



# ***STARPLUS Triad-S™***

## **Product Description Manual**

Issue 1

December 1998

Part Number: 5050-11





### **LIFE SUPPORT APPLICATIONS POLICY**

**VODAVI Communications Systems** products are not authorized for and should not be used within Life Support applications. Life Support systems are equipment intended to support or sustain life and whose failure to perform when properly used in accordance with instructions provided can be reasonably expected to result in significant personal injury or death.

**VODAVI Communications Systems** warranty is limited to replacement of defective components and does not cover injury to persons or property or other consequential damages.

Copyright © 1998 VODAVI Communications Systems, Inc.

All Rights Reserved

This material is copyrighted by VODAVI Communications Systems. Any unauthorized reproductions, use or disclosure of this material, or any part thereof, is strictly prohibited and is a violation of the Copyright Laws of the United States (17 U.S.C. Section 101 et. seq.).

VODAVI reserves the right to make changes in specifications at any time and without notice. The information furnished by VODAVI in this material is believed to be accurate and reliable, but is not warranted to be true in all cases.

**STARPLUS™** is a Registered trademark of VODAVI Communications Systems, Inc.

**Triad-S™** is a Registered trademark of VODAVI Communications Systems, Inc.







# Table of Contents

## 1 INTRODUCTION

PURPOSE.....	1-1
<b>REGULATORY INFORMATION (U.S.A.) .....</b>	<b>1-1</b>
Telephone Company Notification .....	1-1
Incidence of Harm .....	1-1
Changes in Service .....	1-2
Maintenance Limitations .....	1-2
Hearing Aid Compatibility .....	1-2
UL/CSA Safety Compliance .....	1-2
Notice of Compliance .....	1-2
Toll Fraud and DISA Disclaimer .....	1-3

## 2 KEY STATION FEATURES

Account Codes .....	2-1
Account Codes - Forced .....	2-1
Account Codes - Traveling COS (Verified) .....	2-1
Answering Machine Emulation .....	2-1
Attendant Assignment .....	2-2
Attendant Recall .....	2-2
Automatic Call Back Timer .....	2-2
Automatic Call Distribution (ACD) .....	2-2
Agent Positions .....	2-2
Alternate ACD Group Assignments .....	2-3
ACD Group Member Status .....	2-3
Guaranteed Message Announcement .....	2-3
Incoming CO Direct Ringing .....	2-4
No-Answer Recall Timer .....	2-4
No-Answer Retry Timer .....	2-4
Overflow Station Assignments .....	2-4
Overflow Station Forwarding .....	2-4
PC/ACD Interface Trace .....	2-5
Recorded Announcements (RAN) .....	2-5
Supervisor/Agent Calls in Queue Status Display .....	2-6
Wrap-Up Timer Per ACD Group .....	2-7
Automatic Line Access .....	2-7
Automatic Night Service .....	2-7

Automatic Pause Insertion With Speed Dial .....	2-7
Automatic Privacy .....	2-7
Automatic Selection .....	2-8
Background Music .....	2-8
Battery Back-Up (Memory) .....	2-8
Busy Lamp Field (BLF) .....	2-8
Call Announce – Privacy .....	2-8
Call Back .....	2-8
Call Cost Display Feature .....	2-8
Call Coverage Feature .....	2-9
Call Forward - Preset .....	2-9
Preset Call Forward – ACD Groups .....	2-10
Preset Call Forward – Hunt Groups .....	2-10
Preset Call Forward – Off-Net .....	2-10
Preset Call Forward – Per CO Line .....	2-10
Preset Call Forward – Stations .....	2-11
Preset Call Forward – UCD Groups .....	2-11
Preset Call Forward – VM Groups .....	2-11
Call Forward: Station .....	2-11
Call Forward – All Calls .....	2-11
Call Forward – Busy .....	2-11
Call Forward – Busy/No Answer .....	2-11
Call Forward – Follow-Me .....	2-12
Call Forward – No Answer .....	2-12
Call Forward – Off-Net .....	2-12
Call Park .....	2-12
Call Pick-Up .....	2-12
ACD/UCD Groups .....	2-12
Directed .....	2-13
Group .....	2-13
Station .....	2-13
Call Transfer .....	2-13
Calling Station Tone Mode Option .....	2-13
Camp-on .....	2-14
Camp-on Recall .....	2-14
Centrex Compatibility .....	2-14
Flex Button Programming .....	2-14
Off-Hook Preference .....	2-14



- Private Line Appearance ..... 2-14
- Programmable Flash Timer ..... 2-15
- Programming s, #, and Hook-Flashes into Speed Dial ..... 2-15
- Centrex/PBX Transfer ..... 2-15
- Class Of Service (COS) Station ..... 2-15
- CO Line - Access ..... 2-15
- CO Line - Class Of Service (COS) ..... 2-16
- CO Line - Control (Contact) ..... 2-16
- CO Line - Distinctive Ring ..... 2-16
- CO Line - Groups ..... 2-16
- CO Line - Identification ..... 2-16
- CO Line - Incoming Ringing Assignment ..... 2-17
- CO Line - Loop Button ..... 2-17
- CO Line - Loop Supervision ..... 2-18
- CO Line - Pool Button Operation ..... 2-18
- CO Line - Queuing ..... 2-18
- CO Line - Ringing Options ..... 2-18
- CO Ring Detect ..... 2-18
- Conference ..... 2-19
  - Multi-Party Conference ..... 2-19
  - Unsupervised Conference ..... 2-19
  - Conference Enable/Disable ..... 2-19
- Database Printout (Dump) ..... 2-19
- Database Upload/Download ..... 2-19
- Class Of Service (COS) Day/night ..... 2-20
- Dial By Name ..... 2-20
- Dial Pulse Sending ..... 2-20
- Dialing Privileges ..... 2-21
- Direct Inward System Access (DISA) ..... 2-23
  - Group Access ..... 2-23
  - DISA Call Forwarding ..... 2-23
  - Programmable Access ..... 2-23
  - Station Access ..... 2-23
  - Trunk-to-Trunk ..... 2-23
- Direct Station Selection (DDS) ..... 2-24
- Direct Transfer Mode ..... 2-24
- Directory Dialing ..... 2-24
- Disable Outgoing CO Line Access ..... 2-24



Distinctive Ringing (User Selectable) .....	2-24
<b>Do Not Disturb (DND)</b> .....	2-25
One-Time Do Not Disturb .....	2-25
DTMF Sending .....	2-25
End-to-End Signaling .....	2-25
Executive Override .....	2-25
Executive/Secretary Pairing .....	2-26
External Night Ringing .....	2-26
Flash .....	2-26
Flash On Intercom .....	2-26
Flash Rates (Programmable) .....	2-27
Flexible Button Assignment .....	2-27
Forced Least Cost Routing (LCR) .....	2-30
Forward Override .....	2-30
Group Listening .....	2-30
Headset Compatibility .....	2-30
Headset Mode .....	2-30
Hearing Aid Compatible .....	2-31
Hold - Exclusive .....	2-31
Hold - Preference .....	2-31
Hold - Recall .....	2-31
Hold - System .....	2-31
Hot Keypad Feature .....	2-31
Hot Line/Ring Down .....	2-31
Hunt Groups .....	2-32
Chaining .....	2-32
Pilot Hunting .....	2-32
Station Hunting .....	2-32
<b>ICLID/Caller ID Features</b> .....	2-32
Caller-Entered ICLID Digits .....	2-33
Caller ID Name/Number Option .....	2-33
Calling Number/Name Display .....	2-33
Incoming Number/Name for SMDR Records .....	2-33
Unanswered Call Management Table .....	2-34
Idle Speaker Mode .....	2-34
Incoming CO Call Transfer .....	2-34
Intercom Button(S) .....	2-34
Intercom Calling .....	2-35



Intercom Signaling Select .....	2-35
Inter-Digit Timeout .....	2-35
Keypad Mode (Digital KTU Only) .....	2-36
Keypad Self Test .....	2-36
Last Number Redial (LNR) .....	2-36
LCD Interactive Display .....	2-36
Least Cost Routing (LCR) .....	2-36
3-Digit Table .....	2-36
6-Digit Table (Office Codes) .....	2-37
Daily Start Time Tables .....	2-37
Default LCR Database .....	2-37
Exception Tables .....	2-37
Insert/Delete Tables .....	2-37
LCR Routing for Toll Information .....	2-37
Route List Tables .....	2-38
Weekly Time Tables .....	2-38
Local Number/Name Translation Table .....	2-38
Mailbox Button(S) .....	2-38
Meet Me Page .....	2-39
Message Waiting .....	2-39
Message Waiting Reminder Tone .....	2-39
Music-On-Hold .....	2-39
Mute Key .....	2-39
Name In Display .....	2-39
Name/Number Display At Idle .....	2-40
Night Service Feature .....	2-40
Night Service Mode .....	2-40
Automatic Night Mode Operation .....	2-40
External Night Ringing .....	2-40
Manual Operation .....	2-40
Night Class of Service (COS) .....	2-40
Night Ringing Assignments .....	2-41
Universal Night Answer (UNA) .....	2-41
Weekly Night Mode Schedule .....	2-41
Off-Hook Preference .....	2-41
Auto Feature Access .....	2-41
Auto Line Access .....	2-41
Hot Line/Ring Down .....	2-41



Intercom Access .....	2-42
User Programmable Preference .....	2-42
Off-Hook Signaling .....	2-42
Off-Hook Voice Over (OHVO) .....	2-42
On-Hook Dialing .....	2-43
Online Programming .....	2-43
One-Touch Recording .....	2-43
Page/Relay Control .....	2-43
Paging .....	2-43
Access Restriction .....	2-43
External .....	2-43
Internal .....	2-44
Park Personal .....	2-44
Pause Timer .....	2-44
PBX Dialing Codes .....	2-44
Personalized Messages .....	2-44
Custom .....	2-45
Date and Time Entry to Personalized Message(s) .....	2-45
Personalized Message Code on a Flex Key .....	2-45
Scrollable Canned Messages .....	2-46
Preferred Line Answer .....	2-46
Privacy Release .....	2-46
Per CO Line Option .....	2-47
Per Station Option .....	2-47
Private Line .....	2-47
Pulse-to-Tone Switchover .....	2-47
Range Programming .....	2-47
Remote Administration .....	2-48
Database Upload/Download .....	2-48
Remote System Monitor And Maintenance .....	2-48
Maintenance .....	2-48
Monitor .....	2-48
Repeat Redial .....	2-49
Save Number Redial (SNR) .....	2-49
Single Line Telephone (SLT) Compatibility .....	2-49
Speakerphone .....	2-49
Speed Bins/Chaining .....	2-50
Speed Dial • Flash .....	2-50





Speed Dial - Station .....	2-50
Speed Dial - System .....	2-50
Station ID Lock .....	2-50
Station Message Detail Recording (SMDR) .....	2-51
Station Relocation Feature .....	2-51
Text Messaging (Silent Response) .....	2-51
Toll Restriction (Table Driven) .....	2-51
Canned Toll Restriction .....	2-52
Transfer Recall .....	2-52
Uniform Call Distribution (UCD) .....	2-52
Agent Queue Status Display .....	2-52
Alternate UCD Group Assignments .....	2-53
Auto Wrap-Up with Timer .....	2-53
Available/Unavailable Mode .....	2-53
Incoming CO Direct Ringing .....	2-53
No-Answer Recall Timer .....	2-53
No-Answer Retry Timer .....	2-54
Overflow Station Forwarding Assignments .....	2-54
Recorded Announcements (RAN) .....	2-54
Universal Day/Night Answer (UDA/UNA) .....	2-54
Voice Mail Groups (VM) .....	2-54
Disconnect Signal .....	2-55
In-Band Signaling Integration .....	2-55
LCD Message(s) Indication .....	2-55
Message Waiting Indication .....	2-56
Tone Mode Calling Option .....	2-56
Transfer/Forward .....	2-56
Transfer with ID Digits .....	2-56
Volume Control Bar .....	2-57

### 3 SINGLE LINE TELEPHONE FEATURES

Account Codes .....	3-1
Verified/Traveling COS .....	3-1
Automatic Call Distribution/Uniform Call Distribution (ACD/UCD) .....	3-1
Automatic Line Access .....	3-1
Call Brokering.....	3-2
Call Forward .....	3-2
Call Pick-Up Directed .....	3-2



Call Pick-Up Group .....	3-2
Camp-On .....	3-2
CO Line Queuing .....	3-3
Conference .....	3-3
Conference With Personal Park .....	3-3
Direct Outside Line Group Access .....	3-3
Direct Outside Line Ringing .....	3-3
Do Not Disturb (DND) .....	3-3
Handset Receiver Gain .....	3-3
Intercom Calling .....	3-4
Loop Interrupt Option .....	3-4
Message Waiting/Call Back .....	3-4
Messages .....	3-4
Personalized .....	3-4
Custom .....	3-5
Off-Hook Preference .....	3-5
Personal Park .....	3-5
Speed Dial - Station .....	3-5
Speed Dial - System .....	3-5
Toll Restriction (Table Driven) .....	3-5
Canned Toll Restriction .....	3-6
Transfer .....	3-6
Transfer Recall .....	3-6
Universal Day/Night Answer (UDA/UNA) .....	3-6
Voice Mail Groups (VM) .....	3-6
Message Waiting Indication .....	3-6

#### 4 ATTENDANT FEATURES

Attendant Features .....	4-1
Alternate Position .....	4-1
Automatic Night Mode .....	4-1
Direct Station Selector - DSS Console .....	4-1
Disable Outgoing Access .....	4-1
Display .....	4-1
Night Service Feature .....	4-2
Off-Net Forward - Incoming CO Lines .....	4-2
Overflow (Via Preset Forward) .....	4-2
Override .....	4-2







Position .....	4-2
Recall .....	4-3
Special Ring Mode .....	4-3
Time And Date Programming .....	4-3
DSS/DLS Features .....	4-3
Attendant Transfer Search .....	4-3
Busy Lamp Field Indicators .....	4-3
Direct Station Calling .....	4-3
Messages – Custom .....	4-4
Release Key .....	4-4
Volume Control Bar (DKT) .....	4-4

## 5 DIGITAL STATION OPERATION

Introduction .....	5-1
Digital Terminal Station Features .....	5-1
Handset and Speaker .....	5-1
Flexible Buttons .....	5-1
Fixed Feature Buttons .....	5-2
Outside Calls .....	5-2
Intercom Calls .....	5-3
Account Codes .....	5-5
Account Codes/Traveling COS (Verified) .....	5-5
Answering a Recall .....	5-6
Answering Machine Emulation .....	5-6
Automatic Call Distribution (ACD) .....	5-8
ACD Agent HELP Feature .....	5-8
Agent <b>Login/Logout</b> Feature .....	5-9
ACD Agent Queue Status Display .....	5-10
ACD Available/Unavailable Mode .....	5-11
ACD Call Qualification .....	5-12
ACD Group Member Status .....	5-12
ACD Overflow Station – Available/Unavailable Mode .....	5-13
ACD Overflow Station – Forwarding .....	5-14
Supervisor <b>Login/Logout</b> Feature .....	5-15
Supervisor Monitor With Barge-In .....	5-16
Supervisor Queue Status Display .....	5-16
Automatic Selection .....	5-18
Background Music (Optional) .....	5-18



Call Back .....	5-18
Call Coverage Feature .....	5-19
Call Forward ..... 1.....	5-20
All Calls .....	5-20
<b>Busy</b> .....	5-22
Busy/No Answer .....	5-22
Follow-Me .....	5-23
No Answer.....	5-24
Off-Net (via speed dial) .....	5-25
Station .....	5-26
Caller ID Name/Number Option .....	5-26
Calling Station Tone Mode Option .....	5-27
Call Park .....	5-27
Call Pick-Up .....	5-27
Directed .....	5-27
Group .....	5-28
Call Transfer .....	5-28
Camp-On .....	5-29
CO Line Access .....	5-30
CO Line Queuing .....	5-30
Conference Combinations .....	5-31
Dial By Name.....	5-32
Directory Dialing – Stations.. .....	5-33
Direct Inward System Access (DISA) .....	5-36
Distinctive Ringing .....	5-36
Do Not Disturb (DND) .....	5-39
One-Time Do Not Disturb .....	5-40
Executive Override .....	5-40
Executive/Secretary Pairing .....	5-41
FLASH .....	5-41
Flash On Intercom .....	5-42
Flexible Button Assignment.. .....	5-42
Forward Override .....	5-45
Group Listening .....	5-45
Headset Mode .....	5-46
Hold - Exclusive .....	5-46
Hot Keypad Feature .....	5-46
ICLID Unanswered Call Management Table .....	5-47



Incoming CO Call Transfer .....	5-48
Intercom Buttons .....	5-48
Intercom Calling .....	5-50
Intercom Transfer .....	5-51
Keypad Mode .....	5-51
Last Number Redial (LNR) .....	5-52
LCD Display - Contrast .....	5-53
Least Cost Routing (LCR) .....	5-53
Mailbox Buttons .....	5-54
Meet Me Page .....	5-55
Message Waiting .....	5-55
Mute Key .....	5-56
Night Service Feature .....	5-56
Off-Hook Preference .....	5-56
Off-Hook Voice Over (OHVO) .....	5-57
One-Touch Recording .....	5-59
Outside Call - Answer .....	5-60
Outside Call - Place .....	5-61
Outside Call - Place on Hold .....	5-61
Paging .....	5-61
Park - Personal .....	5-62
PBX/Centrex Transfer .....	5-63
Personalized Messages .....	5-63
Messages - Custom .....	5-64
Date and Time Entry on Personalized Message .....	5-64
Personalized Message Code on a Flex Button .....	5-65
Scrollable Canned Messages .....	5-66
Prime Flex Button Programming .....	5-67
Programming PBX/Centrex Codes Onto Flex Button .....	5-68
Programming Your Name Into The LCD Display .....	5-68
Pulse-to-Tone Switchover .....	5-68
Repeat Redial .....	5-69
Save Number Redial (SNR) .....	5-70
Speakerphone .....	5-70
Station Relocation Feature .....	5-71
Speed Dial - Station .....	5-71
Speed Dial - Storing Numbers .....	5-72
Speed Dial - System .....	5-73



Text Messaging (Silent Response) .....	5-73
Uniform Call Distribution (UCD) .....	5-75
UCD Calls In Queue Display .....	5-75
UCD Available/Unavailable Mode .....	5-75
UCD Overflow Station – Forwarding Assignments .....	5-76
Universal Day/night Answer (UDA/UNA) .....	5-77
Voice Mail Groups (VM) .....	5-78
VM Transfer with ID Digits .....	5-79
VM Tone Mode Calling Option .....	5-79
Volume Control Bar (DKT) .....	5-80

## 6 SINGLE LINE TELEPHONE OPERATION

Introduction .....	6-1
Account Codes .....	6-1
Automatic Call Distribution (ACD) .....	6-1
Agent Login/Logout Feature .....	6-2
ACD Agent HELP Feature .....	6-8
ACD/UCD Available/Unavailable Mode .....	6-8
Automatic Line Access .....	6-9
Call Back .....	6-9
Call Brokering .....	6-9
Call Forward .....	6-9
Call Forward – Follow-Me .....	6-10
Calling Station Tone Mode Option .....	6-11
Camp-On .....	6-11
Call Park - Personal .....	6-12
Call Park (System) .....	6-12
Call Transfer .....	6-12
Clear Call Forward, DND, Personalized Messages .....	6-13
CO Line Queuing .....	6-13
Conference .....	6-13
Conference With Personal Park .....	6-14
Direct Outside Line Access .....	6-14
Call Pick-up Directed .....	6-14
Call Pick-Up Group .....	6-14
Do Not Disturb (DND) .....	6-15
PBX/Centrex Transfer (Flash Command to CO Line) .....	6-15
Handset Receiver Gain .....	6-15





Intercom Calling .....	.6-16
Least Cost Routing (LCR) .....	.6-16
Message Waiting .....	6-17
Off-Hook Preference .....	6-17
Personalized Messages .....	6-17
Paging .....	6-1s
Meet Me Page .....	.6-19
Programming Names - LCD Display .....	6-19
Speed Dial - Station .....	6-19
Speed Dial - Storing Station Numbers .....	6-19
Speed Dial - System .....	6-20
Universal Day/Night Answer (UDA/UNA) .....	6-20

**7 DIGITAL ATTENDANT OPERATIONS**

Introduction .....	7-1
Attendant Digital Key Telephone Station Features .....	7-1
Attendant Unavailable (Alternate Position) .....	7-5
Call Hold .....	7-5
Call Park .....	7-6
CO Lines Off-Net Forward - Incoming (via Speed Dial) .....	.7-6
Day/Night/Special Mode .....	7-7
Directory Dialing .....	7-7
Programming .....	7-9
ICLID Unanswered Call Management Table .....	.7-13
Messages – Custom .....	7-13
Outgoing Access • Attendant Disable .....	.7-15
Override .....	7-15
Outside Call • Answer .....	.7-15
Outside Call • Place .....	7-15
Recall .....	7-16
Release Button .....	.7-16
Ring Mode .....	7-16
Setting System Time and Date .....	.7-16
Software Version Display .....	7-17
Speed Dial • System Storing .....	7-17

**8 LIQUID CRYSTAL DISPLAYS**

Introduction .....	.8-1
--------------------	------



**9 SYSTEM CONFIGURATION**

General Description .....	9-1
Basic Key Service Unit (BKSU) .....	9-1
Expansion Key Service Unit (EKSU) .....	9-2
Peripheral Boards .....	9-2
Three 8 CO Line and Eight Digital Station Board (CKIB) .....	9-2
Three 8 CO Line and 8 Single Line Station Board (CSIB) .....	9-3
Optional Boards .....	9-3
Miscellaneous Service Unit (MISU) .....	9-3
Modem Unit (MODU) .....	9-3
Message Wait Unit (MSGU) .....	9-3
DTMF Receiver Unit (DTMF-A) .....	9-3
Digital Station Instruments .....	9-14
S-Button Enhanced Digital Terminal .....	9-14
12-Button Executive Digital Terminals .....	9-15
24-Button Executive/Enhanced Digital Terminals.. ..	9-16
Digital DSS/DLS Console .....	9-17

**A ICLID GENERAL DESCRIPTION**

Introduction .....	A-1
System Configuration .....	A-1
Functional Performance .....	A-2
Calling Number/Name Display .....	A-2
Incoming Number/Name SMDR .....	A-3
Unanswered Call Management .....	A-3
Local Name Translation .....	A-4

**B PART NUMBERS**

**C CUSTOMER DATABASE PROGRAMMING**

1001  
539





# List of Figures

Digital Enhanced (S-Button) Terminal .....	2-21
Digital Executive (12-Btn) Terminal .....	2-22
Digital Executive (24-Button) Terminal .....	2-22
DSS Console Map # 1 .....	4-5
Key Pad - Dial By Name .....	5-33
Key Pad - Directory Dialing .....	5-34
ICLID Unanswered Call Management .....	5-47
2500 Series SLT Telephones .....	6-3
2600 Series SLT Telephones .....	6-5
Attendant Digital Display Terminal .....	7-3
Starplus Triad-S System .....	9-4
Starplus Enhanced (S-Button) Digital Terminal .....	9-14
Triad-S Executive (12-Button) Digital Terminal .....	9-15
Triad-S Executive (24-Button) Digital Terminal .....	9-16
Triad-S Digital DSS/DLS Console .....	9-17
CTI System Configuration .....	A-1



## List of Tables

Flex Button Programming Codes .....	2-29
Key Station Features/Software Packages .....	2-58
SLT Features/Software Packages .....	3-7
Attendant Features/Software Packages .....	4-6
Digital Terminal Numbering Plan .....	5-4
Ringing Choices .....	5-38
Flex Button Programming Codes .....	5-44
Other Key Pad Codes .....	<b>5-65</b>
SLT Numbering Plan .....	<b>6-7</b>
Digital Attendant Numbering Plan .....	7-4
ICLID Unanswered Call Management .....	7-13
Liquid Crystal Displays (LCD) .....	8-1
Digital System Capacity .....	9-4
Electrical Specifications .....	9-5
Environmental Specifications .....	9-6
Loop Limits .....	9-7
Dialing Specifications .....	9-7
Trunk Ordering Information: Public Network Lines .....	9-7
Physical Dimensions and Weight .....	9-7
Miscellaneous Specifications .....	9-8
Single Line Audible Signals .....	9-9
Digital Station Visual Signals - CO Line Buttons .....	<b>9-10</b>
Digital Station Visual Signals - DSS / BLF Buttons .....	9-10
Digital Station Visual Signals - Feature / Function Buttons .....	9-1 1
Signals to Called Stations (Digital Station) .....	9-12
Signals to Calling Station (Digital Station) .....	9-12
Voice Mail Confidence Tones .....	9-13
<b>Starplus</b> Triad-S Part Numbers .....	<b>B-1</b>
System Parameters .....	C-1
Directory Dialing Defaults (FLASH 23) .....	C-8
Hunt Group Parameters (FLASH 30) .....	c-12
Verified Account Codes (FLASH 3 1) .....	c-12
CO Line Programming (FLASH 40) .....	c-19
Miscellaneous CO Parameters & Timers (FLASH 41) .....	c-20
CO Line Ringing Assignments (FLASH 40) .....	c-21
DID/ICLID Default Ringing Assignments (FLASH 43) .....	c-22





Station Programming (FLASH 50) .....	c-30
Button Assignments (FLASH 50) .....	c-31
System Speed Dial Numbers .....	c-33
ACD Group Parameters .....	c-35
UCD Group Parameters .....	C-38
Voice Mail Group Parameters .....	c-39
Mailboxes (FLASH 68) .....	c-41
Exceptions (FLASH 70) .....	c-49
Exceptions (FLASH 70) .....	c-50
Least Cost Routing (FLASH 75) .....	c-51
Daily Start Time .....	c-51
Weekly Schedule .....	c-51
Route List .....	... C-52
Insert/Delete .....	c-55
3-Digit Area/Office Code Route List .....	C-58
6-Digit Area Code/Routing .....	c-60
6-Digit Office Code .....	c-61





# 1 INTRODUCTION

## Purpose

This manual provides the information necessary to program, install, operate and maintain the STARPLUS Triad-S™ system.

## Regulatory Information (U.S.A.)

The Federal Communications Commission (FCC) established rules to allow the direct connection of the Triad-S systems to a telephone network. Certain actions must be undertaken or understood before the connection of customer provided equipment is completed.

## Telephone Company Notification

Before connecting the Triad-S system to the telephone network, the local serving telephone company must be given advance notice of intention to use customer provided equipment, and must be provided with the following information:

- ❖ The telephone numbers to be connected to the system.

## Triad-S System Information:

- ❖ The Ringer Equivalence Number also located on the KSU: 1,3B
- ❖ The USOC jack required for direct interconnection with the telephone network: RJ11C

## FCC Registration Numbers:

- ❖ For systems configured as a key system: (button appearances)  
DLPKOR-24039-KF-E
- ❖ For systems configured as a Hybrid system: (dial access codes)  
DLPKOR-24026-MF-E

## Incidence of Harm

If the telephone company determines that the customer provided equipment is faulty and possibly causing harm or interruption to the telephone network, it should be disconnected until repairs can be made. If this is not done, the telephone company may temporarily disconnect service.



## Changes in Service

The local telephone company may make changes in its communications facilities or procedures. If these changes affect the use of the Triad-S system or compatibility with the network, the telephone company must give written notice to the user to allow uninterrupted service.

## Maintenance Limitations

Maintenance on the Triad-S system must be performed only by the manufacturer or its authorized agent. The user may not make any changes and/or repairs except as specifically noted in this manual. If unauthorized alterations or repairs are made, any remaining warranty and the software license for the system will be voided.

## Hearing Aid Compatibility

All Triad-S Digital Terminals are Hearing Aid Compatible, as defined in Section 68.316 of Part 68 FCC Rules and Regulations.

## UL/CSA Safety Compliance

The Triad-S system has met all safety requirements and was found in compliance with the Underwriters Laboratories (UL) 1459. This system is authorized to bear the "NRTL/C" marking.

## Notice of Compliance

The Triad-S system complies with rules regarding radiation and radio frequency emissions by Class A computing devices. In accordance with FCC Standard 15 (Subpart J), the following information must be supplied to the end user:



***'This equipment generates and uses RF energy and if not installed and used in accordance with the Instruction Manual, may cause interference to Radio Communications. It has been tested and found to comply with the limits for a Class A computing device, pursuant to Subpart J of Part 15 of the FCC Rules, which are designed to provide reasonable protection against such interference, when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference, in which case the user, at his own expense, will be required to take whatever measures may be required to correct the interference.'***





## **Toll Fraud and DISA Disclaimer**

“While this device is designed to be reasonably secure against intrusions from fraudulent callers, it is by no means invulnerable to fraud. Therefore, no express or implied warranty is made against such fraud including interconnection to the long distance network.”

“While this device is designed to be reasonably secure against invasion of privacy, it is by no means invulnerable to such invasions. Therefore, no express or implied warranty is made against unlawful or unauthorized utilization which results in the invasion of one’s right of privacy.”

Vodavi has made every reasonable effort to ensure that this product works in most business environments. However, there may be some environments (**RFI** and **EFI**) in which this product may not work properly. In such cases, it is the responsibility of the installer to take the necessary actions to correct the situation.

This product is tested and found to be Year 2000 compliant. Vodavi shows 00 as the year in SMDR output and on LCD displays.





## 2 KEY STATION FEATURES



The System and Key Station features of the STARPLUS Triad-S™ are listed and described below in alphabetical order. An abbreviated feature index is provided in *Table 2-2:Key Station Features/Software Packages* on page 2-58.

### Account Codes

An account code is the last field within Station Message Detail Recording (SMDR), that provides tracking capabilities for specific calls by entering a non-verified, variable length (up to 12 digits) identifier. The use of forced Account Codes is optional, offered on a system-wide basis. SMDR must be enabled to use account codes.

#### Account Codes - Forced

The Triad-S system allows arranging of the system so that station users must enter an account code before placing an outside call. Account codes can also be used as a Traveling Class-of-Service to upgrade a restricted stations class-of-service for unrestricted dialing. Account codes must be entered before the call when forced.

#### Account Codes - Traveling COS (Verified)

The Verified Account Code/Traveling Class of Service (COS) feature provides the ability to track specific calls by entering a verified, variable length (up to 12 digits) identifier. Each account code can be assigned a day and night Class-of-Service for determining the dialing privileges allowed by that account code. This provides a means for users to override a restricted station. If the dialed account code matches the Verified Account code table, an intercom dial tone is returned, otherwise an error tone is presented. The use of forced Account Codes is optional, offered on a system-wide basis. SMDR must be enabled for the account code to print as part of the SMDR record. The Triad-S system allows up to 250 la-digit account codes.



### Answering Machine Emulation

When a call is sent to a voice mailbox, the station associated with that mailbox can press a pre-programmed button to listen to the caller leaving the voice mail message. If the mailbox owner decides to speak with the caller, they can press the pre-programmed button and connect to the caller. Two methods of notification are



available, a ring mode or a speaker mode. These methods are controlled by the type of flexible button assigned on the telephone.

## Attendant Assignment

Any three Digital Terminals in the system can be assigned as attendant stations. These stations receive recalls and can place the system into Night Service. The attendant stations must be either Enhanced or Executive stations.

## Attendant Recall

When a line is left on hold for a programmable time period, the station placing that line on hold is recalled. If that station fails to answer the recall, the call is recalled to the attendant(s) for handling. There can be three attendants per system. Transferred, Parked and Camp-on recalls also recall the attendant.

## Automatic Call Back Timer

This feature invokes a call back anytime a user places an intercom call and listens to a busy tone for a preset time period. By default, this timer is disabled and is variable from 00 to 99 seconds.

## Automatic Call Distribution (ACD)

*This feature is available with optional software.* When purchased, Uniform Call Distribution (UCD) is not used and is replaced by the ACD functions identified below. Sixteen Automatic Call Distribution (ACD) groups can be programmed, each containing up to 16 station numbers (up to the system station maximum). Each group is assigned a pilot number. When this number is dialed, the first available agent in that group is rung. Calls are routed to the station that has been on-hook for the longest time period.

## Agent Positions

- ❖ Agent Login/Logout with Agent ID Feature: The Agent Login/Logout Feature provides a means for an agent to log into one of the ACD groups and receive calls. The Agent ID entered in the login process identifies the agent and places that agent in the available agent list for the ACD group specified in the login process. This feature allows an agent to log into any ACD group from any station in the system and receive calls.





  
❖ Agent Identification:

Each ACD Agent has a unique Agent ID (0000-9999) for use during login and logout procedures. This unique ID is not verified or stored in the system database.

❖ Agent Available/Unavailable Mode:

Stations programmed into an ACD group may remove themselves from their assigned ACD group by dialing the Available/Unavailable code. When an agent is in the Available mode, that agent receives ACD calls in the normal manner. When an agent is in the Unavailable mode, that agent no longer receives ACD calls, however the agent may receive non-ACD calls. Agents that have gone Unavailable receive a visual reminder with a flashing LED/LCD message.

❖ Agent Help Request:

The HELP feature provides a means for an ACD agent to signal the assigned supervisor for assistance. While on a call, the agent can press the HELP button to signal the assigned supervisor. The supervisor may respond by using the HELP button and the ACD Barge-In feature.

❖ Agent Call Qualification:

This feature provides a means for an agent on ACD calls to enter codes that identify the call. This feature permits entering up to 12 digits to print in the SMDR record. A programmable confirmation tone option was added to the Agent Call Qualification feature on a system-wide basis.

❖ Agent ACD Transfer Display:

This feature changes the LCD message to indicate to what ACD group the call was transferred. The LCD indicates if the call was transferred to a station number or a pilot group number.

## Alternate ACD Group Assignments

An alternate ACD group can be programmed so if stations in one group are busy, the alternate group is checked for an available station.

## ACD Group Member Status

The Supervisors Group Member Status feature provides a means for an ACD supervisor to view the status of the 16 ACD groups in the system, individually. This display tells the supervisor which stations are logged into the group, and if the station logged in is available, unavailable, out-of-service, in DND, or busy on a call. The supervisor can use this display to determine why there are a lot of queued calls in a specific group.

## Guaranteed Message Announcement

This feature provides a means to force incoming callers to an announcement before being placed into an ACD Queue or routed to an agent. The outside callers are presented with the entire message before being



routed to the ACD Group. Agents in an ACD Group with a Guaranteed Message enabled receive incoming callers only after the caller has heard the designated recorded announcement in its entirety.

## Incoming CO Direct Ringing

CO Lines can be programmed to ring directly into an ACD group. When all agents are busy and RAN is enabled, the system answers the caller and presents the first RAN announcement automatically.

## No-Answer Recall Timer

If a call routed to a station via ACD is not answered by the ACD Agent/Station before the No-Answer Recall timer expires, the call is returned to ACD Queue with the highest priority. Additionally, the station that failed to answer the ringing ACD call is placed into an out-of-service (OOS) state.

## No-Answer Retry Timer

When the No-Answer Retry timer expires, a station that failed to answer the ringing ACD call is placed into an out-of-service (OOS) state. The station that was taken out-of-service (OOS) is placed back in service if the agent presses his available flex button or dials the available flex code. Additionally, the agent is placed back in service if the No-Answer Retry timer expires. If the agent does not answer his next ACD call, he is again taken out-of-service. This cycle continues until the station answers calls, logs out, or goes unavailable.

## Overflow Station Assignments

An overflow station may be assigned to route callers in queue to a designated station after a specified time. The Overflow station may remove themselves from their assigned group by dialing the Overflow Available/Unavailable code. When the Overflow station is in the available mode, that station receives ACD calls in the normal manner. When the Overflow station is in the Unavailable mode, that station no longer receives ACD calls, however they may receive non-ACD calls. The Overflow station that went Unavailable receives a visual reminder with a flashing LED. The overflow station may NOT be one of the ACD group stations.

## Overflow Station Forwarding

This feature allows ACD calls reaching the ACD Overflow Station to call forward to another station, This is allowed or denied on a system-wide basis. Once enabled in programming, an ACD Overflow station can Busy/No-Answer forward to Voice Mail Groups, ACD Groups, Hunt Groups and stations. If the ACD Overflow





station is busy or does not answer before the no-answer call timer expires, the ACD call forwards to Voice Mail.



***If NO stations are logged into the ACD Group, ACD calls route to the attendant station.***

## **PC/ACD Interface Trace**

This feature is available with optional software. The PC/ACD Interface Trace provides a series of events trace output that can be used for ACD reporting packages from third parties.

## **Recorded Announcements (RAN)**

Recorded announcement devices can be assigned to provide up to eight different messages per system, if all stations in an ACD group are busy. The eight messages are available to all 16 ACD groups in different configurations. Each group can have a Guaranteed RAN and two other RANs, a primary and a secondary. A RAN device can provide an announcement to one caller at a time. Subsequent callers are queued onto the message on a first-in basis.

Each RAN Announcement Table can be directed to a Hunt Group, therefore each primary and secondary RAN Table can have eight announcements. RAN Hunt Group numbers can be chained together by placing the RAN Group Number **(458-461)** as the last member in the desired group. RAN Groups are pilot type only.

Callers may dial a RAN directly via their station number. This allows users to change RAN recordings by calling the RAN device, providing DTMF instructions, then voice recording. This affects Guaranteed Message Announcements and RAN Announcements.

### **0.0.1 Supervisor Positions**

❖ Supervisor Login/Logout Feature:

The Supervisor Login/Logout Feature provides a means for a supervisor to log into one of the ACD groups, The Supervisor ID entered in the login process identifies the supervisor for the specific ACD group to which he is assigned. A supervisor can log into any ACD group from any station in the system. However, to let the supervisor monitor with barge-in feature, the supervisor must log in at a station with monitor barge-in capability.

❖ Supervisor Identification:

Each ACD Supervisor has a unique Supervisor ID (0000-9999) that is used during login and logout procedures. This unique ID is not verified or stored in the system database.



❖ Supervisor Help Request:

The HELP feature provides a means for an ACD agent to signal his assigned supervisor for assistance. While on a call the agent can press the HELP button to signal the assigned supervisor. The supervisor may respond by using the HELP button and the ACD Barge-In feature.

❖ Supervisor Monitor with Barge-In Feature:

The ACD Supervisor Monitor with Barge-In feature provides a means for an ACD supervisor to monitor an agent's call in progress to coach sales techniques or customer relations skills. When used, a supervisor may intrude onto an agents call in a listen only mode or in a true conference mode. This feature is available with or without a warning tone.



**The use of Supervisor Monitor with Barge-in is limited by federal law and may also be limited or prohibited by state or local law, so check the relevant laws in your area before employing these features.**

***A change in volume may occur on the CO line or intercom call after the barge-in occurs.***

❖ Supervisor Station Assignment Feature:

The ACD Supervisor Station Assignment feature provides a means to assign each ACD group a supervisor. This supervisor station can:

- ❖ Receive calls in queue display in real time.
- ❖ Receives No Answer/out-of-service.
- ❖ Receives HELP displays from the groups to which the supervisor is assigned.
- ❖ Can barge in on active calls in his ACD group or groups.

## Supervisor/Agent Calls in Queue Status Display

This feature provides a means for an agent and ACD supervisor to view the status of their ACD group. This display is an idle state display and prompts a supervisor that agents in the group are having problems answering all their calls. The display tells the agent and his supervisor how many calls are in queue, how many agents are logged into the ACD group, and the length of time that the oldest call has been in queue. This feature displays the oldest call in queue duration in hours, minutes and seconds. When an ACD agent is on a CO call, the LCD displays the trunk name and call duration of the present call in the lower half of the display.

This feature allows an ACD station (12/24 button executive only) to assign multiple buttons that display the calls in queue information for a particular group on the LCD. Additionally, the button LED indicates the number of calls in queue.





## Wrap-Up Timer Per ACD Group

This feature provides can be programmed on a per group basis instead of on a system-wide basis.

## Automatic Line Access

Each station, key or SLT, may have their phone programmed to access a particular CO Line, such as a private line or a line from a Group of CO lines upon going off-hook. This is useful in Centrex or PBX applications when station users have dedicated or individual lines. An outside line dial tone is received just by going off-hook, without dialing an access code.

## Automatic Night Service

The system may optionally be programmed to go in and out of night service automatically. This method does not require the attendant to activate or deactivate night service on a daily basis. The automatic night service is enabled and disabled on a programmable daily schedule including Saturday and Sunday. A time can be set to enable Night Service and to Disable Night Service on a per day basis.

## Automatic Pause Insertion With Speed Dial

If a flash command is placed into system speed dial numbers or station speed dial numbers, a pause is automatically inserted after the flash. A pause is also automatically inserted after a PBX dialing code is used. Manually dialing a flash during a call causes only those numbers dialed after the flash to be redialed for a Last Number redialed number or for a Save Number redialed number.

## Automatic Privacy

Privacy is automatically provided on all calls. If one station is conversing, another station cannot intrude on that line. The Automatic Privacy feature can be disabled, allowing up to seven other stations to join in on existing CO line conversations.



*Disabling of the privacy feature may be limited by federal, state or local law, so check the relevant laws in your area before disabling privacy.*





## Automatic Selection

The user can select an outside line, intercom station, speed dial button, or dial a feature and automatically place the phone in the dialing mode without pressing the ON/OFF button or lifting the handset,

## Background Music

Each Digital Terminal user may receive music over their speaker when an optional music source is connected to the system. This feature can be allowed or denied on a system-wide basis by programming.

## Battery Back-Up (Memory)

A Lithium battery is located on the Master Processor Board (MPB) of the Triad-S system to protect system memory in case of commercial power outage or the system power being turned off for a time period. Battery Back-up Memory retains all system features including system and station speed dial during a power outage.

## Busy Lamp Field (BLF)

When a button on an Digital Terminal is assigned as a DSS, it also serves as a Busy Lamp Field to display the status of that telephone.

## Call Announce – Privacy

Each telephone user can set their intercom signaling switch or HPT button (Digital Terminals) to receive intercom call announcements without having the calling party hear any conversations in progress.

## Call Back

A station can initiate a call back request to another busy station. Once that station becomes idle, the station that left the call back request is signaled.

## Call Cost Display Feature

The Call Cost Display Feature allows a user to view the approximate cost of each call made, This approximate cost is also printed as part of the SMDR record.



## Call Coverage Feature



The Call Cost Display replaces the call duration display when a call is made using LCR. This display is enabled in programming.

The cost information is programmable by selecting one of the 16 route list tables and one of the four time periods. This allows the user to program four separate costs based on the time of day for each of the 16 routes. The costs entered in the tables is a cost for one minute, however, costs are calculated using a 1/10th of a minute value. These costs are rounded down and are based on the start time of the call, even if the call extends into a different time period. The SMDR printout contains a cost calculated using a 1/10th of a minute increment and the display updates approximately every 30 seconds. The user must have LCR enabled to get the call cost display.

## Call Coverage Feature

This feature provides the functionality for stations to answer calls for other stations by utilizing call coverage buttons. Visual and Audible status of ringing stations to an assigned coverage station are provided. Multiple coverage stations can have the same remote ringing station(s) programmed on their stations. Once a coverage station answers the call, other stations attempting to answer the call receives busy tone and the call coverage button extinguishes on all appearances of that button. This feature can cover SLT extensions, however an SLT cannot perform the call coverage function. The SLT extension need not be physically installed, only the SLT card must be installed.

Direct CO calls have ring and LCD priority over call coverage calls. The call coverage station must have a direct CO appearance or Loop button in order to pick up an external call. If the call coverage station is in DND, no audible ringing is heard, however visual and LCD information is presented.

This feature can be programmed by the station user or through admin programming. By default, no call coverage buttons are assigned.

## Call Forward - Preset

This feature allows the system database to be configured so that incoming CO Lines, which are programmed to ring at a particular station, can be forwarded elsewhere in the system predetermined by programming.

This feature is active if the station ringing is not answered in a specified time, and is particularly useful in overflow applications in which a Voice Mail or Auto Attendant may be in use.

- ❖ A station may have one designated preset forward location defined in the database.
- ❖ Preset Call Forward is chainable only to other predetermined preset forward stations specified in the database up to a chain of 5 stations.





- ❖ Chainable Preset Call Forwarding forces the incoming CO Line to ring at each station preassigned in the database for the Preset Forward Ring Timer specified in the database before forwarding.
- ❖ Each station in the system may, independently, have incoming CO calls preset forwarded to the following destinations:

### **Preset Call Forward – ACD Groups**

CO Lines can be preset forwarded to ring into an ACD Group from any station. A CO line does not preset forward to a busy ACD group, however each time the preset forward timer expires (for a total of five attempts) the group is checked for an idle station. If a member of the group is idle the call is then presented to that member.

### **Preset Call Forward – Hunt Groups**

CO Lines can be preset forwarded to ring into a Hunt Group from any station. A CO line does not preset forward to a busy Hunt group, however each time the preset forward timer expires (for a total of five attempts) the group is checked for an idle station, If a member of the group is idle the call is then presented to that member.

### **Preset Call Forward – Off-Net**

CO Lines can be preset forwarded to ring Off-Net via speed dial from any station, After the expiration of the preset forward timer, the system selects an idle CO line and dial the off-net location, then connect the two CO lines.

### **Preset Call Forward – Per CO Line**

This feature allows each CO line to be preset call forwarded on a per CO line basis. This allows a CO line to initially ring at multiple stations and forward to a predetermined destination. The destination can be a station or Hunt Group. Each CO line has a preset forward timer. Additionally, each CO line has a VMID field to allow specific VM digits to be sent when a CO line forwards to a VM group.

This feature applies to initial CO ringing lines only. If a forward destination is programmed in the CO line field, the CO call forwards to that destination after the CO Preset Forward timer expires, This forward occurs regardless of how many or how few stations the line is ringing on. Once the CO line is answered and transferred, station call forwarding rules are in effect. Calls still follow all call or busy forwards, however, CO preset forward forwards the call if the first forward destination has not answered the call, VMID digits per CO line override station VMID. Calls ringing into ACD, UCD or VM Groups continue to ring the group. The CO call does not forward when ringing one of these types of groups.







## **Preset Call Forward – Stations**

Each Digital Terminal user may have preset in the database Initial Ringing Incoming directed to another station in the system, if the call goes unanswered for a predetermined amount of time.

## **Preset Call Forward – UCD Groups**

CO Lines can be preset forwarded to ring into a UCD Group from any station, A CO line does not preset forward to a busy UCD group, however each time the preset forward timer expires (for a total of five attempts) the group is checked for an idle station. If a member of the group is idle the call is then presented to that member.

## **Preset Call Forward – VM Groups**

This feature is available with optional software. CO Lines can be preset forwarded to ring into a Voice Mail Group from any station. A CO line does not preset forward to a busy Voice Mail group, however each time the preset forward timer expires (for a total of five attempts) the group is checked for an idle Voice Mail port. If a VM port is idle the call is then presented to Voice Mail.

## **Call Forward: Station**

When any type of station call forwarding is invoked, the LCD display normally indicates the call forwarding mode at all times. This feature has modified the LCD forwarding display to make the call forwarding mode display optional. This feature is enabled/disabled in admin programming on a system-wide basis.

## **Call Forward – All Calls**

This feature allows a station the ability to have all their calls (internal or external) forwarded immediately to a designated station, an ACD or UCD group pilot number, Voice Mail group number, or Hunt group.

## **Call Forward – Busy**

This feature allows a station the ability to have their calls forwarded to a designated station, an ACD or UCD group pilot number, Voice Mail group number, or Hunt group when their station is busy.

## **Call Forward – Busy/No Answer**

Allows a station the ability to forward a combination busy/no answer calls to a designated station, an ACD or UCD group pilot number, Voice Mail group number, or Hunt group. No answer calls forward when the system-wide no answer timer expires. Initial CO ringing, transferred CO ringing and intercom ringing calls



can all be forwarded. Calls that ring to an idle station is call forwarded after expiration of the No Answer Ring Timer.

## Call Forward -- Follow-Me

This feature allows a user who is away from their station, to activate/deactivate call forwarding from another station in the system. This enables the user to have their calls forwarded to their current location or forwarded into Voice Mail, ACD/UCD, Hunt Groups, or to any other station in the system. When this call forward is activated, all calls presented to the forwarded station forward to the destination station immediately. This feature also provides the capability for DISA and TIE callers to activate/deactivate call forwarding from a remote location. Both internal and external calls forward to the designated station. The call forward status is stored in a battery protected area of memory.

## Call Forward -- No Answer

This feature allows a station the ability to have their calls forwarded to a designated station, an ACD or UCD group pilot number, Voice Mail group number or Hunt group number when there is no answer at the station. No answer calls forward when the system-wide no answer timer expires.

## Call Forward -- Off-Net

Stations are allowed to forward intercom and transferred CO line calls to an off-net location. This allows a station to reroute calls that would normally be lost. Calls can be forwarded to home or another off-net site. Initially ringing CO calls cannot be forwarded with this feature (see Incoming CO lines Off-Net Forward feature).

## Call Park

An outside line can be placed into one of eight parking locations and can be retrieved by any station that has a direct line appearance or an available loop button. Parked calls have their own recall timer and recall the originating station and, if still unanswered, the attendant(s).

## Call Pick-Up

## ACD/UCD Groups

Stations outside of an ACD or UCD group can pick up a tone-ringing intercom call, transferred, incoming, or recalling outside line call ringing to a specific UCD station. The call must be a tone ringing call.



## Call Transfer



## Directed

A station can pick up an intercom call, transferred, incoming, or recalling outside line call to a specific unattended station. The call must be a tone ringing call.

## Group

Stations can be placed in one or more of four pick-up groups. Stations within a group can pick up tone ringing intercom calls, transferred, incoming, or recalling outside line calls for another station in that group.



*By default, **all Voice Mail stations are placed in Pick-Up Group 1. You may need to **change** this default setting.***

## Station

A station can pick up a tone-ringing intercom call, transferred, incoming, or recalling outside line call to a specific unattended station. The call must be a tone ringing call.

## Call Transfer

An outside CO line can be transferred from one keyset to another. By using the TRANS button, screened (announced) or unscreened transfers can be made. The line being transferred rings on the keyset and provides Exclusive Hold flashing indication to the receiving party's keyset. Any number of attempts can be made to locate someone by calling different keysets without losing the call. If a line is transferred to a busy station, it receives muted ringing.

The Direct Transfer Mode allows transferring of an outside CO line directly to the key station handset, if enabled in programming.

An system-wide database parameter can select music on hold or **ringback** tone to the CO caller when CO calls are transferred in the system.

## Calling Station Tone Mode Option

This feature provides an easy means for a Calling station to override a desired stations H (handsfree) or P (call announce) intercom setting. A dial code has been added that is dialed in front of the extension number to force the tone ringing.





## Camp-on

A station may alert a busy party that an outside line is on hold and waiting for them by using the CAMP-ON button. To camp on a call, press the **TRANS** button to transfer the call to the desired busy station, then press the CAMP ON button. The busy party receives a muted ring over the **keyset** speaker, and a visual flashing CAMP ON LED. By pressing the CAMP ON button, the person called places his existing outside call on hold and is connected to the person placing the Camp On. He can then pick up the call on the appropriate line. Calls cannot be camped on when a station is in DND or in Conference.

## Camp-on Recall

When a station does not answer a Camp-On, that call recalls the person placing the Camp-On, and if unanswered by them, recalls the attendant(s).

## Centrex Compatibility

The Triad-S system provide features that are **Centrex** compatible so that **Centrex** users can utilize the Triad-S system to enhance their **Centrex** capabilities. The system actually simplifies and provides easier access to many **Centrex** features by offering the following features:

### Flex Button Programming

Flexible button programming allows **Centrex** users to program complex **Centrex** dial codes onto a **keyset** button for easy one touch access to **Centrex** features.

### Off -Hook Preference

Digital Terminals and Single line telephones may be programmed to have their personal **Centrex** line accessed automatically just by lifting the handset or pressing the ON/ OFF button, Internal features to the Triad-S system are still made available to Digital Terminals by accessing intercom before going off-hook.

### Private Line Appearance

The Triad-S system allow for private line assignment on an unlimited basis. Each station may have sole access to a particular outside line if desired and may also be assigned to receive incoming ringing on that line.



## Centrex/PBX Transfer



## Programmable Flash Timer

CO line flash is a momentary opening on a CO line used for signaling. When using the Triad-S system in a Centrex environment, the CO line flash is to signal the intention to transfer a caller using Centrex transfer. The CO line flash timer is programmable on a per CO line bases to facilitate a mixture of Centrex and CO lines within the same system.

## Programming \*, #, and Hook-Flashes into Speed Dial

Many Centrex codes utilize a hook-flash followed by, in many cases, the digit [ \*] and or [#]. The Triad-S system allow programming of these codes as a part of system or station speed dial sequences.

## Centrex/PBX Transfer

When Centrex or PBX lines are connected to the Triad-S system, users may, by using the Flash button, transfer callers to other Centrex or PBX extensions. Additionally, the Flash command may be included within a Speed Bin and programmed onto a flex button for one button transfer.

## Class Of Service (COS) Station

Each station is assigned a Class of Service which governs that stations dialing privileges. Day Class of Service and Night Class of Service assignments to stations provide the system administrator additional control over station dialing, preventing misuse of phones after hours. Six uniquely defined Classes of Service are available for assignment to stations on a per station basis and all six are available for day and night assignment. Station Class of Service works in conjunction with CO line Class of Service to provide the most flexible means for offering custom toll restriction. As a part of the Dialing privilege assignment through Class of Service the system offers two programmable Allow and Deny tables for additional customization of a toll restriction plan for a particular customer. Additionally, each station can reference up to four special area code tables.

## CO Line - Access

Through programming, telephones are allowed or denied access to particular outside lines or line groups.



## CO Line - Class Of Service (COS)

Each CO Line may be programmed with a Class-of-Service to provide dialing privileges. The Triad-S system use an array between CO Line Class-of-Service and Station Class-Of-Service to offer a wide variety of dialing privilege possibilities.

## CO Line - Control (Contact)

On the Triad-S system, there are two (2) control contacts which may be individually programmed as either CO Line Control (to control ancillary equipment) or Loud Bell Control to control a customer provided ringing device to external areas. When programmed as CO Line Control and assigned to a CO line, the corresponding contact closes whenever that CO line is accessed by a station.

## CO Line - Distinctive Ring

The tone ring signal used to notify stations of an incoming call can be changed in administrative programming to provide distinctive ringing on a per CO line basis. A distinctive ring tone can be programmed for each CO line that is used to ring each station. The system provides 36 different ring patterns that can be selected for each CO line in the system. CO line distinctive ringing overrides station distinctive ringing.

## CO Line - Groups

Outside lines can be placed in one of eight groups if the customer's business requires such grouping. Stations are then individually assigned access to these groups and given the ability to dial on particular lines.

## CO Line - Identification

This feature allows entering a name into the database for each individual line (trunk) connected to the system. The name may be entered in any combination up to 12-characters in length (this represents 24 digits entered). Once entered, LCD Digital Terminals including the attendant station(s) receives the programmed line name in place of the default LINE XXX message. This applies to all line call processing conditions where the current LINE XXX message appears.



## CO Line - Incoming Ringing Assignment



SMDR always print the line number in place of the programmed name. A programmable data field is available for each line in the system.



*This feature is for LCD Display appearance only!*

## CO Line - Incoming Ringing Assignment

Each CO line may be programmed (in database admin) so that incoming ringing on the specified CO line(s) may be assigned initial ringing to one of the following destinations:

- ❖ One or more stations (Keyset or SLT)
- ❖ To an ACD, UCD, Voice Mail or Hunt Group
- ❖ Off-Net (via Speed Dial)

The ring-in follows Day Ring assignments unless Night Service mode is active, in which case all incoming CO calls follow Night Ring assignments.

When ringing is assigned to a keyset, a direct line appearance or an idle Loop button must be available to receive the call. Station call forwarding of initial ringing CO call is possible and can be directed to other keysets with an available Loop button or direct appearance.

If the initially ringing CO call cannot ring at the destination assigned, it rings at the first attendant station.

## CO Line - Loop Button

A station not having a direct appearance for a CO line receives incoming CO calls and transferred CO calls under the loop button. Only one call at a time can be connected to a keyset on the loop button. If more than one loop button is on a key set, the loop buttons may be conferenced together. If all programmed Loop buttons on a keyset are busy or have a CO call on hold, the party attempting to transfer a CO line to that station receives busy tone and cannot transfer the call to that station. If a transfer is attempted, the CO line recalls the initiator immediately.

CO lines are also presented to a Loop when dialing out using LCR or when using speed dial to dial out and the line chosen does not appear on the key station.



## CO Line - Loop Supervision

The Triad-S system can be programmed to monitor CO lines while on-hold or connected to RAN devices or Voice Mail systems, or in Trunk-to-Trunk connections for disconnect signal provided by the Telco.

After a disconnect signal is detected, the Triad-S system releases the CO lines and automatically place them back in service.

## CO Line - Pool Button Operation

The Pool Group Key is used primarily to access CO lines that do not appear on a station so that outgoing calls may be made. Pooled group keys are associated to CO line groups and may be programmed for use on any of the flexible line buttons. CO lines are accessed in descending order of priority starting with the highest numbered available (not busy) CO line in a CO line group. Stations may have as many POOL buttons as there are CO line groups. Multiple POOL buttons for the same group are also allowed.

## CO Line - Queuing

When all the outside lines in a group are busy, stations can be placed in queue awaiting a line in the same group to become available. If a station doesn't answer the queue signal within 15 seconds, that station is dropped from the queue.

## CO Line - Ringing Options

When a CO call rings at a busy station, the call rings at the station using a muted ring signal. This option allows a user to receive a reminder ring at his busy station, instead of muted ringing. Additionally, a reminder ring timer is available to provide the reminder ring every time the timer expires, as long as the incoming CO line remains connected. The system defaults this option to muted ringing.

## CO Ring Detect

The duration of the ringing signal from the CO or the PBX is matched with ringing detection circuitry in the Triad-S. The ring detect can range from 200 to 900 ms programmed in 100 ms increments. This timer helps prevent false ringing.





## Conference

There are two different types of conferencing.



### Multi-Party Conference

Up to eight parties can engage in a conference. A maximum of five external parties can be conferenced.

### Unsupervised Conference

The conference initiator can exit a conference with two outside parties and leave them in an unsupervised conference. The initiator can re-enter the conference at any time. The Triad-S system can automatically terminate the call when both parties hang up, when Loop Supervision is provided by the Telco and enabled in the database.

A programmable conference timer disconnects the unsupervised conference if the initiator does not re-enter.


### Conference Enable/Disable

This feature allows administering of the system conference feature on a per station basis for the ability of a station to initiate a conference.

## Database Printout (Dump)

Through a system programming command, either portions of or a complete database dump can be printed using the RS-232C connector located on the optional Miscellaneous Service Unit (MISU) board on the Triad-S system.

## Database Upload/Download



DataBase Upload/Download feature provides a maintenance facility which has been added to the Remote Administration routine. This routine permits downloading of the database to a PC, when a software change is made or when the system must be initialized and re-programmed. Additionally, the routine facilitates the programming of a database on an in-house system which can be downloaded to a PC and then uploaded to a system in the field. After the system maintenance is completed, the file saved in the PC can then be uploaded to the system.



## Class Of Service (COS) Day/night

This feature allows stations that are a certain COS during the day, to be assigned a different COS when the system is put in the night mode. The night COS goes into affect when the system is placed into the night mode, manually or automatically. This prevents the misuse of phones after hours.

## Dial By Name

The system allows station users to dial extension numbers, or speed bins by entering the name of a person that has been programmed for that station. The system database allows entry of a name (alphanumeric) up to 24 digits in length for each station. The programmed name can be used for dial-by-name station users and in directory dialing. This feature should not be confused with the Name In Display feature.

## Dial Pulse Sending

Each CO interface circuit for outside lines can be programmed to send dial pulse or DTMF signals, Dialing speed and break/make ratios are programmable.





## Dialing Privileges

The system provides a flexible means of providing toll or dialing restriction. Through the assignment of class of service (both station and outside line) many combinations of allow and deny numbers can be set. Both area and office codes can be screened for allow/deny privileges.



Figure 2-1: Digital Enhanced (8-Button) Terminal



Figure 2-2: Digital Executive (12-Btn) Terminal



Figure 2-3: Digital Executive (24-Button) Terminal



## Direct Inward System Access (DISA)

The Triad-S system allows programming of an unlimited number of outside line calls to provide direct access to the system and use of features such as WATS lines, intercom dial tone or the ability to dial out on outgoing trunks without going through the attendant. The duration of a Trunk-to-Trunk DISA call can be set by the system administrator. DISA callers may also access LCR, All Internal/External paging, All Call paging, Call Park pick-up, and Meet-Me paging. A DTMF receiver must be available for DISA operation.



*Vodavi has taken precautions to prevent fraud by requiring a security code for this feature. However, it is may **still** be vulnerable to fraud.*

### Group Access

Incoming DISA callers may access all line groups such as FX or WATS lines or other outgoing services while away from the office.

### DISA Call Forwarding

Four options are available for a DISA line: 1) 24-hour, 2) night, 3) 24-hour with forwarding, 4) or night with forwarding. The CO line ringing at a station follows preset forward or no-answer call forward using the preset forward timer the same as an initially ringing CO line does. It follows direct forward and busy forward the same as an initially ringing CO line. If the preset forward timer is set to 00 (disabled) the first forward of the DISA ringing call at a station takes 15 seconds.

### Programmable Access

A three-digit security code can be assigned in the system database to restrict unwanted use of the DISA circuits. Each DISA line can be programmed independently for each option.

### Station Access

DISA callers may dial any station directly without going through the attendant.

### Trunk-to-Trunk

The DISA Trunk-to-Trunk (or Conference) option on the CO line governs a DISA callers ability to access other outside lines, CO lines must have DISA Trunk-to-Trunk enabled to allow a DISA caller to establish an outgoing trunk-to-trunk connection. This allows for specific CO line access restriction on DISA calls.



## Direct Station Selection (DDS)

A user with DSS buttons assigned at their Key Station can call an intercom station or transfer a CO call by simply pressing the appropriate DSS button.

## Direct Transfer Mode

An outside CO line can be transferred from one keyset to another. By using the TRANS button, a screened (announced) transfer can be transferred directly to the handset on any key station. Any number of attempts can be made to locate someone by calling different keysets without losing the call. If a line is transferred to a busy station, it receives muted ringing.

This feature is programmable on a system-wide basis in admin programming.

## Directory Dialing

Directory dialing allows station users to obtain a directory of station users and have the system dial the extension that is currently on the display. The Triad-S system provide locations for up to 200 names.

Directory dialing also allows users to program a name along with a speed dial bin for use in later locating a speed dial number. When prompted to do so, the system displays the name associated with a speed dial number on the LCD display so that when the desired name is shown, the user may then have the system dial the number.

Directory dialing also allows users to associate a name with an entry in the local number/name translation table. When prompted to do so, the system displays the name associated with the table on the LCD display so that when the desired name is shown, the user may then have the system dial the number.

## Disable Outgoing CO Line Access

This feature allows the first attendant station to dial a code and disable a CO line from outgoing CO calls. This applies to all station(s) that have access to that line. Incoming status is not affected.

## Distinctive Ringing (User Selectable)

The tone ring signal used to notify stations of an incoming call can be changed by each station user to provide distinctive ringing among a group of stations. Each station user may select a distinctive ringing tone



**Do Not Disturb (DND)**

that is used to ring their station. The system provides 36 different ring patterns that the station users may select from.

 **Do Not Disturb (DND)**

Placing a keyset in DND eliminates incoming outside line ringing, intercom calls, transfers and paging announcements. A ringing station may go into DND to silence ringing. The attendant can override a station in DND. The station in DND can use the telephone to make normal outgoing calls. A station can be denied this feature through programming. DND does not apply to the first attendant station.

**One-Time Do Not Disturb**

Allows a station user to turn off muted ringing that occurs while off hook (handset or ON/OFF) on another call. Useful when having an important conversation and do not wish to be disturbed by ringing. The station, while off hook, (ON/OFF or handset) depresses the DND button which eliminates muted ringing. When the station goes on-hook the DND button is extinguished and DND is cancelled.

**DTMF Sending**


Each CO interface circuit for outside lines can be individually programmed to send DTMF (tone) or dial pulse signals.

**End-to-End Signaling**

This feature enables station users to communicate with external devices such as answering machines and IVR devices.

**Executive Override**

This feature allows designation of certain stations as executive stations with the ability to override and Barge in on other keysets engaged in conversation on a CO line or intercom call.



In addition to the station programmable option, a system programmable option enables or disables a warning tone when the station marked as an executive is cut-thru to the conversation. This is useful for an ACD agent supervisors or training personnel who require a service observing option.

A separate condition has been added to this feature which allows or disallow an Executive to override an extension. This prevents an extension with override capability from overriding an Executive's station,



*Use of this feature when the executive override warning tone is disabled may be interpreted as a violation of federal or state laws.*



*A change in volume may occur on the CO line or intercom call after the barge-in occurs.*

## Executive/Secretary Pairing

There are four sets of Executive/Secretary pairings available. When the Executive station is busy or in DND, the Secretary station receives intercom calls and transfers. The Secretary station can signal the Executive in DND by using the Camp-On feature.

## External Night Ringing

The system can be programmed so that CO lines marked for UNA provides ringing out the external page ports when the system is placed into Night mode.

## Flash

Provides telephone users with the ability to terminate an outside call or transfer a call behind a PBX or Centrex and restore dial tone without hanging up the handset. A FLASH button is located on each Digital Terminal.

## Flash On Intercom

This feature enables key station users to utilize the Flash Key to terminate pages and intercom calls. While connected to a page zone or another internal station pressing the Flash key terminates the call and return intercom dial tone.





Flash Rates (Programmable)



## Flash Rates (Programmable)

Fixed and flexible button flash rates can be programmed. There are programmable flash rates for 19 features/functions that can now be programmed to up to 15 different red flash rate options and 14 different green flash rate options. These are set-up in admin programming.

All other flash rates in the system are fixed (defaulted) at the rates for the Triad-S system.

## Flexible Button Assignment

The Triad-S system has the following flexible button assignment features:

- ❖ Enhanced or Executive Digital Terminals (24-Btn/12-Btn) with 11 fixed feature buttons and 24/12 flexible buttons. The system powers up with a default button mapping as shown in *Figure 2-1: Digital Enhanced (8-Button) Terminal* and *Figure 2-2: Digital Executive (12-Btn) Terminal*. Each flexible button can be assigned as a CO/PBX line, DSS button, Speed Dial or Feature button. Refer to *Table 2-1: Flex Button Programming Codes*.
- ❖ Enhanced Digital Terminals (8-Btn) with 5 fixed feature buttons and 8 flexible buttons. The system powers up with a default button mapping as shown in *Figure 2-2: Digital Executive (12-Btn) Terminal*. Each flexible button can be assigned as a CO/PBX line, DSS button, Speed Dial or Feature button. Refer to *Table 2-1: Flex Button Programming Codes*.

This feature enables programming of flexible buttons from a remote location (off-site). Range programming can also be used to assign these buttons to multiple stations.

- ❖ Outside Line: Automatically accesses assigned line. (Assigned in database)
- ❖ DSS/BLF: Automatically signal assigned station and provides BLF for off-hook and DND. (User programmable)
- ❖ Feature: Any feature with a dialing code (i.e., Personalized Messages, Paging, Account Code, Call Park, Music, etc.) can be assigned to a flexible button. (User programmable)
- ❖ Group Access: (Le., ACD, UCD, Hunt, Voice Mail group pilot numbers) (User programmable).
- ❖ Speed Dial: Automatically dials Speed number. (System, Station, Saved Number Redial, Last Number Redial) (User programmable)
- ❖ Pooled Group Access: Some or all outside lines can be grouped; pressing this button accesses the highest numbered unused CO line in that group. (Assigned in database)
- ❖ Loop: Used to answer a transferred call on a line for which a user does not have a button assigned. (Assigned in database)





- ❖ Unassign (Locked-Out): Specific buttons may be designated as unused or locked out. When a button is programmed as unused, the button may not be programmed by the station user using flex button programming procedures.





100-131	<b>Triad-STM</b> Ext. Numbers	643	Repeat Redial
<b>43+[C]</b>	Call Park Location 1-7 (System)	<b>644+[IDX]</b>	Mailbox button
438	Personal Park	645	Intercom button(s)
44 [V]	Voice Mail Group Pilot Numbers O-7	<b>646+[XXX]</b>	Call Coverage (Ringing Type)
45 [H]	Hunt Group Pilot Numbers O-7	<b>647+[XXX]</b>	Call Coverage (Non-Ringing Type)
55 [U]	ACD* Group Pilot Numbers O-9	<b>649+[44V]</b>	One-Touch Recording
55 [U]	UCD Group Pilot Numbers O-7	653	Caller ID Name/Number Toggle
56 [U]	ACD* Group Pilot Numbers 1 O-15	<b>654+[0, I]</b>	Answering Machine Emulation mode
566	ACD*/UCD Available/Unavailable	680	Dial Speed Directory
567	ACD*/UCD Calls in Queue Display	695	Distinctive Ringing
<b>570+[YY]</b>	ACD* Call Qualifier Code	70	All Call Page (Internal and External)
571	ACD* Agent <b>Logout</b>	71	Internal Page Zone 1
<b>572+5 [UU]</b>	ACD* Agent <b>Login</b>	72	Internal Page Zone 2
573	ACD* Group Member Status Display	73	Internal Page Zone 3
574	ACD* Agent Help	74	Internal Page Zone 4
<b>575+5 [UU]</b>	ACD* Supervisor <b>Logout</b>	75	Internal All Call Page
<b>576+5 [UU]</b>	ACD* Supervisor <b>Login</b>	<b>76+[1]</b>	External Page Zones
<b>577+5 [UU]</b>	ACD* Supervisor Queue Status Display	77	Meet-Me-Page Answer
578	ACD* Overflow <b>Avail/Unavail</b>	9	Least Cost Routing (LCR) Access
<b>579+5 [UU]</b>	ACD* Calls in Queue Display buttons	<b>#0</b>	Group Call Pick Up
601	Attendant Override	<b>#5</b>	Universal Day/Night Answer
603	CO Line Off-Net Forward	<b>[SPEED]+[YY]</b>	Speed Dial Access (00-19 Station) (20-99 System)
604	Night Service	<b>[SPEED]+[S]</b>	Save Number Redial
621	Line Queue	<b>[SPEED]+[#]</b>	Last Number Redial
622	Call Back		
625	Executive Override/ Monitor Barge-In		
626	LCR Queue Cancel		
627	Account Code Enter		
628	OHVO Enable		
631	Do Not Disturb		
632	Background Music		
<b>633+[ZZ]</b>	Personalized Messages		
<b>633+[00]</b>	Clear Personalized Messages		
634	Headset Mode		
635	<b>ICLID</b> Display (unanswered calls)		
639	Incoming CO Call Transfer		
641	Release button		

**Table 2-1: Flex Button Programming Codes**

XXX = Station Extension Numbers  
 YY = Speed Dial Bin Numbers  
 ZZ = Personalized Messages  
 U = ACD\* (O-15) or UCD (O-7) Group Number  
 C = Call Park Location O-7  
 H = Hunt Group Number O-7  
 V = Voice Mail Group Number O-7  
 IDX = 001-255

- Features available with optional software.



## Forced Least Cost Routing (LCR)

The Triad-S system may be programmed on a per station basis to force the use of LCR for outgoing accessed. This allows the system administrator to maintain greater control over dialing patterns and the lines used for placing outgoing CO calls.

## Forward Override

This feature allows a user to reach a busy station that is busy forward, no answer forward or all call forwarded. This allows the calling station to call to a forwarded station, OHVO, Executive Override, Monitor, Message Wait, Camp-On, or Call Back at that station rather than forwarding to the busy destination.

## Group Listening

All digital key stations have built-in speakerphones. Station users may use the speaker to monitor a call while using the handset to converse with the outside party. This enables other people in the room to listen to both parties in the conversation.



*This feature is not available when the station is in headset mode.*

## Headset Compatibility

The Triad-S Digital Terminals are designed to allow the connection of an industry standard, electret mic compatible, modular headset. The user connects the modular headset to the handset jack on the telephone leaving the handset in place. The ON/OFF button on the Digital Terminal is then used to activate the headset.

## Headset Mode

Each digital terminal can be individually programmed for headset operation. When programmed, an industry standard headset with its adapter box may be connected to a digital terminal for headset use. This allows handset or headset operation by switching the selector switch on the adapter box. Speakerphone operation and call announce on intercom are disabled while a station has enabled headset mode.

Once programmed in station programming, the user may then select between headset mode or normal handset/speakerphone mode by simply dialing a code or pressing a user programmable flex button,



## Hearing Aid Compatible



## Hearing Aid Compatible

All Digital Terminals and Single Line Telephones are hearing aid compatible in compliance with the FCC Part 68, Section 68.316. This allows using the telephone in conjunction with users wearing hearing aids.

## Hold - Exclusive

When a line is placed on Exclusive Hold, no other station in the system can retrieve this call. Exclusive Hold may be programmed and activated on the first or second depression of the Hold button, CO Lines while in a transfer hold are always placed in an Exclusive Hold condition.

## Hold - Preference

This allows either System or Exclusive hold as the primary hold on the first depression of the HOLD button, depending upon programming. A second depression invokes the second hold preference.

## Hold - Recall

When an outside call has been on Hold for a programmable length of time, recall ringing tone is sent to the station placing the call on Hold. If this station does not answer the recall, a recall tone is sent to the attendant(s).

## Hold - System

When a line is placed on System Hold, any station in the system with an appearance of that line can retrieve the call.

## Hot Keypad Feature

This feature enables a station user to activate the telephone by dialing digits without going off hook.

## Hot Line/Ring Down

Digital key stations may be programmed to immediately call or ring down a particular station or outside number upon going off hook. This is done by programming the stations Off-Hook preference to activate a



DSS or Speed dial feature key. This feature can be overridden if the station user selects a CO line first when going off-hook.

## Hunt Groups

The system can be arranged for up to eight Hunt groups. Each Hunt group can contain up to eight stations each. Each Hunt group is independently arranged to utilize either a pilot hunting technique or station hunting technique.

## Chaining

Hunt Groups can be chained or joined together forming larger Hunt Groups. This is accomplished by assigning a pilot hunt group number as the last member of a group.

## Pilot Hunting

Incoming CO, transferred CO, and intercom calls can be directed to a pilot extension number of a Hunt group. The system searches sequentially (in the order the extensions were entered in the database programming) for an idle station in the group and rings that station. Calls directed to stations (by calling the extension number) within the hunt group do not hunt but receive call progress tones of the extension dialed.

## Station Hunting

Transferred CO calls and intercom calls that are presented to a busy, or DND station, who is a member of a station Hunt group, searches sequentially (in the order the extensions were entered in database programming) for an idle station in the group and rings that station. Direct ringing CO Line calls to the station number rings at the station. If station hunting is desired on a direct ringing call, program the station hunting pilot number in the CO Line ring assignment list. This allows the member of the hunt group to receive private calls and hunt group calls.

## ICLID/Caller ID Features

The ICLID (Incoming Calling Line IDentification) feature has been added to the Triad-S system. However, in order for this feature to operate properly, it must be activated from the Central Office so that the numbers of the calling party is delivered over the individual tip and ring of the CO lines during the first silent interval between ringing. The following features have been implemented.





## Caller-Entered ICLID Digits

This feature is available with optional software. The Guaranteed Message announcement feature provides a means to force incoming callers to an announcement before being placed into an ACD Queue or routed to an agent. The outside callers are presented with the entire message before being routed to the ACD Group. Agents in an ACD Group with a Guaranteed Message enabled receives incoming callers only after the caller has heard the designated recorded announcement in its entirety.

Additionally, the Guaranteed Message feature provides an option to capture digits dialed by the incoming caller which can be inserted as ICLID incoming number identification.

If the Guaranteed Message announcement is programmed in Admin, incoming ACD calls is routed to the Guaranteed Message RAN before going to the ACD Group. If the ICLID option is selected, digits received before the announcement time-out is captured and inserted as incoming ICLID number information. When the ICLID option is selected, a [#] is recognized as a termination of the announcement and a [\*] is recognized as an entry error. An entry error removes the ICLID number and the incoming caller can re-enter his phone number.

## Caller ID Name/Number Option

This feature allows a station user to program a flexible button to view both the number and name on the LCD when receiving a Caller ID CO call. The top line of the LCD displays the number of the caller and the bottom line of the LCD displays the name.

## Calling Number/Name Display

This feature is intended as the basic offering of the ICLID service when associated with the Triad-S system. Whenever an incoming call is received at the system, the number received along with the ringing signal is stored in the line control tables and used at various points in the processing of the call,

- ❖ The primary function is that the calling number is displayed (if available) at any point at which the LINE RINGING is displayed in the system.
- ❖ Additionally, with the availability of the calling name feature, if the calling name is provided, the system delivers that to the display instead of the calling number,

## Incoming Number/Name for SMDR Records

This feature operates normally in the absence of ICLID information or the failure of the ICLID equipment, If the information is present at the time that an SMDR record is generated for a call, it alters the content and format of the SMDR output record.



If the calling number is available, the number is output in the SMDR record in the same location as the dialed number is located in the outgoing calls.

If the calling name is present, an additional line is output in the SMDR record identifying the name. This record immediately follows the normal SMDR record. The normal SMDR record includes an indicator which identifies that a following record with name identification is present.

Unanswered calls is recorded in the SMDR record for incoming with an indicator to allow the identification of callers for statistical and call-back purposes.

## Unanswered Call Management Table

An Unanswered Call Management Table with 100 entry capacity is maintained in the system database. The calling number/name information pertaining to any unanswered call is placed in this table at the time the system has determined that the call has been abandoned.

This table may be accessed from any display telephone to review unanswered calls. Only an attendant station(s) can delete an entry from this table.

## Idle Speaker Mode

This feature allows the system to determine whether the first digit dialed is heard over the digital terminal speaker. This feature is allowed or denied on a system-wide basis in programming.

## Incoming CO Call Transfer

This feature provides station users the ability to transfer a call that is currently ringing at their station without answering it. Only Incoming and Transferred calls can be forced. This feature only operates when the station is in an idle mode and is not available to Single Line Telephone users. Calls may be forwarded to any available station, ACD/UCD group, VM Group. Destination station must have an direct appearance for that CO Line or Loop button and not in DND or error tone is presented to the originator and the call remains ringing at his station. If the station is busy, the current call must be placed on hold, the ringing transfer initiated, and then the station can return to his original call.

## Intercom Button(S)

This feature provides station users the function of ringing a busy station via the intercom without using the Camp-On or Executive Override features. This also allows stations to place intercom calls on hold. If calls







are ringing on intercom buttons and a Handsfree call is received, the Handsfree call is allowed and the calls ringing continue with muted ringing. Multiple intercom path buttons can be assigned to a single station, however up to five internal parties can be placed on hold per station. Music-On-Hold is provided to intercom callers on hold.

This feature can be programmed on any key station or DSS Console with an available flexible button. If there is an available intercom button, a station calling that station cannot OHVO, Camp-On or Override that station. Depending on the key station programming, intercom ringing is muted or reminder ringing. If all intercom buttons are in use, then the station may utilize the Camp-On or Executive Override features. By default, no intercom buttons are assigned to any key stations.

## Intercom Calling

The system's architecture allows non-blocking of intercom calls. A station is reached on intercom by dialing the associated three-digit number.

## Intercom Signaling Select

Users can control the method by which they receive intercom calls and signals. A convenient intercom signal switch(es) or HPT button (Digital Terminals) is located on each Terminal for easy selection, The choices are:

- ❖ Handsfree (H): The station user, upon hearing a tone burst and voice announcement over the speaker, can reply handsfree.
- ❖ Privacy (P): The station user receives a burst of tone and a voice announcement over their speaker. The microphone is deactivated for privacy, The called party must lift the handset or press the MUTE button to answer the call.
- ❖ Tone Ringing (T): A standard tone ring notifies the party of an incoming intercom call. The called party answers by lifting the handset or moving the switch to the handsfree (H) position or pressing the ON/OFF button.

## Inter-Digit Timeout

This feature allows programming of the inter-digit time-out on a system-wide basis. This feature applies to intercom and LCR calls, DISA inter-digit time-out remains unaffected by this timer.



## Keypad Mode (Digital KTU Only)

This feature allows the station user to determine the mode in which the Digital Terminal with CTI Box (optional) operates. The five (5) modes are: Inactive mode, PC Phone mode, ATD Command mode, ATH Command mode and CKTU mode. Through the use of a dial code, the station user can also determine the baud rate for each mode selected. This setting is stored in back-up memory in the event of a power outage or system reset.

## Keypad Self Test

The Triad-S system contains a test mode feature that supports the off-line testing of Digital Terminals and DSS consoles. The term off-line means that the unit under test is disconnected from the system during the test operation. Digital Terminals not under test continue to operate in the normal manner. Tests are provided to verify the keypad and DSS LED, LCD, and keypad button operations.

## Last Number Redial (LNR)

Permits the automatic redialing of the last telephone number dialed on an outside line. Up to 24-digits can be stored. Outside line selection of the same line used is automatic.

## LCD Interactive Display

The Executive Digital Terminal provides the user with visual indication of call status, Calls to and from other extensions, number dialed, line used and camp-on are some of the features displayed.

## Least Cost Routing (LCR)

Allows the system to automatically select the least costly route available according to the number dialed, the time of day/day of week, the class of service (COS) assigned to the station/trunk group priority level assigned.

## 3-Digit Table

This table is divided into two sections: Leading 1 (1 is dialed before the number) and Non-Leading 1 (no 1 is dialed before the number). This gives the system the ability to handle call routing in areas that require a 1 before a long distance number as well as in areas that do not require the 1.



## Least Cost Routing (LCR)



## 6-Digit Table (Office Codes)

The 6-Digit Table can include 20 office code maps. Each map can be programmed to route up to 800 office codes to one of the 16 possible route lists. Each map must be associated with a specific area code in the 3-Digit Table. Several different office code maps can be used with the same area code to provide additional routing flexibility.

## Daily Start Time Tables

The Daily Start Time tables allow the user to match the Time Periods discount structure to the carriers rate schedule.

## Default LCR Database

In an effort to decrease installation and set-up time usually associated with LCR a default LCR database has been incorporated. The default LCR database provides basic routing for all local and long distance dialing.

## Exception Tables

This table is used to route operator assisted calls and any other calls which would use a one or two-digit number rather than a three-digit area code.

## Insert/Delete Tables

There are 20 Insert/Delete Tables. Up to 20-digits, including pauses, can be inserted and up to 16-digits deleted. Digits can be inserted before or after the number dialed, but can be deleted only from the beginning of a number dialed. To insure that a pause is inserted in LCR at default, the database programming has been changed to add a pause in each of the 20 LCR insert and delete tables and insert table 0 in each of the route tables.

## LCR Routing for Toll Information

This feature adds provisions to the LCR call processing which allows common call routing for all toll information calls.

1-(XXX)555-1212, (XXX)555-1212, 1-555-1212 and 555-1212 calls are intercepted and sent to a selected route in the Route List Table. Numbers dialed is integrated and if it is a toll information call, either preceded with an area code or without or with a leading digit 1 or not, the call is sent to the route designated in programming.





## Route List Tables

Up to 16 different routes can be programmed. Each route can contain up to four route lists — one for each of the four time periods. Up to seven CO line groups (routing choices) and their corresponding Insert/Delete Tables may be programmed within each route list.

## Weekly Time Tables

The least costly route for a particular dialed number may be different at different times of the day and on different days of the week. To accommodate this situation, there are two Time-of-Day tables: a Daily Start Time Table and a Weekly Schedule Table.

The Weekly Time table determines which one of the four Routes LCR to use based on the Time-of-Day and Day-of-the-Week.

## Local Number/Name Translation Table

An administrable table provides a local translation from a received calling number to a name. This table can be administered by the customer from the attendant console location. This table is also shared by the ICLID features. In cases of conflict between the name delivered from the CO and that in the local translation table, the local translation table shall rule. 200 entries are provided for the Triad-S system.

## Mailbox Button(S)

This feature provides station users to program specific mailbox index numbers onto flexible button at their station or DSS Console. Users can then transfer internal/external callers to specific Voice Mail Groups or Mailbox numbers. These Voice Mail Groups or Mailbox numbers are programmed in admin programming. A total of 255 mailbox buttons are allowed per system.

This feature can be programmed on any key station or DSS Console with an available flexible button. If a station is an OHVO, Camp-On or Executive Override initiator, they may not use the mailbox button feature. Stations engaged in a conference cannot use this feature.

If no station(s) are programmed in the Voice Mail Group, the user receives an error tone. By default, no mailbox buttons are assigned to any key stations.





## Meet Me Page

Users may answer a page call from any phone in the system by dialing a special code. The party who initiated the page must remain off-hook.

## Message Waiting

Stations that are busy, unattended, or in DND can be left a message indication by other stations in the system. Up to five messages can be left at one keyset. Upon return to the station, the user can press the flashing MSG WALT button to ring each party in sequential order.

## Message Waiting Reminder Tone

A key station with a message waiting can be reminded at a programmed timed interval with a tone.

## Music-On-Hold

A music source, when connected to the system, provides music to all lines on Hold, parked calls, transferred calls and calls waiting to be answered by Automatic Call Distribution (ACD) or Uniform Call Distribution (UCD). This feature can be allowed or denied on a system-wide basis in database programming. This feature can also allow or deny Music-On-Hold heard on each CO line and is programmable on a per CO line basis.

This feature also allows the system to assign CO line circuits as additional music inputs. This increases the capacity of music channels beyond the two available on this system. A total of eight channels is available for use on the system.

## Mute Key

Pressing the MUTE button while in the speakerphone mode or using the handset disables the microphone but not affect the speech coming over the speaker or handset. Pressing the illuminated MUTE button again reactivates the microphone.

## Name In Display

This feature allows every extension (Key or SLT) the capability to program the users name, for that station, so that people using display telephones see the name instead of the station number on their display. The name is programmed at each station by the user and may be up to seven letters in length.





## Name/Number Display At Idle

This feature allows the programmed seven-digit name and station number to display together. This option is programmable on a per station basis, however the feature must be enabled/disabled in admin programming. If a station has this feature enabled but has not programmed a name, the name portion of the LCD is blank. The priority of the idle display is UCD/ACD, Hunt, Station/Name, or Station alone.

## Night Service Feature

The Night Service feature provides a means to put the system in night mode from any keyset or remove the system from night mode from any keyset as long as the system was put in night mode by the night service feature flex button. If the system was placed in night mode by the attendant using the DND button or if the system was placed in night mode by the automatic schedule, the night service flex button can not remove the system from night mode.

## Night Service Mode

### Automatic Night Mode Operation

The Triad-S system can be programmed in database administration to place the system into automatic night mode. The attendant(s) can override the Automatic Night mode schedule simply by pressing the NIGHT (DND) button.

### External Night Ringing

The system can be programmed so that CO lines marked for UNA rings on the external page speakers.

### Manual Operation

The attendant(s) can control the use of Night Mode manually by pressing the NIGHT (DND) button. An LED indicates when the system is in Night Mode operation.

### Night Class of Service (COS)

The system allows each station to be assigned a different COS for night operation. The night COS goes into effect when the system is put into night mode manually or via the automatic schedule. Prevents the misuse of phones after hours.





## Night Ringing Assignments.

Each CO line may be individually programmed for Night ringing to other stations, to Hunt groups, ACD groups, UCD groups, Voice Mail groups, or off-net via speed dial. When the system is placed into night mode, manually or automatically, ringing follows the night ringing assignments for each CO line.

## Universal Night Answer (UNA)

Incoming CO lines can be programmed for Universal Night Answer (UNA). Stations which do not have access to a line during the day can answer that line while the System is in the Night Mode by dialing a UNA code.

## Weekly Night Mode Schedule

A programmable weekly night mode schedule provides for 24 hour, 7 day a week automatic night mode operation. The system can be put into and out of night mode automatically on a daily basis,

## Off -Hook Preference

### Auto Feature Access

In addition to auto line access Digital Terminals have the ability to have their off-hook preference select a DSS or feature button upon going off-hook or pressing the ON/OFF button.

### Auto Line Access

Each station, key or SLT, may have their phone programmed to access a particular CO Line such as a private line or a line from a Group of CO lines upon going off-hook. This is useful in Centrex or PBX applications when station users have dedicated lines. Outside line dial tone is received just by going off-hook, without the need to dial an access code.

### Hot Line/Ring Down

Digital Terminals may be programmed to immediately call or ring down a particular station or outside number upon going off hook. This is done by programming the stations Off-Hook preference to activate a DSS or Speed dial feature key. This feature can be overridden if the station user selects a CO line first when going off-hook.





## Intercom Access

When off-hook preference is enabled, at a key station, that station may still obtain intercom dial tone for accessing internal stations or other system features. This is done either by pressing an DSS button or dialing their own intercom station number prior to going off-hook.

## User Programmable Preference

Based on a station programmable option Digital Terminals may be given the ability to enable, disable or change their off-hook preference by dialing a code. This option can be denied in station programming on a per key station basis.

## Off -Hook Signaling

If a station has been programmed to receive direct outside line ringing and is busy on another call, the call rings at the station using a muted ring signal. This option allows a user to receive a reminder ring at his busy station, instead of muted ringing. Additionally, a reminder ring timer has been added to the system to provide the reminder ring every time the timer expires, as long as the incoming CO line remains connected. The system defaults this option to muted ringing. Additionally CO calls may be camped-on to a busy station and receive muted ringing.

## Off -Hook Voice Over (OHVO)

This feature allows Digital terminal users, off-hook on a call (CO or Intercom), to receive a voice announcement through the handset receiver without interrupting the existing call. The Voice Over is muted so as not to override or drown out the existing conversation. The overridden party may then respond to the calling party using CAMP-ON procedures to talk to the calling party or use Silent Text Messaging to respond to the calling party via LCD displays. The calling (originating) station and receiving station MUST be a digital terminal. The receiving station MUST also be programmed to receive OHVO calls.

A third method provides for the receiving station to respond to an OHVO announcement utilizing the MUTE feature button. This button is pressed to carry on a two-way conversation with the OHVO initiator while still listening to the original call.



*The calling station is placed in a one-time DND mode upon initiating the Voice-Over. One- Time DND cannot be toggled during the OHVO call. The station receiving the OHVO call must be off-hook and in the H mode.*







## On-Hook Dialing

The Digital Terminal user can place calls without lifting the handset. If the speakerphone is disabled, the handset must be lifted to converse.

## Online Programming

Changes to the system database can be made without interrupting normal system operation. Programming may be performed using a key station terminal connected to the system (Station 100) or via an external PC either on-site or remotely.

## One-Touch Recording

This feature allows the station user while on an internal/external call to press a button and have the system record the conversation in the station users mailbox. It has been designed to work with the Triad-S Dispatch Voice Mail system via in-band signaling.



Use of this feature may be interpreted as a violation of federal or state laws and an invasion of privacy. Check applicable laws in your area before recording calls using this feature.

## Page/Relay Control

On the Triad-S system, there are two dry relays that may be individually programmed for: External Page, Loud Bell Control, CO Line Control and Recorded Announcement uses.

## Paging

### Access Restriction

Programming on a per-station basis, can deny any station the ability to make any type of page.

### External

There is one external paging zone available on the **Triad-S™** system. External Paging requires a three-digit dialing code. External paging requires an externally provided amplifier and paging system. The zone can have a relay contact associated to it.





## Internal

There are four internal paging zones available in the Triad-S system. A station can be in any or all zones or in no zone at all. Stations not assigned to a page group can still make page announcements, if allowed in station programming. Stations can be assigned to a page group in order to receive pages but not allowed to make page announcements.

## Park Personal

Each digital terminal in the system can place a call into a personal park location and then later retrieve that call from the originating station. Intercom calls and CO line calls can be placed into the stations' personal park location. Calls parked in a personal park location are subject to the system call park recall timer. A station retrieving a personal parked CO call must have either a direct CO line appearance or an available loop button to retrieve the parked call.



***Only one call can be parked in a Personal Call Park location at one time. When dialing the Personal Park location and the location is already occupied, the initiating station receives the previously parked call and the second call is then parked.***

## Pause Timer

When dialing a speed number, a timed pause between digit sending can be placed in the number. The length of this pause can be programmed in the system database.

## PBX Dialing Codes

Five one or two-digit access codes can be entered into memory. When one of these codes is dialed, it signals the KSU that the user is dialing a PBX access code, not dialing directly over an outside CO line, and to apply toll restriction to the next dialed digits after the code. Therefore, toll restriction is not applied to the station unless one of these five PBX codes is dialed first. This allows dialing of PBX extensions 100, 110, 111, etc. and functions on lines marked as PBX lines in programming.

## Personalized Messages

Each station (Key and SLT) can select a pre-assigned message to display on the LCD of the digital key terminal calling that station. There are ten possible messages which can be displayed:



## Personalized Messages



- 00 = Clears Messages
- 01 = ON VACATION
- 02 = RETURN AM
- 03 = RETURN PM
- 04 = RETURN TOMORROW
- 05 = RETURN NEXT WEEK
- 06 = ON TRIP
- 07 = IN MEETING
- 08 = AT HOME
- 09 = ON BREAK
- 10 = AT LUNCH

**Custom**

This feature allows the system administrator to enter up to ten custom messages for use by station users of the system. These messages may be specified and customized by the customer on a system-wide basis,

**Date and Time Entry to Personalized Message(s)**

This feature allows the station users to activate certain messages that allow the user to enter a specific time or a date of return. These messages display on calling stations to alert them of the desired party's return time or date.

- 11 = ON VACATION UNTIL: MM/DD
- 12 = RETURN: HH:MM xm or MM/DD
- 13 = ON TRIP UNTIL: MM/DD
- 14 = MEETING UNTIL: HH:MM xm
- 15 = AT HOME UNTIL: HH:MM xm
- 16 = ON BREAK UNTIL: HH:MM xm
- 17 = AT LUNCH UNTIL: HH:MM xm

**Personalized Message Code on a Flex Key**

This feature allows a key station user to program the personalized message code [633#] onto a flex button. This speeds access of the pre-selected messages.





## Scrollable Canned Messages

This feature allows the user to use a single digit [#] or [\*] to scroll through the canned messages and select one. When the desired message is displayed, pressing the hold button places that message on the station LCD. This feature operates when the phone is in the idle mode only. This feature cannot be activated if the station is in the Call Forward or DND mode(s). This feature is not available to attendant stations. The messages is scrolled in the following order:

- ❖ Clears Message
- ❖ AT HOME
- ❖ AT LUNCH
- ❖ IN MEETING
- ❖ ON BREAK
- ❖ ON TRIP
- ❖ ON VACATION
- ❖ RETURN AM
- ❖ RETURN EM.
- ❖ RETURN NEXT WEEK
- ❖ RETURN TOMORROW

## Preferred Line Answer

A station with Preferred Line Answer can answer any assigned outside, transferred, or recalling line, or queue callbacks by lifting the handset or pressing the ON/OFF button. The station **MUST** be physically ringing, to function properly.

## Privacy Release

Privacy is insured on all communications in the system. If desired, the customer may elect to disable the Automatic Privacy feature, thus allowing up to three other stations to join in on an existing CO Line conversations.



***Disabling of the privacy feature may be limited by federal, state or local law, so check the relevant laws in your area before disabling privacy.***





## Per CO Line Option

This feature allows programming of each CO line individually for privacy. This feature is useful for maintaining security on such lines as Data lines, Private lines, or special circuits requiring privacy. If privacy is disabled on a CO line then, while in use, another station may enter the conversation simply by pressing the CO line button. A programmable warning tone is presented to all parties prior to actual cut-thru. The station attempting to enter the conversation must also have privacy disabled.

## Per Station Option

Each station may be programmed to give the station the capability to join an existing conversation simply by pressing the CO line button that is in use. A programmable warning tone is presented to all parties when the station enters the conversation. The CO line must also have privacy disabled to allow the cut-through.

Privacy per station on SLT type stations allows/denies camp-on to the SLT. This is useful for data applications.

## Private Line

Private line programming allows certain lines to ring at a specific station only. When placed on Hold, these lines are active at the programmed station only. A private line can be transferred to other stations, provided the station receiving the call has a loop button or direct appearance of that CO line.

## Pulse-to-Tone Switchover

When commanded, the system changes the signaling on an outside line from dial pulse to DTMF (tone), allowing the use of common carriers behind a dial pulse outside line. This can be done manually when dialing, or can be stored within a speed dial number.

## Range Programming

The Triad-S system allow for range programming when programming CO lines and Stations. Range programming allows you to program all parameters alike for the entire range or you can change or modify a few items for all members in the range.





## Remote Administration

The Remote Administration feature allows authorized personnel to access the administration programming via a terminal device (portable terminal device or personal computer with communications software package).

The feature permits the review and entry of the customer database in the same manner as via the digital terminal at ADMIN Station 100. The terminal device can be connected directly to the RS-232C connector on the Miscellaneous Service Unit (MISU) on the Triad-S system, or can be accessed by a telephone modem linking the RS-232C connector (via a CO line) to a remote location. When entering the system remotely via a terminal device, access to the On-Board 9600 baud modem is accomplished by accessing Port 499 either through a direct ringing assignment or through DISA or by being transferred to Port 499 by any internal station.

## Database Upload/Download

Database Upload/Download provides a maintenance facility which is added to the Remote Administration routine. This routine permits downloading of the database to a PC, when a software change is made or when the system must be initialized and reprogrammed. Additionally, the routine facilitates the programming of a database on an in-house system which can be downloaded to a PC and then uploaded to a system in the field. After the system maintenance is completed, the file saved in the PC can then be uploaded to the system.

## Remote System Monitor And Maintenance

### Maintenance

The Remote Maintenance feature allows the Interconnects' technical staff to review the system configuration data and individual card slot configuration data. This can be done on-site using a data terminal or remotely using a modem to access a remote data terminal. When entering the system remotely via a terminal device, access to the optional 9600 baud modem is accomplished by accessing Port 499 either through a direct ringing assignment or through DISA or by being transferred to Port 499 by any internal station.

### Monitor

The Remote Monitor feature provides remote access to the installed system for diagnostic purposes. These capabilities benefit Service personnel enabling them to support the end user remotely. Different levels of



## Repeat Redial



access, via password, allows authorized personnel to trace, monitor and up-load critical information directly from the Triad-S system. This provides a more accurate means of acquiring system information that leads to a quick resolution of problems that may occur. This is all done without interfering with ongoing call processing or normal system operation, and in many cases may be performed without a site visit,

Capabilities allowed and reserved for this High level troubleshooting additionally are:

- ❖ Monitor Mode
- ❖ Enable and Disable Event Trace
- ❖ Dump Trace Buffer (Up-Load)

## Repeat Redial

The feature allows a digital key station to press a flexible button or dial a code and redial a busy or no-answer number at specific intervals. The user is signaled via a queue callback indication. The Repeat Redial flexible button flashes at the callback rate of 120 ipm for 15 seconds. If the station doesn't answer within the 15 seconds, the callback is canceled. The system retains the last call the user made. If the station is busy on an internal/external call when the Repeat Redial queue callback occurs, the callback does not occur until the user goes on-hook. The user must enter a Redial timer value when invoking this feature. This value is from 006-999 which represents seconds. A 2-minute interval would be entered as 120. Default value is 1 minute (60).

## Save Number Redial (SNR)

Any number dialed on an outside line can be saved permanently and used at any time. This number is saved until a new number is stored.

## Single Line Telephone (SLT) Compatibility

The Triad-S system support industry standard 2500 Type (DTMF) single line instruments. When the CO Line/Single Line Interface Board (CSIB) is installed in the **Triad-S™** system up to 24 single line telephones can be supported.

## Speakerphone

Both Enhanced and Executive Digital Terminals are equipped with a speakerphone. However, the speakerphone can be programmed to work in one of three ways:



- ❖ Normal speakerphone operation.
- ❖ Disabled for outgoing and incoming CO calls but handsfree on intercom allowed.
- ❖ Headset operation allowed.

## Speed Bins/Chaining

Speed dial bins may be chained together by simply pressing one speed bin, then another and another as required. This is helpful for accessing Long Distance carriers or banking services when account codes may be required.

## Speed Dial - Flash

A flash can be programmed within a speed dial number. When this is done, a pause is automatically inserted before the remaining speed dial digits are sent.

## Speed Dial - Station

Each station user can program up to 20 frequently dialed numbers of up to 24-digits in length. Pauses, flash commands, pulse-to-tone switchover, and NO-DISPLAY characters take up digit spaces. There are a total of 2000 speed locations in the Triad-S system for dividing among all telephones.

Numbers are dialed by use of the SPEED button and a two-digit code. This feature can additionally be assigned to any of the buttons in the flexible button field on each **keyset** for one-button activation,

## Speed Dial - System


Up to 80 commonly dialed numbers can be programmed into System Speed Dial for use by stations allowed this feature. These numbers can be up to 24-digits including pauses, flash commands, pulse-to-tone switchover, and no-display characters. The last 40 numbers are not monitored by toll restriction.

## Station ID Lock

This feature provides a means for the installer/programmer to lock the station Id of all stations in the system. Once locked, attempts to plug unlike devices (Le., a DSS into a 24-button port) results in the device not working.







This feature is designed to prevent the loss of station programming that results when a different station type is plugged into a port already designated as another station type.



## Station Message Detail Recording (SMDR)

The Triad-S system provides details on both incoming and outgoing calls. This feature is programmable to allow recording of all calls or just outgoing long distance calls. The system tracks calls by outside line, number dialed, time-of-day, date, station that placed the call and duration of call. Account codes may also be entered and recorded. The optional MISU is required.

## Station Relocation Feature

The Station Relocation feature provides a means to allow a user to unplug their station and plug it in at another location. Then by dialing a code followed by the old station number, all station attributes, including extension number, button mapping, speed dial, and class of service are transferred to the new location.




*If a station is assigned to a specific port and that station user unplugs their station and plugs it in at another location, the database administration programming is updated to reflect the new port change. Station lock may prevent this feature from working correctly.*

## Text Messaging (Silent Response)

This feature allows a station user to use text messages to respond to a caller that has either Camped-On or has used the Off-Hook Voice Over (OHVO) feature to alert a busy station of a waiting call or message. The camped-on station may respond to the caller via the personalized, custom, and response text (LCD) messages. The text messages appear on the calling party LCD display. The calling (originating) station and receiving station MUST be a digital terminal. The receiving station MUST also be programmed to allow OHVO calls.

## Toll Restriction (Table Driven)



The system provides a flexible means of providing toll restriction to internal stations of the Triad-S system. Each station is assigned a Class of Service for day mode operation and one for night mode operation these station COS's work in conjunction with a CO line Class of Service to allow for customized toll restriction. Two Allow and Deny tables along with four special tables afford the system administrator to devise a variety of complex toll restriction or dialing privilege schemes.



## Canned Toll Restriction

The system provides an easy means of applying the most common form of toll restriction where 1 + and 0+ along with 976, 555, and 411 type of calls are denied and 1-800, 1-888, 911, 1-911, and 1-611 type of calls are allowed. This canned toll restriction is applied through the use of a single pre-built Class-of-Service and can be assigned to stations using range programming.

## Transfer Recall

Screened and unscreened transfers recalls the initiating party if unanswered for a programmable length of time, and then if unanswered, recalls the attendant.

## Uniform Call Distribution (UCD)

Eight Uniform Call Distribution (UCD) groups can be programmed, each containing up to eight three-digit station numbers. Each group is assigned a pilot number. When this number is dialed, the first available agent in that group is rung. Calls are routed to the station that has been on-hook for the longest period of time.

## Agent Queue Status Display

The Agent Queue Status feature provides a means for an agent and UCD supervisor to view the status of their UCD group. This display is an idle state display and prompts a supervisor that Agents in a group are having problems answering all their calls. The display tells the agent and his supervisor how many calls are in queue, how many agents are available or logged into the group, and the length of time in minutes that the oldest call has been in queue. The agent receives the calls in queue display whenever there is a call in queue.

There are two methods of viewing UCD Group call queue status,

- 1 In-service UCD agents and the assigned overflow station sees the quantity of calls in queue on the LCD of their station for the UCD group of which they are a member. If every member of a UCD group is busy and calls are in queue, the Supervisor/Agent Queue Status display is seen at all UCD members of that group.



***If a UCD member is taken out of the group (i.e., DND, All Call Forward, Unavailable. etc.) they do not receive calls in queue information.***

Uniform Call Distribution (UCD)



- 2 Any station not assigned in a UCD group can view the number of calls in queue for any given UCD Group. To view the number of calls in queue the station user dials the Calls In Queue code (or presses a programmed FLEX button with this code) then enters the UCD group desired. The LCD displays, on a real time basis, the number of calls in queue for that group.



## **Alternate UCD Group Assignments**

An alternate UCD group can be programmed so that if stations in one group are busy, the alternate group is checked for an available station.

## **Auto Wrap-Up with Timer**

After completion of a UCD call (on-hook) the agent is not subjected to another UCD call for the duration of the Auto Wrap-Up Timer (regardless of the number of calls in queue), allowing the agent to finish call related work or access other facilities. This allows agents to remove themselves from the group (i.e., DND, Unavailable, Call Forward or originate another call). The Auto Wrap-Up Timer is programmed as part of the UCD database. (System-wide)

## **Available/Unavailable Mode**

Stations programmed into a UCD group may log off and on to their assigned UCD group by dialing an Available/Unavailable code. When an agent is in the Available mode that agent receives UCD calls in the normal manner. When an agent is in the Unavailable mode that agent no longer receives UCD type calls, however may receive non-UCD calls. Agents that have logged off by going Unavailable receives a visual reminder that they are logged off with a flashing LED and or a LCD display message.

## **Incoming CO Direct Ringing**

CO Lines can be programmed to ring directly into a UCD group. When all agents are busy and RAN is enabled, the system answers the caller and present the 1st RAN announcement automatically.

## **No-Answer Recall Timer**

If a call routed to a station via UCD is not answered by the UCD Agent/Station before the No-Answer Recall timer expires, the call is returned to UCD Queue with the highest priority. Additionally, the station that failed to answer the ringing UCD call is placed into an Out-Of-Service (OOS) state.





## No-Answer Retry Timer

When the No-Answer Recall timer expires, a station that failed to answer the ringing UCD call is placed into an out-of-service (OOS) state. The station that was taken out-of-service (OOS) is placed back in service if the agent hits his available flex button or dials the available flex code. Additionally, the agent is placed back in service if the No-Answer Retry timer expires. If the agent does not answer his next UCD call, he is again taken out-of-service. This cycle continues until the station answers calls, logs out, or goes unavailable.

## Overflow Station Forwarding Assignments

An overflow station may be assigned to route callers in queue to a designated station after a specified time. The overflow station may not be one of the UCD group stations.

This feature allows UCD calls reaching the UCD Overflow Station to call forward to another station. This is allowed or denied on a system-wide basis. Once enabled in programming, a UCD Overflow station can Busy/No-Answer forward to Voice Mail Groups, Hunt Groups and stations. If the UCD Overflow station is busy or does not answer before the no-answer call timer expires, the UCD call forwards to Voice Mail.

## Recorded Announcements (RAN)

Recorded announcement devices can be assigned to provide up to eight different messages, if all stations in a UCD group are busy. The eight messages are available to all eight UCD groups in different configurations. A RAN table can be the answer port for unanswered incoming calls to a UCD group, while another table can provide the secondary message. Each RAN device can provide an announcement to one caller at a time. Subsequent callers is queued onto the message on a first-in basis.

## Universal Day/Night Answer (UDA/UNA)

Incoming CO lines can be programmed for Universal Day Answer (UDA) or Universal Night Answer (UNA). UDA/UNA assigned CO lines can also signal over the external page port(s). External Day ringing is programmed on a system-wide basis in admin programming. Stations which do not have access to a line during the day can answer that line while the System is in the Night Mode by dialing a UNA code. In order to utilize this feature, a Loop button or an appearance of the trunk must be present on the station.

## Voice Mail Groups (VM)

The Voice Mail feature automatically handles unanswered calls. Stations may forward calls to a voice mail group (for leaving mail) or may call the voice mail group directly (to retrieve mail) with no assistance from



## Voice Mail Groups (VM)



the attendant. Up to eight voice mail groups containing up to eight Voice Mail stations can be configured in the system. Each station interfaces with a port on the Single Line Interface Board (SLIB). Each voice mail station can be shared by a number of actual users. A CO Line/Single Line Interface Board (CSIB) is required when utilizing the Triad-S system Voice Mail In-Band integration,

Additionally, calls that are transferred from a Voice Mail group do NOT recall to the VM group. Instead, the call recall to the attendant station. If no attendant station is programmed in the system, the call continues to recall this station. This is useful for Voice Mail systems that only provide unsupervised transfer capability.



*By default, all Voice Mail stations are placed into Pick-Up Group 1. You may need to change the default setting.*

## Disconnect Signal

To avoid Voice Mail ports from being unavailable as a result of CO line callers abandoning the call or not exiting the VM system properly, a disconnect signal is provided to notify the VM system that a CO or intercom caller hung up or abandoned the call. Silence is provided to the VM port followed by busy tone to aid the VM system to recognize that an intercom caller has abandoned the call.

## In-Band Signaling Integration

The Triad-S system allow programming so that if a station programmed to receive incoming CO line ringing is forwarded to Voice Mail, they may have incoming callers routed directly into their stations voice mail box through the use of In-Band signaling. Alternately, incoming CO lines can be programmed to ring directly into the Voice Mail system. In this case, callers are answered by the Voice Mail or Auto Attendant Main greeting.

Incoming CO callers can be call forwarded into Voice Mail automatically, if a Preset Forward Destination is programmed for that CO line and the same CO line programmed to ring at one station. Additionally, CO lines programmed to ring at an attendant station call forward into the Voice Mail system (if programmed to ring at one attendant station) and presented to the main greeting (not the attendant stations mail box) even when ID digits are enabled.

## LCD Message(s) Indication

This feature presents the number of new Voice Messages to users on their LCD display. The new VM LCD message on the keyset takes priority over Forward, DND, Messages, and idle displays. Ringing, Recalling, Outgoing Calls, and current call operation displays override the VM message display for the duration of the call or operation.



## Message Waiting Indication

When Voice Mail receives a voice message for a user who has a station on the Triad-S system, the VM connected to the system can leave a message indication at the VM users station. When the station retrieves their mail, the VM system can cancel the message waiting indication left at a station via a VM port.

The message waiting indication displays on the programmed Voice Mail (group) button, If such a button was not programmed, a voice mail message waiting indication displays on the MSG WAIT button as a normal message waiting signal.

## Tone Mode Calling Option

Voice mails systems and/or Automated Attendants can utilize the Calling Station Tone Mode option, This is useful when using supervised transfer or call screening options on voice mail or auto attendant(s) requiring ring back tone for proper call handling.

## Transfer/Forward

This feature allows Voice Mail calls, upon reaching a forwarded to VM station, to forward back into the Voice Mail unit. This is useful when VM ports are used as Auto Attendant and VM ports. This feature can be enabled/disabled for all VM groups.

## Transfer with ID Digits

This feature provides an attendant or station user a way to transfer a caller directly into a voice mail box. This allows the station identification digits to be entered by the transferring party. Using this feature, a caller can be transferred to a voice mail box when 1) a station user on the system is not forwarded to VM, or 2) the destination voice mail box owner is not a station user. CO trunks and internal calls may be transferred into voice mail using this feature. If no voice mail ID digits are dialed by the transferring station, the identification digits of the transferring station are sent to the voice mail.

This feature allows dialing of digits 0000-9999 when using the VM with ID feature. This allows, on a per station basis, the ID number that is sent to Voice Mail to be flexible. By default, the station number is sent to the Voice Mail system. In database programming, there is a field to insert a 4-digit entry (0000-9999) that can be sent to the Voice Mail system instead of the station number. This is useful when a station user manually transfers a caller to a mailbox.



Volume Control Bar



## **Volume Control Bar**

The volume control bar on the Digital Key Terminal is located below the keypad. It controls ringing, handset, and speakerphone volumes.





FEATURE	STD PKG	ACD PKG	ADDITIONAL EQUIPMENT
<b>A</b>			
ACCOUNT CODES	.	.	N
VERIFIED ACCOUNT CODES	.	.	N
ANSWERING MACHINE EMULATION	.	.	VM System
ATTENDANT RECALL	.	.	N
AUTOMATIC CALL BACK TIMER	.	.	N
AUTOMATIC CALL DISTRIBUTION (ACD)			
Agent Positions		.	N
Alternate ACD Group Assignment		.	N
ACD Group Member Status		.	N
Guaranteed Message Announcement		.	N
Incoming CO Direct Ringing		.	N
No-Answer Recall Timer		.	N
No-Answer Retry Timer		.	N
Overflow Station Assignments		.	N
Overflow Station Forwarding		.	N
PC/ACD Interface Trace		.	N
Recorded Announcements (RAN)		.	N
Supervisor Positions		.	N
Supervisor/Agent Calls in Queue Display		.	N
Wrap-Up Timer Per ACD Group		.	N
AUTOMATIC LINE ACCESS	.	.	N
AUTOMATIC NIGHT SERVICE	.	.	N
AUTOMATIC PAUSE INSERTION	.	.	N
AUTOMATIC PRIVACY	.	.	N
AUTOMATIC SELECTION	.	.	N
<b>B</b>			
BACKGROUND MUSIC	.	.	Music Source
BATTERY BACK-UP (Memory)	.	.	N
BUSY LAMP FIELD (BLF)	.	.	N

N = No Additional Equipment Required

Table 2-2: Key Station Features/Software Packages





Volume Control Bar



FEATURE	STD PKG	ACD PKG	ADDITIONAL EQUIPMENT
<b>C</b>			
CALL ANNOUNCE - PRIVACY	.	.	N
CALL BACK	.	.	N
CALL COST DISPLAY FEATURE	.	.	N
CALL COVERAGE FEATURE	.	.	N
CALL FORWARD: PRESET			
ACD Groups		.	N
Hunt Groups	.	.	N
Off-Net	.	.	N
Per CO Line	.	.	N
Stations	.	.	N
UCD Groups	.	.	N
VM Groups		.	VM System
CALL FORWARD: STATION			
All Calls	.	.	N
Busy	.	.	N
Busy/No Answer	.	.	N
Follow-Me	.	.	N
No Answer	.	.	N
Off-Net	.	.	N
CALL PARK	.	.	N
CALL PICKUP			
Directed Call Pick-Up	.	.	N
Group Pick-Up	.	.	N
CALL TRANSFER	.	.	N
CALLER ENTERED ICLID DIGITS		.	N
CALLER ID NAME/NUMBER OPTION	.	.	N
CALLING STATION TONE MODE OPTION	.	.	N
CAMP-ON	.	.	N
CAMP-ON RECALL	.	.	N
CANNED TOLL RESTRICTION	.	.	N

N = No Additional Equipment Required

Table 2-2: Key Station Features/Software Packages (Continued)



FEATURE	STD PKG	ACD PKG	ADDITIONAL EQUIPMENT
CENTREX COMPATIBILITY			
Flex Button Programming	.	.	N
Off-Hook Preference	.	.	N
Private Line Appearance	.	.	N
Programmable Flash Timer	.	.	N
Programming "*", "#", and Hook-Flashes into Speed Dial	.	.	N
CENTREWPBX TRANSFER	.	.	*
CHAINING SPEED BINS	.	.	N
CO LINE ACCESS	.	.	N
CO LINE CLASS OF SERVICE	.	.	N
CO LINE CONTROL (Contact)	.	.	Ancillary Relay
CO LINE GROUPS	.	.	N
CO LINE IDENTIFICATION	.	.	N
CO LINE INCOMING RINGING ASSIGNMENT	.	.	*
CO LINE LOOP SUPERVISION	.	.	N
CO LINE QUEUING	.	.	N
CO LINE RINGING OPTIONS	.	.	N
CO RING DETECT	.	.	N
CONFERENCE			
Multi-Party Conference	.	.	N
Unsupervised Conference	.	.	N
CONFERENCE ENABLE/DISABLE	.	.	N
<b>D</b>			
DATABASE PRINTOUT (Dump)	.	.	PC/Terminal/MISU
DATABASE UPLOAD/DOWNLOAD	.	.	Printer/Terminal/MISU
DAY/NIGHT CLASS OF SERVICE (COS)	.	.	Printer/Terminal
DEFAULT BUTTON MAPPING	.	.	N
DIAL BY NAME	.	.	N
DIAL PULSE SENDING	.	.	N
DIALING PRIVILEGES	.	.	N

N = No Additional Equipment Required

Table 2-2: Key Station Features/Software Packages (Continued)



Volume Control Bar



FEATURE	STD PKG	ACD PKG	ADDITIONAL EQUIPMENT
FEATURE	.	.	DTMF Rcvr
DIRECT INWARD SYSTEM ACCESS (DISA)	.	.	
CO Line Group Access	.	.	N
DISA Call Forwarding	.	.	N
Programmable Access	.	.	N
Station Access	.	.	N
Trunk-to-Trunk	.	.	N
DIRECT STATION SELECTION	.	.	N
DIRECT TRANSFER MODE	.	.	N
DIRECTED CALL PICK-UP	.	.	
ACD/UCD Groups	.	.	N
Station	.	.	N
DIRECTORY DIALING	.	.	N
DISABLE OUTGOING CO LINE ACCESS	.	.	N
DISTINCTIVE RINGING (User Selectable)	.	.	N
DISTINCTIVE RINGING ON CO LINES	.	.	N
DO NOT DISTURB	.	.	
One-Time Do Not Disturb	.	.	N
DTMF SENDING	.	.	N
<b>E</b>			
EMERGENCY TRANSFER	.	.	PFTU/12v
END-TO-END SIGNALING	.	.	N
EXCLUSIVE HOLD	.	.	N
EXECUTIVE OVERRIDE	.	.	N
EXECUTIVE/SECRETARY TRANSFER	.	.	N
EXTERNAL NIGHT RINGING	.	.	Paging Equip.
<b>F</b>			
FLASH	.	.	N
FLASH ON INTERCOM	.	.	N
FLASH RATES (Programmable)	.	.	N
FLASH WITH SPEED DIAL	.	.	N

N = No Additional Equipment Required

Table 2-2: Key Station Features/Software Packages (Continued)



FEATURE	STD PKG	ACD PKG	ADDITIONAL EQUIPMENT
FLEXIBLE ATTENDANT	.	.	N
FLEXIBLE BUTTON ASSIGNMENT	.	.	24-Btn/12-Btn
FLEXIBLE INTER-DIGIT TIMEOUT	.	.	N
FORCED ACCOUNT CODES	.	.	N
FORCED LEAST COST ROUTING (LCR)	.	.	N
FORWARD OVERRIDE	.	.	N
<b>G</b>			
GROUP CALL PICK-UP	•	•	N
GROUP LISTENING	•	•	N
<b>H</b>			
HEADSET COMPATIBILITY	•	•	Headset
HEADSET MODE	•	•	N
HEARING AID COMPATIBLE	•	•	N
HOLD PREFERENCE	•	•	N
HOLD RECALL	•	•	N
HOT KEYPAD FEATURE	•	•	N
HOT LINE/RING DOWN	•	•	N
HUNT GROUPS			
Hunt Group Chaining	•	•	N
Pilot Hunting	•	•	N
Station Hunting	•	•	N
<b>I</b>			
ICLID FEATURE			MISU
Calling Number/Name Display	•	•	Exec Keyset
Incoming Number/Name for SMDR Records	•	•	Exec Keyset
Unanswered Call Management	•	•	Exec Keyset
IDLE SPEAKER MODE	•	•	N
INCOMING CO CALL TRANSFER	•	•	N
INCOMING CO LINES OFF-NET FORWARD (via Speed Dial)	•	•	N
INTERCOM BUTTONS	•	•	N

N = No Additional Equipment Required

Table 2-2: Key Station Features/Software Packages (Continued)



Volume Control Bar



FEATURE	STD PKG	ACD PKG	ADDITIONAL EQUIPMENT
INTERCOM CALLING	•	.	N
INTERCOM SIGNALING SELECT	•	.	N
<b>K</b>			
KEYSET MODE	•	.	CTI Box
KEYSET SELF TEST	•	.	24-Btn/12-Btn
<b>L</b>			
LAST NUMBER REDIAL (LNR)	.	.	N
LCD INTERACTIVE DISPLAY	.	.	Exec Keypad
LEAST COST ROUTING (LCR)			
3-Digit Table	.	.	N
6-Digit Table (Office Codes)	.	.	N
Daily Start Time Tables	.	.	N
Default LCR Database	.	.	N
Exception Tables	.	.	N
Insert/Delete Tables	.	.	N
LCR Routing for Toll Information	.	.	N
Route List Tables	.	.	N
Weekly Time Tables	.	.	N
LOCAL NUMBER/NAME TRANSLATION TABLE	.	.	*
LOOP BUTTON CO LINE ACCESS	.	.	N
<b>M</b>			
MAILBOX BUTTON	.	.	N
MEET ME PAGE	.	.	N
MESSAGE WAITING	.	.	N
MESSAGE WAITING REMINDER TONE	.	.	N
MESSAGES - PERSONALIZED			
Custom Messages	.	.	N
Date and Time Entry to Personalized Messages	.	.	N
Personalized Message Code on a Flex Key	.	.	N
Scrollable Canned Messages	.	.	Music Source

N = No Additional Equipment Required

Table 2-2: Key Station Features/Software Packages (Continued)



FEATURE	STD PKG	ACD PKG	ADDITIONAL EQUIPMENT
MUSIC ON HOLD	.	.	N
MUTE KEY	.	.	N
<b>N</b>			
NAME IN DISPLAY	.	.	Exec Keyset
NAME/NUMBER DISPLAY AT IDLE	.	.	Exec Keyset
NIGHT SERVICE FEATURE	.	.	N
NIGHT SERVICE MODE			
Automatic Night Mode Operation	.	.	N
External Night Ringing	.	.	N
Manual Operation	.	.	N
Night Class of Service (COS)	.	.	N
Night Ringing Assignments	.	.	N
Universal Night Answer (UNA)	.	.	N
Weekly Night Mode Schedule	.	.	N
<b>O</b>			
OFF-HOOK PREFERENCE			
Auto Feature Access	.	.	N
Auto Line Access	.	.	N
Hot Line/Ring Down	.	.	N
Intercom Access	.	.	N
User Programmable Preference	.	.	N
OFF-HOOK SIGNALING	.	.	N
OFF-HOOK VOICE OVER (OHVO)	.	.	N
ONE-TOUCH RECORDING	.	.	N
ON-HOOK DIALING	.	.	N
ON-LINE PROGRAMMING	.	.	N
<b>P</b>			
PAGE/RELAY CONTROL	.	.	
PAGING			
External Paging	.	.	Paging Equip
Internal Paging	.	.	

N = No Additional Equipment Required

Table 2-2: Key Station Features/Software Packages (Continued)



Volume Control Bar



FEATURE	STD PKG	ACD PKG	ADDITIONAL EQUIPMENT
Paging Access Restriction	.	.	N
PAUSE TIMER	.	..	N
PBX DIALING CODES	.	.	N
PERSONAL PARK	.	.	N
POOL BUTTON OPERATION	.	.	N
PREFERRED LINE ANSWER	.	.	N
PRIVACY RELEASE			
Per CO Line Option	.	.	N
Per Station Option	.	.	N
PRIVATE LINE	.	.	N
PULSE-TO-TONE SWITCHOVER	.	.	N
<b>R</b>			
RANGE PROGRAMMING	.	.	N
REMOTE ADMINISTRATION			
Database Upload/Download	.	.	PC/Term/Modem
REMOTE SYSTEM MONITOR AND MAINTENANCE			
Remote System Maintenance	.	.	PC/Term/Modem
Remote System Monitor	.	.	PC/Term/Modem
REPEAT REDIAL	.	.	N
<b>S</b>			
SAVE NUMBER REDIAL (SNR)	.	.	N
SINGLE LINE TELEPHONE (SLT)			CSIB
COMPATIBILITY	.	.	2500/2600 Type
SPEAKERPHONE	.	.	24-Btn/12-Btn
STATION CLASS OF SERVICE	.	.	N
STATION ID LOCK	.	.	N
STATION MESSAGE DETAIL RECORDING (SMDR)	.	.	Printer/Terminal
STATION RELOCATION FEATURE	.	.	N
STATION SPEED DIAL	.	.	N
SYSTEM CAPACITY	.	.	N

N = No Additional Equipment Required

Table 2-2: Key Station Features/Software Packages (Continued)



FEATURE	STD PKG	ACD PKG	ADDITIONAL EQUIPMENT
SYSTEM HOLD	.	.	N
SYSTEM SPEED DIAL	.	.	N
<b>T</b>			
TEXT MESSAGING (Silent Response)	.	.	Exec Keypad
TOLL RESTRICTION (Table Driven)	.	.	N
TRANSFER RECALL	.	.	N
<b>U</b>			
UNIFORM CALL DISTRIBUTION (UCD)			
Agent Queue Status Display	.	.	N
Alternate UCD Group Assignments	.	.	N
Auto Wrap-Up with Timer	.	.	N
Available/Unavailable Mode	.	.	N
Incoming CO Direct Ringing	.	.	N
No-Answer Recall Timer	.	.	N
No-Answer Retry Timer	.	.	N
Overflow Station Assignments	.	.	N
Recorded Announcements (RAN)	.	.	RAN Devices
UNIVERSAL DAY/NIGHT ANSWER (UDA/UNA)	.	.	N
<b>V</b>			
VOICE MAIL GROUPS (VM)			
VM Disconnect Signal – Pass Through	.	.	VM System
VM In-Band Signaling Integration	.	.	VM System
VM LCD Message(s) Indication1	.	.	VM System
VM Message Waiting Indication	.	.	VM System
VM Tone Mode Calling Option	.	.	VM System
VM Transfer/Forward	.	.	VM System
VM Transfer with ID Digits	.	.	VM System
VOLUME CONTROL BAR (DKT)	.	.	N

N = No Additional Equipment Required

Table 2-2: Key Station Features/Software Packages (Continued)





## 3 SINGLE LINE TELEPHONE FEATURES



Single Line telephones have access to most system and station features listed in the previous section; however, the features listed below are common to CO Line/Single Line Interface Board (CSIB) and are required in the STARPLUS **Triad-S**<sup>TM</sup> System for proper SLT operation. An abbreviated feature index is provided in *Table 3-1:SLT Features/Software Packages*.

### Account Codes

SLT stations may enter an account code to identify calls for billing/tracking purposes. The account code may be entered before the call or during the call (the outside caller is placed on hold while the account code is entered if during the call). The account code is recorded on the SMDR printout. Account codes are not verified and can vary in length from 1-12 digits.

### Verified/Traveling COS

The Verified Account Code/Traveling Class of Service (COS) feature provides tracking of specific calls by entering a verified, variable length identifier (up to 12 digits). Each account code can be assigned a day and night Class of Service for determining the dialing privileges allowed by that account code. This provides a means for users to override a restricted station. If the dialed account code matches the Verified Account code table, an intercom dial tone is returned, otherwise an error tone is returned. The use of forced Account Codes is optional, offered on a system-wide basis. SMDR must be enabled for the account code to print as part of the SMDR record. The Triad-S system allows up to 250 12-digit account codes for verification purposes.

### Automatic Call Distribution/Uniform Call Distribution (ACD/UCD)

A single line telephone (SLT) may be an agent in an ACD group.

### Automatic Line Access



SLTs may have their station programmed to access a particular CO Line, such as a private line or a line from a Group of CO lines, upon going off-hook. This is useful in Centrex or PBX applications when station users have dedicated or individual lines. Outside line dial tone is received just by going off-hook, without dialing access codes.





## Call Brokering

Enables SLT user on a CO call to Hook-Flash and make another CO call. Once this other call is established, the SLT user can Hook-Flash to move back and forth between parties.

## Call Forward

Single line telephones may direct intercom calls and transferred CO lines for forwarding to another station. SLTs have access to all forwarding options that Key station users have:

- ❖ Call Forward – All Calls
- ❖ Call Forward – No Answer [7]
- ❖ Call Forward – Busy [8]
- ❖ Call Forward – Busy/No Answer [9]
- ❖ Call Forward – Off-Net [\*]
- ❖ Preset Call Forward

## Call Pick-Up Directed

Tone ringing intercom calls, Initial Ringing CO calls and transferred outside line calls to specific stations can be picked up by single line telephones. For this type of pickup, the stations need not be in the same pickup group.

## Call Pick-Up Group

Tone ringing intercom calls, transferred outside line calls, and initially ringing calls can be picked up by single line telephones by dialing a special pickup code. The telephones must be in the same pickup group,

## Camp-On

A busy station can be notified that an outside line is on hold and waiting for them. The busy station is notified of this by a beep tone. Single line telephones can receive a camp on indication or initiate one by using an access code.





## CO Line Queuing

Single line telephones can be placed in a queue awaiting the first available outside line in a group to become available.

## Conference

An SLT user can initiate a conference with an outside line and one other internal station,

## Conference With Personal Park

Single Line Telephones (SLT) can initiate a conference between two outside (CO) calls. The personal park feature is used in conjunction with the SLT conference code to make this possible..

## Direct Outside Line Group Access

Single line telephones can access outside lines by dialing CO line group access codes 9 or 81-87.

## Direct Outside Line Ringing

Single line telephones can receive direct outside line ringing. SLTs may be programmed to receive incoming CO Hinging on more than one CO line. However, an SLT can answer only ONE call at a time. If an SLT is busy when a CO call rings in, camp-on tone is given to that SLT station.

## Do Not Disturb (DND)

Each telephone user can place their phone in Do Not Disturb. The user receives an error tone if they are not allowed this feature. They also receive a stuttered dial tone when lifting the handset to remind them they are in Do Not Disturb. The attendant can override a station in DND.

## Handset Receiver Gain

This feature allows an SLT user, while on a CO/ICM call, to hookflash and dial a code to increase/decrease the handset volume.



## Intercom Calling

Single line telephones can make and receive intercom calls.

## Loop Interrupt Option

This feature enables single line telephone ports to provide a loop disconnect signal to any devices connected to an SLT port. This is an inherent operation, no programming is necessary.

- ❖ Signal is provided when a CO Line, marked with loop supervision, connected to an SLT port receives loop supervision from the Central Office.
- ❖ Upon termination of an internal call to an SLT, the SLT provides the loop interrupt signal,
- ❖ Loop interrupt signal consists of an open for 700 ms with less than 5 mA.

## Message Waiting/Call Back

Single Line Telephones calling a station that is busy, idle, or in Do Not Disturb can leave a message waiting indication to signal the station to call back.

## Messages

### Personalized

Each SLT station can select a pre-assigned message to display on the LCD of the Digital Terminal receiving that message, There are ten possible messages that can be displayed:

- 00= Clears Messages
- 01= ON VACATION
- 02= RETURN AM
- 03= RETURN PM
- 04= RETURN TOMORROW
- 05= RETURN NEXT WEEK
- 06= ON TRIP
- 07= IN MEETING
- 08= AT HOME
- 09= ON BREAK
- 1 0= AT LUNCH



## Off -Hook Preference



## Custom

This feature allows the system administrator to enter up to ten custom messages for use by system station users. These messages may be specified and customized by the customer on a system-wide basis.

## Off -Hook Preference

SLTs may access a particular CO Line such as a private line or a line from a Group of CO lines upon going off-hook. This is useful in Centrex or PBX applications when station users have dedicated lines. Outside line dial tone is received just by going off-hook, without the need to dial access codes.

## Personal Park

Single line telephones can be connected to two calls (Intercom or CO lines) at the same time and toggle between the two calls. This can be performed with originated or received calls. This feature is also used with the SLT multi-line conference feature.

## Speed Dial - Station

An SLT user may program up to 20 speed dial numbers. Each speed dial number can be up to 24-digits in length.

## Speed Dial - System

Each SLT user can access system speed dial numbers on a programmable basis. The last forty system speed numbers override toll restriction.

## Toll Restriction (Table Driven)

The system provides a flexible means of providing toll restriction to internal stations of the Triad-S system. Each station is assigned a Class of Service for day mode operation and one for night mode operation these station COS's work in conjunction with a CO line Class of Service to allow for customized toll restriction. Two Allow and Deny tables along with four special tables afford the system administrator to devise a variety of complex toll restriction or dialing privilege schemes.



## Canned Toll Restriction

The system provides an easy means of applying the most common form of toll restriction where 1 + and Of alongwith 976, 555, and 411 type of calls are denied and 1-800, 1-888, 911, 1-911, and 1-611 type of calls are allowed. This canned toll restriction is applied through the use of a single pre-built Class-of-Service and can be assigned to stations using range programming.

## Transfer

Outside lines may be transferred by or to single line telephones. These transfers can be announced or unannounced.

## Transfer Recall

Screened and unscreened transfers recalls the initiating party if unanswered for a programmable length of time, and then if unanswered, recalls the attendant.

## Universal Day/Night Answer (UDA/UNA)

Incoming CO lines can be programmed for Universal Day Answer (UDA) or Universal Night Answer (UNA). UDA/UNA assigned CO lines can also signal over the external page port(s). External Day ringing is programmed on a system-wide basis in admin programming. Stations which do not have access to a line during the day can answer that line while the System is in the Night Mode by dialing a UNA code. In order to utilize this feature, a Loop button or an appearance of the trunk must be present on the station.

## Voice Mail Groups (VM)

The Voice Mail feature automatically handles unanswered calls. Stations may forward calls to a voice mail group (for leaving mail) or may call the voice mail group directly (to retrieve mail) with no assistance from the attendant.




## Message Waiting Indication

When Voice Mail receives a voice message for a user who has a station on the Triad-S system, the VM connected to the system can leave a message indication at the VM users station. When the station retrieves their mail, the VM system can cancel the message waiting indication left at a station via a VM port.



Voice Mail Groups (VM)



FEATURE	STD PKG	ACD PKG	ADDITIONAL EQUIPMENT
<b>A</b>			
ACCOUNT CODES	●	  	N
VERIFIED ACCOUNT CODES/ TRAVELING COS	•	•	N
AUTOMATIC LINE ACCESS	•	•	N
<b>B</b>			
BROKER CALL	•	•	N
<b>C</b>			
CONFERENCE	•	•	N
CONFERENCE WITH PERSONAL PARK	•	•	N
CALL FORWARD	•	•	N
CAMP-ON	•	•	N
CO LINE QUEUING	•	•	N
<b>D</b>			
DIRECT OUTSIDE LINE GROUP ACCESS	•	•	N
DIRECT OUTSIDE LINE RINGING	•	•	N
DIRECTED CALL PICK-UP	•	•	N
DO NOT DISTURB (DND)	•	•	N
<b>G</b>			
GROUP CALL PICK-UP	•	•	N
<b>H</b>			
HANDSET RECEIVER GAIN	•	•	N
<b>I</b>			
INTERCOM CALLING	•	•	N
<b>L</b>			
LOOP INTERRUPT OPTION	•	•	N
<b>M</b>			
MESSAGE WAITING/CALL BACK MESSAGES - PERSONALIZED	•	•	N

**Table 3-1: SLT Features/Sof tware Packages**





FEATURE	STD PKG	ACD PKG	ADDITIONAL EQUIPMENT
Messages - Custom	•	•	N
<b>N</b> NIGHT SERVICE	•	•	N
<b>O</b> OFF-HOOK PREFERENCE	•	•	•
<b>P</b> PERSONAL PARK	•	•	N
<b>S</b> STATION SPEED DIAL	•	•	N
SYSTEM SPEED DIAL	•	•	N
<b>T</b> TRANSFER	•	•	N

N = No Additional Equipment required.

Table 3-1: SLT Features/Software Packages (Continued)







## 4 ATTENDANT FEATURES

The Attendant and Attendant(s) with DSS/DLS Features of the STARPLUS Triad-S™ system are listed and described below in alphabetical order. An abbreviated feature table is provided in *Table 4-1:Attendant Features/Software Packages*.

### Attendant Features

#### Alternate Position

This feature allows Attendant stations to program a flexible button to place their station in an unavailable mode. When the station is in unavailable mode, the next attendant station (second) receives incoming and 0 calls. All other available attendants receive recalls. This feature is based on the system having three Attendant stations. If all Attendants are unavailable, no attendants are available for internal/external calls.

#### Automatic Night Mode

In addition to the attendants capability to place the system into and out of night mode manually, by pressing the Night key, an automatic night mode schedule is added to the system. The automatic schedule is determined in database programming on a weekly basis, including Saturday and Sunday. The Attendant can override the automatic schedule by pressing the NIGHT (DND) button,

#### Direct Station Selector - DSS Console

An optional DSS console is available which may be associated with an attendant station to provide additional buttons for DSS/DLS features.

#### Disable Outgoing Access

The first attendant can disable CO lines, preventing outgoing access to those lines. This is useful for removing a faulty line from service, or for reserving CO lines for important use. All stations that normally make calls on the lines are affected, but incoming calls are unaffected. A CO line may be disabled while it is being used. When the trunk becomes idle, further outgoing access is prevented.

#### Display

The Attendant display timer changes the way in which multiple calls ringing at the attendant station are displayed. If two calls are ringing at an attendant station, when the station goes off hook, the first call is



answered. The LCD display then updates to show the second call that is ringing which sometimes does not allow the station to view the current calls' LCD information. This programmed timer keeps the current calls' information on the LCD for a programmable time period before showing any other calls ringing in at the time.

## Night Service Feature

The Night Service feature provides a means to put the system in night mode from any **keyset** or remove the system from night mode from any **keyset**, providing the system was put in night mode by the night service feature flex button. If the system was placed in night mode by the attendant using the DND button or if the system was placed in night mode by the automatic schedule, the night service flex button cannot remove the system from night mode.

## Off -Net Forward - Incoming CO Lines

Allows the first attendant to forward incoming CO calls to an Off-Net location. The attendant must have a direct appearance of the CO line to be forwarded. Forwarding can be established on a per CO line group basis, all CO lines, or an individual CO line may be simultaneously forwarded to an off-net location,

## Overflow (Via Preset Forward)

System programming allows programming of the attendant station so if the attendant is busy or not there, the call is automatically forwarded to another predetermined station, VM Group, Hunt Group, ACD or UCD group after a programmed time period. (Refer to Call Forward, Station and Preset.)

## Override

Attendant stations may override a busy station or ring a station in DND. While busy, pressing the override key provides override tone and a five second delay before voice cut-through to the called party occurs, automatically placing any outside line call on Hold. The Attendant Override function must be programmed onto a flex button and can be enabled or disabled.

## Position

The system identifies three maximum programmable stations as attendants for line recalls and attendant features. The first programmed attendant can enter system date and time information and System Speed numbers from this position without entering the programming mode. The STARPLUS Digital Hybrid Telephone System is placed in Night Service by any programmed attendant pressing the NIGHT (DND) button or dialing the NIGHT code.





## Recall

A held CO call left unattended by a station recalls the attendant(s) after a programmable time period elapses. A recalling CO line flashes at a distinctive rate and has an LCD display that identifies the originating station of the unanswered call.

## Special Ring Mode

This feature provides an additional ring mode that is manually invoked by the Attendant. This mode provides a third ring list so that the system has a day ring mode, a night ring mode, and a special ring mode. Each CO line can have a special mode ring assignment associated to it. Up to ten stations per CO line may ring in the special mode. By default, no stations are programmed to ring in the special ring mode.

## Time And Date Programming

This feature allows the first programmed attendant to set the time and date without entering the programming mode.

## DSS/DLS Features

### Attendant Transfer Search

Allows a user to make a series of intercom calls without hanging up the handset. An intercom connection is switched to another station whenever a DSS key is pressed. Pressing the next DSS key terminates the previous intercom call.

### Busy Lamp Field Indicators

Each station key on the DSS console has a corresponding indicator that shows whether the station is idle or busy. The indicator is lit when the station is busy and unlit if the station is idle. A station in DND mode is shown by a flashing indicator.

### Direct Station Calling

Enables the user to make an intercom voice call to any Digital Terminal in the system. Lets you automatically put an outside caller on hold and simultaneously make an intercom call to an internal station. Also lets you transfer an intercom call or outside call that is on hold to another station.



## Messages -- Custom

This feature allows the first programmed attendant (system administrator) to enter up to ten custom messages for use by station users of the system. Up to 24 characters may be entered as the custom message (this represent 48 digits entered). A station user may store any of the available messages under a flexible button assigned as a Message Access button. These messages may be specified and customized by the customer on a system-wide basis. Message status is stored in battery protected area of memory for retention in the event of a power failure or system reset (soft or hard).

## Release Key

Allows the user to disconnect calls while off-hook, speeding up call handling time.

## Volume Control Bar (DKT)

On the Digital Key Terminals (DKT), there is a volume control bar below the keypad to control the ringing, handset, and speakerphone volumes.





MAP #1 has 12 CO Lines and the 32 Stations, 100-131. This provides a default layout of a 12x32 configuration.

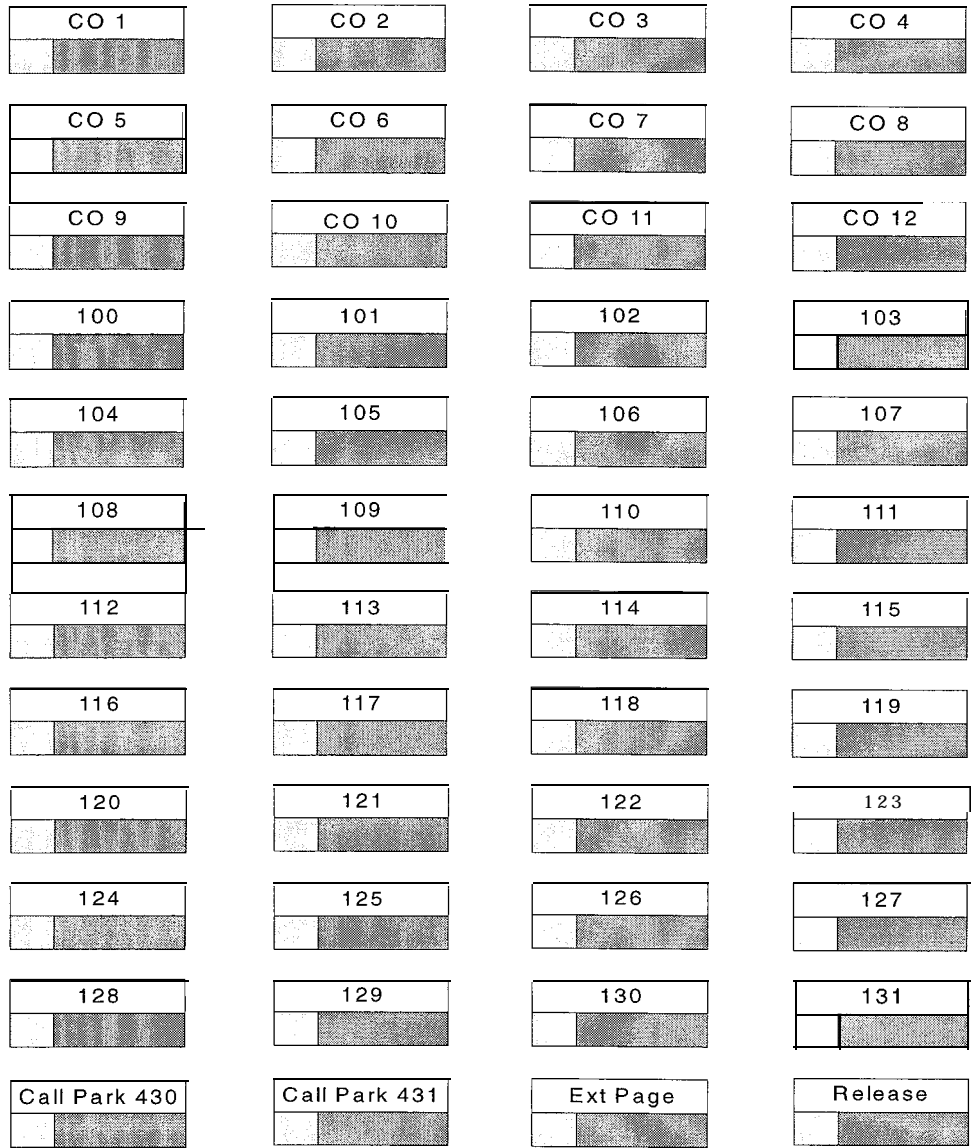


Figure 4-1: DSS Console Map #1



FEATURES	STD PKG	ACD PKG	ADDITIONAL EQUIPMENT
<b>A</b>			
ATTENDANT ALTERNATE POSITION	.	.	N
ATTENDANT DISABLE OUTGOING ACCESS	.	.	N
ATTENDANT DISPLAY	.	.	N
ATTENDANT OVERFLOW	.	.	N
ATTENDANT OVERRIDE	.	.	N
ATTENDANT POSITION	.	.	N
ATTENDANT RECALL	.	.	N
ATTENDANT SPECIAL RING MODE	.	.	N
ATTENDANT with DSS/DLS FEATURES:			
ATTENDANT SEARCH	.	.	N
BUSY LAMP FIELD INDICATORS	.	.	N
DIRECT STATION CALLING	.	.	N
MAPPING OPTIONS	.	.	N
MESSAGES-CUSTOM	.	.	N
RELEASE KEY	.	.	N
AUTOMATIC NIGHT MODE	.	.	N
<b>I</b>			
INCOMING CO LINE OFF-NET FORWARD	.	.	N
<b>N</b>			
NIGHT SERVICE FEATURE	.	.	N
<b>T</b>			
TIME AND DATE PROGRAMMING	.	.	N
<b>V</b>			
VOLUME CONTROL BAR (DKT)	.	.	N

N = No Additional Equipment Required

**Table 4-1: Attendant Features/Software Packages**





# 5 DIGITAL STATION OPERATION

## Introduction

The STARPLUS Triad-S™ system has a variety of features and flexible programming, allowing each telephone user to program the telephone to meet their individual needs.

This section contains the operating instructions for the digital terminal and an illustration of the telephone used in the Triad-S System and the telephone key descriptions and their functions. Visual and audible cues that accompany the various steps in the operation of the features are also included.

A Station User's Guide is also available that provides detailed operating instructions,

## Digital Terminal Station Features

Each Triad-S system provides the following keys, indicators and features:

### Handset and Speaker

Handset and speaker are located at the left side of the front panel. A handset is provided to allow confidential conversation when desired. Lifting the handset from its cradle (going off-hook) disengages the station's built-in speaker.

The speaker is located directly below the center portion of the handset. The station may be operated with the handset on-hook. When this occurs, audio is transmitted to the station user through the station's speaker.

### Flexible Buttons

Flexible buttons provide access to idle outside lines, DSS/BLF for internal stations, access speed dial numbers and activate features. These buttons can be programmed by the individual station user. The default flex feature buttons are described below.

- ❖ CALL BACK button lets you initiate a call back request to another busy station. As soon as that station becomes idle, the station that left the call back request is automatically signaled. A flex button must be assigned to use this feature.
- ❖ PICK-UP button lets you pick up a tone ringing intercom call, transferred, incoming, or recalling outside line call to a specific unattended station, either by group or directed call pick-up.



- ❖ DND (DO NOT DISTURB) button lets the user place their telephone into Do Not Disturb mode to eliminate incoming outside line ringing, intercom calls, transfers and paging announcements. The station in DND can use the telephone to make normal outgoing calls. On Attendant stations, this button becomes the system Night Mode button. A flex button must be assigned to use this feature.
- ❖ LINE QUEUE button lets you queue onto an outside line when all lines in a group are busy. Your station is placed in queue, awaiting a line in the same group to become available.

## Fixed Feature Buttons

- ❖ VOLUME BAR lets the user adjust ringer, speakerphone and handset volume.
- ❖ H-P-T lets the user select the ICM Signaling Mode, handsfree tone, or privacy.
- ❖ FLASH button terminates an outside call and restores dial tone without hanging up the handset. It also transfers calls behind a PBX or Centrex within those systems.
- ❖ CAMP-ON button enables you to alert a busy party that an outside line is on hold and waiting for them.
- ❖ MSG (MESSAGE WAIT) button lets you initiate a message waiting indication at stations that are busy, unattended, or in Do Not Disturb. Message Waiting Callback request left at your station is indicated by a flashing MSG WAIT LED.
- ❖ SPEED button provides access to speed dialing, save number redial and last number redial. This button also accesses flex button programming.
- ❖ TRANS (TRANSFER) button transfers an outside call from one station to another.
- ❖ CONF (CONFERENCE) button establishes and builds conference calls.
- ❖ FORWARD (FWD) button lets you forward your calls to another station.
- ❖ ON/OFF button enables you to make a telephone call without lifting the handset. It turns the telephone on and off when using the speakerphone.
- ❖ MUTE button lets you toggle the built-in microphone on or off when using the speakerphone, or the handset microphone when using the handset.
- ❖ HOLD button enables you to place an outside caller on hold.

## Outside Calls

Outside calls are announced by a tone signal repeated every 3.2 seconds. The corresponding outside line indicator flashes slowly.







## Intercom Calls

Intercom calls can be tone ringing or voice announce. If voice announced, the receiving station receives three tone bursts prior to the announcement. If a tone ringing call, the receiving station hears a tone ring every 2.4 seconds.



Figure 5-1: Starplus Executive Digital Terminal





100-131	Triad-S TM Ext Numbers	680	Speed Dial Directory
43+[C]	Call Park Location O-7 (System)	690	Name in Display Programming
438	Personal Park	691+[BB]	Off -Hook Preference Programming
44+[V]	Voice Mail' Group Pilot Numbers O-7	695	<b>Distinctive</b> Ringing
45+[H]	Hunt Group Pilot Numbers O-7	70	All Call Page (Internal & External)
499	Modem via DISA Access or Transfer	71	Internal Page Zone 1
5#	Forward Override	72	Internal Page Zone 2
55+[U]	ACD' Group Pilot Numbers O-9	73	Internal Page Zone 3
55 [U]	UCD Group Pilot Numbers O-7	74	Internal Page Zone 4
568	ACD* or UDC Available/Unavailable	75	Internal All Call Page
567 55+[U]	ACD' or UCD Calls in Queue Display	76+[0]	External Page
570+[BB]	ACD* Call Qualifier	77	Meet-Me-Page Answer
571	ACD* Agent Logout	81	CO line Group 1 (if LCR is enabled)
572 55+[U]	ACD* Agent Login	82	CO Line Group 2
573	ACD' Group Member Status	63	CO Line Group 3
574	ACD* Agent Help	84	CO Line Group 4
575	ACD' Supervisor Logout	85	CO Line Group 5
578 55+[U]	ACD* Supervisor Login	86	CO Line Group 6
577 55+[U]	ACD* Supervisor Queue Status Display	87	CO Line Group 7
578	ACD* Overflow Sta Avail/Unavail	88	All CO Line Groups (CO Line Off -Net Forward)
6#[XXX]	Tone Mode Ring Option	9	LCR or CO Line Group 1 (if LCR is disabled)
6'	Dial By Name	0	Attendant
623	Message Wait	#0	Group Call Pick Up (Key and SLT)
825	Executive Override/ ACD" Supervisor Monitor Barge-in	#43+[C]	Call Park Pickup (Key and SLT)
828	LCR Queue Cancel	#5	Universal Day /Night Answer
628	OHVO Enable	[SPEED]+[YY]	Speed Dial Access (00-19 Station) (20-99 System)
831	Do Not Disturb	[SPEED]+[*]	Save Number Redial
632+[0,1,2]	Background Music	[SPEED]+[#]	Last Number Saved
633+[#]	Personalized Message on Flex Button		
633+[#]+{#,*}	Scroll Canned Messages	XXX	Intercom Station
633+[ZZ]	Personalized Messages	YY	Speed Dial Bin numbers
633+[00]	Clear Personalized Messages	z z	Personalized Messages
834	Headset Mode	BB	Button Number
835	ICLID Display (unanswered calls)	U	ACD' (O-15) or UCD (O-7) Group Number
636+[XXX]	Station Relocate	C	Call Park Location O-7
839	Incoming CO Call Transfer	H	Hunt Group Number O-7
[FWD]	All Call Forward	V	Voice Mail' Group Number O-7
[FWD]+[7]	No Answer - Call Forward		
[FWD]+[8]	Busy - Call Forward		
[FWD]+[9]	Busy/No Answer - Call Forward		
[FWD]+[*]	Off-Net - Call Forward		
842	Follow-Me Forward		
843	Repeat Redial		
648+{#,*}	Keyset Mode		
862	Clear Call Forward, DND, Personalized Messages		

. Features available with optional software

Table 5-1: Digital Terminal Numbering Plan





## Account Codes

When connected to an outside line call:

- 1 Press the pre-programmed\* ACCOUNT CODE button.
- 2 Dial account code up to 12-digits. (The other party will not hear the digits being dialed).
  - ❖ If account code is less than 12-digits, an [\*] must be entered to return to the call,
  - ❖ If account codes are forced, the account code must be entered prior to dialing the outside number.



***SMDR must be enabled for the Account Code feature to operate. Also, SMDR must be enabled for the account code to become part of the SMDR record.***

\*A Flex Button must be programmed for this feature to operate. Refer to **Table 5-3:Flex Button programming Codes.**

## Account Codes/Traveling COS (Verified)

The Verified Account Code/Traveling Class of Service (COS) feature provides the ability to track specific calls by entering a verified, variable length (up to 12 digits) identifier. Each account code can be assigned a day and night Class of Service for determining the dialing privileges allowed by that account code. This provides a means for users to override a restricted station. If the dialed account code matches the Verified Account code table, an intercom dial tone is returned, otherwise an error tone is presented. Using forced Account Codes is optional, available on a system-wide basis. SMDR must be enabled for the account code to print as part of the SMDR record. The Triad-S system allows up to 250 12-digit account codes for verification purposes.

To enter an account code prior to a CO call:

- 1 Press pre-programmed\* ACCOUNT CODE button before accessing a CO line.
- 2 Dial the account code up to 12-digits. If the account code matches a verified account code, intercom dial tone is returned. Otherwise error tone is presented.  
*If account code is less than 12 digits, an [\*] asterisk must be entered to return to the call.*
- 3 Access the outside CO line or dial the LCR code and dial the desired number.



***SMDR must be enabled for the Account Code feature to operate. Also, SMDR must be enabled for the account code to become part of the SMDR record.***

Conditions:





- ❖ Verified Account Codes allow use of an account code as a traveling Class of Service.
- ❖ If LCR is activated in the system and verified account codes are forced, the user must enter the account code before dialing the LCR code.
- ❖ When verified account codes are forced, station **MUST** enter an account code to dial a number that is restricted through station COS and toll restriction. An account code is not required for calls that are unrestricted through station COS and toll restriction,
- ❖ When verified account codes are not forced, a station user may place a call without entering an account code. In this case, the station user's COS is based on their station COS. In this case, a user can enter a verified account code to upgrade their COS.
- ❖ The Redial feature does not support Verified Account Codes.

\*A Flex Button must be programmed for this feature to operate. Refer to *Table 5-3: Flex Button Programming Codes*.

## Answering a Recall

When an outside line remains on hold for an extended time period, a recalling ring reminder is sent. (If Preferred Line Answer is enabled, skip step 1.)

- 1 Press outside line, Loop or Pool button flashing at very fast rate.
- 2 Lift handset or press ON/OFF button to converse.

## Answering Machine Emulation

When a call is sent to a voice mailbox, the station associated with that can press a pre-programmed button to listen to the caller leaving the voice mail message. If the mailbox owner decides to speak with the caller, they can press the pre-programmed button to be connected to the caller. Two methods of notification are available, a ring mode or a speaker mode. These methods are controlled by the type of flexible button assigned on the telephone.

- ❖ Station A places their phone in the answering machine mode by pressing the flexible button programmed on the telephone. The button lights solid red.

The pre-programmed\* button type (654+ 0=Ring mode, 654 + 1 = Spkr Mode) defines the feature operation mode.

An incoming CO call rings at a station and forwards (except busy type) to the station's voice mailbox. In the:

- ❖ RING MODE: The pre-programmed answering machine flex button flashes at 480 ipm red while the caller is in the owners mailbox. The mailbox owner presses the pre-programmed flashing





button and the audio is broadcast over the keyset speaker. The mute key is enabled on the keyset at this point. The LED lights solid green.

- ❖ **SPKR MODE:** The voice mail message is broadcast over the speaker. The mute key is enabled on the keyset at this point. The LED lights solid green.

Below are the mailbox owners options at this point:

- 1 To leave the caller in the voice mail and stop the speaker broadcast, the mailbox owner presses the ON/OFF button. The mailbox owner can continue to listen to the message without taking action at their **keyset**. When the caller disconnects after leaving the voice mail message, the button returns to solid red and the **keyset** returns to idle.
- 2 The station can press the MUTE key to talk to the party leaving the message. The station is still in the CONF mode at this point and the caller can hear the VM and the station user.
- 3 The station can pick up the call by pressing the flexible button. When the mailbox owner picks up the call, the voice mail system disconnects from the call, and the voice mail port returns to the idle (waiting) state.
- 4 The caller is in a normal talk state with the CO caller.

Conditions:

- ❖ The user must have an Electronic or Digital Keyset.
- ❖ The keyset must have a pre-programmed ANSWER MACHINE flex button.
- ❖ After the in-band digits are sent to the voice mail, the station's flexible button status is checked. Then, the feature is executed based on this check. The result of the check is as follows:
  - ❖ Inactive = no feature operation executed
  - ❖ Active = feature executed as per button function (ring mode or speaker mode)
- ❖ An idle station can press the flexible button to go to the inactive mode. The LED extinguishes and no answer machine calls are presented to the station.
- ❖ Once the button is programmed at the station, it is in the inactive mode (LED extinguished),
- ❖ If the station user answers the call, the normal CO line LCD window displays, The call timer shows the elapsed time including the time the caller was in VM. The call timer does not start at 0 in this case.

When the call is ringing the station in the ring mode, the display shows:

<b>VM SCREENING RING</b> <b>MM/DD/YY</b>	<b>HH:MMam</b>
---	----------------



When the station is monitoring the caller in VM, the display shows:

<b>VM SCREENING</b> <b>MM/DD/YY</b>	<b>HH:MMam</b>
--	----------------

\*A Flex Button must be programmed for this feature to operate. Refer to *Table 5-3: Flex Button Programming Codes*.

## Automatic Call Distribution (ACD)

*This feature is available with optional software.* When purchased, Uniform Call Distribution (UCD) is not used and is replaced by the ACD functions identified below. Sixteen Automatic Call Distribution (ACD) groups can be programmed, each containing up to sixteen 3-digit station numbers.

### ACD Agent HELP Feature

The ACD Agent HELP feature provides a means for an ACD agent to signal his assigned supervisor for assistance. A flex button must be programmed for this feature. Refer to *Table 5-3: Flex Button Programming Codes*.

While on a call in progress, the agent:

- 1 Presses his pre-programmed\* HELP flex button. A confirmation tone is heard by the agent. The agent's HELP button illuminates if a supervisor is logged into his ACD group. If no supervisor is logged in, the agent receives a burst of error tone and the HELP button does not illuminate.
- 2 The ACD supervisor station receives a HELP message if an ACD group member he is assigned to initiates a HELP request. The HELP function also sends a Camp-On tone to the speaker of the supervisors keyset. The HELP message takes precedence over any other message and can be cleared by the supervisor by pressing his HELP button.
- 3 At the time the supervisor receives a HELP request, he can press his HELP flex button followed by the override feature button to bridge onto the ACD group member's call. The HELP button places an intercom call to the station requesting HELP. The HELP message is cleared after the supervisor's HELP button is pressed. Additionally, the HELP message is cleared if the agent was on a call and went back on hook before the supervisor could respond. In this case, the HELP message is converted to a message wait indication. The agent can also clear the HELP request by pressing his HELP button a second time.

Conditions:

- ❖ Up to five messages can be left at any supervisor station. .





- ❖ The supervisor can cancel a HELP request signal by pressing his flashing HELP button. Additionally, a call is placed to the agent requesting HELP. If the agent is on a call, the supervisor can press the barge-in button to monitor the call or give assistance.



## Agent Login/Logout Feature

The Agent Login/Logout feature lets an agent log into one of the ACD groups and receive calls. An agent must first login to be placed into an active ACD state. The agent logs in by:

- 1 Dial the LOGIN CODE [572] on the dial pad, followed by the ACD group number (5xx) into which the agent is going to log.  
or  
Press a pre-programmed\* LOGIN flex button.
- 2 The agent enters his unique AGENT ID code (0000-9999). The LOGIN flex button LED is lit steady. Confirmation tone is heard and the agent is logged onto the ACD group. The ON/OFF LED extinguishes if the agent started the sequence in the handsfree mode. When the agent logs in, an ACD login event is sent to the ACD Events Trace port, if active.



*The ACD Agent Login LED will only light for the ACD group that is assigned to that button.*

*If a member is assigned to a specific ACD group and uses the login-logout codes to enter and exit an ACD group, other than his assigned group, the database is changed to reflect the different group.*

For an agent to remove himself from the ACD group as an active agent:

- ❖ Dial the LOGOUT CODE [571] on the dial pad,  
**or**  
Press a pre-programmed\* LOGOUT flex button. LOGIN flex button LED extinguishes. When the agent logs out and removes himself from the ACD group, an ACD logout event is sent to the ACD Events Trace port, if active.



*When an ACD agent has a Login flex button programmed onto his station, that flex button can be used to Login and Logout of the assigned ACD group.*



Conditions:

- ❖ If an agent logs into an ACD group from a station that is logged into another ACD group, the station is automatically removed from the previous ACD group.
- ❖ An agent may log out while in wrap-up, or unavailable.



- ❖ An agent logging in is placed in wrap-up mode before receiving an ACD call.
- ❖ If an agent attempts to log into an ACD group that already has 16 members, that agent receives error tone.
- ❖ The Triad-S Digital System does not verify agent's ID codes, other than requiring entry of four digits.

\*A Flex Button must be programmed for this feature to operate. *Table 5-3: Flex Button Programming Codes.*

## ACD Agent Queue Status Display

From an idle key telephone:

- 1 Dial [567] on the dial pad,  
*or*  
Press pre-programmed\* flex button.
- 2 Dial the 3-digit ACD group number (5xx). ON/OFF button LED lights steady.

The Agent Queue Status display shows the following information:

<b>ACD5xx 00 CALLS IN QUEUE</b>	
<b>MMM DD YY</b>	<b>HH:MMam</b>

Where:

5xx = ACD Group (550-565).

The above display is an idle state display and tells the agent and/or his supervisor how many calls are in queue.

- ❖ Replace the handset or press the ON/OFF button to terminate the display.



*This feature cannot be used with a call in progress. The station is considered busy for incoming calls during this operation. Each time this feature is used, wrap-up is started.*

The agent automatically receives an enhanced Calls in Queue display whenever there is a call in queue.

The display shows the following information:

<b>5xx: CIQ: xx AGENT(S): xx</b>	
<b>oc:</b>	<b>HH:MM:SS</b>

Where:

5xx = ACD Group (550-565)





CIQ: xx = Calls in queue

AGENT(S): xx = Agents logged in

OC: hh:mm:ss = Oldest call in hours, minutes and seconds

This feature also allows an ACD station (12/24 button executive only) to assign multiple buttons that display the calls in queue for a particular group on the LCD. Additionally, the button LED indicates the number of calls in queue, determined in programming.

From an idle key telephone:

- 1 The pre-programmed\* flex button for the ACD group being monitored is flashing at 240 ipm indicating there are calls in queue. Press the pre-programmed flex button. The Agent Queue Status display shows the following:



Where:

5xx = ACD Group (550-565)

The above display is an idle state display and tells the agent and/or his supervisor how many calls are in queue.

- 2 Replace the handset or press the ON/OFF button to terminate the display.

The user assigns a flexible button by dialing 579 XXX. Where XXX is the ACD group number 550-565.

The user sees the following LED indications:

Conditions:

- ❖ Any ACD station can have a button assigned to view the calls in queue for any ACD group.

\*A Flex Button must be programmed for this feature to operate. Refer to *Table 5-3: Flex Button Programming Codes*.

### ACD Available/Unavailable Mode

If you are an ACD agent, you may place your station in the Available mode to receive ACD calls, or you may place your station in the Unavailable mode to block ACD calls from ringing your station.

To go Available:

- ❖ Dial [566] on the dial pad,  
*or*

Press the pre-programmed\* AVAILABLE/UNAVAILABLE button. You may now receive ACD calls.

To go Unavailable:



- ❖ Dial [566] on the dial pad,

*or*

Press the pre-programmed\* AVAILABLE/UNAVAILABLE button. You are now blocked from receiving ACD calls.

\*A Flex Button must be programmed for this feature to operate. Refer to **Table 5-3:Flex Button Programming Codes**.

## ACD Call Qualification

The CALL QUALIFICATION feature provides a means for an Agent on ACD calls to enter call identification codes. This feature provides up to four digits for the ACD SMDR reporting function. Up to 12 digits can be entered, however only the first four digits are used in the SMDR record.

- ❖ The QUALIFY button is programmed using flex code [570].

\*A Flex Button must be programmed for this feature to operate. Refer to **Table 5-3:Flex Button Programming Codes**.

While on a call, the agent:

- ❖ Presses the pre-programmed CALL QUALIFY flex button, followed by the 4-digit qualify code. Enter an [\*] to complete the sequence. A short burst of confirmation tone is heard through the keyset speaker, if programmed.

Conditions:

- ❖ The outside party does not hear the (qualify code) account code being entered,
- ❖ The qualify code is the first four digits of the account code. Therefore, the account code record in the SMDR contains the qualify code in the first four digits.
- ❖ The qualify code must be entered during CO talk state.

## ACD Group Member Status

The ACD Group Member Status feature provides a means for an ACD Supervisor/Agent to view the status of the eight ACD groups in the system. This display tells the Supervisor/Agent which stations are logged into the group, and if the stations logged in are Available/Unavailable, Out-of-Service, in DND, or busy on a call. The Supervisor/Agent can use this display to determine why there are many queued calls in a specific group.

Any station (Supervisor or Agent) logged onto the ACD group view the group members display by:





- ❖ Dialing the ACD Group Member Status code [573] on the dial pad,

*or*

Pressing the pre-programmed\* flex button. The display now shows ACD Group 550.

The status of the ACD agents is displayed with a letter following the station number where the agent is logged in.

<p><b>ACD5xx: 110A 111A 112A</b>  <b>1130 114U 115D 116B 117N</b></p>
---

The status is displayed with the following priority:

Where:

- (N) = Not Equipped
- (D) = Do not Disturb
- (O) = Out of service
- (U) = Unavailable
- (B) = Busy on a call
- (A) = Available

(If an agent made a call while out of service, the status would be out of service, not busy.)

- ❖ Dial [\*] on the dial pad to scroll up to the next ACD Group. If more than eight members are in the ACD group, pressing [\*] displays the additional members,

*or*

Dial [#] on the dial pad to scroll down to the previous ACD Group. To return to an idle display, the Supervisor/Agent station returns to on-hook condition.

Conditions:

- ❖ The ACD Group Members Status display is updated at the time the code is dialed.

### ACD Overflow Station – Available/Unavailable Mode

If you are an ACD Overflow station, you may place your station in the Available mode to receive ACD calls, or you may place your station in the Unavailable mode to block ACD calls from ringing your station.

To go Available:

- ❖ Dial [578] on the dial pad,

*or*

Press the pre-programmed\* AVAILABLE/UNAVAILABLE button. You may now receive ACD calls.

To go Unavailable:



- ❖ Dial [578] on the dial pad,

or

Press the pre-programmed\* AVAILABLE/UNAVAILABLE button. You are now blocked from receiving ACD calls.



If no stations are logged into the ACD Group, ACD calls are routed to the **Attendant station**.

\*A Flex Button must be programmed for this feature to operate. Refer to *Table 5-3: Flex Button Programming Codes*.

## ACD Overflow Station – Forwarding

This feature allows ACD calls reaching the ACD Overflow Station to follow the call forward of the overflow station.

- 1 Lift the handset or press ON/OFF button.
- 2 Press the FWD button.
- 3 Dial the desired code:

[7] = No Answer Calls

[8] = Busy Calls

[9] = Busy and No Answer Calls



*Skip the preceding step for **immedia tē** forwarding.*

- 4 Dial the 3-digit destination number where calls are to be forwarded (Station, Voice Mail, ACD groups, or Hunt group). Confirmation tone is heard.
- 5 Replace handset or press ON/OFF button.

To remove Call Forwarding:

- 1 Lift handset or press ON/OFF button.
- 2 Press the FWD button. Confirmation tone is heard and the FWD LED is extinguished.

The overflow station follows the following rules:

- 1 It forwards on the no answer timer if the forward is set to NO ANSWER or BUSY NO ANSWER.
- 2 It forwards immediately if the station is set to any other forward type.





\*A Flex Button must be programmed for this feature to operate. Refer to *Table 5-3: Flex Button Programming Codes*.

## Supervisor Login/Logout Feature

The Supervisor Login/Logout feature provides a means for a supervisor to log into one of the ACD groups and monitor calls.

- 1 Dial the **LOGIN CODE [576]** on the dial pad, followed by the ACD group number (**5xx**) that the supervisor is going to log into,  
**or**  
 Press a pre-programmed\* **LOGIN** flex button. (Flex button must have **576+5xx** programmed onto it.)
- 2 The supervisor enters a unique **SUPERVISOR ID** code (0000-9999). The **LOGIN** flex button LED is lit steady. Confirmation tone is heard and the supervisor is logged onto the ACD group. The **ON/OFF** LED extinguishes if the supervisor started the sequence in the handsfree mode. When the supervisor logs in, an ACD **login** event is sent to the ACD Events Trace port, if active.

For a supervisor to remove himself from the ACD group as an active supervisor:

- ❖ Dial the **LOGOUT CODE [575]** on the dial pad, followed by the ACD group number (**5xx**) that the supervisor is going to log out of,  
**or**  
 Press a pre-programmed\* **LOGOUT** flex button. (Flex button must have **575 + 5xx** programmed onto it), The **LOGIN** flex button LED extinguishes. When the supervisor logs out and removes himself from the ACD group, an ACD **logout** event is sent to the ACD Events Trace port, if active.



*The ACD Supervisor Log-in LED will only light for the ACD group that is assigned to that button.*

*When an ACD Login flex button is programmed in the system, that same flex button can be used to toggle the Login/Logout feature.*

Conditions:

- ❖ If a supervisor logs into an ACD group from a station that is logged into another ACD group, the station remains in the previous ACD group.
- ❖ A supervisor may log out while in wrap-up, or unavailable.
- ❖ A supervisor logging in is first placed in wrap-up mode before receiving an ACD call.
- ❖ If a supervisor attempts to log into an ACD group as an agent and that group already has 16 members, the supervisor receives error tone.



- ❖ The Triad-S Digital System does not verify the supervisor's ID codes, other than requiring that four digits are entered.

\*A Flex Button must be programmed for this feature to operate. Refer to *Table 5-3: Flex Button Programming Codes*.

## Supervisor Monitor With Barge-In

The Supervisor Monitor with Barge-In feature provides a means for an ACD supervisor to monitor an agent's call in progress, to coach sales techniques or customer relations skills. When used, a supervisor may intrude onto an agent's call in a listen-only mode or in a true conference mode by use of the barge-in feature. This feature is available with or without a warning tone.



*The use of Supervisor Monitor with Barge-in is limited by federal law and may also be limited or prohibited by state or local law, so check the relevant laws in your area before employing these features.*

*A change in volume may occur on the CO line or intercom call after the barge-in occurs.*

The ACD supervisor can intrude on an agent's call in the listen only mode by:

- ❖ Dialing the agent's 3-digit station number. Upon hearing busy tone, press the pre-programmed\* Barge-In flex button. The conversation in progress is heard by the Supervisor on the handset receiver and the Supervisor's MUTE button LED is lit indicating that the Supervisor's transmit is muted. If the Supervisor wishes to participate in the conversation in a true conference mode, he can press the MUTE button which removes mute.



*The Executive Override Code, [625] programs Supv Monitor with Barge-in feature onto a flex button.*

Conditions:

- ❖ Supervisors are granted the Barge-In option if they log in at a station with the Supervisor Barge-In/Executive Override enabled in programming.
- ❖ Supervisors can only Barge-In on calls of ACD group(s) members into which they are logged.

## Supervisor Queue Status Display

The Supervisor Queue Status feature provides a means for an ACD supervisor to view the status of their ACD group. This display is an idle state display and prompts a Supervisor when a group is having problems





answering their calls. The display tells the supervisor how many calls are in queue, how many agents are logged into the ACD group, and the length of time, in minutes, that the oldest call is in queue.

The supervisor station logged onto the ACD group can obtain the Queue Status display by:

- ❖ Dialing the Queue Status code [577] on the dial pad, followed by the ACD group (5xx) the supervisor wants to observe,

*or*

Press the pre-programmed\* flex button.

The Queue Status display shows the following information:

<p><b>5xx: CIQ: xx AGENTS: xx</b>  <b>oc: HH:MM:SS</b></p>
--

Where:

5xx = ACD Group (550-565)

CIQ: xx = Calls in queue

AGENT(S) : xx = Agents logged in

OC: hh:mm:ss = Oldest call in hours, minutes and seconds

If the supervisor wants to change the display to a different group:

- ❖ Dials the Queue Status code [577] on the dial pad, followed by the ACD group that the supervisor wishes to observe,

*or*

Presses the pre-programmed\* flex button.

Conditions:

- ❖ To receive the Supervisor's Queue Status display, the station must be logged in as a Supervisor and dial the flex code for the appropriate group.
- ❖ ACD Supervisors receive the Queue Status display in real time.
- ❖ The Queue Status display is only given when the ACD group member or Supervisor's station is not receiving a higher priority display, such as HELP or Out-Of-Service, or other applicable off-hook events are taking place at the station.
- ❖ The Supervisor's Queue Status display is saved in battery backed memory.
- ❖ When a Supervisor logs out of the group presently displayed, he must enter a new request for Queue Status display.



## Automatic Selection

Pressing an outside line button, or pool button; a speed button; a station button; or dialing a number in the Triad-S system numbering plan, automatically activates the speakerphone and lights the ON/OFF button, if your keyset is programmed as a speakerphone.

## Background Music (Optional)

- 1 Dial [632] on the dial pad,  
**or**  
Press the pre-programmed\* flexible button.

The LCD display shows the following:

<b>0:OFF</b>	<b>1:CH-1</b>	<b>2:CH-2</b>
<b>MMIDDNY</b>		<b>HH:MM</b>

- 2 Enter the desired channel on the dial pad. Confirmation tone is heard. Music is now heard through the speaker.
- 3 Press the Volume Bar to change the volume. The following message is shown on the display phone:

<b>SPEAKER BGM</b>	<b>[#####]</b>
<b>MM DD YY</b>	<b>HH:MM am</b>

### Conditions

- ❖ When you pick up the handset or press the ON/OFF button, music is discontinued automatically
- ❖ Once the headset is enabled, BGM is discontinued.

\*A Flex Button must be programmed for this feature to operate. Refer to *Table 5-3:Flex Button Programming Codes*.

## Call Back

If you dial a telephone that is busy and want to activate Call Back:

- 1 Press the CALL BACK button.
- 2 Hang up.
- 3 When the busy station hangs up, you are signaled.







- 4 Answer the call; station you called is then signaled. (If your station is busy when signaled, an automatic MSG is left at your phone).



*When the Automatic Cull Back Timer is enabled, a call back request will automatically be invoked anytime a user listens to intercom busy tone for a preset period of time.*

*Only one Call Back request can be left at a station; the second request is converted to a message wait call back request.*

\*A **Flex** Button must be programmed for this feature to operate. Refer to *Table 5-3: Flex Button Programming Codes*.

## Call Coverage Feature

This feature lets stations answer calls for other stations by utilizing enhanced DSS buttons. A Visual and Audible status of ringing stations to an assigned coverage station are provided.

To program a flexible button for call coverage at a station:

- 1 Press the SPEED button twice.
- 2 Press the desired flexible button to program.
- 3 Dial [646XXX] (Ringing Type) or [647XXX] (Non-Ringing Type) on the dial pad where XXX is the extension number to cover. Confirmation tone is heard. If an error was made during entry, error tone is presented.

Once the button is assigned on the station and a call rings in:

- 1 The coverage station hears ringing for the coverage station after a five second delay. The ring tone is the internal ring tone cadence. The LCD of the coverage station identifies the ringing station as:

<b>CALL FOR STA XXX</b>	
<b>MMM DD YY</b>	<b>HH:MM</b>

- 2 The Coverage station then presses their flashing Coverage flexible button,  
*or*  
Presses the ON/OFF button,  
*or*  
Lifts the handset if PLA is enabled. The flash rate is the same as the incoming CO line ringing rate. The call is answered and ceases to ring at any other stations that may have



the same coverage appearance. The following message is displayed after the call is answered:

<p><b>CALL TO STATION XXX</b>  <b>FROM STA YYY</b>                      <b>HH:MM:SS</b></p>
---

By default, no call coverage buttons are assigned.

Conditions:

- ❖ Multiple coverage stations can have the same remote ringing station(s) programmed on their stations.
- ❖ Once a coverage station answers the call, other stations attempting to answer the call receive a busy tone and the call coverage button extinguishes on all appearances of that button,
- ❖ This feature can cover SLT extensions, however an SLT cannot perform the call coverage function. The SLT extension need not be physically installed, only the SLT card must be installed.
- ❖ Direct CO calls have ring and LCD priority over call coverage calls. The call coverage station must have a direct CO appearance or Loop button to pick up an external call. If the call coverage station is in DND, no audible ringing is heard, however visual and LCD information is presented.
- ❖ This feature can be programmed on any key station or DSS Console with an available flexible button. If the DSS with a call coverage button assigned is unplugged or moved, the station associated with that DSS stops ringing until the DSS is plugged in again.
- ❖ Camp-On or Override drops any internal callers to which a station is talking.
- ❖ Only one button type (**646** or **647**) per covered station can be assigned on a keyset.

\*A Flex Button must be programmed for this feature to operate. Refer to *Table 5-3: Flex Button Programming Codes*.

## Call Forward

### All Calls

If you were given the ability to forward your calls:

- 1 Lift handset or press ON/OFF button.
- 2 Press the FWD button or dial [**640**].
- 3 Press DSS button of desired station,

or

Dial the 3-digit extension number where to forward calls, including ACD or UCD, Voice Mail, Hunt Group pilot numbers and Speed Dial bins for off-net forwarding.



## Call Forward



- 4 Replace handset or press ON/OFF button.

## Conditions:

- ❖ Call Forward remains engaged until manually released. When released, the station number is returned to the LCD.
- ❖ Calls cannot be forwarded to a station in the DND mode. An error tone is received when this is attempted. It cannot be forwarded to a busy station, the caller receives busy tone in this case,
- ❖ CO Line queues, a Message Waiting request, and pre-selected messages are canceled when a station is placed in the Forward mode.
- ❖ A forwarded call signals to the forwarded station in the Tone mode, regardless of the Intercom Signaling Switch Mode selection.
- ❖ A station in the Forward mode can make outgoing calls.
- ❖ A Camp-On signal is allowed at the forwarded station if that station is busy.
- ❖ A station denied the use of Call Forwarding receives an error tone when pressing the Call Forward button.
- ❖ A forwarded CO Line call can be transferred back to the original forwarding station, effectively overriding the forward. Also, a station receiving the Call Forward can call the original forwarding station.
- ❖ If a CO Line rings into a station with manual Call Forward, the line sequences to the last station of the chain. If the last station is in DND mode or does not have a Direct appearance for the CO Line or a Loop button, the call reverts back to the first station.
- ❖ If a CO Line rings into a station with both Manual and Preset Call Forwarding, Manual Call Forwarding takes precedence. Once the Manual Forward determines the station to be rung as per above, preset Call Forward may then apply at the new station.
- ❖ An unlimited number of stations can be set up in a Manual Call Forward chain. However, a station cannot forward to a station that is already a member of his chain.
- ❖ If the last number of the Manual Call Forward chain is in DND mode, the internal caller gets a DND response.
- ❖ Calls to a station in both Manual Call Forward and DND mode follow the forward.
- ❖ If a private line rings into a station with Manual Call Forward the CO Line forwards, providing the forwarded station has a direct CO Line appearance or an available Loop button.
- ❖ When a forwarded SLT goes off-hook, a Call Forward warning tone is heard by the user to inform the user the phone is forwarded.
- ❖ SLTs may use Call Forward in the same manner as digital terminals.



- ❖ A station's Call Forward status is stored in a battery protected area of memory. A station's Call Forward status is returned after a power failure or system reset occurs.
- ❖ Idle Keypad in hands-free mode will not follow no answer/busy-no-answer forwarding.

To remove Call Forwarding:

- 1 Lift handset or press ON/OFF button.
- 2 Press the FWD flex button. Confirmation tone is heard and the FWD LED is extinguished.

## Busy

If you were given the ability to forward your calls:

- 1 Lift the handset or press ON/OFF button.
- 2 Press the FWD button or dial [640].
- 3 Dial the Call Forward Busy code [8] on the dial pad.
- 4 Dial the 3-digit destination number to forward calls. Confirmation tone is heard.
- 5 Replace handset.

To remove Call Forwarding:

- 1 Lift the handset or press ON/OFF button.
- 2 Press the FWD button. Confirmation tone is heard and the FWD LED is extinguished.

## Busy/No Answer

If you were given the ability to forward your calls:

- 1 Lift the handset or press ON/OFF button.
- 2 Press the FWD button or dial [640].
- 3 Dial the Call Forward Busy/No Answer code [9] on the dial pad.
- 4 Dial the 3-digit destination number to forward calls. Confirmation tone is heard.
- 5 Replace handset.

To remove Call Forwarding:

- 1 Lift the handset or press ON/OFF button.
- 2 Press the FWD button. Confirmation tone is heard and the FWD LED is extinguished.

Conditions:

- ❖ The user cancels the feature by dialing the Call Forward Code or pressing the Call Forward button again.



## Call Forward

- ❖ For Call Forward No Answer, the number of rings before the call is forwarded is determined by the Call Forward No Answer timer.
- ❖ Stations Call Forwarded/No Answer forward incoming CO calls according to the Preset Forward Ring Timer.
- ❖ CO Line transfers to a station forwarded to a ACD, UCD or VM group receives BGM until a member of the group becomes available.
- ❖ ICM calls forwarded to a VM group receive ringback until a member of the VM group becomes available.
- ❖ If a station is denied Station Call Forwarding, then Off-Net Forwarding is not allowed.
- ❖ A station's Call Forward status is stored in a battery protected area of memory. A station's Call Forward status is returned after a power failure occurs.

The Call Forward condition Codes are as follows:

NONE	Unconditional forward (all calls forwarded)
[7]	Forward after the No Answer time (programmable)
[8]	Forward only when station is busy
[9]	Forward if station is busy or after the No Answer time expires

## Follow-Me

This feature lets a user who is away from their station, activate/deactivate call forwarding from another station in the system. This lets the user forward their calls to their current location or into Voice Mail, ACD/UCD, Hunt Groups, or to any other station in the system. When this call forward is activated, all calls presented to the forwarded station forward to the destination station immediately.

If you were given the ability to forward your calls:

- 1 Lift the handset or press ON/OFF button.
- 2 Dial the Follow-Me Forward code [642 YYY XXX] on the dial pad, where YYY=station forwarding from and XXX is station forwarding to.
- 3 Replace handset.

To remove Follow-Me Forwarding:

- 1 Lift the handset or press ON/OFF button.
- 2 Dial the Follow-Me Forward code [642 YYY YYY] on the dial pad, where Y=station forwarded from.

To establish Follow-Me Forwarding from an off-site location:

- 1 Dial into the system on a DISA or TIE trunk. Enter the DISA access code, if applicable.



- 2 Dial the Follow-Me Forward code [**642** YYY XXX] on the dial pad, where YYY=station forwarding **from** and XXX=station forwarding to.

To remove Follow-Me Forwarding from an off-site location:

- 1 Dial into the system on a **DISA** or TIE trunk. Enter the **DISA** access code, if applicable.
- 2 Dial the Follow-Me Forward code [**642** YYY YYY] on the dial pad, where Y=station forwarded from.

Conditions:

- ❖ If a Call Forward mode is currently active at the station where forwarding is desired, the new forward becomes active and cancels the previous forward.
- ❖ Both internal and external calls to the affected station forward to the designated location,
- ❖ Call forwarding must be allowed in programming for the affected station.
- ❖ When remote forward is activated the forwarding is immediate.
- ❖ A station's Call Forward status is stored in a battery protected area of memory. A stations Call Forward status is returned after a power failure or system reset occurs.
- ❖ When a key telephone is forwarded remotely, the key stations forward button lights. The station user may cancel the forwarding at their station by pressing ON/OFF, then the FWD button, SLT users can cancel their forwarding by going off hook and dialing the forward code.
- ❖ DISA callers entering the code and making a mistake are given error tone for 3 seconds, silence for 2 seconds, then the dial tone is returned.

## No Answer

If you were given the ability to forward your calls:

- 1 Lift the handset or press ON/OFF button.
- 2 Press the FWD button or dial [**640**].
- 3 Dial the Call Forward No-Answer code [**7**] on the dial pad.
- 4 Dial the 3-digit extension number where calls are to be forwarded. Confirmation tone is heard.
- 5 Replace handset or press ON/OFF button.

To remove Call Forwarding:

- 1 Lift the handset or press ON/OFF button.
- 2 Press the FWD button or dial [**640**]. Confirmation tone is heard and the FWD LED is extinguished.





## Off -Net (via speed dial)

This feature allows stations to forward intercom and transferred CO calls to an off-net location,

In a speed dial bin, store the number of the off-net location where to forward calls. Follow instructions provided for storing station or system speed dial numbers.

- 1 Lift handset or press ON/OFF button,
- 2 Press the FWD button or dial [640].
- 3 Dial [\*] on the dial pad. Dial the 2-digit speed bin number (00-19, 20-99) that contains the number where to forward calls. Confirmation tone is heard. FWD button LED flashes.
- 4 Replace handset or press ON/OFF button.

### Conditions:

- ❖ The user cancels forwarding by going off-hook and pressing Call Forward button.
- ❖ Forwarding is unconditional and occurs immediately when a station calls an Off-Net forwarded station.
- ❖ The call to a station is not answered until the outgoing CO Line is seized and the digits are out-pulsed, The calling Station receives ICM ringback until answered. Upon answer the Station receives whatever CO progress tones apply (i.e., Ringback, Busy, Error, Announcement, etc.).
- ❖ If a station is denied Station Call Forwarding, Off-Net forwarding is not allowed.
- ❖ Toll Restriction is based on the forwarding station's COS and the outgoing CO Line COS.
- ❖ The calling station must have an appearance (Direct, Loop) for the outgoing (Off-Net) line. The call is not forwarded if a Direct Appearance or Loop key is unavailable.
- ❖ SMDR printout reflects transferred and outgoing calls like a DISA call record.
- ❖ Station users may use Station or System Speed Dial as the Speed Dial Bin used for Station Off-Net Forward.
- ❖ A station's Call Forward status is stored in a battery protected area of memory, A station's Call Forward status is returned after a power failure or system reset occurs.
- ❖ Call must be an intercom or transferred CO call.

### To remove Off-Net Forwarding

- 1 Lift the handset or press ON/OFF button.
- 2 Press the FWD button. Confirmation tone is heard and the FWD button LED is extinguished.



## Station

When any type of station call forwarding is invoked, the LCD display normally indicates the call forwarding mode at all times. This feature changes the LCD forwarding display to make the call forwarding mode display optional. This feature is enabled/disabled in admin programming on a system-wide basis.

## Caller ID Name/Number Option

This feature lets a station user program a flexible button to view the number and name on the LCD when receiving a Caller ID CO call.

If the feature is enabled, the flex button LED is lit solid, the name and number is displayed. During the call, the user can press the flexible button to view the normal call information.

The top line of the LCD displays the number of the caller and the bottom line of the LCD displays the name.

Conditions:

- ❖ When enabled, this display overrides transfer call LCD messages, ACD Ring messages, Call Pickup messages, and Answer messages. If the user wishes to view the Line Number/Call Timer and the standard call information, they can press the flexible button to toggle between the name/number and normal mode.
- ❖ By default, no button is assigned on telephones.

\*A Flex Button must be programmed for this feature to operate. Refer to *Table 5-3: Flex Button Programming Codes*.







## Calling Station Tone Mode Option

Enables a calling station to override a called station's H or P intercom settings,

When placing a call to a station and Tone ringing is desired:

- 1 Dial [**6#**] on the dial pad.
- 2 Dial the 3-digit extension number,  
**or**  
Press DSS button of desired station (call tone rings station).

## Call Park

To place an outside call in park and consult with, page, or call an internal party:

While connected to an outside line:

- 1 Press TRANS button. The caller is put on hold.
- 2 Dial parking location (430 to 437). Confirmation tone is heard.
- 3 If you hear busy tone, press TRANS twice and dial another parking location.

Retrieving a Parked Call:

- 1 Lift handset or press ON/OFF button.
- 2 Press the [#] button.
- 3 Dial parking location (430 to 437) where the call was parked.

## Call Pick-Up

### Directed

A station can pick up a tone ringing intercom call, transferred, incoming or recalling outside line to a specific unattended station. The call must be a tone ringing call:

- 1 Dial the station number of the known ringing telephone. Receive **ringback** tone or call announce tone depending on the intercom selector switch setting.
- 2 Press the pre-programmed\* PICK UP button to answer the call.

\*A Flex Button must be programmed for this feature to operate. Refer to *Table 5-3: Flex Button Programming Codes*.

Conditions:

- ❖ User must have access to the specific outside line or a Loop button to do a directed call pick up.



## Group

When intercom tone ringing, transferred outside line ringing, recall ringing or initially ringing call is heard at an unattended telephone:

- 1 Lift handset or press ON/OFF button.
- 2 Dial [#0] on the dial pad,

*Of*

Press the pre-programmed\* PICK UP button to connect to the calling party.



***You must be in the same pick up group as the ringing telephone to pick up the call.***

\*A Flex Button must be programmed for this feature to operate. Refer to *Table 5-3: Flex Button Programming Codes*.

Conditions:

- ❖ User must have access to the specific outside line or loop button to do a group call pick up.

## Call Transfer

Outside lines can be transferred from one phone to another within the system. The transfer can be screened (announced) or unscreened to an idle or busy station, ACD or UCD Group, or Hunt Group.

Screened Transfer

While connected to an outside line:

- 1 Press DSS button where to transfer call (if programmed on your telephone),  
*or*  
Press TRANS button and dial 3-digit station number.
- 2 The called extension signals according to the intercom position.
- 3 When that extension answers, announce the transfer.
- 4 Hang up to complete transfer.



***If Direct Transfer Mode is enabled in admin programming, the supervised transfer is transferred directly to the key station handset.***



## Camp-On

## Answering a Screened Transfer

Your intercom signals according to the intercom position.

- 1 Answer the intercom and receive the transfer notice.
- 2 Press the outside line button or loop button flashing on hold.

## Transfer Search

When attempting to locate a party:

- 1 Press a station button to signal the desired station.

If the party is not located:

- 2 Press another station button to continue the search.
- 3 When the called party answers, hang up to complete the transfer.

## Unscreened Transfer

When the called extension begins to signal, hang up to transfer the call (Recall timer starts).

## Camp-On

If you call a station that is busy and wish to alert them to your call:

- 1 Press the CAMP-ON button. Called station receives one-burst of ringing. Wait for their response.
- 2 When called party answers, consult with them or hang up to transfer the call.



*If a station is in **DND**, only the attendant can **Camp On** using **the** attendant **override feature**. **Cump-On or Override will drop any internal callers to which that station is talking.***

## Answering a Camp-On

If you are on a connected call, hear one burst of muted ringing, and your CAMP-ON button is flashing, you have a call waiting.

To answer:

- 1 Press the CAMP-ON button. Any outside line you are connected to is placed on hold. You may converse with the station placing the call.
- 2 Press flashing outside line button if a call is being transferred



If you do not have a Camp-On button:

- ❖ Go on-hook with present call. Camp-On rings through,  
**or**  
Place present call on hold, then go on-hook. Camp-On rings through.

## CO Line Access

To access outside line:

- 1 Press idle CO line button, Pool button,  
**or**  
Dial CO line group access code or LCR access code.
- 2 Dial desired number for outside call.
- 3 Lift handset to converse or use speakerphone.

## CO Line Queuing

A station can queue only one line at a time. If you see that a particular outside line is busy and you wish to be placed on a list waiting for that line to become available:

To Place a Queue:

- 1 Press desired busy outside line button,  
**or**  
Pool button. (Busy tone is heard.)
- 2 Press pre-programmed\* LINE QUEUE button.
- 3 Replace handset or press ON/OFF button.

To Answer a Queue:

If you hear ringing and an outside line of the line group or a Loop button you queued onto is rapidly flashing:

- 1 Lift handset or press ON/OFF button.
- 2 Press flashing outside line button or Loop button to answer.



*If your station has been programmed for Preferred Line Answer, you will have the line automatically upon lif ting the handset.*



Conditions:

- ❖ A Loop button or direct appearance of the queued line is required.

\*A Flex Button must be programmed for this feature to operate. Refer to *Table 5-3: Flex Button Programming Codes*.

## Conference Combinations

Only stations that have conference enabled can institute a conference,

- ❖ **Add-On Conference:** Up to eight internal parties can engage in a conference, or seven internal parties with one external party. A maximum of five 8-party conferences (five external parties maximum) can be established.
- ❖ **Multi-Line Conference:** One internal station can engage in a conference with up to four outside parties.



*A maximum of eight parties can be included in a conference.*

Establishing a Conference:

- 1 Lift handset.
- 2 Select intercom station or dial desired outside party.
- 3 When called party answers, press the CONF button.
- 4 Add next conference party by selecting another outside line or intercom station.
- 5 If the next conference party is an outside line and a busy or wrong number is encountered, press one of the conference parties on hold. This drops the busy or wrong number party. Press the conference button again and repeat step 4.
- 6 When party answers, press the CONF button twice.
- 7 All parties are connected.

Exiting a Conference (Controller only).

There are three methods of exiting a conference:

- 1 Press the ON/OFF button to ON, press the MUTE button, and replace the handset (to monitor a conference).

*Use the following method only if multi-line conference is in progress.*

- 2 Press HOLD button to place outside parties on hold. Hold timer starts. If one of the two parties is internal, that party is dropped.





- 3 Press CONF and hang up or press the ON/OFF button to leave the other conference parties still connected in an unsupervised conference. CONF button flashes and timer starts. There is a warning tone before the other parties are dropped.

#### Re-entering a Conference:

When the controller re-enters the conference, the disconnect timer is reset.

- 1 Lift handset to re-enter a monitored conference.
- 2 To re-enter a conference placed on hold, repeat steps for establishing a conference.
- 3 To re-enter an unsupervised conference, lift handset and press flashing CONF button. The CONF button lights steady and confirmation tone is heard.

#### Terminating a Conference:

To terminate a conference, the conference initiator who is actively in the conference:

- ❖ Replaces handset or pushes ON/OFF button to OFF.

To terminate an unsupervised conference:

- ❖ Pressing the flashing CONF button while on hook, all parties are dropped.

## Dial By Name

The system lets station users dial extension numbers by entering the name of a person programmed for that station. The system database allows entry of a name (alphanumeric) up to 24 characters for each station. This programmed name can be used for dialing-by-name station users and displays on LCD displays.

To dial a station user by name:

- 1 Dial the Dial-By-Name code [**6\***] on the dial pad,  
**or**  
Press the pre-programmed\* DIAL-BY-NAME flex button.





- 2 Dial person's last name on the keypad. Use *Figure 5-2: Key Pad - Dial By Name* below:

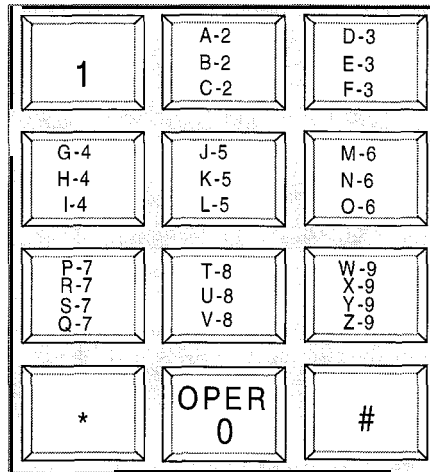


Figure 5-2: Key Pad - Dial By Name

- ❖ Example: searching for the name BROWN, press [2][7][6][9][6].
- ❖ When the system finds a unique numeric match to the name being dialed, the call is placed to the station matching the name. The intercom call signals the station according to the H-P-T button. If fewer than 8 digits are dialed, the numeric match is dialed after a 10 second interdigit time-out occurs, or if [#] is pressed.

\*A Flex Button must be programmed for this feature to operate. Refer to *Table 5-3: Flex Button Programming Codes*.

#### Conditions:

- ❖ The system dials the station that matches the dialed name when a unique match is found. If multiple names are located (found) after eight digits, the first one is dialed.
- ❖ Names are entered as part of the system attributes database. Numbers may be entered as part of a name. To avoid conflicts, all names must have a unique numerical sequence.

## Directory Dialing – Stations

Directory dialing lets station users obtain a directory of station users and automatically dial the extension currently displayed. The Triad-S System provides locations for up to 200 names.



Directory dialing also lets users program a name along with a speed dial bin for later locating a speed dial number. When prompted, the system displays the name associated with a speed dial number on the LCD display. When the desired name is shown, the user may have the system dial the number.

Directory dialing lets users associate a name with an entry in the local number/name translation table. When prompted, the system displays the name associated with the table on the LCD display. When the desired name is shown, the user may have the system dial the number.

The Directory Dialing list may be programmed and maintained at the first assigned attendant station in one of two ways. However this admin routine provides a means for maintaining the directory by the system programmer either locally (at Station 100) or remotely, via modem access,

Directory dialing may also be used to transfer a call from one station to another.

To view the directory list:

- 1 Dial the Directory List dial code [680] on the dial pad,  
**or**  
Press the pre-programmed\* flex button programmed as a directory dialing button.
- 2 Press a button on the key pad once, twice or three times to represent the letter of the alphabet to begin viewing the list of names (i.e., pressing 2 produces the names beginning with A. Pressing 2 again produces the names beginning with B. Pressing 2 a third time produces the names beginning with C). The letters of the alphabet are represented on the key pad as shown below in *Figure 5-3: Key Pad - Directory Dialing*.

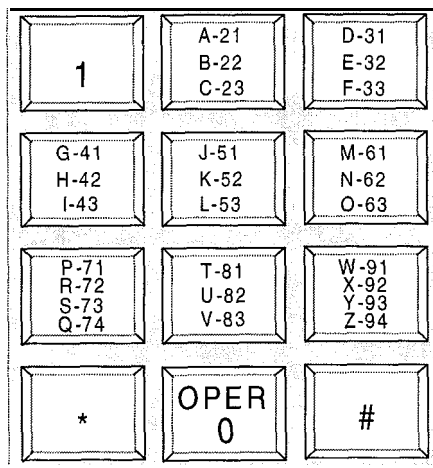


Figure 5-3: Key Pad - Directory Dialing







- 3 Names beginning with the letter chosen display on the LCD display.



*If there are no names in the Directory List beginning with the desired letter, a name with the next higher letter shows on the LCD **display***

- 4 Dial [\*] on the dial pad to scroll up (next entry) through the list,  
or  
Dial [#] on the dial pad to scroll down (previous entry) through the list,  
or  
Press another button to view the list for a different letter of the alphabet.
- 5 When the desired name is shown on the LCD display, press the SPEED button to automatically dial the destination station or outside phone number (via speed dial).

#### Conditions:

- ❖ If the desired party is an intercom station, that station is signaled according to it's H-P-T switch (SLT stations tone ring).
- ❖ If the desired party is associated to a speed dial bin, the system selects a CO line and dials the number programmed into the speed dial bin. Call progress tones are then heard.
- ❖ If a station is in the Directory Dialing mode and a CO or intercom call rings in, the station must exit the Directory Dialing mode to answer the call.

#### To Transfer a call using Directory Dialing while on a call:

- 1 Press the TRANS button.
- 2 Dial the Directory Dial Code [680] on the dial pad,  
or  
Press a pre-programmed\* flex button programmed for directory dialing.
- 3 Press the digit associated with the person's name and when it displays, press the SPEED button to automatically dial the destination station.
- 4 Hang up to complete the transfer.



***Calls** may be transferred to internal stations on/y, An attempt to transfer a call off -net (via a speed dial bin) result in the call recalling upon going **on-hook**.*

\*A Flex Button must be programmed for this feature to operate. Refer to *Table 5-3: Flex Button Programming Codes*.



## Direct Inward System Access (DISA)

- 1 Call the phone number the system administrator specified as the **DISA** line. The system answers and returns internal dial tone.
- 2 Enter the **DISA** access code specified by the system administrator, if applicable. Dial tone returns.

To place an outgoing call:

- 1 Dial a group access code: 9, 81-87. CO Dial tone returns.
- 2 Dial the desired telephone number.



*The conference timer will monitor a **DISA** "trunk- to- trunk" call and release the lines one (7) minute of ter the time expires.*

- 3 To reach an internal station:
- 4 Dial the **3-digit** station number. **Ringback** tone is heard.
- 5 Converse when party answers.



*If the station dialed is unattended, busy or in **DND**, intercom dial tone returns, (after the Preset Call Forward Timer expires).*



**WARNING:** Toll fraud can occur if **DISA** is not properly implemented.

## Distinctive Ringing

The tone ring signal that notifies stations of an incoming call can be changed by each station user to provide distinctive ringing among a group of stations. Each station user may select a distinctive ringing tone used to ring their station. The system provides **36** different ring patterns that station users may select from.

To select a distinctive ring tone for a station:

- 1 Dial the Tone Ring program code [**695**] on the dial pad. The following message is shown on the display phone:

<p><b>ENTER RING TONES</b>                      00-36</p> <p><b>XX PRESS SPEED TO SAVE</b></p>
--

Distinctive Ringing



- 2 Enter the 2-digit tone number. The telephone speaker sounds a steady tone that correlates to the 2-digit entry.
- 3 When the desired tone is selected (default ringing code is set to **00**), press the SPEED button to save it as the tone to present when the station is tone rung. Confirmation tone is heard. This tone is presented as a result of an incoming CO or intercom call, recalling CO line or Transferred CO line or at any other time the station is tone rung. The 2-digit tone number displays in the lower left corner of the LCD display.

The ringing choices are as follows:



TONE #	FREQ	TONE #	FREQ
00	6971770	18	85211477
01	6971852	19	852/1633
02	697/941	20	852/0
03	697/1209	21	941/1209
04	697/1336	22	941/1336
05	697/1477	24	941/1633
06	697/1633	25	941/0
07	697/0	26	1209/1336
08	770/852	27	1209/1447
09	7701941	28	1209/1633
10	77011209	29	1209/0
11	770/1336	30	1336/1477
12	770/1477	31	1336/1633
13	770/1633	32	133610
14	770/0	33	1477/1633
15	8521941	34	1477/0
16	85211209	35	1477/0
17	85211336	36	Off
23	94111477		

Tone Duration = 50 ms/50 ms

Table 5-2: Ringing Choices



Do Not Disturb (DND)



Conditions:

- ❖ Station users may listen to all tones by dialing the 2-digit codes one after another. The tone that is sounding when the SPEED button is pressed is saved as that station's tone ringing selection.
- ❖ A station's tone ringing selection is maintained in a battery protected area of memory. Therefore, if a system experiences a power failure or a soft or hard restart, the tone ringing selection is restored.
- ❖ The tone selected provides TONE ringing normal or muted to the station whenever the station is commanded to tone ring (i.e., this excludes camp-on tone programming confirmation tones or other specific tones not considered TONE ringing).
- ❖ The selected tone is used to notify the station in the following cases:
  - Incoming CO Call
  - Incoming Intercom Call
  - Transferred CO Line
  - Recalling CO Line
  - Call Back Notification
  - Message Wait Call Back
  - All types of forwarded calls
  - Executive/Secretary calls
  - Line Queue Call Back
  - LCR Queue Call Back
- ❖ CO distinctive ringing supersedes station distinctive ringing.

## Do Not Disturb (DND)

DND blocks incoming paging and ringing, and provides visual status indication to other telephones with DSS appearance. The DND code is [631].

- ❖ Press the pre-programmed\* DND button. DND button lights steady,

The DND button can be pressed while the phone is ringing to stop the ringing. (Refer to One-Time Do Not Disturb below.)

Removing Do Not Disturb:

- ❖ Press the pre-programmed\* DND button or dial [631]. The button LED extinguishes and DND cancels.

Conditions:

- ❖ Calling stations will receive DND audible tone.
- ❖ The first programmed attendant does not have DND capability,



- ❖ DND capability is programmable on a per-station basis.

## One-Time Do Not Disturb

Prevents calls from ringing at your station while you are on a call. The One-Time DND condition automatically cancels when you end your call.

- ❖ Press the **pre-programmed\*** DND button while you are off-hook and connected to a CO line or intercom call. The DND button LED lights and off-hook tones at your station cancel.

To cancel:

- ❖ Replace handset. The DND button LED extinguishes and DND cancels.

\*A Flex Button must be programmed for this feature to operate. Refer to *Table 5-3: Flex Button Programming Codes*.

## Executive Override

This feature enables Executive designated stations the ability to override and barge-in on other keysets engaged in conversation. Code is [625].

If you call a busy station:

- 1 Press the pre-programmed\* EXECUTIVE OVERRIDE button. Executive station is bridged onto the CO line conversation in progress at the called station. Optional warning tone is heard and presented to all parties prior to cut-through.
- 2 Replace handset at Executive station to terminate the override.

Conditions:

- 3 An error tone occurs:
  - If the called party is in a conference.
  - If the called party is already on an OHVO call.
  - If the called party has a Camp-On at his station.
- ❖ If the Executive joins a call and one of the members does a hook-flash or presses his transfer button, the Executive is dropped.
- ❖ If the Executive does a hook-flash or presses his transfer button, it is ignored.
- ❖ When the Executive joins an intercom call or CO call and the Executive is not in a mute state, and any member of the party hangs up, the call is converted to a two-party conversation.



## Executive/Secretary Pairing



- ❖ When the Executive joins an intercom call or CO call and the Executive is in the mute state, and either of the two parties in the intercom call hang up, the call is dropped. If the Executive hangs up, the call remains a two-party conversation.
- ❖ Certain forwarding types affect override operation.
- ❖ Intercom button will disallow Executive Override.

\*A Flex Button must be programmed for this feature to operate. Refer to *Table 5-3: Flex Button Programming Codes*.



Use of this feature when the Executive Override warning tone is disabled may be interpreted as a violation of federal, state or local laws, and an invasion of privacy. Check applicable laws in your area before intruding on calls using this feature.



A change in volume may occur on the CO line or intercom call after the **barge-in** occurs.

## Executive/Secretary Pairing

There are four sets of Executive/Secretary pairings available. When the Executive station is busy or in DND, the Secretary station receives intercom calls and transfers. The Secretary station can signal the Executive in DND by using the Camp-On feature.

Conditions:

- ❖ If you are designated the Executive station and your phone is busy or in DND, all calls are routed to the Secretary station.
- ❖ If you are the designated Secretary station, you can signal the Executive that is busy or in DND by using the Camp On feature.

## Flash

When connected to an outside line:

- ❖ Press FLASH to disconnect outside line and reseed outside line dial tone.



## Flash On Intercom

When connected to a page zone or another internal party, press FLASH to disconnect page or intercom call. Intercom dial tone is heard.

## Flexible Button Assignment

If you have buttons on your telephone that have NOT been assigned as CO lines, Pooled group, or Loop buttons, you may program them to suit your own needs. This feature was enhanced in database programming to allow programming of flexible buttons from a remote location (off-site). Range programming can also assign these buttons to multiple stations. There are five possible functions you may assign to these buttons:

- ❖ **DSS/BLF:** When this button is pressed, it automatically signals the assigned intercom station. DSS/BLF buttons are programmed by the station user.
- ❖ **FEATURES:** When this button is pressed, it activates a particular feature, thus eliminating the need for dialing the feature code. Some features require a programmed flex button for that feature to be accessible to the station user. In the case, it is designated in this Feature Operation Section and user guide. Feature buttons are programmed by the station user. Refer to *Table 5-3: Hex Button Programming Codes* for a complete listing of code/features that may be programmed onto a flexible button.
- ❖ **SPEED DIAL:** This button can automatically access a speed number location for one-step operation. PBX and Centrex codes can be programmed into a speed dial bin and accessed by pressing one button.
- ❖ **POOLED GROUP ACCESS:** A group of outside lines can be placed under one button. When this button is pressed, the system selects an available line from this group on which the user may place a call. Pool buttons are assigned in database administration.
- ❖ **LOOP:** This button appears as the direct button for outside lines that do not appear on the user's telephone. Any phone that does not have all lines appearing on it must have a loop button. There is NO limit to the number of LOOP buttons a station may have. Loop buttons are assigned in database administration.
- ❖ **UNASSIGN (Locked Out):** Specific buttons may be designated as locked out or unused. When a button is unused, the button may not be programmed using flex button programming procedures.

To program flexible buttons:

- 1 Press the SPEED button twice.
- 2 Press the assigned button to program (it must be programmed in the database as a multi-function button).





Flexible Button Assignment



- 3 Dial the desired code. Refer to *Table 5-3: Flex Button Programming Codes*.

To erase a flexible button:

- 1 Press the SPEED button twice.
- 2 Press the button to erase.
- 3 Press the FLASH button. Confirmation tone is heard.
- 4 Replace handset or press ON/OFF button.





100-131	Triad-S™ Ext. Numbers	643	Repeat Redial
43+[C]	Call Park Location 1-7 (System)	644+[IDX]	Mailbox button
438	Personal Park	645	Intercom button(s)
44 [V]	Voice Mail Group Pilot Numbers O-7	646+[XXX]	Call Coverage (Ringing Type)
45 [H]	Hunt Group Pilot Numbers O-7	647+[XXX]	Call Coverage (Non-Ringing Type)
55 [U]	ACD* Group Pilot Numbers O-9	649+[44V]	One-Touch Recording
55 [U]	UCD Group Pilot Numbers O-7	653	Caller ID Name/Number Toggle
56 [U]	ACD* Group Pilot Numbers IO-15	654+[0, 1]	Answering Machine Emulation mode
566	ACD*/UCD Available/Unavailable	680	Dial Speed Directory
567	ACD*/UCD Calls in Queue Display	695	Distinctive Ringing
570+[YY]	ACD* Call Qualifier Code	70	All Call Page (Internal and External)
571	ACD* Agent Logout	71	Internal Page Zone 1
572+5 [UU]	ACD* Agent Login	72	Internal Page Zone 2
573	ACD* Group Member Status Display	73	Internal Page Zone 3
574	ACD* Agent Help	74	Internal Page Zone 4
575+5 [UU]	ACD* Supervisor Logout	75	Internal All Call Page
576+5 [UU]	ACD* Supervisor Login	76+[1]	External Page Zones
577+5 [UU]	ACD* Supervisor Queue Status Display	77	Meet-Me-Page Answer
578	ACD* Overflow Avail/Unavail	8	Least Cost Routing (LCR) Access
579+5 [VU]	ACD* Calls in Queue Display buttons	#0	Group Call Pick Up
601	Attendant Override	#5	Universal Day/Night Answer
603	CO Line Off -Net Forward	[SPEED]+[YY]	Speed Dial Access (00-19 Station) (20-99 System)
604	Night Service	[SPEED]+[*]	Save Number Redial
621	Line Queue	[SPEED]+[#]	Last Number Redial
622	Call Back		
625	Executive Override/Monitor Barge-In		
626	LCR Queue Cancel		
627	Account Code Enter		
628	OHVO Enable		
631	Do Not Disturb		
632	Background Music		
633+[ZZ]	Personalized Messages		
633+[00]	Clear Personalized Messages		
634	Headset Mode		
635	ICLID Display (unanswered calls)		
639	Incoming CO Call Transfer		
641	Release button		

XXX = Station Extension Numbers  
 YY = Speed Dial Bin Numbers  
 ZZ = Personalized Messages  
 U = ACD\* (O-15) or UCD (O-7) Group Number  
 C = Call Park Location O-7  
 H = Hunt Group Number O-7  
 V = Voice Mail Group Number O-7  
 IDX = 001-255

• Features available with optional software.

Table 5-3: Flex Button Programming Codes





## Forward Override

This feature lets a user reach a busy station that is busy forward, no answer forward or all call forwarded.

This allows the calling station to call a forwarded station, OHVO, Executive Override, Monitor, Message Wait, Camp On, or Call Back at that station rather than forwarding to the busy destination.

- ❖ Dial [ 5# XXX] on the dial pad where XXX is the desired station extension,

## Group Listening

All digital key stations have a built-in speakerphone. Station users may use the speaker to monitor a call while using the handset to converse with the outside party. This enables other people in the room to listen to both parties in the conversation.

- ❖ While conversing on the handset, press the ON/OFF button. Both parties can then be heard on the digital station's speaker. The speakerphone microphone is muted while the handset is off-hook.

To deactivate Group Listening while off-hook, press the ON/OFF button.

Conditions:

- ❖ While using the speakerphone, lifting the handset turns off the speakerphone. To activate group listening, press the ON/OFF button (to ON) while the handset is off-hook.
- ❖ While in group listening mode, pressing the MUTE button causes the transmit from the handset to be muted (the speakerphone microphone is already muted). However, the distant end is still heard over the handset receiver and the station speaker.
- ❖ If full speakerphone operation is desired while in group listening mode, simply set the handset on-hook.
- ❖ Group listening is unavailable when the station is in headset mode.
- ❖ When placing the handset on-hook to full speakerphone operation, it is normal for a to hear a squeal caused by audio feedback. To eliminate this noise, press MUTE prior to initiating speakerphone operation.
- ❖ Must be enabled in Station Programming.



## Headset Mode

To activate Headset Mode:

- ❖ Dial [634] on the dial pad,

**or**

Press pre-programmed\* HEADSET MODE button. LED lights steady



**While Headset mode is active, the ON/OFF button activates the headset and disables speakerphone and intercom call announce operation at your station.**

*NOTE: To install the headset, see the Installation Manual.*

To deactivate Headset Mode:

- ❖ Dial [634] on the dial pad,

**or**

Press the pre-programmed\* HEADSET MODE button. LED extinguishes.



**Station must be programmed in database programming for headset operation before flex button can be programmed.**

\*A Flex Button must be programmed for this feature to operate. Refer to *Table 5-3: Flex Button Programming Codes*.

## Hold - Exclusive

When a line is placed on Exclusive Hold, no other station in the system can retrieve the call. Exclusive Hold may be programmed for activation when the Hold button is pressed once or twice. CO Lines, while in a transfer hold, are always placed in an Exclusive Hold condition.

## Hot Keypad Feature

This feature enables a station user to activate the telephone by dialing digits without going off hook.





## ICLID Unanswered Call Management Table

An Unanswered Call Management Table with 100 entry capacity for the Triad-S System is maintained in the system. The calling number/name information pertaining to any unanswered call is placed in this table at the time the system determines the call was abandoned.

This table may be accessed from any user station display phone so the unanswered calls may be reviewed and handled by the end user. Any Attendant station(s) can delete a table entry, one entry at a time. Upon entry into the review process, the functions available to a phone are:

Function	Button
1. Go to the beginning of table.	Dial Code 635
2. Review next item in table entry.	MUTE
3. Step to next table entry.	HOLD
4. Delete this table entry. (attendant only)	FLASH
5. Exit table review function.	ON/OFF
6. Step to previous table entry.	TRANSFER
7. Call Back.	SPEED

Table 5-4: ICLID Unanswered Call Management

Conditions:

- ❖ Telco must activate Caller ID service.
- ❖ Auto Attendant calls are considered answered.



## Incoming CO Call Transfer

This feature lets station users transfer a call that is currently ringing at their station without answering it. This feature is unavailable to Single Line Telephone users.

While station is idle:

- 1 Call rings in at idle station.
- 2 Press the pre-programmed\* INC CO XSFR flexible button,  
or  
Dial the Incoming CO call transfer code **[639]** on the dial pad.
- 3 Press a DSS, Group button or dial the 3-digit station number or group number. Call is automatically transferred to that destination.

While on an internal/external call and an incoming or transferred CO call is ringing at your station:

- 1 Place the current call on hold.
- 2 Press the pre-programmed\* INC CO XSFR flexible button,  
**or**  
Dial the Incoming CO call transfer code **[639]** on the dial pad.
- 3 Press a DSS, Group button or dial the 3-digit station number or group number. Call is automatically transferred to that destination. The incoming transferred CO call receives Music-On-Hold during the transfer state.
- 4 Station user can return to call placed on hold.

\*A Flex Button must be programmed for this feature to operate. Refer to *Table 5-3: Flex Button Programming Codes*.

Conditions:

- ❖ Calls may be forwarded to any available station, ACD/UCD group, Hunt Group or VM Group.
- ❖ Destination station must have a direct appearance for that CO Line or Loop button, and not in DND, or error tone is presented to the originator and the call remains ringing at his station.
- ❖ Attendant stations do not send ID digits.
- ❖ ACD agents are not allowed to transfer ACD calls using this feature.

## Intercom Buttons

This feature enables station users the ring a busy station via the intercom without using the Camp-On or Executive Override features. This allows stations to place intercom calls on hold.



## Intercom Buttons



To program a flexible button as an intercom button:

- 1 Press the SPEED button twice.
- 2 Press the desired flexible button to program.
- 3 Dial [645] on the dial pad. Confirmation tone is heard. If an error was made during entry, error tone is heard.

You place an intercom call to a busy station that has an intercom button:

- 1 The calling station receives **ringback** tone instead of busy tone. The called station hears muted or reminder ring and their intercom button LED starts flashing at the incoming CO line rate. This indicates an incoming intercom call.
- 2 The called station can place the current CO call on hold by pressing the HOLD button,  
**or**  
Place the current intercom call on hold by pressing the HOLD button. The intercom call is placed on hold on the available intercom button.
- 3 The called station then presses the flashing intercom button to answer the incoming intercom call. Once the call is answered, the following message displays on the called station LCD:

<b>CALL FROM STA XXX</b> <b>MMM DD YY</b> <b>HH:MM:SS</b>
--

Sta XXX can be a programmed station name.

By default, no intercom buttons are assigned to key stations

Conditions:

- ❖ If calls are ringing on intercom buttons and a Handsfree call is received, the Handsfree call is allowed and the calls ringing continue with muted ringing.
- ❖ Multiple intercom path buttons can be assigned to a single station, however up to five internal parties can be placed on hold per station. Music-On-Hold is provided to the intercom caller on hold.
- ❖ Once an intercom button is set up on the **keyset**, callers dialing that station will always receive **ringback** tone as long as an available intercom button is idle. If all intercom buttons are in use, the station may utilize the camp-on or executive override features to reach the station. Internal callers are dropped after the camp-on is answered.
- ❖ This feature can be programmed on any key station or DSS Console with an available flexible button. If there is an available intercom button, the following actions cannot be performed: Executive Override, ACD Supervisor Barge-In, OHVO, Camp-On or Override.
- ❖ A call ringing to a station on an intercom button rings muted or reminder ringing, depending on the stations tone ringing cadence.



- ❖ Up to five internal parties can be placed on hold. No recall timers apply to Intercom buttons. Internal callers can be placed and removed from hold when they appear on an Intercom button.
- ❖ To utilize the capability of intercom buttons, busy forward cannot be active at the station.
- ❖ A call ringing to a station on an intercom button and the DND button is pressed, returns DND tone to the caller and the call is dropped.

\*A Flex Button must be programmed for this feature to operate. Refer to *Table 5-3: Flex Button Programming Codes*.

## Intercom Calling

### Placing an Intercom Call:

- 1 Press the DSS button of the party to be called (if programmed at your phone),  
or  
Dial the 3-digit extension number.



*Dialing a number in the numbering plan activates the telephone automatically.*

- 2 You hear ringing if the called station is in the T answering mode; or three bursts of tone if called station is in the H or P position.
- 3 Lift the handset or use the speakerphone after the three tone bursts stop.
- 4 Hang up to end the call.

### Answering an Intercom Call:

With your H-P-T button in the T mode (LED On), you hear repeated bursts of intercom tone ringing and the HOLD button slow flashes.

- 1 Lift the handset or press the ON/OFF button to answer,  
or  
Press the H-P-T button to the H mode (No LED) to reply.
- 2 Replace the handset to end the call.

In the P mode (LED flashes at 30 ipm), you hear three bursts of tone and one-way announcement, The calling party cannot hear conversations in progress.

- ❖ Lift the handset or press the ON/OFF button to answer,  
**01**  
Press the H-P-T button to the H mode to reply







In the H mode (No LED), you hear two bursts of tone and an announcement, Reply handsfree or lift the handset for privacy.



## Intercom Transfer

Intercom transfer without DSS buttons:

- 1 Receive or make an intercom call.
- 2 Press the TRANS button. Intercom dial tone is heard.
- 3 Dial the station.
- 4 When the second station answers, you are in a supervised transfer mode (first station is staged for transfer).
- 5 Hang up (stations 1 and 2 are connected).

Intercom transfer using DSS buttons:

- 1 Receive or make an intercom call using a DSS button.
- 2 Press the TRANS button. Intercom dial tone is heard.
- 3 Press the DSS button where to transfer the call.
- 4 Hang up (stations 1 and 2 are connected).

## Keyset Mode

This feature lets a station user determine the mode and baud rate of the optional CTI Module connected to their phone. This setting is stored in back-up memory in the event of a power outage or system reset.

At an idle station:

- 1 Dial the **Keyset Mode** code [648] on the dial pad,  
**or**  
Press the pre-programmed\* **KEYSET MODE** button. The display shows the following information:

**INACTIVE**  
**MODE=% SAVE=HOLD BAUD=#**

- 2 Press [\*] to scroll through the **keyset** modes. The available modes are: Inactive, PC Phone, ATD Command, ATH Comm and CKTU.
- 3 Press [#] to scroll through the baud rates. Available baud rates are: 1200, 2400, and 4800.
- 4 Press the HOLD button to save the desired entries.





When the telephone is set to the AT command mode, the following AT commands are supported:

- ❖ **ATD:** This is the modem dialing command. The telephone recognizes the ATD and accepts digits after the command.
- ❖ **ATH** or **ATHX:** Where X = 0 or 1. This is the modem on hook/off hook command. **ATH** or **ATH0** forces the telephone to the on hook state from it's current state. **ATH1** forces the telephone to the off hook state from it's current state.



*If the handset is off hook (lif ted), these commands are discarded and no action is taken by the telephone.*

- ❖ **AT** or **ATW:** Where X = 0 or 1. This is the modem reset/initialize command. Whenever these commands are sent to the keyset, the keyset returns OK in ASCII format.
- ❖ **CKTU:** This mode is used when the optional Wanderer (cordless key telephone unit) is connected to the station. Refer to the Wanderer User Guide for additional information.

Conditions:

- ❖ The telephone must be in the AT command mode to process AT commands.
- ❖ All **CTI** information is still sent out the RS232 port in the AT command mode.
- ❖ These access codes are assigned to available flexible buttons for feature activation.
- ❖ The **ATD** command is always accepted by the telephone while it is in the AT command mode. **ATHX** is accepted only if enabled.
- ❖ **ATZ** is always enabled if the station is in the AT command mode.
- ❖ **ATD** accepts **W** to indicate a pause command.
- ❖ **ATH** or **ATH0** causes an on hook event. **ATH1** must be specified to go off hook.
- ❖ Default mode is inactive.

\*A **Flex** Button must be programmed for this feature to operate. Refer to *Table 5-3: Flex Button Programming Codes*.

## Last Number Redial (LNR)

- 1 Press the **SPEED** button.
- 2 Press **[#]**. The last number dialed over an outside line is automatically redialed.
  - ❖ The system automatically selects the original line used to place the call and redials the number.



## LCD Display - Contrast



- ❖ If that line is busy, the system automatically selects another line from the same group and redials the number.
- ❖ If no lines are available in the same group, the station receives busy tone and can queue for a line.
- ❖ If the station user preselects a line before activating LNR, the preselection overrides the line that was used originally.

## LCD Display - Contrast

There are four contrast adjustments available to the user to adjust the LCD for different lighting levels, At idle phone:

- 1 Press volume bar up or down for desired effect.

Conditions:

- ❖ BGM must be inactive.
- ❖ Handset must be in cradle.
- ❖ ON/OFF button must be set to OFF.

## Least Cost Routing (LCR)

To place an outside call when LCR is enabled in the system:

- 1 Dial [9] on the dial pad.
- 2 Dial the desired telephone number.
- 3 Wait for an answer. Lift handset or use the speakerphone to converse.

If all available lines are busy, remain off-hook for four seconds to automatically be queued onto LCR for an available line, then hang up.

If an LCR Queue Callback is activated:

- 1 When telephone is signaled, answer the call.
- 2 Desired telephone number is automatically redialed.



Only one **LCR** Queue Call **Back** request may be initiated by a station. When a **second** request is made, the **first** request is cancelled.



If an LCR Queue Callback is activated and you wish to cancel that callback request:

- 1 Dial the LCR Queue Cancel code, **[626]** on the dial pad.
- 2 Replace handset or press ON/OFF button.

## Mailbox Buttons

This feature lets station users program specific mailbox index numbers onto flexible buttons at their station or DSS Console. Users can then transfer internal/external callers to specific Voice Mail Groups or Mailbox numbers. These Voice Mail Groups or Mailbox numbers are programmed in admin programming. Up to 255 mailbox buttons per system are allowed.

To program a flexible button for a mailbox button at a station:

- 1 Press the SPEED button twice.
- 2 Press the desired flexible button to program.
- 3 Dial **[644]** on the dial pad followed by the 3-digit VM Index number (001-255). Confirmation tone is heard. If an error was made during entry, error tone is heard.

To use your mailbox button while on an internal/external call:

- ❖ The called station presses the Mailbox flexible button and goes on-hook. The call is then transferred to the VM port by the telephone system.

By default, no mailbox buttons are assigned to key stations.

Conditions:

- ❖ This feature can be programmed on any key station or DSS Console with an available flexible button. If a station is an OHVO, Camp-on or Executive Override initiator, they may not use the mailbox button feature.
- ❖ Stations engaged in a conference cannot use this feature.
- ❖ If no station(s) are programmed in the Voice Mail Group, the user receives error tone.
- ❖ Mailbox buttons interact with the station VMID feature as follows:
  - VM transfer with ID (manually enter digits) = No station VMID.
  - VM transfer with ID (press DSS button) = Use station VMID.
  - Mailbox button feature = No station VMID.

\*A Flex Button must be programmed for this feature to operate. Refer to *Table 5-3: Flex Button Programming Codes*.



## Meet Me Page



## Meet Me Page

To request another party to meet you on a page:

- 1 Dial the desired 2-digit or 3-digit paging code,  
**or**  
Press pre-programmed\* PAGING button.
- 2 Request that party meet you on the page.
- 3 Do not hang up, wait for the requested party to answer. As soon as the paged party answers and is connected to you, the page circuit releases.

Answering a Meet Me Page

- ❖ Go to the nearest telephone and dial [77] on the dial pad,  
**or**

Press the pre-programmed\* MEET ME PAGE ANSWER button. You are connected to the paging party

\*A Flex Button must be programmed for this feature to operate. Refer to *Table 5-3: Flex Button Programming Codes*.

## Message Waiting

Leaving a Message Waiting Indication:

If you dial a station that is busy, unattended, or in DND, you can leave a message waiting indication.

- 1 Lift handset or press ON/OFF button.
- 2 Dial the desired intercom station.
- 3 Press the MSG button. Confirmation tone is heard. Called party's MSG button slow flashes.
- 4 Replace the handset or press the ON/OFF button to end the call.



**Up to five messages can be left at any Station.**

Answering a Message Waiting Indication:

If your MSG button is lit, you have a message waiting for you. The first message left is the first one called.

- 1 Press the MSG button. Station that left message is signaled with tone ringing.
- 2 If called station does not answer, press MSG button once to leave message.

## Mute Key

The MUTE button provides privacy during speakerphone or handset operation by disabling the microphone.

- 1 Press the MUTE button while off-hook on speakerphone or handset to activate.
- 2 Press the MUTE button again to deactivate.

The mute feature automatically deactivates upon call termination.

## Night Service Feature

The Night Service feature [604] will provide a means to put the system in night mode from any keyset or remove the system from night mode from any keyset as long as the system was put in night mode by the Night Service feature flex button. If the system was placed in night mode by the attendant using the Night Service (DND) button or if the system was placed in night mode by the automatic schedule, the Night Service flex button can not remove the system from night mode.

From an idle station:

- ❖ Press the pre-programmed\* Night Service flex button. The system is now in the Night Service Mode.

To remove the Night Service Mode:

- ❖ Press the pre-programmed\* Night Service flex button again. The system is now removed from the Night Service Mode.

\*A Flex Button must be programmed for this feature to operate. Refer to *Table 5-3: Flex Button Programming Codes*.

## Off -Hook Preference

If your phone has been programmed for Off-Hook Preference, you will access an outside line, or a feature by going off-hook or pressing the ON/OFF button. It simulates the depression of a specific button and can be programmed by a station user or a database administration programmer. Code [691] + Button Number.

While Off-Hook Preference is enabled, you may access internal intercom dial tone by:

- 1 Pressing the pre-programmed\* ICM button,  
or  
Dial your 3-digit intercom number. (Do not lift handset or press ON/OFF button before dialing intercom number.) LED lights steady and intercom dial tone is heard.
- 2 You may now dial an internal station or Feature Access code.

Off -Hook Voice Over (OHVO)



\*A Flex Button must be programmed for this feature to operate. Refer to *Table 5-3: Flex Button Programming Codes*.

## Off -Hook Voice Over (OHVO)

This feature enables users, off-hook on a call (CO or Intercom), receive a voice announcement through the handset receiver without interrupting the existing call. The Voice Over is muted so it does not override or drown out the existing conversation. The overridden party may then talk to the calling party, using CAMP-ON procedures, or use Silent Text Messaging to respond to the calling party via LCD Displays,

Placing an Off-Hook Voice Over (OHVO) call:

When an OHVO station calls a busy OHVO station, and busy tone is received:

- 1 The calling OHVO station dials the OHVO code [628] on the dial pad,  
*or*  
Presses a pre-programmed\* OHVO button to initiate an OHVO announcement, The HOLD button LED flashes at the called OHVO station.
- 2 The OHVO receiving station receives a one-beep warning tone. The station receiving the OHVO call must be off-hook and in H mode, then the calling OHVO party may begin the voice announcement to the called OHVO party. The called OHVO station's existing conversation is uninterrupted and the voice over announcement does not drown out the existing conversation. The calling OHVO station is not connected to or otherwise able to hear the called station's conversation (the connection only allows the calling station to transmit to the called station).



*The calling station is placed in a one-time DND mode upon initiating the Voice Over. One-Time DND cannot be toggled during the OHVO call. The station receiving the OHVO call must be off-hook and in H mode.*

Responding to an Off-Hook Voice Over (OHVO):

After receiving an OHVO announcement, three options are available to respond to the calling party:

**Option 1:** This method lets the receiving station respond to an OHVO announcement utilizing the MUTE feature button. This button is pressed to carry on a two-way conversation with the OHVO initiator while still listening to the original call.

**Option 2:** The OHVO receiving station may respond to the calling station by using the Silent Text Messaging (this feature is only available to digital key terminals, and the calling station must be a digital display terminal.) The OHVO receiving station may press a pre-programmed Message button

to respond to the voice over announcement without being released from the current call, (i.e. by pressing a flex button pre-programmed for the message IN MEETING), the calling station receives this message on the LCD display

**Option 3:** The OHVO receiving station may respond to the calling OHVO station by using the Camp-On feature. The OHVO receiving station presses the flashing HOLD button to consult with the calling station, The existing call (CO line) goes on Exclusive Hold automatically. This method then follows Camp-On procedures and operation.

#### Conditions:

- ❖ The station receiving the OHVO call **MUST** be off-hook and in H mode.
- ❖ The receiving station must have OHVO enabled.
- ❖ When the dialed station responds via Camp-On, all conditions and options available to Camp-On apply (refer to the feature description for Camp-On).
- ❖ OHVO may be used to notify the called party of a transferred call (CO Line or Intercom) by announcing the call, then releasing to complete the transfer. When this occurs, the receiving station need not respond to the **OHVO**.
- ❖ When a call is transferred via OHVO, the receiving station receives muted ringing after the transfer is complete.
- ❖ Any messages including CANNED, CUSTOM, or SILENT RESPONSE text messaging may be used to respond to an OHVO call. The message appears on the calling station and called station LCD displays.
- ❖ If the calling station is a non-LCD terminal, the called station receives error tone when responding via text messaging.
- ❖ The called station may press a flex button programmed as a Text Message button, [633 + #]. Press this flex button and dial the 2-digit message number **(31-51)** to respond to the calling station. DTMF digits are not heard by either party
- ❖ The receiving station must be programmed to allow OHVO calls.
- ❖ When silent messaging is used to respond to an OHVO call, the existing call on the called station is not disconnected while the messages are being sent to the calling station,
- ❖ The calling station of an OHVO call must remain off-hook to receive silent messages. The calling station's voice transmit remains connected to the called station and may respond verbally to the text messages. The OHVO call ends when the calling station goes on-hook.
- ❖ If the receiving station is on-hook in speakerphone mode and a calling party initiates OHVO, the receiving station receives a Camp-On warning tone and normal Camp-On procedures are followed.





- ❖ The called station may send a message, and then press MUTE to talk to the calling station. Each time a message is sent, the splash tone is heard and both displays are updated.
- ❖ LEDs follow Camp-On LED lamp sequences.
- ❖ OHVO will not function if the busy station is in the Group Listening Mode.



## One-Touch Recording

This feature lets the station user, while on an internal/external call, press a button to have the system record the conversation into the station users mailbox. Code [649 44X], where X= 0-7 for desired VM group.



*Use of this feature when the One-Touch Warning Tone is disabled may be interpreted as a violation of federal, state or local laws, and an invasion of privacy. Check applicable laws in your area before recording calls using this feature.*

While on an internal/external call:

- 1 Station user presses the pre-programmed\* VM RECORD button. The LED flutters red at 240 ipm during the set up and the following message displays:



- 2 Once the system connects to the station, the user's mailbox, the flexible button LED lights solid green and the LCD displays:



- 3 When the user finishes recording, press the pre-programmed\* VM RECORD button. The LED extinguishes and the normal LCD call information displays.

Conditions:

- ❖ If the user hangs up without terminating the record function, the system performs the exit procedure as described in step 3 above.
- ❖ If the user presses the TRANS, CAMP-ON, MSG, or FWD buttons during recording, pressing the button is ignored.
- ❖ During the recording setup, pressing the CONF button is ignored.





- ❖ If no VM port is available when the station user wants to record, the user receives the following display (lasts six seconds):

<b>RECORDING UNAVAILABLE</b> <b>MMM DD YY</b>	<b>00:00:00</b>
--	-----------------

The user may retry after the display extinguishes.

- ❖ In the recording mode, pressing the CONF button lets the user add members to the recording (conference). Normal conference operation/conditions apply.
- ❖ If an internal station is being recorded, the internal station receives a CONFERENCE LCD message and the CONF LED lights.
- ❖ If the FLASH or HOLD button is pressed during the recording, the recording is terminated.
- ❖ If a station user presses the record button while in a two-party conference, the conference is recorded. If the button is pressed a second time, the conference ends and the call is returned to a two-way conversation.
- ❖ Only one active recording per station is allowed.
- ❖ If a recording is done to another internal station, the station being recorded cannot invoke the record feature.
- ❖ If a conference is being recorded and the conference master exits, the recording stays active. The recording stops if the initiator re-enters the conference and ends it, removes the record function, or the conference ends on it's own.
- ❖ Only the initiator of a conference can invoke/remove the record function during a conference.
- ❖ Conference Warning Tone is not given to the conference members, if the initiator is recording the conference and the record tone is disabled.
- ❖ Recording is not allowed for a station that is barged in, Executive Overridden, or on an active OHVO call.
- ❖ An unsupervised conference call can be recorded.

\*A Flex Button must be programmed for this feature to operate. Refer to *Table 5-3: Flex Button Programming Codes*.

## Outside Call - Answer

- 1 Lift handset or press ON/OFF button.
- 2 Press slow flashing outside line button or Loop button. (If your telephone is programmed with Preferred Line Answer, you may answer an outside line by lifting the handset, or pressing the ON/OFF button.)



Outside Call ■ Place



## Outside Call - Place

- 1 Press outside line or Pool button. ON/OFF button LED lights and dial tone is heard.
- 2 Dial the desired party.
- 3 When called party answers, lift handset to converse or use speakerphone.

Station user may also dial the individual trunk group access code to access an outside line.

## Outside Call - Place on Hold

- 1 If your system is programmed for Exclusive Hold Preference, press HOLD button once for Exclusive Hold and twice for System Hold.
- 2 If your system is programmed for System Hold Preference, press HOLD button once for System Hold and twice for Exclusive Hold.

## Paging

If you were given the ability to make page announcements:

- 1 Lift handset or press ON/OFF button.
- 2 Dial the 2-digit or 3-digit paging code,  
or  
Press pre-programmed\* PAGE button.

[70] = All Call – Internal and External

[71] = Internal Zone 1

[72] = Internal Zone 2

[73] = Internal Zone 3

[74] = Internal Zone 4

[75] = Internal All Call

[76] + [1] = External Page

- 3 Stations receiving a Page Announcement can press the Volume Bar to change the paging volume. The following message is shown on the display phone:

<b>SPEAKER PAGE</b>	<b>[#####]</b>
<b>MMM DD YY</b>	<b>HH:MM am</b>



*Stations off -book or in **DND** do not hear the internal page announcement.*

*When making a zone page or All **Call** page and the zone is busy, the page initiator receives ring back tone until the zone becomes available. You then hear a warning tone and can make the page announcement.*

*External paging requires op **tional** hardware.*

\*A Flex Button must be programmed for this feature to operate. Refer to *Table 5-3: Flex Button Programming Codes*.

## Park - Personal

Each station in the system can place a call to a personal park location and later retrieve that call from the originating station.

While connected to an outside line:

- 1 Press the TRANS button. The caller is put on Exclusive Hold.
- 2 Dial the Personal Park location [438] on the dial pad,  
*or*  
Press the pre-programmed\* PERSONAL PARK button. Dial tone is heard.



*When dialing the personal park location and it is already occupied, the initiating station receives the previously parked call and the second call is parked.*

Retrieving a Parked Call:

- ❖ Dial the Personal Call Park location code [438] on the dial pad,  
*or*  
Press the pre-programmed\* PERSONAL PARK button. A talk path is established between the two parties.

Conditions:

- ❖ Intercom calls and CO line calls can be placed into the station's personal park location.
- ❖ Calls parked in a personal park location are subject to the system call park recall timer.
- ❖ A CO call parked in a personal call park location recalls to the station that parked the call, when the call park recall timer expires. The CO call rings to this station until the system hold timer expires. The CO call then recalls the attendant(s) (at this point, the attendant station and the initiating





station are ringing), and the attendant recall timer is initiated. When the attendant recall timer expires, the CO call is disconnected.



## PBX/Centrex Transfer

While connected to an outside line (PBX/Centrex):

- 1 Press the FLASH button. Receive transfer dial tone.
- 2 Dial a PBX/Centrex station number.
- 3 Hang up to complete the transfer.

## Personalized Messages

Each station can select a pre-assigned message to display on the LCD of any key telephone calling that station.

There are ten possible messages that can be left.

- 1 Dial [633] on the dial pad,  
**or**  
Press a pre-programmed\* MSG button.
- 2 Dial the 2-digit code for the message that displays. Confirmation tone is heard and the DND button LED flashes.
  - [00] = clear messages
  - [ 01] = ON VACATION
  - [02] = RETURN AM
  - [03] = RETURN PM
  - [04] = RETURN TOMORROW
  - [05] = RETURN NEXT WEEK
  - [06] = ON TRIP
  - [07] = IN MEETING
  - [08] = AT HOME
  - [09] = ON BREAK
  - [10] = AT LUNCH



This feature is **unavailable** at **attendant stations**.





## Messages – Custom

Each station can select from ten possible custom messages to display on the LCD of a key telephone calling that station. These messages are programmed from the first attendant station.

- 1 Dial [633] on the dial pad,  
Of  
Press a pre-programmed\* MSG button.
- 2 Dial the 2-digit code (21-30) for the desired custom message. The first attendant should provide a list of messages to each station user.

Conditions:

- ❖ This feature is not available to attendant stations.

## Date and Time Entry on Personalized Message

Station users can activate certain messages that let users enter a specific time or return date. These messages appear on the calling station's display to alert them of the desired party's return time or date.

To activate a message with a custom return time or date, the station user:

- 1 Dials the Message Access code [633] on the dial pad.
- 2 Then dial the desired message number [11 - 17].

Users may activate the following messages and be prompted to enter a return time or date:

[11] = VACATION UNTIL: *MM/DD*

[12] = RETURN: *HH:MM xm* or *MM/DD*

[13] = ON TRIP UNTIL: *MM/DD*

[14] = MEETING UNTIL: *HH:MM xm*

[15] = AT HOME UNTIL: *HH:MM xm*

[16] = ON BREAK UNTIL: *HH:MM xm*

[17] = AT LUNCH UNTIL: *HH:MM xm*

- 3 Enter the date/time using buttons on the dial pad as shown in *Table 5-5: Other Key Pad Codes*.



1 = 1#	8 = 8#	" = 01	* = *#
2 = 2#	9 = 9#	, = 02	( = #1
3 = 3#	0 = 0#	? = 03	) = #2
4 = 4#	Space = 11	/ = 04	+ = #3
5 = 5#	: = 12	! = *1	= = #4
6 = 6#	- = 13	\$ = *2	# = ##
7 = 7#	' = 14	and = *4	

Table 5-5: Other Key Pad Codes

- 4 Press HOLD to enter message. Confirmation tone is received and DND button LED flashes.

To cancel the message:

- ❖ Dials the Message Access Code [633] + [00] and replaces handset. DND button LED extinguishes.

### Personalized Message Code on a Flex Button

You can program the code [633] onto a flexible button to speed access of pre-selected messages.

- 1 Press the SPEED button twice.
- 2 Press the desired flex button. LED flashes.
- 3 Dial [633]+[#] on the dial pad. Confirmation tone is heard. The user can now press that flex button and dial the 2-digit message number (00-10), or the 2-digit custom message number (21-30) to activate the message. Confirmation tone is heard and DND button LED flashes.





## Scrollable Canned Messages

This feature lets the user use a single digit to scroll through the messages and select one. This feature operates when the phone is in idle mode only and cannot be activated if the station is in Call Forward or DND mode(s). This feature is unavailable at attendant stations.

- 1 Dial [633]+[#] on the dial pad,

**or**

Press the MSG button. Clear Messages is always first. The following message displays on the LCD phone:

<b>CLEAR MESSAGES</b>		
<b>NEXT=#</b>	<b>PREV=*</b>	<b>SAVE=HOLD</b>

- 2 Press [#] to scroll through the messages,

**or**

Press [\*] to scroll backward through the list.

Scroll forward through the messages in the following order. The scroll is a rolodex type scroll.

- ❖ CLEAR MESSAGES
- ❖ AT HOME
- ❖ AT LUNCH
- ❖ IN MEETING
- ❖ ON BREAK
- ❖ ON TRIP
- ❖ ON VACATION
- ❖ RETURN AM
- ❖ RETURN PM
- ❖ RETURN NEXT WEEK
- ❖ RETURN TOMORROW

- 3 When the desired message is shown on the LCD display, pressing the HOLD button activates that message on your station. Confirmation tone is heard and the DND button LED flashes.

Conditions:

- ❖ The telephone receiving the message must be a display telephone.
- ❖ Key telephones and SLTs may activate the message. SLTs are notified that they have an active message with a warning tone when going off-hook.





- ❖ When a message displays by a key telephone, the DND button LED flashes at 15 ipm.
- ❖ When DND is invoked on the telephone the message cancels.
- ❖ Message Access (with a desired message) may be assigned to a flex button.
- ❖ Messages may be entered while off-hook on a call if an intercom call is camped onto the station. This causes the station calling to see the message.
- ❖ Messages are retained in battery protected area of memory in the event of power failure or system reset.

### Prime Flex Button Programming

If your phone is programmed for Off-Hook Preference and were given the ability to enable or change the prime flex button.

- 1 Dial [691] on the dial pad
- 2 Dial the 2-digit button number. Refer to the following chart.

• 1 Q	• 2 W	• 3 E	• 4 R
• 5 T	• 6 Y	• 7 U	• 8 I
• 9 O	• 10 P	• 11 A	• 12 S
• 13 D	• 14 F	• 15 G	• 16 H
• 17 J	• 18 K	• 19 L	• 20 :
• 21 Z	• 22 X	• 23 C	• 24 V

To disable Off-Hook Preference:

- 1 Dial [691] on the dial pad.
- 2 Dial [00] on the dial pad.



## Programming PBX/Centrex Codes Onto Flex Button

For easy one-button access to Centrex or PBX features, perform the following steps:

- 1 Program the **Centrex** or PBX code into a station or system speed dial bin, including hook-flash (flash key), [\*], and [#] commands. Refer to station or system speed dial programming.
- 2 Program that speed bin onto a flexible\* button.

\*A Flex Button must be programmed for this feature to operate. Refer to *Table 5-3: Flex Button Programming Codes*.

## Programming Your Name Into The LCD Display

Every extension (key and SLT) allow users to program their name so that people using display telephones see the name instead of the station number.

- 1 Dial [**690**] on the dial pad.
- 2 Enter the name (up to 7 characters may be entered) by using keys on the dial pad as shown in *Figure 5-2: Key Pad - Dial By Name*. Also refer to *Figure 5-3: Key Pad - Directory Dialing* and *Table 5-5: Other Key Pad Codes*.
- 3 Press the SPEED button to complete the programming process.

To erase your name:

- 1 Dial [**690**] on the dial pad.
- 2 Press the SPEED button to complete the erasing process.

## Pulse-to-Tone Switchover

Signaling on an outside line can be changed from dial pulse to tone (DTMF) manually while dialing out.

To perform the change-over:

- ❖ Dial [ \* ] on the dial pad. The remaining digit(s) is sent using **DTMF**.

The Pulse-To-Tone Switchover command may also be included in a speed dial bin. Refer to "Speed Dial - Storing Numbers" on page 5 -72 for speed dial programming.

## Repeat Redial



## Repeat Redial

The feature lets a digital key station redial a busy or no-answer number at specific intervals. The user is signaled via a queue callback indication. The Redial flexible button flashes at the callback rate of 120 ipm for 15 seconds. If the station does not answer within 15 seconds, the callback cancels. The system retains the last call the user made. If the station is busy on an internal/external call when the Redial queue callback occurs, the callback does not occur until the user goes on-hook. The user must enter a Redial timer value (006-999 that represents seconds) when invoking this feature. A two minute interval is entered as 120. Default value is 1 minute **(60)**.

A keyset station user places a CO call and receives a busy or no answer:

- 1 Press the pre-programmed\* RREPEAT REDIAL flexible button [643]. The LCD prompts the user for a timer value.

<p><b>ENTER RPT REDIAL TIMER:</b>  <b>xxx</b> <span style="float: right;"><b>006-999</b></span></p>
---

- 2 Enter a 3-digit timer value (006-999 seconds) for the Repeat Redial timer. Default value is 060 (one minute). Confirmation tone is heard and the station user goes on-hook. The flexible button LED lights steady.

When the timer expires, the station is signaled via a CO line queue indication on the Repeat Redial flexible button. During the queue callback, the LCD display indicates this is a Redial Callback. Once the line queue is answered, the LCD indicates an outgoing CO line display.

- ❖ Press the pre-programmed\* REDIAL flexible button,

*or*

Press the ON/OFF button,

*or*

Lift the handset. The line is seized and the number is dialed. If the user receives a busy/no answer, they may repeat the step to activate another redial.

To cancel the operation:

- ❖ Press the pre-programmed\* REDIAL flexible button. Confirmation tone is heard and the Auto Redial function is cancelled.

Conditions:

- ❖ Once the user presses the pre-programmed\* flexible button, there is no timer applied until the user enters a digit. After a digit is entered, the inter-digit timer applies between the digits.

\*A Flex Button must be programmed for this feature to operate. Refer to *Table 5-3: Flex Button Programming Codes*.

## Save Number Redial (SNR)

If you wish to save the last number you dialed for use later:

- 1 After placing an outside call, keep handset off-hook.
- 2 Press the SPEED button twice.

To Dial a number that was saved using the steps above:

- 1 Press the SPEED button.
  - 2 Dial the [\*] button.
- ❖ System automatically selects the original line used to place the call and redials the number,
  - ❖ If that line is busy, the system automatically selects another line from the same group and redials the number.
  - ❖ If no lines are available in the same group, the station receives busy tone and can queue for a line.
  - ❖ If the station user preselects a line before activating SNR, the preselection overrides the line originally used.

## Speakerphone

- 1 Press ON/OFF button to ON. Intercom dial tone is heard. Press the Volume Bar to change the tone volume. The following message displays on the display phone:

<b>SPEAKER TONE</b> <b>MMM DD YY</b>	<b>[#####]</b> <b>HH:MM am</b>
---	-----------------------------------

- 2 Press the party's DSS button, or press an available outside line button and dial the number. Speakerphone is activated.
- 3 Press ON/OFF button to OFF to end the call.



*For further references in this **sec** tion where lift handset is specified, you may also press the ON/OFF button, if the telephone is programmed as a two-way speakerphone.*



## Station Relocation Feature

The Station Relocation Feature lets a user unplug their station and plug it into another location. Then, by dialing a code followed by the old station number, bring all the station attributes including extension number, button mapping, speed dial, and class of service to the new location.

- 1 A station can be relocated by unplugging it, then plugging it into a new location.
- 2 Dial **[636]** on the dial pad. Then, dial the extension number of the station being relocated. Once this is done, all station attributes are copied to the current station.



*If a station is assigned to a specific port and the user unplugs his station and plugs it in to another location, database administration programming is updated to reflect the **new port** change.*

### Conditions:

- ❖ The station number that is dialed as the relocated station must be currently out of service.
- ❖ The relocated station is given the station attributes of the station doing the relocating. The two stations trade station numbers and station attributes.
- ❖ If a keyset is plugged into the relocated position it has all station attributes of the relocating station.
- ❖ This feature is only applicable to keysets.
- ❖ If the relocated station is in service, error tone is received.
- ❖ Digital stations must be relocated to another digital port. If a digital user moves his station number to an analog port, the buttons are initialized and must be reprogrammed.
- ❖ Station lock will disable this feature.

## Speed Dial - Station

If no outside line was specified in programming, one can be selected now or the system will assign the line.

- 1 Press SPEED button and dial bin location,  
**or**
- 2 Press the pre-programmed\* speed bin button. Station Speed numbers are 00 to 19.
- 3 When the called party answers, pick up the handset or use the speakerphone to converse.

\*A Flex Button must be programmed for this feature to operate. Refer to *Table 5-3: Flex Button Programming Codes*.



## Speed Dial - Storing Numbers

Station Speed numbers can be entered by keyset users. System Speed numbers must be entered by the first programmed attendant. If no attendant is specified, enter at Station 100.

- 1 Press the SPEED button once.
- 2 Press an outside line button or pool button.  
**or**  
Automatically select an outside line by pressing the SPEED button again.
- 3 Dial the speed bin location.
- 4 00 to 19 = Station Speed numbers; 20 to 99 = System Speed numbers.
- 5 Dial the desired telephone number (including special codes described below).
- 6 TRANS: Pressing the TRANS button during number entry initiates a Pulse-To-Tone switchover.
- 7 HOLD: Pressing the HOLD button during number entry inserts a Pause.
- 8 FLASH: Pressing the FLASH button inserts a Flash into the speed number.
- 9 TRANS: Pressing the TRANS button as the first entry in the speed bin inserts a **no**-display character causing the numbers stored in the bin to not appear on the Digital Terminals display when the bin is accessed.
- 10 Press the SPEED button.
- 11 Replace the handset to end the speed bin programming.

To program several speed numbers, press the SPEED button twice to conclude programming a number, then just enter the next speed number bin to program. If the station has no line appearance for the line programmed into the speed bin, that line comes up under the Loop button or Pool button when accessed.

To erase an existing speed bin:

- 1 Press the SPEED button twice.
- 2 Dial the speed bin location:  
00 to 19 = Station Speed numbers  
20 to 99 = System Speed numbers
- 3 Press the SPEED button again. Confirmation tone is heard.



## Speed Dial - System

If no outside line was specified in programming, one can be selected now or the system will assign the line.

- 1 Press the SPEED button.
- 2 Dial the speed bin location,  
**or**  
Press the pre-programmed\* speed bin button.
- 3 20 to 99 = System Speed numbers.
- 4 When the called party answers, pick up the handset or use the speakerphone to converse.

\*A Flex Button must be programmed for this feature to operate. Refer to *Table 5-3: Flex Button Programming Codes*.

## Text Messaging (Silent Response)

This feature lets a station user use text messages in response to a caller that has Camped-On or used the Off-Hook Voice Over feature to alert a busy station user of a waiting call or message. The camped-on station may respond to the caller via the canned, custom, or silent response text (LCD) messages. Text messages display on the calling party LCD Display.

While receiving a Camp-On, or OHVO call:

- ◆ The called party may press a pre-programmed\* Text Message button with a specific message [633+xx]. Example: [633] + [38] means a telephone calling the station receives the message WHO IS IT ?

Additional messages (with their codes listed below) can also be sent as a text response:

- [31] = I WILL TAKE CALL
- [32] = TAKE MESSAGE
- [ 33] = TRANSFER TO SECRETARY
- [34] = PUT CALL ON HOLD
- [35] = CALL BACK
- [36] = ONE MOMENT PLEASE
- [37] = I WILL CALL BACK
- [38] = WHO IS IT?
- [39] = IS IT LONG DISTANCE?

- [40] = IS IT PERSONAL?  
 [41] = IS IT AN EMERGENCY?  
 [42] = IS IT IMPORTANT?  
 [43] = IS IT URGENT?  
 [44] = SEND CALL TO VOICE MAIL  
 [45] = **PARK CALL**  
 [46] = OUT OF OFFICE  
 [47] = PUT CALL THROUGH  
 [48] = I AM BUSY  
 [49] = O.K.  
 [50] = NO  
 [51] = YES

Conditions:

- ❖ If the station receiving the text message response was doing a camp-on, it receives a short burst of tone on the speaker, then the display shows the message that was activated by the called station.
- ❖ If the station receiving the text message response is on an OHVO call, no tone is received.
- ❖ All canned and custom messages may be used to respond to a calling party,
- ❖ Text response messages automatically clear when the calling station (station receiving the messages) goes on-hook.
- ❖ A station can receive only one message at a time.
- ❖ Text messages may be chained (i.e., multiple messages sent to one caller).
- ❖ Text message responses appear on the calling station and the called station (station activating text responses) LCD displays.
- ❖ If the calling station is a non-LCD terminal, the called station receives error tone when responding via text messaging.
- ❖ The called station may press a flex button programmed as a Text Message button, [633 + #]. Press this flex button and dial the 2-digit message number (31-51) to respond to the calling station. DTMF digits are not heard by either party.
- ❖ When silent messaging is used to respond to a call, the existing call of the called station is not disconnected while the messages are sent to the calling station.
- ❖ The calling station must remain off-hook to receive silent messages.
- ❖ If the called station responds with a text message, the text message displays on the LCD.





- ❖ LEDs follow the CAMP-ON or OHVO.
- ❖ Each message may be programmed onto a flexible button, including a flex button on a DSS/BLF console.



*The calling station must be a display telephone and the called station must be a keyse t.*

## Uniform Call Distribution (UCD)

Eight Uniform Call Distribution (UCD) groups can be programmed, each containing up to eight 3-digit station numbers. Each group is assigned a pilot number. When this number is dialed, the first available agent in that group is rung. Calls are routed to the station that has been on-hook for the longest period of time.

### UCD Calls In Queue Display

From an idle display key telephone:

- 1 Dial [567] on the dial pad, followed by the 3-digit UCD group number (55x),  
*or*

Press pre-programmed\* flex button. ON/OFF button LED lights steady.

This display is an idle state display and prompts a Supervisor that a group is having problems answering their calls. The display tells the agent and his supervisor how many calls are in queue, how many agents are available or logged into the group, and the time (in minutes) that the oldest call has been in queue. The agent automatically receives the calls in queue display whenever there is a call in queue.

- 2 Hang up the handset or press ON/OFF button to terminate the display.



*This feature cannot be used with a call in progress. The station is considered busy for incoming calls during this operation.*

\*A Flex Button must be programmed for this feature to operate. Refer to *Table 5-3:Flex Button Programming Codes*.

### UCD Available/Unavailable Mode

If you are an UCD agent, you may place your station in Available mode to receive UCD calls, or you may place your station in Unavailable mode to block UCD calls from ringing your station.



To go Available:

- ❖ Dial [566] on the dial pad,

**or**

Press the pre-programmed\* AVAILABLE/UNAVAILABLE button. You may now receive UCD calls.

To go Unavailable:

- ❖ Dial [566] on the dial pad,

**or**

Press the pre-programmed\* AVAILABLE/UNAVAILABLE button. You are now blocked from receiving UCD calls.

\*A Flex Button must be programmed for this feature to operate. Refer to *Table 5-3: Flex Button Programming Codes*.

## UCD Overflow Station – Forwarding Assignments

This feature enables UCD calls reaching an Overflow Station to be forwarded.

- 1 Lift the handset or press ON/OFF button.
- 2 Press the pre-programmed\* FWD button.
- 3 Dial the desired code:

[7] = No Answer Calls

[8] = Busy Calls

[9] = Busy and No Answer Calls



*Skip the preceding step for immediate forwarding.*

- 4 Dial the 3-digit destination number where to forward calls (Station, Voice Mail, UCD groups, or Hunt group). Confirmation tone is heard.
- 5 Replace handset or press ON/OFF button.

To remove Call Forwarding:

- 1 Lift handset or press ON/OFF button.
- 2 Press the pre-programmed\* FWD button. Confirmation tone is heard and the FWD LED extinguishes.



## Conditions:

- ❖ An overflow station may be assigned to route callers in queue to a designated station after a specified time. A queued call is one that has been answered by a recorded announcement device or transferred into the group.

\*A Flex Button must be programmed for this feature to operate. Refer to *Table 5-3: Flex Button Programming Codes*.

## Universal Day/Night Answer (UDA/UNA)

Incoming CO lines can be programmed for Universal Day Answer (UDA) or Universal Night Answer (UNA). UDA/UNA assigned CO lines can also signal over the external page port(s). If External Day programming is enabled and the system is in the day mode, the assigned external page port(s) present a ringing signal. UDA/UNA is established on a per CO line basis in admin programming.

When the system is in Day or Night mode and you hear an outside line ringing at another station, and wish to answer it:

- ❖ Dial [#5] on the dial pad. The connected outside line can be transferred or disconnected.



*Each telephone utilizing Universal Day/Night Answer must have a loop button appearance if the ringing outside line does not display at their phone.*

## Conditions:

- ❖ During the Day mode, all common CO lines programmed for UDA ringing will ring.
- ❖ CO lines not programmed for UDA ringing do not participate in common audible ringing.
- ❖ If External Day ring is disabled, or the system is not in the day mode, external page ringing is disabled.
- ❖ Ringing CO lines not assigned CO line group access for a particular SLT may be answered in a UDA service. Dialing privileges are unavailable on CO lines to which an SLT does not have access. CO lines without UDA status may not be answered or accessed via UDA procedures,
- ❖ If two single-line telephones attempt to retrieve one ringing CO line simultaneously, one user is connected to the incoming CO line and the other user receives intercom busy tone.
- ❖ The special ring mode is treated as day mode.



## Voice Mail Groups (VM)

Forward Callers to your Mail box:

Intercom and Transferred CO callers may be routed directly to your mail box by forwarding your phone to a voice mail group. Callers are then greeted by your personal voice mail greeting, if available. (Refer to Call Forward -Voice Mail Operation.)

Retrieving Voice Messages:

If your Message Waiting button or programmed Voice Mail Group button is flashing, you may have a voice message waiting.

To enter the voice mail system to check for mail:

- 1 Dial the Voice Mail Group number [440-447],  
or  
Press the pre-programmed\* Voice Mail group button or flashing Message Wait button.
- 2 When prompted, enter the mailbox password.

Receiving a Voice Mail Message Wait:

To receive a message waiting indication that a voice message is waiting, the Voice Mail system must be programmed to provide the indication.

After the voice mail system receives a voice message for a station user:

- 1 The voice mail must go off -hook and dial the voice mail message wait code [420] on the dial pad.
- 2 Dial the 3-digit extension number of the station user who received a voice message.

Turning the Message Waiting Lamp Off:

When a station user retrieves the voice messages from the voice mail system, the voice mail system must:

- 1 Be programmed to go off -hook and dial the message cancel code [421] on the dial pad.
- 2 Dial the 3-digit extension number of the station user who received a voice message.

Conditions:

- ❖ Only VM extensions are allowed to turn ON/OFF VM message wait indications.

\*A Flex Button must be programmed for this feature to operate. Refer to *Table 5-3: Flex Button Programming Codes*.



Voice Mail Groups (VM)



## VM Transfer with ID Digits

This feature lets an Attendant or station user transfer a caller directly into a voice mail box. This allows entry of the station identification digits by the transferring party. A caller using this feature can transfer to a voice mail box when: 1) a station user on the system is not forwarded to VM, or 2) the destination Voice Mail Box owner is not a station user.

When a caller wishes to be transferred into a user's Voice Mail box and that user's station is not forwarded into voice mail, the attendant or a station user may initiate a Voice Mail Transfer.

When the caller wishes to leave a Voice Message for a VM user:

- 1 The initiating station presses the TRANS button.
- 2 Dial the Voice Mail Group number,  
*or*  
Press the pre-programmed\* VM group button.
- 3 Dial the desired party's VMID (Mail Box location) and go on-hook. The system makes the connection to an available Voice Mail port and sends the Leave Mail Prefix (if any) plus the digits dialed as the VMID number, then the Leave Mail Suffix digits (if any). The system then cuts through the transferred caller.



***The VMID (mail box location) can be any number between 000 through 999. If 4-digit VMID (Flash 09) is enabled, the range is between 0000 through 9999.***

OR

- 1 The initiating system presses the Voice Mail button.
- 2 Press DSS button to transfer desired party's Voice Mail ID.

Conditions:

- ❖ CO Trunks and Internal Calls may be transferred into Voice Mail using this feature.
- ❖ If no VMID digits are dialed by the transferring station, the identification digits of the transferring station are sent to VM.

## VM Tone Mode Calling Option

Lets the Voice Mail system override a called station's H or P intercom settings.

When placing a call to a station and Tone ringing is desired, the Voice Mail system **MUST** be programmed to:

- 1 Dial [6#] on the dial pad.
- 2 Dial the 3-digit station extension (call tone rings station).



## Volume Control Bar (DKT)

There is a volume control bar below the keypad to control the ringing, handset, and speakerphone volumes.

The following message is shown on the display phone, while listening to Background Music:

<b>SPEAKER BGM</b>	<b>[#####]</b>
<b>MMM DD YY</b>	<b>HH:MM am</b>

The following message is shown on the display phone, while using the speakerphone on a Intercom call:

<b>SPEAKER CALL</b>	<b>[#####]</b>
<b>MMM DD YY</b>	<b>HH:MM am</b>

The following message is shown on the display phone, while using the handset on a Intercom call:

<b>HANDSET ICM</b>	<b>[######]</b>
<b>MMM DD YY</b>	<b>HH:MM am</b>

The following message is shown on the display phone, while using the speakerphone on a CO call:

<b>SPEAKER CALL</b>	<b>[#####]</b>
<b>MMM DD YY</b>	<b>HH:MM am</b>

The following message is shown on the display phone, while using the handset on a CO call:

<b>HANDSET CO</b>	<b>[#####]</b>
<b>MMM DD YY</b>	<b>HH:MM am</b>

The following message is shown on the display phone, while receiving a page announcement:

<b>SPEAKER PAGE</b>	<b>[#####]</b>
<b>MMM DD YY</b>	<b>HH:MM am</b>

The following message is shown on the display phone, while receiving an incoming tone ringing Intercom or CO call:

<b>SPEAKER RING</b>	<b>[#####]</b>
<b>MMM DD YY</b>	<b>HH:MM am</b>





# 6 SINGLE LINE TELEPHONE OPERATION



## Introduction

This section of the manual contains the operating instructions for Single Line users. It is designed to provide step-by-step instructions for operating the Single Line telephones in the system.

Literature similar to these operating instructions was prepared for use by the customer in the form of a Single Line Telephone User's Guide.

## Account Codes

SLT stations can enter an account code to identify the call or calling station,

Entering Account Code before a call

- 1 Lift the handset.
- 2 Dial [627] on the dial pad.
- 3 Dial the account code.  
If the account code contains fewer than 12 digits, dial [\*] to return to intercom dial tone.  
Dial tone is heard.
- 4 Dial [9] or CO Access code and the desired number.

Entering Account Code during a call

- 1 Press the hookswitch momentarily. Your call is placed on hold while you enter your account code.
- 2 Dial [627] on the dial pad.
- 3 Dial the account code.  
If the account code contains fewer than 12 digits, dial [\*] to return automatically to the call.

## Automatic Call Distribution (ACD)

*This feature is available with optional software.* When purchased, Uniform Call Distribution (UCD) is not used and is replaced by the ACD functions identified in the following. Sixteen Automatic Call Distribution (ACD) groups can be programmed, each containing up to sixteen 3-digit station numbers.





## Agent Login/Logout Feature

The Agent **Login/Logout** feature provides a means for an agent to log into one of the ACD groups and receive calls. For an agent to be placed into an active ACD state, the agent must first **login**.

- 1 Dial the **LOGIN CODE [572]** on the dial pad, followed by the ACD group number (**5xx**) into which the agent is going to log.
- 2 The agent enters his unique **AGENT ID** code (0000-9999). Confirmation tone is heard and the agent is logged onto the ACD group. When the agent logs in, an ACD **login** event is sent to the SMDR port, if active.



*If a member is assigned to a specific ACD group and uses the login-logout codes to enter and exit an ACD group other than his assigned group, the database is changed to reflect the different group.*

For an agent to remove himself from the ACD group as an active agent

- ❖ Dial the **LOGOUT CODE [571]** on the dial pad. When the agent logs out and removes himself from the ACD group, an ACD **logout** event is sent to the SMDR port, if active.

Conditions:

- ❖ If an agent logs into an ACD group from a station that is logged into another ACD group, the station is automatically removed from the previous ACD group.
- ❖ An agent may log out while in wrap-up, or unavailable.
- ❖ An agent logging in is placed in wrap-up mode before receiving an ACD call,
- ❖ If an agent attempts to log into an ACD group that already has 16 members, that agent receives error tone.







The Triad-S system does not verify agents ID codes, other than requiring entry of four digits.

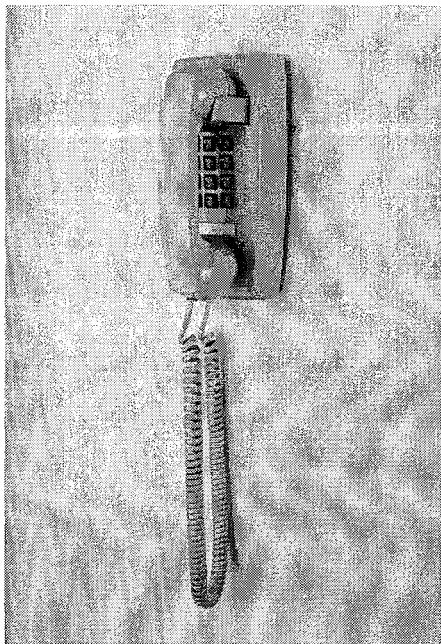


2500 Type



2500 Type with Message Waiting Lamp on Top

**Figure 6-1: 2500 Series SLT Telephones**



2500 Type Wall Phone



2500 Type with Message Waiting Lamp



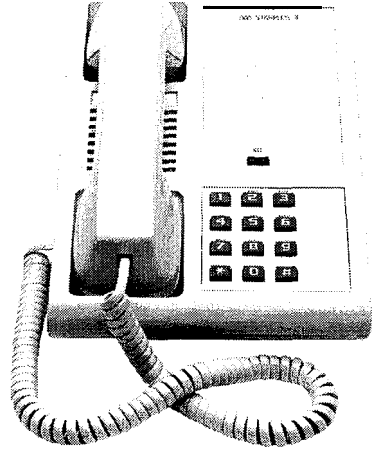
2500 Type with Flash Key

**Figure 6-1: 2500 Series SLT Telephones**

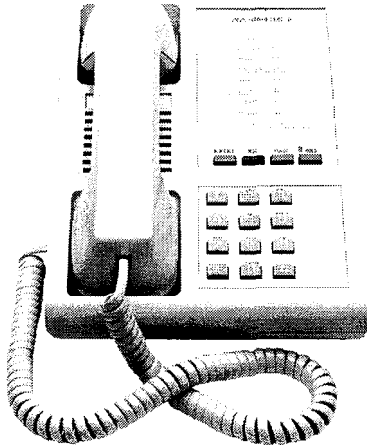




Model 2601 Feature Telephone



Model 2602 Feature Telephone



Model 2603 Feature Telephone



Model 2603E Feature Telephone

**Figure 6-2: 2600 Series SLT Telephones**



Model 2604 Feature Telephone



Model 2604E Feature Telephone



Model 2605 Feature Telephone



Model 2606 Feature Telephone

Figure 6-2: 2600 Series SLT Telephones (Continued)





100-171	Triad-S Ext. Numbers	70	All Call Page (Internal and External)
43 [C]	Call Park Location O-7 (System)	71	Internal Page Zone 1
438	Personal Park	72	Internal Page Zone 2
44 [V]	Voice Mail* Group Pilot Numbers O-7	73	Internal Page Zone 3
45 [H]	Hunt Group Pilot Numbers O-7	74	Internal Page Zone 4
55 [U]	ACD* Group Pilot Numbers O-9	75	Internal All Call Page
55 [U]	UCD Group Pilot Numbers O-7	76+[1]	External Page Zones
56 [U]	ACD* Group Pilot Numbers 1 O-I 5	77	Meet-Me-Page Answer
566	ACD* or UCD Available/Unavailable	81	CO Line Group 1 (if LCR is enabled)
571	ACD* Agent Logout	a2	CO Line Group 2
572 55[U]	ACD* Agent Login	a3	CO Line Group 3
574	ACD* Agent Help	a4	CO Line Group 4
578	ACD* Overflow Sta Avail/Unavail	a5	CO Line Group 5
6# [XXX]	Tone Mode Ring Option	86	CO Line Group 6
620	Camp-On	67	CO Line Group 7
621	Line Queue	88	All CO Line Groups (CO Line Off-Net Forward)
622	Call Back	9	LCR or CO Line Group 1 (if LCR is disabled)
623	Message Wait	0	Attendant
625	Executive Override	#0	Group Call Pick Up (Key and SLT)
626	LCR Queue Cancel	#1+[XXX]	Directed Call Pick Up (SLT)
627	Account Code Enter	#43+[C]	Call Park Pickup (Key and SLT)
631	Do Not Disturb	#5	Universal Day/Night Answer
633+[ZZ]	Personalized Messages		
633+[ 00]	Clear Personalized Messages		
638+[0]	Handset Receiver Gain		
638+[*]	Handset Receiver Gain Decrease		
638+[#]	Handset Receiver Gain Increase		
640	All Call Forward		
640+[7]	No Answer – Call Forward		
640+[8]	Busy – Call Forward		
640+[9]	Busy/No Answer – Call Forward		
640+[*]	Off-Net – Call Forward		
660	SLT Flash Command To CO Line		
661+[YY]	SLT Station Speed Dial Programming		
662	SLT Clear – Call Forward, DND, Personalized Messages		
663	Message Wait Return		
664	SLT Conference w/Personal Park		
668+[YY]	SLT Speed Dial Access		
690	Name in Display Programming		

XXX = Intercom Station Numbers  
 YY = Speed Dial Bin numbers  
 ZZ = Personalized Messages  
 BB = button Number  
 U = ACD\* (O-15) or UCD (O-7) Group Number  
 C = Call Park Location O-7  
 H = Hunt Group Number O-7  
 V = Voice Mail\* Group Number O-7  
 P = External Page Zone Number (I-2)

\* Features available with optional software.

**Table 6-1: SLT Numbering Plan**



## ACD Agent HELP Feature

The ACD Agent HELP feature provides a means for an ACD agent to signal his assigned supervisor for assistance.

While on a call-in-progress, the agent:

- 1 After hook-flashing, dials the HELP code [574] on the dial pad. The agent must hook-flash again to return to his call after the code is dialed. If no supervisor is logged in, the agent receives one-burst of error tone.
- 2 The ACD supervisor station receives a HELP message if a member of one of the ACD groups he is assigned to initiates a HELP request. The HELP function also sends a Camp-On tone to the speaker of the supervisors **keyset**. The HELP message takes precedence over any other message and can be cleared by the supervisor by pressing his HELP button.
- 3 At the time the supervisor receives a HELP request, he can press the HELP flex button followed by the override feature button to bridge onto the ACD group members call. The HELP button places an intercom call to the station requesting HELP. The HELP message is cleared after the supervisor's HELP button is pressed. Additionally, the HELP message is cleared if the agent was on a call and went back on hook before the supervisor could respond. In this case, the HELP message is converted to a message wait indication for the station.

Conditions:

- ❖ Up to five messages can be left at any supervisor station.
- ❖ The supervisor can cancel the HELP request signal by pressing the flashing HELP button. Additionally, a call is placed to the agent requesting **HELP**. If the agent is on a call, the supervisor can press his barge-in button to monitor the call or give assistance on the call.

## ACD/UCD Available/Unavailable Mode

If you are an ACD agent, you may place your station in the Available mode to receive ACD calls or you may place your station in the Unavailable mode to block ACD calls from ringing your station.

To go Available:

- ❖ Dial [566] on the dial pad. Confirmation tone is heard through the handset. You may now receive ACD calls.

To go Unavailable:

- ❖ Dial [566] on the dial pad. Confirmation tone is heard through the handset. You are now blocked from receiving ACD calls.



## Automatic Line Access



Conditions:

- ◆ Single line telephones receive a stuttered dial tone when unavailable.



## Automatic Line Access

SLTs may have their station programmed to access a particular CO Line, such as a private line or a line from a Group of CO lines, upon going off-hook. This is useful in Centrex or PBX applications when station users have dedicated or individual lines. Outside line dial tone is received just by going off-hook, without dialing access codes.

## Call Back

You call a busy station and receive busy:

- 1 Briefly press and release the hookswitch.
- 2 Dial [622] on the dial pad.
- 3 Replace handset.



***Only one Call Back request can be left at a station; the second request converts to Message Waiting Request.***

## Call Brokering

Enables SLT user on a CO call to Hook-Flash and make another CO call. Once this other call is established, the SLT user can Hook-Flash to move back and forth between parties. Hook-Flash timer may require adjustment for proper operation.

## Call Forward

To Call Forward calls to another station:

- 1 Lift handset.
- 2 Dial [640] on the dial pad.
- 3 Skip this step for immediate forwarding. Otherwise, dial the appropriate code:  
[7] = Call Forward No Answer  
[S] = Call Forward Busy  
[9] = Call Forward Busy/No Answer





[\*] = Call Forward Off-Net (via speed dial)

- 4 Dial the 3-digit extension number or speed bin number where calls are to be forwarded. Confirmation tone is heard.
- 5 Replace handset.

To Remove Call Forwarding:

- 1 Lift handset, stuttered dial tone is heard.
- 2 Dial [640] on the dial pad or [662] on the dial pad. Confirmation tone is heard.
- 3 Replace the handset.

## Call Forward – Follow-Me

This feature enables a user who is away from their station, activate/deactivate call forwarding from another station in the system. This lets the user forward their calls to their current location or into Voice Mail, ACD/UCD, Hunt Groups, or to any other station in the system. When this call forward is activated, all calls presented to the forwarded station forward to the destination station immediately.

If you were given the ability to forward your calls:

- 1 Lift the handset or press ON/OFF button.
- 2 Dial the Follow-Me Forward code [642 YYY XXX] on the dial pad, where YYY=station forwarding from and XXX is station forwarding to.
- 3 Replace handset.

To remove Follow-Me Forwarding:

- 1 Lift the handset or press ON/OFF button.
- 2 Dial the Follow-Me Forward code [642 YYY YYY] on the dial pad, where Y=station forwarded **from**.

To establish Follow-Me Forwarding from an off-site location:

- 1 Dial into the system on a DISA or TIE trunk. Enter the DISA access code, if applicable.
- 2 Dial the Follow-Me Forward code [642 YYY XXX] on the dial pad, where YYY=station forwarding **from** and XXX=station forwarding to.

To remove Follow-Me Forwarding from an off-site location:

- 1 Dial into the system on a DISA or TIE trunk. Enter the DISA access code, if applicable.
- 2 Dial the Follow-Me Forward code [642 YYY YYY] on the dial pad, where Y=station forwarded **from**.







Conditions:

- ❖ If a Call Forward mode is currently active at the station where forwarding is desired, the new forward becomes active and cancels the previous forward.
- ❖ Both internal and external calls to the affected station forward to the designated location.
- ❖ Call forwarding must be allowed in programming for the affected station.
- ❖ When remote forward is activated the forwarding is immediate.
- ❖ A station's Call Forward status is stored in a battery protected area of memory. A station's Call Forward status is returned after a power failure or system reset occurs.
- ❖ When a key telephone is forwarded remotely, the key station's forward button lights. The station user may cancel the forwarding at their station by pressing ON/OFF, then the FWD button. SLT users can cancel their forwarding by going off hook and dialing the forward code.
- ❖ DISA callers entering the code and making a mistake are given error tone for 3 seconds, silence for 2 seconds, then the dial tone is returned.

## Calling Station Tone Mode Option

This feature enables a calling station to override a called station's H or P intercom **settings**. Use from VM port.

When placing a call to a station and Tone ringing is desired:

- 1 Dial [6#] on the dial pad.
- 2 Dial the 3-digit extension number,  
*or*  
Press DSS button of desired station (call tone rings station).

## Camp-On

After receiving intercom busy tone:

- 1 Briefly press and release the hookswitch.
- 2 Dial [620] on the dial pad. When the called party answers, consult with them.

While on a CO line you receive a Camp-on warning tone through handset:

- ❖ Choose desired call (hang up present call and take the new one, or ignore the Camp-on signal). (Also see Personal Park)



## Call Park - Personal

While connected to first call:

- 1 Press the hookswitch momentarily. Intercom dial tone is heard.
- 2 Dial [438] on the dial pad (call is placed in personal park).
- 3 Dial desired number for second call.
- 4 Press the hookswitch momentarily. Intercom dial tone is heard.
- 5 Dial [438] on the dial pad (first call is returned and second call is placed in Personal Park).



The user can alternately connect to the other call by doing a hook-flash and dialing [438] as many times as necessary.

## Call Park (System)

This feature enables an outside call to be placed on hold and consult with, page, or call an internal party prior to transfer.

While connected to an outside line:

- 1 Press and release the hookswitch. The caller is put on Exclusive hold.
- 2 Dial parking location (430 to 437) on the dial pad. Confirmation tone is heard.
- 3 If you hear busy tone, press and release the hookswitch to re-establish contact with the called station, and press and release the hookswitch again prior to dialing another parking location.

Retrieving a Parked Call

- 1 Lift handset.
- 2 Dial [#] on the dial pad.
- 3 Dial parking location (430 to 437) where the call was parked.

## Call Transfer

Making an Unscreened Transfer

- 1 Briefly press and release the hookswitch.
- 2 Dial desired intercom number.
- 3 Hang up to complete the transfer.



Clear Call Forward, DND, Personalized Messages



### Making a Screened Transfer

- 1 Briefly press and release the hookswitch.
- 2 Dial desired telephone number. Announce the call.
- 3 Hang up to complete the transfer.

## Clear Call Forward, DND, Personalized Messages

SLTs can activate and cancel call forward by dialing [640] on the dial pad and DND by dialing [631]. SLTs can enable and cancel personalized messages by dialing [633xx].

A convenient code [662] is incorporated to cancel either Call forwarding, DND, or Personalized Messages when the SLT user forgets which code was programmed on the phone

To cancel Call Forward, DND, Personalized Messages:

- 1 Lift handset. Notification tone is heard.
- 2 Dial [662] on the dial pad. Confirmation tone is heard.
- 3 Replace the handset.

## CO Line Queuing

- 1 Dial outside line access code. Receive busy tone.
- 2 Briefly press and release the hookswitch.
- 3 Dial [621] on the dial pad. Confirmation tone is heard.

## Conference

You may set up a conference of one external and one other internal station.

- 1 Lift handset.
- 2 Make outside call.
- 3 Briefly press and release the hookswitch to put the call on hold.
- 4 Dial number of internal station to add.
- 5 When that station answers, briefly press and release the hookswitch again and all three parties are connected.



## Conference With Personal Park

While connected to an outside line:

- 1 Press the hookswitch momentarily. Intercom dial tone is heard.
- 2 Dial [438] on the dial pad (first call is placed in personal park).
- 3 Dial desired number for second call.
- 4 Press the hookswitch momentarily. Intercom dial tone is heard.
- 5 Dial [664] on the dial pad. All three parties are **conf**erenced.
- 6 Hang up to terminate conference.

## Direct Outside Line Access

- 1 Lift handset.
- 2 Dial access code (9, 81-87) on dial pad.
- 3 Dial desired telephone number.

## Call Pick-up Directed

Upon hearing an unattended telephone ring:

- 1 Lift handset.
- 2 Dial [#1] on the dial pad.
- 3 Dial station number of ringing telephone. You are connected to intercom, incoming, recalling or transferred outside line.

## Call Pick-Up Group

Upon hearing an unattended telephone ringing:

- 1 Lift the handset.
- 2 Dial [#0] on the dial pad. You are connected to intercom, transferred or recalling outside line call.



You must be in **the same** pickup group.

Do Not Disturb (DND)



## Do Not Disturb (DND)

Activating Do Not Disturb

- 1 Lift handset.
- 2 Dial **[631]** on the dial pad.
- 3 Replace handset.

To cancel Do Not Disturb

- 1 Lift handset.
- 2 Dial **[631]** on the dial pad or **[662]** on the dial pad.
- 3 Replace handset.

## PBX/Centrex Transfer (Flash Command to CO Line)

To initiate a PBX or Centrex Transfer command from an SLT.

While connected to a PBX or Centrex line:

- 1 Briefly press and release the hookswitch. Intercom dial tone is heard.
- 2 Dial **[660]** on the dial pad. A Flash command is presented to the PBX or Centrex line.
- 3 PBX or Centrex stutter tone is heard. Dial number of desired extension.
- 4 Replace handset to complete transfEr.

## Handset Receiver Gain

This feature allows an SLT user to increase/decrease the handset volume while on a CO or intercom call.

While on a CO or intercom call:

- 1 Hookflash and dial the Handset Receiver Gain code **[638]** on the dial pad.
- 2 Dial a 1-digit entry [0] through [9] (0=lowest, 9=highest) on the dial pad,  
*or*  
Press [#] to increase or [\*] to decrease the gain, one level at a time.
- 3 Hookflash again to return to call.
- 4 Repeat above procedures, if necessary.
- 5 Replace the handset to end the call.



## Intercom Calling

Ringing is heard if called station is in T answering mode; or two bursts of tone if called station is in the H or P position. To place an intercom call:

- 1 Lift the handset.
- 2 Dial the 3-digit intercom number.
- 3 Converse after the two tone bursts stop.
- 4 Replace the handset to end the call.

Answering an Intercom Call

- 1 Lift handset to converse.
- 2 Replace handset to end call

Conditions:

- ❖ Off-Hook Preference may affect this feature. See "Off-Hook Preference" on page 6-17

## Least Cost Routing (LCR)

To place an outside call when LCR is enabled in the system:

- 1 Lift the handset.
- 2 Dial [g] on the dial pad.
- 3 Dial the desired telephone number.
- 4 Wait for an answer, then converse.

If all lines available are busy, remain off-hook for four seconds to automatically be queued onto LCR for an available line.

If an LCR Queue Callback is activated:

- 1 When telephone is signaled, answer the call.
- 2 Desired telephone number is automatically redialed.



*Only one LCR Queue Call Back request may be initiated by a station. When a second request is made, the first request is cancelled.*

To cancel an LCR Queue Callback:

- 1 Dial the LCR Queue Cancel code, [626] on the dial pad.
- 2 Replace the handset.



## Message Waiting



## Message Waiting

### Leaving a Message Waiting Indication

- 1 Lift handset.
- 2 Dial the desired intercom station. Receive no answer, or DND tone.
- 3 Briefly press and release the hookswitch.
- 4 Dial [623] on the dial pad.
- 5 Replace handset.

### Answering a Message Waiting Indication (message waiting lamp is flashing) :

- 1 Lift handset.
- 2 Dial [663] on the dial pad. Station that left the message rings.



**Only SLTs equipped with a message waiting /amp have access to this feature.**

## Off -Hook Preference

If your phone was programmed for Off-Hook Preference, an outside line dial tone is heard when lifting the handset.

When this operation is enabled, you may not have access to all features described in this document. However, consult your Centrex or PBX User's Guide for additional features you may have.

## Personalized Messages

Each station can select a pre-assigned message to display on the LCD of any Key Telephone calling that station. To select one of the ten available messages:

- 1 Dial [633] on the dial pad.
- 2 Dial the 2-digit code for the message.

[00] = clears message

[01] = ONVACATION

[02] = RETURN AM

[03] = RETURN PM

[04] = RETURN TOMORROW



[05] = RETURN NEXT WEEK

[06] = ON TRIP

[07] = IN MEETING

[08] = AT HOME

[09] = ON BREAK

[10] = AT LUNCH



*This feature is unavailable to the attendant(s).*

- 3 Replace the handset. (Activating DND or Call Forwarding cancels selected message.)

## Paging

- 1 Lift handset.
- 2 Dial the 2- or 3-digit paging code. Wait for page warning tone.

[70] = All Call — Internal and External

[71] = Internal Zone 1

[72] = Internal Zone 2

[73] = Internal Zone 3

[74] = Internal Zone 4

[75] = Internal All Call

(All Ext. Zones)

[76] + [1] = External Zone 1

- 3 Deliver message.

Stations off-hook or in DND do not hear the internal page announcement.



*When making a Zone Page or All Call Page and the zone is busy, the page initiator receives ringback tone until the zone becomes available. You then hear a warning tone and can make the page announcement.*

- 4 Use Flash, depress hookswitch or replace handset to terminate page.





## Meet Me Page



## Meet Me Page

To request another party to meet you on a page:

- 1 Dial the desired 2- or 3-digit paging code.
- 2 Request that party meet you on the page.
- 3 Do not hang up; wait for the requested party to answer. As soon as the paged party answers and is connected to you, the page circuit is released.

Answering a Meet Me Page

- ◆ Go to the nearest telephone and dial [77] on the dial pad. You are connected to the party that paged you.

## Programming Names - LCD Display

Every SLT extension has the capability to program the users name so that people using display telephones see the name instead of the station number.

- 1 Lift handset.
- 2 Dial [690] on the dial pad.
- 3 Enter the name (up to 7 characters may be entered) by using keys on the dial pad as shown in *Figure 5-2: Key Pad - Dial By Name, Chapter 5, page 5-33*. Also refer to *Figure 5-3: Key Pad - Directory Dialing, Chapter 5, page 5-34* and *Table 5-5: Other Key Pad Codes, Chapter 5, page 5-65*.
- 4 Press the hookswitch to complete the programming process.

## Speed Dial - Station

- 1 Lift handset.
- 2 Dial [668] on the dial pad.
- 3 Dial desired station speed bin number (00-19).

## Speed Dial - Storing Station Numbers

- 1 Lift handset.
- 2 Dial [661] on the dial pad.
- 3 Dial desired station speed bin number (00-19).
- 4 Dial telephone number to store.





- 5 Briefly press and release the hookswitch (Confirmation tone is heard.)



*Line Group 1 is programmed along with SL T speed numbers and thus, Line Group 1 is used when activating station speed dial from an SL T.*

## Speed Dial - System

- 1 Lift handset.
- 2 Dial [668] on the dial pad.
- 3 Dial desired system speed bin number (20-99).

## Universal Day/Night Answer (UDA/UNA)

Upon hearing an incoming signal:

- 1 Lift handset.
- 2 Dial the UDA/UNA access code [#5] on the dial pad. You are connected to ringing outside line.





# 7 DIGITAL ATTENDANT OPERATIONS



## Introduction

The STARPLUS Triad-S™ system has a wide variety of features and flexible programming, allowing each telephone user to program their telephone to meet their individual needs.

This section contains the operating instructions for Attendant Digital Key Terminal user(s) and includes an illustration of the digital key telephone used in the Triad-S system. It also includes a description of the telephone keys and their functions. This section is intended for use in conjunction with the Station Operation section to provide step-by-step instructions for operating the Attendant(s) Digital Terminal(s) in the system. Visual and audible cues that accompany the various feature operation steps are also included.

Digital Attendant features are an addition to digital station features. An Attendant User's Guide is also available that provides detailed operating instructions.

## Attendant Digital Key Telephone Station Features

Each Triad-S system provide the following keys, indicators and features:

HANDSET AND SPEAKER are located at the left side of the front panel. A handset is provided to allow confidential conversation when desired. Lifting the handset from its cradle (going off-hook) disengages the station's built-in speaker.

The speaker is located directly below the center portion of the handset. The station may be operated with the handset on-hook. When this occurs, audio is transmitted to the station user through the station's speaker.

FLEXIBLE BUTTONS access idle outside lines, provide DSS/BLF for internal stations, access speed dial numbers and activate features. These buttons can be programmed by the individual station user.

The default flex feature buttons are described below:

- ❖ CALL BACK button lets you initiate a call back request to another busy station, As soon as that station becomes idle, the station that left the call back request is automatically signaled. A flex button must be assigned to use this feature.
- ❖ PICK-UP button lets you pickup a tone ringing intercom call, transferred, incoming, or recalling outside line call to a specific unattended station by group or directed call pick-up.
- ❖ DND (DO NOT DISTURB) button. On Attendant stations, this button becomes the system Night Mode button. A flex button must be assigned to use this feature.





- ❖ **LINE QUEUE** button lets you queue onto an outside line when all lines in a group are busy. Your station is placed in queue awaiting a line in the same group to become available.

#### FIXEDFEATUREBUTTONS:

- ❖ **VOLUME BAR** lets the user adjust ringer, speakerphone and handset volume.
- ❖ **H-T-P** lets the user select the **ICM** Signaling Mode, handsfree tone, or privacy.
- ❖ **FLASH** button terminates an outside call and restores dial tone without hanging up the handset. It also transfers calls behind a PBX or **Centrex** within those systems,
- ❖ **CAMP-ON** button lets you alert a busy party that an outside line is on hold and waiting for them.
- ❖ **MSG (MESSAGE WAIT)** button lets you initiate a message waiting indication at stations that are busy, unattended, or in Do Not Disturb. Message Waiting Callback request left at your station is indicated by a flashing MSG WAIT LED.
- ❖ **SPEED** button gives you access to speed dialing, save number redial and last number redial. This button also accesses flex button programming.
- ❖ **TRANS (TRANSFER)** button transfers an outside call from one station to another.
- ❖ **CONF (CONFERENCE)** button establishes and builds conference calls.
- ❖ **FORWARD (FWD)** button lets you forward your calls to another station.
- ❖ **ON/OFF** button lets you make a telephone call without lifting the handset. It turns the telephone on and off when using the speakerphone.
- ❖ **MUTE** button lets you switch the built-in microphone on or off when using the speakerphone, or the handset microphone when using the handset.
- ❖ **HOLD** button lets you place an outside caller on hold.

**OUTSIDE CALLS** are announced by a tone signal repeated every 3.2 seconds. The corresponding outside line indicator flashes slowly.

**INTERCOM CALLS** can be tone ringing or voice announce. If it is voice announced, the receiving station receives two bursts of tone prior to the announcement. If it is a tone ringing call, the receiving station hears a tone ring every 2.4 seconds.





Figure 7-1: Attendant Digital Display Terminal



100-1 / 1	Triad-S Ext. Numbers	680	Speed Dial Directory
43+[C]	Call Park Location O-7 (System)	690	Name in Display Programming
438	Personal Park	691+[BB]	Off -Hook Preference Programming
44+[V]	Voice Mail* Group Pilot Numbers O-7	692	Time and Date Programming (first programmed Attendant)
45+[H]	Hunt Group Pilot Numbers O-7	893	Directory List Program Code
499	Modem via DISA Access or Transfer	694+[XX]	Custom Message(s) Program Code
5#	Forward Override	695+[XX]	Distinctive Ringing
55+[U]	ACD* Group Pilot Numbers O-9	70	All Call Page (Internal and External)
55+[U]	UCD Group Pilot Numbers O-7	71	Internal Page Zone 1
56+[U]	ACD" Group Pilot Numbers IO-15	72	Internal Page Zone 2
566	ACD* or UCD Available/Unavailable	73	Internal Page Zone 3
567+5 [UU]	ACD' or UCD Calls In Queue Display	74	Internal Page Zone 4
570+[YY]	ACD* Call Qualifier	75	Internal All Call Page
571	ACD' Agent Logout	76+[1]	External Page
572+5 [UU]	ACD* Agent Login	77	Meet-Me-Page Answer
573	ACD' Group Member Status	81	CO Line Group 1 (if LCR is enabled)
574	ACD" Agent Help	82	CO Line Group 2
575	ACD' Supervisor Logout	83	CO Line Group 3
576	ACD' Supervisor Login	84	CO Line Group 4
577	ACD* Supervisor Queue Status Display	85	CO Line Group 5
578	ACD' Overflow Sta Avail/Unavail	86	CO Line Group 6
6# [XXX]	Tone Mode Ring Option	87	CO Line Group 7
6*	Dial By Name	88+[YY]	All CO Line Groups (CO Line Off-Net Fwd)
601	Attendant Override	9	LCR or CO Line Group 1 (if LCR disabled)
602	Disable Outgoing CO Line Access	0	Attendant
603	CO Line Off -Net Forward	#0	Group Call Pick Up (Key and SLT)
605	S/W Version Display	#43+[C]	Call Park Pickup (Key and SLT)
606	Clears T-I alarms	#5	Universal Day/Night Answer
607	Attendant Unavailable (Alternate Position)	[SPEED]+[YY]	Speed Dial Access (00-19 Station) (20-99 System)
823	Message Wait	[SPEED]+[*]	Save Number Redial
625	Executive Override/Monitor Barge-In	[SPEED]+[#]	Last Number Redial
626	LCR Queue Cancel		
628	OHVO Enable		
631	Day/Night/Special (Attendant only)		
632+[0,1,2]	Background Music		
633+[ZZ]	Personalized Messages		
633+[00]	Clear Personalized Messages		
634	Headset Mode		
635	ICLID Unanswered Calls Display		
636+[XXX]	Station Relocate		
639	Incoming CO Call Transfer		
FWD	All Call Forward		
[FWD]+[7]	No Answer = Call Forward		
[FWD]+[8]	Busy = Call Forward		
[FWD]+[9]	Busy/No Answer = Call Forward		
[FWD]+[*]	Off -Net = Call Forward		
348+[#,*] Keypad Mode			
		XXX = Intercom Station Numbers	
		YY = Speed Dial Bin numbers	
		ZZ = Personalized Messages	
		BB = button Number	
		U = ACD" (O-15) or UCD (O-7) Group Number	
		C = Call Park Location O-7	
		H = Hunt Group Number O-7	
		V = Voice Mail* Group Number O-7	
		P = External Page Zone Number (1-2)	
		. Features available with optional software.	

Table 7-1: Digital Attendant Numbering Plan



## Attendant Unavailable (Alternate Position)

This feature lets attendant stations have a button that places their station in an unavailable mode. When the station is in the unavailable mode, the next attendant station receives incoming and dial 0 calls. All other available attendants receive recalls. This feature is based on the three programmed attendant stations.

- 1 The first programmed Attendant presses the pre-programmed\* Unavailable flexible button,  
*or*  
Dials the Attendant Unavailable code [607] on the dial pad. The LED on the flexible button lights solid, if programmed. Recalls and dial 0 calls that were ringing at the first Attendant station now ring at the second. If the second Attendant places their phone in unavailable, the third Attendant takes recall and dial 0 calls.
- 2 When the first Attendant presses the pre-programmed\* Unavailable flexible button again,  
*or*  
Dials the Attendant Unavailable code [607] on the dial pad again. The LED on the flexible button, if programmed, extinguishes. The first Attendant resumes normal operation and the second Attendant does not receive recalls or dial 0 calls.

### Conditions:

- ❖ This feature lets the programmed attendant stations receive attendant recalls and dial 0 calls only. No other attendant type functions are given to this station when the station is in the attendant mode.
- ❖ If Attendant A (first programmed) is available, incoming, recalls, and dial 0 calls are directed to this station regardless of other attendant stations status.
- ❖ The special ring mode can be set so the alternate attendant does not receive an incoming CO ring until the main attendant places their phone in special and unavailable modes.
- ❖ If all attendants in the system are unavailable, no attendants are available for internal/external callers.
- ❖ Recalls are directed to all programmed available attendants.
- ❖ If only one attendant is programmed in the system, and that attendant is unavailable, users dialing zero hear an error tone.

## Call Hold

- 1 If your system is programmed for System Hold Preference, press HOLD button once for System Hold and twice for Exclusive Hold.
- 2 If your system is programmed for Exclusive Hold Preference, press HOLD button once for Exclusive Hold and twice for System Hold.





## Call Park

To place an outside call in park and consult with, page, or call an internal party:

### While connected to an outside line:

- 1 Press TRANS button. The caller is put on hold.
- 2 Dial **parking** location (430 to 437). Confirmation tone is heard.
- 3 If you hear busy tone, press TRANS twice and dial another parking location.

### Retrieving a Parked Call:

- 1 Lift handset or press ON/OFF button.
- 2 Press the [#] button.
- 3 Dial parking location (430 to 437) where the call was parked.

## CO Lines Off -Net Forward - Incoming (via Speed Dial)

Lets the first attendant station forward incoming CO calls to an off-net location.

In a speed dial bin, store the number of the off-net location where calls are to forward. Follow instructions provided for storing station or system speed dial numbers.

- 1 Dial [603] on the dial pad,  
*or*  
Press pre-programmed\* CO Off -Net Forward button.
- 2 Dial the CO group access code of the group to be forwarded,  
*or*  
Press the CO Line button for an individual CO Line for Off-Net forward.
  - [81] = CO Group 1
  - [82] = CO Group 2
  - [83] = CO Group 3
  - [84] = CO Group 4
  - [85] = CO Group 5
  - [86] = CO Group 6
  - [87] = CO Group 7
  - [88] = All CO Line
- 3 Dial the speed bin number that contains the number where calls are to forward.  
Confirmation tone is heard.





### Canceling Off-Net Forwarding

- 1 Dial [603] on the dial pad,  
**or**  
Press pre-programmed\* CO Off -Net Forward button,
- 2 Dial the CO group access code,  
**or**  
Press the CO Line button.
- 3 Dial [#] on the dial pad. Confirmation tone is heard.

### Conditions:

- ❖ When CO lines are off-net forwarded, these lines will display unique flash rates at the attendant station.

\*A Flex Button must be programmed for this feature to operate. Refer to *Table 5-3: Flex Button Programming Codes, Chapter 5, page 5-44.*

## Day/Night/Special Mode

Any designated attendant can place the system into Night Service by:

- 1 Pressing the pre-programmed Night Service button (DND by default) once, activates the night mode (LED solid). Pressing the DND button again, activates the special mode (LED flashes @ 240 ipm).
- 2 The DND button (by default) acts as a toggle in this manner, starting in the day mode, night mode, and special mode.

## Directory Dialing

Directory dialing allows station users to obtain a directory of station users and have the system dial the extension that is currently displayed. The Triad-S system provides locations for up to 200 names.

Directory dialing also lets users program a name with a speed dial bin for later locating a speed dial number. When prompted, the system displays the name associated with a speed dial number on the LCD display. The user may then have the system dial the number.

Directory dialing enables users to associate a name with an entry in the local number/name translation table. When prompted, the system displays the name associated with the table on the LCD display. The user may then have the system dial the number.



The Directory Dialing list may be programmed and maintained at the first assigned attendant station. However, this admin routine lets the system programmer maintain the list locally (at Attendant) or remotely via modem access.

Directory dialing may also be used to transfer a call from one station to another.

To view the directory list:

- 1 Dial the Directory List dial code [680] on the dial pad,  
**or**  
Press the pre-programmed\* flex button programmed as a directory dialing button.
- 2 Press a button on the key pad, once, twice or three times, that represents the letter of the alphabet to begin viewing the list of names (i.e., when 2 is first pressed, it produces names beginning with A. When 2 is pressed a second time, it produces names beginning with B. Pressing 2 a third time produces the names beginning with C). The alphabet is represented on the key pad as shown in *Figure 5-2:Key Pad - Dial By Name, Chapter 5, page 5-33*. Also refer to *Figure 5-3:Key Pad - Directory Dialing Chapter 5, page 5-34*
- 3 Names beginning with the letter chosen display on the LCD display.



**If there are no names in the Directory List beginning with the desired letter, a name with the next higher letter displays on the LCD display.**

- 4 Dial [\*] to scroll up (next entry) through the list,  
**or**  
Dial [#] to scroll down (previous entry) through the list,  
**or**  
Press another key to view the list for a different letter of the alphabet.
- 5 When the desired name displays on the LCD, press the SPEED button to automatically dial the destination station or outside phone number (via speed dial).

Conditions:

- ❖ If the desired party is an intercom station, that station is signaled according to their intercom selector switch (SLT stations tone ring).
- ❖ If the desired party is associated to a speed dial bin, the system selects a CO line and dials the number programmed into the speed dial bin. Call progress tones are then heard.

To Transfer a Call using Directory Dialing:

While on a call:

- 1 Press the TRANS button.



Directory Dialing



- 2 Dial the Directory Dial Code [680] on the dial pad,  
*or*  
Press a pre-programmed\* flex button programmed for directory dialing,
- 3 Press the SPEED button to automatically dial the destination station.
- 4 Hang up to complete the transfer.



***Calls may be transferred to internal stations on/y. An attempt to transfer a call of f-net (via a Speed dial bin) results in the call recalling upon going on-hook.***

### Programming

Directory dialing allows station users to obtain a station users directory and have the system dial the extension currently displayed. The Triad-S system provides locations for up to 200 names.

Directory dialing also lets users program a name with a speed dial bin for later locating a speed dial number. When prompted, the system displays the name associated with a speed dial number on the LCD. The user may then have the system dial the number.

Directory dialing enables users to associate a name with an entry in the local number/name translation table. When prompted, the system displays the name associated with the table on the LCD. The user may then have the system dial the number.

The Directory Dialing list may be programmed and maintained at the first assigned attendant station. Directory dialing may also be used to transfer a call from one station to another.

#### Method One:

To enter, edit or erase names that appear in the Directory List for stations or speed dial numbers:

- ❖ Dial the Directory List program code [693] on the dial pad. The HOLD button is lit. The first entry (000) in the Directory List displays on the phone as follows:

<b>DIR LST AAA BIN/ICM: XXX          nnnnnnnnnnnnnnnnnnnnnnnnnnnnnn</b>
---

AAA = Directory List entry number (000-199)

XXX = Station Number, System Speed Dial bin Number, or Local Number/Name Translation Table number

nnn = Programmed Name (blank if none)





To Select a different entry in the Directory List:

- 1 Enter the 3-digit (000-199) entry number on the dial pad,  
Of  
Dial [\*] to scroll up (next entry) through the list,  
**or**  
Dial [#] to scroll down (previous entry) through the list.
- 2 Press the TRANS button to select the entry.

To Enter or Change the current name shown on the display:

- 1 Press the MUTE button.
- 2 Enter the name (up to 24-characters) by using keys on the dial pad as shown in *Figure 5-2: Kq Pad - Dial By Name, Chapter 5, page 5-33* and using the key pad codes listed in *Table 5-5: Other Key Pad Codes, Chapter 5, page 5-65*.
- 3 Press the SPEED button when finished. Confirmation tone is heard and the display updates.
- 4 Press HOLD, use [\*] or [#] to scroll to next entry.

To enter the intercom number to associate with the name:

- 1 Press the TRANS button.
- 2 Enter the 3-digit station intercom number.
- 3 Press the SPEED button to save the entry. Confirmation tone is heard and the display updates.
- 4 Press HOLD, use [\*] or [#] to scroll to next entry.

To clear an entry:

- 1 Select the desired entry using the Method One procedure.
- 2 Press the FLASH button to erase the entry.
- 3 Press the SPEED button. Confirmation tone is heard and the entry is erased.

Method Two:

This method may be used to enter names associated with the Local Number/Name Translation Table only.

- ❖ Dial the Directory List program code [693] on the dial pad. The HOLD button is lit. The first entry (000) in the Directory List displays on the phone as follows:

**DIR LST AAA BIN/ICM: XXX**  
 nnnnnnnnnnnnnnnnnnnnnnnnnnnnnnnnn

AAA = Directory List entry number (000-199)



## Directory Dialing



XXX = Station Number, System Speed Dial bin Number, or Local Number/Name Translation Table number

nnn = Programmed Name (blank if none)

To Select a different entry in the Directory List:

- 1 Enter the 3-digit (000-199) entry number on the dial pad,  
or  
Dial [\*] to scroll up (next entry) through the list,  
or  
Dial [#] to scroll down (previous entry) through the list.
- 2 Press the TRANS button to select the entry.

To enter a name along with a local number/name translation table number:

- 1 Press the TRANS button.
- 2 Dial the 3-digit local number/name translation table number (600-799) that represents the telephone number.
- 3 Press the SPEED button. Confirmation tone is heard and the entry is stored.
- 4 Press HOLD, use [\*] or [#] to scroll to next entry

To Enter or Change the current name shown on the display:

- 1 Press the MUTE button.
- 2 Then enter the name (up to 24-characters may be entered) by using keys on the dial pad as shown in *Figure 5-2:Key Pad - Dial By Name, Chapter 5, page 5-33* and using the key pad codes listed in *Table 5-5:Other Key Pad Codes, Chapter 5, page 5-65*. The display updates as the name is entered.
- 3 Press the SPEED button when finished. Confirmation tone is heard.
- 4 Press HOLD, use [\*] or [#] to scroll to next entry.



**The Local Number/Name Translation Table can be used to enter additional speed dial numbers used for directory dial or dial by name. The name entered into the local number/name translation table is irrelevant when used with directory dialing and dial by name. Note that the numbers entered into this table are limited to 14 digits and are covered by to// restriction rules.**





## ICLID Unanswered Call Management Table

An Unanswered Call Management Table with 100 entry capacity for the Triad-S system is maintained. The calling number/name information pertaining to any unanswered call is placed in this table at the time the system determines the call was abandoned.

This table may be accessed from any station display phone so that the unanswered calls may be reviewed and handled by the end user. Upon entry into the review process, the functions available to a phone are:

Function	Function Button
1. Go to the beginning of table.	Dial Code 635
2. Review next item in the table entry.	MUTE
3. Step to next table entry.	HOLD
4. Delete this table entry.	FLASH
5. Exit table review function.	ON/OFF
6. Step to previous table entry.	TRANSFER
7. Call Back.	SPEED

Table 7-2: ICLID Unanswered Call Management

## Messages – Custom

This feature lets the system administrator enter up to ten custom messages for use by system station users. These messages may be specified and customized by the customer on a system-wide basis.

The system administrator (Station 100) programs the ten custom messages at the first attendant station as follows:

- 1 Dial the Custom Message program code [694] on the dial pad.



The following message is shown on the display phone:

<p><b>ENTER MSG NO</b>  <b>MMM DD YY</b>                      <b>HH:MM am</b></p>
---

- 2 Enter the Z-digit message bin number [21-30].

Then the following display is shown after the bin # has been selected.

<p>mmmmmmmmmm...  <b>ENTER MSG:</b></p>
---

- 3 Enter the custom message using the dial pad keys to enter the letters as shown in *Figure 5-2: Key Pad - Dial By Name, Chapter 5, page 5-33*. For key pad codes, refer to *Table 5-5: Other Key Pad Codes, Chapter 5, page 5-65*.

Up to 24 alphanumeric characters may be entered for the custom message (this represents 48 digits entered). The actual characters display as the digits are being entered while programming the messages. The attendant must go idle after programming a message before another message may be programmed.

- ❖ The user then presses the HOLD button to enter the message and confirmation tone is heard.

Conditions:

- ❖ The telephone receiving the message or programming must be a display telephone.
- ❖ Key telephones and SLTs can leave a message. SLTs are notified that they left a message with a warning tone when going off-hook.
- ❖ Incoming and outgoing calls are not inhibited with a message displayed.
- ❖ When a message is displayed by a key telephone, the DND button LED flashes at the 15 ipm rate.
- ❖ When DND is invoked on the telephone, the message is canceled.
- ❖ Message Access (with a desired message) may be assigned to a flex button.
- ❖ Message status is stored in a battery protected memory area for retention across a power failure or system reset (soft or hard).
- ❖ The Message Access function is assigned to a station flex button in database administration.
- ❖ A station user may store any of the available messages under a flex button assigned as a Message Access button.
- ❖ The ten Custom Messages display in a similar fashion as Canned messages. The idle station display shows the message that was activated at the station and a calling station receives the STA XXX or name-in-display followed by the programmed custom messages.
- ❖ This feature is not available for use at attendant stations.





## Outgoing Access - Attendant Disable

The attendant station can disable CO lines, preventing outgoing CO calls,

- 1 Lift handset or press ON/OFF button.
- 2 Dial [602] on the dial pad. Confirmation tone is heard.
- 3 Press the line button(s) of the CO Line(s) to disable. Confirmation tone is heard and the CO Line button(s) LED is flashing.
- 4 To reactivate the CO Line(s), repeat the steps to disable it.

## Override

If Attendant Override is allowed, Attendant(s) stations may override or call stations that are busy or in Do Not Disturb.

If the Attendant calls a station that is busy on a CO call and wishes to alert them of a waiting call:

- 1 Press the pre-programmed\* ATTN OVERRIDE button [601]. Three short tone bursts are presented to the called party.
- 2 After five (5) seconds, the station's CO line is automatically placed on hold and the Attendant is cut-through.

If the Attendant calls a station that is in Do Not Disturb mode and wishes to alert them of a call:

- ❖ Press the pre-programmed\* ATTN OVERRIDE button. The station is signaled with a Camp-On tone.

\*A Flex Button must be programmed for this feature to operate. Refer to *Table 5-3: Flex Button Programming Codes, Chapter 5, page 5-44.*

## Outside Call - Answer

- 1 Lift handset.
- 2 Press slow flashing outside line button. (If your telephone is programmed with Preferred Line Answer, you may answer an outside line by lifting the handset.)

## Outside Call - Place

- 1 Press outside line button. ON/OFF button LED lights and dial tone is heard.
- 2 Dial desired party.
- 3 When called party answers, lift handset to converse or use speakerphone



## Recall

When an outside line remains on hold for an extended time period, a recall ring is heard.

- 1 Press outside line button flashing at a very fast rate.
- 2 Lift handset to converse.

Conditions:

- ❖ Recall does not apply to intercom calls placed on hold.

## Release Button

Lets the station user disconnect calls while off-hook (on handset, not speakerphone), speeding up call handling time.

While off-hook (on handset, not speakerphone) on an intercom call, transfer sequence, page announcement or CO call:

- ❖ Press the pre-programmed\* RELEASE button to terminate intercom call, transfer sequence, page announcement or CO call.

\*A Flex Button must be programmed for this feature to operate. Refer to *Table 5-3: Flex Button Programming Codes, Chapter 5, page 5-44.*

## Ring Mode

Conditions:

- ❖ The three attendant stations can invoke or remove this mode. When one attendant station activates this mode, other attendant stations have their DND button lit accordingly.
- ❖ Each CO line has a special mode ring assignment associated with it. Up to 10 stations per CO line may ring in the special mode.
- ❖ This feature overrides the day/night scheduler feature.

## Setting System Time and Date

Must be set by the first programmed attendant.

- 1 Dial [692] on the dial pad. Confirmation tone is heard.
- 2 Enter date and time as follows:

YYMMDDHHMM





YY = year 00-99

MM = month 01-12

DD = day 01-31

HH = hour 00-23

MM = minute 00-59

When the correct number of digits are entered, confirmation tone is heard. Pressing the ON/OFF button to OFF updates the display.

## Software Version Display

The current system software can be viewed by the first programmed Attendant. This display shows the version number and the level of software in english.

At the first Attendant station:

- ❖ Dial the S/W Display code [605] on the dial pad. The top line of the LCD continues to show the same data as it currently displays, while the bottom line of the LCD shows the following in place of the time/date information:

STARPLUSBASIC

STARPLUS VOICE MALL

STARPLUSACD

Conditions:

- ❖ The station must be an LCD type to view the information,

## Speed Dial - System Storing

System Speed numbers must be entered by the first programmed attendant. If no attendant is specified, enter at Station 100.

- 1 Press SPEED once, then press a desired outside line key or select an outside line automatically by pressing the SPEED button a second time.
- 2 Dial the System Speed bin location (20-99).
- 3 Dial telephone number.
- 4 Press the SPEED button.
- 5 Hang up.



- a. Pressing the TRANS button during number entry initiates a Pulse-To-Tone switchover. Pressing the HOLD button during number entry inserts a Pause. Pressing the FLASH key inserts a Flash into the speed number.
- b. Pressing the TRANS button as the first entry in the speed bin inserts a no-display character causing the numbers stored in the bin not to display on the Digital Terminals when the bin is accessed.

Speed Bin numbers 60-99 are not monitored by Toll Restriction.

# 8 LIQUID CRYSTAL DISPLAYS



## Introduction

The display is arranged into an upper and lower field. The upper field displays the current activity of the telephone. The lower field is divided into two sections. The left section of the lower field displays the date, speed bin number, connected intercom station or outside line number. The right section of the lower field displays the current time or elapsed time on an outside call. The following table shows what displays on the LCD displays based on the function performed.

FUNCTION	CALLING STATION DISPLAY	CALLED STATION DISPLAY
Idle Station	<div style="border: 1px solid black; padding: 5px; text-align: center;">           STATION XXX            MMM DD YY    HH:MM am         </div> <div style="border: 1px solid black; padding: 5px; text-align: center;">           STA XXXNAME            MMM DD YY    HH:MM am         </div>	<div style="border: 1px solid black; padding: 5px; text-align: center;">           STA XXXNAME            MMM DD YYHH:MM am         </div>
Manually dialing outgoing calls	<div style="border: 1px solid black; padding: 5px; text-align: center;">           18005551212            LINE XXX        HH:MM:SS         </div>	
Recalling line from Hold	<div style="border: 1px solid black; padding: 5px; text-align: center;">           LINE XXX RECALLING            MMM DD YY        HH:MM am         </div>	
Recalling line from another station	<div style="border: 1px solid black; padding: 5px; text-align: center;">           RECALL FROM STA XXX            LINE XXX        HH:MM:SS         </div> <div style="border: 1px solid black; padding: 5px; text-align: center;">           RECALL FROM ..(name)..            LINE XXX        HH:MM:SS         </div>	

\* Features available with optional software

Table 8-1: Liquid Crystal Displays (LCD)



FUNCTION	CALLING STATION DISPLAY	CALLED STATION DISPLAY
Connected to an incoming CO line		<div style="border: 1px solid black; padding: 5px; text-align: center;"> <b>STATION XXX</b>  <b>LINE XXX</b>                      <b>00:00:10</b> </div>
Intercom Call	<div style="border: 1px solid black; padding: 5px; text-align: center;"> <b>CALL TO STA XXX</b>  <b>MMM DD YY    HH:MM am</b> </div>	<div style="border: 1px solid black; padding: 5px; text-align: center;"> <b>CALL FROM STA XXX</b>  <b>MMM DD YY        HH:MM am</b> </div>
	<div style="border: 1px solid black; padding: 5px; text-align: center;"> <b>CALL TO ..(name)..</b>  <b>MMM DD YY        HH:MM am</b> </div>	<div style="border: 1px solid black; padding: 5px; text-align: center;"> <b>CALL FROM ..(name)..</b>  <b>MMM DD YY        HH:MM am</b> </div>
Camp-On	<div style="border: 1px solid black; padding: 5px; text-align: center;"> <b>CALL TO STA XXX</b>  <b>MMM DD YY        HH:MM am</b> </div>	<div style="border: 1px solid black; padding: 5px; text-align: center;"> <b>CAMP-ON BY STA XXX</b>  <b>MMM DD YY        HH:MM am</b> </div>
	<div style="border: 1px solid black; padding: 5px; text-align: center;"> <b>CALL TO ..(name)..</b>  <b>MMM DD YY        HH:MM am</b> </div>	<div style="border: 1px solid black; padding: 5px; text-align: center;"> <b>CAMP-ON BY ..(name)..</b>  <b>MMM DD YY        HH:MM am</b> </div>
Conference	<div style="border: 1px solid black; padding: 5px; text-align: center;"> <b>CONFERENCE</b>  <b>MMM DD YY        HH:MM am</b> </div>	<div style="border: 1px solid black; padding: 5px; text-align: center;"> <b>CONFERENCE</b>  <b>MMM DD YY        HH:MM am</b> </div>
Internal Page		<div style="border: 1px solid black; padding: 5px; text-align: center;"> <b>PAGE FROM STA XXX</b>  <b>MMM DD YY        HH:MM am</b> </div>
	<div style="border: 1px solid black; padding: 5px; text-align: center;"> <b>INTERNAL PAGE</b>  <b>ZONE X            HH:MM am</b> </div>	<div style="border: 1px solid black; padding: 5px; text-align: center;"> <b>PAGE FROM ..(name)..</b>  <b>MMM DD YY        HH:MM am</b> </div>
External Zone Page and External All Call Page	<div style="border: 1px solid black; padding: 5px; text-align: center;"> <b>EXTERNAL PAGE</b>  <b>ZONE X            HH:MM am</b> </div>	
	<div style="border: 1px solid black; padding: 5px; text-align: center;"> <b>EXTERNAL PAGE</b>  <b>MMM DD YY        HH:MM am</b> </div>	

\* Features available with optional software

Table 8-I: Liquid Crystal Displays (LCD)





FUNCTION	CALLING STATION DISPLAY	CALLED STATION DISPLAY
All Call Page	<b>ALL CALL PAGE</b> MMM DD YY    HH:MM am	<b>PAGE FROM STA XXX</b> MMM DD YY    HH:MM am
Meet Me Page	<b>ALL CALL PAGE</b> MMM DD YY    HH:MM am	<b>PAGE FROM XXX</b> MMM DD YY    HH:MM am
	<b>CALL FROM XXX</b> MMM DD YY    HH:MM am	<b>CALL TO XXX</b> MMM DD YY    HH:MM am
Station Call Forward (Originating Station) (Name in Display)	<b>FORWARDED TO STA XXX</b> MMM DD YY    HH:MM am	
	<b>FORWARDED TO ..(name)..</b> MMM DD YY    HH:MM am	
Station No-Answer Call Forward (Originating Station)	<b>NO ANS FWD TO STA XXX</b> MMM DD YY    HH:MM am	
	<b>NO ANS FWD TO ..(name)..</b> MMM DD YY    HH:MM am	
Station Busy/No- Answer Call Forward (Originating Station)	<b>BSY/NA FWD TO STA XXX</b> MMM DD YY    HH:MM am	
	<b>BSY/NA FWD TO ..(name)..</b> MMM DD YY    HH:MM am	

\* Features available with optional software

Table 8-1: Liquid Crystal Displays (LCD)



FUNCTION	CALLING STATION DISPLAY	CALLED STATION DISPLAY
Station Busy Call Forward (Originating Station)	<b>BUSY FWD TO STA XXX</b> MMM DD YY    HH:MM am	
	<b>BUSY FWD TO ..(name)..</b> MMM DD YY    HH:MM am	
Forwarded Call (Name in Display)	<b>FORWARDED TO STA XXX</b> VIA STA XXX    HH:MM am	<b>CALL FROM STA XXX</b> VIA STA XXX    HH:MM am
	<b>FORWARDED TO ..(name)..</b> VIA STA XXX    HH:MM am	<b>CALL FROM ..(name)..</b> VIA STA XXX    HH:MM am
Forwarded Intercom Call	<b>FORWARDED TO STA XXX</b> VIA STA XXXHH:MM am	<b>CALL FROM STA XXX</b> VIA STA XXXHH:MM am
Station Forward to Voice Mail Group (Station Idle)	<b>FORWARDED TO VOICE MAIL</b> MMM DD YY    HH:MM am	
Station Forward to ACD* or UCD Group (Station Idle)	<b>FORWARDED TO ACD 55X</b> MMM DD YY    HH:MM am	
Preset Forward		<b>FORWARD RING</b> LINE XXX        HH:MM am
Station call to <i>Station Forwarded to a Voice Mail Group *</i>	<b>FORWARDED TO VOICE MAIL</b> VIA STA XXX        HH:MM am	<b>FORWARDED TO VOICE MAIL</b> MMM DD YY        HH:MM am

\* Features available with optional software

Table 8-1: Liquid Crystal Displays (LCD)





FUNCTION	CALLING STATION DISPLAY	CALLED STATION DISPLAY
Call Pick Up	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 5px auto;"> <b>CALL TO STA XXX PICKED UP BY STA XXX      HH:MM am</b> </div>	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 5px auto;"> <b>CALL TO STA XXX FROM STA XXX    HH:MM am</b> </div> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 5px auto;"> <b>TRANSFER FROM STA XXX LINE XXX      HH:MM am</b> </div>
Exclusive Hold	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 5px auto;"> <b>LINE HOLDING LINE XXX      HH:MM am</b> </div>	
Do Not Disturb	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 5px auto;"> <b>DO NOT DISTURB STA XXX MMM DD YY    HH:MM am</b> </div> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 5px auto;"> <b>DO NOT DISTURB ..(name).. MMM DD YY    HH:MM am</b> </div>	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 5px auto;"> <b>STA IN DO NOT DISTURB MMM DD YY    HH:MM am</b> </div>
Call Back	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 5px auto;"> <b>CALL BACK FROM STA XXX MMM DD YY    HH:MM am</b> </div> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 5px auto;"> <b>CALL BACK FROM ..(name).. MMM DD YY    HH:MM am</b> </div>	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 5px auto;"> <b>CALL FROM STA XXX MMM DD YY    HH:MM am</b> </div> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 5px auto;"> <b>CALL FROM ..(name).. MMM DD YY    HH:MM am</b> </div>
Outside Line Transfer		<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 5px auto;"> <b>TRANSFER FROM STA XXX LINE XXX      HH:MM am</b> </div> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 5px auto;"> <b>TRANSFER FROM ..(name).. LINE XXX      HH:MM am</b> </div>
Message Waiting		<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 5px auto;"> <b>MSG: XXX XXX XXX XXX XXX MMM DD YY    HH:MM am</b> </div>

\* Features available with optional software

Table 8-I: Liquid Crystal Displays (LCD)



FUNCTION	CALLING STATION DISPLAY	CALLED STATION DISPLAY
Reply to a Message Waiting	<div style="border: 1px solid black; padding: 2px; text-align: center;"> <b>CALL TO STA XXX</b>  <b>MMM DD YY    HH:MM am</b> </div> <div style="border: 1px solid black; padding: 2px; text-align: center;"> <b>CALL TO ..(name)..</b>  <b>MMM DD YY    HH:MM am</b> </div>	<div style="border: 1px solid black; padding: 2px; text-align: center;"> <b>CALL BACK FROM STA XXX</b>  <b>MMM DD YY    HH:MM am</b> </div>
Programmed Flash Command (F)	<div style="border: 1px solid black; padding: 2px; text-align: center;"> <b>F*1</b> </div>	
Programmed Pause Command (P)	<div style="border: 1px solid black; padding: 2px; text-align: center;"> <b>950777P1234567</b>  <b>SPEED XX    HH:MM am</b> </div>	
Programmed Pulse-To-Tone Switchover (S)	<div style="border: 1px solid black; padding: 2px; text-align: center;"> <b>950777S1234567</b>  <b>SPEED XX    HH:MM am</b> </div>	
CO Line Queuing	<div style="border: 1px solid black; padding: 2px; text-align: center;"> <b>PLACED IN QUEUE FOR</b>  <b>LINE XXX    HH:MM am</b> </div> <div style="border: 1px solid black; padding: 2px; text-align: center;"> <b>QUEUE CALL BACK</b>  <b>LINE XXX    HH:MM am</b> </div>	
Hunt Groups	<div style="border: 1px solid black; padding: 2px; text-align: center;"> <b>CALL TO STA XXX</b>  <b>VIA HUNT    HH:MM am</b> </div> <div style="border: 1px solid black; padding: 2px; text-align: center;"> <b>CALL TO ..(name)..</b>  <b>VIA HUNT    HH:MM am</b> </div>	

\* Features available with optional software

Table 8-1: Liquid Crystal Displays (LCD)

INTRODUCTION



FUNCTION	CALLING STATION DISPLAY	CALLED STATION DISPLAY
ACD* or UCD Groups	<p>CALL TO STA XXX VIA ACD      HH:MM am</p>	
	<p>CALL TO ..(name).. VIA ACD      HH:MM am</p>	
Ringing CO Lines		<p>LINE RINGING LINE XXX      HH:MM am</p>
Display Security Feature	<p>DISPLAY SECURITY LINE XXX      HH:MM:SS</p>	
Station Forwarding Off-Net	<p>FORWARDED TO SPEED XX MMM DD YY      HH:MM am</p>	
Call to Station Forwarded Off -Net (before and after a call is answered)	<p>FORWARDED OFF NET LINE XXX      CALLED 102</p>	<p>FORWARDED TO SPEED XX MMM DD YY      HH:MM am</p>
	<p>2331234 LINE XXX      HH:MM:SS</p>	
Calls in Queue (Supervisor)	<p>55X: CIQ: XX AGENT(S): XX OLDEST CALL      HH:MM:SS</p>	
Calls in Queue (Using Dial Code) ACD* or UCD	<p>ACD 55X 02 CALLS IN QUEUE MMM DD YY      HH:MM am</p>	
Unavailable Mode (Agent Station) ACD* or UCD	<p>UNAVAILABLE ACD * XXX * MMM DD YY      HH:MM am</p>	

\* Features available with optional software

Table 8-I: Liquid Crystal Displays (LCD)



FUNCTION	CALLING STATION DISPLAY	CALLED STATION DISPLAY
Station call to Voice Mail Group Pilot Number	CALL TO VOICE MAIL MMM DD YY HH:MM am	
Dial By Name	DIAL NAME: MMM DD YY HH:MM pm	
Off-Hook Voice Over (OHVO)	ANNOUNCE TO STA XXX MMM DD YY HH:MM am	ANNOUNCE FROM STA XXX MMM DD YY HH:MM am
Executive Override	MONITORING STA XXX MMM DD YY HH:MM am	
Voice Mail* Transfer with ID Digits	CALL TO VOICE MAIL VIA XXX MMM DD YY	
	ENTER VM ID: MMM DD YY HH:MM pm	
Repeat Redial	ENTER RPT REDIAL TIMER XXX 066-999	
	RPT REDIAL CALLBACK: MMM DD YY HH:MM pm	
Call Coverage Station  After call is answered at coverage station.	CALL TO STA XX MMM DD YY HH:MM am	
	CALL TO STATION XXX FROM STA YYY HH:MM am	

\* Features available with optional software

Table 8-1: Liquid Crystal Displays (LCD)



INTRODUCTION



FUNCTION	CALLING STATION DISPLAY	CALLED STATION DISPLAY
Name/Number Display at Idle	<p style="text-align: center;"><b>STA YYYXXXXXXXXX</b>  <b>MMM DD YY HH:MM pm</b></p>	
Scrollable Canned Messages	<p style="text-align: center;"><b>XXXXXXXXXXXXXXXXXX</b>  <b>NEXT=# PREV=* SAVE=HOLD</b></p>	
ACD* Transfer Display	<p style="text-align: center;"><b>TRANSFER FROM ACD 55X</b>  <b>LINE XXX HH:MM am</b></p>	
ACD* Overflow Station receives an Overflow Call	<p style="text-align: center;"><b>TRANSFER VIA ACD 55X</b>  <b>LINE XXX HH:MM</b></p>	
Answering Machine Emulation: When a call rings the station in ring mode.	<p style="text-align: center;"><b>VM SCREENING RING</b>  <b>MMM DD YY HH:MM pm</b></p>	
Answering Machine Emulation: When station monitors caller in VM.	<p style="text-align: center;"><b>VM SCREENING</b>  <b>MMM DD YY HH:MM pm</b></p>	

\* Features available with optional software

Table 8-1: Liquid Crystal Displays (LCD)





## 9 SYSTEM CONFIGURATION



### General Description

TheSTARPLUS Triad-S™ is a digital telephone system designed to meet the needs of small size business offices. The system incorporates state-of-the-art digital technology for command and voice switching utilizing a Pulse Code Modulation/Time Division Multiplexing switching matrix. The system achieves flexibility by employing a universal card slot architecture with Basic and Expansion cabinets. These cabinets house plug-in circuit boards that support different types of telephone instruments.

The system begins at a 3-line, 8-station capacity and can expand to a maximum configuration of a 12-line, 32-station capacity. Expansion is accomplished in 3-line, 8-station increments. The system supports proprietary digital terminals or standard touch tone 2500-type terminals.

### Basic Key Service Unit (BKSU)

The Triad-S Basic Key Service Unit (BKSU) is a wall mountable cabinet that houses the following:

- ❖ Main CPU board
- ❖ System ROM
- ❖ System RAM
- ❖ Power supply
- ❖ Circuitry to support two 3x8 boards and the expansion cabinet with two 3x8 boards

Thus, the maximum capacity of the BKSU is 6 CO lines and 16 stations (8 digital and 8 digital or SLT). Every BKSU supports three loop start CO lines and eight standard digital station interfaces from the factory.

The BKSU also has these standard features:

- ❖ 1 Program Module Unit (PMU) that provides system software (sold separately)
- ❖ 1 DTMF Receiver (for DISA/SLT applications)
- ❖ 2 Programmable relays with dry contacts rated at 24V DC, 1 amp
- ❖ 1 External Page Port
- ❖ Battery Backup for System Database
- ❖ 1 Music Input (MOH/BGM)

The BKSU main board can accept the following modules:





- ❖ 1 Miscellaneous Service Unit (MISU) that provides two RS232C/9 pin ports and second music source circuitry
- ❖ 1 Modem Unit (MODU, 9600 baud modem) for remote administration
- ❖ 1 4 Circuit DTMF Receiver (DTMF-A) provides 4 DTMF receivers
- ❖ 1 3x8 CKIB or 3x8 CSIB (one CKIB installed in every BKSU standard)

A number 12 AWG copper wire should be used to ground between the ground source and the BKSU (25 feet maximum). Attach this wire to the ground lug on the lower right side of the BKSU.

## Expansion Key Service Unit (EKSU)

The Triad-S Expansion Key Service (EKSU) is a wall-mountable cabinet that houses the circuitry to support two 3x8 boards. The EKSU mounts directly above the BKSU. The EKSU has cables that connect power and digital communications from the EKSU to the BKSU.

The EKSU can provide six additional CO lines and sixteen station growth that takes the system to it's maximum configuration of twelve CO lines and 32 stations.

The EKSU contains one expansion interface board (EIB) which includes power supply and connector interface buses. A number 12 AWG copper wire should be used to ground between the ground source and the BKSU (25 feet maximum). Attach this wire to the ground lug on the right side of the EKSU.

## Peripheral Boards

### Three 8 CO Line and Eight Digital Station Board (CKIB)

This board provides three loop start CO line interfaces and eight Digital Key Telephone interfaces. This board can be installed in the BKSU or EKSU. If all CKIB boards are installed in the BKSU and EKSU, the system capacity is 12 CO lines and 32 digital stations.

The CO line interfaces are brought out on the right side of the BKSU/EKSU utilizing RJ11 connectors. The digital station interfaces are brought out utilizing a 50-pin amphenol connector on the left side of the BKSU/EKSU.

The station interface for stations 100-107 also provides the wiring interface for the additional features that require input/output connections. These features are music sources, relay connections, and external page connections.







## **Three 8 CO Line and 8 Single Line Station Board (CSIB)**

This board provides three loop start CO line interfaces and eight Single Line Telephone interfaces. These interfaces support 2500 touch tone telephone instruments and/or voice mail interfaces. This board can be installed in the BKSU or EKSU. A maximum of three CSIBs may be installed between the BKSU/EKSU to provide a maximum of 24 single line interfaces.

The CO line interfaces are brought out on the right side of the BKSU/EKSU utilizing RJ11 connectors. The digital station interfaces are brought out utilizing a 50-pin amphenol connector on the left side of the BKSU/EKSU.

The CSIB can accept the optional Message Wait Unit (MSGU) to provide message wait lamp capability to the eight instruments attached.

## **Optional Boards**

### **Miscellaneous Service Unit (MISU)**

This board provides two RS232C interfaces for system programming, caller ID, and SMDR applications. The board also contains a second music source to increase the music channels in the system from one to two. The board installs in the BKSU.

### **Modem Unit (MODU)**

This board provides a 9600 baud modem for remote system programming. The modem is accessed by dialing station 499.

### **Message Wait Unit (MSGU)**

This board provides message wait lamp capability to the eight attached SLT instruments. This board is installed on the CSIB. Each CSIB may have one MSGU installed.

### **DTMF Receiver Unit (DTMF-A)**

This board provides four DTMF receivers for CSIB use and should be installed any time a CSIB board is installed in the system. The BKSU supports one DTMF-A unit.

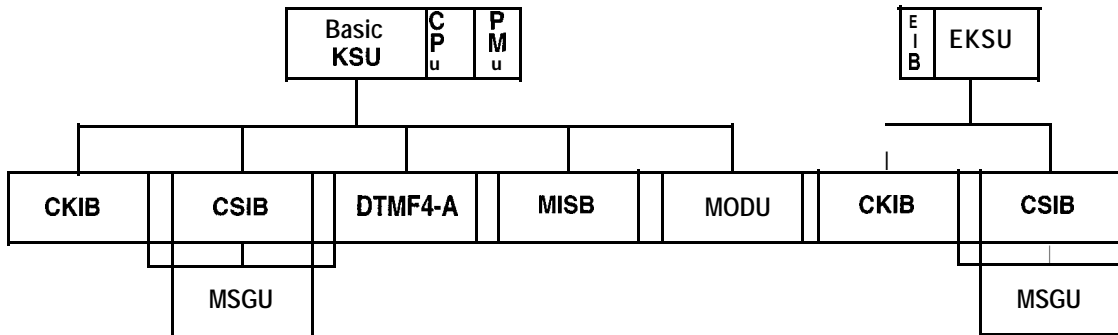


Figure 9-1: Starplus Triad-S System

<b>BKSU Capacity</b>	
CO/PBX/Centrex Lines:	6 lines maximum (3 per CKIB/CSIB board)
Station:	
Digital Terminal:	<b>16 maximum</b> (8 per CKIB board)
Single Line Telephone:	8 maximum (8 per CSIB board)
<b>BKSU + EKSU Capacity</b>	
CO/PBX/Centrex Lines:	12 lines maximum
Station:	
Digital Terminal:	32 maximum (8 per CKIB board)
Single line Telephone:	24 maximum (8 per CSIB board) ( <i>System max: 12 lines, 8 digital telephones, 24 SLT</i> )
DTMF Receiver	Basic: 1 each With DTMF4-A: 5 (Provides 4 additional services)
DTMF Sender	Unlimited
I/O Ports	2 maximum with MISU
<b>Conference</b>	
Circuit:	5 conference per system
Parties:	8 parties per conference (5 of the 8 can be external)
DISA Circuit	12 CO lines may be programmed simultaneously
Attendants	Up to 3 stations can be designated as attendants

Table 9-1: Digital System Capacity





<b>Digital DSS/DLS Units</b>	8 maximum ▪ each DSWDLS unit requires 1 station port and reduces station capacity by 1. DSWDLS maps may not be duplicated at a station. One station may have up to three DSWDLS units associated with it.
<b>Loop Supervision Disconnect</b>	700 msec. duration ▪ CO or Internal Call to SLT
<b>Paee Zones</b> Internal Paging: External Paging: (One/Two Way)	4 maximum ▪ software controlled 1 maximum
<b>Hunt Groups</b> Groups: Members: Types:	Software supports up to 8 groups Software supports up to 8 stations in each group Station or Pilot Hunting
<b>Voice Mail Groups</b> Groups: Members (Ports): Integrated Method: VM Message Wait: VM Disconnect Signal:	Software supports up to 8 groups Software supports up to 8 stations In-band signalling (DTMF) Programmable 12-digit (DTMF) string If no digits are programmed, 15 seconds of silence followed by busy tone
<b>ACD Groups</b> Groups: Members: RAN Announcements: Calls in Queue:	Software supports up to 16 groups Software supports up to 16 stations in each group Eight RAN Announcements per system, 3 per ACD group All CO lines may be queued for an ACD group
<b>UCD Groups</b> Groups: Members: RAN Announcements: Calls in Queue:	Software supports up to 8 groups Software supports up to 8 stations in each group Eight RAN Announcements per system, 3 per UCD group All CO lines may be queued for a UCD group

**Table 9-1: Digital System Capacity**

<b>AC Input to Power Supply</b>	117 VAC±10%, 60Hz single phase
<b>Power Consumption</b>	74 watts
<b>Power Supply Fuse ▪ AC Input</b>	1A/250V

**Table 9-2: Electrical Specifications**



Longitudinal Balance	60 dB from 200 Hz to 1,000 Hz 40 dB from 1,000 Hz to 40,000 Hz
Idle Channel Noise	Less than 15 dB for all connections
Cross Talk Attenuation	Greater than 80 dB Station to CO and Station to Station
Single Frequency Distortion 300 Hz - 3,400 Hz	Station to CO and Station to Station: Better than 2.0% or 34 dB for an output Level - 30 dBm to 0 dBm
Ringing Sensitivity	16 Hz to 30 Hz at 40 Vrms minimum 03 Hz to 67 Hz at 50 Vrms minimum
CO Line Signaling - DTMF	Frequency pair at -5 dBm $\pm$ 0.5 dBm Frequency tolerance $\pm$ 1.5%
CO Line Signaling - Dial Pulse	10 PPS
Input Level	+10 dB maximum
Music Source Music on Hold/Background Music Input	600 ohm input at 0 dBm maximum from music source
Contact Rating Multipurpose Relay	1 amp @ 24 V DC (two on MBU board)
External Paae Port Output Impedance Output Power without Compression	600 ohm @ 0 dBm 5 milli-watt maximum
CSA File Number (NRTL/C)	LR85633

Table 9-2: Electrical Specifications

Operating Temperature	32e to 104s F    0e to 40s C
Optimum Temperature	60e to 80e F    15s to 26s C
Storage Temperature	-40e to 140e F    4e to 60e C
Relative Humidity	5% to 90% non-condensing
Heat Dissipation (BTU)	1481 BTU/Hour

Table 9-3: Environmental Specifications



<b>Digital Terminals</b>	Maximum length of station loop: 1,000 feet of 24 AWG (2 wire, inside wiring, twisted cable)
<b>Single Line Telephones</b>	2,000 feet of 24 AWG

**Table Q-4: Loop Limits**

<b>DTMF Dialing</b>	
Frequency Deviation	± 1.5%
Rise Time	5 msec
Duration of DTMF Signal	70-100 msec
Interdigit Time	100-130 msec
<b>Pulse Dialing</b>	
Pulse Dialing Rate	10 pps
Pulse Break/Make Duration	60/40 or 66/33
<b>CO Type</b>	Loop start, 600 ohm, current sensing

**Table Q-5: Dialing Specifications**

**System Port Specification, Facility Interface and Service Order Codes**

<b>Interface Card</b>	<b>Ringer Equivalent Number (REN)</b>	<b>Facility Line Interface</b>	<b>Jack Type</b>
Loop start	1.3 B	02LS2	RJ11C

**Table Q-6: Trunk Ordering Information: Public Network Lines**

<b>Item</b>	<b>Height</b>	<b>Width</b>	<b>Depth</b>	<b>Weight</b>
<b>Triad-S Basic Key Service Unit</b>	13.6 in	10.85 in	4.9 in	5.3 Kg
<b>Triad-S Expansion Key Service Unit</b>	13.6 in	10.85 in	4.9 in	4.6 Kg

**Table Q-7: Physical Dimensions and Weight**



<b><u>Memory</u></b> Programmable Read-Only Memory (EPROM) Random Access Memory (RAM)	1 Megabyte 384 K expandable to 640 K
Telephone Transmitter	Electret mic compatible
<b><u>CO/PBX/Centrex Paths</u></b> Basic KSU Basic KSU + Expansion KSU Intercom Paths	3/6 CO/PBX/Centrex talkpaths (non-blocking) 12 CO/PBX/Centrex talkpaths (non-blocking) Non-blocking
<b><u>Music Channels</u></b> Music On-Hold/Background Music	2 channels with optional MISU per system (1 MOH, 1 BGM [different sources]) <i>Additional music channels available through CO lines. Connections up to 8 maximum optional. Talk battery required.</i>
<b><u>Account Codes</u></b> Number of Digits Per Account Code Number of Account Codes - Unverified Number of Account Codes - Verified	Up to 12 unverified digits Unlimited 250 account codes
<b><u>Dialina Memory</u></b> Station Speed Dialing System Speed Dialing	20 bins per station (24 digits) 80 bins per system (24 digits)

Table Q-8: Miscellaneous Specifications



Optional Boards



Type of Signal	Frequency	Signal Duration
<b>Single Line Signals:</b>		
Incoming CO Line	20 Hz 90 VAC	.8 on / 2.8 off repeated
Intercom Tone Ringing	20 Hz 90 VAC	.2 on / .4 off / .6 on / 3.0 off repeated
Transferred CO Line	20 Hz 90 VAC	.8 on / 2.8 off repeated
CO Line Recall	20 Hz 90 VAC	.8 on / .2 off / .2 on / .2 off
CO Queue Call Back	20 Hz 90 VAC	1 sec on / 2 sec off repeated
<b>Single Line Confidence Tones:</b>		
Intercom Ringback	440 + 480	.8 on / 2.8 off repeated
Transferred CO Line	440 + 480	.8 on / 2.8 off repeated
Call Announce	440	.8 on / 2.8 off repeated
Busy Tone	480 + 620	.5 on / .5 off repeated
Error Tone	480 + 620	.2 on / .2 off repeated
Intercom Dial Tone	350 + 440	Steady
DND Tone	350 + 440	.4 on / .4 off / .2 on / .2 off / .2 on repeated
Paging Confirmation Tone	350 + 440	1 sec on
(Conference Time-out Tone	440	Programmable Steady Tone
Confirmation Tone	350 + 440	.8 on / .8 off 3 bursts

**Table 9-9: Single Line Audible Signals**



Feature / Function	Flash Rates	LED Color
Incoming CO Ringing	30 ipm flash	Red
Transferred CO Ringing	120 ipm flash	Red
CO Line Recalling	480 ipm flutter	Red
System Hold	60 ipm double wink	Red
Exclusive Hold (I-Hold)	120 ipm flash	Green
I-Hold (system)	60 ipm wink	Green
CO Line Queue Call Back	480 ipm flutter	Red
CO Line in Use	On steady	Red
CO Line Idle	Off	Off
Exclusive Hold (other stations)	On steady	Red

Table 9-10: Digital Station Visual Signals - CO Line Buttons

Feature / Function	Flash Rates	LED Color
Off-Hook (busy)	On steady	Red
Incoming Intercom Ring	120 ipm flutter	Red
Call Announce (H or P mode)	Steady	Red
Message Waiting Call Back	120 ipm flutter	Red
(Station in Do Not Disturb	60 ipm double flash	Red
Camp On (by station)	120 ipm flutter	Red
(Automatic Call Back	120 ipm flash	Red
Station Unavailable (ACD/UCD)	60 ipm flash	Red

Table 9-11: Digital Station Visual Signals - DSS / BLF Buttons





Feature / Function	Flash Rates	LED Color
Call Forward (active)	30 ipm flash	Red
Message Wait (active)	Steady	Red
Camp On (active)	120 ipm flash	Red
Call Back (active - initiator)	120 ipm flash	Red
CO Line Queue (active)	480 ipm flutter	Red
DND (active)	Steady	Red
Mute	Steady	Red
(On/Off	Steady	Red
Conference	Steady	Red
Speed (moment on until bin address dialed)	Steady	Red
Personalized Messages	15 ipm flash	Red
Tone Intercom Call (hold button)	15 ipm flash	Red
Loop	same as CO	Green / Red
Pool	same as CO	Green / Red
Transfer	None	None

**Table 9-12: Digital Station Visual Signals - Feature / Function Buttons**



Feature / Indication	Sound in HZ	Occurrence / Cadence
incoming CO Line	User selectable *	.8 on / 2.4 sec off repeated
Intercom Tone Ringing	User selectable *	.4 sec on / .4 sec off / .4 sec on / 2 sec off repeated
Intercom Call Announce (H and P)	935	.2 sec on / .2 sec off 2 bursts
Transferred CO Line	User selectable *	.8 sec on 12.4 sec off repeated
CO Line Recall	User selectable *	.2 sec on I .6 sec off repeated
Message Waiting Call Back	User selectable *	.4 sec on / .4 sec off / .4 sec on / .2 sec off repeated
Queued CO Line Call Back	User selectable *	.2 sec on I .6 sec off repeated
Camp On	935	.2 sec burst
* Only one tone can be selected by a station at a time. This tone is used for all signaling that uses the User Selectable tone.		

Table 9-13: Signals to Called Stations (Digital Station)

Feature / Indication	Sound in Hz	Occurrence / Cadence
Incoming Ring Back Tone	1215 / 1417	.5 sec on   2.5 sec off repeated
Intercom Call Announce	935	.2 sec on / .25 sec off 3 times
Busy Tone	701	.5 sec on I .5 sec off repeated
Error Tone	701	.25 sec on I .25 sec off repeated
Intercom Dial Tone	420	Continuous
DND Tone	701	.2 sec on I .2sec off 3 times, pause, repeated
Paging Confirmation Tone	935	1 second burst
Conference Time-out Warning Tone	420	1 second burst
Programming Confirmation Tone	1471	1 second burst
Programmed Error Tone	1471	.25 sec on I .25 sec off 6 times
Call Waiting	735	.5 second burst

Table 9-14: Signals to Calling Station (Digital Station)





<b>VM Condition Action</b>	<b>Tone Received</b>	<b>Sound in Hz</b>	<b>Occurrence / Cadence</b>
Off Hook	Internal dial tone - no stutter tone	350 / 440	Continuous
Calls an Internal Station (idle)	Ring back tone	440 / 480	1 sec on / 3 sec off repeated
Initiate a Transfer (hook-flash)	Internal dial tone (no stutter tone)	350 / 440	Continuous
Calls an Internal Station - busy Call back not allowed	Busy tone	4801620	.5 sec on / .5 sec off repeated
Calls an Internal Station - DND	Busy tone	4801620	.5 sec on / .5 sec off repeated
Calls an Internal Station - programmed I not equipped	Busy tone	4801620	1 sec on / .5 sec off repeated
Calls an Internal Station - not programmed I not equipped	Reorder tone	4801620	1 sec on 1.2 sec off repeated
Dials Invalid Digit I FA Code I station	Reorder tone	4801620	.2 sec on / .2 sec off repeated
Calling Party Disconnects (internal or external call)	Silence or disconnect digits	0 or DTMF Digits	Continuous or as programmed

**Table 9-15: Voice Mail Confidence Tones**



## Digital Station Instruments

### 8-Button Enhanced Digital Terminal

The Triad-S Enhanced 8-Button Digital Terminals are fully modular instruments with five fixed feature buttons and eight buttons that can be flexibly assigned as CO/PBX/Centrex lines, Station DSS, or feature/function buttons. This telephone also features an integrated speakerphone, call announce with handsfree intercom, a volume control button, and long life LEDs.



Figure 9-2: STARPLUS Enhanced (8-Button) Digital Terminal



## 12-Button Executive Digital Terminals

The Triad-S Executive 12-Button Digital Terminals are fully modular instruments with 11 fixed feature buttons and 12 buttons that can be flexibly assigned as CO/PBX/Centrex lines, Station DSS, or feature/function buttons. This telephone also features an integrated speakerphone, call announce with handsfree intercom, a volume control bar, and long life LEDs.



Figure 9-3: Triad-S Executive (12-Button) Digital Terminal



## 24-Button Executive/Enhanced Digital Terminals

The STARPLUS Executive/Enhanced 24-Button Digital Terminals are fully modular instruments with 11 fixed feature buttons and 24 buttons that can be flexibly assigned as CO/PBX/Centrex lines, Station DSS, or feature/function buttons. This telephone also features an integrated speakerphone, call announce with handsfree intercom, a volume control bar, and long life LEDs.



Figure 9-4: Triad-S Executive (24-Button) Digital Terminal





## Digital DSS/DLS Console



The station port used for a DSS/ DLS Console can be assigned as a Direct Station Select or Direct Line Select depending on customer need. All forty-eight (48) buttons on the unit can be assigned as DSS, or flexible buttons. Refer to *Figure 4-1:DSS Console Map #1, Chapter 4, page 4-5* for an explanation of the mapping options.

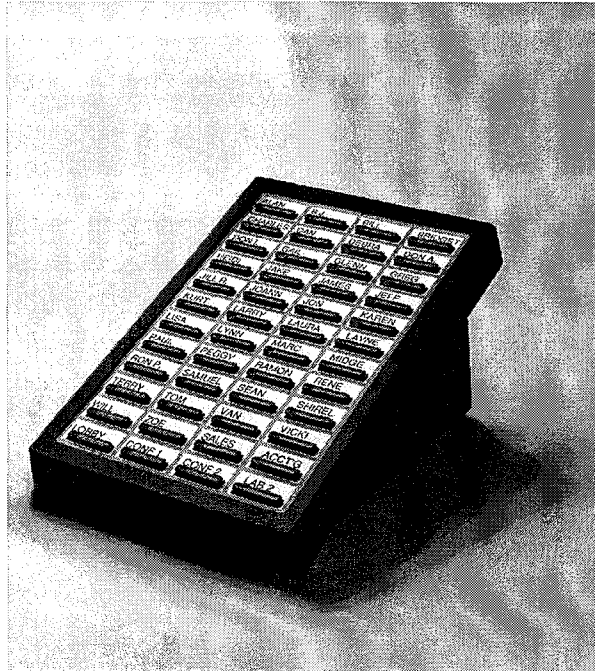


Figure 9-5: Triad-S Digital DSS/DLS Console









# A ICLID GENERAL DESCRIPTION

## Introduction

This specification provides the functional and implementation definition for the addition of the ICLID feature to the STARPLUS Triad-S™ Digital Key Telephone System.

## System Configuration

The following illustration depicts the configuration presumed for the implementation of the ICLID feature for the system. The phones are presumed to be in an ACD or UCD group in order to allow proper operation with the system.

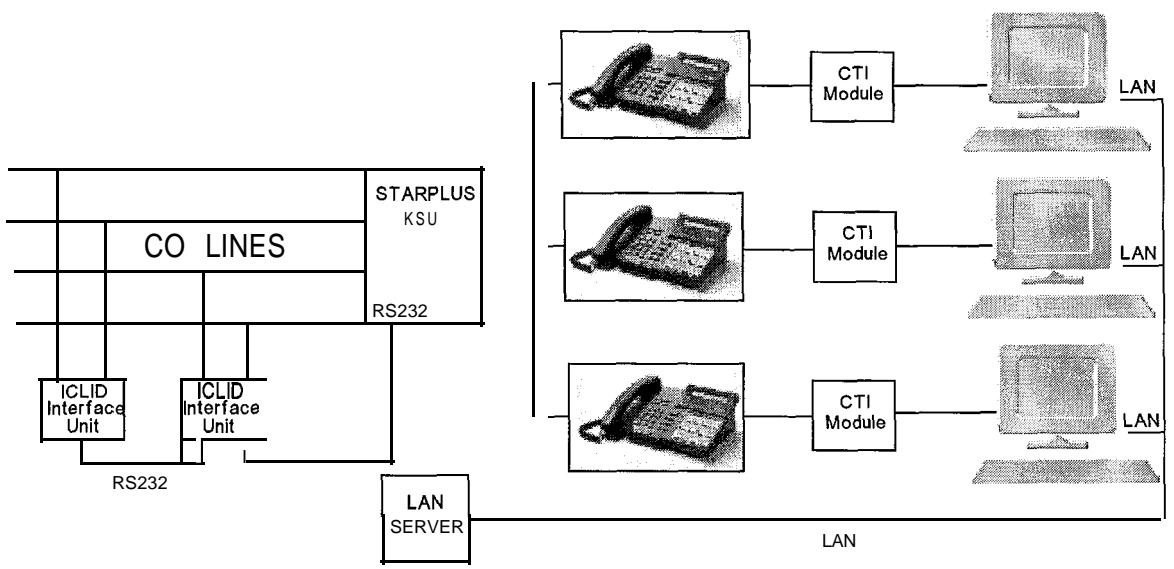


Figure A-I: CTI System Configuration



## Functional Performance

The ICLID (Incoming Calling Line **ID**entification) feature has been added to the Triad-S system as a first step in providing it generally. The key system operation of this feature is dependent on the feature first being activated from the central office so that the numbers of the calling party will be delivered over the individual tip and ring of the CO lines during the first silent interval between ringing.

The features implemented are:

- 1 Display of calling number/name on initial ring-in of a line on the display **keysets**.
- 2 Recording of incoming call number/name on the SMDR printout.
- 3 Management of an "unanswered call" table from a display phone with appropriate privilege level to allow tracking of unanswered calls for statistical information and return call management.
- 4 Local translation of incoming numbers to names according to a table of number/name equivalences which can be administered by the system.

## Calling Number/Name Display

This feature is intended as the basic offering of the ICLID service when associated with the Triad-S system. Essentially, whenever an incoming call is received at the system, the number received along with the ringing signal will be stored in the line control tables and used at various points in the processing of the call.

The primary function will be that the calling number will be displayed (if available) at any point at which the "LINE RINGING" is displayed in the system.



***If 2 lines are ringing in at the same time, the display will show the oldest line information. After 1 of the lines is answered, the display will show the information on the unanswered line.***

In addition, with the availability of the *calling name* feature, if the calling name is provided, the system will deliver that to the display instead of the calling number.

The specification for this feature is that the system will display its "LINE RINGING" message as normally implemented and alter that display to the calling number/name if the information is made present on the line. This will allow the normal operation of the system when ICLID information is not presented or the device which intercepts it and provides the information to the KSU is missing or failed.

**000000001111111122222**  
**123456789012345678901234**





bbbbNNNNNNNNNNNNNNNNbbbb

OR

XXXXXXXXXXXXXXXXXXXXXXXXXX

If the calling name is available, the display will be shown as above where X... represents the internal table storage of the calling name. Note that although the Central Office delivery of the calling name is 15-characters, the internal table used to store the name for translation of a received number is 24-characters in width. If the Central Office delivers a name, it will be positioned left justified in the 24-character field on the display. Note that if a number is received which matches a number/name translation, the translated name will be used and the name delivered from the Central Office will be effectively discarded.

If no name is available from the Central Office or a translation table the delivered number will be displayed as the repeated character N (14 characters).

### Incoming Number/Name SMDR

As with the above feature implementation, the intent is that the system operate normally in the absence of ICLID information or the failure of the ICLID equipment. If the information is present at the time that an SMDR record is generated for a call, it will alter the content and format of the SMDR output record.

If the calling number is available, the number will be output in the SMDR record in the same location as the dialed number is located in the outgoing calls.

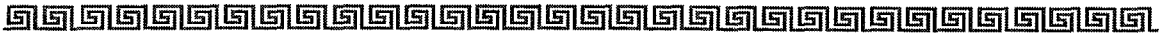
If the calling name is present, an additional line will be output in the SMDR identifying the name. This record will immediately follow the normal SMDR record. The normal SMDR record will include an indicator which identifies that a following record with name identification is present.

Unanswered calls will be recorded on the SMDR as a system option to allow the identification of callers for statistical and call-back purposes. These calls will be identified with an indicator in the SMDR record.

### Unanswered Call Management

An Unanswered Call Management Table with 50 entry capacity for the Triad-D systems are maintained in the system, The calling number/name information pertaining to any unanswered call will be placed in this table at the time the system has determined that the call has been abandoned. This table may be accessed from any station display phone so that the unanswered calls may be reviewed and handled by the end user.





## Local Name Translation

An administrable table provides a local translation from a received calling number to a name. This table can be administered by the customer from the attendant console location, In cases of conflict between the name delivered from the CO and that in the local translation table, the local translation table shall rule, 200 entries are provided for the Triad-S systems.





# B PART NUMBERS

<b>TRIAD-S™</b> Basic KSU (BKSU)	5000-00
<b>TRIAD-S™</b> Expansion KSU (EKSU)	5002-01
DSS Console (Off-White)	TR9010-08
DSS Console (Burgundy)	TR9010-60
DSS Console (Charcoal)	TR9010-71
8-Button Basic (Off -White)	TR9011-08
8-Button Basic (Burgundy)	TR9011-60
8-Button Basic (Charcoal)	TR9011-71
24-Button Enhanced (Off-White)	TR9013-08
24-Button Enhanced (Burgundy)	TR9013-60
24-Button Enhanced (Charcoal)	TR9013-71
12-Button Executive (Off-White)	TR9014-08
12-Button Executive (Burgundy)	TR9014-60
12-Button Executive (Charcoal)	TR9014-71
24-Button Executive (Off-White)	TR9015-08
24-Button Executive (Burgundy)	TR9015-60
24-Button Executive (Charcoal)	TR9015-71
CTI Connector Box	9020-00
Caller Identification Interface Unit (TCI)	1480-00
" 9600 Baud Modem (MODU)	5030-30
4-circuit DTMF Receiver Unit (DTMF-A)	9033-I 0
3 CO line x 8 Circuit Digital Telephone Interface Board (CKIB)	5032-00
3 CO line x 8 Circuit Single Line Interface Board (CSIB)	5033-00
Message Wait Unit (MSGU)	5033-I 0
Miscellaneous Interface Service Unit (MISU)	5035-00

Table B-I : STARPLUS TRIAD-S™ Part Numbers



# C CUSTOMER DATABASE PROGRAMMING



PROGRAM CODE	FLEX BTN	FUNCTION	FORMAT	DEFAULT	CUSTOMER DATA
FLASH 01	SYSTEM TIMERS:				
	1	System Hold Recall Timer	000-300	060 sec	
	2	Exclusive Hold Recall Timer	000-300	180 sec	
	3	Attendant Recall Timer	00-60	01 min	
	4	Transfer Recall Timer	000-300	045 sec	
	5	Preset Forward Timer	00-99	10 sec	
	6	Call Forward No/Answer Timer	000-600	15 sec	
	7	Pause Timer	1-9	2 sec	
	8	Call Park Recall Timer	000-600	180 sec	
	9	Conference/DISA Timer	00-99	10 sec	
	10	Paging Time-out Timer	00-60	15 sec	
	11	CO Ring Detect Timer	200-900	3 (100 ms)	
	12	SLT DTMF Receiver Timer	005-100	020	
	13	Message Wait Reminder Tone	000-104	000 min	
	14	SLT Hook Flash Timer	0.5-2.0	10 (1 sec)	
	15	SLT Hook Flash Debounce Timer	000-100	100 ms	
	16	SMDR Call Qualification Timer	00-60	30 sec	
	17	Automatic Call Back Timer	00-99	03 sec	
	18	Reminder Ring Timer	00-99	00 sec	
	19	Release Guard Timer	01-50	3 (300 ms)	
20	Flexible Inter-Digit Timeout	01-99	5 sec		

Table C-1 : System Parameters



PROGRAM CODE	FLEX BTN	FUNCTION	FORMAT	DEFAULT	CUSTOMER DATA
FLASH 02	ADDITIONAL SYSTEM TIMERS:				
	1	Repeat Redial Timer	006-999	60 sec	
	2	Attendant Display Timer	00-99	1 sec	
	3	Call Coverage Ring Timer	00-99	5 sec	
	4	Modem Answer T/O	25-99	25 sec	
	5	Pulse Dial Inter-Digit Timer	300-600	300 ms	
	6	DTMF Time Operation	100/999 ms	100ms/100ms	
FLASH 05	SYSTEM FEATURES 1 PROGRAMMING				
	1	Attendant Override	Disabled/ Enabled	Disabled	
	2	Hold Preference	System/ Exclusive	System	
	3	External Night Ring	Disabled/ Enabled	Disabled	
	4	Executive Override Warning Tone	Disabled/ Enabled	Enabled	
	5	Page Warning Tone	Disabled/ Enabled	Enabled	
	6	Background Music Channel	Disabled/ Enabled	Enabled	
	7	Least Cost Routing	Disabled/ Enabled	Disabled	
	8	Account Codes – Forced	Disabled/ Enabled	Disabled	
	9	Group Listening	Disabled/ Enabled	Disabled	
	10	Idle Speaker Mode	Disabled/ Enabled	Disabled	
	11	Call Cost Display Feature	Disabled/ Enabled	Disabled	
	12	Music-On-Hold	Disabled/ Enabled	Enabled	
13	Call Qualifier Tone Option	Disabled/ Enabled	Disabled		

Table C-1 : System Parameters (Continued)







PROGRAM CODE	FLEX BTN	FUNCTION	FORMAT	DEFAULT	CUSTOMER DATA	
FLASH 06	SYSTEM FEATURES 2 PROGRAMMING					
		1	Privacy Release Tone Option	Disabled/ Enabled	Enabled	
		3	Distinctive CO Ringing	Disabled/ Enabled	Enabled	
		3	Verified Account Code	Disabled/ Enabled	Disabled	
		4	Call Forward Display	Disabled/ Enabled	Enabled	
		5	External Day Ring	Disabled/ Enabled	Disabled	
		6	Overflow Station Forward	Disabled/ Enabled	Disabled	
		7	Direct Transfer Mode	Disabled/ Enabled	Enabled	
		8	Station ID Lock	Disabled/ Enabled	Disabled	
		9	LCR Call Progress	Disabled/ Enabled	Enabled	
		10	One-Touch Recording Warning Tone	Disabled/ Enabled	Enabled	
		11	Ringback on Transfer	Disabled/ Enabled	Disabled	

Table C-1 : System Parameters (Continued)



PROGRAM CODE	FLEX BTN	FUNCTION	FORMAT	DEFAULT	CUSTOMER DATA
FLASH 07	FLASH RATES (Programmable)				
	1	Incoming CO Line Ringing	00-28	Red 30ipm flash (08)	
	2	Incoming Intercom Ringing	00-28	Red 120ipm flutter (11)	
	3	Call Forward Button	00-28	Red Steady On (01)	
	4	Message Wait/VM Button	00-28	Red Steady On (01)	
	5	Message CallBack DSS/BLF	00-28	Red 120ipm flutter (11)	
	6	Do Not Disturb DSS/BLF	00-28	Red 60ipm flash (04)	
	7	Auto CallBack DSS/BLF	00-28	Red 120ipm flash (10)	
	8	UCD Avail/Unavail DSS/BLF	00-28	Red 60ipm flash (04)	
	9	Transfer CO Ringing	00-28	Red 120ipm flash (10)	
	10	Recall CO Ringing	00-28	Red 480ipm flutter (08)	
	11	Queued CO Ringing	00-28	Green 480ipm flutter (22)	
	12	Exclusive Hold	00-28	Green 120ipm flash (26)	
	13	System Hold	00-28	Red 60ipm dbl wink (04)	
	14	In Use Hold (I-Hold)	00-28	Green 60ipm flash (17)	
	15	Camp-On Button	00-28	Red 120ipm flash (12)	
	16	Call Back Button	00-28	Red 120ipm flash (10)	
	17	Line Queue Button	00-28	Red 480ipm flutter (08)	
	18	Do Not Disturb Button	00-28	Red Steady On (01)	
19	Intercom Hold Button	00-28	Red 15ipm flash (09)		

Table C-1 : System Parameters (Continued)



PROGRAM CODE	FLEX BTN	FUNCTION	FORMAT	DEFAULT	CUSTOMER DATA
FLASH 09	1	Leading Digit 1		None	
	2	Leading Digit 2		None	
	3	Leading Digit 3		None	
	4	Leading Digit 4		None	
	5	Leading Digit 5		None	
	6	Leading Digit 6		None	
	7	Leading Digit 7		None	
	8	Leading Digit Option	Disabled/ Enabled	Disabled	
	9	Centrex Digit Length	4-5 digits	4 digits	
FLASH 09	10	Four Digit Voice Mail ID	3-4 digits	3 digits	
	13	MOH Assignments	3-8 Channels	None	
	14	MOH Assignments	3-8 Channels	None	
	15	MOH Assignments	3-8 Channels	None	
	16	MOH Assignments	3-8 Channels	None	
	17	MOH Assignments	3-8 Channels	None	
FLASH 10		ATTENDANT STATION ASSIGNMENT	100-131 or 100-351	STA 100	
FLASH 11	1	SYSTEM TIME AND DATE	HR:M/D, 12/2 4	MM/DD/YY, 12Hr	
FLASH 12		PBX DIALING CODES	5 (2-digits)	None	
FLASH 13	1	EXECUTIVE/SECRETARY PAIRS	Sta #, Sta #	None	
	2	EXECUTIVE/SECRETARY PAIRS	Sta #, Sta #	None	
	3	EXECUTIVE/SECRETARY PAIRS	Sta #, Sta #	None	
	4	EXECUTIVE/SECRETARY PAIRS	Sta #, Sta #	None	
FLASH 14	1	ON BOARD RELAY PROGRAMMING		None	
	2	ON BOARD RELAY PROGRAMMING		None	

Table C-1 : System Parameters (Continued)





PROGRAM CODE	FLEX BTN	FUNCTION	FORMAT	DEFAULT	CUSTOMER DATA
FLASH 15	BAUD RATE ASSIGNMENTS				
	1	Port #1 (Optional MISU)		9600 Baud	
	2	Port #2 (Optional MISU)		9600 Baud	
	3	Port #3 (Optional Modem)		9600 Baud	
FLASH 20	ACCESS CODES				
	1	DISA Access Code	100-999	100	
	2	Database Admin Password	0000-9999	3226	
FLASH 21	STATION MESSAGE DETAIL RECORDING				
	1	SMDR Enable/Disable	Disabled/ Enabled	Disabled	
	2	Long Distance/Local Assignment	LD/All	LD Only	
	3	Character Print Assignment	80/30	80	
	4	Baud Rate Display		9600	
	5	SMDR Port Assignments	1/2/3/4	Port #1	

Table C-1 : System Parameters (Continued)



PROGRAM CODE	FLEX BTN	FUNCTION	FORMAT	DEFAULT	CUSTOMER DATA
FLASH 22	WEEKLY NIGHT MODE SCHEDULE				
	1	Automatic/Manual Operation	Auto/Manual	Manual	
	2	Day of Week Programming	08:00-17:00 ####-####	(0-4) (5-6)	
	3	Day of Week Programming	08:00-17:00 ####-####	(0-4) (5-6)	
	4	Day of Week Programming	08:00-17:00 ####-####	(0-4) (5-6)	
	5	Day of Week Programming	08:00-17:00 ####-####	(0-4) (5-6)	
	6	Day of Week Programming	08:00-17:00 ####-####	(0-4) (5-6)	
	7	Day of Week Programming	08:00-17:00 ####-####	(0-4) (5-6)	
	8	Day of Week Programming	08:00-17:00 ####-####	(0-4) (5-6)	

Table C-1 : System Parameters (Continued)



ROUTE	BIN	NAME	ROUTE	BIN	NAME
000	100		037	137	
001	101		038	138	
002	102		039	139	
003	103		040	140	
004	104		041	141	
005	105		042	142	
006	106		043	143	
007	107		044	144	
008	108		045	145	
009	109		046	146	
010	110		047	147	
011	111		048	148	
012	112		049	149	
013	113		050	150	
014	114		051	151	
015	115		052	152	
016	116		053	153	
017	117		054	154	
018	118		055	155	
019	119		056	156	
020	120		057	157	
021	121		058	158	
022	122		059	159	
023	123		060	160	
024	124		061	161	
025	125		062	162	

Table C-2: Directory Dialing Defaults (FLASH 23)





ROUTE	BIN	NAME	ROUTE	BIN	NAME
026	126		063	163	
027	127		064	164	
028	128		065	165	
029	129		066	166	
030	130		067	167	
031	131		068	168	
032	132		069	169	
033	133		070	170	
034	134		071	171	
035	135		072	172	
036	136		073	173	
074	174		111	211	
075	175		112	212	
076	176		113	213	
077	177		114	214	
078	178		115	215	
079	179		116	216	
080	180		117	217	
081	181		118	218	
082	182		119	219	
083	183		120	220	
084	184		121	221	
085	185		122	222	
086	186		123	223	
087	187		124	224	
088	188		125	225	

Table C-2: Directory Dialing Defaults (FLASH 23) (Continued)



ROUTE	BIN	NAME	ROUTE	BIN	NAME
089	189		126	226	
090	190		127	227	
091	191		128	228	
092	192		129	229	
093	193		130	230	
094	194		131	231	
095	195		132	232	
096	196		133	233	
097	197		134	234	
098	198		135	235	
099	199		136	236	
100	200		137	237	
101	201		138	238	
102	202		139	239	
103	203		140	240	
104	204		141	241	
105	205		142	242	
106	206		143	243	
107	207		144	244	
108	208		145	245	
109	209		146	246	
110	210		147	247	
148	248		174	274	
149	249		175	275	
150	250		176	276	
151	251		177	277	

Table C-2: Directory Dialing Defaults (FLASH 23) (Continued)







ROUTE	BIN	NAME	ROUTE	BIN	NAME
152	252		178	278	
153	253		179	279	
154	254		180	280	
155	255		181	281	
156	256		182	282	
157	257		183	283	
158	258		184	284	
159	259		185	285	
160	260		186	286	
161	261		187	287	
162	262		188	288	
163	263		189	289	
164	264		190	290	
165	265		191	291	
166	266		192	292	
167	267		193	293	
168	268		194	294	
169	269		195	295	
170	270		196	296	
171	271		197	297	
172	272		198	298	
173	273		199	299	

Table C-2: Directory Dialing Defaults (FLASH 23) (Continued)



PROGRAM CODE	FLEX BTN	FUNCTION	PILOT or STATION	STATIONS (Up to 8)
FLASH 30	HUNT GROUPS:			
	1	Hunt Group 1 (450)		
	2	Hunt Group 2 (451)		
	3	Hunt Group 3 (452)		
	4	Hunt Group 4 (453)		
	5	Hunt Group 5 (454)		
	6	Hunt Group 6 (455)		
	7	Hunt Group 7 (456)		
	8	Hunt Group 8 (457)		
	9	Hunt Group 9 (458)	RAN	
	10	Hunt Group 10 (459)	RAN	
	11	Hunt Group 11 (460)	RAN	
12	Hunt Group 12 (461)	RAN		

Table C-3: Hunt Group Parameters (FLASH 30)

INDEX	DEFAULT COS				NEW DIGITS (12 MAX.)				INDEX	DEFAULT		NEW		A	X	.	)
	D	N	D	N	D	N	D	N		1	2	M					
00	1	1							32	1	1						
01	1	1							33	1	1						
02	1	1							34	1	1						
03	1	1							35	1	1						
04	1	1							36	1	1						
05	1	1							37	1	1						
06	1	1							38	1	1						
07	1	1							39	1	1						
08	1	1							40	1	1						
09	1	1							41	1	1						
10	1	1							42	1	1						

Table C-4: Verified Account Codes (FLASH 31)





INDEX	DEFAULT		NEW cos		DIGITS (12 MAX.)	INDEX	DEFAULT		NEW cos		DIGITS (12 MAX.)
	D	N	D	N			D	N	D	N	
11	1	1				43	1	1			
12	1	1				44	1	1			
13	1	1				45	1	1			
14	1	1				46	1	1			
15	1	1				47	1	1			
16	1	1				48	1	1			
17	1	1				49	1	1			
18	1	1				50	1	1			
19	1	1				51	1	1			
20	1	1				52	1	1			
21	1	1				53	1	1			
22	1	1				54	1	1			
23	1	1				55	1	1			
24	1	1				56	1	1			
25	1	1				57	1	1			
26	1	1				58	1	1			
27	1	1				59	1	1			
28	1	1				60	1	1			
29	1	1				61	1	1			
30	1	1				62	1	1			
31	1	1				63	1	1			
64	1	1				96	1	1			
65	1	1				97	1	1			

Table C-4: Verified Account Codes (FLASH 31) (Continued)



INDEX	DEFAULT		NEW COS		DIGITS (12 MAX.)	INDEX	DEFAULT		NEW COS		DIGITS (12 MAX.);
	D	N	D	N			D	N	D	N	
66	1	1				98	1	1			
67	1	1				99	1	1			
68	1	1				100	1	1			
69	1	1				101	1	1			
70	1	1				102	1	1			
71	1	1				103	1	1			
72	1	1				104	1	1			
73	1	1				105	1	1			
74	1	1				106	1	1			
75	1	1				107	1	1			
76	1	1				108	1	1			
77	1	1				109	1	1			
78	1	1				110	1	1			
79	1	1				111	1	1			
80	1	1				112	1	1			
81	1	1				113	1	1			
82	1	1				114	1	1			
83	1	1				115	1	1			
84	1	1				116	1	1			
85	1	1				117	1	1			
86	1	1				118	1	1			
87	1	1				119	1	1			
88	1	1				120	1	1			

Table C-4: Verified Account Codes (FLASH 31) (Continued)



INDEX	DEFAULT		NEW cos		DIGITS (12 MAX.)	INDEX	DEFAULT		NEW cos		DIGITS (12 MAX.)
	D	N	D	N			D	N	D	N	
89	1	1				121	1	1			
90	1	1				122	1	1			
91	1	1				123	1	1			
92	1	1				124	1	1			
93	1	1				125	1	1			
94	1	1				126	1	1			
95	1	1				127	1	1			
128	1	1				160	1	1			
129	1	1				161	1	1			
130	1	1				162	1	1			
131	1	1				163	1	1			
132	1	1				164	1	1			
133	1	1				165	1	1			
134	1	1				166	1	1			
135	1	1				167	1	1			
136	1	1				168	1	1			
137	1	1				169	1	1			
138	1	1				170	1	1			
139	1	1				171	1	1			
140	1	1				172	1	1			
141	1	1				173	1	1			
142	1	1				174	1	1			
143	1	1				175	1	1			

Table C-4: Verified Account Codes (FLASH 31) (Continued)



INDEX	DEFAULT		NEW COS		DIGITS (12 MAX.)	INDEX	DEFAULT		NEW COS		DIGITS (12 MAX.1,
	D	N	D	N			D	N	D	N	
144	1	1				176	1	1			
145	1	1				177	1	1			
146	1	1				178	1	1			
147	1	1				179	1	1			
148	1	1				180	1	1			
149	1	1				181	1	1			
150	1	1				182	1	1			
151	1	1				183	1	1			
152	1	1				184	1	1			
153	1	1				185	1	1			
154	1	1				186	1	1			
155	1	1				187	1	1			
156	1	1				188	1	1			
157	1	1				189	1	1			
158	1	1				190	1	1			
159	1	1				191	1	1			
193	1	1				225	1	1			
194	1	1				226	1	1			
195	1	1				227	1	1			
196	1	1				231	1	1			
197	1	1				232	1	1			
198	1	1				233	1	1			
199	1	1				234	1	1			

Table C-4: Verified Account Codes (FLASH 31) (Continued)





INDEX	DEFAULT		NEW C O S		DIGITS (12 MAX.)	INDEX	DEFAULT		NEW C O S		DIGITS (12 MAX.)
	D	N	D	N			D	N	D	N	
200	1	1				231	1	1			
201	1	1				232	1	1			
202	1	1				233	1	1			
203	1	1				234	1	1			
204	1	1				235	1	1			
205	1	1				236	1	1			
206	1	1				237	1	1			
207	1	1				238	1	1			
208	1	1				239	1	1			
209	1	1				240	1	1			
210	1	1				241	1	1			
211	1	1				242	1	1			
212	1	1				243	1	1			
213	1	1				244	1	1			
214	1	1				245	1	1			
215	1	1				246	1	1			
216	1	1				247	1	1			
217	1	1				248	1	1			
218	1	1				249	1	1			
219	1	1									
220	1	1									
221	1	1									
222	1	1									

Table C-4: Verified Account Codes (FLASH 31) (Continued)



INDEX	DEFAULT		NEW COS		DIGITS (12 MAX.)	INDEX	DEFAULT		NEW COS		DIGITS (12 MAX.)
	D	N	D	N			D	N	D	N	
223	1	1									
224	1	1									

Table C-4: Verified Account Codes (FLASH 31) (Continued)







DATA FIELD	PGE/ BTN	CO LINE PORT NUMBER								DE- FAULT
		1	2	3	4	5	6	7	8	
DTMF/Dial Pulse Programming	A/1									DTMF
CO/PBX Programming	A/2									CO
UNA Programming	A/3									Enabled
DISA Trunk-to-Trunk	A/4									Enabled
Privacy	A/5									Enabled
Loop Supervision Programming	A/6									400 ms
DISA Programming	A/7									Disabled
Line Group Programming	A/8									Group 1
Class of Service Programming	A/9									COS 1
CO Line Ringing Assignments	All 0	Refer to CO Line Ringing Assignments								Sta 100
CO Line Identification Display	A/11									Line XX
co1 :		Line XX								
co2:		Line XX								
co3:		Line XX								
co4:		Line XX								
co5:		Line XX								
CO6:		Line XX								
co7:		Line XX								
CO8:	Line XX									
Trunk Direction	A/12									Bothway
Display Ring Assignments	All 3									DTMF
PAGE A	19	Page "A" is selected by pressing PAGE flexible button.								
Transmit Volume Option	B/1									7 (0 dB)
Preset Call Forward Destination	B/2									None
Preset Forward Voice Mail	B/3									None
Universal Day Answer	B/4									Disabled
Music-On-Hold	B/5									Channel
Ring Tone	B/6									00

Table C-5: CO Line Programming (FLASH 40)





PAGE B	20	Page "B" is selected by pressing PAGE B flexible button.								
Flash Timer	C/1									10
Ring Delay Timer	C/2									Disabled
Reseize Timer	C/3									2.0 sec
Guard Timer	C/4									5 sec
Preset Forward Timer	C/5									10 sec
PAGE C	21	Page "C" is selected by pressing PAGE C flexible button.								
NEW RANGE	24	01-96								

Table C-5: CO Line Programming (FLASH 40)

PROGRAM CODE	FLEX BTN	FUNCTION	FORMAT	DEFAULT	CUSTOM-ER DATA
FLASH 41	1	Dial Pulse Parameters	60/40, 66/33	60/40	

Table C-6: Miscellaneous CO Parameters & Timers (FLASH 41)



_____ T _____ O CO LINE(S) T Y P E : _____ _____ NUMBER	STA	D	N	S	STA	D	N	S	STA	D	N	S
_____ TO _____ CO LINE(S) TYPE: _____ _____ NUMBER	STA	D	N	S	STA	D	N	S	STA	D	N	S
_____ T _____ O CO LINE(S) TYPE: _____ _____ NUMBER	STA	D	N	S	STA	D	N	S	STA	D	N	S
_____ TO _____ CO LINE(S) TYPE: _____ _____ NUMBER	STA	D	N	S	STA	D	N	S	STA	D	N	S

Button #11 = Enter Ringing Assignments

Button #17 = Display Ringing Assignments

Ringing Assignments:

0 = No Ringing (unassigned/to delete a station)

1 = Day Ringing (D)

2 = Night Ringing (N)

3 = Day/Night Ringing (DN)

4 = Special Only (S)

5 = Day/Special (DS)

6 = Night/Special (NS)

7 = All Modes - Day/Night/Special (A)

Table C-7: CO Line Ringing Assignments (FLASH 40)



DID/ICLID ROUTE	DEFAULT DESTINATION	RINGING ASSIGNMENTS	DID/ICLID ROUTE	DEFAULT DESTINATION	RINGING ASSIGNMENTS
000	None		033	None	
001	None		034	None	
002	None		035	None	
003	None		036	None	
004	None		037	None	
005	None		038	None	
006	None		039	None	
007	None		040	None	
008	None		041	None	
009	None		042	None	
010	None		043	None	
011	None		044	None	
012	None		045	None	
013	None		046	None	
014	None		047	None	
015	None		048	None	
016	None		049	None	
017	None		050	None	
018	None		051	None	
019	None		052	None	

1. Route 000 in the ICLID Ringing Assignment Table is used as the intercept route. Calls to numbers not contained in the DID table will follow Route 000. If Route 000 is defaulted to "none", the call will follow Route 001.
2. Route 001 in the ICLID Ringing Assignment Table is used for Busy calls. If Route 001 is defaulted to "none", the caller is given a busy tone. Calls to busy stations (i.e., without an available Loop or CO button) will follow Route 001.

**Table C-8: DID/ICLID Default Ringing Assignments (FLASH 43)**



DID/ICLID ROUTE	DEFAULT DESTINATION	RINGING ASSIGNMENTS	DID/ICLID ROUTE	DEFAULT DESTINATION	RINGING ASSIGNMENTS
020	None		053	None	
021	None		054	None	
022	None		055	None	
023	None		056	None	
024	None		057	None	
025	None		058	None	
026	None		059	None	
027	None		060	None	
028	None		061	None	
029	None		062	None	
030	None		063	None	
031	None		064	None	
032	None		065	None	

1. Route 000 in the ICLID Ringing Assignment Table is used as the intercept route. Calls to numbers not contained in the DID table will follow Route 000. If Route 000 is defaulted to "none", the call will follow Route 001.
2. Route 001 in the ICLID Ringing Assignment Table is used for Busy calls. If Route 001 is defaulted to "none", the caller is given a busy tone. Calls to busy stations (i.e., without an available Loop or CO button) will follow Route 001.

**Table C-8: DID/ICLID Default Ringing Assignments (FLASH 43) (Continued)**



DID/ICLID ROUTE	DEFAULT DESTINATION	RINGING ASSIGNMENTS	DID/ICLID ROUTE	DEFAULT DESTINATION	RINGING ASSIGNMENTS
066	None		099	None	
067	None		100	100A	
068	None		101	101A	
069	None		102	102A	
070	None		103	103A	
071	None		104	104A	
072	None		105	105A	
073	None		106	106A	
074	None		107	107A	
075	None		108	108A	
076	None		109	109A	
077	None		110	110A	
078	None		111	111A	
079	None		112	112A	
080	None		113	113A	
081	None		114	114A	
082	None		115	115A	
083	None		116	116A	
084	None		117	117A	
085	None		118	118A	

1. Route 000 in the ICLID Ringing Assignment Table is used as the intercept route. Calls to numbers not contained in the DID table will follow Route 000. If Route 000 is defaulted to "none", the call will follow Route 001.

2. Route 001 in the ICLID Ringing Assignment Table is used for Busy calls. If Route 001 is defaulted to "none", the caller is given a busy tone. Calls to busy stations (i.e., without an available Loop or CO button) will follow Route 001.

**Table C-8: DID/ICLID Default Ringing Assignments (FLASH 43) (Continued)**





DID/ICLID ROUTE	DEFAULT DESTINATION	RINGING ASSIGNMENTS	DID/ICLID ROUTE	DEFAULT DESTINATION	RINGING ASSIGNMENTS
086	None		119	119A	
087	None		120	120A	
088	None		121	121A	
089	None		122	122A	
090	None		123	123A	
091	None		124	124A	
092	None		125	125A	
093	None		126	126A	
094	None		127	127A	
095	None		128	128A	
096	None		129	129A	
097	None		130	130A	
098	None		131	131A	

1. Route 000 in the ICLID Ringing Assignment Table is used as the intercept route. Calls to numbers not contained in the DID table will follow Route 000. If Route 000 is defaulted to "none", the call will follow Route 001.
2. Route 001 in the ICLID Ringing Assignment Table is used for Busy calls. If Route 001 is defaulted to "none", the caller is given a busy tone. Calls to busy stations (i.e., without an available Loop or CO button) will follow Route 001.

**Table C-8: DID/ICLID Default Ringing Assignments (FLASH 43) (Continued)**



DID/ICLID ROUTE	DEFAULT DESTINATION	RINGING ASSIGNMENTS	DID/ICLID ROUTE	DEFAULT DESTINATION	RINGING ASSIGNMENTS
132	132A		165	165A	
133	133A		166	166A	
134	134A		167	167A	
135	135A		168	168A	
136	136A		169	169A	
137	137A		170	170A	
138	138A		171	171A	
139	139A		172	172A	
140	140A		173	173A	
141	141A		174	174A	
142	142A		175	175A	
143	143A		176	176A	
144	144A		177	177A	
145	145A		178	178A	
146	146A		179	179A	
147	147A		180	180A	
148	148A		181	181A	
149	149A		182	182A	
150	150A		183	183A	
151	151A		184	184A	

1. Route 000 in the ICLID Ringing Assignment Table is used as the intercept route. Calls to numbers not contained in the DID table will follow Route 000. If Route 000 is defaulted to "none", the call will follow Route 001.
2. Route 001 in the ICLID Ringing Assignment Table is used for Busy calls. If Route 001 is defaulted to "none", the caller is given a busy tone. Calls to busy stations (i.e., without an available Loop or CO button) will follow Route 001.

Table C-8: **DID/ICLID Default Ringing Assignments (FLASH 43) (Continued)**







DID/ICLID ROUTE	DEFAULT DESTINATION	RINGING ASSIGNMENTS	DID/ICLID ROUTE	DEFAULT DESTINATION	RINGING ASSIGNMENTS
152	152A		185	185A	
153	153A		186	186A	
154	154A		187	187A	
155	155A		188	188A	
156	156A		189	189A	
157	157A		190	190A	
158	158A		191	191A	
159	158A		192	192A	
160	160A		193	193A	
161	161A		194	194A	
162	162A		195	195A	
163	163A		196	196A	
164	164A		197	197A	

1. Route 000 in the ICLID Ringing Assignment Table is used as the intercept route. Calls to numbers not contained in the DID table will follow Route 000. If Route 000 is defaulted to "none", the call will follow Route 001.
2. Route 001 in the ICLID Ringing Assignment Table is used for Busy calls. If Route 001 is defaulted to "none", the caller is given a busy tone. Calls to busy stations (i.e., without an available Loop or CO button) will follow Route 001.

**Table C-8: DID/ICLID Default Ringing Assignments (FLASH 43) (Continued)**



DID/ICLID ROUTE	DEFAULT DESTINATION	RINGING ASSIGNMENTS	DID/ICLID ROUTE	DEFAULT DESTINATION	RINGING ASSIGNMENTS
198	198A		225	225A	
199	499A		226	226A	
200	200A		227	227A	
201	201A		228	228A	
202	202A		229	229A	
203	203A		230	230A	
204	204A		231	231A	
205	205A		232	232A	
206	206A		233	233A	
207	207A		234	234A	
208	208A		235	235A	
209	209A		236	236A	
210	210A		237	237A	
211	211A		238	238A	
212	212A		239	239A	
213	213A		240	240A	
214	214A		241	241A	
215	215A		242	242A	
216	216A		243	243A	
217	217A		244	244A	

1. Route 000 in the ICLID Ringing Assignment Table is used as the intercept route. Calls to numbers not contained in the DID table will follow Route 000. If Route 000 is defaulted to "none", the call will follow Route 001.

2. Route 001 in the ICLID Ringing Assignment Table is used for Busy calls. If Route 001 is defaulted to "none", the caller is given a busy tone. Calls to busy stations (i.e., without an available Loop or CO button) will follow Route 001.

**Table C-8: DID/ICLID Default Ringing Assignments (FLASH 43) (Continued)**





DID/ICLID ROUTE	DEFAULT DESTINATION	RINGING ASSIGNMENTS	DID/ICLID ROUTE	DEFAULT DESTINATION	RINGING ASSIGNMENTS
218	218A		245	245A	
219	219A		246	246A	
220	220A		247	247A	
221	221A		248	248A	
222	222A		249	249A	
2 2	3 223A		250	250A	
224	224A		251	251A	

1. Route 000 in the ICLID Ringing Assignment Table is used as the intercept route. Calls to numbers not contained in the DID table will follow Route 000. If Route 000 is defaulted to "none", the call will follow Route 001.
2. Route 001 in the ICLID Ringing Assignment Table is used for Busy calls. If Route 001 is defaulted to "none", the caller is given a busy tone. Calls to busy stations (i.e., without an available Loop or CO button) will follow Route 001.

**Table C-8: DID/ICLID Default Ringing Assignments (FLASH 43) (Continued)**



DATA FIELD	PAGE/BTN	STATION NUMBERS						DEFAULT
Paging Access	A/1							Enabled
Do Not Disturb	A/2							Enabled
Conference Enable/Disable (per Station)	A/3							Enabled
Executive Override	A/4							Disabled
Privacy (per Station)	A/5							Enabled
System Speed Dial Access	A/6							Enabled
Line Queuing	A/7							Enabled
Preferred Line Answer	A/8							Enabled
Off-Hook Voice Over (OHVO)	A/9							Disabled
Call Forwarding	A/10							Enabled
Forced Least Cost Routing (LCR)	A/11							Disabled
ACD* Supervisor Monitor w/Barge-In	A/12							Disabled
Executive Override Blocking	A/13							Enabled
CO Line Ringing Options	A/14							Muted
Name/Number Display at Idle	A/15							Name
<b>PAGE A</b>	<b>19</b>	<b>Page "A" is selected by pressing PAGE A flexible button</b>						
Station Identification	B/1							0 (24-Btn) 5 (SLT)
Station Day Class Of Service	B/2							1
Station Night Class Of Service	B/3							1
Speakerphone/Headset Programming	B/4							1
Pick-Up Group(s) Programming	B/5							1
Paging Zone(s) Programming	B/6							1
Preset Call Forwarding Programming	B/7							None
CO Line Group Access	B/8							1

**Table C-9: Station Programming (FLASH 50)**





LCR Class of Service (COS)	A/9							0
Off-Hook Preference Programming	A/10							00 (Key-set)
Flexible Button Programming	A/11	Refer to Flexible Button Programina Chart						
Keypad Mode	A/12							Inactive
Voice Mail ID Translation	A/13							VMID Digits
<b>PAGE B</b>	20	<b>Page "B" is selected by pressing PAGE B flexible button</b>						
<b>NEW STATION RANGE</b>	24	<b>700-131</b>						

\*Features available with optional software.

Table C-9: Station Programming (FLASH 50)

STA#				PORT#			
1	2	3	4	1	2	3	4
5	6	7	8	5	6	7	8
9	10	11	12	9	10	11	12
13	14	15	16	13	14	15	16
17	18	19	20	17	18	19	20
21	22	23	24	21	22	23	24

Table C-10: Button Assignments (FLASH 50)



Refer to **Table C-10: Button Assignments (FLASH 50)** to assign a function to each flexible button.

#### Defaults:

- ❖ Buttons 1 thru **12** are assigned as Stations 100 thru 111,
- ❖ Buttons 13 thru 18 are assigned as CO Lines 01 thru 06,
- ❖ Buttons 19 is assigned as a Loop button,
- ❖ Button 20 is assigned as a Pool Group button,
- ❖ Buttons 21 thru 24 are flexible buttons with features assigned to them.

Where:BB = Button Number (01-24)

- ❖ LLL = CO Line Number (001-012)
- ❖ G = Line Group (1-7)

#### KEY STATION BUTTON PROGRAMMING:

- 1 To assign a button as a Flexible button (user programmable) enter:  
BB [0] HOLD
- 2 To assign a button as a CO Line button, enter:  
BB [1] LLL HOLD
- 3 To assign a button as a Loop button, enter:  
BB [2] HOLD
- 4 To enter a button as a Pooled Group button, enter:  
BB [3] G HOLD
- 5 To enter a button as a Feature button, **enter**:  
BB [4] [XXX] HOLD
- 6 To unassign a button, enter:  
BB [#] HOLD

#### SLT ENTRY: (Off-Hook Preference)

- ❖ When an SLT is being assigned for Off-Hook Preference, enter:  
01 [1] LLL HOLD for a specific CO Line,
- ❖ or  
01 [3] G HOLD for a CO Group Access.

**Table C-1 0: Button Assignments (FLASH 50)**





Programmed from the first Attendant Station.

BIN #	TELEPHONE NUMBER	BIN #	TELEPHONE NUMBER
Monitored by Toll Restriction (COS)			
20		40	
21		41	
22		42	
23		43	
24		44	
25		45	
26		46	
27		47	
28		48	
29		49	
30		50	
31		51	
32		52	
33		53	
34		54	
35		55	
36		56	
37		57	
38		58	
39		59	

Table C-1 1: System Speed Dial Numbers





Programmed from the first Attendant Station.

BIN #	TELEPHONE NUMBER	BIN #	TELEPHONE NUMBER
Overridden by Toll Restriction (COS)			
60		80	
61		81	
62		82	
63		83	
64		84	
65		85	
66		86	
67		87	
68		88	
69		89	
70		90	
71		91	
72		92	
73		93	
74		94	
75		95	
76		96	
77		97	
78		98	
79		99	

Table C-I 1: System Speed Dial Numbers (Continued)





PRO-GRAM CODE	FLEX BTN	FUNCTION	ALT (9)	OVR (10)	RAN (11)	SUPV (12)	STATIONS (Up to 16)
ACD* GROUP PROGRAMMING							
FLASH 60	1	ACD Group 0 (550)					
	2	ACD Group 1 (551)					
	3	ACD Group 2 (552)					
	4	ACD Group 3 (553)					
	5	ACD Group 4 (554)					
	6	ACD Group 5 (555)					
	7	ACD Group 6 (556)					
	8	ACD Group 7 (557)					
	9	Alternate ACD Group					
	10	ACD Overflow Assignment					
	11	Announcement Tables					
	12	ACD Supervisor Programming					
ACD* TIMERS							
	13	ACD Wrap-up Timer		000-999		004	
	14	ACD CIQ Threshold		00-99		00	

PRO-GRAM CODE	FLEX BTN	FUNCTION	FORMAT	DEFAULT	CUSTOMER DATA
FLASH 61	1	ACD Ring Timer	000-300	060	
	2	ACD Message Interval Timer	000-300	060	
	3	ACD Overflow Timer	000-300	060	
	4				
	5	ACD No-Answer Recall Timer	000-300	000	
	6	ACD No-Answer Retry Timer	000-999	300	
	7	Guaranteed Message Timer	000-300	05	

Table C-12: ACD Group Parameters



PRO-GRAM CODE	FLEX BTN	FUNCTION	ALT (9)	OVR (10)	RAN (11)	SUPV (12)	STATIONS (Up to 16)
ACD RAN ANNOUNCEMENT TABLES							
FLASH 62	1	Announcement Table #1		YXXXMMM		None	
	2	Announcement Table #2		YXXXMMM		None	
	3	Announcement Table #3		YXXXMMM		None	
	4	Announcement Table #4		YXXXMMM		None	
	5	Announcement Table #5		YXXXMMM		None	
	6	Announcement Table #6		YXXXMMM		None	
	7	Announcement Table #7		YXXXMMM		None	
	8	Announcement Table #8		YXXXMMM		None	

\*Features available with optional software.

**Table C-1 2: ACD Group Parameters (Continued)**





PRO-GRAM CODE	FLEX BTN	FUNCTION	ALT (9)	OVR (10)	RAN (11)	SUPV (12)	STATIONS (Up to 16)	
<b>ACD* GROUP PROGRAMMING</b>								
FLASH 64	1	ACD Group 0 (558)						
	2	ACD Group 1 (559)						
	3	ACD Group 2 (560)						
	4	ACD Group 3 (561)						
	5	ACD Group 4 (562)						
	6	ACD Group 5 (563)						
	7	ACD Group 6 (564)						
	8	ACD Group 7 (565)						
	9	Alternate ACD Group						
	10	ACD Overflow Assignment						
	11	Announcement Tables						
	12	ACD Supervisor Programming						
	<b>ACD* TIMERS</b>							
	13	ACD Wrap-up Timer			000-999		004	
14	ACD CIQ Threshold			00-99		00		

\*Features available with optional software.

**Table C-12: ACD Group Parameters (Continued)**





PROGRAM CODE	FLEX BTN	FUNCTION	ALT	OVR	RAN	STATIONS (Up to 16)
UCD GROUP PROGRAMMING						
FLASH 60	1	UCD Group 0 (550)				
	2	UCD Group 1 (551)				
	3	UCD Group 2 (552)				
	4	UCD Group 3 (553)				
	5	UCD Group 4 (554)				
	6	UCD Group 5 (555)				
	7	UCD Group 6 (556)				
	8	UCD Group 7 (557)				

PROGRAM CODE	FLEX BTN	FUNCTION	FORMAT	DEFAULT	CUSTOMER DATA
UCD TIMERS					
FLASH 61	1	UCD Ring Timer	000-300	060	
	2	UCD Message Interval Timer	000-300	060	
	3	UCD Overflow Timer	000-300	060	
	4	UCD Wrap-up Timer	000-999	004	
	5	UCD No-Answer Recall Timer	000-300	000	
	6	UCD No-Answer Retry Timer	000-999	300	

Table C-13: UCD Group Parameters



PROGRAM CODE	FLEX BTN	FUNCTION	ALT	LV	RTV	EXTENSIONS
FLASH 65	1	Voice Mail Group 0 (440)		0	1	
	2	Voice Mail Group 1 (441)				
	3	Voice Mail Group 2 (442)				
	4	Voice Mail Group 3 (443)				
	5	Voice Mail Group 4 (444)				
	6	Voice Mail Group 5 (445)				
	7	Voice Mail Group 6 (446)				
	8	Voice Mail Group 7 (447)				

PROGRAM CODE	FLEX BTN	FUNCTION	OUTPULSING DIGITS	L or R
FLASH 66	VOICE MAIL IN-BAND SIGNALING			
	1	Voice Mail Outpulsing Table 0	[0] Prefix P7 [1] Suffix None	
	2	Voice Mail Outpulsing Table 1	[0] Prefix P7 [1] Suffix S	
	3	Voice Mail Outpulsing Table 2	[0] Prefix [1] Suffix	
	4	Voice Mail Outpulsing Table 3	[0] Prefix [1] Suffix	
	5	Voice Mail Outpulsing Table 4	[0] Prefix [1] Suffix	
	6	Voice Mail Outpulsing Table 5	[0] Prefix [1] Suffix	
	7	Voice Mail Outpulsing Table 6	[0] Prefix [1] Suffix	
	8	Voice Mail Outpulsing Table 7	[0] Prefix P7 [1] Suffix 2	
	9	Voice Mail Disconnect Table 8	Disconnect	

Table C-1 4: Voice Mail Group Parameters



PROGRAM CODE	FLEX BTN	FUNCTION	ALT	LV	RTV	EXTENSIONS
PROGRAM CODE	FLEX BTN	FUNCTION			DEFAULT	
FLASH 67		VOICE MAIL IN-BAND FEATURES				
	1	Voice Mail In-Band Digits			Enabled	
	2	Voice Mail Transfer/Forward			Enabled	
	3	VM Broker			Enabled	

Table C-1 4: Voice Mail Group Parameters





INDEX	GROUP	ID DIGITS	INDEX	GROUP	ID DIGITS
00	440		33	440	
01	440		34	440	
02	440		35	440	
03	440		36	440	
04	440		37	440	
05	440		38	440	
06	440		39	440	
07	440		40	440	
08	440		41	440	
09	440		42	440	
10	440		43	440	
11	440		44	440	
12	440		45	440	
13	440		46	440	
14	440		47	440	
15	440		48	440	
16	440		49	440	
17	440		50	440	
18	440		51	440	
19	440		52	440	
20	440		53	440	
21	440		54	440	
22	440		55	440	
23	440		56	440	
24	440		57	440	

Table C-15: Mailboxes (FLASH 68)





INDEX	GROUP	ID DIGITS	INDEX	GROUP	ID DIGITS
25	440		58	440	
26	440		59	440	
27	440		60	440	
28	440		61	440	
29	440		62	440	
30	440		63	440	
31	440		64	440	
32	440		65	440	

Table C-15: Mailboxes (FLASH 68) (Continued)





INDEX	GROUP	ID DIGITS	INDEX	GROUP	ID DIGITS
66	440		99	440	
67	440		100	440	
68	440		101	440	
69	440		102	440	
70	440		103	440	
71	440		104	440	
72	440		105	440	
73	440		106	440	
74	440		107	440	
75	440		108	440	
76	440		109	440	
77	440		110	440	
78	440		111	440	
79	440		112	440	
80	440		113	440	
81	440		114	440	
82	440		115	440	
83	440		116	440	
84	440		117	440	
85	440		118	440	
86	440		119	440	
87	440		120	440	
88	440		121	440	
89	440		122	440	
90	440		123	440	

Table C-15: Mailboxes (FLASH 68) (Continued)



INDEX	GROUP	ID DIGITS	INDEX	GROUP	ID DIGITS
91	440		124	440	
92	440		125	440	
93	440		126	440	
94	440		127	440	
95	440		128	440	
96	440		129	440	
97	440		130	440	
98	440		131	440	

Table C-15: Mailboxes (FLASH 68) (Continued)





INDEX	GROUP	ID DIGITS	INDEX	GROUP	ID DIGITS
132	440		165	440	
133	440		166	440	
134	440		167	440	
135	440		168	440	
136	440		169	440	
137	440		170	440	
138	440		171	440	
139	440		172	440	
140	440		173	440	
141	440		174	440	
142	440		175	440	
143	440		176	440	
144	440		177	440	
145	440		178	440	
146	440		179	440	
147	440		180	440	
148	440		181	440	
149	440		182	440	
150	440		183	440	
151	440		184	440	
152	440		185	440	
153	440		186	440	
154	440		187	440	
155	440		188	440	
156	440		189	440	

Table C-15: Mailboxes (FLASH 68) (Continued)



INDEX	GROUP	ID DIGITS	INDEX	GROUP	ID DIGITS
157	440		190	440	
158	440		191	440	
159	440		192	440	
160	440		193	440	
161	440		194	440	
162	440		195	440	
163	440		196	440	
164	440		197	440	

Table C-15: Mailboxes (FLASH 68) (Continued)



INDEX	GROUP		ID DIGITS	INDEX	GROUP		ID DIGITS
198	440			227	440		
199	I	440	I	228	440		
200	I	440		229	440		
201		440		230	440		
202		440		231		440	
203		440		232		440	
204		440		233	I	440	
205	I	440		234		440	
206	I	440	I	235	440		
207		440	I	236	440		
208	I	440	I	237		440	
<b>209</b>		440	I	238		440	
210	I	440	I	<b>239</b>	440		
211		440	I	240	440		
212	I	440	I	241		440	
213		440		242		440	
214		440		243		440	
215		440		244		440	
216		440		245		440	I
217		440		246		440	
218		440		247		440	
219		440		248		440	
220		440		249		440	
221		440		250	440		
222		440		251		440	

Table C-15: Mailboxes (FLASH 68) (Continued)





INDEX	GROUP	ID DIGITS	INDEX	GROUP	ID DIGITS
223	440		252	440	
224	440		253	440	
225	440		254	440	
226	440		255	440	

Table C-15: Mailboxes (FLASH 68) (Continued)



Allow Table A		Allow Table B	
BIN 1		BIN 1	
BIN 2		BIN 2	
BIN 3		BIN 3	
BIN 4		BIN 4	
BIN 5		BIN 5	
BIN 6		BIN 6	
BIN 7		BIN 7	
BIN 8		BIN 8	
BIN 9		BIN 9	
BIN 10		BIN 10	
BIN 11		BIN 11	
BIN 12		BIN 12	
BIN 13		BIN 13	
BIN 14		BIN 14	
BIN 15		BIN 15	
BIN 16		BIN 16	
BIN 17		BIN 17	
BIN 18		BIN 18	
BIN 19		BIN 19	
BIN 20		BIN 20	

Deny Table A		Deny Table B	
BIN 1		BIN 1	
BIN 2		BIN 2	
BIN 3		BIN 3	
BIN 4		BIN 4	
BIN 5		BIN 5	
BIN 6		BIN 6	
BIN 7		BIN 7	
BIN 8		BIN 8	
BIN 9		BIN 9	

Table C-16: Exceptions (FLASH 70)



Special Table 1

Special Table 2

Area Code:			Area Code:		
Office Codes			OFFICE CODES		

Special Table 3

Special Table 4

Area Code:			Home Area Code:		
Off ice Codes			OFFICE CODES		

Table C-I 7: Exceptions (FLASH 70)







COLINEGROUPS

1	2	3	4	5	6	7

Table C-I 8: Least Cost Routing (FLASH 75)

START TIME	DEFAULT TIME	CHANGED TIME
1	0800	
2	1700	
3	2300	
4	####	

Table C-I 9: Daily Start Time

START TIME (From Daily Start Table)	TIME PERIOD ROUTE LIST						
	MON	TUE	WED	THU	FRI	SAT	SUN
1							
2							
3							
4							

TOLL INFORMATION ROUTE LIST TABLE	DE- FAULT 00	
-----------------------------------	--------------------	--

Table C-20: Weekly Schedule



	ROUTE (00-15)	TIME (1-4)	COST	GROUP (1-7)	INSERT/ DELETE (00-19)	LCR COS
1 + 10 DIGITS LD TOLL ROUTE	00	1				
		2				
		3				
		4				
7 DIGIT LOCAL ROUTE	01	1				
		2				
		3				
		4				
1+7 DIGITS TOLL ROUTE	02	1				
		2				
		3				
		4				
DEFINED BY DEFAULT	03	1				
		2				
		3				
		4				
DEFINED BY DEFAULT	04	1				
		2				
		3				
		4				
DEFINED BY DEFAULT	05	1				
		2				
		3				
		4				

Table C-21: Route List





	ROUTE (00-15)	TIME (1-4)	COST	GROUP (1-7)	INSERT/ DELETE (00-19)	LCR COS
	06	1				
		2				
		3				
		4				
	07	1				
		2				
		3				
		4				
	08	1				
		2				
		3				
		4				
	09	1				
		2				
		3				
		4				
	10	1				
		2				
		3				
		4				
	11	1				
		2				
		3				
		4				

Table C-21 : Route List



	ROUTE (00-15)	TIME (1-4)	COST	GROUP (1-7)	INSERT/ DELETE (00-19)	LCR COS
	12	1				
		2				
		3				
		4				
	13	1				
		2				
		3				
		4				
	14	1				
		2				
		3				
		4				
	15	1				
		2				
		3				
		4				

Table C-21 : Route List





TABLE	DIGITS DIALED		
00	INSERT	[1] PRE	
		[2] POST	
	DELETE	[0] (PRE)	
01	INSERT	[1] PRE	
		[2] POST	
	DELETE	[0] (PRE)	
02	INSERT	[1] PRE	
		[2] POST	
	DELETE	[0] (PRE)	
03	INSERT	[1] PRE	
		[2] POST	
	DELETE	[0] (PRE)	
04	INSERT	[1] PRE	
		[2] POST	
	DELETE	[0] (PRE)	
05	INSERT	[1] PRE	
		[2] POST	
	DELETE	[0] (PRE)	

Table C-22: Insert/Delete



TABLE	DIGITS DIALED		
06	INSERT	[1] PRE	
		[2] POST	
	DELETE	[0] (PRE)	
07	INSERT	[1] PRE	
		[2] POST	
	DELETE	[0] (PRE)	
08	INSERT	[1] PRE	
		[2] POST	
	DELETE	[0] (PRE)	
09	INSERT	[1] PRE	
		[2] POST	
	DELETE	[0] (PRE)	
10	INSERT	[1] PRE	
		[2] POST	
	DELETE	[0] (PRE)	
11	INSERT	[1] PRE	
		[2] POST	
	DELETE	[0] (PRE)	

Table C-22: Insert/Delete



TABLE	DIGITS DIALED		
12	INSERT	[1] PRE	
		[2] POST	
	DELETE	[0] (PRE)	
13	INSERT	[1] PRE	
		[2] POST	
	DELETE	[0] (PRE)	
14	INSERT	[1] PRE	
		[2] POST	
	DELETE	[0] (PRE)	
15	INSERT	[1] PRE	
		[2] POST	
	DELETE	[0] (PRE)	
16	INSERT	[1] PRE	
		[2] POST	
	DELETE	[0] (PRE)	
17	INSERT	[1] PRE	
		[2] POST	
	DELETE	[0] (PRE)	

Table C-22: Insert/Delete



TABLE	DIGITS DIALED		
18	INSERT	[1] PRE	
		[2] POST	
	DELETE	[0] (PRE)	
19	INSERT	[1] PRE	
		[2] POST	
	DELETE	[0] (PRE)	

Table C-22: Insert/Delete

Non-Leading (0) Leading (1)	Code (NNN)	Route (RR)	No. of Digits	6-Digit (Y/N)	Non-Leading (0) Leading (1)	Code (NNN)	Route (RR)	No. of Digits	6-Digit (Y/N)
0					0				
1					1				
0					0				
1					1				
0					0				
1					1				
0					0				
1					1				
0					0				
1					1				
0					0				
1					1				
0					0				
1					1				
0					0				
1					1				
0					0				
1					1				

Table C-23: 3-Digit Area/Office Code Route List







Non-Leading (0) Leading (1)	Code (NNN)	Route (RR)	No. of Digits	6-Digit (Y/N)	Non-Leading (0) Leading (1)	Code (NNN)	Route (RR)	No. of Digits	6-Digit (Y/N)
0					0				
1					1				
0					0				
1					1				
0					0				
1					1				
0					0				
1					1				
0					0				
1					1				
0					0				
1					1				
0					0				
1					1				
0					0				
1					1				
0					0				
1					1				
0					0				
1					1				
0					0				
1					1				
0					0				
1					1				
0					0				
1					1				
0					0				
1					1				
0					0				
1					1				

Table C-23: 3-Digit Area/Office Code Route List





AREA CODE	ROUTE					

Table C-24: 6-Digit Area Code/Routing

CODE #	EXCEPTION CODES (XX)	ROUTE (00-15) (RR)	CODE #	EXCEPTION CODES (XX)	ROUTE (00-15) (RR)
1			11		
2			12		
3			13		
4			14		
5			15		
6			16		
7			17		
8			18		
9			19		
10			20		

Table C-25: 6-Digit Office Code







# ***STARPLUS Triad-S™***

## **Installation Manual**

Issue 1

December 1998

Part Number: 5050-12





### **LIFE SUPPORT APPLICATIONS POLICY**

**VODAVI Communications Systems** products are not authorized for and should not be used within Life Support applications. Life Support systems are equipment intended to support or sustain life and whose failure to perform when properly used in accordance with instructions provided can be reasonably expected to result in significant personal injury or death.

**VODAVI Communications Systems** warranty is limited to replacement of defective components and does not cover injury to persons or property or other consequential damages.

Copyright © 1998 VODAVI Communications Systems, Inc.

All Rights Reserved

This material is copyrighted by VODAVI Communications Systems. Any unauthorized reproductions, use or disclosure of this material, or any part thereof, is strictly prohibited and is a violation of the Copyright Laws of the United States (17 U.S.C. Section 101 et. seq.).

VODAVI reserves the right to make changes in specifications at any time and without notice. The information furnished by VODAVI in this material is believed to be accurate and reliable, but is not warranted to be true in all cases.

**STARPLUS TRIAD-S™** is a registered trademark of VODAVI Communications Systems, Inc.

**TRIAD™** is a Registered trademark of VODAVI Communications Systems, Inc.







# Table of Contents

## 1 Introduction

Purpose..	1-1
Regulatory Information (U.S.A.)	1-1
Telephone Company Notification	1-1
Incidence of Harm	1-1
Changes in Service	1-2
Maintenance Limitations	1-2
Hearing Aid Compatibility	1-2
UL/CSA Safety Compliance	1-2
Notice of Compliance	1-2
Toll Fraud and DISA Disclaimer	1-3

## 2 Installation

Introduction	2-1
Site Preparation	2-1
General Site Considerations	2-1
Backboard Installation	2-2
Verify On-Site Equipment	2-2
KSU Installation	2-3
Mounting the Basic KSU	2-3
Mounting the Expansion KSU (EKSU)	2-5
Battery Charging Unit (BCU) Installation	2-8
KSU Grounding	2-8
Power Line Surge Protection	2-9
Lightning Protection	2-9
KSU AC Power Plug	2-9
PCB Installation	2-9
PCB Handling and General Installation	2-9
BKSU and Main Board Assembly	2-10
Modem Unit (MODU)	2-10
Miscellaneous Interface Unit (MISU) Installation	2-12
DTMF4-A Unit	2-14
Message Wait Unit (MSGU)	2-15
CKIB/CSIB Installation	2-16



CKIB/CSIB Wiring .....	2-17
Station Wiring .....	2-20
Digital Keypad .....	2-20
Single Line Telephone .....	2-20
Wall Mounting the Digital Key Telephone .....	2-21
Headset Installation .....	2-23
Caller ID Interface Unit Installation .....	2-23
Switch Settings .....	2-24
Programming Caller ID .....	2-24
ICLID Enable .....	2-24
I/O Ports .....	2-24
CO Lines .....	2-24
SMDR .....	2-25

### 3 System Check-Out

Introduction .....	..3- 1
Preliminary Procedures .....	..3-1
Power Up Sequence .....	..3-1

### 4 Maintenance and Troubleshooting

Introduction .....	... 4-1
System Programming and Verification .....	... 4-1
Telephone and Terminal Troubleshooting .....	... 4-2
Keypad Self Test .....	... 4-2
KeypadLCD/LED Test .....	... 4-2
Keypad Button Test .....	... 4-3
DSS LED/Button Test .....	... 4-3
Key Telephones/Terminals .....	... 4-4
Single Line Telephones .....	... 4-5
DSS/DLS Console .....	... 4-5
CO Line Card Functions .....	... 4-6
System Functions .....	... 4-6
Remote Maintenance .....	... 4-7
General Overview .....	... 4-7
Overview of Maintenance Commands .....	... 4-7
Maintenance Password .....	... 4-7
Exit Maintenance .....	... 4-8



System Configuration .....	..	..	..	. 4-9
Station Configuration .....	..	..	..	. 4-10
Event Trace Buffer .....	..	..	..	. 4-11
DTMF Receiver Trace .....	..	..	..	. 4-11
Remote System Monitor .....	..	..	..	. 4-12
<b>General Overview</b> .....	..	..	..	. 4-12
Monitor Password .....	..	..	..	. 4-12
Help Menu (?) .....	..	..	..	. 4-13
Dump Memory Data .....	..	..	..	. 4-13
Event Trace Mode .....	..	..	..	. 4-14
Modify Memory Command .....	..	..	..	. 4-16
Exit the Monitor Mode .....	..	..	..	. 4-16

## List of Figures

Basic KSU .....	2-4
Basic KSU Mounting Holes and Installation .....	2-5
Expansion KSU .....	2-6
BKSU and EKSU Mounting Holes and Installation .....	2-7
BKSU Dip Switches ..	2-10
Modem Unit (MODU) .....	2-11
Miscellaneous Interface Unit (MISU) .....	2-13
DTMF4-A .....	2-14
Message Wait Unit (MSGU) ..	2-15
CKIB Board .....	2-1 <sup>6</sup>
CSIB Board with MSGU Mounted .....	2-17
Digital Station Jack Wiring .....	2-20
Single Line Telephone Wiring .....	2-20
Digital Key Telephone Wail Mounting .....	2-22
Caller ID Cable Connections .....	2-23
Maintenance Help Menu .....	4-8
System Configuration .....	4-9
CO / Station Configuration .....	4-10
Help Menu .....	4-13
Trace Mode Status .....	4-14
Enable Event Trace .....	4-1 <sup>5</sup>
Event Trace .....	4-1 <sup>6</sup>



## List of Tables

MISU Dip Switches .....	2-12
CKIB/CSIB Wiring .....	2-18
SMDR Printout .....	2-26
Power Supply Tests .....	3-2
Flash Rates .....	4-3
Key Telephones/Terminals .....	4-4
Single Line Telephones .....	4-5
DSS/DLS Console .....	4-5
CO Line Loop Start Board (CKIB/CSIB Board) .....	4-6
System Functions .....	4-6





# 1 Introduction

## Purpose

This manual provides the information necessary to program, install, operate and maintain the **STARPLUS Triad-S™** systems.

## Regulatory Information (U.S.A.)

The Federal Communications Commission (FCC) has established rules that allow the direct connection of the **STARPLUS Triad-S** systems to the telephone network. Certain actions must be undertaken or understood before the connection of customer provided equipment is completed.

## Telephone Company Notification

Before connecting the **STARPLUS Triad-S** system to the telephone network, the local serving telephone company must be given advance notice of intention to use customer provided equipment, and must be provided with the following information:

- ❖ The telephone numbers to be connected to the system.
- ❖ Triad-S system information:
- ❖ The Ringer Equivalence Number also located on the KSU: **1.3B**
- ❖ The USOC jack required for direct interconnection with the telephone network: **RJ11C**

FCC Registration Numbers:

- ❖ For systems configured as a key system: (button appearances)  
**DLPKOR-24039-KF-E**
- ❖ For systems configured as a hybrid system: (dial access codes)  
**DLPKOR-24026-MF-E**

## Incidence of Harm

If the telephone company determines that the customer provided equipment is faulty and possibly causing harm or interruption to the telephone network, it should be disconnected until repairs can be made. If this is not done, the telephone company may temporarily disconnect service.





## Changes in Service

The local telephone company may make changes in its communications facilities or procedures. If these changes affect the use of the STARPLUS Triad-S system or compatibility with the network, the telephone company must give written notice to the user to allow uninterrupted service.

## Maintenance Limitations

Maintenance on the STARPLUS Triad-S system must be performed only by the manufacturer or its authorized agent. The user may not make any changes and/or repairs except as specifically noted in this manual. If unauthorized alterations or repairs are made, any remaining warranty and the software license for the system will be voided.

## Hearing Aid Compatibility

All STARPLUS Triad-S digital terminals are Hearing Aid Compatible, as defined in Section 68.316 of Part 68 FCC Rules and Regulations.

## UL/CSA Safety Compliance

The STARPLUS Triad-S system has met all safety requirements and was found in compliance with the Underwriters Laboratories (UL) 1459. This system is authorized to bear the "NRTL/C" marking.

## Notice of Compliance

The STARPLUS Triad-S system complies with rules regarding radiation and radio frequency emissions by Class A computing devices. In accordance with FCC Standard 15 (Subpart J), the following information must be supplied to the end user:



***'This equipment generates and uses RF energy and if not installed and used in accordance with the Instruction Manual, may cause interference to Radio Communications. It has been tested and found to comply with the limits for a Class A computing device, pursuant to Subpart J of Part 15 of the FCC Rules, which are designed to provide reasonable protection against such interference, when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference, in which case the user, at his own expense, will be required to take whatever measures may be required to correct the interference.'***





## **Toll Fraud and DISA Disclaimer**

“While this device is designed to be reasonably secure against intrusions from fraudulent callers, it is by no means invulnerable to fraud. Therefore, no express or implied warranty is made against such fraud including interconnection to the long distance network.”

“While this device is designed to be reasonably secure against invasion of privacy, it is by no means invulnerable to such invasions. Therefore, no express or implied warranty is made against unlawful or unauthorized utilization which results in the invasion of one’s right of privacy.”

Vodavi has made every reasonable effort to ensure that this product works in most business environments. However, there may be some environments (**RFI** and **EFI**) in which this product may not work properly. In such cases, it is the responsibility of the installer to take the necessary actions to correct the situation,

This product is tested and found to be Year 2000 compliant. Vodavi shows 00 as the year in SMDR output and on LCD displays.



PAGE

1





## 2 Installation



### Introduction

As with any sophisticated communications device, installation of the STARPLUS Triad-S system requires the care and forethought of a competent technician. To assure easy servicing and reliable operation, several factors must be considered when planning the system installation. The installation proceeds in these major steps:

- ❖ Site Preparation
- ❖ KSLJ and Power Supply (PS) Installation
- ❖ PCB Installation
- 4 System Wiring
- 4 Keyset and Terminal Installation
- 4 Basic Installation Check-Out
- 4 System Programming and Verification

Installing the STARPLUS Triad-S system is quick and efficient if these installation instructions are followed.

### Site Preparation

#### General Site Considerations

The first step is to locate an acceptable site for the common equipment (KSUs, boards, etc.). When locating a mounting site for the KSUs, the following points must be considered:

- 4 KSUs are designed for wall mounting and should not be mounted directly to a masonry or plasterboard wall. It is recommended that a 1/2 inch plywood backboard be firmly mounted to the wall, and the KSU and MDF be mounted to the backboard.
- ❖ The location must have access to a **dedicated** 110 Volt AC ( $\pm 10\%$ ), 60 Hz, single-phase circuit with a circuit breaker or fuse rated at 15 amps. A 3-wire parallel blade grounded outlet should be within approximately 6 feet of the lower left rear of the BKSU mounting.
- 4 The location must have access to a good earth ground, such as a metallic cold water pipe without non-metallic joints. The ground source should be located as close as possible to the system.
- 4 The system should be located in an area that is well ventilated with a recommended temperature range of 68°-78° F and a relative humidity range of 5-60% (non condensing),





- ❖ The system should be located within **25** feet of the telephone company's termination point. Also, the location should be within the prescribed station loop lengths for all **keysets** and terminals. If existing cabling is used, its location and conduits should be considered. Station wiring should be in the building. Station ports are not designed for installation outside of the building.
- ❖ Protection from flooding, flammable materials, excessive dust and vibration.
- 4 The site should be away from radio transmitting equipment, arc-welding devices, copying machines and other electrical equipment capable of generating electrical interferences,
- 4 Operation of this equipment in a residential area is likely to cause interference. In which case the user, at his own expense, is required to take any necessary measures to correct the interference.

## Backboard Installation

A wooden backboard is recommended for **all** installations and must be installed when the location has masonry or plasterboard walls. A **1/2** inch plywood material is sufficient for most installations. The backboard should be mounted at a convenient height, about three feet above the floor and be bolted in various places to distribute the weight of the system.

Space should be available on the bottom side of the backboard for the MDF cabling and for optional equipment such as a music source, battery backup, etc. It is recommended that the location of each major item be roughly sketched on the backboard as an installation layout.

## Verify On-Site Equipment

Once the equipment installation site is identified and a dedicated AC outlet, earth ground, and lighting and ventilation are available, verify that all equipment required is on-site and was not damaged during shipment. Unpack the **KSUs** to assure there is no shipping damage. Note that a mounting template is packed with the **BKSU**; this template is required later in the installation. Check that the type and quantity of boards received is correct and optional equipment and a Power Line Surge Protector are on-site. Do **NOT** unpack the individual boards at this time.

If any equipment is damaged or missing, notify the appropriate personnel to correct the situation,



## KSU Installation

The STARPLUS Triad-S system consists of a Basic KSU (BKSU) cabinet,



### Mounting the Basic KSU

The Basic KSU consists of a plastic cover, a metal base frame designed for wall mounting. Before installing BKSU on the wall, two wall mounting plates that are assembled in the bottom side of the BKSU, must be extended for mounting. The KSU must NOT be mounted on a masonry or dry-wall surface; a wooden backboard is required.

A mounting template is included with the BKSU. This template can be used to drill pilot holes for mounting screws. Please note that the template provides screw hole locations for the BKSU and EKSU.

The BKSU is mounted with three #10 or larger, 1 1/2 inch or longer screws. Drill pilot holes in the three locations marked, insert the screws and tighten leaving about 1/2 inch exposed,



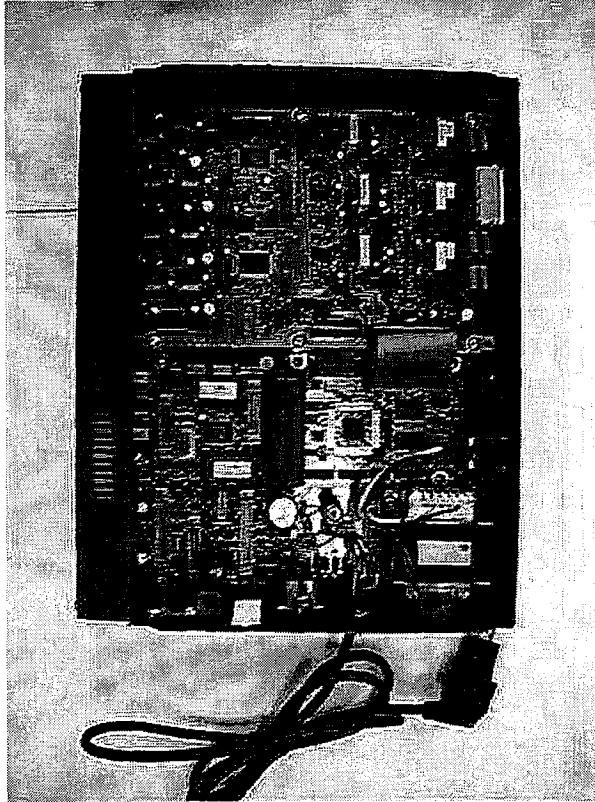
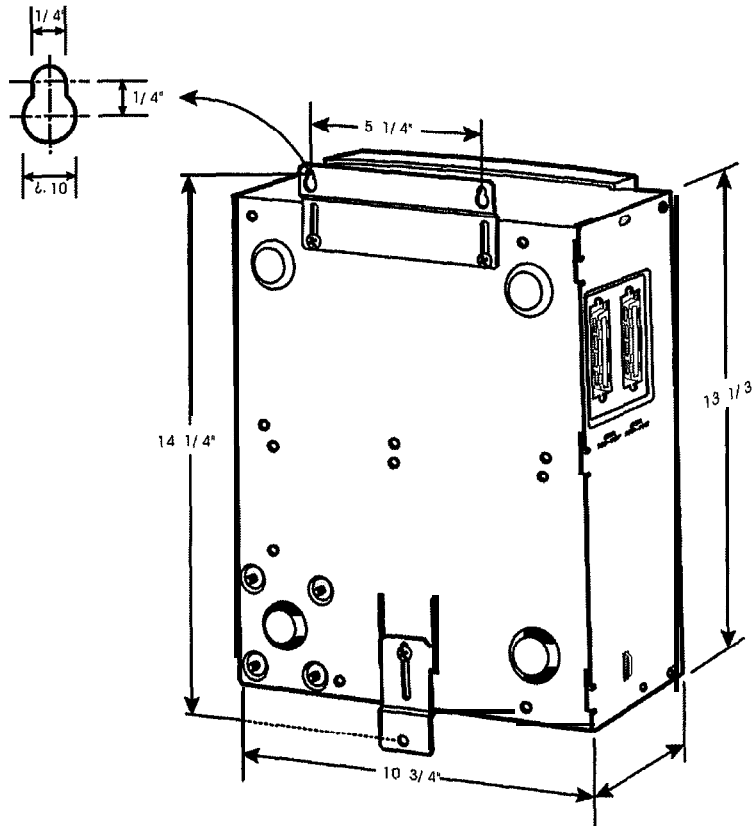


Figure 2-1: STARPLUS Triad-S Basic KSU

**Mounting the Expansion KSU (EKSU)**



**Figure 2-2: STARPLUS Triad-S Basic KSU Mounting Holes and Installation**

**Mounting the Expansion KSU (EKSU)**

The Expansion KSU consists of a plastic cover, a metal base frame designed for wall mount installation. The EKSU contains a power transformer and expansion interface board (EIB). The EKSU MUST be mounted above the BKSU. Before installing the BKSU on the wall, the wall mounting plate that is assembled in the bottom side of the EKSU, must be extended for wall mounting and the fastener provided with the EKSU must be assembled with the EKSU. After positioning the EKSU above the BKSU, mark the location of the two screws to mount the BKSU. The EKSU must NOT be mounted on a masonry or dry wall surface; a wooden backboard is required.



- 4 The EKSU is mounted with two #10 or larger, 1 ½ inch or longer screws. Drill pilot holes in the two locations marked, insert the screws and tighten leaving about ½ inch exposed. Mount the Expansion KSU on the screws and tighten the screws securely,

Interconnection is achieved via an amphenol type connector and power cable. The amphenol connector is included and connects the EKSU to the BKSU on the right side through connectors labeled EXP. Refer to *Figure 2-3: STARPLUS Triad-S Expansion KSU*.

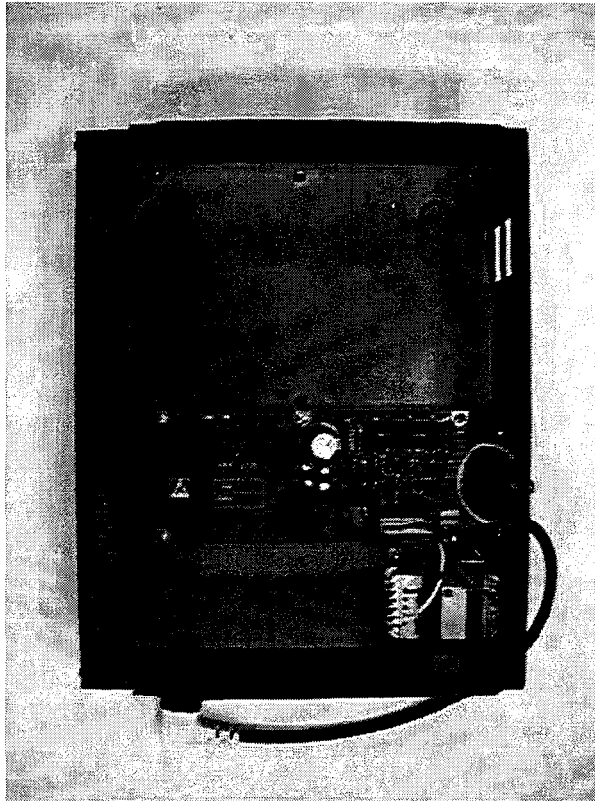


Figure 2-3: STARPLUS Triad-S Expansion KSU



Mounting the Expansion KSU (EKSU)

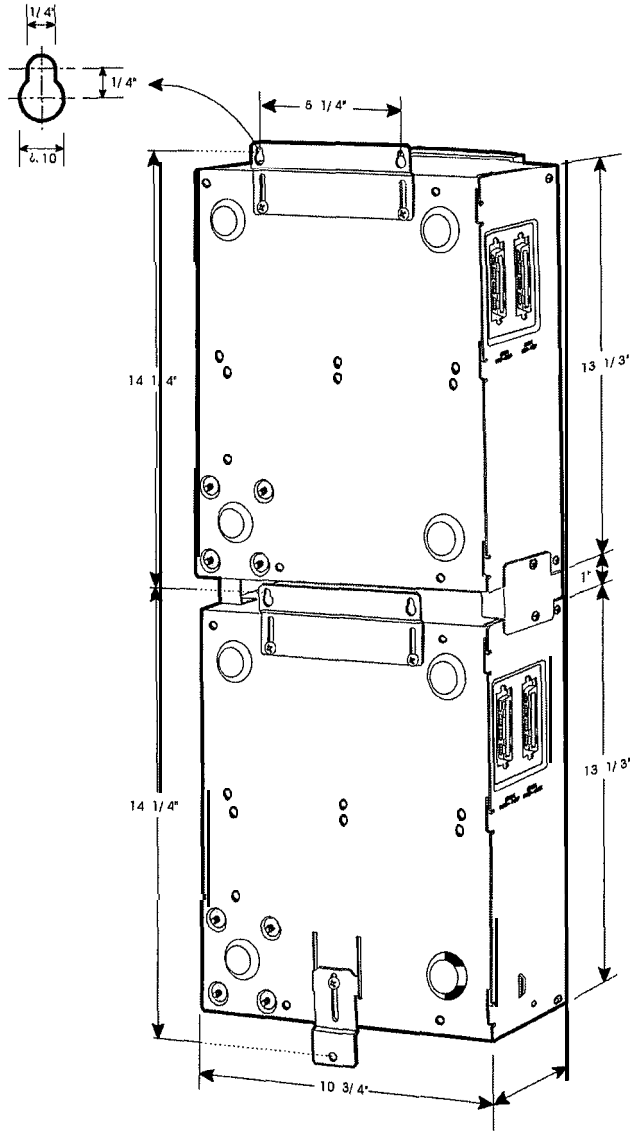


Figure 2-4: STARPLUS Triad-S BKSU and EKSU Mounting Holes and Installation

## Battery Charging Unit (BCU) Installation

The BCU provides power for the system during a power failure. The BCU connects to the Triad-S via the connector on the bottom of the BKSU. The external gel cell batteries must provide 24V DC. This is generally accomplished by connecting two 12 volt batteries in series. The BCU provides charging current to the batteries during normal AC power operation at a maximum of about 0.5 amp. During battery operation, the BCU discontinues battery operation if AC power is restored or the battery voltage is too low to maintain proper system operation.

The time the system operates on batteries is dependent on several elements, including: battery charge state, condition of the batteries, capacity of the batteries, and the system size (number of station ports). The following chart gives the approximate backup time in ampere hours for two system sizes and different battery capacities.

Battery Capacity	16 Port	32 Port
10 AH	4 Hour	1.75 Hour
20 AH	8 Hour	3.5 Hour

## KSU Grounding

To ensure proper system operation and for safety purposes, a good earth ground is required. A metallic COLD water pipe usually provides a reliable ground. Carefully check that the pipe does not contain insulated joints that could isolate the ground. In the absence of a COLD water pipe, a ground rod or other source may be used.

A #12 insulated AWG or larger copper wire should be used between the ground source and the KSU (BKSU and EKSU, respectively). The wire should be kept as short as possible (recommended 25 feet or less).

- 1 Remove about 1 1/2 inches of insulation from both ends. Attach one end of the wire to the Ground Lug on the lower side of the Basic and on the lower side of the Expansion **KSU** by inserting the wire under the lug screw, then tighten the screw securely.
- 2 Attach the other end of the wire, as appropriate, to the ground source.
- 3 Take a DC resistance reading and an AC volt reading between the chassis ground point (cold water pipe) and AC ground (third wire AC ground). The limit is 5V AC and 5 Ohms DC resistance. If a higher reading is obtained, choose a different chassis ground point and repeat this step until a suitable ground point is found.



## Power Line Surge Protection

The AC outlet should be equipped with a power surge protection device or UPS. Systems using such devices are more resistant to damage from power line surges than unprotected systems. Power line surges often occur during normal operations and during violent thunderstorms,

Installation of a surge protector meeting the specifications described in the following paragraph may prevent or minimize the damage resulting from power line surges.

The isolation transformer/surge protector should be: 15 amp self-contained unit that plugs into a standard grounded 117V AC wall outlet. The wall outlet must be designed to accept a **3-prong** plug (two parallel blades and a ground pin). The protector should be fast and capable of protecting transients greater than 200 volts.

## Lightning Protection

The system provides secondary protection per UL 1459 specifications. Primary protection circuitry is the installer's responsibility and should be installed per the National Electric Code (NEC).

## KSU AC Power Plug

Before plugging the KSU power cord into the AC source (grounded, **3-prong** AC outlet required), verify that the power switch of the BKSU is off.

- ◆ Plug the KSU power cord into the AC outlet and turn the power switch on, The red LED on the MBU illuminates.

## PCB Installation

### PCB Handling and General Installation



*DO NOT install or remove any boards with power applied.*

Power must be turned off prior to installation or removal of the PCBs. The system cards contain digital circuitry which are extremely reliable, but can be damaged by exposure to excessive static electricity. When handling PCBs, a grounded wrist strap should be used to protect the boards from static discharges. Also, use common sense when handling PCBs. For example, do not place a PCB in locations where heavy objects might fall on the PCB and damage components.

## BKSU and Main Board Assembly

The MBU is installed in the BKSU at the factory before the shipment. The MBU contains a lithium dry cell to maintain memory and real-time clock functions. The battery is soldered to the MBU and connected to the circuitry by an ON-OFF dip switch (SW2). Make sure the dip switch SW2 is ON before database programming.

Before programming the system, switch 1 (SW1) should be placed in the ON position and powered off and on to initialize the system database to default. Once the database is initialized, switch 1 (SW1) should be placed in the OFF position to protect the database. Shown below is the dip switch position functions:

MBU PCB Marking	Dip Switch Position	Function
SW1	ON	Flush the database
	OFF	Retain the database

**Figure 2-5: BKSU Dip Switches**

The MBU may be equipped with 3 daughter boards: MODU for modem access to the system, DTMF-4A for DTMF receiver expansion up to five, and a MISU for two serial ports and a second music source.

Software for the system is contained on two chips labeled U1 and U2 in the Program Module Unit (PMU) module.

The MBU provides miscellaneous features:

- ◆ One external page port that is connected to transformers, providing a 600 ohm impedance.
- ◆ One music input that is connected to transformers, providing a 600 ohm impedance.
- ◆ Two independent dry relay contacts rated at 1 amp, 24V DC.
- ◆ A DTMF receiver.

These features are provided through the **amphenol** connector on the front edge of the **CKIB** installed in the first slot of the BKSU. These features are controlled by system software.

## Modem Unit (MODU)

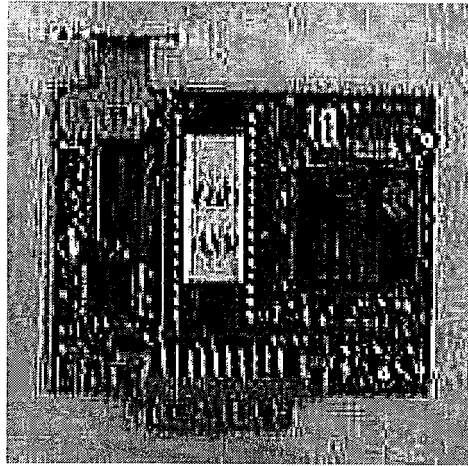
The Modem Unit provides an asynchronous modem for access to the system database and remote maintenance. The module is optionally installed on the BKSU (MBU) and includes a 9600 baud modem.

**Modem Unit (MODU)**

The modem may be accessed from any station or CO. The MODU port is independent of the MISU RS232C ports, enabling system database access, etc., without interrupting the SMDR output.

To install the MODU:

- 1 Using a grounding strap, unpack the MODU from its anti-static bag in the packing box.
- 2 Locate the CN6 connector (outlined) on the MBU.
- 3 Locate the **CN1** connector on the MODU.
- 4 Position the MODU so the **CN1** matches with CN6 on the MBU.
- 5 Push the MODU onto its connector, making sure it is properly seated.
- 6 Match the screw hole on the MODU PCB bracket with the screw hole on the base frame.
- 7 Insert a screw and tighten the screws securely.



**Figure 2-6: STARPLUS Triad-S Modem Unit (MODU)**

This completes the MODU installation.

## Miscellaneous Interface Unit (MISU) Installation

The Miscellaneous Interface Unit (MISU) contains the second external music source (MOH/BGM) and two serial ports.

To install the MISU:

- 1 Using a grounding strap, unpack the MISU from its anti-static conductive bag in the packing box.
- 2 Locate the CN15 connector (outlined) on the MBU.
- 3 Locate the CN3 connector on the MISU.
- 4 Position the MISU so that CN3 matches CN15 on the MBU.
- 5 Push the MISU onto it's connector making sure it is properly seated.
- 6 Match the screw hole on the MISU PCB bracket with the screw hole on the base frame.
- 7 Insert a screw and tighten the screws securely.

The MISU has an eight position dip switch. The table below lists the functions of each switch.

Dip Switch	Function
1	Not used
2	Not used
3	Not used
4	ON: XOFF/XON OFF: CTS/RTS
5	Not used
6	ON: Execute H/W tests at start-up OFF: Skip H/W tests at start-up
7	ON: Display start-up status OFF: Do not display start-up status
8	Not used

Table 2-1: MISU Dip Switches

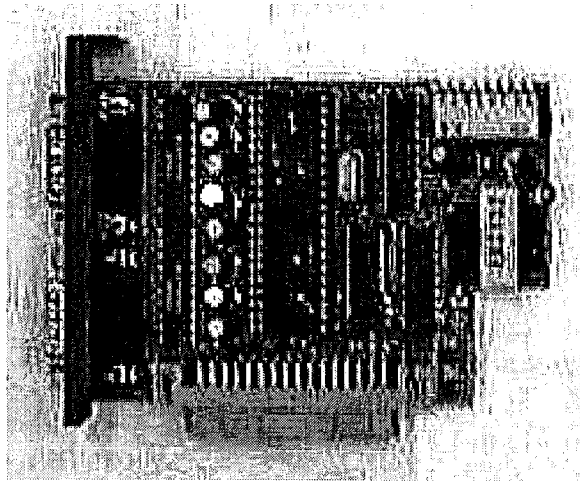


Figure 2-6: STARPLUS Triad-S Miscellaneous Interface Unit (MISU)

This completes the MISU installation.

## DTMF4-A Unit

The **DTMF4-A** provides the additional four DTMF receivers that may be used for detecting the DTMF signal from the single line telephone port or central office line.

To install the **DTMF4-A**:

- 1 Using a grounding strap, unpack the **DTMF4-A** from its anti-static conductive bag in the packing box.
- 2 Locate the **CN13** and **CN14** connectors (outlined) on the MBU.
- 3 Locate the **CONN5** and **CONN6** connectors on the **DTMF4-A**.
- 4 Position the **DTMF4-A** so **CONN5** and **CONN6** match **CN13** and **CN14** on the MBU.
- 5 Push the **DTMF4-A** onto its connector making sure it is properly seated.

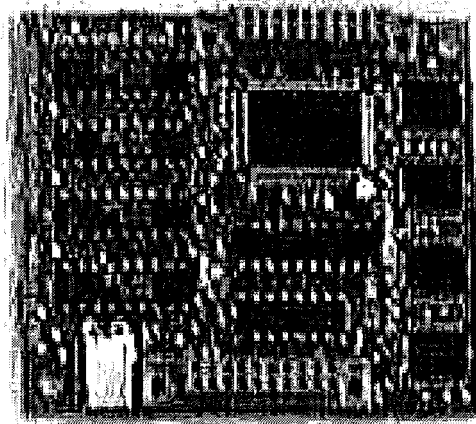


Figure 2-7: STARPLUS Triad-S DTMF4-A

This completes the **DTMF4-A** installation.





## Message Wait Unit (MSGU)

The Message Wait Lamp Relay Control (MSGU) provides message wait lamp relay control for message lamp single line telephones. The MSGU board mounts on the CSIB as a daughter-board-type arrangement. The CSIB interfaces with mechanical 90V AC ringers and 95V DC lights on 2500-type phone sets,

To install the MSGU:

- 1 Using a grounding strap, unpack the **MSGU** module from its anti-static conductive bag in the packing box.
- 2 Locate the **CN1** and **CN2** connectors on the **MSGU** module.
- 3 Locate the **CN1** and **CN2** connectors on the **CSIB** (outlined).
- 4 Position the MSGU module so **CN1** and **CN2** match **CN1** and **CN2** connectors on the **CSIB**, respectively.
- 5 Push the MSGU module onto these connectors making sure it is properly seated.

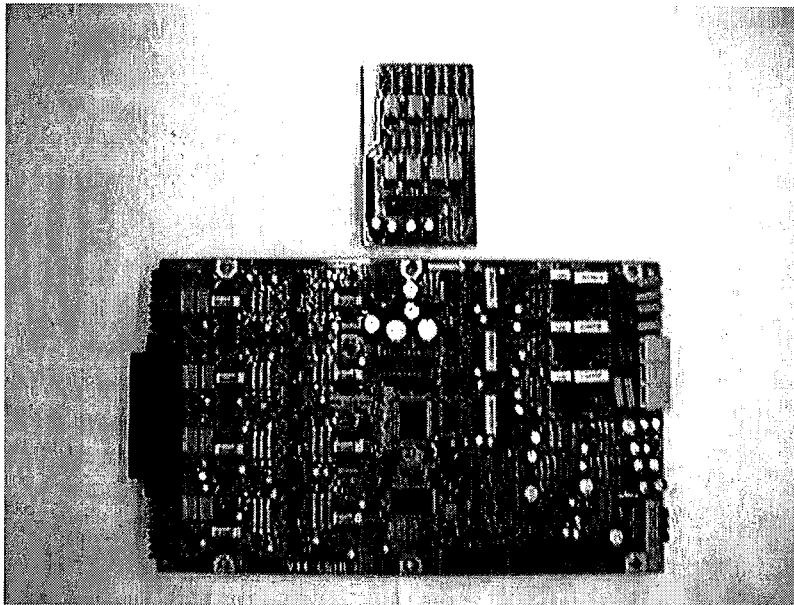


Figure 2-8: STARPLUS Triad-S Message Wait Unit (MSGU)

This completes the MSGU module installation,

## CKIB/CSIB Installation

There are **two** types of expansion boards available: CKIB and CSIB. These boards include 3 loop start CO line interfaces and **8 digital** key telephone interfaces (**CKIB**), or 3 loop start CO line interfaces and 8 **single line** telephone interfaces (**CSIB**).

To install the **CKIB/CSIB**:

- 1 Using a grounding strap, unpack the **CKIB/CSIB** from its anti-static conductive bag and six standoffs from the auxiliary bag in the packing box.
- 2 Unscrew the six screws from the **CKIB/CSIB** installed in the first slot of the BKSU or EKSU.
- 3 Insert the standoffs to secure the first card to the BKSU or EKSU.
- 4 Position the **CKIB/CSIB** on the six standoffs so the screw holes match.
- 5 Insert the screws and tighten them securely.
- 6 Connect the flat cable with the MBU in the BKSU or the EIB in the EKSU. The **CKIB** cable is labeled CN4; the **CSIB** cable is labeled CN5.

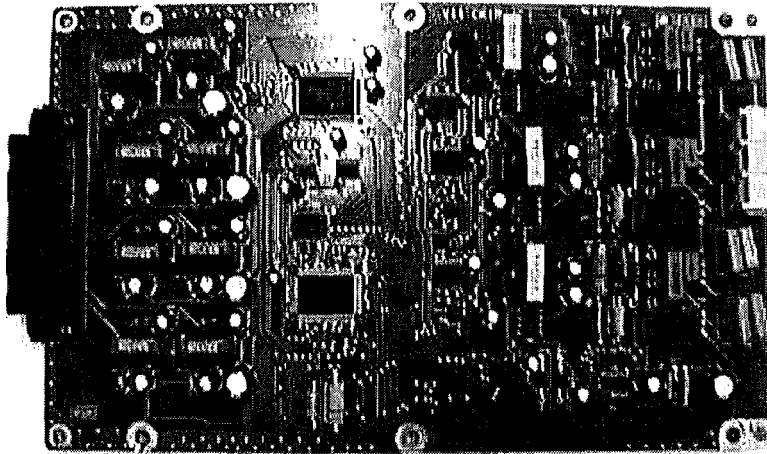


Figure 2-9: STARPLUS Triad-S **CKIB** Board

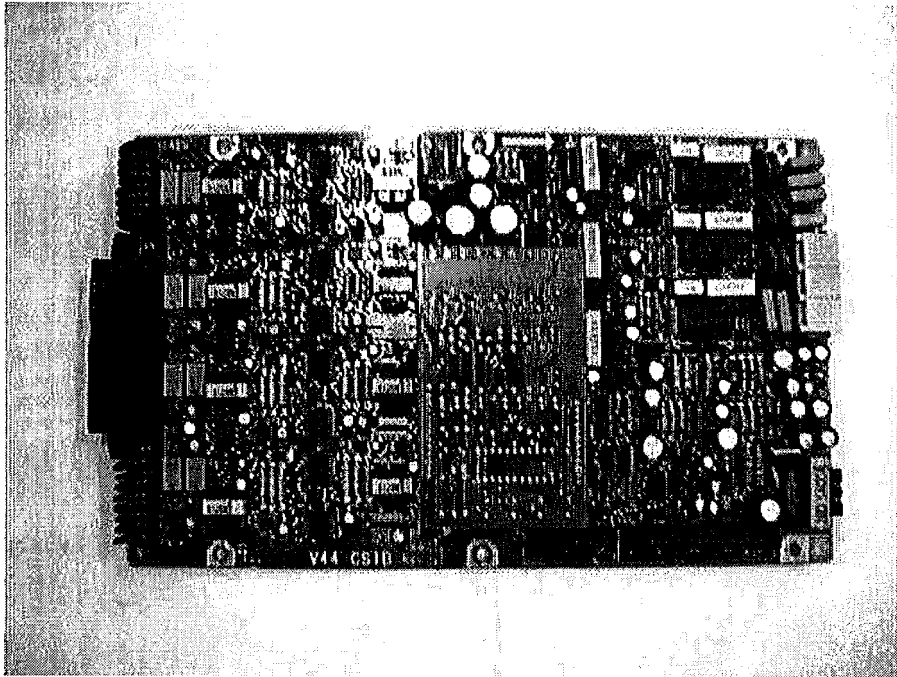


Figure 2-10: STARPLUS Triad-S CSIB Board with MSGU Mounted

Each CKIB or CSIB has 3 loop start CO line interfaces. The loop start CO/PBX lines are connected to RJ-11 connectors on the right side of each board.

This completes the CKIB/CSIB installation.

## CKIB/CSIB Wiring

There is one 50-pin female amphenol connector on the left side of the board. This enables the system to be cabled to the main distribution frame (MDF). A 25-pair telephone cable must be prepared with mating connectors to extend the interface circuits to the MDF. The cables should be routed through the cable clamps at the bottom of the KSU to the MDF. These cables are terminated on industry standard 66MI-50 type punch down blocks. It is recommended that 66MI-50 split blocks with bridging clips be used to simplify troubleshooting and to quickly isolate any faults.



Pair	Pin #	Color	CKIB Description		CSIB Description	
1	26 1	Wh/BL BL/WH	Data-T1 Data-R1	DKTU1	Tip Ring	SLT1
2	27 2	WH/OR OR/WH	Data-T2 Data-R2	DKTU2	Tip Ring	SLT2
3	28 3	WH/GN GN/WH	Data-T3 Data-R3	DKTU3	Tip Ring	SLT3
4	29 4	WH/BN BN/WH	Data-T4 Data-R4	DKTU4	Tip Ring	SLT4
5	30 5	WH/SL SL/WH	Data-T5 Data-R5	DKTU5	Tip Ring	SLT5
6	31 6	RD/BL BL/RD	Data-T6 Data-R6	DKTU6	Tip Ring	SLT6
7	32 7	RD/OR OR/RD	Data-T7 Data-R7	DKTU7	Tip Ring	SLT7
8	33 8	RD/GN GN/RD	Data-T8 Data-R8	DKTU8	Tip Ring	SLT8
9	34 9	RD/BN BN/RD				
10	35 10	RD/SL SL/RD				
11	36 11	BK/BL BL/BK				
12	37 12	BK/OR OR/BK				
13	38 13	BK/GN GN/BK				
14	39 14	BK/BN BN/BK				
15	40 15	BK/SL SL/BK				
16	41 16	YL/BL BL/YL				
17	42 17	YL/OR OR/YL				
18	43 18	YL/GN GN/YL				

Table 2-2: CKIB/CSIB Wiring





Pair	Pin #	Color	CKIB Description	CSIB Description
19	44	YL/BN		
	19	BN/YL		
20	45	YL/SL	EXPIT	
	20	SL/YL	EXPIR	
21	46	VI/BL	MOHIT	
	21	BL/VI	MOHIR	
22	47	VI/OR	BGM/MOH2T	
	22	OR/VI	BGM/MOH2R	
23	48	VI/GN	RELAY1T	
	23	GN/VI	RELAY1R	
24	49	VI/BN	RELAY2T	
	24	BN/VI	RELAY2R	
25	50	VI/SL		
	25	SL/VI		

**Table 2-2: CKIB/CSIB Wiring**



*Wiring for External Page, MOH/BGM, and Relay Is available only at the first boardposition of the BKSU.*



## Station Wiring

The following provides details on the interconnection of each type station interface board and station jack.



*Only the first pair (green, red) on the jack should be connected to the KSU. No other pairs should be connected.*

### Digital Keypad

Wiring from the CKIB to the station jack requires single pair cable (2 or 3 pair is recommended). Digitized voice, signaling and battery are sent over this pair.

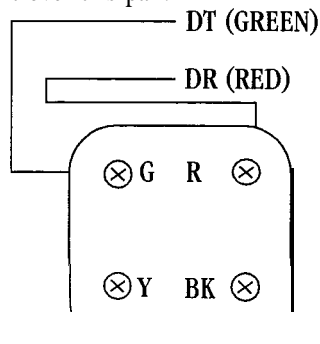


Figure 2-11: STARPLUS Triad-S Digital Station Jack Wiring

### Single Line Telephone

The CSIB is wired to SLT devices with single pair cabling to provide talk battery, voice and signaling to and from the SLT.

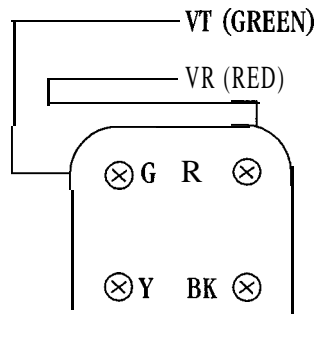


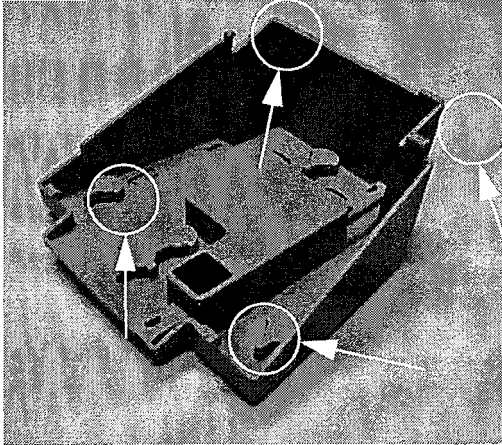
Figure 2-12: STARPLUS Triad-S Single Line Telephone Wiring



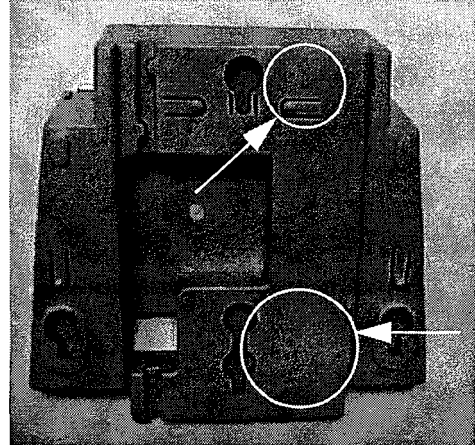
## Wall Mounting the Digital Key Telephone

To wall mount the digital key telephone, it is necessary to use the wall mount bracket and a standard type jack designed for 630-type wall hanging applications. See Figure 2-13: *Digital Kq Telephone Wall Mounting* on the following page.

- 1 Remove the handset from the cradle and locate the plastic retainer in the bottom of the hook-switch well area.
- 2 Push the plastic retainer slowly upward until it is free.
- 3 Locate the tab on the plastic retainer, making sure it is toward you, then place it back into its holder.
- 4 Slide the plastic retainer all the way down into its channel. Part of the retainer remains above its holder to hold the handset secure for the wall mount configuration.
- 5 Turn the telephone over and unplug the line cord. If the cord is not plugged into the wall jack assembly, reroute the line cord through the access channel on the top of the telephone. If the line cord is plugged into the wall jack assembly, run the line cord through the hole provided and plug it into the connector on the back of the telephone.
- 6 Line up the hooks on the top and bottom of the wall mount bracket so they can engage with the slots cut into the bottom of the telephone base. Insert the bottom hooks first.
- 7 Slide the mounting bracket slowly downwards until the top tabs slide into the top slots. and snap into place.
- 8 Match the two key hole slots on the base plate with the lugs on the 630-A type jack and align the modular connector, then slide the telephone into place.
- 9 Place the handset onto the retainer.



**Mounting Bracket Tabs**



**Wall Mounting Holes**

**Figure 2-13: Digital Key Telephone Wall Mounting**

The telephone is now ready to use.





## Headset Installation

The STARPLUS Triad-S digital key telephones were designed to operate with industry standard electret mic compatible modular headset adapters and operator headsets.

To modify a STARPLUS Triad-S digital key telephone to support an external headset:

- 1 Plug the headset adapter cord into the vacant handset jack on the key telephone base.
- 2 Plug the telephone handset cord into the headset adapter box where indicated by the headset manufacturer's instructions.

Refer to Station Programming in the System Programming manual for instructions on enabling headset operation. After programming, the station can enable or disable headset mode by dialing a code. When headset mode is active at the station, the ON/OFF button controls the on-hook or off-hook status. Additionally, while headset mode is active, features such as on-hook dialing and hands free speakerphone operation become inoperable.

## Caller ID Interface Unit Installation

The Caller Identification Interface Unit receives the data from the telephone company and sends the data, in ASCII RS-232C format to the KSU.

To connect the cable port (9081-00) :

- 1 Select the correct RS-232 cable.
- 2 Connect one end of the cable on the desired MSIB I/O port (1 or 2).
- 3 Connect the other end to the 1480-00 I/O port marked RS232.

Figure 2-14: *Caller ID Cable Connections* illustrates the connections for the TCI Caller ID Interface Unit,

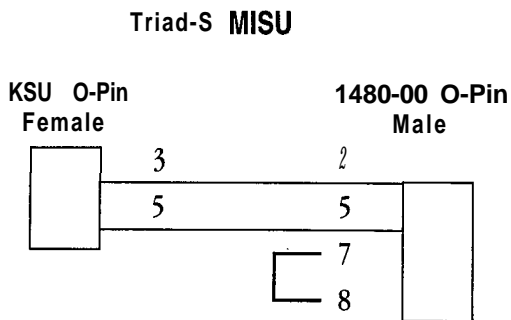


Figure 2-14: Caller ID Cable Connections

## Switch Settings

S1 dip switches select the signaling protocol of the RS-232 OUT connector to assist in matching signals from the 1480-00 with those of the DTE device. S2 dip switches control two major functions:

- ❖ Switches 1-5 configure the 1480-00 to the DTE device for baud rate, data bits, and parity,
- ❖ Switches 6-S select the unit number for the 1480-00 when multiple units are connected in series. If a single unit is used, switches 6-8 are set for Unit # 1.

Set the switches on the 1480-00 as follows:



## Programming Caller ID

### ICLID Enable

- 1 Verify the programming for ICLID enable, **\*\*3226**, Flash 56.
- 2 Press Button [I].
- 3 Dial [I ] on the keypad and press HOLD.

### I/O Ports

- 1 Verify the programming for the I/O ports, **\*\*3226**, Flash 15.
- 2 Select the I/O port, Button 1, 2 (**SIU1**, **SIU2**).
- 3 Dial [**5**] on the keypad and press HOLD to select 2400 baud.

### CO Lines

- 1 Verify the programming for the CO lines, **\*\*3226**, Flash 40.
- 2 Enter the CO line range for the Caller ID Unit.
- 3 Press HOLD.
- 4 Press Button [**21**] (Page C).
- 5 Press Button [**2**], ring delay timer.
- 6 Enter 04 (minimum) and press HOLD.
- 7 Reset the system and Caller ID Unit.



## SMDR

The SMDR feature provides detailed records of all outgoing and/or incoming, long distance only or all calls, The SMDR Qualification Timer determines the time needed to determine a valid SMDR call for reporting purposes. By default, this timer is set to 30 seconds and is variable from 00-60 seconds in one second increments. This feature is enabled or disabled in system programming. By default, SMDR is disabled and set to record long distance calls only. A printout format of 80 characters maximum or 30 characters maximum may be selected in system programming. The standard format is 80 characters per line. A 30 character format generates three lines per message. If the SMDR feature is enabled, the system starts collecting information about the call as soon as it starts and terminates when the call ends. If the call was longer than 30 seconds, the following information is printed (see next two pages) :



**30 character format selected:**

```

1      2      3
123456789012345678901234567890
AAA BB HH:MM SS HH:MM MM/DD/YY(CR)(LF)
HCCCCCCCCCCCCCCCCCCCCCCCCCCCC<R>GGGGGGGGGGGG
STA CO TOTAL START DATE
116 08 00:02:00 14:13 05/11/90(CR)(LF)
0123456789012345678901234(CR)(LF)
123456789012(CR)(LF)

```

**80 character format selected:**

```

123456789~123456789~123456789~123456789~123456789~123456789~123456789~
AAA BB HH:MM SS HH:MM MM/DD/YY HCCCCCCCCCCCCCCCCCCCCCCCC GGGGGGGGGGGG (CR)(LF)
STA CO TOTAL START DATE DIALED ACCOUNT CODE<~>~>COST
116 08 00:02:00 14:13 05/11/90 0123456789012345678901234 123456789012(CR)(LF)

```

**80 character format with Call Cost Display feature enabled:**

```

123456789~123456789~-23456789~1234567890123456789~123456789~123456789~123456789~
AAA BB HH:MM SS HH:MM MM/DD/YY HCCCCCCCCCCCCCCCCCCCCCCCC GGGGGGGGGGGG (CR)(LF)
STA CO TOTAL START DATE DIALED ACCOUNT CODE<~>~>COST
116 08 00:02:00 14:13 05/11/90 0123456789012345678901234 123456789012<_>000.00(CR)(LF)

```

**BO character format for DISA Calls:**

```

1      2      3      4      5      6      7      8
1234567890123456789012345678901234567890123456789012345678901234567890
AA BB HH:MM SS HH:MM MM/DD/YY HCCCCCCCCCCCCCCCCCCCCCCCC GGGGGGGGGGGG (CR)(LF)
STA CO 00:02:00 14:13 05/11/90 DIALED ACCOUNT CODE<~>~>COST
31 04 00:04:54 14:15 05/11/90 1012345678901234567890123123456789012<_>000.00(CR)(LF)

```

**CLID 30 character format selected:**

```

1      2      3
123456789012345678901234567890
STA CO TOTAL START DATE
100 01 00:00:19 09:32 10/24/94(CR)(LF)
) 602-443-6000(CR)(LF)
123456789012 ***(CR)(LF)

```

Table 2-3: SMDR Printout

SMDR



ICLID 80 character format selected:

1	2	3	4	5	6	7	8
1234567890123456789012345678901234567890123456789012345678901234567890							
STA	CO	TOTAL	START	DATE	DIALED	ACCOUNT	CODE<_><_>COST
100	01	00:00:36	04:37	06/19/92	11-602-443-6000		**<CR><LF>
**VODAVI							
							(CR)<LF>
01	00:00:00	04:38	06/19/92	U1-602-443-6000			**
**VODAVI							
							(CR)<LF>

AAA = Station originator or Trunk on DISA and Off-Net (CO Line) calls,  
 BB = Outside line number  
 HH:MM:SS = Duration of call in Hours, Minutes and Seconds  
 HH:MM = Time of day (start time) in Hours and Minutes  
 MM/DD/YY = Date of Call  
 H = Indicates call type:  
 I = Incoming\*  
 O = Outgoing  
 T = Transferred\*  
 U = Unanswered calls for ICLID SMDR call records  
 CC...CC = Number dialed  
 GG...GG = Last Account code entered (optional)  
 (CR) = Carriage return  
 (LF) = Line Feed

Table 2-3: SMDR Printout





## 3 System Check-Out

### Introduction

Prior to actual power up and initialization, check out the **STARPLUS** Triad-S System to avoid start up delays or improper loading. A step-by-step checklist is provided for this purpose.

### Preliminary Procedures

- 1 Make sure the Basic Key Service Unit (BKSU) is properly grounded to cold water pipe or earth ground.
- 2 Verify that all expander modules are firmly seated onto their connectors.
- 3 Inspect the MDF for shorted wiring and improper polarity that would affect the Digital Terminal or DSS console.
- 4 Make certain the lithium battery switch (SW2) on the MBU of the BSKU is set to the ON position to enable the battery backup option.
- 5 Make sure the MDF cables connected to the KSU are secure and are plugged into the correct position.

### Power Up Sequence

The power up sequence involves 1) the proper application of AC power to the system and 2) defaulting the system. A successful power up is assured if the installation checklist is followed.

- 1 Plug the AC power cord of the Key Service Unit into the dedicated 117V AC outlet.
- 2 Remove the BKSU cover, set SW1 on the MBU to the ON position. Set (SW2) (BATT) to the ON position.
- 3 Turn the power switch of the KSU to ON.
- 4 Set (SW1) on the MBU to the OFF position to retain changes to the database.
- 5 The system is ready for programming. If problems occur, refer to Section 4, Maintenance and Troubleshooting.



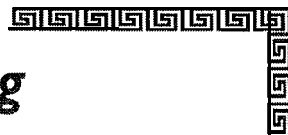


Voltage Destination	Voltage Reading	Test Point Location
117V AC	+117V AC, ±10%	Commercial Power Source

Table 3-1: Power Supply Tests







# 4 Maintenance and Troubleshooting

## Introduction

This section is provided as a guideline in isolating and resolving functional problems that may be encountered as a result of improper use or component failure of the STARPLUS Triad-S systems. Other failures, such as no dial tone from the central office, must also be considered as an overall troubleshooting procedure.

## System Programming and Verification

System operation should be verified as per the programmed customer database once all customer database programming was completed. A hard copy of the customer database can be printed from the system and should be kept on-site and up to date for future reference.



***System must be initialized before the customer database is programmed.***

The STARPLUS Triad-S systems are highly-featured digital switches and, as such, feature activation can sometimes be mistaken for improper operation. First, verify all programmable features are enabled for the phone or function in question. Then compare the suspected improper operation with the feature operation description to determine which feature is causing conflict. Be aware that some features can *override* others and take precedence in operational priority. Then make the necessary programming changes in customer database programming to acquire the desired operation.

If feature operation is not the cause of the suspected problem, then general troubleshooting procedures should be employed. A basic guideline for determining the cause of a reported problem is given below:

- 1 Verify that system programming is correct and that the suspected feature, circuit or function was enabled in programming.
- 2 Check the installation cabling/wiring and connectors for cuts, shorts or loose connections.

By verifying correct operation for each segment of the installation and system, the source of the problem is isolated and can thereby be identified and resolved.



## Telephone and Terminal Troubleshooting

This section discusses general functions on a variety of key telephones and terminals available for use on the system. It is assumed that basic troubleshooting skills in the identification and resolution of basic problems are already possessed (e.g., static/noise heard on conversation, one phone only; Replace worn handset cord).

### Keypad Self Test

The STARPLUS Triad-S system contains a test mode feature that supports the off-line testing of digital keysets and DSS units. The term off-line means that the unit under test is operationally disconnected from the switch during the test operation. Keysets not under test continue to operate in the normal manner. Tests are provided to verify the keypad and DSS LED, LCD, and keyboard button operations.

- 1 The test mode is entered by taking a keypad's handset off hook.
- 2 Press the SPEED button and dial [7#] on the dial pad. This disconnects the keypad from the system and brings up the Test Mode Menu on the keypad's LCD. The test mode is exited by putting the handset back on hook. This reconnects the keypad to the system.

Test Mode Menu: The menu allows the operator to select a test mode by pressing the mode number at the dial pad. The operator can always return to the main test menu by pressing [##].

**SELECT 1:LCDLED 2:KEYBTN  
3: DSSBTN**

### Keypad LCD/LED Test

This test outputs a series of continuously repeated LCD string messages to LCD lines 1 and 2. The set of strings consists of the letters A through X and a through x. The next set of strings are:

**PICKUP TRUCK SPEED ZONE!  
\*\*\* STANDING BACK \*\*\***

- 4 The strings are alternately displayed on lines 1 and 2 of the LCD display,

Keypad Self Test



### Keypad Button Test

- 1 Pressing a **keyset** button turns on the LED and displays an LCD message identifying the button number.



- a Each time the selected button is pressed it sequences through the table of flash rates available.

Button	ipm	Type
01	On	Steady
02	30	Flash
03	60	Flash
04	60	Double Wink
05	240	Flash
06	240	Flutter
07	480	Flash
08	480	Flutter
09	15	Flash
10	120	Flash
11	120	Flutter
12	30	Double Flash
13	480	Double Wink
14	480	Double Flash

Table 4-1: Flash Rates

- 3 Pressing dial pad keys display an LCD message that indicates which digit was pressed. Pressing the H-T-P switch from one position to another causes the word **H\_POS**, **T\_POS**, or **P\_POS** to display.
- 4 **LEDs** can be tested independently of the **KEYS** by pressing the flex LED button.

### DSS LED/Button Test

When the DSS test is selected and a DSS test is invoked, ALL DSS units associated with the **keyset** are placed in the test mode.





If no DSS unit is associated with the keypad, the keypad display indicates NO DSS. The DSS LED test causes all the LEDs to light steady. All LEDs remain lit steady until a DSS flex button is pressed. Pressing a DSS button turns on the DSS button LED and displays an LCD message on the associated keypad identifying the DSS button number (01 to 48). In addition, it turns off the previously selected flex LED.



Conditions:

- ◆ Test mode interrupts the normal operation of a keypad or DSS.

### Key Telephones/Terminals

The following actions apply to multi-line key telephones:

Symptom	Action
1 No power to keypad	Verify that keypad is connected to correct type of station card.
2 No handsfree answer-back on intercom	On digital keysets, the mode of intercom answer is programmable.
3 CO line/station button will not access CO line/station	Check flexible button programming for that button.
4 Speakerphone does not work	Check station programming for speakerphone enable.
	Verify phone is a speakerphone model.
5 Cannot call another intercom station	Check off hook preference programming.
6 No camp-on signals or override to phone	Check station programming for override enable

Table 4-2: Key Telephones/Terminals



## Single Line Telephones

The following applies to all 2500 type single line telephones connected to the system,

Symptom	Action
1 Phone will not dial out	Verify correct SLT type programmed in station identification. Verify line group access programming.
2 No ringing to phone	Check CO line ringing assignments in programming.
3 Message waiting lamp does not work	Check station ID assignment in programming.
	Make sure the MSGU is installed on the CSIB.
4 Cannot call another intercom station	Check off hook preference programming. Put all unused CO lines in a CO line group not currently being used.

Table 4-3: Single Line Telephones

## DSS/DLS Console

The following applies to DSS/DLS Consoles:

Symptom	Action
1 Buttons on DSS/DLS do not function as labeled	Check station identification assignment in programming for correct DSS map assignment.
2 Pressing buttons on DSS does not activate keypad	DSS must be assigned to <b>keyset</b> in station ID programming.
3 No power	Verify unit is connected to the correct type station board (digital or electronic).

Table 4-4: DSS/DLS Console



## CO Line Card Functions

The system can be equipped with either a CKIB or CSIB line interface card. Each card type contains three (3) Loop Start CO lines.

Symptom	Action
1 3 loop start CO lines on the system do not work	Check or change card. Check CO line demarcation.
2 CO line(s) does not ring	Check CO line ring assignment in programming.
3 Noise or cross-talk on the line	Check CO line at demarcation for cross-talk. Check with different card at different station.

Table 4-5: CO Line Loop Start Board (CKIB/CSIB Board)

## System Functions

The following functions are related to system resources and the common equipment boards controlling them.

Symptom	Action
<b>Basic KSU and MBU</b>	
1 Complete system failure	Verify that power switch is on, power cord is plugged in. Check power LED on MBU (left edge of card). Verify PMU was installed with software.
2 Any correctly activated feature does not work properly	Check system programming related to specific feature.
3 Loss of system intercom dial tone and call processing tones	Check off hook preferences, headset mode, and verify on another telephone.
4 Loss of customer database programming	Verify status of initialization switch, database backup battery connection, battery voltage, and system programming.
5 Customer database cannot be programmed	Verify that no one else is accessing database programming. Check RS232 cable and verify programming was performed from Station 100.

Table 4-6: System Functions



Symptom	Action
<b>Modem Unit (MODU)</b>	
1 Cannot access system database programming remotely	Verify modem installation and programming. Check modem baud rate.
<b>Miscellaneous Interface Board (MISU)</b>	
1 Music Channel 2 is not functioning	Verify MSU is installed and check music source.
2 Cannot communicate with external devices	Check the baud rate programming and the COMM port selection and cable.
<b>DTMF Receiver Unit (DTMF-A)</b>	
1 DTMF single line telephones cannot dial out	Verify DTMF-A is installed.

Table 4-6: System Functions

## Remote Maintenance

### General Overview

The Remote Maintenance feature allows authorized personnel to survey system, slot configuration information and programming. This can be done through the optional modem or data terminal connected via the RS-232C port on the optional MISU Module. The commands are entered from a keyboard and are limited to those listed.

### Overview of Maintenance Commands

There are four basic commands available in the Remote Maintenance feature. All commands begin with a single character, followed by a space, another character and an optional digit or digits. All commands are terminated with the [Enter] key.

### Maintenance Password

The Maintenance feature, like Programming, is entered via a six-character alphanumeric string. The password prompt is given by pressing [Enter] at the device connected to the RS232 port. After the prompt displays, enter the password, then press [Enter]. Proper entry of the password displays the maintenance prompt. The Maintenance password is: {CONFIG}



## Exit Maintenance

The Exit command terminates the current Maintenance feature session. The Exit command format is: `maint>X`

```

maint>
maint>
maint>
maint>
maint>
maint>
maint>
maint>?
command list:
c          - clear log error trace
d s[nn]   - dump system or slot configuration data
           [nn] specifies an optional slot number parameter
           no parameter indicates that the entire system will be dumped
           examples:
           maint>d s      (dumps entire system configuration)
           maint>d s2    (dumps slot 2 configuration, etc.)
           maint>d b      (dumps busy device.)
           maint>d e      (dumps event trace)
           maint>d l      (dumps log error trace)
           maint>d r      (dumps RCVR configuration)
           maint>d r01    (toggle RCVR 01 stat & dumps configuration)
i0..3     - set trace (0 = disable, 1/2/3 = enable soft/cold/both start
x          - exit maint
?          - help menu
maint>

```

Figure 4-1: Maintenance Help Menu





## System Configuration

*Figure 4-2: System Configuration* is a configuration of the STARPLUS Triad-S system and displays what is printed when:

- ❖ The installer enters **D<space>S** at the `maint>` prompt.

```

OPTION      MPB      INS      044      1.34-FFFF
OPTION      MISB     INS      00-0
OPTION      MEMU     INS      00-0
OPTION      MODU     INS      00-0

maint>d s
SLOT      BRD TYPE      SERV STAT      BRD OPTS      FW VER.
-----
  00      LCOB          INS           0             00-0
  01      DTIB          INS           0             00-0
  02      LCOB          OOS
  03      DTIB          OOS
  04      LCOB          OOS
  05      DTIB          OOS
  06      LCOB          OOS
  07      DTIB          OOS
OPTION      MPB      INS      044      1.34-FFFF
OPTION      MISB     INS      00-0
OPTION      MEMU     INS      00-0
OPTION      MODU     INS      00-0

maint>

```

**Figure 4-2: System Configuration**

Where:

- ❖ **Column 1** lists the card slot.
- ❖ **Column 2** lists card type of that card slot.
- ❖ **Column 3** lists card status:  
**OOS** status can indicate the entire card is out of service, or a specific station is not installed or installed but not operational.  
**INS** status can indicate a specific station is installed and operating correctly.
- ❖ **Column 4** lists card options.
- ❖ **Column 5** lists firmware version of card.

## Station Configuration

Figure 4-3: *Station Configuration* illustrates what is printed out when:

- ◆ The installer enters **D<space>S1** at the `maint>` prompt

```

maint>
maint>
maint>
maint>
maint>
maint>
maint>d s1

```

SLOT	BRD TYPE	SERV STAT	BRD OPTS	FW VER.
01	DTIB	INS	0	00-0

STA	TYPE	STATUS	LCD
100	SP 16BTN	OOS	N
101	SP 16BTN	OOS	N
102	SP 16BTN	OOS	N
103	SP 16BTN	OOS	N
104	SP 16BTN	OOS	N
105	SP 16BTN	OOS	N
106	SP 16BTN	OOS	N
107	SP 16BTN	OOS	N

```

maint>

```

Figure 4-3: Station Configuration

Where: **Stations**

- ◆ Column 1 lists the station number.
- ◆ Column 2 indicates station type (keyset, DSS, SLT).
  - Keyset** – ID 0 = Key station
  - DSS/DLS** – ID 1 = DSS Map 1
  - SLT-ID 5 = SLT
  - SLT w/Lamp -ID 6 = SLT with Message Waiting
- ◆ Column 3 indicates status:
  - OOS** status can indicate the entire card is out of service, or a specific station is not installed or installed but not operational.
  - INS** status can indicate a specific station is installed and operating correctly,
- ◆ Column 4 indicates if the station has an LCD Display.



## Event Trace Buffer

The Event Trace Buffer is used to store and dump event traces (up to 30) that occur just prior to a STARPLUS Triad-S system soft or hard restart. These can then be reviewed by authorized personnel to aid in system troubleshooting.

The basic format for the commands are:

- ❖ **T<space> <return>** -displays the current status of the Event trace buffer
- ❖ **T<space> 0 <return>** -turns the Trace buffer OFF.
- ❖ **T<space> 1 <return>** -turns the Trace buffer ON to record events prior to a soft system reset,
- ❖ **T<space> 2 <return>** -turns the Trace buffer ON to record events prior to a hard system restart.
- ❖ **T<space> 3 <return>** -turns the Trace buffer ON to record events prior to either a soft reset or a hard system restart.
- 4 **d<space> E <return>** -dumps Trace Events stored from last system reset (soft or hard),
- 4 **d<space> b <return>** - permits maintenance personnel to determine the busy status of all the busy keysets and CO Lines in the system, including the **TI** lines,
- 4 **R<space> SXXX <return>** -permits a specific station to be reset.
- 4 **R<space> CXX <return>** - permits a specific CO Line to be reset.

## DTMF Receiver Trace

The CONFIG utility to allow technicians to take specific DTMF receivers in/out of service. This is useful for troubleshooting DTMF receiver problems to isolate a specific DTMF receiver that may be faulty.

- ❖ Connect a PC with communication software to the I/O port 1 on the MISU. At the ENTER PASSWORD prompt type CONFIG and press [ENTER].

The basic format for the commands are:

- ❖ **d<space>r<return>** - to display the status of all DTMF receivers in the system. The display shows the receiver number, cabinet location, card slot location, receiver status, and state of the receiver.

To make a receiver busy:

- 4 **d<space>rXX<return>** - Where XX is the specific receiver number to make busy,

To make a receiver available:

- 4 **d<space>rXX<return>** - Where XX is the specific receiver number to make available.



## Remote System Monitor

### General Overview

The Remote System Monitor feature provides access to the installed system for diagnostic purposes. These capabilities benefit service personnel enabling them to support the end user. Different levels of access, via password, allows authorized personnel to trace, monitor and upload critical information directly from the STARPLUS Triad-S system. This provides a more accurate means of acquiring system information that leads to a quick resolution of problems that may occur. This is all done without interfering with ongoing call processing or normal system operation, and in many cases may be performed without a site visit. The optional 9600 baud modem is used for remote access.

Capabilities allowed and reserved for this high level troubleshooting in addition are:

- ◆ Monitor Mode
- ◆ Enable and Disable Event Trace
- ◆ Dump Trace Buffer (up-load)

### Monitor Password

The Monitor feature, like Maintenance, is entered via a six-character alphanumeric string. The password prompt is accessed by pressing the [Enter] key at the PC connected to the MISU. After the prompt displays, enter the password, then press [Enter]. Proper entry of the password results in the `mon>` prompt. The Maintenance password is: {ETTRACE}



*The remote monitor **feature** is intended for use only under the guidance and instruction by authorized personnel from VODAVI Technical Support. Care and caution must be observed when using this **feature** as permanent damage to the **software** structure can occur.*



## Help Menu (3)

A convenient Help Menu is provided by typing [?], then pressing [Enter]. The following displays:

```

44 Digital Hybrid Key-System
Eng. Ver. 1.34-FFFF DATE: 04/15/98 TIME: 00:12:17
ENTER PASSWORD:
mon>?
command list:
?          - help menu
a board    - board-cmd slot,cmd,data1,data2
b rate     - set baud rate
c [c]      - dump co data
d [a][a]   - dump memory
e [s]      - dump prot sta data
f          - flush minor alarm log
g [s]      - dump local sta data
h          - hdlc status report
k          - key-cmd sta,cmd,data1...data17
l          - display minor alarm log
m add      - modify memory
n          - display stack trace
p          - Send Sta Event (Sta Event Data1 Data2)
q          - Send Sta Event (Sta Event Data1 Data2) & exit monitor
s [s]      - dump sta data
t [d]      - set trace key
x          - exit monitor
mon>

```

Figure 4-4: Help Menu

## Dump Memory Data

Three options allow the memory structure to be dumped for viewing. The three options are entered as follows:

- c [c] -Dump CO Line memory structure
- s [s] -Dump Station memory structure
- d [a] [a] -Dump a memory address structure

The data obtained from these commands is in hexadecimal format and is used primarily for manufacturer-level support.



**[Ctrl] + c aborts the Data Dump and returns to the mon> prompt.**

## Event Trace Mode

The T command enables and disables the STARPLUS Triad-S system Trace mode. While the trace mode is enabled events for the trace desired displays on the monitor, printer or PC connected to the STARPLUS Triad-S system. To view the current status of the trace mode type [T] <return> at the mon> prompt, the following screen displays:

```

DATE: 04/15/98 TIME: 00:08:14
exiting maintenance utility...

44 Digital Hybrid Key-System
Eng. Ver. 1.34-FFFF DATE: 04/15/98 TIME: 00:08:15
ENTER PASSWORD:
mon>t

Cmd   Messages   Y/N
-----
B - BOARD EVT   -> N
C - COL States -> N
D - Dev PP Cmd  -> N
E - Error Msg   -> N
H - H/W States  -> N
I - CTI PP Msg  -> N
K - LCD PP Cmd  -> N
L - LED PP Cmd  -> N
M - MSC States  -> N
P - PCM         -> N
Q - Que Evt    -> N
S - Stn States  -> N

mon>

```

Figure 4-5: Trace Mode Status

- 1 To enable an Event Trace, type **t<space>** (space bar).
- 2 Indicate type of trace desired [d], where d is determined as follows:
  - B = Board event trace (traces events associated with PCB)
  - M = Miscellaneous State event trace
  - P = Pulse Coded Modulation (PCM) traces events associated with voice communications.
  - C = CO Line (LCOB) States (traces events associated with CO Line activity)
  - S = Station (STA) States (traces events associated with Station activity)
  - E = Error Messages (traces error messages)
  - Q = Queue (QUE) Events (traces queuing events, i.e., DTMF receiver, UCD, LCR, etc.)
  - D = Device Command (traces commands to peripheral devices).



- 3 Enter the specific board, CO line or Station number of the trace desired or type [all], if all boards, CO lines or Stations events are desired.

001-012 = CO Line port

100-131 = Station location

All = All Boards, CO lines or Stations

- 4 Press [Enter] to enable the trace. A screen similar to the following displays:

```

mon>
mon>
mon>
mon>
mon>
mon>
mon>
mon>t b

```

Cmd	Messages	Y/N
B	- BOARD EVT	-> Y
C	- COL States	-> N
D	- Dev PP Cmd	-> N
E	- Error Msg	-> N
H	- H/W States	-> N
I	- CTI PP Msg	-> N
K	- LCD PP Cmd	-> N
L	- LED PP Cmd	-> N
M	- MSC States	-> N
P	- PCM	-> N
Q	- Que Evt	-> N
S	- Stn States	-> N

```

mon>

```

Figure 4-6: Enable Event Trace

- 5 To disable or turn off a particular trace mode, do not enter a specific board, CO Line or Station Number (i.e., **t<space>s<return>** to disable station event trace).

To have event traces displayed on the screen, you must first exit the MONitor mode by typing x at the mon> prompt. After you exit the event(s), the trace begins as shown in *Figure 4-7: Event Truce* on the following page.



*Unless instructed by personnel at Vodavi Technical Support, do not leave the trace mode enabled for extended time periods. The system dumps the requested event(s) trace which may use up paper or fill memory buffers on the collecting device. It is recommended that the trace events be **disabled** (turned off) for all event(s) traces before leaving the system site unless otherwise instructed by Technical Support.*



## Modify Memory Command

The Modify Memory Command is for **engineering use** only.



*Use of this command can alter or damage the Triad-S System operating database which can result in system malfunction. If this occurs, it is necessary to power the system down and re-initialize the database, then complete/reprogram the customer data.*

## Exit the Monitor Mode

The Exit command terminates the current Monitor enable/disable session. If Event(s) Trace was or is still enabled, event records display only after exiting the **MONITOR** mode. The Exit command format is: `mon> X`

```
Sta 100: State- DIAL-TONE. Evt= Dial Pad (25), Data-7
Sta 100: State- DIALING, Evt= Dial Pad (25), Data-5
Sta 100: State- DIALING, Evt= Int Page (69), Data-8
Sta 100: State- PAGING, Evt= Dial Pad (25), Data-3
Sta 100: State- PAGING, Evt= Dial Pad (25), Data-9
Sta 100: State- PAGING, Evt= Dial Pad (25), Data-5
Sta 100: state- PAGING, Evt= Dial Pad (25), Data-8
Sta 100: state- PAGING, Evt= Dial Pad (25), Data-7
Sta 100: state- PAGING, Evt= Dial Pad (25), Data-4
Sta 100: State- PAGING, Evt= Dial Pad (25), Data-3
Sta 100: State- PAGING, Evt= Dial Pad (25), Data-9
Sta 100: State- PAGING, Evt= Dial Pad (25), Data-9
Sta 100: state- PAGING, Evt= Dial Pad (25), Data-9
Sta 100: State- PAGING, Evt= Dial Pad (25), Data-7
Sta 100: State- PAGING, Evt= Dial Pad (25), Data-11
Sta 100: State- PAGING, Evt= Dial Pad (25), Data-3
Sta 100: State- PAGING, Evt= Dial Pad (25), Data-2
Sta 100: State- PAGING, Evt= Page T/O (150), Data-0
Sta 100: State- MISC-TONE. Evt= Dial Pad (25), Data-4
Sta 100: State- MISC-TONE, Evt= Dial Pad (25), Data-9
Sta 100: State- MISC-TONE, Evt= Key Data (26), Data-32
Sta 100: state- MISC-TONE, Evt= Mon Key (145), Data--1
Sta 100: State- MISC-TONE, Evt= On Hook (17), Data-0
```

Figure 4-7: Event Trace





# ***STARPLUS Triad-S™***

## **System Programming Manual**

issue 1

December 1998

Part Number: 5050-13





### **LIFE SUPPORT APPLICATIONS POLICY**

**VODAVI Communications Systems** products are not authorized for and should not be used within Life Support applications. Life Support systems are equipment intended to support or sustain life and whose failure to perform when properly used in accordance with instructions provided can be reasonably expected to result in significant personal injury or death.

**VODAVI Communications Systems** warranty is limited to replacement of defective components and does not cover injury to persons or property or other consequential damages.

**Copyright © 1998 VODAVI Communications Systems, Inc.**

**All Rights Reserved**

This material is copyrighted by VODAVI Communications Systems. Any unauthorized reproductions, use or disclosure of this material, or any part thereof, is strictly prohibited and is a violation of the Copyright Laws of the United States (17 U.S.C. Section 101 et. seq.).

VODAVI reserves the right to make changes in specifications at any time and without notice. The information furnished by VODAVI in this material is believed to be accurate and reliable, but is not warranted to be true in all cases.

**DVX<sup>plus</sup>®** is a Registered trademark of VODAVI Communications Systems, Inc.

**STARPLUS™** is a Registered trademark of VODAVI Communications Systems, Inc.

**Triad-S™** is a Registered trademark of VODAVI Communications Systems, Inc.





# Table of Contents

## 1 Customer Database Programming

Introduction .....	1-1
Program Mode Entry (Key Station) .....	1-19
Program Mode Entry (Data Terminal or PC) .....	1-19
Initialization .....	1-19
Customer Data Worksheets .....	1-20
Database Fields .....	1-20
Database Upload/Download Routine .....	1-20
Upload/Download through Remote Administration , . . . . .	1-21

## 2 System Parameters Programming

System Timers .....	2-1
System Hold Recall Timer .....	2-3
Exclusive Hold Recall Timer .....	2-3
Attendant Recall Timer .....	2-4
Transfer Recall Timer .....	2-4
Preset Forward Timer .....	2-5
Call Forward / No Answer Timer .....	2-5
Pause Timer .....	2-6
Call Park Recall Timer .....	2-7
Conference / DISA Timer .....	2-7
Paging Time-out Timer .....	2-8
CO Ring Detect Timer .....	2-9
SLT DTMF Receiver Timer .....	2-9
Message Wait Reminder Tone .....	2-10
SLT Hook Flash Timer .....	2-10
SLT Hook Flash Debounce Timer .....	2-11
SMDR Call Qualification Timer .....	2-12
Automatic Call Back Timer .....	2-13
Reminder Ring Timer .....	2-13
Release Guard Timer .....	2-14
Inter-Digit Time-out .....	2-14
Additional System Timers .....	2-15
Repeat Redial Timer .....	2-16



Attendant Display Timer .....	2-17
Call Coverage Ring Timer .....	2-18
Modem Answer Timer .....	2-18
Pulse Dial Inter-Digit Timer .....	2-19
DTMF On/Off Time Operation .....	2-19
System Features 1 Programming .....	2-20
Attendant Override .....	2-22
Hold Preference .....	2-22
External Night Ring .....	2-23
Executive Override Warning Tone .....	2-23
Page Warning Tone .....	2-2 <sup>4</sup>
Least Cost Routing (LCR) .....	2-25
Account Codes - Forced .....	2-26
Group Listening .....	2-2 6
Idle Speaker Mode .....	2-2 7
Call Cost Display Feature .....	2-27
Music On Hold .....	2-28
Call Qualifier Tone Option .....	2-28
System Features 2 Programming .....	2-29
Distinctive CO Ringing .....	2-32
Verified Account Codes .....	2-32
Call Forward Display .....	2-33
External Day Ring.. .....	2-3 4
Overflow Station Forward .....	2-34
Direct Transfer Mode .....	2-35
Station ID Lock .....	2-35
LCR Call Progress .....	2-36
One-Touch Recording Warn Tone .....	2-37
Ringback on Transfer .....	2-3 <sup>7</sup>
Programmable Flash Rates .....	2-38
Incoming CO Line Ringing .....	2-40
Incoming Intercom Ringing .....	2-40
Call Forward Button .....	2-41
Message Wait / VM Button .....	2-41
Message Callback - DSS / BLF .....	2-42
Do Not Disturb - DSS / BLF .....	2-42
Auto Callback - DSS / BLF .....	2-43
UCD Available / Unavailable - DSS / BLF .....	2-43



Transfer CO Ringing .....	..2-4 4
Recall CO Ringing .....	..2-4 5
Queued CO Ringing .....	..2-4 5
Exclusive Hold .....	..2-46
System Hold .....	..2-46
In-Use Hold (I-Hold) .....	..2-47
Camp-On Button .....	..2-4 7
Callback Button .....	..2-4 8
Line Queue Button .....	..2-4 8
Do Not Disturb Button .....	..2-49
Intercom Hold Button .....	..2-49
System Parameters Programming .....	..2-50
Leading Digit Translation .....	..2-52
Leading Digit Enable .....	..2-53
Centrex Digit Length .....	..2-54
Four-Digit Voicemail ID .....	..2-54
MOH Assignments .....	..2-55
Attendant Station Assignment .....	..2-55
System Time and Date .....	..2-56
PBX Dialing Codes .....	..2-57
Executive / Secretary Pairs .....	..2-57
On-Board Relay Programming .....	..2-58
Baud Rate Assignments .....	..2-59
Port #1, #2, #3 Baud Rates .....	..2-59
Access Codes .....	..2-6 0
DISA Access Code .....	..2-6 1
Database Admin Password .....	..2-61
Station Message Detail Recording (SMDR) .....	..2-62
SMDR Enable / Disable .....	..2-62
Long Distance /All Calls .....	..2-63
Character Print Assignment .....	..2-63
Baud Rate Display .....	..2-64
SMDR Port Assignments .....	..2-64
Weekly Night Mode Schedule .....	..2-65
Automatic /Manual Operation .....	..2-65
Day of Week Programming .....	..2-66
Directory Dialing .....	..2-66



Hunt Groups .....	2-70
Hunt Group Programming .....	2-70
Station / Pilot Hunting Assignment .....	2-71
Verified Account Codes Table/Traveling Class of Service .....	2-72
Local Number / Name Translation Table .....	2-74

### 3 CO Line Attribute Programming

Page A Introduction .....	3-1
DTMF /Dial Pulse Programming .....	3-2
CO / PBX Programming .....	3-2
Universal Night Answer (UNA) .....	3-3
DISA Trunk-to-Trunk (Per CO Line) .....	3-3
Privacy .....	3-4
Loop Supervision Programming .....	3-5
DISA Programming .....	3-6
Line Group Programming .....	3-7
Class of Service .....	3-7
CO Line Ringing Assignments .....	3-9
CO Line Identification Display .....	3-10
Trunk Direction .....	3-12
Display Ring Assignments .....	3-13
Page B Introduction .....	3-14
Transmit Volume Option .....	3-15
Preset Call Forward Destination .....	3-16
Preset Forward Voicemail ID .....	3-17
Universal Day Answer (UDA) .....	3-17
Music On Hold (per CO Line) .....	3-18
Distinctive Ringing (per CO Line) .....	3-18
Page C Introduction .....	3-20
Flash Timer .....	3-21
Ring Delay Timer .....	3-22
Reseize Timer .....	3-22
Guard Timer .....	3-23
Preset Forward Timer .....	3-23
Miscellaneous CO Parameters .....	3-24
Dial Pulse Parameters .....	3-25







## 4 Station Attributes Programming

Page A Introduction .....	.4-1
Programming Steps .....	.4- 1
Description .....	.4-1
Paging Access .....	..4- 2
Do Not Disturb .....	..4- 3
Conference Enable / Disable (Per Station) .....	.4-3
Executive Override .....	.4-4
Privacy (Per Station) .....	.4-5
System Speed Dial Access .....	.4-6
Line Queuing .....	..4- 7
Preferred Line Answer .....	..4- 7
Off-Hook Voice Over (OHVO) .....	.4-8
Call Forwarding .....	.4-8
Forced Least Cost Routing (LCR) .....	.4-9
ACD Supervisor Monitor with Barge-In .....	.4-9
Executive Override Blocking .....	.4-10
CO Line Ringing Options .....	.4-11
Name / Number Display at Idle .....	.4-12
Page B Introduction .....	.. 4-1 <sup>2</sup>
Programming Steps .....	.4-12
Description .....	.4-1 <sup>3</sup>
Station Identification .....	.4-14
Station ID for DSS / DLS Console with Map .....	.4-14
SLT Station ID .....	.4-1 <sup>6</sup>
SLT with Message Waiting Lamp Station ID .....	.4-16
Station Day Class of Service (COS) .....	.4-17
Station Night Class of Service (COS) .....	.4-18
Speakerphone / Headset .....	.4-19
Pickup Group(s) .....	.4-2 <sup>0</sup>
PagingZone .....	..4-2 0
Preset Call Forward .....	.4-21
CO Line Group Access .....	.4-2 <sup>2</sup>
LCR Class of Service (COS) .....	.4-23
Off-HookPreference.. ..	..4-2 3
Flexible Button ..	..4-2 4
Keypad Mode .....	..4-2 9
Voicemail ID Translation .....	.4-30



Display Flexible Buttons .....	4-30
Cordless KTU Feature Button .....	4-33

## 5 ICLID Route Programming

Introduction .....	5- 1
Calling Number / Name Display .....	5-1
Incoming Number/Name for SMDR Records .....	5-2
Unanswered Call Management Table .....	5-2
ICLID Ringing Assignments .....	5-3
Programming Steps .....	5-3
Description .....	5-4
View ICLID Ringing Assignments .....	5-5
Description .....	5-6
ICLID Features .....	5- 6
Programming Steps .....	5-6
Enable/Disable.. .....	5- 7
Name in Display .....	5-7
Baud Rate Display .....	5-8
Port Assignment .....	5-8

## 6 Automatic Call Distribution (ACD)

ACD Group Programming .....	6-1
Programming Steps .....	6-1
Description .....	6-1
Alternate ACD Group Assignment .....	6-2
ACD Overflow Station Assignment .....	6-3
ACD Recorded Announcement Assignment(s) (RAN) .....	6-3
ACD Supervisor .....	6-5
ACD Auto Wrap-Up Timer .....	6-5
ACD CIQ Threshold .....	6-6
ACD Station Assignment(s) .....	6-6
View ACD Station Assignments .....	6-8
ACD Timers .....	6-8
Programming Steps .....	6-8
Description.. .....	6- 9
ACD Ring Timer .....	6- 9
ACD Message Interval Timer .....	6-10
ACD Overflow Timer .....	6-10



ACD No-Answer Recall Timer .....	.6-11
ACD No-Answer Retry Timer .....	.6-12
Guaranteed Message Timer .....	.6-12
ACD Announcement Tables (RAN) .....	.6-14
Programming Steps .....	.6-14
Description .....	.6-15
PC / ACD Interface Trace .....	.6-15
Programming Steps .....	.6-15
Description .....	.6-15
Enable / Disable .....	.6-16
Trace Port Assignment .....	.6-16
Baud Rate Display .....	.6-17
ACD Group .....	.6-17
Programming Steps .....	.6-17
Description .....	.6-18
Alternate ACD Group Assignment .....	.6-19
ACD Overflow Station Assignment .....	.6-19
ACD Recorded Announcement Assignment(s) (RAN) . . . . .	.6-20
ACD Supervisor .....	.6-21
ACD Auto Wrap-Up Timer .....	.6-22
ACD CIQ Threshold .....	.6-22
ACD Station Assignment(s) .....	.6-23
View ACD Station Assignments .....	.6-24

## 7 Uniform Call Distribution (UCD)

UCD Group Programming .....	.7-1
Programming Steps .....	.7-1
Description .....	.7-1
Alternate UCD Group Assignment .....	.7-2
UCD Overflow Station Assignment .....	.7-3
UCD Announcement Assignment(s) (RAN) . . . . .	.7-3
UCD Auto Wrap-Up Timer .....	.7-4
UCD Station Assignment(s) .....	.7-4
UCD Timers .....	.7-6
Programming Steps .....	.7-6
Description .....	.7-6
UCD Ring Timer .....	.7-6
UCD Message Interval Timer .....	.7-7





UCD Overflow Timer . . . . .	7-8
UCD No-Answer Recall Timer . . . . .	7-8
UCD No-Answer Retry Timer . . . . .	7-9
UCD Announcement Tables (RAN) . . . . .	7-9
Programming Steps . . . . .	7-9
Description . . . . .	7-10

## 8 Voicemail Groups

VoiceMail Programming . . . . .	8-1
Programming Steps . . . . .	8-1
Description . . . . .	8-1
Alternate Voicemail Group . . . . .	8-2
Leave Mail Index Entry . . . . .	8-3
Retrieve Mail Index Entry . . . . .	8-3
Station Assignment(s) . . . . .	8-4
VoiceMail Outpulsing Table . . . . .	8-5
Voicemail In-Band Signaling . . . . .	8-5
Voicemail Disconnect Table . . . . .	8-7
VoiceMail In-Band Features . . . . .	8-8
Programming Steps . . . . .	8-8
Description . . . . .	8-8
Voicemail In-Band Digits . . . . .	8-8
Voicemail Transfer / Forward . . . . .	8-9
Voicemail Broker . . . . .	8-9
VoiceMail Index Table . . . . .	8-10
Description . . . . .	8-11

## 9 Exception Tables

Exception Tables Programming . . . . .	9-1
RELATED ITEMS TO TOLL RESTRICTION . . . . .	9-3
CO/PBX Lines . . . . .	9-3
Forced Account Codes . . . . .	9-3
SLT DTMF Receivers . . . . .	9-3
LCR Versus Toll Restriction . . . . .	9-4
Toll Restriction . . . . .	9-4
Entering Toll Table . . . . .	9-4
Allow Table . . . . .	9-6
Deny Table . . . . .	9-8



Special Table .....	9-9
Display Toll Table Entries .....	9-11

## 10 Least Cost Routing

Introduction .....	..	..	..	10-1
LCR Operation .....	..	..	..	10-1
LCR Tables .....	..	..	..	10-4
Programming Steps .....	..	..	..	10-4
3-Digit Area / Office Code Table ..	..	..	..	10-5
6-Digit Office Code Table .....	..	..	..	10-6
Exception Code Table .....	..	..	..	10-7
Route List Table .....	..	..	..	10-7
Insert /Delete Table .....	..	..	..	10-10
Daily Start Time Table .....	..	..	..	10-12
Weekly Schedule Table .....	..	..	..	10-13
LCR Routing for Toll Information ,	..	..	..	10-14
Default LCR Database , .....	..	..	..	10-15

## 11 initialize Database Parameters

Introduction .....	..	..	..	11-1
Programming Steps .....	..	..	..	11-1
Description .....	..	..	..	11-1
Initialize System Parameters .....	..	..	..	11-2
Initialize CO Line Attributes .....	..	..	..	11-8
Initialize Station Attributes .....	..	..	..	11-10
Initialize CO / Station Port Parameters .....	..	..	..	11-12
Initialize Exception Tables .....	..	..	..	11-12
Initialize System Speed Numbers .....	..	..	..	11-14
Initialize LCR Tables .....	..	..	..	11-14
Initialize ICLID Tables .....	..	..	..	11-16
Initialize Directory Dialing Table Parameters ..	..	..	..	11-17
Initialize Hunt Group Parameters .....	..	..	..	11-18
Initialize ACD / UCD Group Parameters .....	..	..	..	11-19
Initialize Voicemail Group Parameters .....	..	..	..	11-21
Initialize Verified Account Code Table .....	..	..	..	11-22
System Reset .....	..	..	..	11-23



## 12 Print System Database Parameters

Introduction .....	..12- 1
Print Database Parameters .....	. 12-1
Print System Parameters .....	. 12-2
Print CO Line Attributes .....	. 12-5
Print Station Attributes .....	. 12-7
Print CO /Station Port Parameters .....	. 12-9
Print Exception Tables .....	. 12-10
Print System Speed Numbers .....	. 12-12
Print LCR Tables .....	. 12-13
Print Entire System Database .....	. 12-26
Print ICLID ■ DID Tables .....	. 12-27
Print Directory Dial Table Parameters .....	12-31
Print Hunt Group Parameters .....	. 12-33
Print ACD /UCD Group Parameters .....	. 12-34
Print Voicemail Group Parameters .....	12-35
Print Verified Account Codes .....	. 12-38
Abort Printing .....	12-4 <sup>1</sup>



## List of Figures

Data Terminal Program Codes Cross Reference .....	1-3
Programming Button Mapping .....	1-3
Hook Switch Activity .....	2-11
LCR Flowchart .....	10-3
Daily Start Time and Weekly Schedule Tables .....	10-13
Daily and Weekly Start Time Table .....	10-14
LCR Toll Information Routing Program Form .....	10-15
System Parameters .....	12-3
CO Line Attributes .....	12-6
Station Attributes .....	12-8
CO /Station Port Attributes .....	12-10
Exception Tables .....	12-12
System Speed Numbers .....	12-14
LCR Tables .....	12-15
3-Digit Table Defaults .....	12-17
ICLID /DID Tables .....	12-29
Directory Dialing Table .....	12-41
Hunt Group Parameters .....	12-42
ACD Group Parameters .....	12-44
Voicemail Group Parameters .....	12-46
DID - TIE Parameters .....	12-47
Verified Account Codes .....	12-49



## List of Tables

Default Values .....	1-4
System Timers Defaults .....	2-2
Additional System Timers Defaults .....	2-15
System Features 1 Defaults .....	2-20
System Features 2 Defaults .....	2-29
Flash Rates .....	2-38
Dial Pad Keys. ....	2-68
CO Line Conference Flag. ....	3-4
CO Line Privacy Flag .....	3-5
Class of Service (COS) .....	3-8
<b>Ringling Tones</b> .....	<b>3-18</b>
Default DID and ICLID Table Entries .....	3-29
Station Privacy Flag .....	4-6
Class of Service (COS) .....	4-18
Flex Button Codes for Remote Programming , ,	4-26
Flex Button Display Designations .....	4-31
Allow / Deny Table .....	9-2
LCR Class of Service Table .....	10-10
System Parameter Defaults. ....	11-3
CO Line Attribute Defaults .....	11-7
Station Attribute Defaults .....	11-q
CO Port Defaults .....	<b>11-11</b>
Station Port Defaults .....	11-12
Exception Table Defaults .....	11-13
LCR Table Defaults .....	11-15
ICLID - DID Table Defaults .....	11-16
Directory Dialing Table Defaults .....	11-17
Hunt Group Defaults .....	11-18
ACD /UCD Group Defaults .....	11-19
Voicemail Group Defaults .....	11-20
DID - TIE Defaults .....	11-22
Verified Account Code Table Defaults .....	11-23







# 1 Customer Database Programming



## Introduction

The STARPLUS Triad-S™ Digital Hybrid Telephone System is programmed to meet each customer's individual needs. All programming is done at Station 100 using the digital telephone as the programming station through an ASCII terminal or PC. The digital display model is required for programming,

When the programming mode is entered, the digital telephone being used no longer operates as a telephone but as a programming station with all of the buttons redefined. The keys on the dial pad are used to enter data fields (Program Codes) associated with system, station, and CO line features as well as specific data that requires a numeric entry. Flexible buttons toggle on or off features, or enable entry of specific data fields, LEDs and the LCD display provide a visual indication of entered data and their value.

Programming is also performed using an ASCII terminal, or a computer capable of emulating an ASCII terminal. This form of programming is done locally (on-site) by connecting the terminal directly to the RS-232C connector on the Miscellaneous Service Unit (MISU) or is performed remotely (off-site) through the use of the optional 9600 baud modem. The method and steps to program the system via a PC are identical to those used when programming from a digital key set. A button to keyboard mapping is provided (see *Figure 2-1: Programming Button Mapping*) to help minimize familiarization and training time.

The system must be initialized to load default data into memory at the time of installation. If this pre-programming is acceptable to the customer, initialization is all that is needed. Refer to *Table 2-1: Default Values* for a listing of all the default values.

When features are programmed, tones are provided to determine if a correct or incorrect entry has been made. A solid one second tone indicates the data was accepted. An interrupted tone means an error was made. When this occurs, re-enter the data and information. Until new data is entered and accepted, the system continues to operate under default or previously entered values.

The system database is updated on a real-time basis as new data is entered, by pressing the Hold button. The system continues to operate with the current database and is updated with any newly entered or changed data without interruption to telephone operation or call processing in progress. However, if for example a station's attributes are changed while that station is off-hook on an active call, the newly entered data does not take effect until the station goes on-hook or becomes idle.

When using a PC to program the system, the following chart presents the data terminal characters that are equivalent to the key set buttons.



Some features must have more than one data field programmed for that feature to work. This information is stated in the instructions.

```

adm>
REMOTE ADMIN KEY DEFINITION
Keyset  Term  Keyset  Term  Keyset  Term
-----
0      0      FLEX 1  Q      FLEX 13 D
1      1      FLEX 2  W      FLEX 14 F
2      2      FLEX 3  E      FLEX 15 G
3      3      R      H
4      4      FLEX 4  Y      FLEX 16 J
5      5      FLEX 6  U      FLEX 18 K
6      6      FLEX 7  L      FLEX 19 L
7      7      FLEX 8  I      FLEX 20 .
8      8      Z
9      9      FLEX 9  0      FLEX 22 X
*      *      FLEX 11 A      FLEX 23 C
#      #      FLEX 12 S      FLEX 24 V
TRANS B      MUTE  N      ON-OFF M
FLASH '      HOLD  CR
adm>
    
```

Figure 2-1: Data Terminal Program Codes Cross Reference





FLEX 1 Q	FLEX 2 W	FLEX 3 E	FLEX 4 R
FLEX 5 T	FLEX 6 Y	FLEX 7 U	FLEX 8 I
FLEX 9 O	FLEX 10 P	FLEX 11 A	FLEX 12 S
FLEX 13 D	FLEX 14 F	FLEX 15 G	FLEX 16 H
FLEX 17 J	FLEX 18 K	FLEX 19 L	FLEX 20 ;
FLEX 21 Z	FLEX 22 X	FLEX 23 C	FLEX 24 V

Figure 2-1: Programming Button Mapping



Features	Program Code	Flex Button	Default Value
<b>SYSTEM PARAMETERS PROGRAMMING</b>			
SYSTEM TIMERS			
	FLASH 01		
System Hold Recall Timer		1	060sec
Exclusive Hold Recall Timer		2	180sec
Attendant Recall Timer		3	01 min
Transfer Recall Timer		4	045sec
Preset Forward Timer		5	10 <b>sec</b>
Call Forward No/Answer Timer		6	15 <b>sec</b>
Pause Timer		7	2sec
Call Park Recall Timer		8	180sec
<b>Conference/DISA Timer</b>		9	10 <b>sec</b>
Paging Time-out Timer		10	15 <b>sec</b>
CO Ring Detect Timer		11	3 (100 ms)
SLT DTMF Receiver Timer		12	020
Message Wait Reminder Tone		13	000 min
SLT Hook Flash Timer		14	10 (1 <b>sec</b> )
SLT Hook Flash <b>Debounce</b> Timer		15	100 ms
SMDR Call Qualification Timer		16	30sec
Automatic Call Back Timer		17	03sec
Reminder Ring Timer		18	00 <b>sec</b>
Release Guard Timer		19	3 (300 ms)
Flexible Inter-Digit Time-out		20	5 <b>sec</b>
ADDITIONAL SYSTEM TIMERS	FLASH 02		

\* Features available with Optional Software

Table 2-1: Default Values





Features	Program Code	Flex Button	Default Value
Repeat Redial Timer		1	60 sec
Attendant Display Timer		2	01 sec
Call Coverage Ring Timer		3	5 sec
Modem Answer T/O		4	25 sec
Pulse Dial Inter-Digit Timer		5	300 ms
Programmable DTMF Time Operation		6	100ms/100ms
SYSTEM FEATURES 1 PROGRAMMING	FLASH 05		
Attendant Override		1	Disabled
Hold Preference		2	System
External Night Ring		3	Disabled
Executive Override Warning Tone		4	Enabled
Page Warning Tone		5	Enabled
Background Music		6	Enabled
Least Cost Routing		7	Disabled
Account Codes = Forced		8	Disabled
Group Listening		9	Disabled
Idle Speaker Mode		10	Disabled
Call Cost Display Feature		11	Disabled
Music-On-Hold		12	Enabled
Call Qualifier Tone Option		13	Disabled
SYSTEM FEATURES 2 PROGRAMMING	FLASH 06		
Barge-In/Privacy Release Tone Option		1	Enabled
Distinctive CO Ringing		2	Enabled

\* Features available with Optional Software

Table 2-1: Default Values



Features	Program Code	Flex Button	Default Value
Verified Account Codes		3	Disabled
Call Forward Display		4	Enabled
External Day Ring		5	Disabled
Overflow Station Forward		6	Disabled
Direct Transfer Mode		7	Enabled
Station ID Lock		8	Disabled
LCR Progress		9	Enable
One-Touch Recording Warn Tone		10	Enable
Ringback on Transfer		12	Disable
FLASH RATES (Programmable)	FLASH 07		
Incoming CO Line Ringing		1	Red 480 ipm flutter
Incoming Intercom Ringing		2	Red 120 ipm flutter
Call Forward Button		3	Red Steady On
Message Wait/VM Button		4	Red Steady On
Message CallBack - DSS/BLF		5	Red 120 ipm flutter
Do Not Disturb - DSS/BLF		6	Red 60 ipm Dbl Wink
Auto CallBack - DSS/BLF		7	Red 120 ipm flash
UCD Available/Unavailable - DSS/BLF		8	Red 60 ipm Dbl Wink
Transfer CO Ringing		9	Red 120 ipm flash
Recall CO Ringing		10	Red 480 ipm flutter
Queued CO Ringing		11	Green 480 ipm flutter

\* Features available with Optional Software

Table 2-I: Default Values





Features	Program Code	Flax Button	Default Value
Exclusive Hold		12	Green 120 ipm flash
System Hold		13	Red 60 ipm Dbl wink
In Use Hold (I-Hold)		14	Green 60 ipm flash
Camp-On Button		15	Red 120 ipm flash
Call Back Button		16	Red 120 ipm flash
Line Queue Button		17	Red 480 ipm flutter
Do Not Disturb Button		18	Red Steady On
Intercom Hold Button		19	Red 15 ipm flash
SYSTEMPARAMETERS PROGRAMMING	FLASH 09		
Leading Digit 1		1	Leading Digit
Leading Digit 2-7		2-7	None
Leading Digit Option		8	Disabled
Centrex Digit Length		9	4 digits
Four Digit Voicemail ID		10	3 digits
MOH Assignments Channels 3-8		13-18	###
ATTENDANT STATION ASSIGNMENT	FLASH 10		STA 100
SYSTEM TIME AND DATE	FLASH 11	1	YY/MM/DD HHMM
PBX DIALING CODES	FLASH 12		None
EXECUTIVE/SECRETARY PAIRS	FLASH 13	1-4	None
ON BOARD RELAY PROGRAMMING	FLASH 14	1-2	None
BAUD RATE ASSIGNMENTS	FLASH 15		

\* Features available with Optional Software

Table 2-I: Default Values



Features	Program Code	Flex Button	Default Value
Port #1 (MISU)		1	9600 Baud
Port #2 (MISU)		2	9600 Baud
Port #3 (Modem)		3	9600 Baud
ACCESS CODES	FLASH 20		
DISA Access Code		1	100
Database Admin Password		2	3226
STATION MESSAGE DETAIL RECORDING	FLASH 21		
SMDR Enable/Disable		1	NO
Long Distance/All Calls		2	Long Distance
Character Print Assignment		3	80
Baud Rate Display		4	9600
SMDR Port Assignments		5	Port #1
WEEKLY NIGHT MODE SCHEDULE	FLASH 22		
Automatic/Manual Operation		1	Manual <b>(NO)</b>
Day of Week Programming		2-8	O-4 08:00-17:00 5-6 #####-####
DIRECTORY DIALING	FLASH 23		
Bin/ICM		1	None
Name		2	None
Clear		3	None
HUNT GROUPS	FLASH 30		
Hunt Group Programming		1-12	None
Station/Pilot Hunting Assignment		13	Pilot
VERIFIED ACCOUNT CODES TABLE	FLASH 31		
Account Code		1	

*Features available with Optimum Software*

Table 2-1: Default Values







Features	Program Code	Flex Button	Default Value
Class of Service		2	##
Delete Code		3	
Erase Digits		4	
LOCAL NUMBER/NAME TRANSLATION TABLE	FLASH 55		
Route Number		1	None
Phone Number		2	None
Name		3	None
Clear Entry		4	None
CO LINES ATTRIBUTES PROGRAMMING (Press HOLD for entire range)			
PAGE A INTRODUCTION	FLASH 40	Button 19	
DTMF/Dial Pulse Programming	Page A	1	DTMF
CO/PBX Programming		2	c o
Universal Night Answer (UNA)		3	Enabled
DISA CO-to-CO (Per CO Line)		4	Enabled
Privacy		5	Enabled
Loop Supervision Programming		6	400 ms
DISA Programming		7	None
Line Group Programming		8	Group 1
Class of Service (COS) Programming		9	cos 1
CO Line Ringing Assignments		10	100A
CO Line Identification Display		11	Line XXX

\* Features available with Optional Software

Table 2-I: Default Values



Features	Program Code	Flex Button	Default Value
Trunk Direction		12	Incoming/Outgoing
Display Ring Assignments		13	100A
PAGE B INTRODUCTION	FLASH 40	Button 20	
Transmit Volume Option	Page B	1	5 (0 dB)
Preset Call Forward Destination		2	None
Preset Forward Voicemail		3	None
Universal Day Answer (UDA)		4	Disabled
Music-On-Hold (per CO Line)		5	Channel 1
Distinctive Ringing (per CO Line)		6	00
PAGE C INTRODUCTION	FLASH 40	Button 21	
Flash Timer Programming	Page C	1	10
Ring Delay Timer		2	0
Reseize Timer		3	200 ms
Guard Timer		4	0.5 sec
Preset Forward Timer		5	10
MISCELLANEOUS CO PARAMETERS	FLASH 41	Button 1	
Dial Pulse Parameters		1	60/40
STATION ATTRIBUTES PROGRAMMING			
PAGE A INTRODUCTION	FLASH 50	Button 19	
Paging Access	Page A	1	Enabled
Do Not Disturb		2	Enabled
Conference Enable/Disable (Per Station)		3	Enabled
Executive Override		4	Disabled

*Features available with Optional Software*

Table 2-1: Default Values



Features	Program Code	Flex Button	Default Value
Privacy (Per Station)		5	Enabled
System Speed Dial Access		6	Enabled
Line Queuing		7	Enabled
Preferred Line Answer		a	Enabled
Off -Hook Voice Over (OHVO)		9	Disabled
Call Forwarding		10	Enabled
Forced Least Cost Routing (LCR)		11	Disabled
ACD Supervisor Monitor with Barge-In		12	Disabled
Executive Override Blocking		13	Disabled
CO Line Ringing Options		14	Muted Ring
Name/Number Display at Idle		15	Name (Enabled)
<b>PAGE B INTRODUCTION</b>	<b>FLASH 50</b>	<b>Button 20</b>	
Station Identification	Page B	1	0 (24-Btn Key set) 6 (SLT w/o MWt)
Station Day Class of Service		2	1
Station Night Class of Service		3	1
Speakerphone/Headset Programming		4	0 (Full Speakerphone)
Pick-Up Group(s) Programming		5	1
Paging Zone(s) Programming		6	1
Preset Call Forwarding Programming		7	###
CO Line Group Access		a	1
LCR Class of Service (COS)		9	0
Off -Hook Preference Programming		10	00 (Keyset)

\* Features available with Optional Software

Table 2-I: Default Values





Features	Program Code	Flex Button	Default Value
Flexible Button Programming		11	None
Key Set Mode		12	Inactive Mode
Voicemail ID Translation		13	x x x x (Station Number)
Display Flexible Buttons		14	
Cordless Key (CKTU) Button		17	00
ICLID PROGRAMMING			
ICLID RINGING ASSIGNMENT(S)	FLASH 43	1	None
Next ICLID Route Number		18	
Previous ICLID Route Number		19	
Select Route Number		20	
ICLID FEATURES			
Disable/Enable	FLASH 56	1	No (Disabled)
Name in Display		2	NAME (Yes)
Baud Rate Display			9600
Port Assignment		4	Port #1
AUTOMATIC CALL DISTRIBUTION*			
ACD GROUP PROGRAMMING*			
ACD Groups (550-557)	FLASH 60 Page A	1-8	None
Alternate ACD Group Assignment		9	###
ACD Overflow Station Assignment		10	###
ACD Recorded Announcement		11	####
ACD Supervisor Programming		12	###
ACD Auto Wrap-Up Timer (Per Group)		13	04 sec
ACD CIQ Threshold		14	00

\* Features available with Optional Software

Table 2-1: Default Values





Features	Program Code	Flex Button	Default Value
Display Stations	Sta 9-16	17	None
	Sta 1-8	19	None
ACD TIMERS	FLASH 61		
ACD Ring Timer		1	60 sec
ACD Message Interval Timer		2	60 sec
ACD Overflow Timer		3	60 sec
ACD No-Answer Recall Timer		5	000 sec
ACD No-Answer Retry Timer		6	300 sec
ACD Guaranteed Message Timer		7	05 sec
ACD RAN ANNOUNCEMENT TABLES*	FLASH 62	1-8	###
PC/ACD INTERFACE TRACE	FLASH 63		
Event Trace Disable/Enable		1	No (Disabled)
Trace Port Assignment		2	Port #1
Baud Rate Display			9600 Baud
ACD GROUP PROGRAMMING*	FLASH 64		
ACD Groups (558-565)	Page A	1-8	None
Alternate ACD Group Assignment		9	None
ACD Overflow Station Assignment		10	None
ACD Recorded Announcement		11	None
ACD Supervisor Programming		12	None
ACD Auto Wrap-Up Timer (Per Group)		13	04 sec
ACD CIQ Threshold		14	Disabled
Display Stations	Sta 9-16	17	
	Sta 1-8	19	None

\* Features available with **Optional Software**

Table 2-1: Default Values



Features	Program Code	Flex Button	Default Value
UNIFORM CALL DISTRIBUTION (UCD)			
UCD GROUP PROGRAMMING	FLASH 60		
UCD Groups (550-557)	Page A	1- 8	None
Alternate UCD Group Assignment		9	None
UCD Overflow Station Assignment		10	None
UCD Announcement Assignment(s)		11	None
UCD Station (550-557) Assignment(s)	Page B	1- 8	None
UCD TIMERS	FLASH 61		
UCD Ring Timer		1	60 sec
UCD Message Interval Timer		2	60 sec
UCD Overflow Timer		3	60 sec
UCD Auto Wrap-Up Timer		4	04 sec
UCD No-Answer Recall Timer		5	000 sec
UCD No-Answer Retry Timer		6	300 sec
UCD ANNOUNCEMENT TABLES (RAN)	FLASH 62	1-8	None
VOICE MAIL GROUPS			
VOICE MAIL PROGRAMMING	FLASH 65		
Voicemail Groups(440-447)		1- 8	None
Alternate Voicemail Group		9	###
Leave Mail Index Entry		10	440 = 0
Retrieve Mail Index Entry		11	440 = 1
Station Assignment(s)		12	None
VOICE MAIL OUTPUTPULSING TABLE	FLASH 66		

\* Features available with Optional Software

Table 2-I: Default Values





Features	Program Code	Flex Button	Default Value
Voicemail In-Band Signaling		1	Tbl 0 Pre=P7 Suf =None
		2	Tbl 1 Pre=P7 Suf=*
		3-7	None
		8	Tb17 Pre=P7 Suf =2
		9	None
Voicemail Disconnect Table			
VOICE MAIL IN-BAND FEATURES	FLASH 67		
Voicemail In-Band Digits		1	Enabled
Voicemail Transfer/Forward		2	Enabled
Voicemail Broker		3	Enabled
VOICE MAIL INDEX TABLE	FLASH 68		
Voicemail Group		1	440
Voicemail ID Number		2	
EXCEPTION TABLES PROGRAMMING			
TOLL RESTRICTION PROGRAMMING	FLASH 70		
Allow Table A Programming		1	None
Deny Table A Programming		2	None
Allow Table B Programming		3	None
Deny Table B Programming		4	None
Special Table 1 Programming		5	All Codes Allowed
Special Table 2 Programming		6	All Codes Allowed
Special Table 3 Programming		7	All Codes Allowed

\* Features available with *Optional Software*

Table 2-l: Default Values



Features	Program Code	Flex Button	Default Value
Special Table 4 Programming		8	Home
Area Code for Special Table 1		9	
Area Code for Special Table 2		10	
Area Code for Special Table 3		11	
Displaying Toll Table Entries		12	
LEAST COST ROUTING (LCR) PROGRAMMING			
LCR TABLES PROGRAMMING	FLASH 75		
3-Digit Area/Office Code Table		1	See LCR Tables
6-Digit Area/Office Code Table		2	None
Exception Code Table		3	See LCR Tables
Route List Table		4	
Insert/Delete Table		5	
Daily Start Time Table		6	
Weekly Schedule Table		7	
LCR Routing for Toll Information		8	00
INITIALIZE DATABASE PARAMETERS INTRODUCTION	FLASH 80		
Initialize System Parameters		1	Default
Initialize CO Line Attributes		2	Default
Initialize Station Attributes		3	Default
Initialize CO/Station Port Parameters		4	Default
Initialize Exception Tables		5	Default
Initialize System Speed Numbers		6	Default
Initialize LCR Tables		7	Default

\* Features available with Optional Software

Table 2-1: Default Values







Features	Program Code	Flex Button	Default Value
Initialize ICLID-DID Tables		8	Default
Initialize Directory Dialing Tbl Parameters		9	Default
Initialize Hunt Group Parameters		10	Default
Initialize ACD*/UCD Group Parameters		11	Default
Initialize Voicemail* Group Parameters		12	Default
Initialize Verified Account Code Table		14	Default
System Reset		20	
PRINTING SYSTEM DATABASE PARAMETERS			
INTRODUCTION	FLASH 85		
Printing System Parameters		1	Default
Printing CO Line Attributes		2	Default
Printing Station Attributes		3	Default
Printing CO/Station Port Parameters		4	Default
Printing Exception Tables		5	Default
Printing System Speed Numbers		6	Default
Printing LCR Tables		7	Default
Printing Entire System Database		8	Default
Printing Directory Dial Table Parameters		10	Default
Printing Hunt Group Parameters		11	Default
Printing ACD*/UCD Group Parameters		12	Default
Printing Voicemail* Group Parameters		13	Default
Printing Verified Account Codes		15	Default
Abort Printing		20	

\*Features available with Optional Software

Table 2-I: Default Values



Features	Program Code	Flex Button	Default Value
LOAD DATABASE ROUTINE  Upload database Download database	FLASH 86	1  2	PC Only  PC Only



\* Features available with Optional Software

Table 2-1: Default Values





## Program Mode Entry (Key Station)

Programming is performed at Station 100 (defaults to Port 01) using a 24-button Digital Display Terminal. Programming is always done at this station regardless of the class of service or which station has been assigned the attendant(s). Before entering the program mode, the programmer must verify that Station 100 is properly connected.

To enter the program mode:

- 1 Press the ON/OFF button (optional). LED lights and intercom dial tone is heard.
- 2 On the dial pad, press [\*][\*].
- 3 On the dial pad, enter [3][2][2][6]\*. A confirmation tone is heard.
- 4 The ON/OFF button LED is lit. The system is ready to program.

\* ***This is a default password. However, it may be changed after entering programming.***

Other telephones connected to the system continue to function normally.

## Program Mode Entry (Data Terminal or PC)

A PC terminal connected to the RS-232C port on the MISU or remotely through the optional 9600 baud modem is used for database programming. When using a data terminal (ASCII or PC capable of emulating an ASCII terminal) on-site or locally, to program the system:

- 1 Press <Enter> on the terminal.
- 2 Enter the password [default=3226VODAVI], and press <Enter> again. Proper entry of the password results in the ADM> prompt. Proceed with programming referring to *Figure 2-1: Data Terminal Program Codes Cross Reference* for terminal characters that represent the key set buttons. By entering [?] from the terminal, a Help screen displays.

When entering the system remotely via a PC, access to the optional 9600 baud modem is accomplished by accessing Port 499 through a direct ringing assignment or through DISA or by being transferred to Port 499.

## Initialization

The system was pre-programmed with certain features called default data (refer to **Table 2-1: Default Values**). These features are loaded into memory when the system is initialized.



***The system should be initialized when installed or at any time the database is corrupted.***



Use the procedures below to return the system database to default values:

- 1 Place Switch #1 on the BKSU in the ON position.
- 2 Turn the power off and on to initialize the system database to the default.
- 3 Once the database is initialized, place Switch #1 in the OFF position to protect the database.

## Customer Data Worksheets

Before attempting programming, it is strongly recommended that customer data worksheets be prepared (Refer to *Product Description Manual, Appendix C: Customer Database Programming*). These worksheets should become part of the permanent record of customer programming. Refer to the following sections when preparing the worksheets.

## Database Fields

The data fields set system timers, determine central office line features and Key Telephone features. When entering CO line data and station data, be sure to enter the exact number of digits specified. The data fields and features are further described in the following sections.

## Database Upload/Download Routine

The Database Upload/Download Routine (Flash 86) provides a maintenance facility which permits the user to download the database to a PC, when a software change is made or when the system needs to be initialized and reprogrammed. In addition, the routine facilitates the programming of a database on an in-house system which is downloaded to a PC and then uploaded to a system in the field. After the system maintenance is completed, the file saved in the PC can then be uploaded to the system.



All trace modes (*SMDR, ICLID Event, Maintenance Event Traces, etc.*) MUST be turned off before a download is performed!





## Upload/Download through Remote Administration

- 1 Connect one end of an RS-232C serial cable from the RS-232C connector on the MISU of the Triad-S System to the desired Comm Port on the PC.



Use a straight-through DB-9 to DB-9 (female to female) cable.

- 2 Load a communication software package (i.e., Procomm) into the PC. Make the necessary changes to the following areas of the communications package. Save these permanent settings.

Items to Change	Change
<b>PARAMETERS: a + [P]</b>	
Baud Rate	9600 Baud, N for Parity, 8 Bits, 1 Stop Bit
<b>SETUP OPTIONS: a + [S]</b>	
Protocol Options:	
Item A: Echo Locally	OFF
Item D: Character Pacing	0
Item E: Line Pacing	0
Item F: Pace Character	0
Item I: CR Translation (upload)	NONE
Item J: LF Translation (upload)	NONE
Item K: CR Translation (download)	NONE
Item L: LF Translation (download)	NONE
<b>PROTOCOL OPTIONS</b>	
General Protocol Options:	NO
Item C: Abort xfer if CD lost	

*Note: Item C appears in Procomm Plus Version 2.01 or higher.*

- 3 Press <Enter> on the PC. The following displays:

```

44 Digital Hybrid Key-System
Eng. Ver. 1.36-FFFF DATE: 12/01/98 TIME: 15:37:14
ENTER PASSWORD:
    
```

- 4 Enter the password [default=3226VODAVI], and press <Enter> again. Proper entry of the password results in the ADM> prompt. Proceed with programming referring to *Figure*



2-l: *Data Terminal Program Codes Cross Reference* for terminal characters that represent the key set buttons. By entering [?] from the terminal, a Help screen displays.

- 5 Enter the information on the following screen capture. Continue with the steps that follow.

```

44 Digital Hybrid Key-System
Eng. Ver. 1.36-FFFF DATE: 12/01/98 TIME: 15:37:14
ENTER PASSWORD:
adm>
  ADMIN PROGRAMMING
adm>,
  ENTER PROGRAM NO
adm>86
  LOAD DATABASE ROUTINE
  ENTER BUTTON NUMBER
adm>q
  UPLOAD DATEBASE
  PRESS HOLD ←
adm>

```

The HOLD button on a key set is the same as the <Enter> key on the keyboard. Press <Enter>.

- 6 On the PC, press <PgDn> to display the Download Protocol screen. Enter X to set the download file to use X-Modem. This introduces an error correction facility to track errors and correct them during the download procedure.

```

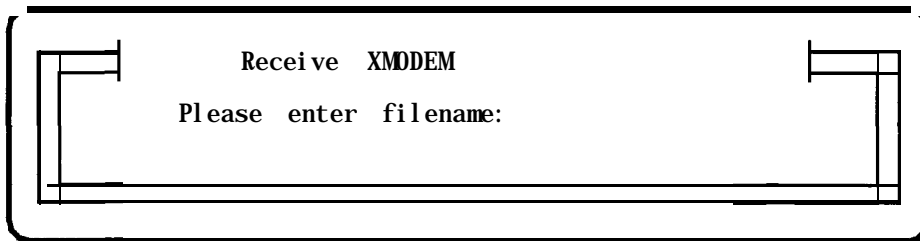
Download Protocols 124811648 bytes free
X) XMODEM          A) ASCII
Z) ZMODEM          R) RAW ASCII
Y) YMODEM (Batch) T) TELINK
G) YMODEM-G (Batch) M) MODEM7
O) 1K-XMODEM      W) WXMODEM
E) 1K-XMODEM-G    I) IMODEM
C) COMUSERVE B+   1) CEXT 1]
K) KERMIT          2) [EXT 2]
S) SEALINK        3) CEXT 3]

Your Selection: (press ENTER for ZMODEM)

```



- 7 This displays the Receive XMODEM screen on the PC monitor. Enter a path and file name for the database file and press <Enter> to begin the download routine.



- 8 On the PC, press <Enter> to begin the download routine. A Confirmation tone is heard from the communications package after the download is complete and the ADM> prompt displays.
- 9 Enter M and press <Enter>.
- 10 On the PC, press <Alt> + <X>. Press <Enter> to exit Procomm and return to the DOS prompt.



*The downloaded database cannot be changed in the PC. The Upload/Download routine is only a method to save an existing database. Database changes are made using the remote admin capabilities. Baud rates on I/O ports are NOT downloaded or uploaded.*

The download file contains a series of ASCII strings with a checksum at the end of the string. The checksum is verified when the system receives the string. An error in the checksum results in rejection of the string. An error message is sent to the PC when a string is received with an error. The user must watch for no more data on the screen to determine when the transmission of the download file is complete.



*The Database should be **initialized** prior to an upload. The system should then be reset after the upload.*

Forward and backward compatibility is maintained. If the file uploaded from the PC contains less information in a string than required by the system database, the system maintains default information in the area not covered by the string. If the file uploaded from the PC contains more information in a string than required by the system database, the system ignores the additional information.

To upload an ASCII database file:



1 Enter the information on the following screen capture.

```

44 Digital Hybrid Key-System
Eng. Ver. 1.36-FFFF DATE: 12/01/98 TIME: 15:37:14
ENTER PASSWORD:
adm>
  ADMIN PROGRAMMING
adm>,
  ENTER PROGRAM NO
adm>86
  LOAD DATABASE ROUTINE
  ENTER BUTTON NUMBER
adm>w
  DOWNLOAD DATEBASE
  PRESS HOLD ←
adm>

```

The HOLD button on a key set is the same as the <Enter> key on the keyboard. Press <Enter>.

2 On the PC, press <PgUp> to display the Upload Protocol screen. Enter X to set the upload file to use X-Modem. This introduces an error correction facility to track errors and correct them during the upload procedure.

```

Upload Protocols * 124811648 bytes free

X) XMODEM                A) ASCII
Z) ZMODEM                R) RAW ASCII
Y) YMODEM (Batch)       T) TELINK
G) YMODEM-G (Batch)    M) MODEM7
O) 1K-XMODEM           W) WXMODEM
E) 1K-XMODEM-G        I) IMODEM
C) COMPU SERVE B+      1) CEXT 11
K) KERMIT              2) CEXT 21
S) SEALINK            3) [EXT 31

Your Selection: (press ENTER for XMODEM)

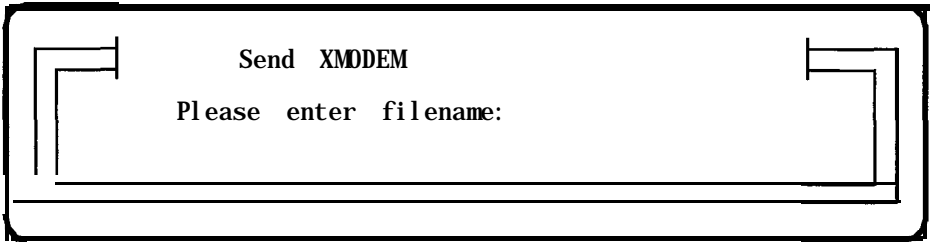
```



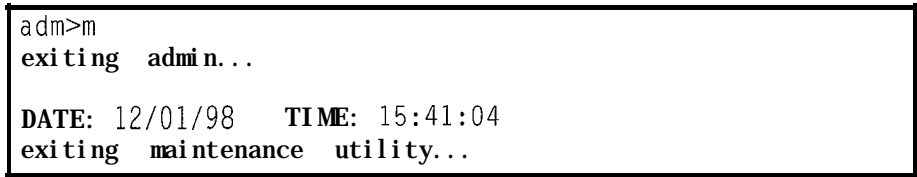




- This displays the Send XMODEM screen on the PC monitor. Enter a path and file name for the database file and press <Enter> and the desired file is uploaded to the system.



- A Confirmation tone is heard after the uploaded is complete and you are returned to the ADM> prompt.
- Enter an M at the ADM> prompt and press <Enter>.



- On the PC, press <Alt> + <X>. Press <Enter> to exit Procomm and return to the DOS prompt.
- After the upload procedure is completed, the system MUST be reset for full activation of the database programming to take effect.





## 2 System Parameters Programming



### System Timers

#### Programming Steps

If the system is in the programming mode, continue using the program codes. If starting to program here, enter the programming mode. Refer to Chapter 1: *Customer Database Programming*.

- I Press FLASH and dial [01]. The following message displays:

SYSTEM TIMERS ENTER BUTTON NUMBER
--------------------------------------

#### Description

This section describes the procedures and steps to program system timers in the System Timers programming area. The buttons on the digital terminal are illustrated on the following page:





SYSTEMHOLD RECALL * 1 Q	EXCL HOLD RECALL * 2 W	ATTENDANT RECALL * 3 E	TRANSFER RECALL * 4 R
PRESET FORWARD * 5 T	CALL FWD NO/ANSWER * 6 Y	PAUSE TIMER * 7 U	CALL PARK TIMER * 8 I
CONF/DISA TIMER * 9 O	PAGING TIMEOUT * 10 P	CO RING DETECT * 11 A	DISA/SLT RECEIVER * 12 S
MSG WAIT REMINDER * 13 D	HOOK FLASH * 14 F	HOOK FLASH DEBOUNCE * 15 G	SMDR CALL QUALIFICATION * 16 H
AUTO CALL BACK TIMER * 17 J	REMINDER RING * 18 K	RELEASE GUARD TIMER * 19 L	INTER-DIGIT TIMEOUT * 20 :
* 21 Z	* 22 X	* 23 C	* 24 V

Program Code	Flex Button	Feature	Default (after initialization)
FLASH 01	1	System Hold Recall	060 seconds
	2	Exclusive Hold Recall	180 seconds
	3	Attendant Recall Timer	01 minutes
	4	Transfer Recall Timer	045 seconds
	5	Preset Forward Timer	10 seconds
	6	Call Forward No/Answer	015seconds
	7	Pause Timer	<b>2</b> seconds
	8	Call Park Recall Timer	180 seconds
	9	Conf erence/DISA Timer	10 minutes
	10	Paging Timeout Timer	15 seconds
	11	CO Ring Detect Timer	300 ms
	12	SLT DTMF Receiver Timer	020 seconds
	13	MSG Wait Reminder Tone	000 minutes
	14	SLT Hook Flash Timer	10 (1 second)
	15	SLT Hook Flash <b>Debounce</b>	010 (.1 seconds)
	16	SMDR Call Qualification Timer	30 seconds
	17	Auto Call Back Timer	03 seconds (enabled)
	18	Reminder Ring Timer	00 seconds (disabled)
	19	Release Guard Timer	300 ms
	20	Inter-Digit Timeout	5 seconds

Table 2-1: System Timers Defaults





## System Hold Recall Timer

### Programming Steps

- 1 Press the SYSTEM HOLD RECALL TIMER flexible **button(FLASH 01, button 1)**. The following message displays:

SYS HOLD RECALL	000-300
060	

- 2 Enter a 3-digit timer value on the dial pad that corresponds to 000-300 seconds.
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

This timer determines the time before a call placed on System Hold recalls the station placing the hold, If unanswered by that station, the call recalls the attendant. By default, the System Hold Recall Timer is set for 60 seconds and is variable from 000-300 seconds. An entry of 000 disables the timer and there is no recall.

## Exclusive Hold Recall Timer

### Programming Steps

- 1 Press the EXCLUSIVE HOLD RECALL TIMER flexible button **(FLASH 01, button #2)**. The following message displays:

EXC HOLD RECALL	000-300
180	

- 2 Enter a 3-digit timer value on the dial pad that corresponds to 000-300 seconds,
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

This timer determines the time before a call placed on Exclusive Hold recalls the station placing the Hold. If unanswered by that station, the call recalls the attendant. By default, the Exclusive Hold Recall Timer is set for 180 seconds and is variable from 000-300 seconds. An entry of 000 disables the timer and there is no recall.



## Attendant Recall Timer

### Programming Steps

- 1 Press the ATTENDANT RECALL TIMER flexible button (FLASH 01, button **#3**). The following message displays:

ATND RECALL TIMER	00-60
01	

- 2 Enter a 2-digit timer value on the dial pad that corresponds to 00-60 minutes.
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

This timer determines the time a recalling call rings at the attendant station(s) before the system releases the line. When a CO Line recalls to the Attendant station and is still unanswered, the system releases the line at the expiration of this timer and automatically places the line to an idle condition. By default, the Attendant Recall Timer is set for 1 minute and is variable from 00-60 minutes. An entry of 00 causes the Attendant(s) to ring until answered.

## Transfer Recall Timer

### Programming Steps

- 1 Press the TRANSFER RECALL TIMER flexible button (FLASH 01, button **#4**). The following message displays:
- 2 Enter a 3-digit timer value on the dial pad that corresponds to 000-300 seconds.

TRANSFER RECALL	000-300
045	

- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

This timer determines the time a transferred call rings at the station receiving the transfer before it recalls the station making the transfer. If unanswered by that station, the call recalls the attendant. By default, the Transfer Recall Timer is set for **45** seconds and is variable from 000-300 seconds. A 000 entry disables the timer and there is no recall.



### Preset Forward Timer

#### Programming Steps



- 1 Press the PRESET FORWARD TIMER flexible button (FLASH 01, button #5). The following message displays:



- 2 Enter a 2-digit timer value on the dial pad that corresponds to 01-99 seconds.
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

#### Description

This timer determines the time an outside line rings before being forwarded to a predetermined station. This entry works with Preset Forward station assignments in Station Programming. More than one station can be forwarded to the same party.



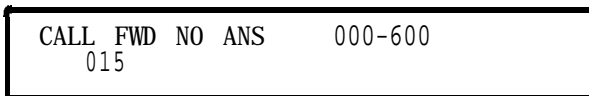
*Initial incoming CO lines follow the Preset Call Forward Timer when encountering a station in the Forward/No Answer mode.*

This timer also governs the time the DISA call rings at a station before returning to intercom dial tone, if not answered. By default, the Preset Forward Timer is set at 10 seconds and is variable from 01-99 seconds. If no preset forward destination is programmed, the feature is disabled.

### Call Forward / No Answer Timer

#### Programming Steps

- 1 Press the CALL FORWARD NO/ANSWER TIMER flexible button (FLASH 01, button #6). The following message displays:



- 2 Enter a 3-digit timer value on the dial pad that corresponds to 000-600 seconds.
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.





## Description

This timer is used when a station in the system specifies that no answer calls be forwarded to another station. The timer determines how long an intercom or transferred call rings before it is considered a no-answer call. The call then forwards to the designated station for handling. By default, the Call Forward No/Answer Timer is set for 15 seconds and is variable from 000-600 seconds.



*Initial incoming CO lines follow the Preset Call Forward Timer when encountering a station in the Forward / No Answer mode.*

## Pause Timer

### Programing Steps

- 1 Press the PAUSE TIMER flexible button (FLASH 01, button #7). The following message displays:

PAUSE TIMER	1-9
2	

- 2 Enter a 1-digit timer value on the dial pad that corresponds to 1-9 seconds.
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

## Description

This timer determines the length of the pause when programmed for use with speed dialing and LCR Insert Tables. By default, the Pause Timer is set at 2 seconds and is variable from 1-9 seconds. There is no 0 entry. Use of *this feature may affect Centrex transfers.*







## Call Park Recall Timer

### Programming Steps

- 1 Press the CALL PARK RECALL TIMER flexible button (**FLASH 01, button #8**). The following message displays:

CALL PARK TIMER	000-600
180	

- 2 Enter a 3-digit timer value on the dial pad that corresponds to 001-600 seconds.
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

This timer determines the time before a call placed in a call park location recalls the station placing the call in park. If unanswered by that station, the call recalls the attendant. By default, the Call Park Recall Timer is set at 180 seconds and is variable from 000-600 seconds. A 000 entry disables the timer and there is no recall.

## Conference / DISA Timer

### Programming Steps

- 1 Press the CONFERENCE/DISA TIMER flexible button (**FLASH 01, button #9**). The following message displays:

CONFERENCE TIMER	00-99
10	

- 2 Enter a 2-digit timer value on the dial pad that corresponds to 01-99 minutes.
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.



### Description

This timer determines the time an unsupervised conference can continue after the initiator of the conference has exited. By default, the Conference/DISA Timer is set at 10 minutes and is variable from 01–99 minutes. A 00 entry disables the timer and no automatic disconnect occurs.

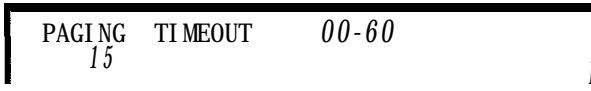


*The Conference Timer also allows the system administrator to control the time a DISA caller is allowed after establishing a Trunk-to-Trunk call. At the expiration of the Conference Timer, a tone is presented to both DISA parties, then one minute later the system automatically releases both trunks. The Conference Timer does not affect or control a DISA-to-Station call.*

### Paging Time-out Timer

#### Programming Steps

- 1 Press the PAGING TIMEOUT TIMER flexible button (FLASH 01, button #10). The following message displays:



- 2 Enter a 2-digit timer value on the dial pad that corresponds to 01-60 seconds.
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

This timer determines the maximum length of a page announcement (internal, external or all call). The system automatically disconnects the page at the end of this time unless the person making the page has already hung up. By default, the Paging Time-out Timer is set at 15 seconds and is variable from 01–60 seconds. A 00 entry disables the timer and pages are not limited in length. *This will affect use of the Meet Me Page feature.*





## CO Ring Detect Timer

### Programming Steps

- 1 Press the CO RING DETECT TIMER flexible button(FLASH 01, button #11). The following message displays:

CO RING DETECT	2-9
3	

- 2 Enter a 1-digit timer value on the dial pad that corresponds to 2-9 (200 ms to 900 ms).
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

This timer controls the time necessary to detect an outside line ringing into the system. By default, the CO Ring Detect Timer is set at 3 (300 ms), and is variable from 2-9 (200 ms to 900ms). There is no 0 or 1 entry.

## SLT DTMF Receiver Timer

### Programming Steps

- 1 Press the SLT DTMF RECEIVER TIMER flexible button(FLASH 01, button #12). The following message displays:

SLT RCVR TIMER	005-100
020	

- 2 Enter a 3-digit timer value on the dial pad that corresponds to 005-100 seconds.
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

Single line telephones require the use of a DTMF receiver when going off-hook and dialing. When SMDR or toll restriction (via COS assignments) is enabled, a DTMF receiver monitors and screens the SLT digits for the duration of this timer. By adjusting this timer, the system administrator may free system DTMF receivers sooner if system SLT traffic is heavy, or provide a longer monitoring period if toll restriction becomes a problem. Note that when LCR is enabled, the DTMF receivers are released when the expected number of digits are dialed as entered in the LCR database. By default, the SLT DTMF Receiver Timer is set at 20 seconds and is variable from 005-100 seconds.

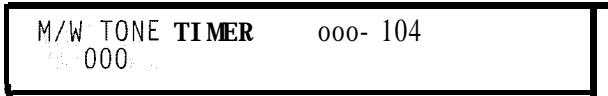




### Message Wait Reminder Tone

#### Programming Steps

- 1 Press the MESSAGE WAIT REMINDER TONE flexible button(FLASH 01, button #13). The following message displays:



- 2 Enter a 3-digit timer value on the dial pad that corresponds to 000-104 minutes.
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

#### Description

This timer determines the time between repeated reminder tones to a key telephone with a message waiting. Digital Hybrid station users may be reminded of a message waiting on their telephone with an audible signal presented at a timed interval. By default, the Message Wait Reminder Tone is set at 000 (disabled) and is variable from 000-104 minutes.

### SLT Hook Flash Timer

#### Programming Steps

- 1 Press the SLT HOOK FLASH TIMER flexible button (FLASH 01, button #14). The following message displays:



- 2 Enter a 2-digit timer value on the dial pad that corresponds to 052.0 seconds in 1/10 second increments.
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

#### Description

This timer determines how long an SLT user presses the hook switch for it to be considered a valid on hook (disconnect) request, An on-hook shorter in duration (but longer than the Hook Switch Bounce Timer) is



## System Timers



considered a Hook Flash (transfer) request. Refer to Figure 2-1. By default, the SLT Hook Flash Timer is set at **10** (one second) and is variable from 0.5-2.0 seconds.



Some Single Line telephones have a fixed or programmable Flash Timer (Flash or Tap button). **This** Hook Switch Timer must be set longer than the SL T Flash Timer to allow Hook Flash transfer.

## SLT Hook Flash Debounce Timer

### Programming Steps

- 1 Press the SLT HOOK FLASH DEBOUNCE TIMER flexible button (**FLASH 01, button #15**). The following message displays:

```
HOOK SWT BOUNCE    000- 100
  010
```

- 2 Enter a 3-digit timer value on the dial pad that corresponds to 0-1 seconds in 10 ms increments.
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

This timer determines the time needed to determine a valid on-hook or off-hook condition for single line telephones. On-Hook or Off-Hook signals that are shorter in duration than this timer are ignored by the system. Refer to *Figure 2-1: Hook Switch Activity*. By default, the SLT Hook Flash Debounce Timer is set to 0.10 seconds and is variable from 0-1 seconds in 10 ms increments. This is a 3-digit entry where 010 equals 0.1 seconds.



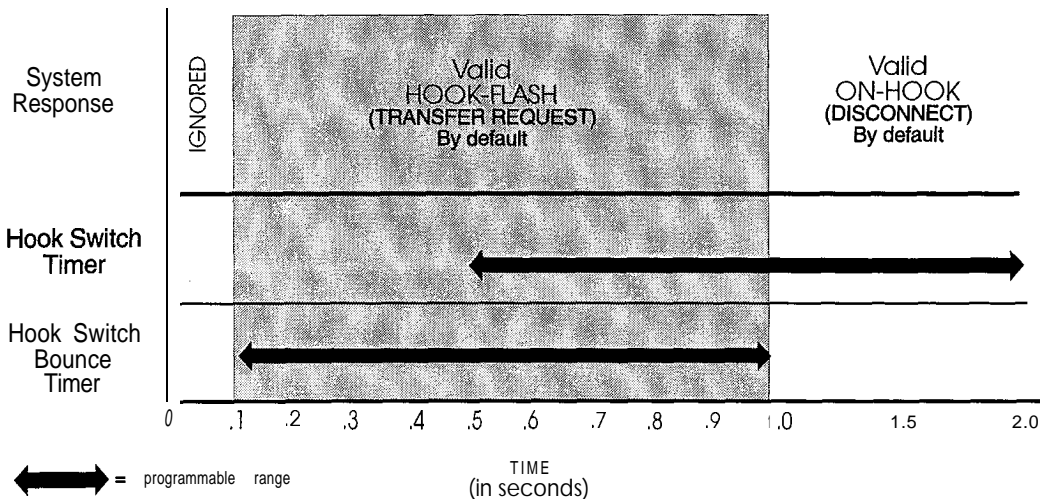


Figure 2-1: Hook Switch Activity

## SMDR Call Qualification Timer

### Programming Steps

- 1 Press the SMDR CALL QUAL TIMER flexible button(FLASH 01, button #16). The following message displays:

```

SMDR CALL QUAL    00-60
 30
    
```

- 2 Enter a 2-digit timer value on the dial pad that corresponds to 00-60 seconds in 1 second increments.
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

This feature determines the time needed to determine a valid SMDR call for reporting purposes. By default, the SMDR Call Qualification Timer is set to 30 seconds and is variable from 00-60 seconds in 1-second increments.





## Automatic Call Back Timer

### Programming Steps

- 1 Press the AUTO CALL BACK TIMER flexible button (FLASH 01, button **#17**). The following message displays:

AUTO CALL BACK	00-99
03	

- 2 Enter a Z-digit timer value on the dial pad that corresponds to 00-99 seconds in 1 second increments.
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

This feature invokes a call back anytime a user listens to busy tone for a programmable period of time. By default, the Automatic Call Back Timer is set for **03** seconds (enabled), and is variable from **00-99** seconds. A value of 00 disables this timer. An Automatic Call Back does not occur when this timer is disabled.

## Reminder Ring Timer

### Programming Steps

- 1 Press the REMINDER RING flexible button (FLASH 01, button **#18**). The following message displays:

REMINDER RING	00-99
00	

- 2 Enter a 2-digit timer value on the dial pad that corresponds to 00-99 seconds in 1 second increments. A value of 00 disables the timer, therefore the user only receives one ring burst at the beginning of the call.
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

When a CO line rings at a busy station, the call rings at the station using muted ringing. The CO Line Ringing Option feature enables a user to receive a reminder ring instead of muted ring. This timer provides a reminder ring every time the timer expires, as long as the incoming CO line remains connected. If the user continues his present conversation and the CO party does not hang up, the Reminder Ring timer expires and





the user receives another ring burst. When the key set user ends the existing call, ringing for the CO call reverts to normal ringing. By default, the Reminder Ring Timer is set to 00 second and is variable from 00-99 seconds in 1 second increments.

## Release Guard Timer

### Programming Steps

- 1 Press the RELEASE GUARD TIMER flexible button (**FLASH 01, button #19**). The following message displays:

RELEASE GUARD	01-50
03	

- 2 Enter a 2-digit timer value on the dial pad that corresponds to 01-50 (0.1 to 5.0 seconds)
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

The Release Guard Timer is designed to accommodate variations from one Central Office to another. The timer is started whenever a CO line is released. If a user attempts to access a CO line before the Release Guard timer expires, his LED illuminates indicating the CO line was seized, however the CO line is not seized until the timer expires. The user DOES NOT receive a busy tone, but may get a delayed CO dial tone if the timer is set to a large value. By default, the Release Guard timer is set for 3 (for 300 ms), and is variable from 100 ms to 5 seconds.

## Inter-Digit Time-out

### Programming Steps

- 1 Press the INTER-DIGIT TIMEOUT flexible button (**FLASH 01, button #20**). The following message displays:

INTERDIGIT T/O	01-99
05	

- 2 Enter a 2-digit timer value on the dial pad that corresponds to 01-99 seconds in 1 second increments.





## Additional System Timers



3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

This feature provides inter-digit time-out programming on a system-wide basis and applies to intercom and LCR calls. DISA, DID, TIE inter-digit time-outs remain unaffected by this timer. By default, the Inter-Digit Time-out is set for 5 seconds, and is variable from 1-99 seconds.

## Additional System Timers

### Programming Steps

If the system is in the programming mode, continue using the program codes, If starting to program here, enter the programming mode.

- 1 Press FLASH and dial [02]. The following message displays:

```
SYSTEM TIMERS
ENTER BUTTON NUMBER
```

### Description

This section describes the procedures and steps necessary to program additional System Timers in the Timers programming area.



<p><b>SYSTEM REDIAL TIMER</b></p> <p>* <input type="text" value="1"/> <input type="text" value="Q"/></p> <p><b>PULSE DIAL I/O TIMER</b></p> <p>* <input type="text" value="5"/> <input type="text" value="T"/></p> <p>* <input type="text" value="9"/> <input type="text" value="O"/></p> <p>* <input type="text" value="13"/> <input type="text" value="D"/></p> <p>* <input type="text" value="17"/> <input type="text" value="J"/></p> <p>* <input type="text" value="21"/> <input type="text" value="Z"/></p>	<p><b>ATD DISPLAY TIMER</b></p> <p>* <input type="text" value="2"/> <input type="text" value="W"/></p> <p><b>DTMF TIME OPERATION</b></p> <p>* <input type="text" value="6"/> <input type="text" value="Y"/></p> <p>* <input type="text" value="10"/> <input type="text" value="P"/></p> <p>* <input type="text" value="14"/> <input type="text" value="F"/></p> <p>* <input type="text" value="18"/> <input type="text" value="K"/></p> <p>* <input type="text" value="22"/> <input type="text" value="X"/></p>	<p><b>CALL CVRG RING TIMER</b></p> <p>* <input type="text" value="3"/> <input type="text" value="E"/></p> <p>* <input type="text" value="7"/> <input type="text" value="U"/></p> <p>* <input type="text" value="11"/> <input type="text" value="A"/></p> <p>* <input type="text" value="15"/> <input type="text" value="G"/></p> <p>* <input type="text" value="19"/> <input type="text" value="L"/></p> <p>* <input type="text" value="23"/> <input type="text" value="C"/></p>	<p><b>MODEM ANSWER T/O</b></p> <p>* <input type="text" value="4"/> <input type="text" value="R"/></p> <p>* <input type="text" value="8"/> <input type="text" value="I"/></p> <p>* <input type="text" value="12"/> <input type="text" value="S"/></p> <p>* <input type="text" value="16"/> <input type="text" value="H"/></p> <p>* <input type="text" value="20"/> <input type="text" value="."/></p> <p>* <input type="text" value="24"/> <input type="text" value="V"/></p>
---	---	--	--

Program Code	Flex Button	Feature	Def ault (after initialization)
Additional System Timers:			
FLASH 02	1	Repeat Redial Timer	060 seconds
	2	ATD Display Timer	01 seconds
	3	Call Coverage Ring Timer	5 seconds
	4	Modem Answer Time-out	25 seconds
	5	Pulse Dial Inter-Digit Timer	300 ms
	6	DTMF Time Operation	100 ms ON / 100ms OFF

Table 2-2: Additional System Timers Defaults

## Repeat Redial Timer

### Programming Steps

- 1 Press the RPT REDIAL TIMER flexible button (**FLASH 02, button #1**). The following message displays:

```

RPT REDIAL    006-999
 060
    
```

- 2 Enter a 3-digit timer value on the dial pad that corresponds to 006-999 seconds.



- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

## Description

The feature lets a digital key station press a flexible button or dial a code and redial a busy or no-answer number at specific intervals. The user is signaled via a queue callback indication, The Redial flexible button flashes at the callback rate of 120 ipm for 15 seconds. If the station does not answer within 15 seconds, the callback is cancelled. If the station is busy with an internal/external call when the Redial queue callback occurs, the callback occurs after the user goes on-hook. By default, the Repeat Redial Timer is set for 1 minute (60) and is variable from 006-999 seconds.

## Attendant Display Timer

### Programming Steps

- 1 Press the ATTENDANT DISPLAY TIMER flexible button (FLASH 02, button **#2**). The following message displays:

ATTENDANT	DISPLAY	006-999
01		

- 2 Enter a 2-digit timer value on the dial pad that corresponds to 00-99 seconds.
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

## Description

The Attendant display timer modifies the way in which multiple calls ringing at the attendant station display. Currently, if two calls are ringing at an attendant station, when the station goes off hook, the first call is answered. The LCD updates to show the second call that is ringing which sometimes does not allow the station to view the current call's LCD information. This timer keeps the current calls' information on the LCD for the set time period, then shows any other calls ringing in at the time. By default, the Attendant Display Timer is set for 1 second and is variable from **00-99** seconds.



## Call Coverage Ring Timer

### Programming Steps

- 1 Press the CALL CVRG RING TIMER flexible button (**FLASH 02, button #3**). The following message displays:

CALL COVERAGE RING	00-99
05	

- a Enter a 2-digit timer value on the dial pad that corresponds to 00-99 seconds.
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

A ringing Call Coverage button enables the user to place another station under a flex button. For additional information refer to Chapter 4: *Table 4-3: Flex Button Codes for Remote Programming*. When that station rings with an internal or external call, the DSS button for that station rings or flashes. By default, the Call Coverage Ring Timer is set for 5 seconds and is variable from 00-99 seconds. A value of 00 results in the LED flashing but the call coverage station does not ring.

## Modem Answer Timer

### Programming Steps

- 1 Press the MODEM ANSWER TIMER flexible button (**FLASH 02, button #4**). The following message displays:

MODEM ANSWER T/O	025-099
25	

- 2 Enter a 2-digit timer value on the dial pad that corresponds to 025-099 seconds.
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

This timer determines how long the On Board modem provides a carrier tone to a distant modem. If a connection is not made at the end of this timer, the On Board modem hangs up. By default, the Modem Answer Timer is set for 25 seconds and is variable from 25-99 seconds.



### Pulse Dial Inter-Digit Timer

#### Programming Steps

- 1 Press the PULSE DIAL I/D TIMER flexible button (**FLASH 02, button #5**). The following message displays:

INT DIGIT PULSE	300-600
300	

- 2 Enter a 3-digit timer value on the dial pad that corresponds to 300-600 ms.
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

#### Description

This governs the inter-digit time of the Pulse Dial Digits. By default, the Pulse Dial Ring Timer is set for 300 ms and is variable from 300-600 ms.

### DTMF On/Off Time Operation

#### Programming Steps

- 1 Press the DTMF TIME OPERATION flexible button (**FLASH 02, button #6**). The following message displays:

DTMF ON/OFF TIME	100-999
100/100	I

- 2 Enter a 3-digit value (100-999) on the dial pad for the DTMF on and off times.
- 3 Press HOLD to save the entry. A A confirmation tone is heard.

#### Description

This feature lets the installer select the DTMF on/off time on a system-wide basis. This lets the installer customize the system for certain applications that require more than the standard DTMF time of 100ms on and 100ms off. By default, the DTMF Time Operation is set for 100 ms on and 100 ms off.





## System Features 1 Programming

### Programming Steps

If the system is in the programming mode, continue using the program codes, If starting to program here, enter the programming mode.

- 1 Press FLASH and dial [05]. The following message displays:

```
SYSTEM FEATURES 1
ENTER BUTTON NUMBER
```

### Description

This section describes the procedures and steps necessary to program System Features in the System Features programming area. The buttons on the digital terminal are illustrated on the following page:





ATTN OVERRIDE * <b>1</b> <b>Q</b>	HOLD PREFERENCE * <b>2</b> <b>W</b>	EXTERNAL NIGHT RING * <b>3</b> <b>E</b>	EXECUTIVE OVERRIDE * <b>4</b> <b>R</b>
PAGE WARN TONE * <b>5</b> <b>T</b>	BACKGROUND MUSIC * <b>6</b> <b>Y</b>	LCR ENABLE * <b>7</b> <b>U</b>	ACCOUNT CODES * <b>8</b> <b>I</b>
GROUP LISTENING * <b>9</b> <b>O</b>	IDLE SPEAKER MODE * <b>10</b> <b>P</b>	CALL COST DISPLAY * <b>11</b> <b>A</b>	MUSIC ON HOLD * <b>12</b> <b>S</b>
CALL QUALIFIER TONE OPTION * <b>13</b> <b>D</b>	* <b>14</b> <b>F</b>	* <b>15</b> <b>G</b>	* <b>16</b> <b>H</b>
* <b>17</b> <b>J</b>	* <b>18</b> <b>K</b>	* <b>19</b> <b>L</b>	* <b>20</b> <b>:</b>
* <b>21</b> <b>Z</b>	* <b>22</b> <b>X</b>	* <b>23</b> <b>C</b>	* <b>24</b> <b>V</b>

Program Code	Flex Button	Feature	Default (after initialization)
System Features 1:			
FLASH 05	1	Attendant Override	Disabled
	2	Hold Preference	System
	3	External Night Ring	Disabled
	4	Executive Warning	Enabled
	5	Page Warning Tone	Enabled
	6	Background Music	Enabled
	7	Least Cost Routing	Disabled
	8	Account Code	Disabled
	9	Group Listening	Disabled
	10	Idle Speaker Mode	Disabled
	11	Call Cost Display Feature	Disabled
	12	Music On Hold	Enabled
	13	Call Qualifier Tone Option	Disabled

Table 2-3: System Features 1 Defaults



## Attendant Override

### Programming Steps

- 1 Press the ATTN OVERRIDE flexible button (**FLASH 05, button #1**).
- 2 Enter a 1-digit value (0-1) that corresponds with the following entries:  
[0] = Disabled  
[1] = Enabled

ATTENDANT OVERRIDE	0-1
DISABLED	

- 3 Press HOLD to save the entry. A confirmation tone is heard.

### Description

When this feature is enabled, it lets the attendant override a busy station or a station in DND. By default, Attendant Override is disabled.



*Attendant Override functions ONLY when the Attendant station is **QS**-signed a flex button designated as Attendant Override.*

## Hold Preference

### Programming Steps

- 1 Press the HOLD PREF flexible button (**FLASH 05, button #2**).
- 2 Enter a 1-digit value (0-1) that corresponds with the following entries:  
[0] = Exclusive Hold  
[1] = System Hold

HOLD PREFERENCE	0-1
SYSTEM	

- 3 Press HOLD to save the entry. A confirmation tone is heard.







### Description

The system may be programmed to have Exclusive or System Hold preferred. If Exclusive Hold is preferred, the user presses HOLD once for Exclusive Hold and twice for System Hold. If System Hold is preferred, the user presses HOLD once for System Hold and twice for Exclusive Hold. Refer to System Timer programming for System and Exclusive Hold recall times. By default, Hold Preference is System Hold.

## External Night Ring

### Programming Steps

- 1 Press the EXT NIGHT RING flexible button (**FLASH 05, button #3**).
- 2 Enter a I-digit value (O-I) that corresponds with the following entries:  
 [0] = Disabled  
 [1] = Enabled

EXTERNAL NIGHT RING	0-1
DISABLED	1

- 3 Press HOLD to save the entry. A confirmation tone is heard.

### Description

When this feature is set to yes, it activates *external night ring which produces a tone that is sent over all externalpage groups*. When outside lines are marked UNA, ringing activates a tone over external paging when an incoming call occurs on those lines during night service. By default, External Night Ring is disabled.

## Executive Override Warning Tone

### Programming Steps

- 1 Press the EXEC OVER WARN TONE flexible button (**FLASH 05, button #4**).
- 2 Enter a I-digit value (O-I) that corresponds with the following entries:  
 [0] = Disabled  
 [1] = Enabled

EXECUTIVE WARNING	0-1
ENABLED	1



- 3 Press HOLD to save the entry. A confirmation tone is heard.

**Description**

This option enables Executive stations to override and barge-in on other key sets engaged in conversation on a CO line. Prior to actual cut through of the third party, a warning tone is presented to all parties notifying them of the barge-in. This warning tone, however, is a programmable option on a system-wide basis, that either enables or disables the tone. When the tone is disabled, no audible signal is presented to the parties to signal the barge-in. By default, Executive Override Warning Tone is enabled.



*Use of this feature when the Executive Override Warning Tone is disabled may be interpreted as a violation of federal, state, or local laws, and an invasion of privacy. Check applicable laws in your area before intruding on calls using this feature.*



*A change in volume may occur on the CO line or intercom call after the barge-in occurs. This feature also affects ACD Supervisor Barge-in warning tone.*

**Page Warning Tone**

**Programming Steps**

- 1 Press the PAGE WARN TONE flexible button (FLASH 05, button **#5**).
- 2 Enter a I-digit value (O-I) that corresponds with the following entries:  
 [0] = Disabled  
 [I] = Enabled

PAGE WARNING TONE	o- 1
ENABLED	I

- 3 Press HOLD to save the entry, A confirmation tone is heard.

**Description**

Determines whether a page warning tone sounds over the Key Telephone speakers or external paging speakers, prior to a page announcement. By default, Page Warning Tone is enabled.





### Background Music

#### Programming Steps



- 1 Press the BACKGROUND MUSIC flexible button (**FLASH 05, button #6**).
- 2 Enter a 1-digit value (0-1) that corresponds with the following entries:  
[0] = Disabled  
[1] = Enabled

BACKGROUND MUSIC	0-1
ENABLED	

- 3 Press HOLD to save the entry. A confirmation tone is heard.

#### Description

The system can be programmed to let stations activate their Background Music, in addition to Music-On-Hold. A music source must be connected to the BGM/MOH connector on the MISU. By default, the Background Music channel is enabled.

### Least Cost Routing (LCR)

#### Programming Steps

- 1 Press the LCR ENABLE flexible button (**FLASH 05, button #7**).
- 2 Enter a 1-digit value (0-1) that corresponds with the following entries:  
[ 0 ] = Disabled  
[1] = Enabled

LEAST COST ROUTING	0-1
DI SABLED	

- 3 Press HOLD to save the entry. A confirmation tone is heard.



#### Description

If Least Cost Routing is used, it must be enabled here. Before enabling LCR, refer to the Least Cost Routing section (Flash 75) and programming tables (Product Description Manual - Appendix C). When the tables are programmed, you may then enable LCR for the system. After system initialization, a default LCR database is loaded into the LCR section of memory. By default, LCR is disabled.



## Account Codes - Forced

### Programming Steps

- 1 Press ACCOUNT CODES flexible button (**FLASH 05, button #8**) to determine whether the use of Account Codes is forced or optional.
- 2 Enter a 1-digit value (0-1) that corresponds with the following entries:

[0] = Disabled

[1] = Enabled

FORCED ACCOUNT CODE	0-1
DI SABLED	

- 3 Press HOLD to save the entry. A confirmation tone is heard.

### Description

The system can force the use of account codes on all restricted calls. If forced account code option is enabled, a station's Class of Service is upgraded to day COS1, night COS1, when the account code is entered. If forced account code option is disabled, a station's Class of Service is not upgraded but the account code continues to be part of the SMDR record. By default, the use of account codes is optional.

## Group Listening

### Programming Steps

- 1 Press the GROUP LISTENING flexible button (**FLASH 05, button #9**).
- 2 Enter a 1-digit value (0-1) that corresponds with the following entries:

[0] = Disabled

[1] = Enabled

GROUP LISTENING	0-1
DI SABLED	

- 3 Press HOLD to save the entry. A confirmation tone is heard.

### Description

All digital key terminals have built-in speakerphones. Station users may use the speaker to monitor a call while using the handset to converse with the outside party. This enables other people in the room to listen





to both parties in the conversation. Group listening is unavailable when the station is in the headset mode, By default, Group Listening is disabled.

## Idle Speaker Mode

### Programming Steps

- 1 Press the IDLE SPEAKER MODE flexible button (**FLASH 05, button #10**).
- 2 Enter a I-digit value (O-I) that corresponds with the following entries:  
[0] = First digit dialed is Heard (Disabled)  
[1] = First digit dialed is Muted (Enabled)

<b>IDLE SPEAKER MODE</b> 0-1 <b>DISABLED</b>
---

- 3 Press HOLD to save the entry. A confirmation tone is heard.

### Description

The Idle Speaker Mode feature determines whether the first digit dialed is heard over the digital key terminal speaker. This feature can be enabled or disabled on a system-wide basis. By default, this mode is disabled.

## Call Cost Display Feature

### Programming Steps

- 1 Press the CALL COST DISPLAY flexible button (**FLASH 05, button #11**).
- 2 Enter a I-digit value (O-I) that corresponds with the following entries:  
[0] = Disabled  
[1] = Enabled

<b>CALL COST DISPLAY</b> 0-1 <b>DISABLED</b>
---

- 3 Press HOLD to save the entry. A confirmation tone is heard.





## Description

The Call Cost Display Feature lets a user view the approximate cost of each call made. This approximate cost also prints as part of the SMDR record. The Call Cost Display replaces the call duration display when a call is made using LCR. Cost information is programmable in LCR Flash 75. This enables the user to program four separate costs based on the time of day. Costs entered in the tables are costs for one minute, however, costs are calculated using 1/10th of a minute value. These costs are rounded down and based on the call start time, even if the call extends into a different time period. The SMDR printout contains a cost calculated using 1/10th of a minute increment, however the station display updates approximately every 30 seconds. The user must use LCR to get the call cost display. By default, the Call Cost Display feature is disabled.

## Music On Hold

### Programming Steps

- 1 Press the MUSIC ON HOLD flexible button (**FLASH 05, button #12**). This feature toggles on and off each time the button is pressed. The display updates with each toggle.

[0] = Disabled

[1] = Enabled

MUSIC ON HOLD	0-1
ENABLED	

- 2 Press HOLD to save the entry. A confirmation tone is heard.

## Description

When connected to the system, a music source provides music to all lines on Hold, parked calls, transferred calls and calls waiting to be answered by Automatic Call Distribution (ACD) or Uniform Call Distribution (UCD). This feature is allowed or denied on a system-wide basis in programming. By default, Music-On-Hold is enabled.

## Call Qualifier Tone Option

### Programming Steps

- 1 Press the CALL QUAL TONE OPTION flexible button (**FLASH 05, button #13**).
- 2 Enter a I-digit value (O-I) that corresponds with the following entries:

[0] = Disabled





[!] = Enabled

CALL QUALIFIER TONE	o- 1
DI SABLED	

- 3 Press HOLD to save the entry. A confirmation tone is heard.

## Description

This feature is associated with the ACD Call Qualifier code and determines if a confirmation tone is heard after the ACD Call Qualifier code is dialed. If programmed, the confirmation tone is heard through the key set speaker. This feature provides up to four digits for the ACD SMDR reporting functions that are compatible with the Basic ACD software package. This feature permits entry of up to twelve digits, By default, the Call Qualification Confirmation tone is disabled.

## System Features 2 Programming

### Programming Steps

If the system is in the programming mode, continue using the program codes. If starting to program here, enter the programming mode.

- 1 Press FLASH and dial [06]. The following message displays:

SYSTEM FEATURES 2	
ENTER BUTTON NUMBER	1

## Description

This section describes the procedures and steps necessary to program System Features in System Features programming area. The buttons on the digital terminal are illustrated on the following page:



<b>PRIVACY RELEASE TONE</b> * <b>1</b> <b>Q</b>	<b>CO RING TONE</b> * <b>2</b> <b>W</b>	<b>VERIFIED ACCT CODES</b> * <b>3</b> <b>E</b>	<b>CALL FWD DISPLAY STATUS</b> * <b>4</b> <b>R</b>
<b>EXT DAY RINGING</b> * <b>5</b> <b>T</b>	<b>ACD/UCD OVERFLOW STA FWD</b> * <b>6</b> <b>Y</b>	<b>DIRECT TRANSFER</b> * <b>7</b> <b>U</b>	<b>STATION ID LOCK</b> * <b>8</b> <b>I</b>
<b>LCR CALL PROGRESS</b> * <b>9</b> <b>O</b>	<b>ONE-TOUCH RCD WARNING TONE</b> * <b>10</b> <b>P</b>	<b>RINGBACK ON TRANSFER</b> * <b>11</b> <b>A</b>	* <b>17</b> <b>S</b>
* <b>13</b> <b>D</b>	* <b>14</b> <b>F</b>	* <b>15</b> <b>G</b>	* <b>16</b> <b>HI</b>
* <b>17</b> <b>J</b>	* <b>18</b> <b>K</b>	* <b>19</b> <b>L</b>	* <b>20</b> <b>:</b>
* <b>21</b> <b>Z</b>	* <b>22</b> <b>X</b>	* <b>23</b> <b>C</b>	* <b>74</b> <b>VI</b>

Program Code	Flex Button	Feature	Default (after initialization)
<b>System Features 2:</b>			
FLASH 06	1	Privacy Release Tone	Enabled
	2	CO Ring Tone	Enabled
	3	Verified Account Codes	Disabled
	4	Call Forward Display Status	Enabled
	5	External Day Ringing	Disabled
	6	ACD/UCD Overflow Sta Fwd	Disabled
	7	Direct Transfer	Enabled
	8	Station ID Lock	Disabled
	9	LCR Call Progress	Enabled
	10	One-Touch Record Warning Tone	Enabled
	11	Ringback on Transfer	Disabled

Table 2-4: System Features 2 Defaults





## Privacy Release Tone Option

### Programming Steps

- 2 Press the PRIVACY RELEASE TONE flexible button (**FLASH 06, button #1**). The following message displays:



- 3 Enter a 1-digit value on the dial pad to enable or disable the conference tone.  
 [ 0 ] = Disabled  
 [ 1 ] = Enabled
- 4 Press HOLD to save the entry. A confirmation tone is heard.



*Display stations continue to receive the CONFERENCE display regardless of the warning tone setting.*

Privacy is ensured on all communications in the system. If desired, the user may elect to disable the Automatic Privacy feature, thus allowing up to seven other stations to join existing CO Line conversations.



*Disabling of the privacy feature may be limited by federal, state, or local law, so check the relevant laws in your area before disabling privacy.*

Station Attempting to Access CO Line	CO Line in Use by Another Station	
	Privacy Enabled	Privacy Disabled
Privacy Enabled	Private (no cut-through)	Private (no cut-through)
Privacy Disabled	Private (no cut-through)	Privacy Release (cut-through allowed)

Table 2-5: CO Line Privacy Flag



## Distinctive CO Ringing

### Programming Steps

- 1 Press the CO RING TONE flexible button (**FLASH 06, button #2**). The following message displays:

```
CO RING TONES    0-1
  ENABLED
```

- 2 Enter a 1-digit value on the dial pad to enable/disable the tone ring signal.  
[0] = Disabled  
[1] = Enabled
- 3 Press HOLD to save the entry. A confirmation tone is heard.

### Description

The tone ring signal that notifies stations of an incoming call can be changed in administrative programming to provide distinctive ringing on a per CO line basis. A distinctive ring tone can be programmed for each CO line that rings each station. The system provides 36 different ring patterns that can be selected for CO lines in the system. By default, Distinctive CO ringing is enabled.

## Verified Account Codes

### Programming Steps

- 1 Press the VERIFIED ACCT CODES flexible button (**FLASH 06, button #3**). The following message displays:

```
VERIFIED ACCT CODES    0-1
  DISABLED
```

- 2 Enter a 1-digit value on the dial pad to enable/disable the use of verified account codes.  
[0] = Disabled  
[1] = Enabled
- 3 Press HOLD to save the entry. A confirmation tone is heard.





### Description

The Verified Account Code/Traveling Class of Service (COS) feature provides tracking of specific calls by entering a verified, variable length (up to 12-digits) identifier. Each account code can be assigned a day and night Class-of-Service for determining the dialing privileges allowed by that account code. This lets users override a restricted station. If the dialed account code matches the Verified Account code table, an intercom dial tone is returned, otherwise an error tone is returned. SMDR must be enabled for the account code to print as part of the SMDR record. The Triad-S system allows up to 250 12-digit account codes programmed in at Flash 31. By default, the Verified Account Codes feature is disabled.

### Call Forward Display

#### Programming Steps

- 1 Press the CALL FWD DISPLAY STATUS flexible button (FLASH 06, button #4). The following message displays:



- 2 Enter a 1-digit value on the dial pad to enable/disable the call forward display option.  
[0] = Disabled  
[1] = Enabled
- 3 Press HOLD to save the entry. A confirmation tone is heard.

### Description

When call forwarding is invoked, the LCD display normally indicates the call forwarding mode at all times, This feature is enabled/disabled in administrative programming on a system-wide basis. By default, the status of the Call Forward display is enabled.



## External Day Ring

### Programming Steps

- 1 Press the EXT DAY RINGING flexible button (**FLASH 06, button #5**). The following message displays:

EXTERNAL DAY RING	0-1
DISABLED	

- 2 Enter a 1-digit value on the dial pad to enable/disable the use of external day ring option.  
[0] = Disabled  
[1] = Enabled
- 3 Press HOLD to save the entry. A confirmation tone is heard.

### Description

The system can be programmed so CO lines marked for UDA provides ringing out of the external page ports when the system is in the Day Mode. By default, External Day Ringing is disabled.

## Overflow Station Forward

### Programming Steps

- 1 Press the ACDIUCD OVERFLOW STA FWD flexible button (**FLASH 06, button #6**). The following message displays:

OVERFLOW STA FWD	0-1
DISABLED	

- 2 Enter a 1-digit value on the dial pad to enable/disable the use of this feature.  
[0] = Disabled  
[1] = Enabled
- 3 Press HOLD to save the entry. A confirmation tone is heard.

### Description

This feature allows ACD/UCD calls reaching the ACD/UCD Overflow Station to call forward to another station. This enhancement is allowed or denied on a system-wide basis. Once enabled in programming, an





ACD/UCD Overflow station can Busy/No-Answer forward to Voice Mail Groups, ACD/UCD Groups, Hunt Groups and stations. If the ACD/UCD Overflow station is busy or does not answer before the no-answer call timer expires, the ACD/UCD call forwards to the destination, By default, this feature is disabled,

## Direct Transfer Mode

### Programming Steps

- 1 Press the DIRECT TRANSFER flexible button (**FLASH 06, button #7**). The following message displays:

DIRECT XFER	0-1
ENABLED	1

- 2 Enter a 1-digit value on the dial pad to enable/disable this feature.  
[0] = Disabled  
[1] = Enabled
- 3 Press HOLD to save the entry. A confirmation tone is heard.

### Description

When enabled, supervised transfers (screened transfers) to stations in the handset mode connect calls directly to the handset. The station user must have a direct appearance of that CO line or a Loop button. This feature is programmed on a system-wide basis. By default, the Direct Transfer Mode is enabled.

## Station ID Lock

### Programming Steps

- 1 Press the STATION ID LOCK flexible button (**FLASH 06, button #8**). The following message displays:

STATION LOCK	0-1
DI SABLED	

- 2 Enter a 1-digit value on the dial pad to enable/disable the use of this feature.  
[0] = Disabled  
[1] = Enabled
- 3 Press HOLD to save the entry. A confirmation tone is heard.



## Description

This feature enables the installer/programmer to lock the station ID of all extensions on the system. It also prevents the loss of station programming that results when a different station type is plugged into a port already designated as another station type. This feature is programmed on a system-wide basis. By default, the Station ID Lock feature is disabled.

The proper procedure(s) for changing the Station ID with the Station ID Lock feature enabled:

- 1 Enter programming mode and disable the Station ID Lock feature.
- 2 Plug the new device type into the jack. The set is automatically identified.
- 3 Enter programming mode and disable the Station ID Lock feature.
- 4 Enter programming and perform Station ID programming. (Flash 50, Page B, button #1). The set is automatically identified.

## LCR Call Progress

### Programming Steps

- 1 Press the LCR CALL PROGRESS flexible button (FLASH **06**, button **#9**). The following message displays:

LCR CALL PROGRESS	0-1
ENABLED	

- 2 Enter a 1-digit value on the dial pad to enable/disable the use of this feature.  
[0] = Disabled  
[1] = Enabled
- 3 Press HOLD to save the entry. A confirmation tone is heard.

## Description

This feature enables the installer to select, on a system-wide basis, whether users hear call progress indications. By default, the LCR Call Progress feature is enabled.



*If this feature is disabled, a confirmation tone is given after the last digit is dialed. The user does not hear the line being seized or the outpulsing of digits to the Central Office.*



## One-Touch Recording Warn Tone

### Programming Steps

- 1 Press the ONE-TOUCH RCD WARNING TONE flexible button (**FLASH 06, button #10**). The following message displays:



- 2 Enter a 1-digit value on the dial pad to enable/disable the use of this feature.  
[0] = Disabled  
[1] = Enabled
- 3 Press HOLD to save the entry. A confirmation tone is heard.

### Description

This feature lets the installer enable/disable the One-Touch Recording Warning Tone on a system-wide basis. By default, the Recording Warning Tone is enabled.



*Use of this feature when the One-Touch Recording Warn Tone is disabled may be interpreted as a violation of federal, state, or local laws, and an invasion of privacy. Check applicable laws in your area before recording calls using this feature.*

## Ringback on Transfer

### Programming Steps

- 1 Press the RINGBACK ON TRANSFER flexible button (**FLASH 06, button #11**). The following message displays:



- 2 Enter a 1-digit value on the dial pad to enable/disable the use of this feature.  
[0] = Disabled (Music)  
[1] = Enabled (Ringback Tone)
- 3 Press HOLD to save the entry. A confirmation tone is heard.



## Description

This feature provides on a system-wide basis music on hold or **ringback** tone to the CO caller when CO calls are transferred. Callers currently hear music. By default, the **Ringback** on Transfer feature is disabled.

## Programmable Flash Rates

### Programming Steps

If the system is in the programming mode, continue using the program codes. If starting to program here, enter the programming mode.

- 1 Press FLASH and dial **[07]**. The following message displays:

SYSTEM	FLASH	RATES
ENTER	BUTTON	NUMBER

## Description

This section describes the procedures and steps necessary to program the Flash Rates in the Flash Rates programming area. The buttons on the digital terminal are illustrated on the following page:



Programmable Flash Rates



INC CO RING * <b>1</b> <b>Q</b>	INC ICW RING * <b>2</b> <b>W</b>	CALL FORWARD BTN * <b>3</b> <b>E</b>	MSG WAIT/VM BTN * <b>4</b> <b>R</b>
MSG CBCK DSS/BLF * <b>5</b> <b>T</b>	DND DSS/BLF * <b>6</b> <b>Y</b>	AUTO CBCK DSS/BLF * <b>7</b> <b>U</b>	UCD UNAVL DSS/BLF * <b>8</b> <b>I</b>
TRANSFER CO RING * <b>9</b> <b>O</b>	RECALL CO RING * <b>10</b> <b>P</b>	QUEUED CO RING * <b>11</b> <b>A</b>	EXCLUSIVE HOLD * <b>12</b> <b>S</b>
SYSTEM HOLD * <b>13</b> <b>D</b>	IN USE HOLD * <b>14</b> <b>F</b>	CAMP-ON BTN * <b>15</b> <b>G</b>	CALLBACK BTN * <b>16</b> <b>H</b>
LINE QUEUE BTN * <b>17</b> <b>J</b>	DND BTN * <b>18</b> <b>K</b>	ICM HOLD BTN * <b>19</b> <b>L</b>	* <b>20</b> <b>:</b>
* <b>21</b> <b>Z</b>	* <b>22</b> <b>X</b>	* <b>23</b> <b>C</b>	* <b>24</b> <b>V</b>

Red LED Flash Rates		Green LED Flash Rates	
00	Off	15	Steady On
01	Steady On	16	30 ipm Flash
02	30 ipm Flash	17	60 ipm Flash
03	60 ipm Flash	18	60 ipm Dbl Wink
04	60 ipm Dbl Wink	19	240 ipm Flash
05	240 ipm Flash	20	240 ipm Flutter
06	240 ipm Flutter	21	480 ipm Flash
07	480 ipm Flash	22	480 ipm Flutter
08	480 ipm Flutter	23	15 ipm Flash
09	15 ipm Flash	24	120 ipm Flash
10	120 ipm Flash	25	120 ipm Flutter
11	120 ipm Flutter	26	30 ipm Dbl Flash
12	30 ipm Dbl Flash	27	480 ipm Dbl Wink
13	480 ipm Dbl Wink	28	480 ipm Dbl Flash
14	480 ipm Dbl Flash		

Table 2-6: Flash Rates



## Incoming CO Line Ringing

### Programming Steps

- 1 Press the INC CO RING flexible button (**FLASH 07, button #1**). The following message displays:

INC CO RING	00-28
RED 480 IPM FLUTTER	

- 2 Enter a 2-digit value on the dial pad to correspond to one of the 29 available options. Refer to the flash rate table.
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

The Incoming CO Line Ringing flash rate is the rate at which an Incoming CO line or Loop Button flashes. This flash rate can be programmed to 29 different options identified in the flash rate table, which enables the programmer to customize the key system configuration to desired flash rates. By default, the Incoming CO Ringing flash rate is set for RED 480 ipm Flutter (08).

## Incoming Intercom Ringing

### Programming Steps

- 1 Press the INC ICM RING flexible button (**FLASH 07, button #2**). The following message displays:

INC ICM RING	00-28
RED 120 IPM FLUTTER	

- 2 Enter a 2-digit value on the dial pad to correspond to one of the 29 available options. Refer to flash rate table.
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

The Incoming Intercom Ringing flash rate is the rate an Incoming DSS button flashes if you have a DSS appearance for the calling station. This flash rate can be programmed to 29 different options identified in the flash rate table. This enables the programmer to customize the key system configuration to desired flash rates. By default, the Incoming Intercom Ringing flash rate is set for RED 120 ipm Flutter (11).





## Call Forward Button

### Programming Steps



- 1 Press the CALL FORWARD BTN flexible button (**FLASH 07. button #3**). The following message displays:

CALL FORWARD BTN	00-28
RED STEADY ON	

- 2 Enter a 2-digit value on the dial pad to correspond to one of the 29 available options. Refer to flash rate table.
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

The Call Forward Button flash rate is the rate at which the Call Forward button flashes when any type of forward mode is used. This flash rate can be programmed to 29 different options identified in the flash rate table. This enables the programmer to customize the key system configuration to desired flash rates, By default, Call Forward Button flash rate is set for a Red Steady On (01).

## Message Wait / VM Button

### Programming Steps

- 1 Press the MSG WAIT/VM BTN flexible button (**FLASH 07, button #4**). The following message displays:

MSG WAIT / VM BTN	00-28
RED STEADY ON	

- 2 Enter a 2-digit value on the dial pad to correspond to one of the 29 available options. Refer to flash rate table.
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.



### Description

The Message Wait/VM Button flash rate is the rate at which the Message Wait and VM button(s) flashes when you receive a message/voice mail message. This flash rate can be programmed to 29 different options





identified in the flash rate table. This enables the programmer to customize the key system configuration to desired flash rates. By default, Message Wait/VM Button flash rate is set for a Red Steady On (01).



The fixed message button should not be used as a Voice Mail button.

## Message Callback - DSS / BLF

### Programming Steps

- 1 Press the MSG CBCK – DSS/BLF flexible button (**FLASH 07, button #5**). The following message displays:

MSG CBCK DSS / BLF	00-28
RED 120 IPM FLUTTER	

- 2 Enter a 2-digit value on the dial pad to correspond to one of the 29 available options. Refer to flash rate table.
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

The Message Callback DSS/BLF flash rate is the rate at which a DSS button of a station returning your message flashes. This flash rate can be programmed to 29 different options identified in the flash rate table. This enables the programmer to customize the key system configuration to desired flash rates. By default, Message Callback DSS/BLF flash rate is set for a Red 120 ipm Flutter (11).

## Do Not Disturb - DSS / BLF

### Programming Steps

- 1 Press the DND – DSS/BLF flexible button (**FLASH 07, button #6**). The following message displays:

DND DSS / BLF	00-28
RED 60 IPM DBL WINK	

- 2 Enter a 2-digit value on the dial pad to correspond to one of the 29 available options, Refer to flash rate table.





- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

## Description



The Do Not Disturb DSS/BLF flash rate is the rate at which a DSS button of a station flashes when you are in a Do Not Disturb mode. This flash rate can be programmed to 29 different options identified in the flash rate table. This enables the programmer to customize the key system configuration to desired flash rates. By default, Do Not Disturb DSS/BLF flash rate is set for a Red 60 ipm Double Wink (04).

## Auto Callback - DSS / BLF

### Programming Steps

- 1 Press the AUTO CBCK - DSS/BLF flexible button (**FLASH 07, button #7**). The following message displays:

AUTO CBCK DSS / BLF	00-28
RED 120 IPM FLASH	

- 2 Enter a 2-digit value on the dial pad to correspond to one of the 29 available options. Refer to flash rate table.
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

## Description

The Auto Callback DSS/BLF flash rate is the rate at which a DSS button of a station returning your call back flashes. This flash rate can be programmed to 29 different options identified in the flash rate table. This enables the programmer to customize the key system configuration to desired flash rates. By default, Auto Callback DSS/BLF flash rate is set for a Red 120 ipm Flash (10).

## UCD Available / Unavailable - DSS / BLF

### Programming Steps



- 1 Press the UCD UNAVL - DSS/BLF flexible button (**FLASH 07, button #8**). The following message displays:

UCD UNAVL DSS / BLF	00-28
RED 60 IPM DBL WNK	I



- 2 Enter a 2-digit value on the dial pad to correspond to one of the 29 available options. Refer to flash rate table.
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

The UCD Available/Unavailable DSS/BLF flash rate is the rate at which a DSS appearance for a station in ACD/UCD Unavailable mode flashes. This flash rate can be programmed to 29 different options identified in the flash rate table. This enables the programmer to customize the key system configuration to desired flash rates. By default, UCD Available/Unavailable DSS/BLF flash rate is set for a Red 60 ipm Double Wink (04).

## Transfer CO Ringing

### Programming Steps

- 1 Press the TRANSFER CO RING flexible button (FLASH 07, button #9). The following message displays:

TRANSFER CO RING	00-28
RED 120 IPM FLASH	

- 2 Enter a 2-digit value on the dial pad to correspond to one of the 29 available options. Refer to flash rate table.
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

The Transfer CO Ringing flash rate is the rate at which a CO Line button or Loop button flashes when a call is transferred to you. This flash rate can be programmed to 29 different options identified in the flash rate table. This enables the programmer to customize the key system configuration to desired flash rates. By default, Transfer CO Ringing flash rate is set for a Red 120 ipm Flash (10).





## Recall CO Ringing

### Programming Steps



- 1 Press the RECALL CO RING flexible button (FLASH 07, button #10). The following message displays:

```

RECALL CO RING      00-28
RED 480 IPM FLUTTER
    
```

- 2 Enter a 2-digit value on the dial pad to correspond to one of the 29 available options. Refer to flash rate table.
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates

### Description

The Recall CO Ringing flash rate is the rate at which a CO Line button or Loop button flashes when a call recalls to your station. This flash rate can be programmed to 29 different options identified in the flash rate table. This enables the programmer to customize the key system configuration to desired flash rates, By default, Recall CO Ringing flash rate is set for a Red 480 ipm Flutter (08).

## Queued CO Ringing

### Programming Steps

- 1 Press the QUEUED CO RING flexible button (FLASH 07, button #11). The following message displays:

```

QUEUED CO RING      00-28
GREEN 480 IPM FLUTTER
    
```

- 2 Enter a 2-digit value on the dial pad to correspond to one of the 29 available options. Refer to flash rate table.
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.



### Description

The Queued CO Ringing flash rate is the rate at which a CO Line button or Loop button flashes when a queued line becomes available. This flash rate can be programmed to 29 different options identified in the flash rate table. This enables the programmer to customize the key system configuration to desired flash rates. By default, Queued CO Ringing flash rate is set for a Green 480 imp Flutter (22).



## Exclusive Hold

### Programming Steps

- 1 Press the EXCLUSIVE HOLD flexible button (**FLASH 07, button #12**). The following message displays:

EXCLUSIVE HOLD	00-28
GREEN 120 IPM FLASH	

- 2 Enter a 2-digit value on the dial pad to correspond to one of the 29 available options. Refer to flash rate table.
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

The Exclusive Hold flash rate is the rate at which a CO Line button or Loop button flashes when a call is placed on Exclusive Hold. This flash rate can be programmed to 29 different options identified in the flash rate table. This enables the programmer to customize the key system configuration to desired flash rates. By default, Exclusive Hold flash rate is set for a Green 120 ipm Flash (26).

## System Hold

### Programming Steps

- 1 Press the SYSTEM HOLD flexible button (**FLASH 07, button #13**). The following message displays:

SYSTEM HOLD'	00-28
RED 60 IPM DBL WINK	

- 2 Enter a 2-digit value on the dial pad to correspond to one of the 29 available options. Refer to flash rate table.
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

The System Hold flash rate is the rate at which a CO Line button or Loop button flashes when a call is placed on System Hold. This flash rate can be programmed to 29 different options identified in the flash rate table. This enables the programmer to customize the key system configuration to desired flash rates. By default, System Hold flash rate is set for a Red 60 ipm Double Wink (04).







## In-Use Hold (I-Hold)

### Programming Steps

- 1 Press the IN USE HOLD flexible button (**FLASH 07, button #14**). The following message displays:

IN-USE HOLD	00-28
GREEN 60 IPM FLASH	

- 2 Enter a 2-digit value on the dial pad to correspond to one of the 29 available options. Refer to flash rate table.
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

The In Use Hold (I-Hold) flash rate is the rate at which a CO Line button or Loop button flashes when a call is placed on In Use Hold (I-Hold). This flash rate can be programmed to 29 different options identified in the flash rate table. This enables the programmer to customize the key system configuration to desired flash rates. By default, In Use Hold (I-Hold) flash rate is set for a Green 60 ipm Flash (17).

## Camp-On Button

### Programming Steps

- 1 Press the CAMP-ON BTN flexible button (**FLASH 07, button #15**). The following message displays:

CAMP ON BTN	00-28
RED 120 IPM FLASH	

- 2 Enter a 2-digit value on the dial pad to correspond to one of the 29 available options. Refer to flash rate table.
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

The Camp-On Button flash rate is the rate at which the Camp-On button flashes when you receive a Camp-On. This flash rate can be programmed to 29 different options identified in the flash rate table. This enables the programmer to customize the key system configuration to desired flash rates. By default, Camp-On Button flash rate is set for a Red 120 ipm Flash (12).



## Callback Button

### Programming Steps

- 1 Press the CALL BACK BTN flexible button (**FLASH 07, button #16**). The following message displays:

CALL BACK BTN	00-28
RED 120 IPM FLASH	

- 2 Enter a 2-digit value on the dial pad to correspond to one of the 29 available options. Refer to flash rate table.
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

The Call Back Button flash rate is the rate at which the Call Back button flashes when a station at which you left a call back request becomes available. This flash rate can be programmed to 29 different options identified in the flash rate table. This enables the programmer to customize the key system configuration to desired flash rates. By default, Call Back Button flash rate is set for a Red 120 ipm Flash (10).

## Line Queue Button

### Programming Steps

- 1 Press the LINE QUEUE BTN flexible button (**FLASH 07, button #17**). The following message displays:

LINE QUEUE BTN	00-28
RED 480 IPM FLUTTER	

- 2 Enter a 2-digit value on the dial pad to correspond to one of the 29 available options. Refer to flash rate table.
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

The Line Queue Button flash rate is the rate at which the Line Queue button flashes after queueing onto a busy line. This button flashes when the busy line becomes available. This flash rate can be programmed to 29 different options identified in the flash rate table which enables the programmer to customize the key





system configuration to desired flash rates. By default, Line Queue Button flash rate is set for a Red 480 ipm Flutter (08).



## Do Not Disturb Button

### Programming Steps

- 1 Press the DND BTN flexible button (**FLASH 07, button #18**). The following message displays:

```
DND BTN      00-28
RED STEADY ON
```

- 2 Enter a 2-digit value on the dial pad to correspond to one of the 29 available options. Refer to flash rate table.
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

The Do Not Disturb Button flash rate is the rate at which your Do Not Disturb button flashes when you place your station in a Do Not Disturb mode. This flash rate can be programmed to 29 different options identified in the flash rate table. This enables the programmer to customize the key system configuration to desired flash rates. By default, Do Not Disturb Button flash rate is set for Red Steady On (01).

## Intercom Hold Button

### Programming Steps

- 1 Press the ICM HOLD BTN flexible button (**FLASH 07, button #19**). The following message displays:

```
ICM HOLD BTN  00-28
RED 15 IPM FLASH
```



- 2 Enter a 2-digit value on the dial pad to correspond to one of the 29 available options. Refer to flash rate table.
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.





## Description

The Intercom Hold Button flash rate is the rate at which your Hold button flashes when you receive an intercom call and your station's intercom mode selector switch is in the T position. This flash rate can be programmed to 29 different options identified in the flash rate table. This enables the programmer to customize the key system configuration to desired flash rates. By default, Intercom Hold Button flash rate is set for a Red 15 ipm Flash (09).

## System Parameters Programming

### Programming Steps

If the system is in the programming mode, continue using the program codes. If starting to program here, enter the programming mode.

- 1 Press FLASH and dial **[09]**. The following message displays:

SYSTEM PARAMETERS  
ENTER BUTTON NUMBER





## Description

This section describes the procedures and steps necessary to program System Parameters in the System Parameters programming area. The buttons on the digital terminal are illustrated below:

LEADING DIGIT 1 * [ 1 ] Q	LEADING DIGIT 2 * [ 2 ] W	LEADING DIGIT 3 * [ 3 ] E	LEADING DIGIT 4 * [ 4 ] R
LEADING DIGIT 5 * [ 5 ] T	LEADING DIGIT 6 * [ 6 ] Y	LEADING DIGIT 7 * [ 7 ] U	LEADING DIGIT ENABLE * [ 8 ] I
CENTREX DIGITS * [ 9 ] O	4 DIGIT VM ID * [ 10 ] P	* [ 11 ] A	* [ 12 ] S
MUSIC CH #3 * [ 13 ] D	MUSIC CH #4 * [ 14 ] F	MUSIC CH #5 * [ 15 ] G	MUSIC CH #6 * [ 16 ] H
MUSIC CH #7 * [ 17 ] J	MUSIC CH #8 * [ 18 ] K	* [ 19 ] L	* [ 20 ] :
* [ 21 ] Z	* [ 22 ] X	* [ 23 ] C	* [ 24 ] V



Program Code	Flex Button	Feature	Default (after initialization)	
FLASH 09	1	Leading Digit 1	Leading Digit	
	2	Leading Digit 2	None	
	3	Leading Digit 3	None	
	4	Leading Digit 4	None	
	5	Leading Digit 5	None	
	6	Leading Digit 6	None	
	7	Leading Digit 7	None	
	8	Leading Digit Option	Disabled	
	9	Centrex Digits	4 digits	
	10	Four Digit Voice Mail ID	3 digits	
	11			
	12			
	13		Music Channel #3*	##
	14		Music Channel #4*	##
	15		Music Channel #5*	##
	16		Music Channel #6*	##
	17		Music Channel #7*	##
	18		Music Channel #8*	##

\* Music Channels 3-8 can only be used for Music-On-Hold functions

Table 2-7: System Parameters Programming

## Leading Digit Translation

### Programming Steps

- 1 Press FLASH and dial [09]. The following message displays:

LEADING DIGIT 1     D- 8  
LEADING DIGIT

- 2 The top left button in the flexible button field is lit for programming Leading Digit 1. To change Leading Digits or enter a different Leading Digit, press the appropriate flexible button 1-8 and perform the following procedures.
- 3 Enter a l-digit value on the dial pad that corresponds to the leading digit translation.  
[0] = NONE  
[1] = Trunk Group 1 (81)





[2] = Trunk Group 2 (82)

[3] = Trunk Group 3 (83)

[4] = Trunk Group 4 (84)

[5] = Trunk Group 5 (85)

[6] = Trunk Group 6 (86)

[7] = Trunk Group 7 (87)

[8] = Leading Digit\*

\* 8 is unavailable on button 7 (digit 7), only 0-7 are available.

- 4 Press HOLD to save the entry. A confirmation tone is heard and the LCD indicates the change.

### Description

This feature lets the system have the dialing plan modified to accommodate multiple systems connected together via CO lines. The dialing plan is changed to a four digit access with a programmable leading digit. All feature access codes and station numbers are dialed by dialing the programmable leading digit first followed by the standard dialing plan. There is no default for this feature.

Conditions:

- ❖ The leading digit does not apply to feature access codes starting with 8, 9, or 0.
- ❖ The remaining digits selected for the Triad-S system may be used as CO line group access for Centrex dialing applications.

### Leading Digit Enable

#### Programming Steps

- 1 Press the LEADING DIGIT ENABLE flexible button (**FLASH 09, button #8**). The following message displays:

LEADING DIGIT OPTION	0-1
DISABLED	

- 2 Enter a 1-digit value (0-1) that corresponds with the following entries:  
[0] = Disabled  
[1] = Enabled
- 3 Press HOLD to save the entry. A confirmation tone is heard.



## Description

This feature enables/disables the Leading digit Integration feature option on a system-wide basis. By default, this feature is disabled.

## Centrex Digit Length

### Programming Steps

- 1 Press the CENTREX DIGITS flexible button (**FLASH 09, button #9**). The following message displays:

CENTREX DIGITS	4-5
4	

- 2 Enter a 1-digit value (4-5) that corresponds with the following entries:  
[4] = Centrex Digit length  
[5] = Centrex Digit length
- 3 Press HOLD to save the entry. A confirmation tone is heard.

## Description

This feature determines the number of Centrex digits in the system.

## Four-Digit Voicemail ID

### Programming Steps

- 1 Press the FOUR DIGIT VM ID flexible button (**FLASH 09, button #10**). The following message displays:

VM ID DIGITS	3-4
3	

- 2 Enter a 1-digit entry (3-4) that corresponds to the number of digits to be dialed.
- 3 Press HOLD to save the entry. A confirmation tone is heard.







## Description

This feature modifies the station and CO voice mail identification fields such that the maximum length of these fields is increased from three digits to four digits. When using leading digit for voice mail IDs, the new number must be entered individually... 2100, 2101, 2103, etc. This is performed in Flash 50, Page B, Button 13.

## MOH Assignments

### Programming Steps

- 1 Press the MUSIC CH # flexible button (**FLASH 09, button #13 through #18**). The following message displays:

```
MUSIC CHANNEL X   ###,001-012
      YYY
```

Where:

X= 3-8

YYY = CO Line number

- 2 Enter a 2-digit entry (001-012) that corresponds to the CO line number desired.
- 3 Press HOLD to save the entry. A confirmation tone is heard.

## Description

This feature enables the system to assign CO line circuits as additional 6 music-on-hold inputs. This increases the capacity of music channels beyond the 2 available on the MISU board for use by MOH sources. A total of 8 channels are available for use on the system. By default, no channels are assigned.

## Attendant Station Assignment

### Programming Steps

- 1 Press **FLASH** and dial **[IO]**. The following message displays:

```
ATND STA ASSIGNMENT
  100,###,###
```

- 2 Enter up to 3-digit station number(s) on the dial pad.
- 3 100-I 31 for Triad-S.



- 4 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

**Description**

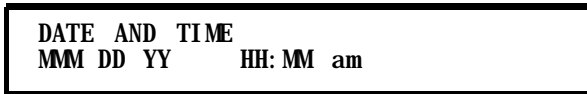
The system identifies an attendant station for the purpose of receiving recalls and activating night service. The system can have up to three attendant(s) programmed. Entering [#] three times removes that attendant assignment or different station numbers can be programmed. By default, Station 100 is assigned as the first attendant.

**System Time and Date**

**Programming Steps**

To set the time and date that appears on display Terminals:

- 1 Press FLASH and dial [11]. The following message displays:



- 2 Choose display format by pressing the appropriate button in the flexible button field.
- 3 Press HOLD or dial the time and date as follows (12 digits):  
Y Y M M D D H H M M S S
- 4 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

The time can be displayed in the standard 12 hour format or the 24 hour format.

**12/24 HOUR**



By default, the time is set for 12 hour display format. When entering the time and date, use the following data:

- LED Off = 12 Hour Display
- LED On = 24 Hour Display



The Date and Time can be changed or set by the first Attendant station using dial code [692].





## PBX Dialing Codes

### Programming Steps

- 1 Press FLASH and dial [12]. The following message displays:

```
PBX DIAL CODES
##, ##, ##, ##, ##
```

- 2 Enter five 2-digit code numbers, one right after the other, on the dial pad up to ten digits. If a single digit code is required, enter the code followed by [#].
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.
- 4 To delete a code, enter [#] [#] and press HOLD.

### Description

Five 1- or Z-digit PBX access codes can be programmed into memory. When dialed, these codes signal the system so toll restriction is applied at the next dialed digit. When a single digit code [9] is entered, it must be followed by [#] as the second digit. To delete an entry, enter [#] twice and Press HOLD. Lines must be programmed as PBX lines before these codes apply. By default, no PBX dialing codes are assigned. This programming is performed in Flash 40, Page A, Button 2.

## Executive / Secretary Pairs

### Programming Steps

- 1 Press FLASH and dial [13]. The following message displays:

```
EXEC SECY PAIRINGS
###,### PAIR 1
```

The first button is lit indicating the first pair may be programmed.

- 2 Enter the 3-digit Executive station number.
- 3 Enter the 3-digit Secretary station number.
- 4 Press HOLD to save the data. A confirmation tone is heard and the display updates.
- 5 To program a second pair, press the second flexible button in the flexible button field and enter station numbers as in steps 3-5.
- 6 To program a third pair, press the third button in the flexible button field and enter station numbers as in steps 3-5.



- 7 To program a fourth pair, press the fourth button in the flexible button field and enter station numbers as in steps 3-5.

**Description**

There are four Executive/Secretary pairs available. When an Executive station is busy or in DND, intercom calls and transfers are automatically routed to the designated Secretary.

<b>EXEC / SECY</b>	<b>EXEC / SECY</b>	<b>EXEC / SECY</b>	<b>EXEC / SECY</b>
<b>PAIR #1</b>	<b>PAIR #2</b>	<b>PAIR #3</b>	<b>PAIR #4</b>
* <b>1</b> <b>Q</b>	* <b>2</b> <b>W</b>	* <b>3</b> <b>E</b>	* <b>4</b> <b>R</b>

The assigned secretary may Camp-On to the Executive Station when the station is busy or in Do-Not-Disturb. There can be only one pairing of stations, with no duplicates. You cannot pair Executive 100 to Secretary 101, then pair Secretary 101 to Executive 100. The same Secretary station can be specified for more than one Executive station (101-105 and 102-105). Entering [#] six times removes the assignments. Individual pairs may be changed by pressing the associated flexible button. By default, no Executive / Secretary pairs are assigned.

**On-Board Relay Programming**

**Programming Steps**

- 1 Press FLASH and dial [14]. button #1 is lit to indicate Relay #1 is selected. The following message displays:

```

RELAY X TYPE
YYYYYYYYYYY          I
    
```

Where:

X=1-6

YYYYYYYYYYYYY = Ext Page Zone I-I, LBC Sta XXX, Ran Start X, CO Control XX

- 2 Press the button that corresponds to the desired relay. That button lights. Enter one of the following sequences on the keypad:

- [1]+[1] External Page Zones
- [2]+[1 through 8] = RAN Start (RAN Announcement Tables 1-8)
- [3] + STA # = Loud Bell
- [4] + CO # = CO Line Control





[ 0 ] = Disables Relay

- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

Each time the user presses a relay button, the LCD updates with the relay number and the function assigned to it.

## Description

The Triad-S has two relays on the BKSLJ that can be programmed to perform certain functions. These functions are loud bell, external page control, RAN Start, and CO Line control.

RELAY 1	RELAY 2		
* [ 1 ] Q	* [ 2 ] W	* [ 3 ] E	* [ 4 ] R
* [ 5 ] T	* [ 6 ] Y	* [ 7 ] U	* [ 8 ] I

## Baud Rate Assignments

### Programming Steps

- 1 Press FLASH and dial [15]. The first button is lit and ready for programming Port #1. The following message displays:

PORT	BAUD
1	9600

## Description

The Triad-S System provides outputs such as SMDR or ICLID to the optional RS-232 connectors on the MISU.

PORT #1 MISU 1	PORT #2 MISU 2	PORT #3 MODEM	
* [ 1 ] Q	* [ 2 ] W	* [ 3 ] E	* [ 4 ] R
* [ 5 ] T	* [ 6 ] Y	* [ 7 ] U	* [ 8 ] I

## Port #1, #2, #3 Baud Rates

### Programming Steps

- 1 Press the desired PORT # flexible button (FLASH 15, Buttons #1, #2, or #3) to determine the port to program.



2 Enter a 1-digit number for the baud rate:

- [1] = 150 Baud
- [2] = 300 Baud
- [3] = 600 Baud
- [4] = 1200 Baud
- [5] = 2400 Baud
- [6] = 4800 Baud
- [7] = 9600 Baud

3 Press HOLD to save the entry. A confirmation tone is heard and the **display updates**.

**Description**

Port **#1**: First RS-232C port on the optional MISU board.

Port **#2**: Second RS-232 port on the optional MISU board.

By default, Port **#1** (MISU RS-232C), Port **#2** (MISU RS-232) and Port **#3** (Modem) baud rates are set for 9600.

Access Codes

**Programming Steps**

If the system is in the programming mode, continue using program codes. If starting to program here, enter the programming mode.

1 Press **FLASH** and dial **[20]**. The following message displays:

ACCESS' CODES  
ENTER BUTTON NUMBER

**Description**

This section describes the procedures and steps necessary to program Access codes.

**DISA ACCESS**

**CODE**

\* **1** **Q**

**ADMIN**

**PASSWORD**

\* **2** **W**

\* **3** **E**

\* **4** **R**





## DISA Access Code

### Programming Steps



- 1 Press the DISA ACCESS CODE flexible button (**FLASH 20, button #1**). The following message displays:

DISA ACCESS CODE 100
-------------------------

- 2 Enter a 3-digit value (100-999) on the dial pad for the DISA access code.
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

This permits assigning a 3-digit access code to the system. Anyone calling on a DISA line must use this code to gain access to system features. To disable the DISA access code, enter (#) three times. By default, 100 is the assigned access code. Use of this feature with or without access code can be abused by callers.

## Database Admin Password

### Programming Steps

- 1 Press the ADMIN PASSWORD flexible button (**FLASH 20, button #2**). The following message displays:

ADMIN PASSWORD 3226
------------------------

- 2 Enter a 4-digit value on the dial pad that corresponds with 0000-9999.
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description



The password used to enter customer database programming can be customized by the programmer. This lets the system administrator block unauthorized personnel from entering database admin.



*Care should be taken when changing the programming password so authorized personnel are not locked out, which could prevent or delay them from making necessary programming changes.*





## Station Message Detail Recording (SMDR)

### Programming Steps

- 1 Press FLASH and dial **[21]**. The following message displays:

SDR	TPE	PNT	BAUD	PORT
NO	LD	80	9600	1

- 2 To program SMDR features, use the flexible button(s) as defined in the following procedures.
- 3 The ENABLE/DISABLE, TYPE, and PRINT features toggle on and off each time the button is pressed. The display updates with each toggle.
- 4 After all entries are made, Press HOLD to save the entry. A confirmation tone is heard.

### Description

The Triad-S System can provide SMDR output to the optional RS-232C connectors on the MISU. When SMDR is desired, the following system-wide parameters determine how SMDR information is reported.

ENABLE / DISABLE	CALL TYPE	PRINT FORMAT	BAUD RATE
* <b>1 Q</b>	* <b>2 W</b>	* <b>3 E</b>	* <b>4 R</b>
* <b>5 T</b>	* <b>6 Y</b>	* <b>7 U</b>	* <b>8 I</b>

### SMDR Enable / Disable

#### Programming Steps

- 1 Press the ENABLE/DISABLE flexible button (FLASH 21, button **#1**). This feature toggles on and off each time the button is pressed. The display updates with each toggle.  
LED ON = SMDR is enabled  
LED OFF = SMDR is disabled
- 2 Press HOLD to save the entry. A confirmation tone is heard





### Description

A call accounting device can be installed allowing the system to track calls by outside line number, number dialed, time of day, date, station that placed or received the call, and duration of the call. By default, SMDR is disabled.



### Long Distance / All Calls

#### Programming Steps

- 1 Press the CALL TYPE flexible button (**FLASH 21, button #2**) to determine the type of calls to record. This feature toggles on and off each time the button is pressed. The display updates with each toggle.  
 LED ON = Long Distance is enabled  
 LED OFF = All Calls is enabled
- 2 Press HOLD to save the entry. A confirmation tone is heard.

### Description

The system can be set to record all outgoing calls or only outgoing long distance calls. Long Distance calls are defined as beginning with a 1 or 0, or containing eight or more digits. Incoming calls are only recorded if TYPE is set for all calls. By default, the system records long distance (LD) calls only.

### Character Print Assignment

#### Programming Steps

- 1 Press PRINT FORMAT flexible button (**FLASH 21, button #3**) to determine the print format of SMDR records. This feature toggles on and off each time the button is pressed. The display updates with each toggle.  
 LED On = 80-Character is enabled  
 LED Off =30-Character is enabled
- 2 Press HOLD to save the entry. A confirmation tone is heard.



### Description

The system can be programmed to print individual SMDR records in either a 1-line 80-character format or a 3-line SO-character format. By default, the 1-line SO-character format is selected,





## Baud Rate Display

### Programming Steps

The SMDR Baud Rate is programmed using Flash 15, Baud Rate Assignments. **FLASH 21, button #4** returns an error tone when pressed. The LCD displays the current baud rate based on which port is assigned to the SMDR Port number.

### Description

The Triad-S System provides SMDR output to the standard RS-232C connector on the optional MISU. The baud rate is displayed as 150, 300,600, 1200, 2400, 4800, or 9600 baud.

## SMDR Port Assignments

### Programming Steps

- 1 Press the PORT flexible button (**FLASH 21, button #5**) to determine which port to use for SMDR information.
- 2 Enter a 1-digit number for the SMDR Port number:  
[1] = Port #1 (MISU On-Board RS-232C)  
[2] = Port #2 (MISU On-Board RS-232C)
- 3 The LCD displays the current baud rate based on which Port number is assigned to the SMDR Port number.
- 4 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

PORT #1: Refers to the standard RS-232C connector on the optional MISU.

PORT #2: Refers to the standard RS-232C connector on the optional MISU.

By default, Port #1 is used for SMDR.





## Weekly Night Mode Schedule

### Programming Steps

- 1 Press FLASH and dial [22]. The following message displays:

DAY	END	START	AUTO	
MON	0800	1700	YES	I

### Description

The Triad-S System can be programmed so it is automatically placed into and out of night mode. A programmable weekly time schedule lets the system administrator preset the time the system goes into night mode, and the time night mode is removed on a daily basis, including weekend operation.

AUTO / MANUAL	MONDAY	TUESDAY	WEDNESDAY
* [ 1 ] Q	* [ 2 ] W	* [ 3 ] E	* [ 4 ] R
THURSDAY	FRIDAY	SATURDAY	SUNDAY
* [ 5 ] T	* [ 6 ] Y	* [ 7 ] U	* [ 8 ] I

## Automatic / Manual Operation

### Programming Steps

- 1 Press the AUTO/MANUAL flexible button (FLASH 22, button #1). This feature toggles on and off each time the button is pressed. The display updates with each toggle.  
LED On = Automatic Night Mode  
LED Off = Manual operation
- 2 If no other changes must be made, press HOLD to save the entry. A confirmation tone is heard.



*Once enabled, this feature addresses the entire week.*

### Description

If the system is operated in the automatic night mode the attendant(s) can override the automatic mode by pressing the night key on the attendant(s) phone. The schedule does not go into effect until the attendant(s)





- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

To scroll through the list:

- 1 Press the NEXT flexible button (**FLASH 23, button #18**) to scroll up (next entry)  
or  
Press the PREV flexible button (**FLASH 23, button #19**) to scroll backwards (previous entry).

### Description

Directory Dialing enables station users obtain a directory of station users and have the system dial the extension currently displayed. The Triad-S system provides locations for up to 200 names (000-199). Directory dialing also lets users program a name with a speed dial bin for use in later locating a speed dial number. When prompted, the system displays the name associated with a speed dial number so when the desired name is shown, the user may then have the system dial the number. Directory dialing also lets users associate a name with an entry in the local number/name translation table. When prompted, the system displays the name associated with the table so when the desired name is shown, the user may then have the system dial the number. The Triad-S system provides locations for up to 200 names.

The Directory Dialing list may be programmed and maintained at the first assigned attendant station in one of two ways. However, this admin routine lets the directory list be maintained by the system programmer locally (at Station 100) or remotely via modem access.



BIN / ICM	NAME	CLEAR	BACKSPACE
* 1 Q	* 2 W	* 3 E	* 4 R
* 5 T	* 6 Y	* 7 U	* 8 I
* 9 O	* 10 P	* 11 A	* 12 S
* 13 D	* 14 F	* 15 G	* 16 H
* 17 J	NEXT ENTRY * 18 K	PREV ENTRY * 19 L	NEW ENTRY * 20 :
* 21 Z	* 22 X	* 23 C	* 24 V

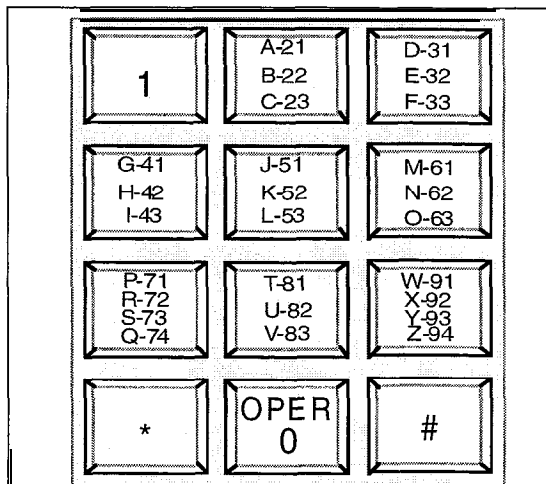
To enter the Intercom number or System Speed Dial bin to associate to the name:

- 1 Press the BIN/ICM flexible button (**FLASH 23, button #1**).
- 2 Enter a 3-digit station intercom number, a 3-digit System Speed Dial number, or a 3-digit Local Number/name Translation Table number.  
100-I 31 = Triad-S Extension Numbers  
020-099 = System Speed Number  
600-799 = Local Number/Name Table
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

**BIN/ICM** – Each entry in the directory dialing list must be associated to a system speed dial bin (for calling a destination outside of the system) or to an intercom station (for calling internal station including CO line transfers).

To enter or change the current Name shown on the display:

- 1 Press the NAME flexible button (**FLASH 23, button #2**).
- 2 Enter the name (up to **24-characters** may be entered) by using keys on the dial pad as illustrated on the following page:



Other Codes:

1 = 1#	8 = 8#	= 01	* = *#
2 = 2#	9 = 9#	, = 02	( = #1
3 = 3#	0 = 0#	? = 03	) = #2
4 = 4#	Space = 11	/ = 04	+ = #3
5 = 5#	: = 12	! = *1	= = #4
6 = 6#	- = 13	\$ = *2	# = ##
7 = 7#	' = 14	& = *4	

Table 2-8: Dial Pad Keys

- If an error is made while entering the name, press the BACK SPACE flexible button (**FLASH 23, button #4**). This button backspaces one character at a time.
- Press HOLD to save the entry. A confirmation tone is heard and the display updates.

**NAME -A** name up to 24-characters may be entered into each directory dial list entry. The names display alphabetically when accessed by a station user. It is possible to have multiple entries that are associated to the same station number or system speed dial bin. This lets the same name be entered into the list several times, For example, by last name and by first name, pointed to a station number and a speed dial bin (home, or mobile phone number). Or, several different names associated to the same speed dial bin.

To clear an entry:

- Press the CLEAR flexible button (**FLASH 23, button #3**).





- 2 Press HOLD to save the entry. A confirmation tone is heard and the display updates. The entry is erased (both the **BIN/ICM** assignment and the programmed name).

**CLEAR** – Entries in the table may be erased and cleared from the table allowing placement of another entry into the list. When a system speed dial bin is deleted or changed the name associated to the bin must also be erased. When a multiple table listing is associated to one system speed dial bin it may be necessary to clear more than one entry.

## Hunt Groups

### Hunt Group Programming

#### Programming Steps

- 1 Press FLASH and dial **[30]**. The following message displays on the display:

```
HUNT GROUP 450 P ###, ###
###, ###, ###, ###, ###, ### I
```

- 2 The top left button in the flexible button field is lit for programming Hunt Group 1 (450). To change Hunt Groups or enter a different Hunt Group, press the appropriate flexible button 1-12 (450-461) and perform the following procedures.
- 3 Enter the 3-digit station numbers up to a maximum of 24 digits (8 stations). Hunt groups are joined together by entering another Hunt Group Pilot Number as the last entry of the group.
- 4 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

#### Description

The system can be programmed for up to 8 hunt groups. Each hunt group can contain up to 8 stations each. Each hunt group can be independently arranged to utilize a pilot hunting technique or station hunting technique. Hunt groups may also be chained together when larger groups are desired. Hunt groups can be joined together by programming a hunt group number as the last member of a hunt group. If a station is in DND or is forwarded to another station, it is considered busy.







HUNT GRP 450 * <b>1 Q</b>	HUNT GRP 461 * <b>2 W</b>	HUNT GRP 452 * <b>3 E</b>	HUNT GRP 453 * <b>4 R</b>
HUNT GRP 454 * <b>5 T</b>	HUNT GRP 455 * <b>6 Y</b>	HUNT GRP 456 * <b>7 U</b>	HUNT GRP 457 * <b>8 I</b>
HUNT GRP 458 * <b>9 O</b>	HUNT GRP 459 * <b>10 P</b>	HUNT GRP 460 * <b>11 A</b>	HUNT GRP 461 * <b>12 S</b>
STATION / PILOT * <b>13 D</b>	* <b>14 F</b>	* <b>15 G</b>	* <b>16 H</b>

## Station / Pilot Hunting Assignment

### Programming Steps

- 1 Press the STATION/PILOT flexible button (FLASH 30, button **#13**) to indicate Station Hunting or Pilot Hunting.  
LED On = Station Hunting enabled  
LED Off = Pilot Hunting enabled

To remove stations from a Hunt group:

- 1 Enter **[#]** three times on the dial pad.
- 2 Press HOLD. A confirmation tone is heard and the display updates. This removes all stations previously programmed in that group.



*458-461 are ONLY for RAN applications.*

### Description

STATION HUNTING -Transferred CO, and intercom calls that are presented to a busy, or DND station, that are members of a Station Hunt group, search sequentially (in the order the extensions were entered in database programming) for an idle station in the group and rings that station. Direct ringing CO Line calls to the station number ring at the station. If station hunting is desired on a direct ringing call, program the station hunting pilot number in the CO Line ring assignment list. This lets the member of the hunt group to receive private calls and hunt group calls.





PILOT HUNTING — Incoming CO, transferred CO, and intercom calls can be directed to a pilot number of a hunt group. The system searches sequentially (in the order the extensions were entered in the database programming) for an idle station in the group and rings that station. Calls directly to stations (by calling the extension number) within the hunt group do not hunt but receive call progress tones from the extension,

## Verified Account Codes Table/Traveling Class of Service

### Programming Steps

- 1 Press FLASH and dial [**31**]. The following message displays:

ACT	COS
XXXXXXXXXXXX	YY

Where:

ACCT = Up to 12-digit account code

COS = Class of Service for account codes

- 2 Press the ACCT CODE flexible button (**FLASH 31, button #1**). Enter up to 12 digits (0-9, \*, #). [\*] represents a do not care digit. The system ignores all digits after this digit when entering an account code. The [#] represents a single do not care digit.
- 3 Press the Class of Service flexible Button (**FLASH 31, button #2**). Enter a 2-digit Class of Service Number (1-6) that corresponds to Class of Service 1-6. The first digit represents Day COS and the second digit represents Night COS.
- 4 Press HOLD to complete the entry. A confirmation tone is heard.

### Description

The Verified Account Code/Traveling Class of Service (COS) feature provides tracking of specific calls by entering a verified, variable length (up to 12 digits) identifier. Each account code can be assigned a day and night Class of Service for determining the dialing privileges allowed by that account code. This provides a means for users to override a restricted station. If the dialed account code matches the Verified Account code table, an intercom dial tone is returned, otherwise an error tone is returned. The use of forced Account Codes is optional, offered on a system-wide basis. SMDR must be enabled for the account code to print as part of the SMDR record. The Triad-S System allows up to 250 12-digit account codes and must be enabled in Flash 06, Button 3. By default, no Account Codes are assigned.



ACCT CODE	CLASS OF SERVICE	DELETE ACCT CODE	ERASE DIGITS
* 1 Q	* 2 W	* 3 E	* 4 R
* 5 T	* 6 Y	* 7 U	* 8 I
* 9 O	* 10 P	* 11 A	* 12 S
* 13 D	* 14 F	* 15 G	* 16 H
* 17 J	NEXT * 18 K	PREV * 19 L	* 20 .
* 21 Z	* 22 X	* 23 C	* 24 V

To delete the currently displayed account code:

- 1 Press the DELETE CODE flexible button (**FLASH 31, button #3**) to delete the entire account code entry.
- 2 Press the NEXT flexible button (**FLASH 31, button #18**) to display the next account code on the LCD  
or  
Press the PREVIOUS flexible button (**FLASH 31, button #19**) to display the previous account code on the LCD.
- 3 Re-enter the correct digits and press HOLD to complete the entry. A confirmation tone is heard.

To erase previously entered digits:

- 1 Press the ERASE DIGITS flexible button (**FLASH 31, button #4**)
- 2 Each time this button is pressed erases one digit. Continue until all desired digits are erased.
- 3 Re-enter the correct digits and press HOLD to complete the entry. A confirmation tone is heard.



## Local Number / Name Translation Table

### Programming Steps

- 1 Press FLASH and dial **[55]**. The following message displays:

S . XXX ### ,

Where:

XXX = Table Number 600-799

### = Route Number 000-199

- 2 The ROUTE NUMBER LED is lit. Enter the 3-digit Route Number (000-199) from what was entered in program code, FLASH **[43]**.

To erase a current phone number and name entry:

- 1 Press the CLEAR ENTRY flexible button (FLASH 55, button **#4**) to clear an entire phone number and name from the current index.
- 2 Press the NEXT TABLE flexible button (FLASH 55, button **#18**) to advance to the next index and continue entering information into the translation table  
or
- 3 Press the PREV TABLE flexible button (FLASH 55, button **#19**) to return to a previous index that is already programmed.

To locate an existing index for editing:

- 1 Press the TABLE NUMBER flexible button (FLASH 55, button **#20**). The following message displays:

ENTER TABLE NUMBER

- 2 Enter a 3-digit number that corresponds to the table numbers 600-799.
- 3 Press HOLD to complete the entry.

### Description

An administrable table in the KSU provides a local translation from a received calling number to a name. This is administrable by the customer from the attendant console position. This table is also shared by the ICLID features. In cases of conflict between the name delivered from the CO and that in the local translation



Hunt Groups



table, the local translation table rules. 200 entries are provided in this table for the Triad-S System. An option was added to the Local Number/Name translation table to route an ICLID or Caller Entered ID Digits, based on a partial compare with the number entered in the translation table.

ROUTE NUMBER	PHONE NUMBER	NUMBER	NAME	CLEAR ENTRY
* 1 Q	* 2 W	* 3 E	* 4 R	
<b>BACKSPACE</b>				
* 5 T	* 6 Y	* 7 U	* 8 I	
* 9 O	* 10 P	* 11 A	* 12 S	
* 13 D	* 14 F	* 15 G	* 16 H	
	<b>NEXT TABLE</b>	<b>PREV TABLE</b>		
* 17 J	* 18 K	* 19 L	* 20 .	
* 21 Z	* 22 X	* 23 C	* 24 V	



*If a match is found between a number in the translation table and an incoming call record, the translated name is displayed and/or stored in the unanswered call table.*

To program a phone number into the Local Number/Name Translation table:

- 1 Press the PHONE NUMBER flexible button (**FLASH 55. button #2**) to enter the desired phone number into the translation table. Maximum length of a phone number is 14 digits, including hyphens. Phone numbers must be in the format: 1-602-XXX-XXXX. Refer to *Table 2-8: Dial Pad Keys*.
- 2 Press HOLD to update the database. The BACK SPACE flexible button(FLASH 55, **button #5**) erases the current number for error correction.

An option was added to the Local Number/Name translation table to route an ICLID or Caller Entered ID Digits based on a partial compare with the number entered in the translation table.

The Guaranteed Message announcement forces incoming callers to an announcement before being placed into an ACD Queue or routed to an agent. Agents in an ACD Group with a Guaranteed Message enabled receive incoming callers only after the caller hears the designated recorded announcement in its entirety, or after the incoming caller dials up to 14 digits followed by [ #]. These digits are inserted as ICLID incoming



number identification. If the ICLID option is selected, digits received before the announcement time-out are captured and inserted as incoming ICLID number information,

When the ICLID option is selected, [#] is recognized as an announcement termination and [\*] is recognized as an entry error. An entry error causes removal of the ICLID and the incoming caller can re-enter their phone number.

**Example:** If **602-443** is entered in the translation table with a route number, any call received from ICLID are routed per this partial entry. It is important to note that if a partial entry is inserted in the table, entries that begin with the partial entry, such as **602-443-6000** cause confusion. A call in this scenario can be routed by either entry depending on the search. This is considered a duplicate entry and should be avoided. Also note that calls still require exact entries, therefore, a caller entered number of **602443** requires a separate route entry from **602-443** since there is no dash.

To program a name into the translation table:

- 1 Press the NAME flexible button (**FLASH 55, button #3**) to enter the desired name into the translation table. Maximum length is 24 characters. Refer to Table 2-6 for dial pad keys.
- 2 Press HOLD to update the database. The BACK SPACE flexible button (**FLASH 55, button #5**) erases the current letter for error correction.





# 3 CO Line Attributes Programming



## Page A Introduction

### Programming Steps

If the system is in the programming mode, continue using the program codes. If starting to program here, enter the programming mode. Refer to Chapter 1, *Figure 2-1: Programming Button Mapping*. If any CO line features must be changed

- 1 Press FLASH and dial [40]. The following message displays:

```

CO LINE ATTRIBUTES
SELECT A CO LINE RANGE

```

- 2 Enter a 6-digit number for the range of lines being programmed. If only one line is being programmed, enter that number twice (001 001).



*If HOLD is pressed without entering a CO range, ALL CO lines (001-012) are selected.*

- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates. Flexible Button #19 (Page A) is lit. The following message displays to indicate current programming of that line or group of lines:

```

XXX-XXX PAGE A
ENTER BUTTON NUMBER

```

Where:

XXX-XXX = CO Line Range

001-012 = STARPLUS Triad-S



This section describes the procedures and steps necessary to program CO Line attributes. When entering the CO Line attributes portion of the database, the programmer may decide to enter information for a range of CO lines or one specific CO Line. Range programming lets the programmer change a specific parameter or a few parameters for an entire range of CO Lines leaving intact the remaining data fields that do not require change. Those data fields continue to operate with the previously programmed data. By default, Page A is shown.





DTMF / DP * <input type="text" value="1"/> <input type="text" value="Q"/>	co / PBX * <input type="text" value="2"/> <input type="text" value="W"/>	UNA * <input type="text" value="3"/> <input type="text" value="E"/>	DISA T / T * <input type="text" value="4"/> <input type="text" value="R"/>
PRIVACY * <input type="text" value="5"/> <input type="text" value="T"/>	LOOP SUPV * <input type="text" value="6"/> <input type="text" value="Y"/>	DISA * <input type="text" value="7"/> <input type="text" value="U"/>	CO GROUP * <input type="text" value="8"/> <input type="text" value="I"/>
COS * <input type="text" value="9"/> <input type="text" value="O"/>	RING ASSIGN * <input type="text" value="10"/> <input type="text" value="P"/>	CO LINE ID * <input type="text" value="11"/> <input type="text" value="A"/>	TRUNK DIR * <input type="text" value="12"/> <input type="text" value="S"/>
DISPLAY RING * <input type="text" value="13"/> <input type="text" value="D"/>	<input type="text" value="14"/> <input type="text" value="F"/>	<input type="text" value="15"/> <input type="text" value="G"/>	<input type="text" value="16"/> <input type="text" value="H"/>
<input type="text" value="17"/> <input type="text" value="J"/>	<input type="text" value="18"/> <input type="text" value="K"/>	PAGE A * <input type="text" value="19"/> <input type="text" value="L"/>	PAGE B * <input type="text" value="20"/> <input type="text" value="."/>
PAGE C * <input type="text" value="21"/> <input type="text" value="Z"/>	NEXT (FWD) * <input type="text" value="22"/> <input type="text" value="X"/>	NEXT (BACK) * <input type="text" value="23"/> <input type="text" value="C"/>	NEW RANGE * <input type="text" value="24"/> <input type="text" value="V"/>

## DTMF / Dial Pulse Programming

### Programming Steps

- 1 Press the DTMF/DIAL PULSE flexible button (**FLASH 40, Button #1**).
- 2 Enter a I-digit value (O-I) that corresponds with the following entries:  
[0] = Dial Pulse  
[I] = DTMF

PULSE / DTMF	0-1
DTMF	

- 3 Press HOLD to save the entry. A confirmation tone is heard.

### Description

Each individual outside line can be programmed to be DTMF (tone) or dial pulse. By default, all lines are set for DTMF.

## CO / PBX Programming

### Programming Steps

- 1 Press the CO/PBX flexible button (**FLASH 40, Button #2**).
- 2 Enter a I-digit value (O-I) which corresponds with the following entries:  
[0] = PBX







[1] = CO

PBX / CO	0-1
CO	

- 3 Press HOLD to save the entry. A confirmation tone is heard.

## Description

Each individual outside line connected to the system may be programmed as a CO or PBX line. Use the PBX mark when identifying Centrex lines. By default, all lines are assigned as CO lines.

## Universal Night Answer (UNA)

### Programming Steps

- 1 Press the UNA flexible button (FLASH 40. Button **#3**).
- 2 Enter a I-digit value (O-I) which corresponds with the following entries:  
[0] = Disabled  
[1] = Enabled

UNA	0-1
ENABLED	1

- 3 Press HOLD to save the entry. A confirmation tone is heard.

## Description

If a line is marked UNA, this activates night service answering of incoming calls on this line by stations not normally assigned access to the line(s). This station must have a direct CO appearance or an available loop key assigned to do this. Lines marked as UNA also activate Night Ringing over External Page when in the night mode if External Night Ringing is set to Yes. By default, UNA is enabled

## DISA Trunk-to-Trunk (Per CO Line)

### Programming Steps

- 1 Press the DISA CO-to-CO flexible button (FLASH 40, Button **#4**).
- 2 Enter a I-digit value (O-I) which corresponds with the following entries:  
[0] = Disabled



[1] = Enabled

DISA CO TO CO ENABLED	0-1
--------------------------	-----

- 3 Press HOLD to save the entry. A confirmation tone is heard.

### Description

The DISA Trunk-to-Trunk (or Conference) mark on the CO line governs a DISA caller's ability to access other outside lines. CO lines must have DISA Trunk-to-Trunk enabled to allow a DISA caller to establish an outgoing trunk-to-trunk connection. This allows for specific CO line access restriction on DISA calls. A station with Conference enabled can initiate a conference on CO lines regardless of the CO line conference marking. By default, DISA Trunk-to-Trunk is enabled for all CO lines.

The CO line conference flag affects a DISA caller's ability to access outgoing CO lines as shown in the following table:

Incoming DISA Trunk	Trunk DISA Caller Attempts To Access	
	T-t-T Enabled	T-t-T Disabled
T-t-T Enabled	Call Allowed	Call Denied
T-t-T Disabled	Call Denied	Call Denied

Table 3-1: CO Line Conference Flag

### Privacy

#### Programming Steps

- 1 Press the PRIVACY flexible button (**FLASH 40, Button #5**).
- 2 Enter a 1-digit value (0-1) which corresponds with the following entries:

[0] = Disabled

[1] = Enabled

PRIVACY ENABLED	0-1	1
--------------------	-----	---





- 3 Press HOLD to save the entry. A confirmation tone is heard.



*Disabling the privacy feature may be limited by federal, state or local law, so check the relevant laws in your area before disabling privacy.*

If desired, the system can be programmed to eliminate CO Line privacy, allowing another station to join existing outside line conversations.

- ❖ Stations must have a direct CO line appearance to join CO line conversations in progress.
- ❖ A station must also have Privacy disabled before the system allows that station to enter an existing conversation.
- ❖ If Privacy is disabled and a station joins an existing call, a programmed warning tone is presented to both parties prior to actual cut-through.
- ❖ When Privacy is disabled, up to seven other stations may join an existing conversation.
- ❖ The station joining receives a solid red LED indication,

By default, Privacy is enabled for all CO Lines.

Station Attempting to Access CO Line	CO Line in Use by Another Station	
	Privacy Enabled	Privacy Disabled
Privacy Enabled	Private (no cut-through)	Private (no cut-through)
Privacy Disabled	Private (no cut-through)	Privacy Release (cut-through allowed)

Table 3-2: CO Line Privacy Flag

Warning tone is programmed in Flash 06, Button 1.

## Loop Supervision Programming

### Programming Steps

- 1 Press the LOOP SUPV flexible button (**FLASH 40, Button #6**).



- 2 Enter a 1-digit timer value on the dial pad between 1-9 which corresponds to 100-900 ms. (0 = disabled)

LOOP <small>4</small>	SUPERVISION	0-9
--------------------------	-------------	-----

- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

## Description

Loop supervision is used primarily with DISA, Voice Mail/Auto Attendant and with unsupervised conference applications. It lets the system detect when loop current is broken and an outside line is no longer being used. To determine timer value for loop supervision, consult your local central office for type and duration of loop supervision signal. By default, Loop Supervision is set for 400 ms for all CO Lines.

## DISA Programming

### Programming Steps

- 1 Press the DISA flexible button (**FLASH 40, Button #7**).
- 2 Enter a 1-digit value on the dial pad to indicate type of DISA desired.
  - [0] = No DISA
  - [1] = 24-Hour DISA
  - [2] = Night DISA
  - [3] = 24-Hour DISA with forwarding
  - [4] = Night DISA with forwarding

DISA TYPE NONE	0-4
-------------------	-----

X = 0 through 4

- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

## Description

Each CO can be assigned as a DISA line with one of the 5 DISA types mentioned above (0-4). One DTMF Receiver is provided on the BKSU:

- ❖ DISA can be programmed using Range programming.
- ❖ DISA callers are subject to the Class of Service placed on the line accessed for out dialing.





- ❖ The system administrator can control the call duration after establishing a Trunk-to-Trunk call,
- ❖ After expiration of the Conference Timer, a tone is presented to both DISA parties, then one minute later the system automatically releases both trunks.
- ❖ The Conference Timer does not affect or control a DISA-to-Station call. By default, there are no outside lines assigned as DISA lines.

## Line Group Programming

### Programming Steps

- 1 Press the CO LINE GROUP flexible button (FLASH 40, Button **#8**).
- 2 Enter a 1-digit value on the dial pad between 0-7 which corresponds to Groups 0-7.



- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

Eight line groups are available for CO line assignment. Groups should be assigned according to type (local, FX, WATS, etc.). All unassigned CO lines should be programmed into a different group so they are not accessed by Line Queuing, Pooled Group access (Pool Buttons), Speed Dial, or LCR features,

Line Group 0 is for programming a line(s) as a private. CO Lines assigned to Line Group 0 can only be accessed by stations with a direct CO appearance (button) on their phone. By default, all lines are placed in Line Group 1.

### Class of Service

#### Programming Steps

- 1 Press the LINE COS flexible button (FLASH 40. Button **#9**).
- 2 Enter a 1-digit value on the dial pad between 1-5 which corresponds to five possible class-of-service to which a line may be assigned:  
COS1 = No restrictions.  
COS2 = Table A governs, Station COS 2 and 4 are monitored.  
COS3 = Table B governs, Station COS 3 and 4 are monitored.



COS4 = Restricts [0], [1], [\*], [#] dialed as first-digit and places a 7-digit dialing limitation. In addition, 1-800, 1911, and 1611 are allowed and 411, 976, and 555 numbers are denied.

COS5 = Overrides Station COS 2, 3, 4, 5 and allows unrestricted dialing.

CLASS OF SERVICE	1-5
1	1

- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

**Description**

Through assignments of a CO Class of Service, the assigned CO line interacts with a station Class of Service, provides a canned restriction, or provides unrestricted dialing capabilities. (When a CO line is marked PBX, COS restrictions apply to the station only if one of five PBX codes are dialed first.)

CO LINE CLASS OF SERVICE						
		1	2	3	4	5
S T A T I O N  C O S	1	Unrestricted	Unrestricted	Unrestricted	Canned Restricted*	Unrestricted
	2	Table A	Table A	Unrestricted	Canned Restricted*	Unrestricted
	3	Table B	Unrestricted	Table B	Canned Restricted*	Unrestricted
	4	Table A and B	Table A	Table B	Canned Restricted*	Unrestricted
	5	Canned Restricted*	Canned Restricted*	Canned Restricted*	Canned Restricted*	Unrestricted
	6	Intercom Only	Intercom Only	Intercom Only	Intercom Only	Intercom Only

\* Canned Restriction: No [0], [1], [#], [\*] as first dialed digit, and 7-digit dialing limitation; plus 1-800, 1911, 7611 are allowed, and 411, 976, and 555 numbers are denied.

Table 3-3: Class of Service (COS)





## CO Line Ringing Assignments

### Programming Steps

- 1 Press the RING ASSIGNMENT flexible button (**FLASH 40, Button #IO**). The display shows the following information:

RING ASSIGNMENTS  
ENTER DDDR

- 2 Enter the 3-digit destination (DDD) and the 1-digit ring type (R) followed by HOLD. A confirmation tone is heard and the display updates.

*DDD = Valid 3-digit Destinations:*

[020-099] = System Speed Bins 20-99, for Off-Net ringing

[100-131]= STARPLUS Triad-S Extension Numbers

[440-447] = Voice Mail Groups 1-8

[450-457] = Hunt Groups 1-8

[499] = Direct Ringing to Modem

[550-565] = ACD Groups 1-16

[550-557] = UCD Groups 1-8

*R = Valid Ring Types*

[0] = No Ring; unassigned; or to delete a station

[1] = Day Ring [D]

[2] = Night Ring [N]

[3] = Day/Night Ring

[4] = Special Only [S]

[5] = Day/Special [DS]

[6] = Night/Special [NS]

[7] = All Modes [Day/Night/Special]

- 3 To add multiple stations: DDDR HOLD DDDR HOLD DDDR HOLD...etc.

To Delete a single station, enter:

DDDO HOLD

To Delete Multiple stations:

DDDO HOLD DDDO **HOLD**...etc.





### Description

Each CO Line may be assigned to ring any station in the system; UCD, Voice Mail or Hunt Group, or Off-Net (via speed dial). CO Line ringing is programmed on a per CO Line destination basis. Each destination may be designated to ring during the day, during the night, or receive both Day and Night ringing. Stations that are assigned for initial ring-in **must have** a LOOP button(s) to answer calls if a direct CO appearance is unavailable.

An incoming CO line may be programmed to any number of stations but it cannot be programmed to ring a mixture of stations and groups in the same time period. Incoming calls directed Off-Net are connected to an outgoing system speed bin. CO lines assigned to ring multiple stations do not follow any station's forwarding. By default, all CO lines ring at the attendant, Station 100 during Day and Night Modes.

### CO Line Identification Display

#### Programming Steps

Each CO line in the system can be programmed to have a name associated to it in database programming.

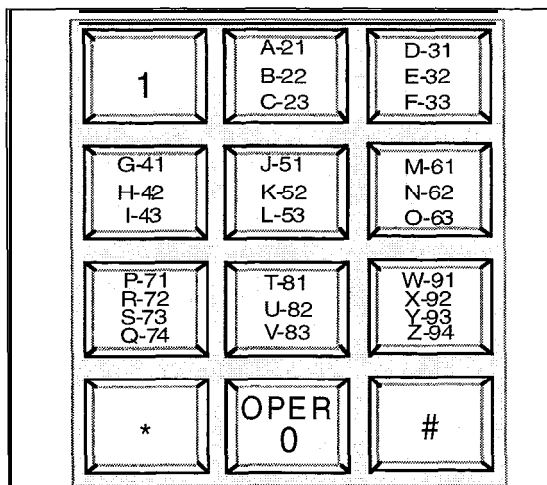
- 1 Press the CO LINE IDENTIFICATION flexible button (**FLASH 40. Button #11**). The following message displays:

LINE ID LINE 001
---------------------

- 2 Enter the name by using keys on the dial pad as follows. Valid alphanumeric characters are: [A-Z], [0-9], [\*], [#], [-] [spaces] and other ASCII characters as listed below. The name may be entered in any combination up to **12-characters** (this represents 24-digits entered). Refer to *Table 3-4: Dial Pad Keys*.







Other Codes:

1 = 1#	8 = 8#	= 01	* = *#
2 = 2#	9 = 9#	, = 02	( = #1
3 = 3#	0 = 0#	? = 03	) = #2
4 = 4#	Space = 11	/ = 04	+ = #3
5 = 5#	: = 12	! = *1	= = #4
6 = 6#	- = 13	\$ = *2	# = ##
7 = 7#	' = 14	& = *4	

Table 3-4: Dial Pad Keys

- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

This feature provides entry of a name for each line (trunk) connected to the system. Once entered into the database, LCD phones, including the attendant stations, receive the programmed line name in place of the default LINE XXX message. This applies to all line call processing conditions where the current LINE XXX message appears. SMDR continues to print out the line number in place of the programmed name. If the line name was not programmed, the current LINE XXX display is the default. A programmable data field is available for each line in the system. Line names may be assigned using the range programming.





A message similar to the following display is used for all CO Line displays when a name is programmed for a CO Line.

LINE RINGING nnnnnnnnnnnn            HH: MM am
---



*Entries can be made using a keyboard by following the same outlined procedures using Table 2-6.*

## Trunk Direction

### Programming Steps

- 1 Press the TRUNK DIRECTION flexible button. **(FLASH 40, Button #12)**. The following message displays:

CO DIRECTION            0-3 INCOMING- OUTGOING
---

- 2 Enter a 1-digit value on the dial pad which corresponds to the desired trunk type:
  - [0] = Out-of-Service (OOS)
  - [1] = Incoming Only
  - [2] = Outgoing Only
  - [3] = Both Incoming and Outgoing
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

CO Lines can be programmed on a per CO Line basis for the type of CO Line desired: Incoming, Outgoing, or Incoming and Outgoing.

#### Incoming

- ❖ Incoming restricts the CO Line for incoming calls only.
- ❖ Users can place call on hold, park the call, and other stations can pick-up the call.



Outgoing

- ❖ Outgoing restricts the CO Line to outgoing calls only,
- ❖ Users can place call on hold, park the call, and other stations can pick-up the call.

Incoming and Outgoing

- ❖ Incoming and outgoing type allow calls to be received or dialed out,

By default, all CO Lines default to both incoming and outgoing type.

### Display Ring Assignments

#### Programming Steps

- 1 Press **FLASH 40, Button #13** to display ring assignments. Assignments are displayed in sets of 8, up to the number programmed. The following format displays the assignments.

```

DDRR  DDRR  DDRR  DDRR
DDRR  DDRR  DDRR  DDRR

```

Where:

DDD = Destination

RR:

[0] = No Ring

[D] = Day Ring

[N] = Night Ring

[DN] = Day/Night Ring

[S] = Special Only

[DS] = Day/Special

[NS] = Night/Special

[A] = All Modes (Day/Night/Special)

- 2 Press **FLASH 40, Button #13** additional times to cycle to the next group of eight ring assignments etc. ..ring assignments are continuous and display in order of the destination number from 001-557.



## Page B Introduction

### Programming Steps

If the system is in the programming mode, continue using the program codes. If starting to program here, enter the programming mode. If Page B CO Line features must be changed:

- 1 Press FLASH and dial **[40]**. The following message displays:

```

CO LINE ATTRIBUTES
SELECT A CO LINE RANGE
  
```

- 2 Enter a 6-digit number for the range of lines being programmed. If only one line is being programmed, enter that number twice (001 001).



*If HOLD is pressed without entering a CO range, ALL CO lines (001-012) are selected.*

- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates. Flexible Button #19 (Page A) is lit.
- 4 Press the Page B flexible button (Button #20). The following message displays:

```

XXX-XXX PAGE B
ENTER BUTTON NUMBER
  
```

Where:

XXX-XXX = CO Line Range

001-012

### Description

This section describes the procedures and steps necessary to program CO Line attributes. When entering the CO Line attributes portion of the database, the programmer may decide to enter information for a range of CO lines or one specific CO Line. Range programming lets the programmer change a specific parameter or a few parameters for an entire range of CO Lines leaving intact the remaining data fields that do not require change. Those data fields continue to operate with the previously programmed data.



When programming the Page B features, the flexible buttons are mapped as follows:

<b>XMT VOLUME</b> * [ 1 ] Q	<b>P FWD DEST</b> * [ 2 ] W	<b>P FWD VMID</b> * [ 3 ] E	<b>UDA</b> * [ 4 ] R
<b>MOH PER CO</b> * [ 5 ] T	<b>RING TONE</b> * [ 6 ] Y	* [ 7 ] U	* [ 8 ] I
* [ 9 ] O	* [ 10 ] P	* [ 11 ] A	* [ 12 ] S
* [ 13 ] D	* [ 14 ] F	* [ 15 ] G	* [ 16 ] H
<b>S k -</b>	<b>% + -</b>	<b>PAGE A</b> * [ 19 ] L	<b>PAGE B</b> * [ 20 ] :
<b>PAGE C</b> * [ 21 ] Z	<b>NEXT (FWD)</b> * [ 22 ] X	<b>NEXT (BACK)</b> * [ 23 ] C	<b>NEW RANGE</b> * [ 24 ] V

## Transmit Volume Option

### Programming Steps

- 1 Press the TRANSMIT VOLUME flexible button (**FLASH 40**, Page B, Button **#1**). The following message displays:

TRANSMIT VOLUME                      o-9  
0 DB

- 2 Enter the I-digit value for the desired volume level, O-9.
 

[0] -15 dB	[5] 0 dB
[1] -12 dB	[6] +3 dB
[2] -9 dB	[7] +6 dB
[3] -6 dB	[8] +9 dB
[4] -3 dB	[9] +12 dB
- 3 When the desired level is selected, press HOLD to complete the entry, A confirmation tone is heard and the display updates.



## Description

Up to ten volume levels are available for each CO Line in the system. By default, all CO lines are programmed for level 5 (0 dB).



*Do NOT adjust this option without consulting with Technical Support first. The default settings were set to apply to most applications. Have the dB readings on all CO lines available when calling Technical Support.*

## Preset Call Forward Destination

### Programming Steps

- 1 Press the PRESET FWD DESTINATION flexible button (FLASH 40, Page B, Button #2). The following message displays:

PRESET FORWARD DEST  
###

- 2 Enter the 3-digit forward destination on the dial pad.
  - [020-099] = System Speed Bins
  - [100-171] = Triad 1/2 Station Extensions
  - [100-351] = Triad 3 Station Extensions
  - [440-447] = Voice Mail Groups 1-8
  - [450-457] = Hunt Groups 1-8
  - [499] = Direct Ringing to Modem
  - [550-557] = UCD Groups 1-8
  - [550-565] = ACD Groups 1-6
- 3 A confirmation tone is heard and the LCD display updates.

## Description

This feature enables a CO line to initially ring at multiple stations and forward to a pre-determined destination. The destination can be a station group. Each CO line has a preset forward timer. Additionally, each CO line has a VMID field to allow sending of specific VM digits when a CO line forwards to a VM group. Calls ringing into ACD/UCD Groups or Voice Mail Groups continue to ring the group. The CO line does not forward when ringing one of these types of groups. By default, no destinations are assigned.





## Preset Forward Voicemail ID

### Programming Steps

- 1 Press the PRESET FWD VMID flexible button (**FLASH 40, Page B, Button #3**). The following message displays:

<p>PRESET FORWARD VMID #####</p>
--------------------------------------

- 2 Enter up to four digits on the dial pad that correspond to 0000-9999 for the Voice Mail ID digits.
- 3 Press HOLD to complete the entry. A confirmation tone is heard and the display updates.

To delete numbers that are currently entered:

- 1 Press [#] four times. Press HOLD to update. All information is erased.

### Description

This feature enables a programmer to assign which digits will be sent to voice mail when a CO line is programmed to preset forward. By default, no digits are sent.

## Universal Day Answer (UDA)

### Programming Steps

- 1 Press the UNIV. DAY ANSWER flexible button (**FLASH 40, Page B, Button #4**). The following message displays:

<p>UNIVERSAL DAY ANSWER      0-1 DISABLED</p>
---

- 2 Enter a 1-digit value on the dial pad to enable/disable the UDA feature.  
[0] = Disabled  
[1] = Enabled
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

UDA-assigned CO lines can signal over external page port(s). External Day ringing is programmed on a system-wide basis in administrative programming. Stations that do not have access to a line during the day





can answer that line while the System is in the day mode by dialing a UDA code [#5]. To utilize this feature, a LOOP button or an appearance of the trunk must be present on the station. By default, the Universal Day Answer feature is disabled.

### Music On Hold (per CO Line)

#### Programming Steps

- 1 Press the MUSIC-ON-HOLD flexible button (**FLASH 40, Page B, Button #5**). The following message displays:

MOH	CHANNEL	0-1
	1	

- 2 Enter a I-digit value on the dial pad to change this feature.  
 [0] = No Music-On-Hold.  
 [1] = Channel 1.  
 : : : : :  
 [8] = Channel 8.
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

#### Description

This feature provides a method to select the Music-On-Hold channel for each CO line. This feature lets the system assign CO line circuits as additional music inputs. This increases the capacity of music channels beyond the two available on the MISU to be used for MOH sources. A total of eight channels are available for use on the system. The CO line can be assigned to NOT play music for callers on hold. By default, Channel 1 is used for Music-On-Hold.

### Distinctive Ringing (per CO Line)

#### Programming Steps

- 1 Press the RING TONE flexible button (**FLASH 40, Page B, Button #6**). The following message displays:

RING TONE	00-35
00	







2 Enter the 2-digit value on the dial pad to change this feature. The ringing choices are:

Tone#	Freq	Tone #	Freq
00	6971770	18	852/1477
01	697/852	19	852/1633
02	697/941	20	852/0
03	697/1209	21	941/1209
04	697/1336	22	941/1336
05	697/1477	23	941/1477
06	697/1633	24	941/1633
07	697/0	25	941/0
08	770/852	26	1209/1336
09	770/941	27	1209/1477
10	770/1209	28	1209/1633
11	770/1336	29	1209/0
12	770/1477	30	1336/1477
13	770/1633	31	1336/1633
14	770/0	32	1336/0
15	852/941	33	1477/1633
16	852/1209	34	1477/0
17	852/1336	35	1633/0

Tone Duration = 50 ms/50 ms

Table 3-5: Ringing Tones

3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

The tone ring signal used to notify stations of an incoming call can be changed in administrative programming to provide distinctive ringing on a per CO line basis. A distinctive ring tone can be programmed



for each CO line that rings each station. The system provides **36** different ring patterns that can be selected for each CO line in the system. By default, Distinctive Ringing is set for 00 (697/770).



*Distinctive CO ringing overrides station distinctive ringing.*

## Page C Introduction

### Programming Steps

If the system is in the programming mode, continue using the program codes. If starting to program here, enter the programming mode first.

- 1 Press **FLASH** and dial **[40]**. The following message displays:

```

CO LINE ATTRIBUTES
SELECT A CO LINE RANGE
  
```

- 2 Enter a 6-digit number for the range of lines being programmed. If only one line is being programmed, enter that number twice (001 001).



*If HOLD is pressed without entering a CO range, ALL CO lines (001-012) are selected.*

- 3 Press Button #21 to select Page C. The display updates. The following message displays to indicate current programming of that line or group of lines:

```

XXX-XXX PAGE C
ENTER BUTTON NUMBER
  
```

Where:

XXX-XXX = CO Line Range

001-012

### Description

This section describes the procedures and steps necessary to program CO Line attributes. When entering the CO Line attributes portion of the database, the programmer may decide to enter information for a range





of CO lines or one specific CO Line. Range programming lets the programmer change a specific parameter or a few parameters for an entire range of CO lines, leaving intact the remaining data fields that do not require change. Those data fields continue to operate with the previously programmed data. By default, Page A is shown.

When programming the Page C features, the flexible buttons are mapped as follows:

FLASH TIMER * <b>1</b> <b>Q</b>	RING DELAY * <b>2</b> <b>W</b>	RESEIZE TIMER * <b>3</b> <b>E</b>	GUARD TIMER * <b>4</b> <b>R</b>
PRESET FWD TIMER * <b>5</b> <b>T</b>	* <b>6</b> <b>Y</b>	* <b>7</b> <b>U</b>	* <b>8</b> <b>I</b>
* <b>9</b> <b>O</b>	* <b>10</b> <b>P</b>	* <b>11</b> <b>A</b>	* <b>12</b> <b>S</b>
* <b>13</b> <b>D</b>	* <b>14</b> <b>F</b>	* <b>15</b> <b>G</b>	* <b>16</b> <b>H</b>
* <b>17</b> <b>J</b>	* <b>18</b> <b>K</b>	PAGE A * <b>19</b> <b>L</b>	PAGE B * <b>20</b> <b>:</b>
PAGE C * <b>21</b> <b>Z</b>	NEXT (FWD) * <b>22</b> <b>X</b>	NEXT (BACK) * <b>23</b> <b>C</b>	NEW RANGE * <b>24</b> <b>V</b>

## Flash Timer

### Programming Steps

- 1 Press the FLASH TIMER flexible button (FLASH 40, Page C, button #1).
- 2 Enter a 2-digit timer value on the dial pad between 01-20 which corresponds to 100 ms to 2 seconds.



- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

Flash is a programmable opening on a line for signaling. When using an outside line, flash lets a user obtain a new dial tone without losing the line. This is particularly useful behind a PBX or Centrex. Each CO line can be programmed for a flash time. By default, the Flash Timer is set for 10 (1.0 seconds) and is variable from 01-20 (100 ms to 2 seconds).



## Ring Delay Timer

### Programming Steps

- 1 Press the RING DELAY TIMER flexible button (**FLASH 40, Page C, button #2**). The following message displays:

RING DELAY TIMER	00-20
00	

- 2 Enter a 2-digit timer value on the dial pad between 00-20 which corresponds to 00-20 seconds.
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

The Ring Delay timer was added to the Triad-S to accommodate ICLID interface requirements. The Ring Delay timer is started whenever a CO Line detects incoming ringing. When the timer expires, CO line ringing is detected by digital terminals and Single Line telephones. The purpose of this timer is to wait until after the first ring cycle to be detected by the digital system so the ICLID information is passed down the CO line prior to being answered. In some cases, it may be necessary to set the Ring Delay Timer to four seconds so all the ICLID information is received from the Central Office. By default, the Ring Delay Timer is set at 00 (disabled) and is variable from 00-20 seconds.

## Reseize Timer

### Programming Steps

- 1 Press the RESEIZE TIMER Button (**FLASH 40, Page C, button #3**) in the flexible button field. The following message displays:

RESEIZE TIMER	000-255
200	

- 2 Enter a 3-digit value on the dial pad that corresponds to 000-255 (100 ms to 2.55 seconds).
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.





## Description

This option lets the user adjust the resize timer on a per CO Line basis. The resize timer can be used on any trunk type. This timer sets the time period that a trunk is held disconnected after receiving a disconnect before being resized when a device is queued for a member of the trunk group. By default, the Resize Timer is set for two seconds.

## Guard Timer

### Programming Steps

- 1 Press the GUARD TIMER button (**FLASH 40, Page C, button #4**) in the flexible button field. The following message displays:

GUARD TIMER	1-60
50	I

- 2 Enter a 3-digit value on the dial pad which corresponds to 1-60 (100 ms to 6 seconds).
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

## Description

The outgoing guard timer is the length of time a tie trunk is held busy to outgoing seizure after a valid release is detected. By default, the Guard Timer is set for five seconds.

## Preset Forward Timer

### Programming Steps

- 1 Press the PRESET FWD TIMER flexible button (**FLASH 40, Page C, button #5**). The following message displays:

PRESET FWD TIMER	00-99
00	

- 2 Enter a 2-digit timer value on the dial pad which corresponds to 00-99 seconds.
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.





## Description

This timer determines the time an outside line rings before being forwarded to a predetermined destination. If a forward destination is programmed in the CO line field, the CO calls forward to that destination after the CO preset forward timer expires. This forward occurs regardless of how many stations the line is ringing. The digits entered for the CO line are sent in the station field. This feature applies to initial CO ringing lines only and works with Preset Forward CO Line assignments. By default, the CO Line Preset Forward Timer is set at 10 seconds and is variable from 00-99 seconds. A [00] entry disables the timer and the feature is disabled.

## Miscellaneous CO Parameters

### Programming Steps

If the system is in the programming mode, continue using the program codes. If starting to program here, enter the programming mode first.

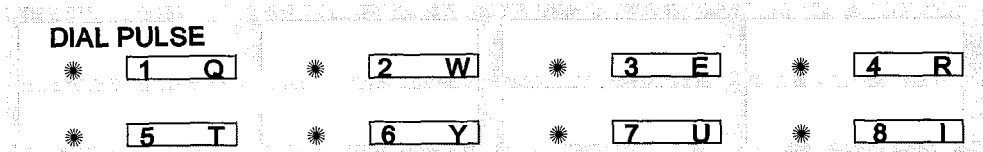
- 1 Press FLASH and dial [41]. The following message displays:

CO FEATURES  
ENTER BUTTON NUMBER

- 2 Select any of the features by pressing the appropriate flexible button(s) in the flexible field.
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

When entering the Miscellaneous CO Parameters programming area the buttons on the digital terminal are defined as shown below:





## Dial Pulse Parameters

### Programming Steps

Press the DIAL PULSE flexible button (**FLASH 41, button #1**). The following message displays:

```

DIAL PULSE
60/40 10 PPS
  
```

- Enter the I-digit value (0-3) which corresponds with the following entries:
  - [0] = 60/40 (RATIO), 10 pps (SPEED)
  - [1] = 66/33 (RATIO), 10 pps (SPEED)
  - [2] = 60/40 (RATIO), 20 pps (SPEED)
  - [3] = 66/33 (RATIO), 20 pps (SPEED)
- Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

This option lets the installer adjust the dial pulse ratio and speed when using dial pulse (rotary) type signaling. By default, all lines are DTMF (tone) signaling. If pulse dialing is required, the individual outside line must be programmed for Dial Pulse (DP). When Dial Pulse is selected, this system-wide parameter must be set to determine the break/make ratio and the dial speed of the dial pulse signal.



*This program code is only used when an outside (CO) line is programmed for Dial Pulse.*







# 4 Station Attributes Programming

## Page A Introduction

### Programming Steps

If the system is in the programming mode, continue using the program codes, If starting to program here, enter the programming mode. If station features must be changed:

- 1 Press FLASH and dial [50]. The following message displays:

STATION ATTRIBUTES  
SELECT A STATION RANGE

- 2 Enter a 6-digit number for the station range being programmed. If one station is being programmed, enter that number twice (100100).



*If HOLD is pressed without entering a station range, ALL stations (1&-13 1) are selected.*

- 3 Press Button #19 and the display updates. The display updates to current programming for Page A:

XXX-XXX PAGE A  
ENTER BUTTON NUMBER

Where:

XXX-XXX = Station Range (100-131)

### Description

This section describes the steps and procedures necessary to program station attributes.

Range programming enables the programmer to change a specific parameter or a few parameters for a range of stations, leaving intact the remaining data fields not requiring changes. Those data fields continue to operate with the previously programmed data. By default, Page A is shown,





When programming the Page A features, the flexible buttons are mapped as follows:

<b>PAGE ACCESS</b>	<b>DO NOT DISTURB</b>	<b>CONFERENCE</b>	<b>EXECUTIVE OVERRIDE</b>
* [ 1 ] Q	* [ 2 ] W	* [ 3 ] E	* [ 4 ] R
<b>PRIVACY</b>	<b>SYSTEM SPEED</b>	<b>LINE QUEUING</b>	<b>PREF LINE ANSWER</b>
* [ 5 ] T	* [ 6 ] Y	* [ 7 ] U	* [ 8 ] I
<b>OHVO</b>	<b>CALL FORWARD</b>	<b>FORCED LCR</b>	<b>ACD SUPV BARGE-IN</b>
* [ 9 ] O	* [ 10 ] P	* [ 11 ] A	* [ 12 ] S
<b>EXEC OVRD BLOCKING</b>	<b>CO LINE RING OPTIONS</b>	<b>NAME / NUMBER DISPLAY</b>	
* [ 13 ] D	* [ 14 ] F	* [ 15 ] G	* [ 16 ] H
		<b>PAGE A</b>	<b>PAGE B</b>
* [ 17 ] J	* [ 18 ] K	* [ 19 ] L	* [ 20 ] :
<b>PAGE C</b>	<b>NEXT (FWD)</b>	<b>NEXT (BACK)</b>	<b>NEW RANGE</b>
* [ 21 ] Z	* [ 22 ] X	* [ 23 ] C	* [ 24 ] V

### Paging Access

#### Programming Steps

- 1 Press the PAGE ACCESS flexible button (**FLASH 50, Page A, button #1**). The following message displays:



- 2 Enter a I-digit value on the dial pad to enable/disable the Paging Access feature.  
[0] = Disabled  
[1] = Enabled
- 3 Press HOLD to save the entry. Confirmation tone is heard.

#### Description

Stations can individually be allowed or denied the ability to make pages. This applies to all internal and external zone paging. A station denied access to paging may still answer a meet-me page announcement. (Station COS **6** does not deny a station the ability to make a page.) By default, Paging is enabled at all stations.



## Do Not Disturb

### Programming Steps

- 1 Press the DO NOT DISTURB flexible button (**FLASH 50, Page A, button #2**). The following message displays:

DO NOT DISTURB ENABLED	0-1	I
---------------------------	-----	---

- 2 Enter a I-digit value on the dial pad to enable/disable the Do Not Disturb feature.  
[0] = Disabled  
[I] = Enabled
- 3 Press HOLD to save the entry. Confirmation tone is heard.

### Description

Stations can be individually allowed or denied the ability to place their telephone in Do Not Disturb. By default, Do Not Disturb is enabled at all stations. The first programmed attendant cannot utilize DND.

## Conference Enable / Disable (Per Station)

### Programming Steps

- 1 Press the CONFERENCE flexible button (**FLASH 50, Page A, button #3**). The following message displays:

CONFERENCE ENABLED	0-1
-----------------------	-----

Enter a I-digit value on the dial pad to enable/disable the Conference feature.  
[0] = Disabled  
[I] = Enabled

- 2 Press HOLD to save the entry. Confirmation tone is heard.

### Description

This feature lets the system be programmed on a per Station basis for the ability to initiate a conference.



## Executive Override

### Programming Steps

- 1 Press the EXECUTIVE OVERRIDE flexible button (**FLASH 50, Page A, button #4**). The following message displays:



- 2 Enter a 1-digit value on the dial pad to enable/disable the Executive Override feature.  
[0] = Disabled  
[1] = Enabled
- 3 Press HOLD to save the entry. Confirmation tone is heard.



*Use of this feature when the Executive Override Warning Tone is disabled may be interpreted as a violation of federal, state, or local laws, and an invasion of privacy. Check applicable laws in your area before intruding on calls using this feature.*



*A change in volume may occur on the CO line or intercom call after the barge-in occurs.*

### Description

This feature lets certain stations be designated as Executive stations with the ability to override and barge-in on other key sets engaged in a CO line or intercom conversation. If Supervisor Monitor with barge-in function is denied, this feature **MUST** be disabled. An optional warning tone is programmed on a system wide basis to enable or disable the tone. This tone is presented to all parties prior to actual cut through of the third party.



*A separate condition was added to this feature that allows or disallows an Executive to override an extension. This prevents an extension with override capability from overriding an Executive's station.*

By default, Executive Override is disabled for all stations. Supervisor Barge-In can be programmed in [FLASH 50] [Button 13].



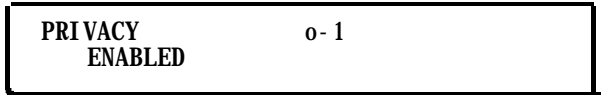


## Privacy (Per Station)



### Programming Steps

- 1 Press the PRIVACY flexible button (**FLASH 50, Page A, button #5**). The following message displays:



- 2 Enter a 1-digit value on the dial pad to enable/disable the Privacy feature.  
[0] = Disabled  
[1] = Enabled
- 3 Press HOLD to save the entry. Confirmation tone is heard.



*Disabling the privacy feature **may** be limited by **federal, state, and local law**, so check the relevant laws in your area before disabling privacy.*

For Single Line Telephones:

- 1 Enter a 1-digit value on the dial pad to enable/disable the camp-on feature.  
[0] = No Camp-on is allowed  
[1] = Camp On is allowed
- 2 Press HOLD to save the entry. Confirmation tone is heard.

## Description

The system provides privacy on all communications in the system which prevents other stations from accidentally entering an existing conversation. However, the system provides, on a per station basis, the ability for a station to join an existing outside CO line conversation. Each station can be granted the privilege to join an existing CO line conversation by simply pressing the CO line button of a CO line in use. The Privacy flag when enabled on SLT type stations allows/denies Camp-on requests to the SLT. This can be useful in situations where a modem is using the SLT port for data transmission. Disabling this feature lets data transfer proceed without being interrupted with a camp on tone.



- ❖ Both the station and the CO Line must have Privacy disabled before the system allows cut-through.
- ❖ If Privacy is disabled and a station joins an existing call, a programmable warning tone is presented to both parties prior to actual cut-through.
- ❖ If Privacy is disabled, up to eight other stations may join in on an existing conversation.





Privacy is enabled for all stations in default.

Station Attempting to Access CO Line	CO Line in Use by Another Station	
	Privacy Enabled	Privacy Disabled
Privacy Enabled	Private (No Cut-through)	Private (No Cut-through)
Privacy Disabled	Private (No Cut-through)	Privacy Released (Cut-through Allowed)

Table 4-1: Station Privacy Flag

### System Speed Dial Access

#### Programming Steps

- 1 Press the SPEED flexible button (**FLASH 50, Page A, button #6**). The following message displays:

SYSTEM SPEED ENABLED	o- 1
-------------------------	------

- 2 Enter a 1-digit value on the dial pad to enable/disable the Speed Dial feature.  
[0] = Disabled  
[1] = Enabled
- 3 Press HOLD to save the entry. Confirmation tone is heard.

#### Description

Stations can be individually allowed or denied the ability to use system speed dial (20–99) numbers. The last 40 system speed numbers are not monitored by toll restriction. Stations cannot be prevented from using station speed dial. By default, System Speed Dialing is enabled at all stations.



## Line Queuing

### Programming Steps

- 1 Press the QUEUING flexible button (**FLASH 50, Page A, button #7**). The following message displays:

LINE QUEUING ENABLED	0-1
-------------------------	-----

- 2 Enter a 1-digit value on the dial pad to enable/disable the Line Queuing feature.  
[0] = Disabled  
[1] = Enabled
- 3 Press HOLD to save the entry. Confirmation tone is heard.

### Description

Stations can be allowed or denied the ability to manually queue for a busy group of CO lines. Even when disabled, stations have automatic LCR queuing privileges. By default, CO Line Queuing is enabled at all stations.

## Preferred Line Answer

### Programming Steps

- 1 Press the PREF LINE ANSWER flexible button (**FLASH 50, Page A, button #8**). The following message displays:

PREF LINE ANSWER ENABLED	0-1
-----------------------------	-----

- 2 Enter a 1-digit value on the dial pad to enable/disable the Preferred Line feature.  
[0] = Disabled  
[1] = Enabled
- 3 Press HOLD to save the entry. Confirmation tone is heard.

### Description

Stations can be given the ability to answer a call by simply going off-hook. By default, Preferred Line Answer is enabled on all stations.



## Off-Hook Voice Over (OHVO)

### Programming Steps

- 1 Press the OHVO flexible button (**FLASH 50, Page A, button #9**). The following message displays:

OFF HOOK VOICE OVER DISABLED	0-1
---------------------------------	-----

- 2 Enter a 1-digit value on the dial pad to enable/disable the Off-Hook Voice Over feature.  
[0] = Disabled  
[1] = Enabled
- 3 Press HOLD to save the entry. Confirmation tone is heard.

### Description

When enabled, this feature allows a digital station to receive OHVO while on a call. A station can be denied the ability to receive OHVO calls by disabling this feature. By default, Off-Hook Voice Over is disabled for all stations. The station must be in H or P mode to enable this feature.

## Call Forwarding

### Programming Steps

- 1 Press the CALL FORWARD flexible button (**FLASH 50, Page A, button #10**). The following message displays:

CALL FORWARD ENABLED	0-1
-------------------------	-----

- 2 Enter a 1-digit value on the dial pad to enable/disable the Call Forwarding feature.  
[0] = Disabled  
[1] = Enabled
- 3 Press HOLD to save the entry. Confirmation tone is heard.







## Description

Stations can be allowed or denied the ability to forward incoming CO calls, intercom calls, or transferred outside lines to another station or group. By default, Call Forwarding is enabled at all stations.

## Forced Least Cost Routing (LCR)

### Programming Steps

- 1 Press the FORCED LCR flexible button (**FLASH 50, Page A, button #11**). The following message displays:

FORCE LCR DISABLED	0-1
-----------------------	-----

- 2 Enter a 1-digit value on the dial pad to enable/disable the LCR feature.  
 [0] = Disabled  
 [1] = Enabled
- 3 Press HOLD to save the entry. Confirmation tone is heard.

## Description

Stations may be forced to place outgoing CO calls by use of LCR (dial [9]) to access an outside line. This lets the system administrator control dialing patterns and lines used for outgoing CO calls. This can be enabled/disabled on a per-station basis for additional flexibility and control. Forced LCR is optional (disabled) for all stations, and eliminates access to all other line groups.

## ACD Supervisor Monitor with Barge-In

### Programming Steps

- 1 Press the SUPV BARGE-IN flexible button (**FLASH 50, Page A, button #12**). The following message displays:

ACD SUPV BARGE IN DISABLED	0-1	1
-------------------------------	-----	---

- 2 Enter a 1-digit value on the dial pad to enable/disable the ACD Supervisor feature.  
 [0] = Disabled  
 [1] = Enabled





- 3 Press HOLD to save the entry. Confirmation tone is heard,



The use of Supervisor Monitor with Barge-In is limited by *federal* law and *may also be limited or prohibited by state or local law, so check the relevant laws in your area before employing these features.*

A change in volume may occur on the CO line or intercom call offer the *barge-in occurs.*

## Description

***This feature is available with optional software.*** The ACD Supervisor Monitor with Barge-In feature provides a means for an ACD Supervisor to monitor an agent's call in progress to coach sales techniques or customer relations skills. When used, a supervisor may intrude into an agent's call in a listen-only mode or in a true conference mode. Prior to barge-in, a supervisor must log into the agent's group using the supervisor log-in code 576XXX. This feature is available with or without a warning tone. By default, the Supervisor Monitor with Barge-In feature is disabled.



*Executive Override is a system feature and, therefore, takes precedence over this feature.* If Supervisor Monitor with Barge-In is used *properly*, *Executive Override MUST be disabled.* Otherwise, the barge-in is performed with the MUTE button OFF.

## Executive Override Blocking

- 1 Programming Steps
- 2 Press the EXECUTIVE OVERRIDE BLOCKING flexible button (**FLASH 50, Page A, button #13**). The following message displays:

EXEC OVERRIDE BLOCK	0-1
ENABLED	

- 3 Enter a 1-digit value on the dial pad to enable/disable the Exec Override Block feature.  
[0] = Disabled  
[1] = Enabled
- 4 Press HOLD to save the entry. Confirmation tone is heard.





### Description

The Executive Override Feature has a separate condition added to it that allows or disallows an Executive to override an extension. This prevents an extension with override capability from overriding an Executive's station. By default, Executive Override is enabled at all stations.



*The Executive Override blocking feature also blocks an ACD Supervisor Monitor with Barge-in.*

## CO Line Ringing Options

### Programming Steps

- 1 Press the RINGING OPTIONS flexible button (**FLASH 50, Page A, button #14**). The following message displays:

CO RING OPTIONS	0-1
MUTED RING	

- 2 Enter a 1-digit value on the dial pad to enable/disable the Ringing Options feature.  
 [0] = Reminder Ring  
 [1] = Muted Ring
- 3 Press HOLD to save the entry. Confirmation tone is heard.

### Description

When a CO call rings at a busy station, the call rings at the station using a muted ring signal. This option lets a user receive a reminder ring at his station, instead of muted ring. In addition, a reminder ring timer has also been added to the system to provide the reminder ring every time the timer expires, for as long as the incoming CO line has not been disconnected. By default, Muted Ringing is allowed at all stations.





## Name / Number Display at Idle

### Programming Steps

- 1 Press the NAME/NUMBER DISPLAY flexible button (**FLASH 50, Page A, button #15**). The following message displays:

NAME AT IDLE ICD	0-1
NAME	

- 2 Enter a 1-digit value on the dial pad to enable/disable the Name/Number feature.  
[0] = Name  
[1] = Station Number
- 3 Press HOLD to save the entry. Confirmation tone is heard.

### Description

This feature displays the standard idle LCD showing the programmed 7-digit name and station number together. This option is programmable on a per station basis, however, the feature must be enabled / disabled in admin programming. If a station has this feature enabled but has not programmed a name, the name portion of the LCD is blank. The idle display priority is UCD/ACD, Hunt, Station/Name, or Station. By default, the Name and Station number display on the LCD.

## Page B Introduction

### Programming Steps

If the system is in the programming mode, continue using the program codes. If starting to program here, enter the programming mode.

- 1 Press **FLASH** and dial **[50]**. The following message displays:

STATION ATTRIBUTES
SELECT A STATION RANGE

- 2 Enter a 6-digit number for the station range being programmed. If one station is being programmed, enter that number twice, e.g., **[100100]**.





If HOLD is pressed without entering a station range, all stations (100-131) are selected.

- 3 Press **HOLD** to save the entry. A confirmation tone is heard and the display updates. Flexible button #24 (New Range) is lit.
- 4 Press [PG B] button. The current programming for those features displays as:

XXX-XXX PAGE B  
 ENTER BUTTON NUMBER I

Where:

XXX = Station Range (100-131)

## Description

This section describes the steps and procedures necessary to program station attributes. Range programming enables the programmer to change a specific parameter or a few parameters for a range of stations, leaving intact the remaining data fields not requiring changes. Those data fields continue to operate with the previously programmed data.

When programming the Page B features, the flexible buttons are mapped as follows:

STATION ID * [ 1 ] Q	DAYCLASS OF SERVICE * [ 2 ] W	NIGHT CLASS OF SERVICE * [ 3 ] E	SPEAKER-PHONE * [ 4 ] R
GROUP PICKUP * [ 5 ] T	PAGING ZONES * [ 6 ] Y	PRESET FORWARD * [ 7 ] U	CO LINE GROUP ACCESS * [ 8 ] I
LCR CLASS OF SERVICE * [ 9 ] O	OFF-HOOK PREFERENCE * [ 10 ] P	BUTTON ASSIGN * [ 11 ] A	KEY SET MODE * [ 12 ] S
VMID TRANSLATION * [ 13 ] D	DISPLAY BUTTONS * [ 14 ] F	* [ 15 ] G	* [ 16 ] H
CKTU * [ 17 ] J	* [ 18 ] K	PAGE A * [ 19 ] L	PAGE B * [ 20 ] :
PAGE C * [ 21 ] Z	NEXT (FWD) * [ 22 ] X	NEXT (BACK) * [ 23 ] C	NEW RANGE * [ 24 ] V



## Station Identification

### Programming Steps

- 1 Press the STATION ID flexible button (**FLASH 50, Page B, button #1**).



- 1 Enter a 1, 2, 3 or 4-digit value on the dial pad to identify the type of terminal:
  - [000] or [0] = 24-Button Terminal
  - [1] = DSS Console
  - [6] = SLT without Message Wait
  - [7] = SLT with Message Wait
  - [007] = 12-Button Terminal
  - [008] = 8-Button Terminal
- 2 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

Each system port must be programmed to identify the type of station that operate on that port. Each station type must be identified. By default, all Key Telephone Boards (DTIB) default to ID 0 (24-Button Digital Terminal), all Single Line Boards (SLIB) default to ID 6.



When identifying a station as a DSS / DLS console, you must also enter *the station number of the key telephone to which the DSS / DLS console is associated*. To associate a DSS console with Station 100, the entry would be 1100 [HOLD].

## Station ID for DSS / DLS Console with Map

### Programming Steps

- 1 Dial [1] on the dial pad.
- 2 Enter the 3-digit station number (100-131) to which the DSS/DLS Console is associated.
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.



STATION ID                      0-7 DSS MAP X ASSOC XXX
--

Where:

x =1

XXX = Station Range (100-131)

MAP #1 by default has all 12 CO Lines and all 32 Stations, 100-131. This provides a default layout for a 12x32 configuration. Station/Feature buttons are flexible and can be changed by the station user. CO Line buttons are NOT changeable.

CO1	CO2	CO3	CO4
CO5	CO6	CO7	CO8
CO9	CO10	CO11	CO12
100	101	102	103
104	105	106	107
108	109	110	111
112	113	114	115
116	117	118	119
120	121	122	123
124	125	126	127
128	129	130	131
Call Park 430	Call Park 431	Ext Page	RLS



## SLT Station ID

### Programming Steps

- 1 Dial [6] on the dial pad.
- 2 Press HOLD to save the entry. A confirmation tone is heard and the display updates.



### Description

The STARPLUS Triad-S™ system supports industry standard 2500-type (DTMF) single line instruments. When the CSIB is installed in the system, a maximum of 24 single line telephones are supported,

## SLT with Message Waiting Lamp Station ID

### Programming Steps

- 1 Dial [7] on the dial pad.
- 2 Press HOLD to save the entry. A confirmation tone is heard and the display updates,



### Description

The Triad-S system supports industry standard 2500-Type (DTMF) single line instruments. When the CSIB is installed in the system, a maximum of 8 single line telephones may be supported. The Triad-S system supports up to 24 single line telephones.



*Triad-S system sends 90V DC to SL Ts with message waiting lamps.*





# Station Day Class of Service (COS)

## Programming Steps

- 1 Press the DAY COS flexible button (**FLASH 50, Page B, button #2**).

DAY COS	1-6
1	

The six classes of service are:

COS 1 = No restrictions.

COS 2 = Table A governs

COS 3 = Table B governs

COS 4 = Table A and B govern

COS 5 = Restricts [0], [1], [\*], [#] dialed as first-digit and places a 7-digit maximum.

COS 6 = Intercom Only (no CO line access - will result in **911 block**)

- 2 Press HOLD to save the entry. A confirmation tone is heard and the display updates.





### Description

Each station must be assigned a certain COS for Day Mode operation and for Night Mode operation. Class of Service (COS) determines the station's dialing privileges. By default, all stations are assigned a COS 1 for Day Mode.

		CO LINE CLASS OF SERVICE				
		1	2	3	4	5
S T A T I O N  C O S	1	Unrestricted	Unrestricted	Unrestricted	Canned Restricted*	Unrestricted
	2	Table A	Table A	Unrestricted	Canned Restricted*	Unrestricted
	3	Table B	Unrestricted	Table B	Canned Restricted*	Unrestricted
	4	Table A&B	Table A	Table B	Canned Restricted*	Unrestricted
	5	Canned Restricted*	Canned Restricted*	Canned Restricted*	Canned Restricted*	Unrestricted
	6	Intercom Only	Intercom Only	Intercom Only	Intercom Only	Intercom Only

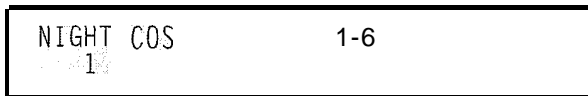
\* Canned Restriction: No [0], [1], [#], [\*] as first dialed digit, and 7-digit dialing /imitation; plus 1-800, 1911, 1611 are allowed, and 411, 976, and 555 numbers are denied.

Table 4-2: Class of Service (COS)

### Station Night Class of Service (COS)

#### Programming Steps

- 1 Press the NIGHT COS flexible button **(FLASH 50, Page B, button #3)**.



The six classes of service are:

COS 1 = No restrictions.

COS 2 = Table A governs

COS 3 = Table B governs

COS 4 = Table A and B govern

COS 5 = Restricts [0], [1], [\*], [#] dialed as first-digit and places a 7-digit maximum.





COS 6 = Intercom Only (no CO line access - will result in 911 **block**)

- 2 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

## Description

Each station must be assigned a COS for Night Mode operation. The Night COS goes into affect when the system is manually or automatically placed into Night Mode. This prevents misuse of phones after hours. Class of Service (COS) determines the station's dialing privileges. By default, all stations are assigned a COS 1 for Night Mode. Refer to *Table 4-2: Class of Service (COS)*.

## Speakerphone / Headset

### Programming Steps

- 1 Press the SPEAKERPHONE flexible button (**FLASH 50, Page B, button #4**). The following message displays:

SPEAKERPHONE                      0-2 FULL SPEAKERPHONE
--

- 2 Enter a I-digit value on the dial pad to identify the speakerphone operation.
  - [0]= Works as normal speakerphone. Full speakerphone capabilities on CO lines and Intercom.
  - [1] = Speakerphone enabled for intercom calls only. Speakerphone capabilities disabled for outgoing CO line calls (monitoring and on-hook dialing are still permitted).
  - [2] = Permits toggling of speakerphone and headset operation via the [634] Headset code.
- 3 Forces the telephone to always ring in the tone intercom mode.
- 4 Forces the telephone to the hand-free intercom mode always.
- 5 Press HOLD to save the entry. A confirmation tone is heard.

## Description

Speakerphones are programmable. By default, all stations are assigned an ID of 0 (Full Speakerphone).



## Pickup Group(s)

### Programming Steps

- 1 Press the GROUP PICKUP flexible button **(FLASH 50, Page B, button #5)**. The following message displays:

PICKUP GROUPS	o-4
1	

- 2 Enter a 1-4 digit number to program pickup groups.
  - [0] = No Group
  - [1] = Group 1
  - [2] = Group 2
  - [3] = Group 3
  - [4] = Group 4
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates,

### Description

Stations are assigned to pick-up groups. Stations can be in any combination of the four groups or in no group at all. By default, all stations are in Group **1**.

## Paging Zone(s)

### Programming Steps

- 1 Press the PAGING ZONES flexible button **(FLASH 50, Page B, button #6)**. The following message displays:

PAGE ZONE	o-4
1	

- 2 Enter a 1-4 digit number to program paging zone(s).
  - [0] = No Zone (no pages received)
  - [1] = Zone 1
  - [2] = Zone 2
  - [3] = Zone 3
  - [4] = Zone 4





- Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description



Stations are assigned to internal paging zones. A station can be in any or all zones or in no zone at all. All Call is all page zones combined. If a station is not in an internal zone, it is excluded from all call pages. Stations not assigned to a page group can make page announcements if allowed in station programming. Stations can be assigned to a page group to receive pages but cannot make pages, All stations are in Zone 1.

### Preset Call Forward

#### Programming Steps

- Press the PRESET FORWARD flexible button (**FLASH 50, Page B, button #7**). The following message displays:



- Enter a 3-digit entry to determine the destination where calls must be routed when the Preset Forward Timer expires.

Valid 3 digit destinations are:

[020-099] = System Speed Bins 20-99 for off-net forwarding

[100-131] = Triad-S Extension Numbers

[440-447] = Voice Mail Groups I-8

[450-457] = Hunt Groups I-8

[550-557] = UCD Groups I-8

[550-565] = ACD Groups 1-16

- Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description



This feature lets the system database be configured so incoming CO Lines, programmed to ring at a particular station, can be forwarded elsewhere in the system predetermined by programming. This feature is active if the station ringing is not answered in a specified time. This is particularly useful in overflow applications where a Voice Mail or Auto Attendant may be in use. A station may have one designated preset forward location defined in the database.

Preset Call Forward only can be chained to other preset forward stations specified in the database (up to five stations), If a CO Line forwarded by Preset Call Forward encounters a manually forwarded station (Call





Forward – Station), or a station in DND, the incoming CO Line bypasses that station and forwards to the next in the chain. If that station is the last in the chain, the call forwards no further and continues to ring at that station until answered or terminated. Chainable Preset Call Forwarding forces the incoming CO Line to ring at each station preassigned in the database for the Preset Forward Ring Timer [FLASH 01] [Button 5], specified in the database, before forwarding.

CO Lines can be preset forwarded to ring into an ACD, UCD, Voice Mail, Hunt Group or Off-Net via speed dial from any station. A CO Line does not preset forward to a busy Hunt, Voice Mail, ACD, or UCD Group. Each time the preset forward timer expires (for a total of five attempts), the group is checked for an idle station. If a member of the group is idle, the call is presented to that member. No preset forward destinations are programmed.

## CO Line Group Access

### Programming Steps

- 1 Press the CO LINE GROUP ACCESS flexible button (**FLASH 50, Page B, button #8**)  
The following message displays:

LINE GROUP ACCESS	0-7
1	

- 2 Enter up to seven digits (0, or 1-7) for the outside line groups the station to access.
  - [0] = No Access (911 Calls disallowed/blocked)
  - [1] = Access to Group 1, Code 9 or 81
  - [2] = Access to Group 2, Code 82
  - [3] = Access to Group 3, Code 83
  - [4] = Access to Group 4, Code 84
  - [5] = Access to Group 5, Code 85
  - [6] = Access to Group 6, Code 86
  - [7] = Access to Group 7, Code 87
- 3 Press HOLD to save the entry. A confirmation tone is heard and the **display updates**.

### Description

A station can access any combination of outside line groups, or a station may not be allowed access to outside lines. CO line groups are used primarily by single line telephones or for flexible buttons assigned as pooled group buttons on a Key Telephone. B Stations are allowed access to Group 1.



## LCR Class of Service (COS)

### Programming Steps

- 1 Press the LCR COS flexible button (**FLASH 50, Page B, button #9**). The following message displays:

LCROCLASS OF SERVICE	0-6
----------------------	-----

- 2 Enter a 1 -digit number (0-6) to correspond to the LCR Class of Service desired.
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

Stations can be given a class of service assignment for Least Cost Routing. The range is between **0-6**, with 0 being unrestricted and **6** the most restricted. A station can use LCR routes with a priority number equal to or higher than the stations LCR COS assignment. Stations are given unrestricted access (0).

## Off -Hook Preference

### Programming Steps

- 1 Press the OFF-HOOK PREF flexible button (**FLASH 50, Page B, button #10**). The following message displays:

OFFHOOK PREFENCE BTN	XXY
00 ENABLED	I

- 2 Enter the 2-digit button number (01-24) or (00) to indicate no specific button is preferred. SLTs use [01] to enable or [00] to disable.
- 3 Enter one of the following:  
 [ 0 ] = Disables programmable preference so users may not change the of f-hook preference as set in programming. Also use for SLT stations.  
 [1]= Enables programmable preference to key station users so that they may change the off -hook preference through a user dial code.
- 4 Press HOLD to save the entry. A confirmation tone is heard and the display updates.





## Description

This lets a key station user automatically have a flex button selected when going off-hook or when pressing the ON/OFF button. An SLT user may have a particular CO line or a CO line group selected automatically when going off-hook. This may be established in programming so that key station users can select and/or change their off-hook preference through the use of a dial code [691] + BB (01-24). Dialing [691] +00 disables Off-Hook Preference. This user programmable preference may be allowed or denied in programming.

When establishing an off-hook preference for SLT stations, it is necessary to program the SLTs CO line, or line group, to access when going off-hook, using a flex button programming procedure. By default, all digital terminals can change their preference but no button is assigned (00). SLT stations cannot use this feature.

## Flexible Button

### Programming Steps

- 1 Press the BUTTON ASSIGN flexible button (**FLASH 50, Page B, button #11**). The following message displays:

```

FLEX BUTTON PROG
ENTER BUTTON DATA
  
```

- 2 Enter the **2-digit** button number [01-24] to program followed by the desired button function as follows:

- [0] = Flexible/user changeable
- [1] = CO line
- [2] = Loop button/all-purpose CO appearance
- [3] = Pool for specific groups
- [4] = Direct feature programmable
- [#] = Locks button

## Description

Each Digital terminal has 8, 12 or 24 flexible buttons that can be programmed. One of the following five operations can be selected in programming for each button.







To assign a button as a Flexible button (user programmable):

- 1 Enter [BB], [0], [HOLD].



When a button is assigned as a flexible button [0], the user can program any features or functions on the buttons to which they have access.

To assign a button as a CO Line button:

- 1 Enter [BB], [1], [LLL], [HOLD]

Where: LLL = CO Line 001-012

Example:

03	1	003	
02	1	002	
<b>01</b>	<b>1</b>	<b>001</b>	<b>HOLD</b>
Button	CO	CO	
Number	Code	Line	

Buttons assigned as specific CO lines provide direct access and appearance of the CO line at a station. The station receives call status indications such as LED flash rates for incoming ringing when the line is placed on HOLD, etc. CO Line ringing is programmed in CO Line Attribute programming.

To assign a button as a Loop button:

- 1 Enter [BB], [2], [HOLD]

Example:

02	2	<b>HOLD</b>
Button	Loop	
Number	Code	

Used for a station without direct CO line appearance to answer the line ringing in or transferred to the station. It is recommended that all stations be given a loop button so they can receive a transferred call on a line for which they have no button access.



To assign a button as a Pool Group button:

- 1 Enter [BB], [3], [G], [HOLD]

Where: G = Line Group Number (1-7)





Example:

20	3	1	HOLD
Button	Pool	Line	
Number	Code	Group	

Some or all outside CO lines may be grouped together and accessed via a POOL button for the purpose of placing an outgoing CO call. Pressing this button accesses the highest numbered unused CO line in that CO line group.

To assign a button as a Feature button (admin programmable):

1 Enter [BB], [4], [XXX], [HOLD]

This feature enables flexible buttons to be programmed from a remote location, Range programming can be used to assign these buttons to multiple stations. When a button is assigned as a feature button [4], the programmer can program any features on the buttons.

To unassign (lock out) a button:

1 Enter [BB], [#], [HOLD]

If SLT stations must be programmed for off-hook preference, program the desired CO line, or CO line group the SLT must access when going off-hook.

To assign a CO line for an SLT with off-hook preference:

1 Enter [01], [I], [LLL], [HOLD]

Where: LLL = CO Lines (001-012)

To assign a CO Line Group for an SLT with off-hook preference:

1 Enter [01], [3], [G], [HOLD]

Where: G = Line Group Number (1-7)





Code	Description	Code	Description
570+[XXX]	ACD Call Qualifier	643	Repeat Redial
579+[XXX]	ACD Calls in Queue Display	694	Custom Message
571	ACD Logout	644+[IDX]	Mailbox Button (IDX = 001-255)
572+[XXX] A	C D Login	645	Intercom Button
573	ACD Member Status	646+[XXX]	Call Coverage (Ringing)
574	ACD Supervisor Help	647+[XXX]	Call Coverage (Non-Ringing)
575+[XXX]	ACD Supervisor Logout	649+[44V]	One-touch Recording (VM 440-447)
576+[XXX]	ACD Supervisor Login	653	Caller ID Name/Number Toggle
577+[XXX]	ACD Supervisor Status	654+[ 0, I]	Answering Machine Emulation
607	Attendant Available / Unavailable	709	LCR
601	Attendant Override	695+[01-35]	Distinctive Ringing (Station)
622	Call Back	770	All Call Page
438	Call Park (Personal)	633+[XX]	Personalized Message
430-437	Call Park (System)	632	Background Music
624	Conference	771-774	Internal Zone Page
603	CO Off-Net Forward	703	Universal Day / Night Answer
602	Disable CO Outgoing	700	Group Pickup
625	Executive Override	775	Internal All Call
450-457	Hunt Groups	634	Headset Mode
621	Line Queue	760	External Page
626	LCR Queue Cancel	777	Meet Me Page
604	Night Service	706	Dial by Name
578	Overflow Available / Unavailable	680	Speed Dial Directory
000-019	Station Speed Bins	627	Account Code

Table 4-3: Flex Button Codes for Remote Programming



Code	Description	Code	Description
020-099	System Speed Bins	628	OHVO
100-131	Triad-S DSS	631	Do Not Disturb
566	UCDIACD Available/Unavailable	640	Call Forward
567	UCD/ACD Calls in Queue	641	Release Key
440-447	VM Pilot Groups	635	ICLID Unanswered Call

Table 4-3: Flex Button Codes for Remote Programming

Specific buttons may be assigned as unused or locked out. When a button is programmed as unused, the button may not be programmed by the station user using flex button programming procedures.

24-Button Digital Keypad Default:

<b>STA 100</b> * <b>1</b> <b>Q</b> <b>STA 104</b> * <b>5</b> <b>T</b> <b>STA 108</b> * <b>9</b> <b>O</b> c o 1 * <b>13</b> <b>D</b> c o 5 * <b>17</b> <b>J</b> <b>CALL BACK</b> * <b>21</b> <b>Z</b>	<b>STA 101</b> * <b>2</b> <b>W</b> <b>STA 105</b> * <b>6</b> <b>Y</b> <b>STA 109</b> * <b>10</b> <b>P</b> c o 2 * <b>14</b> <b>F</b> CO6 * <b>18</b> <b>K</b> <b>PICKUP</b> * <b>22</b> <b>X</b>	<b>STA 102</b> * <b>3</b> <b>E</b> <b>STA 106</b> * <b>7</b> <b>U</b> <b>STA 110</b> * <b>11</b> <b>A</b> c o 3 * <b>15</b> <b>G</b> <b>LOOP</b> * <b>19</b> <b>L</b> <b>DND</b> * <b>23</b> <b>C</b>	<b>STA 103</b> * <b>4</b> <b>R</b> <b>STA 107</b> * <b>8</b> <b>I</b> <b>STA 111</b> * <b>12</b> <b>S</b> c o 4 * <b>16</b> <b>H</b> <b>POOL</b> * <b>20</b> <b>:</b> <b>LINE QUEUE</b> * <b>24</b> <b>V</b>
---	---	--	---

12-Button Digital Keypad Default:

<b>STA 100</b> * <b>1</b> <b>Q</b> c o 1 * <b>5</b> <b>T</b> <b>CALL BACK</b> * <b>9</b> <b>O</b>	<b>STA 101</b> * <b>2</b> <b>W</b> c o 2 * <b>6</b> <b>Y</b> <b>PICKUP</b> * <b>10</b> <b>P</b>	<b>STA 102</b> * <b>3</b> <b>E</b> <b>LOOP</b> * <b>7</b> <b>U</b> <b>DND</b> * <b>11</b> <b>A</b>	<b>STA 103</b> * <b>4</b> <b>R</b> <b>POOL</b> * <b>8</b> <b>I</b> <b>LINE QUEUE</b> * <b>12</b> <b>S</b>
--	--	---	--





&Button-Digital Keypad Default:

<b>STA 100</b> * <input type="text" value="17"/> <b>J</b>	<b>STA 101</b> * <input type="text" value="18"/> <b>K</b>	<b>LOOP</b> * <input type="text" value="19"/> <b>L</b>	<b>POOL</b> * <input type="text" value="20"/> <b>.</b>
<b>CALL BACK</b> * <input type="text" value="21"/> <b>Z</b>	<b>PICKUP</b> * <input type="text" value="22"/> <b>X</b>	<b>DND</b> * <input type="text" value="23"/> <b>C</b>	<b>LINE QUEUE</b> * <input type="text" value="24"/> <b>V</b>

## Keypad Mode

### Programming Steps

- 1 Press the **KEYSET MODE** flexible button (**FLASH 50, Page B, button #12**). The following message displays:

KEYSET MODE                    o-4  
 INACTIVE MODE

- 2 Enter a 1-digit number to change the mode of a digital terminal:
  - [0] = Inactive Mode (normal mode without CTI box)
  - [1] = PC Phone Mode at 4800 baud
  - [2] = ATD Command Mode at 4800 baud
  - [3] = ATH Command Mode at 4800 baud
  - [4] = CKTU Mode
- 3 Press **HOLD** to save the entry. A confirmation tone is heard and the display updates.

### Description

This feature lets the station user determine the mode in which the Digital Terminal with CTI Box (optional) operates. The 5 modes are: Inactive, PC Phone, ATD Command, ATH Command and CKTU. Through the use of a dial code, the station user can also determine the baud rate for each mode selected. This setting is stored in back-up memory in the event of a power outage or system reset.

By default, keypad is set for Inactive Mode.



## Voicemail ID Translation

### Programming Steps

- 1 Press the VMID TRANSLATION flexible button (**FLASH 50, Page B, button #13**). The following message displays:

VOICEMAIL ID	0000-9999
0100	

- 2 Enter a four-digit VMID number which corresponds to 0000 to 9999.
- 3 Press HOLD to update the table. A confirmation tone is heard and the display updates.

### Description

This feature enables programming of the station number sent to the Voice Mail via In-Band integration. By default, the station number is sent to the Voice Mail system. In station programming, there is a field to insert a \$-digit entry (0000-9999) which can be sent to the Voice Mail system in place of the station number. By default, Station Numbers are assigned as VMID Digits.

## Display Flexible Buttons

### Programming Steps

- 1 Press the DISPLAY BUTTONS flexible button (**FLASH 50, Page B, button #14**). The programming assignment on four buttons display starting with the lowest button number.
- 2 Each time the DISPLAY BUTTONS button is subsequently pressed, the next four buttons display. The following message displays:

BUTTONS	XXX-YYY	01D100
02D101	03D103	04D104

Where:

XXX = Station Number

BB = Button Number

YYY = Button Function (See Table 4-4)

### Description

Press the display button (FLASH 50, Page B, button **#14**) to display programming assignments. Each time the DISPLAY BUTTONS button is subsequently pressed, the next four buttons display.





When a button is assigned as a flexible button [0], the user can program any features or functions on the buttons to which he has access. When the buttons are programmed with user programmed functions, the display shows the function assigned to the button.

Flex But- ton	Designation	Flex But- ton	Designation
A[AAA]	ACD Group with Pilot Number		
ACC	Account Code Enter	IP[N]	Internal Page with Zone
ACP	All Call Page	LCR	LCR Access
ALI	Agent Login	LP	Loop
ALO	Agent Logout	IAC	Internal All Call Page
AMD	Agent Member Display	LNR	Last Number Redial
ANS	Answering Machine Emulation Mode	LQU	Line Queue
AOR	Attendant Override (attn)	M[ZZ]	Personalized Message with Message Number
AVL	ACD or UCD Available / Unavailable	MMP	Meet Me Page
CBK	Call Back	MUL	Flexible Button
CID	Caller ID Name / Number Toggle	MUS	Background Music
CIQ	ACD or UCD Calls in Queue	NTS	Night Service
CO[LLL]	CO Line Button (CO Line [LLL])	OFD	ACD Overflow Station Available / Unavailable
CQD	ACD Calls in Queue Display	OHP	Off -Hook Preference
D[XXX]	Station DSS / BLF	OHV	Off -Hook Voice Over
DND	Do Not Disturb	P[CCC]	Call Park with Park Location
DRG	Distinctive Ringing	PKU	Pickup
DUA	Display Unanswered Calls	PL[G]	Pool with CO Line Group Number
EAC	External All Call	PPK	Personal Park

Table 4-4: Flex Button Display Designations



Flex But- ton	Designation	Flex But- ton	Designation
EOR	Executive Override	S[YY]	Speed Dial Button with Bin Number
EP[N]	External Page with Zone	SLI	Supervisor Login
FFW	Incoming Transfer CO Line	SLO	Supervisor Logout
H[ HHH]	Hunt Group with Pilot Number	SNR	Save Number Redial
HLP	Agent Help	STS	Supervisor Status Display
HST	Headset Mode	U[UUU]	UCD Group with Pilot Number
IAC	Internal All Call Page	UNA	Universal Night Answer
		V[VVV]	VM Group with Pilot Number
[LLL]	CO Line Number	[AAA]	ACD Group Pilot Number
[G]	Pool or CO Line Group Number	[UUU]	UCD Group Pilot Number
[XXX]	Station Number	[VVV]	Voicemail Group Number
[HHH]	Hunt Group Number	[ZZ]	Personalized Message Number
[CCC]	Call Park Location	[YY]	Speed Dial Bin
[N]	Page Zone Number		

Table 4-4: Flex Button Display Designations





## Cordless KTU Feature Button

### Programming Steps

To assign FEAT Buttons on the Cordless KTU (CKTU) :

- 1 Press the Cordless Key Flexible Button (Flash 50, Page B, Button #17). The following message displays:

CORDLESS KEY BTN	00-24
xx	l

Where XX = the assigned FEAT Button

00 = None

01-24 = Button 1-24

### Description

If a CKTU is associated with the station, the FEAT Button on the CKTU may be assigned to function as any one (1) of the 24 Flexible Buttons on the telephone. This programming area defines which Flexible Button on the telephone will be applied to the CKTU FEAT Button. Not all features are available to be assigned to the CKTU FEAT button. By default, no button (00) is assigned to the FEAT.





# 5 ICLID Route Programming

## Introduction

The ICLID (**Incoming Calling Line Identification**) feature was added to the STARPLUS Triad-S™ System. For this feature to operate properly, it must be activated from the Central Office so the numbers or name, if available, of the calling party are delivered over the individual tip and ring of the CO lines during the first silent interval between ringing.

## Calling Number / Name Display

This feature is the basic offering of the ICLID service when associated with the Triad-S System. Essentially, whenever an incoming call is received at the system, the number received with the ringing signal is stored in the line control tables and used during the call processing.

The primary function is that the calling number is displayed (if available) at any point at which the LINE RINGING message is displayed in the system.



*If two lines are ringing at the same time, the display shows the oldest line information. After one of the lines is answered, the display shows the information on the unanswered lines.*

Additionally, with the availability of the **calling name** feature, if the calling name is provided, it displays instead of the calling number. Note that although the Central Office delivery of the calling name is 12 characters, the internal table used to store the name for translation of a received number is 24 characters. If the Central Office delivers a name, it is positioned left justified in the 24-character field on the display. If a number is received that matches a number/name translation, the translated name is used and the name delivered from the Central Office is discarded.

```
000000000111111111122222
123456789012345678901234
```

```
bbbbbbNNNNNNNNNNNNNNNNNNbbbbbb
```



OR

XXXXXXXXXXXXXXXXXXXXXXXXXXXX
------------------------------

If no name is available, supplied from the Central Office or internally from the translation table, the delivered number is positioned centered in the display as shown above for the 14 Ns.

An option was added to the Local Number/Name Translation Table to route ICLID or Caller Entered ID Digits based on a partial compare with the number entered in the translation table.

### Incoming Number/Name for SMDR Records

When this feature is implemented, the system operates normally in the absence of ICLID information or the failure of the ICLID equipment. If the information is present at the time that an SMDR record is generated for a call, it alters the content and format of the SMDR output record.

- ❖ If the calling number is available, the number is output in the SMDR record in the same location as the dialed number is located in the outgoing call record.
- ❖ If the calling name is present, an additional line is output in the SMDR identifying the name, This record immediately follows the normal SMDR record. The normal SMDR record includes an indicator that states the following record with name identification is present.

Unanswered calls are recorded in the SMDR record for incoming calls with a U indicator to provide caller identification for statistical and call-back purposes.

### Unanswered Call Management Table

An Unanswered Call Management Table with 100 entry capacity for the DVX<sup>plus</sup> Digital System is maintained in the system. The calling number/name information pertaining to any unanswered call is placed in this table at the time the system determines the call was abandoned.

This table may be interrogated from any station user so that the unanswered calls may be reviewed and handled by the customer. Upon entering the review process, the functions available to a phone are:

Function	Function Button
1. Go to the beginning of table.	Dial Code 635
2. Review next item in this table entry.	MUTE
3. Step to next table entry.	HOLD



# ICLID Route Programming

## ICLID Ringing Assignments



4. Delete this table entry.	FLASH
5. Exit table review function.	ON/OFF
6. Step to previous table entry.	TRANSFER
7. Call Back	SPEED

# ICLID Ringing Assignments

## Programming Steps

If ICLID Ringing Assignments must be assigned or changed:

- 1 Press **FLASH** and dial **[43]**. The following message is shown on the display phone:

ROUTE 000 XXXY

Where:

000 = Route Number (000-252)

XXX = Ringing Destination

Y = Ringing Type

- 2 Press the RING ASSIGNMENT flexible button (**FLASH 43, button #1**). LED #1 is lit indicating Route 000 is ready for programming.
- 3 Enter the 3-digit destination (XXX) and the 1-digit ring type (Y) followed by HOLD. A confirmation tone is heard and the display updates.

Valid 3-Digit Destinations (XXX) are:

[020-099] = System Speed Bins 20-99, for Off-Net ringing.

[100-131] = Triad-S Extension Numbers

[440-447] = Voice Mail Groups 1-8

[450-457] = Hunt Groups 1-8

[499] = Direct Ringing to modem

[550-565] = ACD Groups 1-16

[550-557] = ACD Groups 1-8

Valid Ring Types (Y) are:

[0] = No Ring; unassigned; or to delete a station

[1] = Day Ring [D]



- [2] = Night Ring [N]
- [3] = Day/Night Ring [DN]
- [4] = Special Only [S]
- [5] = Day/Special [DS]
- [6] = Night/Special [NS]
- [7] = All Modes [Day/Night/Special [A]



### Description

ICLID Ringing Assignments let you change the ring assignment based on the incoming number received. This feature permits you to select from 252 ringing routes for each entry in the name to number translation table and DID table. For example, this feature could be used to re-route selected customers to a specific ACD or UCD group and bypass the general attendant. The Direct Inward Dialing (DID) feature permits one-way direct inward dialing access to stations on specific DID lines from the public telephone network, without going through an attendant answering position. DID capabilities refer to incoming calls only.

The system accepts 2-7 digits from the Central Office. This lets the number and name field of the LCD display on a DID call be presented to the ICLID port. Calls are identified in the SMDR field as answered (I) or Unanswered (U) followed by the DID number. At least one DTMF receiver must be installed.

#### RINGING ASSIGNMENTS

* [ 1 ] Q	* [ 2 ] W	* [ 3 ] E	* [ 4 ] R
* [ 5 ] T	* [ 6 ] Y	* [ 7 ] U	* [ 8 ] I
* [ 9 ] O	* [ 10 ] P	* [ 11 ] A	* [ 12 ] S
* [ 13 ] D	* [ 14 ] F	* [ 15 ] G	* [ 16 ] H

#### DISPLAY RINGING ASSIGNMENTS

#### NEXT ROUTE NUMBER

#### PREVIOUS ROUTE NUMBER

#### SELECT ROUTE NUMBER

* [ 17 ] J	* [ 18 ] K	* [ 19 ] L	* [ 20 ] :
* [ 21 ] Z	* [ 22 ] X	* [ 23 ] C	* [ 24 ] V





## View ICLID Ringing Assignments

### Programming Steps

If ICLID Ringing Assignments must be viewed:

- 1 Press FLASH 43, button **#17** to display ring assignments. Assignments are displayed in sets of six, up to the number programmed. Press FLASH 43, button **#17** additional times to cycle to the next group of six ring assignments.

```

ROUTE 000 DOORR OOORR
DDDRR DDDRR DDDRR DDDRR
    
```

Where:

DDD = Destination

RR:

[0] = No Ring

[D] = Day Ring

[N] = Night Ring

[DN] = Day/Night Ring

[S] = Special Only

[DS] = Day/Special

[NS] = Night/Special

[A] = All Modes (Day/Night/Special)

Multiple station assignments are accomplished by assigning another destination with ring status, DDDR, and pressing HOLD. This can be done for up to the maximum number of stations on the system.

Ring assignments are continuous and display in order of the destination number from 001-557.

- 1 A maximum of eight stations display. Additional stations and ringing assignments are displayed using button **#17**.

To advance to the next Route:

- 1 Press the NEXT flexible button (**FLASH 43, button #18**) to advance to the next ICLID Route number.

To go to a previous Route:

- 1 Press the PREVIOUS flexible button (FLASH 43, **button #19**) to return to the previous ICLID Route number.



To select a different Route:

- 1 Press the SELECT ROUTE NUMBER flexible button (FLASH 43, button **#20**) to select the desired route number.
- 2 Enter the 3-digit ICLID route number ([000–252] for Triad 1/2/3 Systems).
- 3 Press HOLD to change to the different route entered. A confirmation tone is heard.



## Description

Keysets designated to ring on an incoming CO line but not designated to ring on the ICLID ring, may receive a ring cycle before the call is moved. The same ringing restrictions applied to CO line ringing are applied to ICLID ringing. By default, no destinations or ringing assignments exist.

## ICLID Features

### Programming Steps

If ICLID to use:

- 1 Press FLASH and dial **[56]**. The following message is shown on the display phone:

ICLID	NAME	BAUD	PORT
NO	YES	9600	1

- 2 To program ICLID features, use the flexible button(s) as defined in the following procedures.
  - Button # 1 = Disable/Enable
  - Button # 2 = Name In Display
  - Button # 3 = Baud Rate Display
  - Button # 4 = Port Assignment
- 3 After all entries are made, press HOLD to accept the data.

The Triad-S system provides ICLID input on the standard RS-232C connector on the MPB, or to the optional SIU2 Module. When ICLID is desired, the following system-wide parameters determine how the ICLID information is distributed.







When entering the ICLID features programming area the buttons on the digital terminal are defined as shown below:

ENABLE / DISABLE	NAME	BAUD RATE	PORT
* [ 1 ] Q	* [ 2 ] W	* [ 3 ] E	* [ 4 ] R

## Enable / Disable

### Programming Steps

- 1 Press the DISABLE/ENABLE flexible button (**FLASH 56, button #1**).
- 2 Enter a 1-digit value on the dial pad to enable/disable this feature.  
[0] = Disabled  
[1] = Enabled
- 3 Press HOLD to save the entry. A confirmation tone is heard.

### Description

The ICLID (Incoming Calling Line **I**Dentification) feature was added to the Triad-S system. These features are unavailable unless the Basic ICLID Software package was purchased separately. For this feature to operate properly, it must be activated from the central office so the numbers of the calling party are delivered over the individual tip and ring of the CO lines during the first silent interval between ringing. By default, ICLID is disabled.

## Name in Display

### Programming Steps

- 1 Press the NAME flexible button (**FLASH 56, button #2**) to determine whether the name shows in the LCD display instead of the incoming telephone number.
- 2 Enter a 1-digit value on the dial pad.  
[0] = Telephone number in display  
[1] = Name in display
- 3 Press HOLD to save the entry. A confirmation tone is heard.

### Description

The system can be set to display the incoming telephone number or the person's name on the LCD display. By default, the system shows the telephone number on the LCD display.





## Baud Rate Display

### Programming Steps

The ICLID baud rate is programmed using Flash 15 baud rate assignments. The LCD displays the current baud rate based on which number is assigned to the ICLID Port number.

**FLASH 56, button #3** returns an error tone when pressed.

### Description

The Triad-S system can provide ICLID input on the standard RS-232C on the optional MISU. The baud rate is displayed as 150, 300,600, 1200, 2400, 4800, or 9600 baud.

## Port Assignment

### Programming Steps

- 1 Press the PORT flexible button (**FLASH 56. button #4**) to determine which port to use for ICLID information.
- 2 Enter a 1-digit entry for the ICLID Port number:  
 [1] = Port #1 (MPB RS-232C on optional MISU)  
 [2] = Port #2 (MPB RS-232C on optional MISU)  
 [3] = Port #3 (Optional modem)

The LCD displays the current baud rate based on which number is assigned to the ICLID Port number.

ICLID	NAME	BAUD	PORT
NO	YES	9600	1

- 3 Press HOLD to accept the data. A confirmation tone is heard and the display updates.





# 6 Automatic Call Distribution (ACD)



## ACD Group Programming

### Programming Steps

If the system is in the programming mode, continue using the program codes. If starting to program here, enter the programming mode. If ACD Groups must be assigned:

- 1 Press FLASH and dial [60]. The following message displays:

```

ACD5XXA  ALT  OVR  AN    SUP
          AAA  BBB  CCCC  DDD
  
```

Where:

[5XX] = ACD Group Number (550457)

[A] = Page A Parameters

[AAA] = Alternate ACD Group Assignment

[BBB] = ACD Overflow Assignment

[CCCC] = ACD Announcement Tables

[DDD] = ACD Supervisor Programming

- 2 The top left button in the flexible button field is lit for programming ACD Group 1 (550). To change ACD Groups or enter more ACD Groups (550-557), press the appropriate flexible button and perform the following procedures.

### Description

*This feature is available with optional software.* There can be 16 ACD groups of up to 16 stations each, The ACD groups use a pilot hunting technique. If the pilot number is dialed, the assigned stations in that ACD group are searched for the station in an idle condition for the longest period of time. Each ACD Group may have an assigned Alternate ACD Group, an Overflow station and up to 16 stations as ACD members. The eight system RAN ports (tables) may also be referenced on a per ACD group basis. By default, ACD Group Tables are empty.

When entering the ACD Group(s) programming area, the buttons on the digital terminal are defined as shown below:





ACD GROUP 550 * [ 1 ] Q	ACD GROUP 551 * [ 2 ] W	ACD GROUP 552 * [ 3 ] E	ACD GROUP 553 * [ 4 ] R
ACD GROUP 554 * [ 5 ] T	ACD GROUP 555 * [ 6 ] Y	ACD GROUP 556 * [ 7 ] U	ACD GROUP 557 * [ 8 ] I
ALTERNATIVE ACD GROUP * [ 9 ] O	ACD OVER- FLOW ASSIGN * [ 10 ] P	ANNOUNCEMENT TABLES * [ 11 ] A	ACD SUPV PROGRAMMING * [ 12 ] S
ACD WRAP-UP TIMER * [ 13 ] D	CIQ THRESHOLD * [ 14 ] F	* [ 15 ] G	* [ 16 ] H
DISPLAY STAS 1-8 * [ 17 ] J	SELECT PAGE A * [ 18 ] K	DISPLAY STAS 9-16 * [ 19 ] L	* [ 20 ] :
* [ 21 ] Z	* [ 22 ] X	* [ 23 ] C	* [ 24 ] V

## Alternate ACD Group Assignment

### Programming Steps

To program an alternate group:

- 1 Press the ALTERNATE ACD GROUP flexible button (**FLASH 60, button #9**).
- 2 Enter the 3-digit pilot number (550 to 557) of the desired alternate ACD group.

```
ACD5XXA ALT OVR' AN SUP
          AAA BBB CCCC DDD
```

- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

An alternate ACD group can be programmed so if no station in a group is available, the alternate group is checked for an available station. This provides a way to chain or link ACD groups together. To delete an Alternate ACD Group, press [#] three times and press HOLD.



## ACD Overflow Station Assignment

### Programming Steps

To program ACD Overflow station:

- 1 Press the OVERFLOW ASSIGN flexible button (**FLASH 60, button #10**).
- 2 Enter a 3-digit station number to designate the ACD Groups overflow station.

ACD5XXA	ALT	OVR	AN	SUP
	AAA	BBB	CCCC	DDD

- 3 Press HOLD to save the entry. A confirmation tone is heard and the **display updates**.

### Description

When an overflow station is assigned, callers that remain in queue for a specified amount of time are routed to the assigned overflow station. The overflow station may not be one of the ACD group stations. Only CO calls transferred to a ACD group overflow to the overflow station when RAN tables are assigned. To delete an Overflow Station, press [#] three times and press HOLD.

## ACD Recorded Announcement Assignment(s) (RAN)

### Programming Steps

To program a Recorded Announcement:

- 1 Press the ANNOUNCEMENT TABLES flexible button (**FLASH 60, button #11**).
- 2 Enter a four-digit sequence on the keypad:  
First Digit = RAN port specified for Guaranteed Message (Direct Calls)  
Second Digit = RAN port specified for primary message,  
Third Digit = RAN port specified for secondary message.  
Fourth Digit = RAN port specified for Guaranteed Message (transferred calls)
- 3 Press [#] once as the first digit if no Guaranteed Message is desired.

Example:

- ❖ An entry of [#], [2], [3] = No Guaranteed Message is heard. Announcement Table 2 provides a primary message and Announcement Table 3 provides a secondary message.



- ❖ An entry of [ 1], [2], [3] = Announcement Table 1 provides the Guaranteed Message upon initially answering the call, Announcement Table 2 provides a primary message and Announcement Table 3 provides a secondary message.
  - ❖ An entry of [8], [1], [2] = Announcement Table 8 provides the Guaranteed Message upon initially answering the call, Announcement Table 1 provides a primary message and Announcement Table 2 provides a secondary message.
- 4 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

To erase Recorded Announcement(s):

- 1 Press [#] four times and press HOLD.

ACD5XXA	ALT	OVR	AN	SUP
	AAA	BBB	CCCC	DDD

**Description**

Optional Recorded Announcement device(s) may be connected to the system to provide an announcement if all stations in a ACD group are busy. Up to eight ports in the system may be assigned to provide a path to Recorded Announcement devices. Incoming CO Callers are answered and routed to the Overflow assignment only if a RAN Table is assigned.

The Guaranteed Message announcement provides a means to force incoming callers to an announcement before being placed into an ACD Queue or routed to an agent. Outside callers are presented with a message before being routed to the ACD Group. Agents in an ACD Group with a Guaranteed Message enabled receive incoming callers only after the caller hears the designated recorded announcement in its entirety, or after the incoming caller dials up to 14 digits followed by (#). These digits are inserted as ICLID incoming number identification. If the Guaranteed Message announcement is programmed in Admin, incoming ACD calls are routed to the Guaranteed Message RAN before going to the ACD Group.

The Guaranteed RAN Enhancement allows a second guaranteed RAN type to be associated with each ACD Group in the system. This RAN handles only transferred CO calls. This lets a CO call transferred to an ACD Group enter caller entered ID digits via this RAN. The digits are then compared to the local name/number translation table and routed based on table entries. If no match is found, the call rings to the ACD Group. Intercom calls to the group pilot number result in a busy tone. Once the intercom caller hangs up to complete the transfer, the CO call is presented to the RAN device.





## ACD Supervisor

### Programming Steps



To program an ACD Supervisor:

- 1 Press the ACD SUPV flexible button (**FLASH 60, button #12**).
- 2 Enter the 3-digit station number of the desired ACD Supervisor station.

ACD5XXA	ALT	OVR	AN	SUP
	AAA	BBB	CCCC	DDD

- 3 Press HOLD to **save** the entry. A confirmation tone is heard and the display updates.

### Description

The ACD Supervisor Station assignment feature provides a means to assign each ACD group a supervisor. This Supervisor Station can receive the calls in queue display in real time, receives No Answer/Out of Service conditions, HELP displays from the groups to which the supervisor is assigned, and can barge-in on active calls in his ACD Group or groups.

A supervisor can be assigned in ADMIN to a group or groups to receive the help request and out of service (OOS) messages. If a supervisor station is assigned in ADMIN, it is considered logged in. In addition, a supervisor can dial a supervisor login code followed by the ACD group that the supervisor is logging into and his 4-digit ID number.

## ACD Auto Wrap-Up Timer

### Programming Steps

To change the ACD Auto Wrap-up Timer:

- 1 Press the AUTO-WRAP TIMER flexible button (**FLASH 60, button #13**). The following message displays:

ACD5XX	WRAP-UP	000-999
004		

- 2 Enter the 3-digit value on the dial pad which corresponds to 000-999 seconds.
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.





## Description

After completion of a ACD call (on-hook) the agent is not subjected to another ACD call for the duration of the Auto Wrap-Up Timer allowing the agent to finish call related work or access other facilities. This lets agents remove themselves from the group (e.g., DND, Call Forward) or originate another call. By default, the ACD Auto Wrap-Up Timer is set for 4 seconds and is variable from 000-999 seconds.

## ACD CIQ Threshold

### Programming Steps

To make a change to the CIQ Threshold:

- 1 Press the CIQ THRESHOLD flexible button (**FLASH 60, button #14**). The following message displays:

ACD5XXCIQ THRESHOLD	00-99
00	

- 2 Enter the 3-digit value on the dial pad that corresponds to 00-99 calls.
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

This feature determines how many calls appear in queue before the LED flashes at 240 ipm flutter. Once the number of calls in queue falls below the CIQ threshold, the LED extinguishes. By default, this feature is disabled.

### Conditions

- ❖ Any ACD station can have a button assigned to view the calls in queue of any ACD group.

## ACD Station Assignment(s)

### Programming Steps

To program stations into a ACD group:

- 1 Press the DISPLAY STAS 9-16 flexible button (**FLASH 60, button #19**). The following message displays.







```

ACD5XXB   ### ## ## ##
### ## ## ##
    
```

Where:

[5XX] = ACD Grp Number (550457)

[B] = Page B parameters

[###] = ACD Station assignments

- 2 The top left button in the flexible button field is lit for programming ACD Group 1 (550). To change ACD groups or enter further ACD groups (550-557), press the appropriate flexible button and perform the following procedures.
- 3 Enter the 3-digit station numbers of the stations in the ACD group in the order in which they are checked. The order is only relevant for the first call. After that, the rule is oldest idle. Up to 16 stations may be entered. No station entries are displayed at this time.
- 4 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

**Description**

Any type of station (excluding DSS/DLS Consoles) may be entered as valid ACD stations. Calls are routed to station in the order they are entered for the first round of calls only. After that the calls are routed to stations based on On-Hook time. The-station with the longest On-Hook time receives the next call. If a specific station number is dialed, only that station is rung; no distribution is done if that station is busy.

The buttons on the digital terminal are defined as shown below when entering the ACD Station Assignments programming area:

ACD GROUP 550	ACD GROUP 551	ACD GROUP 552	ACD GROUP 553
* [ 1 ] Q	* [ 2 ] W	* [ 3 ] E	* [ 4 ] R
ACD GROUP 554	ACD GROUP 555	ACD GROUP 556	ACD GROUP 557
* [ 5 ] T	* [ 6 ] Y	* [ 7 ] U	* [ 8 ] I
* [ 9 ] O	* [ 10 ] P	* [ 11 ] A	* [ 12 ] S
* [ 13 ] D	* [ 14 ] F	* [ 15 ] G	* [ 16 ] H
DISPLAY STAS	SELECT PAGE A	DISPLAY STAS	
1-8		9-16	
* [ 17 ] J	* [ 18 ] K	* [ 19 ] L	* [ 20 ] :
* [ 21 ] Z	* [ 22 ] X	* [ 23 ] C	* [ 24 ] V





To erase all stations, press [ # ] three times and press HOLD.



*If an ACD member is assigned to a specific ACD group and uses the **login-logout** codes to enter and exit an ACD group other than their own assigned group, the database programming for ACD stations is automatically changed to re **flect** the different group.*

*It is recommended that ACD agent station not be deleted from an ACD group through database administration when that station is in the Unavailable Mode. This causes the LCD to display unavailable even though the station is no longer part of the ACD group. The station can dial the 566 code to remove the message.*

## View ACD Station Assignments

### Programming Steps

If ACD Station Assignments in the second group of eight (Stations 9-16) must be viewed:

- 1 Press the DISPLAY STAS 1-8 flexible button (FLASH **60, Page B, button #17**). The first group of station assignments display. If no additional stations are assigned beyond the first eight stations, the display shows **(#)s** instead of station assignments.
- 2 Press DISPLAY STAS 9-16 flexible button (FLASH **60, button #19**) to view the second group of eight stations in the same ACD group.

### Description

Any time a display of the first group of ACD Station assignments (default or changed) is needed, press the DISPLAY STAS **1-8** button (button **#17**). It displays the first group of station assignments, up to eight stations at a time. Button **#19** always shows the second group of eight stations programmed in the ACD Group. Button **#17** always displays the first group of eight stations programmed in the same ACD Group.

## ACD Timers

### Programming Steps

If ACD timers must be changed:

- 1 Press **FLASH** and dial **[61]**. The following message displays:



ACD TIMERS ENTER BUTTON NUMBER
-----------------------------------

### Description

Six timers for ACD operation are programmable on a system-wide basis. The ACD timers include: A Ring Timer, Message Interval Timer, an Overflow Timer, a No/Answer Recall Timer, a No/Answer Retry Timer, and a Guaranteed Message Timer. Each timer is described in the following section:

The buttons on the digital terminal are defined as shown below when entering the ACD Timers programming area:

<b>RING TIMER</b>	<b>MIT TIMER</b>	<b>OVERFLOW TIMER</b>	
* <input type="text" value="1"/> <b>Q</b>	* <input type="text" value="2"/> <b>W</b>	* <input type="text" value="3"/> <b>E</b>	* <input type="text" value="4"/> <b>R</b>
<b>NO-ANSWER RECALL</b>	<b>NO-ANSWER RETRY</b>	<b>GUARANTEED MSG TIMER</b>	
* <input type="text" value="5"/> <b>T</b>	* <input type="text" value="6"/> <b>Y</b>	* <input type="text" value="7"/> <b>U</b>	* <input type="text" value="8"/> <b>I</b>

### ACD Ring Timer

#### Programming Steps

To make a change to the ACD Ring Timer:

- 1 Press the RING TIMER flexible button (**FLASH 61, button #1**). The following message displays:

RING 060	000-300
-------------	---------

- 2 Enter the 3-digit timer value on the dial pad which corresponds to 000-300 seconds.
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.



## Description

The ACD Ring Timer determines how long a call rings into a busy ACD group before being presented to the first recorded announcement. By default, the ACD Ring Timer is set for 60 seconds, and is variable from 000–300 seconds.



*A RAN Table must be specified in ACD programming. If a RAN Table is NOT specified, incoming CO callers are not answered but continue to receive ringback.*

## ACD Message Interval Timer

### Programming Steps

To change the ACD Message Interval Timer:

- 1 Press the MIT TIMER flexible button (FLASH 61, button **#2**). The following message displays:

MESS/W&	INTERVAL	000-600
---------	----------	---------

- 2 Enter the 3-digit timer value on the dial pad which corresponds to 000-600 seconds.
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.



*The ACD Ring and Message Interval timers only apply when RAN ports are specified. If RAN ports are not specified, incoming callers continue to receive a ringback tone.*

## Description

The ACD Message Interval Timer (MIT) determines the length of time a caller remains in queue (listening to MOH, if provided) between recorded announcements. By default, the ACD Message Interval Timer is set for 60 seconds and is variable from 000-600 seconds.

## ACD Overflow Timer

### Programming Steps

To change the ACD Overflow Timer:





- 1 Press the OVERFLOW TIMER flexible button (**FLASH 61, button #3**). The following message displays:

OVERFLOW 060	000-600
-----------------	---------

- 2 Enter the 3-digit value on the dial pad which corresponds to 000-600 seconds.
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

## Description

The ACD Overflow Timer determines the total length of time a caller remains in queue for a particular ACD group. When the timer expires, the caller is routed to the designated overflow station. The timer starts when an incoming call is answered and presented to the first recorded announcement. Transferred CO callers overflow at the expiration of the Overflow Timer. By default, the ACD Overflow Timer is set for 60 seconds and is variable from 000–600 seconds.

## ACD No-Answer Recall Timer

### Programming Steps

To change the ACD No-Answer Recall Timer:

- 1 Press the NO-ANSWER RECALL TIMER flexible button (**FLASH 61, button #5**). The following message displays:

NO-ANS RECALL 000	000-300
----------------------	---------

- 2 Enter the 3-digit value on the dial pad which corresponds to 000-300 seconds.
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

## Description

If a call routed to a station via ACD is not answered by the ACD Agent/Station before the No-Answer Recall Timer expires, the call is returned to ACD Queue with the highest priority. In addition, the station that failed to answer the ringing ACD call is placed into an out-of-service (OOS) state. By default, the ACD No-Answer Timer is at 000 (disabled) and is variable from 000-300 seconds.



## ACD No-Answer Retry Timer

### Programming Steps

To change the ACD No-Answer Retry Timer:

- 1 Press the NO-ANSWER RETRY TIMER flexible button (**FLASH 61, button #6**). The following message displays:

NO ANSWER RETRY 300	000-999
------------------------	---------

- 2 Enter the 3-digit value on the dial pad which corresponds to 000-999 seconds.
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

When the No-Answer Recall Timer expires, a station that failed to answer the ringing ACD call is placed into an out-of-service (OOS) state. The station that was taken out-of-service (OOS) is placed back in service if the agent presses the available flex button or dials the available flex code. In addition, the agent is placed back in service if the No-Answer Retry Timer expires. If the agent does not answer his next ACD call, he is taken out-of-service. This cycle continues until the station answers calls, logs out, or goes unavailable. By default, the ACD No-Answer Retry Timer is set for 300 seconds and is variable from 000–999 seconds.

## Guaranteed Message Timer

### Programming Steps

To change the ACD Guaranteed Message Timer:

- 1 Press the GUARANTEED MESSAGE TIMER flexible button (**FLASH 61, button #7**). The following message displays:

GUARANTEED MSG 005	000-300
-----------------------	---------

- 2 Enter the 3-digit value on the dial pad which corresponds to 000-300 seconds.
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.





### Description

This timer determines how long a call rings before being answered by Guaranteed Message RAN when the Guaranteed Message RAN feature is added to an ACD Group. By default, the Guaranteed Message Timer is set for 5 seconds and is variable from 000-300 seconds.



## ACD Announcement Tables (RAN)

### Programming Steps

If Recorded Announcement devices are installed to operate with ACD, these tables must be programmed

<p>1 Press <b>FLASH</b> and dial <b>[62]</b>. The following message displays:</p> <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p><b>ANNOUNCEMENT TABLE 1</b>  <b>TYPE # INDX ## TIME ###</b></p> </div> <p>2 The top left button in the flexible button field is lit for programming ACD RAN Announcement Table #1. To change to ACD RAN Announcement Table #2, press (<b>FLASH 62, button #2</b>) flexible button.  (* Repeat the above for Tables 3-8.)</p> <p>3 Enter a string of six, or seven digits on the dial pad. The order of data entry is:</p> <p><b>Type Number:</b>  [1] = CO Port Interface  [2] = SLT Port Interface  [3] = RAN Hunt Group</p> <p><b>Index (port) Number:</b>  [001-012] = Triad-S CO Line Ports  [100-131] = Triad-S SLT Station Ports  [458-461] RAN Hunt Group</p> <p><b>Message Time:</b>  000 to 300 seconds</p> <p>4 Press HOLD to save the entry. A confirmation tone is heard and the display updates.</p>	<p>To program a table for CO line port:</p> <ol style="list-style-type: none"> <li>1 Press the TABLE X flexible button s (1-8).</li> <li>2 Dial [1] for CO Port Interface.</li> <li>3 Dial [001-012] for CO Lines used.</li> <li>4 Enter Message duration (000-300 <b>sec</b>)</li> </ol> <p>To program a table for an SLT port:</p> <ol style="list-style-type: none"> <li>1 Press the TABLE X flexible button (Buttons 1 to 8).</li> <li>2 Dial [2] for SLT Port Interface.</li> <li>3 Dial [100-131] for SLT stations used.</li> <li>4 Enter Message duration (000-300 seconds).</li> </ol> <p>To program a table for RAN Hunt Group port:</p> <ol style="list-style-type: none"> <li>1 Press the TABLE X flexible button (Buttons 1-8).</li> <li>2 Dial [3] for RAN Hunt Group.</li> <li>3 Dial [458-461] for RAN Hunt Group used.</li> <li>4 Enter Message duration (000-300 seconds).</li> </ol> <p>To clear entries in a Table:</p> <ol style="list-style-type: none"> <li>1 Press [#] once followed by HOLD.</li> </ol>
---	---

Table 6-1: Programming ACD Announcement Tables





## Description

Determines the type, index (port) number and message length for the eight available Recorded Announcements (RAN). There are eight RAN Tables that can be programmed. Table 1 can be the answer port for unanswered incoming calls to a ACD group. Table 8 can provide the secondary message or vice versa.

The buttons on the digital terminal are defined as shown below when entering the ACD RAN Announcement Tables Programming area:

ANNOUNCE- MENT TABLE 1	ANNOUNCE- MENT TABLE 2	ANNOUNCE- MENT TABLE 3	ANNOUNCE- MENT TABLE 4
* [ 1 ] Q	* [ 2 ] W	* [ 3 ] E	* [ 4 ] R
ANNOUNCE- MENT TABLE 5	ANNOUNCE- MENT TABLE 6	ANNOUNCE- MENT TABLE 7	ANNOUNCE- MENT TABLE 6
* [ 5 ] T	* [ 6 ] Y	* [ 7 ] U	* [ 8 ] I

The type can be either a CO line port, an SLT port or a RAN Hunt Group port. The index number specifies which circuit for the type of interface. The message length is used to match the maximum length of the message to the device that is used.

## PC / ACD Interface Trace

### Programming Steps

To enable PC/ACD Interface Trace options:

- 1 Press **FLASH** and dial [63]. The following message is shown on the display phone:

```

ACD_EVT_TRACE  I/O  BAUD
NO             X    YYYY
  
```

Where:

X = Port for PC/ACD Interface Trace

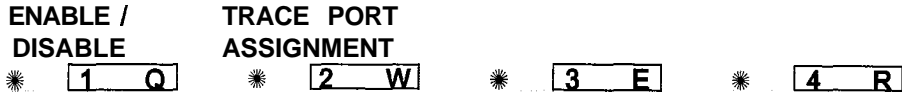
YYYY = Baud Rate of desired port

## Description

*The feature is available with optional software.* The PC/ACD Interface Trace feature provides an event trace output which is compatible with a third-party PC/ACD Reporting package



The buttons on the digital terminal are defined as shown below when entering the PC/ACD Event Trace feature programming area:



### Enable / Disable

#### Programming Steps

- 1 Press the DISABLE/ENABLE flexible button (**FLASH 63, button #1**). The following message is shown on the display:

```

ACD_EVT_TRACE  I/O  BAUD
NO              X    YYYY
```

- 2 Press the ENABLE/DISABLE flexible button.  
LED On = YES (Enabled)  
LED Off = NO (Disabled)
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

The PC/ACD Interface Trace provides a series of events trace output which is compatible with a third-party PC/ACD Reporting package. By default, the PC/ACD Event Trace is disabled (NO).

### Trace Port Assignment

#### Programming Steps

- 1 Press the TRACE PORT ASSIGNMENT flexible button (**FLASH 63, button #2**) to determine which port to use for the PC/ACD Interface Trace.
- 2 Enter a I-digit entry for the PC/ACD Event Trace Port number:  
[1] = Port #1 (MISU)  
[2] = Port #2 (MISU)  
[3] = Port #3 (Modem)



ACD Group



The LCD displays the current baud rate based on which Port number is assigned to the ACD SMDR Port number.



```
ACD_EVT_TRACE  I/O  BAUD
NO             X    YYYY
```

- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

## Baud Rate Display

### Programming Steps

The PC/ACD Port baud rate is programmed using Flash 15 baud rate assignments, The LCD displays the current baud rate based on which Port number is assigned to the ACD SMDR Port number. The following message displays:

```
ACD_EVT_TRACE  I/O  BAUD
NO             X    YYYY
```

### Description

The STARPLUS Digital Hybrid Telephone System can provide PC/ACD Reporting output to the optional MISU RS232C I/O ports. The baud rate is displayed as 300, 1200, 2400, 4800, or **9600** baud. By default, the PC/ACD baud rate is set to 9600.

## ACD Group

### Programming Steps

If the system is in the programming mode, continue using the program codes. If starting to program here, enter the programming mode. If ACD Groups must be assigned:

- 1 Press FLASH and dial **[64]**. The following message displays:



```
ACD5XXA  ALT  OVR  AN   SUP
          AAA  BBB  CCCC DDD
```

Where:

**[5XX]** = ACD Grp Number (558-565)



[A] = Page A Parameters

[AAA] = Alternate ACD Group Assignment

[BBB] = ACD Overflow Assignment

[CCCC] = ACD Announcement Tables

[DDD] = ACD Supervisor Programming

- The top left button in the flexible button field is lit for programming ACD Group 9 (558). To change ACD Groups or enter further ACD Groups (558 to 565), press the appropriate flexible button and perform the following procedures.

## Description

*This feature is available with optional software.* There can be sixteen ACD groups of no more than sixteen stations each. The ACD groups use a pilot hunting technique. If the pilot number is dialed, the assigned stations in that ACD group are searched for the station that is in an idle condition the longest time. Each ACD Group may have an assigned Alternate ACD Group, an Overflow station and up to sixteen stations as ACD members. The eight system RAN ports (tables) may also be referenced on a per ACD group basis. By default, ACD Group Tables are empty.

The buttons on the digital terminal are defined as shown below when entering the ACD Group(s) programming area:

ACD GROUP 558	ACD GROUP 559	ACD GROUP 560	ACD GROUP 561
* [ 1 ] Q	* [ 2 ] W	* [ 3 ] E	* [ 4 ] R
ACD GROUP 562	ACD GROUP 563	ACD GROUP 564	ACD GROUP 565
* [ 5 ] T	* [ 6 ] Y	* [ 7 ] U	* [ 8 ] I
ALTERNATE ACD GROUP	ACD OVER- FLOW ASSIGN	ANNOUNCE- MENT TABLES	ACD SUPV PROGRAMMING
* [ 9 ] O	* [ 10 ] P	* [ 11 ] A	* [ 12 ] S
ACD WRAP-UP TIMER			
* [ 13 ] D	* [ 14 ] F	* [ 15 ] G	* [ 16 ] H
DISPLAY STAS 1-8	SELECT PAGE A	DISPLAY STAS 9-16	
* [ 17 ] J	* [ 18 ] K	* [ 19 ] L	* [ 20 ] :
* [ 21 ] Z	* [ 22 ] X	* [ 23 ] C	* [ 24 ] V





## Alternate ACD Group Assignment

### Programming Steps



To program an alternate group:

- 1 Press the ALTERNATE ACD GROUP flexible button (**FLASH 64, button #9**).
- 2 Enter the 3-digit pilot number (558-565) of the desired alternate ACD group.

ACD5XXA	ALT	OVR	AN	SUP
	AAA	BBB	CCCC	DDD

- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

An alternate ACD group can be programmed so that if no station in a group is available, the alternate group is checked for an available station. This provides a means to chain or link ACD groups together. To delete an Alternate ACD Group, press [#] three times and press HOLD.

## ACD Overflow Station Assignment

### Programming Steps

To program ACD Overflow station:

- 1 Press the OVERFLOW ASSIGN flexible button (**FLASH 64, button #10**).
- 2 Enter a 3-digit station number to designate the ACD Groups overflow station.

ACD5XXA	ALT	OVR	AN	SUP
	AAA	BBB	CCCC	DDD

- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description



When an overflow station is assigned, callers that have remained in queue for a specified time are routed to the assigned overflow station. The overflow station may not be one of the ACD group stations. Only CO calls transferred to a ACD group overflow to the overflow station when RAN tables are assigned. To delete an Overflow Station, press [#] three times and press HOLD.



## ACD Recorded Announcement Assignment(s) (RAN)

### Programming Steps

To program a Recorded Announcement:

- 1 Press the ANNOUNCEMENT TABLES flexible button (FLASH 64, button **#11**).
- 2 Enter a four-digit sequence on the keypad:
  - First Digit = RAN port specified for Guaranteed Message (Direct Calls)
  - Second Digit = RAN port specified for primary message,
  - Third Digit = RAN port specified for secondary message.
  - Fourth Digit = RAN port specified for Guaranteed Message (transferred calls)

Example:

- ❖ An entry of [#], [2], [3] = No Guaranteed Message is heard. Announcement Table 2 provides a primary message and Announcement Table 3 provides a secondary message.
  - ❖ An entry of [1], [2], [3] = Announcement Table 1 provides the Guaranteed Message upon initially answering the call, Announcement Table 2 provides a primary message and Announcement Table 3 provides a secondary message.
  - ❖ An entry of [8], [1], [2] = Announcement Table 8 provides the Guaranteed Message upon initially answering the call, Announcement Table 1 provides a primary message and Announcement Table 2 provides a secondary message.
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

To erase Recorded Announcement(s) :

- 1 Press [#] four times and press HOLD.

ACD5XXA	ALT	OVR	AN	SUP
	AAA	BBB	CCCC	DDD

### Description

Optional Recorded Announcement device(s) may be connected to the system to provide an announcement if all stations in a ACD group are busy. Up to eight ports in the system may be assigned to provide a path to Recorded Announcement devices. Incoming CO Callers are answered and routed to the Overflow assignment only if a RAN Table is assigned.

The Guaranteed Message announcement provides a means to force incoming callers to an announcement before being placed into an ACD Queue or routed to an agent. The outside callers are presented with a



ACD Group



message before being routed to the ACD Group. Agents in an ACD Group with a Guaranteed Message enabled receive incoming callers only after the caller hears the designated recorded announcement in its entirety, or after the incoming caller dials up to 14 digits followed by (#). These digits are inserted as ICLID incoming number identification. If the Guaranteed Message announcement is programmed in Admin, incoming ACD calls are routed to the Guaranteed Message RAN before going to the ACD Group.

The Guaranteed RAN Enhancement allows a second guaranteed RAN type to be associated with each ACD Group in the system. This RAN handles only transferred CO calls. This lets a CO call transferred to an ACD Group enter caller entered ID digits via this RAN. The digits are then compared against the local name/number translation table and routed based on table entries. If no match is found, the call rings to the ACD Group. Intercom calls to the group pilot number result in a busy tone, Once the intercom caller hangs up to complete the transfer, the CO call is presented to the RAN device.

## ACD Supervisor

### Programming Steps

To program an ACD Supervisor:

- 1 Press the ACD SUPV flexible button (**FLASH 64. button #12**).
- 2 Enter the 3-digit station number of the desired ACD Supervisor station.

ACD5XXA	ALT	OVR	AN	SUP
	AAA	BBB	CCCC	DDD

- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

The ACD Supervisor Station assignment feature provides a means to assign each ACD group a supervisor. This Supervisor Station can receive the calls in queue display in real time, receives No Answer/Out of Service conditions, HELP displays from the groups to which the supervisor is assigned, and can barge-in on active calls in his ACD Group or groups.

A supervisor can be assigned in ADMIN to a group or groups to receive the help request and out of service (OOS) messages. If a supervisor station is assigned in ADMIN, it is considered logged in. In addition, a supervisor can dial a supervisor login code followed by the ACD group that the supervisor is logging into and his 4-digit ID number. For maximum compatibility with the STARPLUS PC-ACD Reporting package, the supervisor assignment should be left blank and the supervisor login-logout feature used.



## ACD Auto Wrap-Up Timer

### Programming Steps

To change the ACD Auto Wrap-up Timer:

- 1 Press the AUTO-WRAP TIMER flexible button (**FLASH 64, button #13**). The following message displays:

ACD5XX	WRAP- UP	000- 999
004		

- 2 Enter the 3-digit value on the dial pad which corresponds to 000-999 seconds.
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

After completion of a ACD call (on-hook) the agent is not subjected to another ACD call for the duration of the Auto Wrap-Up Timer allowing the agent to finish call related work or access other facilities. This lets agents remove themselves from the group (i.e., DND, Call Forward) or originate another call. By default, the ACD Auto Wrap-Up Timer is set for four seconds and is variable from 000-999 seconds.

## ACD CIQ Threshold

### Programming Steps

To change the CIQ Threshold:

- 1 Press the CIQ THRESHOLD flexible button (**FLASH 64, button #14**). The following message displays:

ACD5XXCIQ	THRESHOLD	00- 99
00		

- 2 Enter the 2-digit value on the dial pad which corresponds to 00-99 calls.
- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

This feature determines how many calls appear in queue before the LED flashes at 240 ipm flutter. Once the number of calls in queue falls below the CIQ threshold, the LED extinguishes. By default, this feature is disabled.







## Conditions

- ❖ Any ACD station can have a button assigned to view the calls in queue of any ACD group.

## ACD Station Assignment(s)

### Programming Steps

To program stations into a ACD group:

- 1 Press the DISPLAY STAS 9-16 flexible button (FLASH 64, button **#19**). The following message displays:

```
ACD5XXB ### ## # #
### ## # #
```

Where:

[5XX] = ACD Grp Number (558-565)

[B] = Page B parameters

[###] = ACD Station assignments

- 2 The top left button in the flexible button field is lit for programming ACD Group 9 (558). To change ACD groups or enter further ACD groups (558-565), press the appropriate flexible button and perform the following procedures.
- 3 Enter the 3-digit station numbers of the stations in the ACD group in the order in which they are checked. The order is only relevant for the first call. After that, the rule is oldest idle. A maximum of sixteen stations may be entered. No station entries are displayed at this time.
- 4 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

## Description

Any type of station (excluding DSS/DLS Consoles) may be entered as valid ACD stations. Calls are routed to station in the order they are entered for the first round of calls only. After that the calls are routed to stations based on On-Hook time. The station with the longest On-Hook time receives the next call. If a specific station number is dialed, only that station is rung; no distribution is done if that station is busy.

The buttons on the digital terminal are defined as shown below when entering the ACD Station Assignments programming area:



ACD GROUP 558 * <b>1</b> <b>Q</b>	ACD GROUP 559 6 1	ACD GROUP 580 2	ACD GROUP 561 * <b>3</b> <b>E</b> * <b>4</b> <b>R</b>
ACD GROUP 562 * <b>5</b> <b>T</b>	ACD GROUP 583 * <b>6</b> <b>Y</b>	ACD GROUP 564 * <b>7</b> <b>U</b>	ACD GROUP 565 * <b>8</b> <b>I</b>
* <b>9</b> <b>O</b>	* <b>10</b> <b>P</b>	* <b>11</b> <b>A</b>	* <b>12</b> <b>S</b>
* <b>13</b> <b>D</b>	* <b>14</b> <b>F</b>	* <b>15</b> <b>G</b>	* <b>16</b> <b>H</b>
<b>DISPLAY STAS</b> 1-8	<b>SELECT PAGE A</b>	<b>DISPLAY STAS</b> 9-16	
* <b>17</b> <b>J</b>	* <b>18</b> <b>K</b>	* <b>19</b> <b>L</b>	* <b>20</b> <b>:</b>
* <b>21</b> <b>Z</b>	* <b>22</b> <b>X</b>	* <b>23</b> <b>C</b>	* <b>24</b> <b>V</b>

To erase all stations, press [#] three times, then press HOLD.



If an ACD member is assigned to a specific ACD group and uses the **login-logout** codes to enter and exit an **ACD group** other than their own assigned group, the database programming for ACD stations is automatically changed to reflect the **different** group.

It is recommended that ACD agent station not be deleted from an ACD group through database administration when that station is in the **Unavailable Mode**. This causes the LCD to display unavailable even though the station is no longer part of the ACD group. The station can dial the 566 code to remove the message.

## View ACD Station Assignments

### Programming Steps

If ACD Station Assignments in the second group of eight (Stations **9-16**) must be viewed:

- 1 Press the **DISPLAY STAS 1-8** flexible button (FLASH 64, Page B, button **#17**). The first group of station assignments displays. If no additional stations are assigned beyond the first eight stations, the display shows **(#)s** instead of station assignments.
- 2 Press **DISPLAY STAS 9-16** flexible button (FLASH 64, button **#19**) to view the second group of eight stations in the same ACD group.



ACD Group



### Description

Any time a display of the first group of ACD Station assignments (default or changed) is needed, press the DISPLAY STAS 1-8 button (FLASH **64, button #17**). It displays the first group of station assignments, up to eight stations at a time. Button **#19** always shows the second group of eight stations programmed in the ACD Group. **Button #17** always displays the first group of eight stations programmed in the same ACD Group.







# 7 Uniform Call Distribution (UCD)

## UCD Group Programming

### Programming Steps

If the system is in the programming mode, continue using the program codes. If starting to program here, enter the programming mode.

- 1 Press FLASH and dial **[60]**. The following message displays:

```
UCD5XXA  ALT  OVR  AN
          AAA  BBB  CC
```

Where:

[5XX] = UCD Group Number (550457)

[A] = Page A Parameters

[AAA] = Alternate UCD Group Assignment

[BBB] = UCD Overflow Assignment

[CCCC] = UCD Announcement Tables

[DDD] = UCD Supervisor Programming

- 2 The top left button in the flexible button field is lit for programming UCD Group 1 (550). To change UCD Groups or enter more UCD Groups (550-557), press the appropriate flexible button and perform the following procedures.

### Description

There can be eight UCD groups of no more than eight stations each. The UCD groups use a pilot hunting technique. If the pilot number is dialed, the assigned stations in that UCD group are searched for the station which has been in an idle condition for the longest time period. Each UCD Group may have an assigned Alternate UCD Group, an Overflow station and up to eight stations as UCD members. The two system RAN ports (tables) may also be referenced on a per UCD group basis. By default, UCD Group Tables are empty.

The buttons on the digital terminal are defined as shown below when entering the UCD Group(s) programming area:



UCD GROUP 550 * [ 1 ] Q	UCD GROUP 551 * [ 2 ] W	UCD GROUP 552 * [ 3 ] E	UCD GROUP 553 * [ 4 ] R
UCD GROUP 554 * [ 5 ] T	UCD GROUP 555 * [ 6 ] Y	UCD GROUP 556 * [ 7 ] U	UCD GROUP 557 * [ 8 ] I
ALTERNATIVE UCD GROUP * [ 9 ] O	UCD OVER- FLOW ASSIGN * [ 10 ] P	ANNOUNCE- MENT TABLES * [ 11 ] A	* [ 12 ] S
UCD WRAP-UP TIMER * [ 13 ] D	* [ 14 ] F	* [ 15 ] G	* [ 16 ] H
* [ 17 ] J	SELECT PAGE A * [ 18 ] K	DISPLAY STAS 1-8 * [ 19 ] L	* [ 20 ] :
* [ 21 ] Z	* [ 22 ] X	* [ 23 ] C	* [ 24 ] V

## Alternate UCD Group Assignment

### Programming Steps

- 1 Press the ALTERNATE UCD GROUP flexible button (**FLASH 60, button #9**).
- 2 Enter the 3-digit pilot number (550 to 557) of the desired alternate UCD group.

```
UCD5XXA  ALT  OVR  AN
          AAA  BBB  CC
```

- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates.

### Description

An alternate UCD group can be programmed so if no station in a group is available, the alternate group is checked for an available station. This provides a way to chain or link UCD groups together. To delete an Alternate UCD Group, press [ # ] three times and press HOLD.

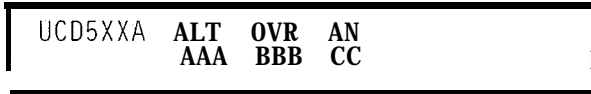




## UCD Overflow Station Assignment

### Programming Steps

- 1 Press the OVERFLOW ASSIGN flexible button (**FLASH 60, button #10**).
- 2 Enter a 3-digit station number to designate the UCD Groups overflow station.



- 3 Press HOLD to save the entry. A confirmation tone is heard and the display updates,

### Description

When an overflow station is assigned, callers that remain in queue for a specified amount of time are routed to the assigned overflow station. The overflow station may not be one of the UCD group stations. Only CO calls transferred to a UCD group overflow to the overflow station when RAN tables are assigned. To delete an Overflow Station, press [ # ] three times and press HOLD.

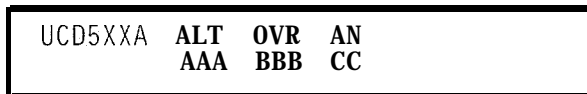
## UCD Announcement Assignment(s) (RAN)

### Programming Steps

- 1 Press the ANNOUNCEMENT TABLES flexible button (**FLASH 60, Button #11**).
- 2 Enter a 2-digit sequence:  
First Digit = RAN port specified for primary message,  
Second Digit = RAN port specified for secondary message.

Example:

- ❖ An entry of [ 1 ], [ 2 ] = Announcement Table 1 answers the call, Announcement Table 2 provides a secondary message.
  - ❖ An entry of [ 8 ], [ 1 ] = Announcement Table 8 answers the call, Announcement Table 1 provides a secondary message.
- 3 Press HOLD to save the entry. Confirmation tone is heard and the display now updates.
  - 4 To erase recorded announcement, press [ # ] two times and press HOLD.





## Description

Optional Recorded Announcement device may be connected to the system to provide an announcement if all stations in a UCD group are busy. Up to eight ports in the system may be assigned to provide a path to Recorded Announcement devices. Incoming CO Callers are answered and routed to the Overflow assignment only if a RAN Table is assigned.

## UCD Auto Wrap-Up Timer

### Programming Steps

- 1 Press the AUTO-WRAP TIMER flexible button (FLASH 60, **Button #13**). The following message is shown on the display phone:

```
UCD5XX WRAP-UP      000 -999
 004
```

- 2 Enter the 3-digit value on the dial pad which corresponds to 000-999 seconds.
- 3 Press HOLD to save the entry. Confirmation tone is heard and the display now updates.

### Description

After completion of a UCD call (on-hook) the agent is not be subjected to another UCD call for the duration of the Auto Wrap-Up Timer allowing the agent to finish call related work or access other facilities. This lets agents remove themselves from the group (i.e., DND, Call Forward) or originate another call. By default, the UCD Auto Wrap-Up Timer is set for 4 seconds and is variable from 000 to 999 seconds,

## UCD Station Assignment(s)

### Programming Steps

- 1 Press the DISPLAY STAS I-8 flexible button (FLASH 60, **Button #19**). The following message is shown on the display phone:

```
UCD5XXB ### ## ## ##
### ## ## ##
```

Where:

[5XX] = UCD Grp Number (550457)

[B] = Page B parameters







[###] = UCD Station assignments

- 2 The top left button in the flexible button field is lit for programming UCD Group 1 (550). To change UCD groups or enter further UCD groups (550 to 557), press the appropriate flexible button and perform the following procedures.
- 3 Enter the 3-digit station numbers of the stations in the UCD group in the order in which they are to be checked. The order is relevant for the first call, then the rule is oldest idle. A maximum of 8 stations may be entered. No station entries are displayed at this time.
- 4 Press HOLD to save the entry. Confirmation tone is heard and the display now updates.

**Description**

Any type of station (excluding DSS/DLS Consoles) may be entered as valid UCD stations. Calls are routed to station in the order they are entered for the first round of calls only. After that the calls are routed to stations based on On-Hook time. The station with the longest On-Hook time receives the next call. If a specific station number is dialed, only that station is rung; no distribution is done if that station is busy.

The buttons on the digital terminal are defined as shown below when entering the UCD Station Assignments programming area:

UCD GROUP 560	UCD GROUP 561	UCD GROUP 562	UCD GROUP 563
* [ 1 ] Q	* [ 2 ] W	* [ 3 ] E	* [ 4 ] R
UCD GROUP 564	UCD GROUP 565	UCD GROUP 566	UCD GROUP 567
* [ 5 ] T	* [ 6 ] Y	* [ 7 ] U	* [ 8 ] I
* [ 9 ] O	* [ 10 ] P	* [ 11 ] A	* [ 12 ] S
* [ 13 ] D	* [ 14 ] F	* [ 15 ] G	* [ 16 ] H
* [ 17 ] J	SELECT PAGE A	DISP STAS 1-8	* [ 20 ] :
* [ 21 ] Z	* [ 18 ] K	* [ 19 ] L	
	* [ 22 ] X	* [ 23 ] C	* [ 24 ] V



## UCD Timers

### Programming Steps

Press FLASH and dial **[61]**. The following message is shown on the display phone:

UCD TIMERS  
ENTER BUTTON NUMBER

### Description

Six timers for UCD operation are programmable on a system-wide basis. The UCD timers include: a Ring Timer, Message Interval Timer, an Overflow Timer, an Auto Wrap-Up Timer, a No/Answer Recall Timer, and No/Answer Retry Timer. Each timer is described in the following section.

The buttons on the digital terminal are defined as shown below when entering the UCD Timers programming area:

RING TIMER	MIT TIMER	OVERFLOW TIMER	
* <input type="text" value="1"/> Q	* <input type="text" value="2"/> W	* <input type="text" value="3"/> E	* <input type="text" value="4"/> R
NO-ANSWER RECALL	NO-ANSWER RETRY		
* <input type="text" value="5"/> T	* <input type="text" value="6"/> Y	* <input type="text" value="7"/> U	* <input type="text" value="8"/> I

### UCD Ring Timer

#### Programming Steps

- 1 Press the RING TIMER flexible button (FLASH 61, Button **#1**). The following message is shown on the display phone:

RING                      000-300  
060

- 2 Enter the 3-digit timer value on the dial pad which corresponds to 000-300 seconds.
- 3 Press HOLD to save the entry. Confirmation tone is heard and the display now updates.





## Description

The UCD Ring Timer determines how long a call rings into a busy UCD group before being presented to the first recorded announcement. By default, the UCD Ring Timer is set for 60 seconds, and is variable from 000–300 seconds.



*A RAN Table must be specified in UCD programming. If a RAN Table is NOT specified, incoming CO callers are not answered but continue to receive ringback.*

## UCD Message Interval Timer

### Programming Steps

- 1 Press the MIT TIMER flexible button (**FLASH 61, Button #2**). The following message is shown on the display phone:

MESSAGE	INTERVAL	000-600
060		

- 2 Enter the 3-digit timer value on the dial pad which corresponds to 000-600 seconds.
- 3 Press HOLD to save the entry. Confirmation tone is heard and the display now updates.



*The UCD Ring and Message Interval Timers only apply when RAN ports are specified. If RAN ports are not specified, incoming callers continue to receive a ringback tone.*

## Description

The UCD Message Interval Timer (MIT) determines the length of time a caller remains in queue (listening to MOH, if provided) between recorded announcements. By default, the UCD Message Interval Timer is set for 60 seconds and is variable from 000 to 600 seconds.



## UCD Overflow Timer

### Programming Steps

- 1 Press the OVERFLOW TIMER flexible button (**FLASH 61, Button #3**). The following message is shown on the display phone:

OVERFLOW 060	000 - 600
-----------------	-----------

- 2 Enter the 3-digit value on the dial pad which corresponds to 000-600 seconds.
- 3 Press HOLD to save the entry. Confirmation tone is heard and the display now updates.

### Description

The UCD Overflow Timer determines the total length of time a caller remains in queue for a particular UCD group. When the timer expires, the caller is routed to the designated overflow station. The timer starts when an incoming call is answered and presented to the first recorded announcement. Transferred CO callers overflow at the expiration of the Overflow Timer. By default, the UCD Overflow Timer is set for 60 seconds and is variable from 000–600 seconds.

## UCD No-Answer Recall Timer

### Programming Steps

- 1 Press the NO-ANSWER RECALL TIMER flexible button (**FLASH 61, Button #5**). The following message is shown on the display phone:

NO-ANS RECALL 000	000- 300
----------------------	----------

- 2 Enter the 3-digit value on the dial pad which corresponds to 000-300 seconds.
- 3 Press HOLD to save the entry. Confirmation tone is heard and the display now updates.

### Description

If a call routed to a station via UCD is not answered by the UCD Agent/Station before the No-Answer Recall Timer expires, the call is returned to UCD Queue with the highest priority. In addition, the station that failed to answer the ringing UCD call is placed into an out-of-service (OOS) state. By default, the UCD No-Answer Timer is at 000 (disabled) and is variable from 000-300 seconds.



## UCD No-Answer Retry Timer

### Programming Steps

- 1 Press the NO-ANSWER RETRY TIMER flexible button (**FLASH 61, Button #6**). The following message is shown on the display phone:



- 2 Enter the 3-digit value on the dial pad which corresponds to 000-999 seconds.
- 3 Press HOLD to save the entry. Confirmation tone is heard and the display now updates.

### Description

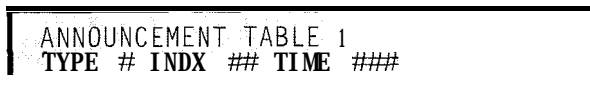
When the No-Answer Recall Timer expires, a station that failed to answer the ringing UCD call is placed into an out-of-service (OOS) state. The station that was taken out-of-service (OOS) is placed back in service if the agent hits his available flex button or dials the available flex code. In addition, the agent is placed back in service if the No-Answer Retry Timer expires. If the agent does not answer his next UCD call, he is taken out-of-service again. This cycle continues until the station answers calls, logs out, or goes unavailable. By default, the UCD No-Answer Retry Timer is set for 300 seconds and is variable from 000-999 seconds.

## UCD Announcement Tables (RAN)

### Programming Steps

If Recorded Announcement devices are installed to operate with UCD, these tables must be programmed:

- 1 Press **FLASH** and dial [**62**]. The following message is shown on the display phone:



- 2 The top left button in the flexible button field is lit for programming UCD RAN Announcement Table #1. To change to UCD RAN Announcement Table #2, press (**FLASH 62, Button #2**) flexible button. (\*Repeat the above for Tables 3 through 8.)
- 3 Enter a string of six or seven digits on the dial pad. The order of data entry is:

Type Number:

[I] = CO Port Interface



[2] = SLT Port Interface

*Index (port) Number:*

[001-012] = Triad-S CO Line Ports

[100-131] = Triad-S SLT Station Ports

*Message Time:*

000 to 300 seconds

- 4 Press HOLD to save the entry. Confirmation tone is heard and the display now updates.

To clear entries in a Table:

- 1 Press [#] followed by HOLD.

## Description

Determines the type, index (port) number and message length for the eight available Recorded Announcements (RAN). There are eight RAN Tables that can be programmed. Table 1 can be the answer port for unanswered incoming calls to a UCD group, while another table can provide the secondary message.

The buttons on the digital terminal are defined as shown below when entering the UCD RAN Announcement Tables Programming area:

ANNOUNCE-  
MENT TABLE 1

\* [ 1 ] Q

ANNOUNCE-  
MENT TABLE 5

\* [ 5 ] T

ANNOUNCE-  
MENT TABLE 2

\* [ 2 ] W

ANNOUNCE-  
MENT TABLE 6

\* [ 6 ] Y

ANNOUNCE-  
MENT TABLE 3

\* [ 3 ] E

ANNOUNCE-  
MENT TABLE 7

\* [ 7 ] U

ANNOUNCE-  
MENT TABLE 4

\* [ 4 ] R

ANNOUNCE-  
MENT TABLE 8

\* [ 8 ] I

The type can be either a CO line port, or a SLT port. The index number specifies which circuit for the type of interface. The message length matches the maximum length of the message to the device that is used.





Example:

To program a table for CO line port:

- 1 Press the TABLE X flexible button (**FLASH 62, Buttons 1 to 8**).
- 2 Dial [1] for CO Port Interface.
- 3 Dial [001-012] for CO Lines used.
- 4 Enter Message duration (000-300 seconds).

To program a table for an SLT port:

- 1 Press the TABLE X flexible button (**FLASH 62. Buttons 1 to 6**).
- 2 Dial [2] for SLT Port Interface.
- 3 Dial [1 00-131] for SLT stations used.
- 4 Enter Message duration (000-300 seconds).







# 8 Voicemail Groups (VM)



## Voicemail Programming

### Programming Steps

Enter the programming mode. To program Voicemail Groups:

- 1 Press FLASH and dial [65]. The following message is shown on the display phone.

```

VM 44G AAA LLL R XXX,XXX,
  XXX,XXX,XXX,XXX,XXX,XXX

```

Where:

[G] = Voicemail Group Number (0-7)

[AAA] = Alternate Group (440-447)

[LLL] = Leave Mail Index.

[R] = Retrieve Mail Index from outpulsing table for retrieving messages (0-7)

[XXX] = Voicemail Station Numbers (ports) up to 8 stations maximum.

- 2 The top left button in the flexible button field is lit for programming Voicemail Group 440. To change voicemail groups or enter further voicemail groups, press the appropriate flexible button, 1-8 (440-447) and perform the following procedures.



*If installing a STARPLUS Voicemail system (and if default), skip directly to Button 12 and enter voice mail ports.*

*Certain programming is required in the Voicemail system connected to the Triad-S system for proper operation.*

*Tone Mode Calling option (6#) must be programmed as leading digits in transfer sequence(s) to force tone ringing to key telephones in the hands-free mode.*



## Description

Up to eight Voicemail groups can be configured in the STARPLUS Triad-S™ system. Each group can contain up to eight Voicemail designated ports, each of which interfaces with a port on an SLT card. An externally provided Voicemail system or Auto Attendant must be connected to the Triad-S system for





Voicemail or Auto Attendant operation. Voicemail automatically handles unanswered calls. Station user can then retrieve messages left at their stations. Auto Attendants can handle incoming calls and route callers to station users without intervention from the systems attendant.

Direct incoming ring to Voicemail/Auto Attendant groups can be done directly through CO Line Ringing Assignments. By default, all Voicemail stations are assigned to Pick-Up Group 1.

The buttons on the digital terminal are defined as shown below when entering the Voicemail programming area:

VM GROUP 440 * 1 Q	VM GROUP 441 * 2 W	VM GROUP 442 * 3 E	VM GROUP 443 * 4 R
VM GROUP 444 * 5 T	VM GROUP 445 * 6 Y	VM GROUP 446 * 7 U	VM GROUP 447 * 8 I
ALTERNATIVE VM GROUP * 9 O	L(EAVE) * 10 P	R(ETRIEVE) * 11 A	STATION ASSIGN * 12 S
* 13 D	* 14 F	* 15 G	* 16 H
* 17 J	* 18 K	* 19 L	* 20 :
* 21 Z	* 22 X	* 23 C	* 24 V

## Alternate Voicemail Group

### Programming Steps

- 1 Press the ALTERNATE VM GROUP flexible button (**FLASH 65, Button #9**).
- 2 Enter the 3-digit pilot number (440 to 447) of the desired group.

VM 44G AAA LLL R XXX,XXX,  
xxx, xxx, xxx, xxx, xxx, xxx

- 3 Press HOLD to save the entry. Confirmation tone is heard and the display now updates.

To delete an Alternate Voicemail Group assignment:

- 1 Press [#] three times, then press HOLD.





## Description

An Alternate Voicemail Group may be programmed so that if all voicemail ports are in use, the call can be routed to an alternate group. This is useful when more than eight ports are required for voicemail traffic.



## Leave Mail Index Entry

### Programming Steps

- 1 Press the LEAVE flexible button (**FLASH 65, Button #10**).
- 2 Enter the 3-digit Leave mail index on the dial pad:  
First Digit = Standard Leave Table number (0-7).  
Second Digit = Leave Table to utilize when station is forwarded to VM in a No-Answer condition.  
Third Digit = Leave Table to utilize when station is forwarded to VM in a Busy condition.

```
VM 44G AAA LLL R XXX,XXX,  
XXX,XXX,XXX,XXX,XXX,XXX
```

- 3 Press HOLD to save the entry. Confirmation tone is heard and the display now updates.

To delete a Leave mail index entry:

- 1 Press [#] in the desired location on the keypad, then press HOLD (i.e., Tables 1,2,3 entered to delete only Table 2, enter [1],[#],[3] and press HOLD).

## Description

The Leave Mail Index specifies the outpulsing Table where the in-band digits required to connect a caller, forwarded into voicemail, to the called stations mail box are stored. By default, Voicemail Group 1 (440) Leave Table index is set to zero (0).

## Retrieve Mail Index Entry

### Programming Steps

- 1 Press the RETRIEVE flexible button (**FLASH 65. Button #11**).
- 2 Enter the one-digit outpulsing table number (0-7) on the dial pad.





VM 44G AAA LLL R XXX,XXX, XXX, XXX, XXX, XXX, XXX, XXX
---

- 3 Press HOLD to save the entry. Confirmation tone is heard and the display now updates.

To delete a Retrieve Mail Index Entry:

- 1 Press the pound key once [#], then press HOLD.

## Description

The Retrieve Mail Index specifies the outpulsing table where the In-Band digits required to connect a station user to their own mailbox are stored. By default, Voicemail Group 1 (440) Retrieve Table index is set to 1.



*For the Triad-S system to send the Station Identification digits (station 3 or 4-digit extension number), a Leave and a Retrieve tab/e must be referenced when assigning voicemail groups. However, the Leave and Retrieve outpulsing tables can be **empty** (no entries in the referenced table).*

## Station Assignment(s)

### Programming Steps

- 1 Press the STATION ASSIGN flexible button (**FLASH 65, Button #12**).
- 2 Enter the 3-digit station numbers. A maximum of eight SLT stations may be entered.

VM 44G AAA LLL R XXX,XXX, XXX, XXX, XXX, XXX, XXX, XXX
---

- 3 Press HOLD to save the entry. Confirmation tone is heard and the display now updates.

## Description

Up to eight SLT port extension numbers may be programmed into a voicemail group. A flexible button may be programmed with a voicemail group pilot number (440-447). This button then acts as a DSS for that voicemail group when pressed and also serves as the message waiting indication for that VM group.





## Voicemail Outpulsing Table

### Voicemail In-Band Signaling

#### Programming Steps

- 1 Press FLASH and dial [66]. The following message is shown on the display phone.

VOICE	PRE	XXXXXXXXXXXXE
MAIL Y	SUF	XXXXXXXXXXXXE

Where:

y = Table Index (0-7)

X = Entered Digits (0-9, #, \*, Pauses)

- 2 The TABLE 00 flexible button (Button #1) led is lit. To change tables, press the appropriate flexible button (Buttons 2-8) and perform the following procedures.
- 3 Dial one of the following, if required:
  - [0] = If a prefix is required
  - [I] = If a suffix is required
  - [#] = If entry is to be deleted
- 4 Enter up to 12 digits, including [\*] and [#], TRANS button = pause.
- 5 Press HOLD to save the entry. Confirmation tone is heard and the display now updates.

To clear entries in a Table:

- 1 Press the pound key once [#], followed by HOLD.

#### Description

Entries in one of the eight Voicemail Outpulsing Tables determine the In-Band signaling required for Retrieving messages (lets stations pick up mail) and Leaving messages (lets stations leave messages in voicemail).



TABLE 0 * 1 Q	TABLE 1 * 2 W	TABLE 2 * 3 E	TABLE 3 * 4 R
TABLE 4 * 5 T	TABLE 5 * 6 Y	TABLE 6 * 7 U	TABLE 7 * 8 I
DISCONNECT TABLE			
* 9 O	* 10 P	* 11 A	* 12 S
* 13 D	* 14 F	* 15 G	* 16 H
* 17 J	* 18 K	* 19 L	* 20 :
* 21 Z	* 22 X	* 23 C	* 24 V

Build a table (0 for example) for any additional digits other than the Station Extension Number (Voicemail Box Number) needed for a caller to leave a message in a station's mailbox (Leave). Build another table (1 for example) for any additional digits needed for a mailbox holder to retrieve a message.(Retrieve).

By default:

Table 0 Prefix = P7 (Pause+7)

Suffix = None

Table 1 Prefix = P7 (Pause+7)

Suffix = \*

Table 7 Prefix = P7 (Pause+7)

Suffix = 2



*Entries are not required in the Outpulsing Table. However, a tab/e must be referenced when setting up the Voicemail groups.*





## Voicemail Disconnect Table

### Programming Steps

- 1 Press the DISCONNECT TABLE 8 flexible button (**FLASH 66, Button #9**). This table number is used for the voicemail disconnect signal.
- 2 Enter up to 12 digits used for the disconnect signal, including [\*] and [#], TRANS button = pause.



- 3 Press HOLD to save the entry. Confirmation tone is heard and the display now updates.

### Description

A disconnect signal can be programmed into the Triad-S system to notify the VM system that a call has been abandoned. This is accomplished through in-band signaling. If a CO or Intercom disconnect signal is detected, the Triad-S system sends a series of DTMF digits programmed in the voicemail disconnect table to the voicemail port. This can be any digit stream up to 12 digits including [\*] and [#]. This table serves all eight voicemail groups. When no digits are programmed in the disconnect table, silence is provided to the voicemail port followed by busy tone to aid the voicemail system to recognize that the caller has abandoned the call.

The Triad-S provides Loop Supervision monitoring while a CO call is connected to a port designated as voicemail.



Loop Supervision must be enabled on *the* CO lines (in CO *Line programming*) for the VM Disconnect feature to operate.

By default, there are no entries in the Disconnect Table (Table #8).



## Voicemail In-Band Features

### Programming Steps

- 1 Press FLASH and dial [67]. The following message is shown on the display:

```

VM FEATURES ICID AFWD
VBRK

```

### Description

Entries into the Voicemail In-Band Features determines the in-band signaling required for ICID Incoming ID Digits (forwards incoming CO callers directly to a Stations Voicemail Box), and AFWD Call Forward (lets voicemail calls, upon reaching a forwarded to VM station, forward back into the voicemail system).

INCOMING ID  
DIGITS

\* [ 1 ] Q

CALL  
FORWARD

\* [ 2 ] W

VM BROKER

\* [ 3 ] E

\* [ 4 ] R

## Voicemail In-Band Digits

### Programming Steps

- 1 Press the INCOMING ID DIGITS flexible button (FLASH 67. Button **#1**). The following message is shown on the display phone.

```

VM FEATURES ICID AFWD
VBRK

```

- 2 Press the button to Enable/Disable this feature.  
LED Off = NO (Disabled)  
LED On = YES (Enabled)
- 3 Press HOLD to save the entry. Confirmation tone is heard and the display now updates.

### Description

This feature enables and disables station in-band signaling.

Incoming CO callers can be Station Call **Forwarded** into voicemail only when the ringing CO line is programmed to ring at one station. CO lines programmed to ring at an attendant station, call forward into







the voicemail system (if programmed to ring only at one attendant station). Callers are presented to the main greeting (not the attendant stations' mail box) even when ID digits are enabled. By default, ID digits for incoming CO calls is enabled.



## Voicemail Transfer / Forward

### Programming Steps

- 1 Press the CALL FWD flexible button (FLASH 67, Button **#2**). The following message are shown on the display phone.



- 2 Press the button to Enable/Disable this feature.  
LED Off = NO (Disabled)  
LED On = YES (Enabled)
- 3 Press HOLD to save the entry. Confirmation tone is heard and the display now updates.

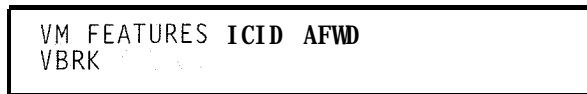
### Description

This feature forwards voicemail calls, upon reaching a forwarded to VM station, back into the voicemail unit. It is useful when VM ports are being used as both Auto Attendant and VM ports. This feature can be enabled/disabled for all VM groups. By default, the VM Transfer/Forward feature is enabled.

## Voicemail Broker

### Programming Steps

- 1 Press the VM BROKER flexible button (FLASH 67, Button **#3**). The following message is shown on the display phone.



- 2 Press the button to Enable/Disable this feature.  
LED Off = NO (Disabled)  
LED On = YES (Enabled)
- 3 Press HOLD to save the entry. Confirmation tone is heard and the display now updates.





## Description

This feature modifies the operation of voicemail ports when disabled. Broker operation is unavailable when using supervised transfers to stations. If enabled, the current operation of broker mode during supervised transfers remains in effect. This means that the call to the station remains as the second party in a broker mode. If disabled, the VM port disconnects the call to a station and return to the original party. By default, the VM Broker feature is enabled.

## Voicemail Index Table

### Programming Steps

To add Mailbox buttons, change Voicemail Groups, or Voicemail ID Numbers:

- 1 Press **FLASH** and dial **[68]**. The following message is shown on the display:

MAILBOX TBL: XXX	VMID ZZZZ
VM GROUP: YYY	

- 2 The top left button in the flexible button field (**FLASH 68, Button #1**) is lit for programming VM Group 1 (440).

To change VM Groups:

- 1 Enter the 3-digit VM Group number (440-447).
- 2 Press HOLD to save the entry. Confirmation tone is heard and the display now updates.

To change the VMID Number:

- 1 Press the VMID NUMBER flexible button (**FLASH 68, Button #2**).
- 2 Enter the four-digit VMID Number which corresponds to 0000-9999. A value of 0000 disables this table entry. In this case, no VM digits is sent.
- 3 Press HOLD to save the entry. Confirmation tone is heard and the display now updates.

To advance to the next VM Index Number:

- 1 Press the NEXT flexible button (**FLASH 68, Button #18**). The Mailbox Table number increments by 1.

To go to a previous VM Index Number:

- 1 Press the PREV flexible button (**FLASH 68, Button #19**). The Mailbox Table number decrements by 1.

To change to a different VM Index Number:





- 1 Press the SELECT flexible button (FLASH 68, Button **#20**).
- 2 Enter a 3-digit Mailbox Table Number (001-255).
- 3 Press HOLD to save the entry. Confirmation tone is heard and the display now updates and shows the new Mailbox Table Number.

## Description

This feature provides an attendant or station user a way to transfer a caller directly into a voicemail box. Station identification digits can be entered by the transferring party. Using this feature, a caller can be transferred to a voicemail box when:

- ❖ a station user on the system is not forwarded to VM, or
- ❖ the destination voicemail box owner is not a station user.

CO trunks and internal calls may be transferred into voicemail using this feature. If no voicemail ID digits are dialed by the transferring station, the ID digits of the transferring station are sent to voicemail.

This feature permits dialing digits 0000-9999 when using the VM with ID feature. On a per station basis, the ID number that is sent to voicemail can be flexible. By default, the station number is sent to the voicemail system. In administrative programming, there is a field to insert from **0-4** digits (0000-9999) which can be sent to the voicemail system in place of the station number. This is useful when a station user manually transfers a caller to a mailbox. By default, no mailbox buttons are assigned at key stations.

VM GROUP		VMID NUMBER	
* 1 Q	* 2 W	* 3 E	* 4 R
* 5 T	* 6 Y	* 7 U	* 8 I
* 9 O	* 10 P	* 11 A	* 12 S
* 13 D	* 14 F	* 15 G	* 16 H
* 17 J	<b>NEXT</b> * 18 K	<b>PREVIOUS</b> * 19 L	<b>SELECT</b> * 20 :
* 21 Z	* 22 X	* 23 C	* 24 V





# 9 Exception Tables

## Exception Tables Programming

The STARPLUS Triad-S™ Systems offer a flexible means of applying toll restriction to stations or individuals. Dialing privileges (or toll restriction) is determined through assignment of station and CO line Class Of Service (COS). Several types of restriction can be derived simply by programming COS assignments and CO line access to stations. This may, in some cases, be all that is necessary. However, when a more complex or specific type of restriction is desired the system offers two Allow and two Deny tables along with four special tables. These tables can be programmed in a variety of ways to handle applications that are straight forward or applications that require a more complex arrangement.

The Allow and Deny tables are assigned to stations based on their station Class of Service (COS) assignment. The Station (COS) interacts with CO Line COS assignments to provide several different types of dialing privileges. Refer to *Table 9-1: Class of Service*.

		CO LINE CLASS OF SERVICE				
		1	2	3	4	5
S T A T I O N  C O S	1	Unrestricted	Unrestricted	Unrestricted	Canned Restricted*	Unrestricted
	2	Table A	Table A	Unrestricted	Canned Restricted*	Unrestricted
	3	Table B	Unrestricted	Table B	Canned Restricted*	Unrestricted
	4	Table A&B	Table A	Table B	Canned Restricted*	Unrestricted
	5	Canned Restricted*	Canned Restricted*	Canned Restricted*	Canned Restricted*	Unrestricted
	6	Intercom Only	Intercom Only	Intercom Only	Intercom Only	Intercom Only

\* Canned Restriction: No [0], [1], [#], [\*] as first dialed digit, and 7-digit dialing limitation; plus 1-800, 1911, 1611 are allowed, and 411, 976, and 555 numbers are denied.

Table 9-1: Class of Service





The Allow and Deny tables enable entries of either general or specific allow and deny codes such as allowing all [1-800] type calls, and/or denying all [1]+ or [0]+ calls. The Allow and Deny tables allow a maximum of 8 digits to be entered as allow or deny digits. This enables entry of certain area codes or office codes that can specifically be allowed or denied. For example, the code [1-555-1212] may be entered in the Deny Table to deny local toll information calls. Each Allow Table contains 20 bins for entry of allow codes. Each Deny Table contains 10 bins for entry of deny codes.

The following rules should be remembered when setting up the Allow/Deny tables. Refer to *Table 9-2: Allow /Deny Table*.

- 1 If both tables (Allow and Deny) have no entries, no restriction is applied.
- 2 If entries are made in the Allow Table and only there, then only those numbers are allowed. All other dialing is denied.
- 3 If entries are made in the Deny Table and only there, then only those numbers are denied. All other dialing is allowed.
- 4 If there are entries in both Allow and Deny tables, the Allow Table is searched first, and if a match is found, it is allowed. If a match is not found, the Deny Table is searched; if a match is found, the call is denied. If the number does not match an entry in either table, it is allowed.

	Allow Table	Deny Table	Conditions and Results			
			Dialed No.	A/D	Dialed No.	A/D
<b>RULE1</b>	No Entries	No Entries	Allow			
<b>RULE2</b>	Entries	No Entries	Found	A		
			Not Found	*		
<b>RULE3</b>	No Entries	Entries			Found	D
					Not Found	A
<b>RULE4</b>	Entries	Entries	Found	A		
			Not Found	→		
					Not Found	A

Table 9-2: Allow / Deny Table



**Exception Tables**

**RELATED ITEMS TO TOLL RESTRICTION**



A special **Do Not Care** character (**D**) may be entered to allow or deny any digit dialed in that digit sequence.

The Triad-S system also offers four special tables (found in the Product Description Manual) that can be referenced from within the two allow tables. Three of the special tables can be assigned to specific area codes that require further toll restriction definition. The fourth Special Table is reserved for use as a home area code table (numbers within the same area code as the site where the system is installed). This provides expanded ability to apply toll restriction on numbers that are dialed within an area code. Each Special Table allows up to 800 entries (200-999). This offers the ability to allow every office code on an individual basis.

**RELATED ITEMS TO TOLL RESTRICTION**

**CO/PBX Lines**

When CO lines are marked as PBX lines the system first checks the PBX code table for a valid match, If the first digits dialed do not match the entries in the PBX code table the call is considered an attempt to call another PBX extension and no toll restriction is applied. If the first digits dialed are found in the PBX code table (FLASH 12), toll restriction starts with the next dialed digit.

**Forced Account Codes**

The system can be programmed to force the use of account codes on all restricted calls. When forced account codes are enabled an account code must be entered to place a call that is otherwise restricted through toll restriction, By entering an account code, the station class of service becomes unrestricted,

When account codes are forced on a system wide basis selected users may be instructed on how to enter account codes from any station and be allowed to dial unrestricted from a station that may otherwise be restricted. Use of account codes in this manner, as a traveling class of service, is however, not controlled by the system. Any station user with knowledge of how to enter account codes to override a stations toll restriction can do so.

**SLT DTMF Receivers**

When single line telephones are connected to the Triad-S system and toll restriction is enabled, the DTMF receivers located in the system monitors the call for a programmed time period. While the DTMF receiver is monitoring the digits being dialed by a single line telephone, it is considered busy and not available for monitoring another SLT attempting to dial. When all DTMF receivers are busy, an SLT attempting to go off-hook does not receive dial tone until a receiver is available.



The Triad-S system allows up to 5 DTMF receivers for monitoring SLT dialing. If a system has heavy SLT usage, then toll restriction may inhibit dialing by SLT stations. Two options are available to help alleviate this problem:

- ❖ Shorten the SLT receiver timer [FLASH 01] [Button 12]. This frees up DTMF receivers faster, but may not provide the desired toll restriction for SLT stations.
- ❖ Enable LCR and force LCR on SLT stations.

When the LCR database is set up, the 3-digit table allows entry of the number of digits to expect. When a SLT dials the appropriate number of digits, LCR releases the DTMF receiver and then be available for another SLT call.

## LCR Versus Toll Restriction

LCR is not an alternative to toll restriction nor is toll restriction an alternate to LCR. They work best when programmed together. Toll restriction specifies station dialing privileges, and LCR provides call routing to appropriate lines. LCR can enhance toll restriction by providing Store and Forward operation to analyze digits being dialed before a trunk is seized. This prevents users from by-passing toll restriction by taking advantage of the time required for a central office line to provide dial tone. LCR is recommended when toll restriction is enabled.

## Toll Restriction

### Entering Toll Table

#### Programming Steps

If the system is in the programming mode, continue using the program codes. If starting to program here, enter the programming mode.

- 1 Press **FLASH** and dial **[70]**. The following message is shown on the display phone:

EX TABLES  
ENTER BUTTON NUMBER

- 2 To program Allow/Deny tables, press the appropriate Table button and enter information as outlined in the following procedures.



Toll Restriction



- 3 To program Special Tables 1-3, it is necessary to associate an area code to the table. This is done by pressing the appropriate AREA CODE TABLE button and assign the area code.



*Special Table 4 is reserved for the home area code and does not require an area code entry.*

- 4 To display entries in any of the tables, press the DISPLAY TABLES button (**FLASH 70, Button #12**). Entries in the Allow/Deny tables display two at a time. Entries in the Special tables display six at a time in ascending order.

**Description**

All toll tables have been conveniently placed under one program code to allow entry of all toll restriction data.

The buttons on the digital terminal are defined as shown below when entering the Toll Restriction programming area:

<p><b>ALLOW TABLE A</b></p> <p>* [ 1 ] [ Q ]</p> <p><b>SPECIAL TABLE 1</b></p> <p>* [ 5 ] [ T ]</p> <p><b>AREA CODE TABLE 1</b></p> <p>* [ 9 ] [ O ]</p> <p>* [ 13 ] [ D ]</p> <p>* [ 17 ] [ J ]</p> <p>* [ 21 ] [ Z ]</p>	<p><b>DENY TABLE A</b></p> <p>* [ 2 ] [ W ]</p> <p><b>SPECIAL TABLE 2</b></p> <p>* [ 6 ] [ Y ]</p> <p><b>AREA CODE TABLE 2</b></p> <p>* [ 10 ] [ P ]</p> <p>* [ 14 ] [ F ]</p> <p>* [ 18 ] [ K ]</p> <p>* [ 22 ] [ X ]</p>	<p><b>ALLOW TABLE B</b></p> <p>* [ 3 ] [ E ]</p> <p><b>SPECIAL TABLE 3</b></p> <p>* [ 7 ] [ U ]</p> <p><b>AREA CODE TABLE 3</b></p> <p>* [ 11 ] [ A ]</p> <p>* [ 15 ] [ G ]</p> <p>* [ 19 ] [ L ]</p> <p>* [ 23 ] [ C ]</p>	<p><b>DENY TABLE B</b></p> <p>* ( [ ] [ 4 ]</p> <p><b>SPECIAL TABLE 4</b></p> <p>* [ 8 ] [ I ]</p> <p><b>DISPLAY TABLES</b></p> <p>* [ 12 ] [ S ]</p> <p>* [ 16 ] [ H ]</p> <p>* [ 20 ] [ : ]</p> <p>* [ 24 ] [ V ]</p>
---	---	--	--

When the system searches the allow and deny tables, the entries are checked starting with Bin 01 and proceeding sequentially through the table to the last bin. In addition the Allow Table is always searched before looking at the Deny Table. Therefore, the entry order is important. Entries that are specific (e.g., [ 1 716 ]) are placed ahead of entries that are more general (usually include Do Not Care digits; e.g., [ 1 D 1]).

Once a match is found in the Allow Table that references a Special Table, the number dialed are checked for an allowed code in the Special Table. If a match is not found in the Special Table, the system continues to

check for a match in the next Allow or Deny Table to check. The system does not return to the table that sent the call to the Special Table.

## Allow Table

### Programming Steps

- 1 Press the ALLOW TABLE A or ALLOW TABLE B flexible button (FLASH 70, Button #1 or #3). The following message is shown on the display telephone:

ALLOW TABLE A	02E
01E	

The first two bin locations display.

- 2 Enter the 2-digit bin number (01-20) of the bin to be programmed.

It is recommended that:

- ❖ Bin 17 be reserved for an entry that references SPECIAL TABLE 1
- ❖ Bin 18 be reserved for an entry that references SPECIAL TABLE '2
- ❖ Bin 19 be reserved for an entry that references SPECIAL TABLE 3
- ❖ Bin 20 be reserved for an entry that references the Home Area Code Table, SPECIAL TABLE 4.

- 3 Enter the Allow Code.

Where:

[0-9], [\*], [#] = Corresponding allow digits (numbers)

MUTE = Do Not Care digit (D)

TRANS = Search Special Table (S)

- 4 Press the HOLD button to save the entry. Confirmation tone is heard and the display now updates.
- 5 When all entries for one table are complete, press the flexible button for the next table.

To erase a bin:

- 1 Enter the 2-digit bin number.
- 2 Press the HOLD button.

### Description

Each Allow Table contains 20 bin numbers. Each bin number may be up to 8 digits, including Do Not Care digits and Search Special Table commands. Entries into the Allow Table represent exceptions to numbers or codes that are to be allowed only if they would otherwise be restricted by an entry in the Deny Table. For

## Exception Tables

Toll Restriction



example, if [1 555 1212] is allowed but [1 +] numbers are denied, by an entry into the Deny Table, [1 555 12 12] is entered into the Allow Table as an allowed number.

- ❖ Allow Table A is referenced and searched first (before Deny Table A) when Station COS is 2 and CO Line COS is either 1 or 2.
- ❖ Allow Table B is referenced and looked at first (before Deny Table B) when Station COS is 3 and CO Line COS is either 1 or 3.
- ❖ When Station COS is 4 and CO Line COS is 1 both allow tables are looked at first (Allow Table A first, then Allow Table B) then both deny tables (Deny Table A first, then Deny Table B).

Do Not **Care** digits specify that the system should consider any digit dialed in that position as a match. Do Not Care digits should not be entered as the last digit in an entry, as this would be an unnecessary or meaningless command.

**Search Special Table** commands must be entered in a specific manner and should always be the last entries in the Allow Table. It is recommended that the last four bins (17-20) in the Allow Table be reserved for referencing the four special tables with the reference to the home area code (Special Table 4) always being located in bin number 20. Search Special table commands can only be entered into the allow tables.

The following rules apply when making entries that references the Special tables:

For entries referencing the first three special tables a specific area code must be identified (one for each table needed). Then make note as to how the numbers are dialed when dialing numbers to this area code (i.e., with a leading digit [I] or no leading digit [I] ).

The entry into the Allow Table would be entered as follows:

Leading digit [I]: Enter:

[BB] [I] [XXX] [DDD] [S] or,

Non-Leading [I]: Enter

[BB] [XXX] [DDD] [S]

Where:

BB = Bin Number (Bins 17-19)

XXX = Area Code (must match AREA-X entry)

DDD = Do Not Care digit (three entries, DND button)

[S] = Search Special Table Command  
(TRANS button)

For an entry that references the Home Area Code table (Special Table 4) the entry may also be entered to expect or not expect a leading digit [I]. In fact, in some cases it may be desirable to enter both of the following entries;



Leading digit [I]: Enter  
[BB] [I] [DDD] {S} and/or,

Non-Leading [I]: Enter  
[BB] [DDD] {S}

Where:

BB = Bin number (Bin 20)

DDD = Do Not Care digit (three entries, MUTE button)

{S} = Search Special Table Command  
(TRANS button)



*If both leading digit [I] and non-leading digit [1] entries are made to reference the same table, it is necessary to place the leading digit [1] entry ahead of the non-leading digit [1] entry in the Allow Table.*

## Deny Table

### Programming Steps

- 1 Press the DENY TABLE A or DENY TABLE B flexible button (FLASH 70, Button #2 or #4). The following message is shown on the display phone:



The first two bin locations are displayed.

- 2 Enter the 2-digit bin number (01–10) of the bin to be programmed.
- 3 Enter the deny code:

Where:

[0–9], [\*], [#] = Corresponding deny digits numbers)

MUTE = Do Not Care digit

- 4 Press the HOLD button to save the entry. Confirmation tone is heard and the display now updates.
- 5 When all entries for one table are complete, press the flexible button for the next table.



To erase a bin:

- 1 Enter the 2-digit bin number
- 2 Press the HOLD button.





## Description

Each Deny Table contains ten bin numbers. Each bin number may be up to eight-digits including {Do Not Care} digits. Entries in the Deny Table represent numbers or codes that are to be denied or restricted. Common entries would be [1] for restricting all [ 1 +] type of calls. Exceptions to this restriction would be entered into the Allow Table.

- ❖ Deny Table A is referenced and searched only after the Allow Table A is checked when Station COS is 2 and CO Line COS is either 1 or 2.
- ❖ Deny Table B is referenced and searched only after the Allow Table B is checked when Station COS is 3 and CO Line COS is either 1 or 3.
- ❖ When Station COS is 4 and CO Line COS is 1, both allow tables are looked at first (Allow Table A first, then Allow Table B) then both deny tables (Deny Table A first, then Deny Table B).

Do Not Care digits specify that the system should consider any digit dialed in that position as a match. Do Not Care digits should not be entered as the last digit in an entry.

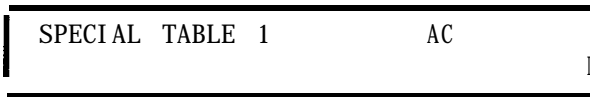
**Search Special Table** commands cannot be entered into the Deny tables.

## Special Table

### Programming Steps

To program a Special Table, it is first necessary to assign an area code to the table (except for the home area code), To assign an area code to a Special Table:

- 1 Press the appropriate AREA CODE TABLE (#1 to #4) flexible button (FLASH 70, Buttons #9 to #11). The following message is shown on the display phone:



- 2 Enter the 3-digit area code.
- 3 Press the HOLD button to save the entry. Confirmation tone is heard and the display now updates.

To enter office codes into the Special Table:



- 1 Press the SPECIAL TABLE (#1 to #4) flexible button (**FLASH 70, Buttons #5 to #8**) that corresponds to the area code programmed above. The following message is shown on the display phone:

SPECIAL TABLE 1	AC XXX	I
-----------------	--------	---

Where:

XXX = Area Code

- 2 Enter the 3-digit office codes that are to be allowed followed by a [I] which means to allow this code. To remove a code from the allow list enter the 3-digit office code followed by a [0] which removes the code from the allow list.

XXX [1] = Allow Code

XXX [0] = Remove Code from the list.

Where:

XXX = An office code from 200 to 999.

- 3 Press HOLD after every code entered. Confirmation tone is heard and the display now updates. Multiple codes may be entered in a row. The display updates showing the first six codes in ascending order.

## Description

The Special Tables provide greater flexibility in designing a toll plan for a particular site. Each Special Table allows entry of up to 800 3-digit office codes (200–999). Three of these tables must be assigned an area code by which they are referenced. The fourth table is reserved for the home area code and requires no area code entry. The special tables are referenced through entries in the allow tables. Four area codes, including the home area code, can be referenced to these special tables for further definition. When a Special Table is referenced, entries must be made in the Special Table specifying what office codes are allowed.

Codes can be added to the allow list or removed from the list. When a Special Table is checked for a match to a 3-digit code and not found, the system continues to search the next Allow/Deny Table to be checked. The system does not return to the Allow Table which routed the call to the Special Table. By default, no codes are on the allow list.



ALLOW TABLE A	DENY TABLE A	ALLOW TABLE B	DENY TABLE B
* 1 Q	* 2 W	* 3 E	* 4 R
SPECIAL TABLE 1	SPECIAL TABLE 2	SPECIAL TABLE 3	SPECIAL TABLE 4
* 5 T	* 6 Y	* 7 U	* 8 I
AREA CODE TABLE 1	AREA CODE TABLE 2	AREA CODE TABLE 3	DISPLAY TABLES
* 9 O	* 10 P	* 11 A	* 12 S
* 13 D	* 14 F	* 15 G	* 16 H
* 17 J	* 18 K	* 19 L	* 20 :
* 21 Z	* 22 X	* 23 C	* 24 V

## Display Toll Table Entries

### Programming Steps

- 1 Press the DISPLAY TABLES flexible button (**FLASH 70, Button #12**) while entering information into a table.
- 2 While viewing entries made into an Allow or Deny Table, two entries at a time are displayed on the bottom line of the display. By pressing the DISPLAY TABLES button again, the next higher bins displays. When the last entries are displayed, pressing the DISPLAY TABLES button again shows the first two entries.

```

ALLOW TABLE A
01 XXXXXXXE          02 xxxxxxxx
    
```

Where:

X = Allow or Deny Code

E = End of Entry



While viewing entries in a Special Table, six 3-digit codes allowed display in ascending order starting with the lowest entry. By pressing the DISPLAY TABLES button again, the next 6 entries display. This continues until all codes are displayed.

SPECIAL TABLE 1	AC XXX
YYY YYY YYY YYY	YYY YYY

1

Where:

XXX= Area Code

YYY= Allowed Office Code

## Description

It is possible to view entries in the toll tables using the display on the Executive telephone. To view all entries, the DISPLAY TABLES flexible button (FLASH 70, Button #12) is pressed multiple times to scroll through the entries.



*It is recommended to view all entries in the Allow and Deny Table before leaving programming. Entries can be entered near the bottom of the list for searching the special tables or entries made in error. Viewing the entire Allow Table ensures proper entry and operation.*





# 10 Least Cost Routing (LCR)



## Introduction

Least Cost Routing (LCR) selects the most economical programmed route for an outgoing call. When a station user dials an outside number, the LCR feature analyzes the number and then automatically chooses an outside line from the group that has been programmed as most economical. The LCR feature puts the responsibility of choosing the least expensive route for each area code and exchange code on the system administrator, not on the station user. In order to make a routing decision, the LCR feature is programmed in the system database. The successful operation of this feature is completely dependent on the accuracy of the programming.


There are eight different tables which are set up to monitor the dialing of digits and to select the best route for the call depending on time of day and day of week. These tables are:

- ❖ 3-digit Area/Office Code Routing Table
- ❖ 6-digit Office Code Routing Table
- ❖ Exception Table
- ❖ Route List Table
- ❖ Insert/Delete Table
- ❖ Daily Start Time Table
- ❖ Weekday (Weekly) Schedule
- ❖ Toll Information Table

## LCR Operation

The system first checks to see if the number dialed is more than two digits. If it is two digits or less, the call is processed according to instructions in the Exception Table. If the number is not found in the Exception Table, the call is denied. If the number is more than two digits, it goes to the 3-digit table. If the first digit dialed is a 1 the Leading 1 table is checked with the following three digits. If the first digit dialed is not a 1, then the first three digits are checked against the Non-Leading 1 3-digit table. The first three digits (either office code or area code) are then checked to see if they are in the 3-digit table. If they are not found there, the call is not routed. If the digits are found in the 3-digit table, the system then checks for an entry to see if the 6-digit table must be referenced.





If the 6-digit column is marked [yes] in the three digit table entry, the number is then checked in the 6-digit table. There are twenty 6-digit tables. Each 6-digit table is programmed and becomes associated to a specific area code with a selected route. Office codes are entered into the 6-digit table that is routed to a specific route list table. This lets the system administrator split area codes for routing to different lines connected to the system. This helps when Foreign Exchange lines (FX Lines), Banded WATS lines, or Dedicated Lines (OPXs from another system) are in use.

If the office code is not found in the 6-digit table, the call is referred back to the 3-digit table for selecting a route list table. The office code then goes through the same procedures as described below.

Before actually selecting a route list table, the number is checked against the toll restriction tables (station COS). When LCR is enabled, only station Class of Service is referenced. CO Line Class of Service is no longer applicable. All CO lines are considered Class of Service 1. If the call is not allowed through the toll restriction tables, the call is denied. If it is allowed, the call then goes to the Route List table as specified by either the j-digit or 6-digit table.

The time-of-day and day-of-week is determined and the call is presented to the corresponding time period route within the specified route table. Each of the 16 Route tables contain four time-sensitive routes, Routes are determined by the time-of-day and day-of-week as specified in the Daily Start Time table and the Weekly Schedule table. After the appropriate route is selected, LCR Class of Service becomes applicable. A station can use only those line groups programmed with a priority number equal to or higher than the station's LCR Class of Service.

If a line is not available in the first choice line group, the system advances to the next choice line group and searches for a free line. This process continues until an available line is found, or the last available line group is searched, or until a line group is reached with a priority assignment lower than the station's LCR Class of Service assignment. When a line is available the system seizes that line and waits for dial tone. Then before dialing, the system checks the Insert/Delete table for digits that should be deleted from the front of the number or digits that should be inserted either before or after the number dialed. Finally the system begins to dial the number out over the selected line. All of this analyzing and manipulation of the number takes only a fraction of a second from the time the station user begins to dial until the number is dialed out over the public network lines.

If no lines are available in any of the CO line groups programmed for that route and allowed to that station, the call can be automatically queued on to the first choice (least costly) line group. If the user waits three seconds after dialing the number, they will hear confirmation tone which indicates that an automatic LCR Queue Callback has been activated on the first choice line group. When a CO line becomes available in the first choice line group the system will ring the calling station. When answered by the station the system will automatically seize the line and redial the number.

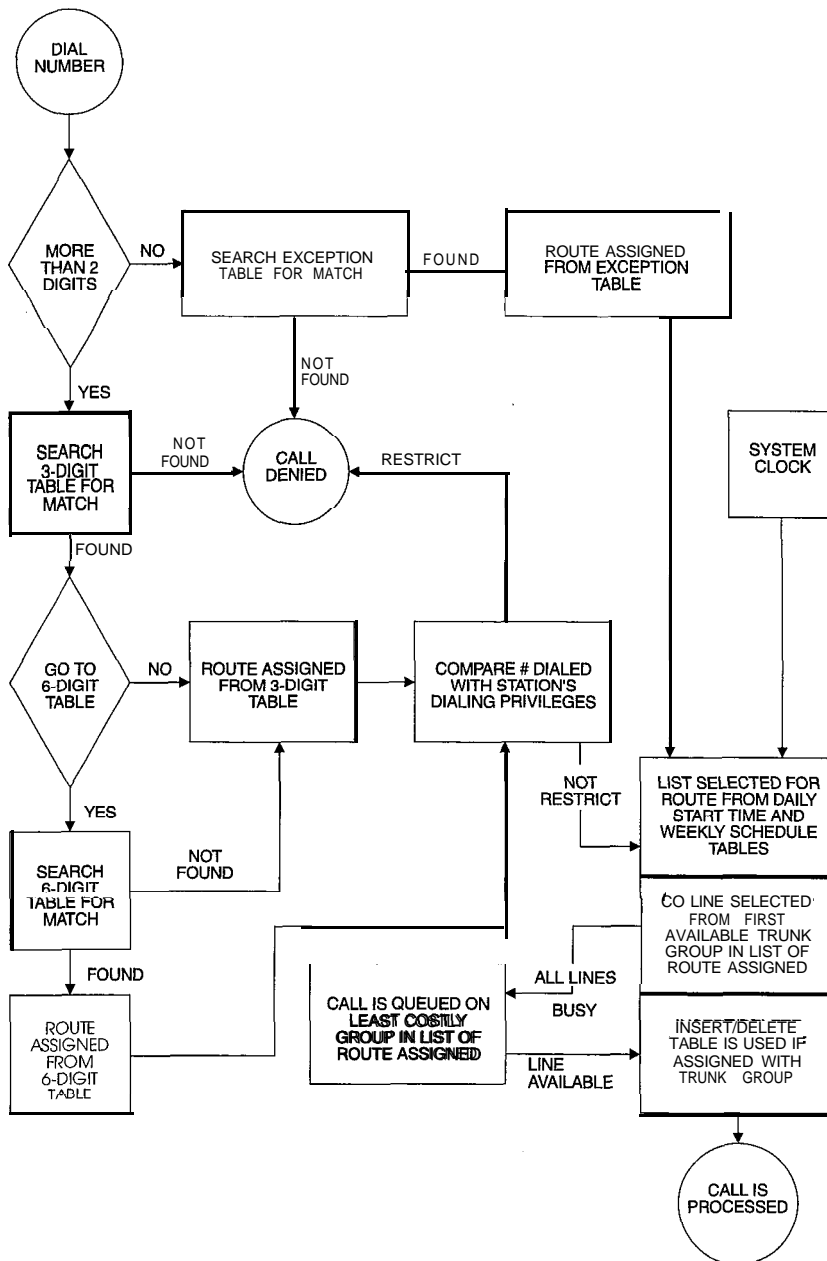


Figure 1 O-I: LCR Flowchart



## LCR Tables

### Programming Steps

If the system is in the programming mode, continue using the program codes. If starting to program here, enter the programming mode. To program the system for Least Cost Routing:

- 1 Press **FLASH** and dial **[75]**. The following message is shown on the display phone:

LCR TABLES  
ENTER BUTTON NUMBER

- 2 There are eight tables which can be programmed here for LCR (you must also program LCR Class of Service in Station Programming). Use the procedures listed below to program these LCR tables.



*It is extremely important that the worksheets be completed before programming the LCR tables.*

### Description

The Least Cost Routing (LCR) feature allows automatic selection of the most economical trunk according to the number dialed and the time of the day and day of the week. There are eight different tables which are set up to monitor the dialing of digits of a station and to select the best route programmed for the call.

These tables are:

- ❖ 3-digit Area/Office Code Routing Table
- ❖ 6-digit Office Code Routing Table
- ❖ Exception Table
- ❖ Route List Table
- ❖ Insert/Delete Table
- ❖ Daily Start Time Table
- ❖ Weekday (Weekly) Schedule
- ❖ Toll Information Table

The buttons on the digital terminal are defined as shown below when entering the LCR Tables Programming area:





**3-DIGIT TABLE**

\*    
 INSERT /  
 DELETE TABLE  
 \*

**6-DIGIT TABLE**

\*    
 DAILY TIME  
 TABLE  
 \*

**EXCEPTION  
TABLES**

\*    
 WEEKLY TIME  
 TABLE  
 \*

**ROUTE LIST  
TABLE**

\*    
 TOLL  
 INFORMATION  
 \*

**3-Digit Area / Off ice Code Table**

**Programming Steps**

- 1 Press 3-digit Table flexible button (**FLASH 75, Button #1**). The following message will be shown on the display phone:

3 DIGIT ROUTING TABLE  
 ENTER L NNN RRY PP HOLD

Where:

L = [0] for Non-Leading 1 (1 not dialed)  
 [1] for Leading 1 (1 is dialed)

NNN = Area/Office Code

RR = Route List Number 00-15

Y = [0] do not go to 6-digit table  
 [1] go to 6-digit table

PP = Number of digits expected to be dialed.

- 2 Press the HOLD button to save the entry. Confirmation tone is heard and the display will now update.

**Description**

This table is divided into two sections – Leading 1 (a [1] is dialed before the number) and Non-Leading 1 (no [1] is dialed before the number). This gives the system the ability to handle call routing in areas that require a [1] before a long distance number, as well as in areas that do not require the [1].

Both of these tables include all area codes (NPAs), and office codes (NXXs), from 000 to 999, including such numbers as 911,411, etc. A complete entry into these tables include a route list table to be used, if the 6-digit table is to be checked and the number of digits likely to be dialed (Example: 7 or 10 digits). All local office codes must be entered in this table even if they do not require long distance calling.





The number of digits to expect entry will aid the system in identifying when the last digit is dialed and to begin routing the call. This also helps to free SLT DTMF receivers if SLT traffic in the system is heavy. For international calls, use 00 as number of digits to expect. This causes the system to wait five seconds (or inter-digit time-out) after user dials last digit before the system accesses a CO Line and dials out.

## 6-Digit Office Code Table

### Programming Steps

- 1 Press the 6-digit table flexible button (**FLASH** 75, Button **#2**). The following message is shown on the display phone:

6 DIGIT ROUTING TABLE  
ENTER S AAA RR NNN HOLD

Where:

S = [0] to remove codes, [1] to add codes

AAA = Area Code

RR = Route Number 00-15

NNN = Office Code

- 2 Press the HOLD button to save the entry. Confirmation tone is heard and the display will now update.
- 3 Enter additional office codes to be programmed into the same Area Code/ Route Table, pressing HOLD after each office code entry.
- 4 Press a flexible button to program a different table.

To delete all entries in an Area Code/Route Table:

- 1 Enter [0 AAA RR ###]

### Description

This table determines a route for one or a group of individual office codes within an area code. Certain office codes within an area code can be given unique or special routing. If the office code dialed is not found in the 6-digit Office Code Table, the call is then routed according to the route list table as was entered in the 3-digit table.

The system allows twenty 6-digit Area/Office code tables that may be used to route specific office codes within an area code. Each table will route calls for a common area code to a specified route. All entries





made to a table route those office codes to the specified route list table, An area code may be entered into more than one 6-digit table with different routes specified.



## Exception Code Table

### Programming Steps

- 1 Press EXCEPTION TABLES flexible button (FLASH 75, Button #3). The following message will be shown on the display phone:

```
EXCEPTION CODE TABLE
ENTER S XX RR HOLD
```

Where:

S = [0] to remove code from table,  
[1] to add code to table

XX = Exception codes for single digit codes, press MUTE button as 2nd digit. The [\*] may be entered as the 1st digit only.

RR = Route Table Number 00-15

- 2 Press the HOLD button to save the entry. Confirmation tone is heard and the display will now update.
- 3 Press FLASH 75, Button #3 again for further entries. Up to 20 Exception Codes may be programmed in this table.

### Description

This table is used for operator calls and any other calls which would use a one-digit or two-digit entry, rather than a three-digit area code.

## Route List Table

### Programming Steps

- 1 Press the ROUTE LIST TABLE flexible button (FLASH 75, Button #4). The following message will be shown on the display phone:

```
ROUTE LIST TABLE
RR T G DD L
```





Where:

RR = Route List Table Number 00-15

T = Time Period Route List 1-4

G = CO Line Group 1-7

DD = Insert/Delete Table reference 00-19 (## for none)

L = LCR Class of Service (LCOS)

- 2 Press the HOLD button to save the entry. Confirmation tone is heard and the display will now update.
- 3 To enter additional CO Line groups in the same time period route list number, Dial: [G] [DD] [L] [HOLD]

To enter data for a different time period route list:

- 1 Press program **FLASH 75, Button #4** and enter all data (RR T G DD L).
- 2 Repeat the above to program a new Route Number 00 to 15 or press a flexible button to program other LCR information.

To use the scroll method, use Button # 18 to advance to the next entry or use Button # 19 to return to a previous entry.

The following message displays when the Call Cost feature is enabled in **FLASH 05, Button #11**.

ROUTE LIST TABLE  
RR T CCC G DD L

Where:

RR = Route List Table Number 00-15

T = Time Period Route List 1-4

CCC = Cost for one minute (\$ 0.00-\$9.99)

G = CO Line Group 1-7

DD = Insert/Delete Table reference 00-19 (## for none)

L = LCR Class of Service (LCOS)

### Description

Up to 16 different Route List tables can be programmed. Each route list table contains four time period routing lists, one for each of the available (four) daily start time periods. Within each time period route list up to seven CO (outside) line groups and their corresponding Insert/Delete table, if any, and LCR class of service priority are programmed on a per line group basis.







When routing a CO call through LCR, CO Line groups are accessed in sequence so that the first line group entered represents the least costly (and first selected) and the last line group entered represents the most costly (and last selected).



The Route List table references many other tables when processing a call for routing. First of all, the Daily start time table is referenced to determine what start time entry should be checked in the weekly schedule table. The corresponding entry in the weekly schedule table depending on the day of the week then determines which Time Period Route list should be used within the Route List table.

The system then begins to check for idle lines in the first entered CO line group and will proceed until an idle line is found. While it is searching for an idle CO line the Station LCR COS is checked against the entries for LCR COS Priority of the specific CO line groups (see LCR COS Priority explanation below). Once an idle CO Line is found with a LCR priority equal to or higher than the stations LCR COS, then a final check is made to determine if an Insert/Delete table should be referenced. Once all of the tables and entries are checked the system then processes the call on the outside CO line.



*Make sure you made entries into all Time Period Route Lists referenced in the weekly schedule table.*

LCR COS Priority ▪ A station should be assigned a class of service for LCR. The LCR COS can be between 0 and 6, with 0 being unrestricted and 6 being the most restrictive. Within the time period route List table, line groups are given an LCR COS Priority assignment between 0 and 6. A station using LCR will be able to use only those CO (outside) line groups with a priority assignment of equal or higher value than the station's LCR Class of Service (Le., a station with LCOS 3 can use line groups with a priority between 3 and 6).





Allow Access To Route		LCR CO Line Group Priority						
		0	1	2	3	4	5	6
S T A	0	Y	Y	Y	Y	Y	Y	Y
	1	N	Y	Y	Y	Y	Y	Y
	2	N	N	Y	Y	Y	Y	Y
L C R	3	N	N	N	Y	Y	Y	Y
	4	N	N	N	N	Y	Y	Y
	5	N	N	N	N	N	Y	Y
C O S	6	N	N	N	N	N	N	Y

↓ = Cannot Use Line Group

Y = Has Access to Line Group

Table 1 O-I: LCR Class of Service Table

## Insert / Delete Table

### Programming Steps

- Press INSERT/DELETE TABLE flexible button (FLASH 75, Button #5). The following message will be shown on the display phone:

```
DIGIT INSERT / DELETE
ENTER TT X DDD HOLD
```

- Enter the table information as follows:

Where:

TT = Insert/Delete Table Number 00-19

X = [0] Pre-Delete numbers (first digits dialed in the number)

or

[1] Pre-Insert numbers (insert digits in front of number dialed,

or

[2] Post-Insert numbers (insert digits behind number dialed)

DDD = Digits (up to 16-digits may be deleted from the beginning of the number dialed and up to 40 digits can be inserted (20 pre- and 20 post).





- 3 Press the HOLD button to save the entry. Confirmation tone is heard and the display updates.

To add and delete numbers in the same table, enter the different Insertion/Deletion tables in step 1, and enter as separate entries using the same table number. In the Insert Tables for LCR programming:

- 1 Press the TRANS button for a pause.

The [\*] and [#] digits are allowed as valid digits for inserting digits dialed over the network.

The [\*] and [#] are valid entries for adding digits in both the pre (in front of) or post (behind the number) tables.

The [\*] and [#] cannot be used as delete characters in the Delete tables.

To delete a table:

- 1 Enter the table number followed by the HOLD button.

### Description

Digits can be either added or deleted when dialing a number. For instance, if a user dials a long distance call that should be placed on a foreign exchange (FX) line, the digit [ 1] and the three-digit area code (NPA) dialed by the user must be deleted before the call can be placed on that FX line. An Insert/Delete table can be programmed to do this. Digits can also be added to a number that has been dialed by the user. For instance, Other Common Carrier (OCC) access codes and authorization (ID) codes can be automatically inserted by the system either in front of, and/or behind the number dialed.

There are twenty Insert/Delete tables and each allows entries in a delete table and a pre- and post insert table. Up to 40 digits (including pauses) can be inserted (20 pre and 20 post) and up to 16 digits can be deleted. Digits can be inserted before or after the number dialed, but can be deleted only from the start of the number dialed.

To ensure that a pause is inserted in LCR at default, the database programming was changed to add a pause in each of the 20 LCR Insert and Delete tables and insert table 0 in each of the route tables,



## Daily Start Time Table

### Programming Steps

- 1 Press the DAILY START flexible button (FLASH 75, Button **#6**). The following message displays on the phone:

DAILY	START	TIME	TABLE	
HHMM	HHMM	HHMM	HHMM	HOLD

- 2 Enter times in military format (2400 hours) in succession.
- 3 Press the HOLD button to save the entry. Confirmation tone is heard and the display updates.

Default times are 0800, 1700, 2300 (8 AM, 5 PM, and 11 PM), and the fourth time is disabled (####). To change a Start Time, all times must be re-entered. Four pounds [####] are displayed if nothing is entered for a specific time.

### Description

The Daily Start Time table correlates the LCR routing table to the time sensitive discount structure offered by the customers carrier.

Example:

In the most common situation, the most expensive rate period is between 8:00 am and 5:00 pm, often called the day rate. The first discount period usually starts at 5:00 pm and runs until 11:00 pm, often called Evening Rates. The remaining time (from 11:00 pm until 8:00 am) in this example is referred to as night time rates which usually have the biggest discount.

With the wide selection of Common Carriers, the least costly route for a particular area code may be different at different times of the day. To accommodate this situation, this table and the Weekly Schedule table work together, dividing the day into four possible time periods. By default these tables are set at the standard divisions of 8AM, 5PM, and 11PM. However, these times can be changed.

Entries in the Daily Start Time table are used to select the time period to reference in the weekly schedule. Based on the time a call is placed, the daily start time table selects the time period to choose in the weekly schedule. The weekly schedule is then used to determine the time period route list in the Route List table to use for routing the call for a particular day of the week. Times are entered in the 24 hour format.



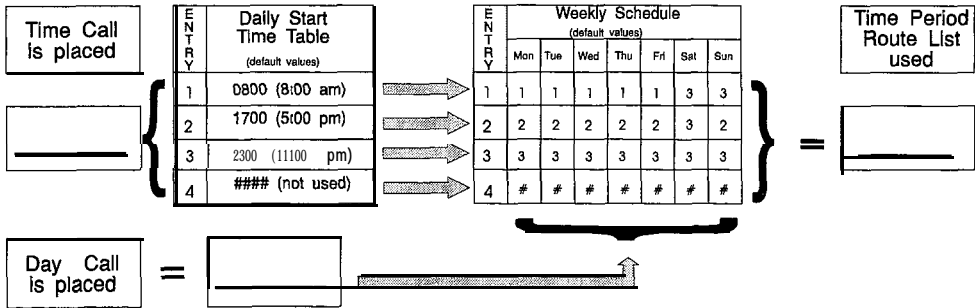


Figure 1 O-2: Daily Start Time and Weekly Schedule Tables

## Weekly Schedule Table

### Programming Steps

- 1 Press the WEEKLY SCHED flexible button (FLASH 75. Button **#7**). The following message displays on the phone:

WEEKLY SCHEDULE TABLE  
ENTER D T T T T HOLD

Where:

D = Day of the Week:

- |                 |                |
|-----------------|----------------|
| [0] = Monday    | [4] = Friday   |
| [1] = Tuesday   | [5] = Saturday |
| [2] = Wednesday | [6] = Sunday   |
| [3] = Thursday  |                |

T = Time Period Route List (1-4) to use for the time-of-day (based on the Daily Start Time table). Enter values for all time periods specified in the Daily Start Time table for that day.

First T = Time Period Route List for the FIRST Daily Start Time (applies to all Route List tables).

Second T = Time Period Route List for the SECOND Daily Start Time (applies to all Route List tables).

Third T = Time Period Route List for the THIRD Daily Start Time (applies to all Route List tables).

Fourth T = Time Period Route List for the FOURTH Daily Start Time (applies to all Route List tables).



- Press the HOLD button after each complete daily entry. Confirmation tone is heard and the display updates.

### Description

The weekly schedule table determines what Time Period Route list to use within the Route List table. When a call is placed and ultimately sent to a route list (call is not denied) based on the time of day the call is placed, the Daily Start Time table selects the time period to reference in the weekly schedule table. The time period route entered for the specified time period, as determined in the Daily Start Time table and based on the day of week, is then selected and the call will be routed according to the specified time period route list.

Example:

If a call is placed at 5:45 pm on a Monday, then according to the Daily Start Time table (using default values) the entry for time period two of the weekly schedule is checked. Because it is Monday the entry for time period two on Monday is used and the result is that the Time Period Route List number two (again using default values) will be used for all routes. Thus, the call is routed according to the entries in Time Period Two route list no matter what route (00-15) is selected.

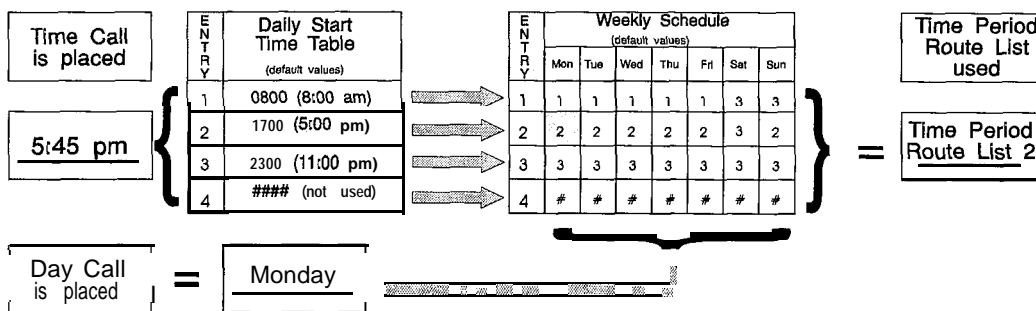


Figure 10-3: Daily and Weekly Start Time Table

## LCR Routing for Toll Information

### Programming Steps

- Press the TOLL INFO flexible button (FLASH 75, Button #8). The following message displays on the phone:

LCR ROUTE FOR 555-1212  
ENTER ROUTE





- a Enter the two-digit Route List number (00-15) for the Route to be referenced in the Route List table.
- 3 Press the HOLD button after programming the Route number. Confirmation tone is heard and the display will now update.
- 4 Enable LCR at this point.

**Description**

This feature adds provisions to the LCR call processing which will allow common call routing for all toll information calls. 1-(XXX) 555-1212, (XXX) 555-1212, 1-555-1212 and 555-1212 calls will all be intercepted and sent to a selected route in the Route List table. Numbers dialed will be integrated and if it is determined to be a toll information call, either preceded with an area code or without or with a leading digit 1 or not, the call will be sent to the route designated in programming. By default, Toll Information Calls will be sent to Route List table zero (0) which will allow toll information calls to be placed on the system at default. A Toll Information route is chosen over a j-digit or 6-digit route assignment if both are assigned.

Entering the pound key twice [##] denies all Toll Information calls.

**Default LCR Database**

**Programming Steps**

In an effort to decrease installation and set up time usually associated with LCR, a default LCR database was incorporated.

**Description**

The default LCR database provides basic routing for local and long distance dialing. Default entries have been made in the 3-digit table for local office codes (NNXs) and all area codes (NPAs). Six routes have been established with the default database for routing of all calls under default.







# 11 Initialize Database Parameters



## Introduction

### Programming Steps

If the system is in the programming mode, continue using the program codes. If starting to program here, enter the programming mode. If Database Parameters must be initialized:

- 1 Press FLASH and dial **[80]**. The following message displays on a display phone:

<p><b>INITIALIZE DATABASE</b> <b>ENTER BUTTON NUMBER</b></p>
--

### Description

This section describes the procedures and steps necessary to initialize the system database, returning any programmed data to its original or default value. This section lets portions of the database be initialized individually. This initialization occurs regardless of the position of switch #8 on the MPB. The only way to initialize the entire database is to move switch #8 on the MPB board to the ON position and reset or power off/on the system. In addition to initialization of the entire database, a System Reset (button #20) command is also included in this section for clearing meantime errors without initializing the database,

The buttons on the key telephone are defined as shown below when entering the Initialize Database Parameters programming area:





<b>SYSTEM PARAMETERS</b>	<b>CO LINE ATTRIBUTES</b>	<b>STATION ATTRIBUTES</b>	<b>PORT - STA/CO</b>
* 1 Q	* 2 W	* 3 E	* 4 R
<b>EXCEPTION TABLES</b>	<b>SYSTEM SPEED NUMBERS</b>	<b>LCR TABLES</b>	<b>ICLID-DID TABLES</b>
* 5 T	* 6 Y	* 7 U	* 8 I
<b>DIRECTORY DIAL TABLE</b>	<b>HUNT GROUPS</b>	<b>ACD* OR UCD GROUPS</b>	<b>VOICEMAIL GROUPS</b>
* 9 O	* 10 P	* 11 A	* 12 S
* 13 D	<b>ACCT CODES</b>	* 15 G	* 16 H
* 17 J	* 14 F	* 19 L	* 20 :
* 21 Z	* 18 K	* 23 C	* 24 V
	* 22 X		

## Initialize System Parameters

### Programming Steps

- 1 Press the SYSTEM PARAMETERS flexible button (**FLASH 80, button #1**). The following message displays on the phone:

INITIALIZE SYS PARAM  
PRESS HOLD

- 2 To initialize the System Parameters, press the HOLD button. Confirmation tone is heard.

### Description

The system parameters may be initialized setting all data fields to their original, default values. The following data fields are returned to their default values upon initializing the System Parameters.



Program Code	Flex Button	Features	Default Value After Initialization
Flash 01	<b>SYSTEM TIMERS:</b>		
	1	System Hold Recall Timer	060 sec.
	2	Exclusive Hold Recall Timer	180 sec.
	3	Attendant Recall Timer	01 min.
	4	Transfer Recall Timer	045 sec.
	5	Preset Forward Timer	10 sec.
	6	Call Forward No/Answer Timer	15 sec.
	7	Pause Timer	2 sec.
	8	Call Park Recall Timer	180 sec.
	9	Conference/DISA Timer	10 sec.
	10	Paging Time-out Timer	15 sec.
	11	CO Ring Detect Timer	3 (100 ms)
	12	SLT DTMF Receiver Timer	020
	13	Message Wait Reminder Tone	000 min.
	14	SLT Hook Flash Timer	10 (1 sec.)
	15	SLT Hook Flash Debounce Timer	100 ms
	16	SMDR Call Qualification Timer	30 sec.
	17	Automatic Call Back Timer	03 sec.
	18	Reminder Ring Timer	00 sec.
	19	Release Guard Timer	3 (300 ms)
20	Flexible Inter-Digit Timeout	5 sec.	

Table 1 I-I: System Parameter Defaults



Program Code	Flex Button	Features	Default Value After Initialization
Flash 02	ADDITIONAL SYSTEM TIMERS		
	1	Repeat Redial Timer	60 sec.
	2	Attendant Display Timer	1 sec.
	3	Call Coverage Ring Timer	5 sec.
	4	Modem Answer T / 0	25 sec.
Flash 02	5	Pulse Dial Inter-Digit Timer	300 ms
	6	Programmable DTMF Time Operation	1 00ms on/ 00ms off
Flash 05	SYSTEM FEATURES 1		
	1	Attendant Override	Disabled
	2	Hold Preference	System
	3	External Night Ring	Disabled
	4	Executive Override Warning Tone	Enabled
	5	Page Warning Tone	Enabled
	6	Background Music Channel	Enabled
	7	Least Cost Routing	Disabled
	8	Account Codes - Forced	Disabled
	9	Group Listening	Disabled
	10	Idle Speaker Mode	Disabled
	11	Call Cost Display Feature	Disabled
	12	Music-On-Hold	Enabled
13	Call Qualifier Tone Option	Disabled	

Table 11-1: System Parameter Defaults





Program Code	Flex Button	Features	Default Value After Initialization
Flash 06	SYSTEMFEATURES		
	1	Privacy Release Tone Option	Enabled
	2	Distinctive CO Ringing	Enabled
	3	Verified Account Codes	Disabled
	4	Call Forward Display	Enabled
	5	External Day Ring	Disabled
	6	Overflow Station Forward	Disabled
	7	Direct Transfer Mode	Enabled
	a	Station ID Lock	Disabled
	9	LCR Call Progress	Enabled
	10	One-Touch Recording Warning Tone	Enabled
	11		
	12	Ringback on Transfer	Disabled

Table II-I: System Parameter Defaults



Program Code	Flex Button	Features	Default Value After Initialization
Flash 07	FLASH RATES		
	1	Incoming CO Line Ringing	Red 480 ipm flutter
	2	Incoming Intercom Ringing	Red 120 ipm flutter
	3	Call Forward Button	Red Steady On
	4	Message Wait/VM Button	Red Steady On
	5	Message CallBack - DSS/BLF	Red 120 ipm flutter
	6	Do Not Disturb - DSS/BLF	Red 60 ipm flash
	7	Auto CallBack - DSS/BLF	Red 120 ipm flash
	8	UCD Available/Unavailable - DSS/BLF	Red 60 ipm flash
	9	Transfer CO Ringing	Red 120 ipm flash
	10	Recall CO Ringing	Red 480 ipm flutter
	11	Queued CO Ringing	Green 480 ipm flutter
	12	Exclusive Hold	Green 120 ipm flash
	13	System Hold	Red 60 ipm dbl wink
	14	In Use Hold (I-Hold)	Green 60 ipm flash
	15	Camp-On Button	Red 120 ipm flash
	16	Call Back Button	Red 120 ipm flash
	17	Line Queue Button	Red 480 ipm flutter
	18	Do Not Disturb Button	Red Steady On
19	Intercom Hold Button	Red 15 ipm flash	
Flash 09	1-7	Leading Digit 1-7	None
	8	Leading Digit Option	Disabled
	9	Centrex Digit Length	4 digits
	10	Four Digit Voice Mail ID	3 digits
	13-18	MOH Assignments	None
Flash 10		Attendant Station Assignment	STA 100

Table II-I: System Parameter Defaults





Program Code	Flex Button	Features	Default Value After Initialization
Flash 1 1	1-4	System Time And Date	12 HR MMIDDIYY
Flash 12		PBX Dialing Codes	None
Flash 13	1-4	Executive/Secretary Pairs	None
Flash 14	1-2	On Board Relay	None
Flash 15	1	Port #1 (RS232C MISU)	9600 Baud
	2	Port #2 (RS232 MISU)	9600 Baud
	3	Port #3 (Modem)	9600 Baud
Flash 20	1	DISA Access Code	100
	2	Database Admin Password	3226
Flash 21	1	SMDR Enable/Disable	Disabled
	2	Long Distance/Local Assignment	LD
	3	Character Print Assignment8	80
	4	Baud Rate Display	9600
	5	SMDR Port Assignments	Port #1
Flash 22	1	Automatic/Manual Operation	Manual
	2-8	Day of Week Programming	(0-4) 08:00-17:00 (5-6) ####-####
Flash 23	1-4	Directory Dialing Table	None
Flash 41	1	Dial Pulse Parameters	60/40pps

Table II-I: System Parameter Defaults





## Initialize CO Line Attributes

### Programming Steps

- 1 Press the CO LINE ATTRIBUTES flexible button (**FLASH 80**, button **#2**). The following message displays on the phone:

INITIALIZE CO LINES  
PRESS HOLD

- 2 To initialize the CO Line Attributes, press the HOLD button. Confirmation tone is heard.

### Description

The CO Line parameters may be initialized setting all data fields to their original, default values. The following data fields are returned to their default value upon initializing the CO Line Attributes,

Program Code	Flex Button	Features	Default Value (after initialization)
Flash 40 Page A	1	DTMF/Dial Pulse Programming	DTMF
	2	CO/PBX Programming	c o
	3	UNA Programming	Enabled
	4	DISA Trunk-to-Trunk (Per CO Line)	Enabled
	5	Privacy	Enabled
	6	Loop Supervision Programming	Enabled 400 ms
	7	DISA Programming	Disabled
	8	Line Group Programming	Group 1
	9	Class of Service (COS) Programming	COS 1
	10	CO Line Ringing Assignments	STA 100
	11	CO Line Identification Display	None
	12	Trunk Direction	Bothway
	13	Display Ring Assignments	None
Flash 40	1	Transmit Volume Option	5 (0 db)

Table 11-2: CO Line Attribute Defaults







Program Code	Flex Button	Features	Default Value (after initialization)
Page B	2	Preset Call Forward Destination	None
	3	Preset Forward Voice Mail	None
	4	Universal Day Answer	Disabled
	5	Music-On-Hold per CO Line	Channel 1
	6	Ring Tone	00
Flash 40 Page C	1	Flash Timer Programming	10
	2	Ring Delay Timer	10
	3	Reseize Timer	1.5 sec.
	4	Guard Timer	2 sec.
	5	Preset Forward Timer	10 sec.

Table 11-2: CO Line Attribute Defaults



## Initialize Station Attributes

### Programming Steps

- 1 Press the STATION ATTRIBUTES flexible button (**FLASH 80, button #3**). The following message displays on the phone:

INITIALIZE STATIONS  
PRESS HOLD

- 2 To initialize the Station Attributes, press the HOLD button. Confirmation tone is heard.

### Description

The Station parameters may be initialized setting all data fields to their original, default values. The following data fields are returned to their default value upon initializing the Station Attributes,

Program Code	Flex Button	Features	Default Value (after initialization)
Flash 50	1	Paging Access	Enabled
Page A	2	Do Not Disturb	Enabled
	3	Conference Enable/Disable (Per Station)	Enabled
	4	Executive Override	Disabled
	5	Privacy (Per Station)	Enabled
	6	System Speed Dial Access	Enabled
	7	Line Queuing	Enabled
	8	Preferred Line Answer	Enabled
	9	Off -Hook Voice Over (OHVO)	Disabled
	10	Call Forwarding	Enabled
	11	Forced Least Cost Routing (LCR)	Disabled
	12	ACD Supervisor Monitor w/Barge-In	Disabled
	14	CO Line Ringing Options	Disabled
	15	Name/Number Display at Idle	Name

Table 11-3: Station Attribute Defaults





Program Code	Flex Button	Features	Default Value (after initialization)
Flash 50 Page B	1	Station Identification	0 (24-Btn Keypad) 6 (SLT w/o MWt)
	2	Station Day Class of Service	'
	3	Station Day Class of Service	'
	4	Speakerphone/Headset Programming	1
	5	Pick-Up Group(s) Programming	1
	6	Paging Zone(s) Programming	1
	7	Preset Call Forwarding Programming	None
	8	CO Line Group Access	1
	9	LCR Class of Service (COS)	0
	10	Off -Hook Preference Programming	00 (Keypad)
	11	Flexible Button Programming	None
	12	Keypad Mode	Inactive Mode
	13	Voice Mail ID Translation	VMID Digits
	14	Display Flexible Buttons	

Table 11-3: Station Attribute Defaults





## Initialize CO / Station Port Parameters

### Programming Steps

- 1 Press the PORT-STA/CO flexible button (**FLASH 80, button #4**). The following message displays on the phone:

```
INITIALIZE PORT - STA / CO
PRESS HOLD
```

- 2 To initialize the Station/CO Port Parameters, press the HOLD button. Confirmation tone is heard.

### Description

Station numbers can be initialized and reset to their original default values after the user has performed the Station Relocation Feature (**636**).

## Initialize Exception Tables

### Programming Steps

- 1 Press the EXCEPTION TABLES flexible button (**FLASH 80, button #5**). The following message displays on the phone:

```
INITIALIZE EX TABLES
PRESS HOLD
```

- 2 To initialize the Exception Tables, press the HOLD button. Confirmation tone is heard.

### Description

The Exception Tables parameters, including the Allow/Deny Tables and the Special Tables, may be initialized setting all tables to their original, default values. The following Tables are cleared returning to their default value upon initializing the Exception Tables parameters:



Program Code	Flex Button	Features	Default Value (after initialization)
Flash 70	<b>TOLL RESTRICTION:</b>		
	1	Allow Table A	Table Cleared (No Entries)
	2	Deny Table A	Table Cleared (No Entries)
	3	Allow Table B	Table Cleared (No Entries)
	4	Deny Table B	Table Cleared (No Entries)
	5	Special Table 1	Table Cleared (No Entries allowed, No Area Code specified)
	6	Special Table 2	Table Cleared (No Entries allowed, No Area Code specified)
	7	Special Table 3	Table Cleared (No Entries allowed, No Area Code specified)
	8	Special Table 4 (Home Area Code)	Table Cleared (No Entries allowed)
	9	Area Code for Special Table 1	
	10	Area Code for Special Table 2	
	11	Area Code for Special Table 3	
	12	Displaying Toll Table Entries	

Table 11-4: Exception Table Defaults



## Initialize System Speed Numbers

### Programming Steps

- 1 Press the SYSTEM SPEED NUMBERS flexible button (**FLASH 80, button #6**). The following message displays on the phone:

```
INITIALIZE SYS SPEED NO
PRESS HOLD
```

- 2 To initialize the System Speed bins, press the HOLD button. Confirmation tone is heard.

### Description

Numbers entered into the System Speed Dial Table may be initialized clearing all bins to their original, default value (empty). All bins 20-99 are cleared returning to their default value (empty) upon initializing the Speed Dial Table.

## Initialize LCR Tables

### Programming Steps

- 1 Press the LCR TABLES flexible button (**FLASH 80, button #7**). The following message displays on the phone:

```
INITIALIZE LCR TABLES
PRESS HOLD
```

- 2 To initialize the LCR Tables, press the HOLD button. Confirmation tone is heard.

### Description

The LCR Tables may be initialized setting all tables to their original, default values. The following tables are reset to their original default value after initialization of the LCR Tables:

- ❖ 3-Digit Table
- ❖ 6-Digit Table
- ❖ Exception Table
- ❖ Route List Table





- ❖ Insert/Delete Table
- ❖ Daily Start Time Table
- ❖ Weekly Schedule
- ❖ Toll Information Route

Program Code	Flex Button	Features	Default Value After Initialization
Flash 75	LCR TABLES:		
	1	3-Digit Area/Off ice Code Table	Default Values assigned
	2	6-Digit Area/Off ice Code Table	Default Values assigned
	3	Exception Code Table	Default Values assigned
	4	Route List Table	Default Values assigned
	5	Insert/Delete Table	Default Values assigned
	6	Daily Start Time Table	Default Values assigned
	7	Weekly Schedule Table	Default Values assigned
	8	LCR Routing for Toll Information	Default Values assigned

Table 11-5: LCR Table Defaults



## Initialize ICLID Tables

### Programming Steps

- 1 Press the ICLID-DID TABLES flexible button (**FLASH 80, button #8**). The following message displays on the phone:

INITIALIZE ICLID  
PRESS HOLD

- 2 To initialize the ICLID-DID Tables, press the HOLD button. Confirmation tone is heard.

### Description

The ICLID Tables parameters may be initialized setting all data fields to their original, default values,

Program Code	Flex Button	Features	Default Value After Initialization
Flash 43	ICLID-DID TABLES:		
	1	ICLID Ringing Assignments	None
	18	Next ICLID Route Number	
	19	Previous ICLID Route Number	
	20	Select Route Number	
Flash 55	1-4	Local Number/Name Translation	None
Flash 56	1	ICLID Disable/Enable	Disable
	2	ICLID Name in Display	Telephone Number
	3	ICLID Baud Rate Display	9600
	4	ICLID Port Assignment	Port #1

Table 11-6: ICLID Table Defaults







## Initialize Directory Dialing Table Parameters

### Programming Steps

- 1 Press the DIRECTORY DIAL TABLE flexible button (FLASH **80**, button **#9**). The following message displays on the phone:

INITIALIZE DIR - DIAL  
PRESS HOLD

- 2 To initialize the Directory Dialing Table Parameters, press the HOLD button. Confirmation tone is heard.

### Description

The Directory Dialing Table Parameters may be initialized setting all data fields to their original, default values.

Program Code	Flex Button	Features	Default Value After Initialization
Flash 23	DIRECTORY DIALING TABLE:		
	1	Bin/ICM	None
	2	Name	None
	3	Clear	None

Table 11-7: Directory Dialing Table Defaults



## Initialize Hunt Group Parameters

### Programming Steps

- 1 Press the HUNT GROUPS flexible button (**FLASH 80, button #10**). The following message displays on the phone:

INITIALIZE HUNT GROUP PRESS HOLD
-------------------------------------

- 2 To initialize the Hunt Group Parameters, press the HOLD button. Confirmation tone is heard.

### Description

Hunt Group Parameters may be initialized setting all data fields to their original, default value

Program Code	Flex Button	Features	Default Value After <i>initialization</i>
Flash 30	HUNT GROUPS:		
	1-12	Hunt Group Programming	None
	13	Station/Pilot Hunting Assignment	None

Table 11-8: Hunt Group Defaults



## Initialize ACD / UCD Group Parameters

### Programming Steps

- 1 Press the ACD\* or UCD GROUPS flexible button (**FLASH 80, button #11**). The following message displays on the phone:

INITIALIZE ACD GROUP  
PRESS HOLD

- 2 To initialize the ACD\* or UCD Group Parameters, press the HOLD button. Confirmation tone is heard.

### Description

ACD\* or UCD Group Parameters may be initialized setting all data fields to their original, default values,

Program Code	Flex Button	Features	Default Value After Initialization
<b>F l a s h</b>	<b>ACD GROUPS 550-557:</b>		
	1 - 8	ACD*/UCD Groups (550-557)	None
	9	Alternate ACD*/UCD Group Assignment	None
	10	ACD*/UCD Overflow Station Assignment	None
	11	ACD*/UCD Recorded Announcement	None
	12	ACD* Supervisor Programming	None
	13	ACD* Auto Wrap-Up Timer (Per Group)	04sec.
	14	ACD* CIQ Threshold	Disabled
Page B	1-8	ACD* Station (550-557) Assignments	None

Table 11-9: ACD / UCD Group Defaults



Program Code	Flex Button	Features	Default Value After Initialization
Flash 61	ACD TIMERS:		
	1	ACD*/UCD Ring Timer	60 sec.
	2	ACD*/UCD Message Interval Timer	60 sec.
	3	ACD*/UCD Overflow Timer	60 sec.
	5	ACD*/UCD No-Answer Recall Timer	000 sec.
	6	ACD*/UCD No-Answer Retry Timer	300 sec.
	7	ACD* Guaranteed Message Timer	05 sec.
Flash 62	1-8	ACD* Ran Announcement Tables	None
Flash 63	1	Event Trace Disable/Enable	Disabled
	2	Trace Port Assignment	Port #1
Flash 64	ACD GROUPS 558-565:		
	1-8	ACD* Groups (558-565)	None
	9	Alternate ACD* Group Assignment	None
	10	ACD* Overflow Station Assignment	None
	11	ACD* Recorded Announcement	None
	12	ACD* Supervisor Programming	None
	13	ACD* Auto Wrap-Up Timer (Per Group)	04 sec.
Flash 64	14	ACD* CIQ Threshold	Disabled
Page B	1 - 8	ACD* Station (558-565) Assignments	None

Features available with optional software

Table 11-9: ACD / UCD Group Defaults





## Initialize Voicemail Group Parameters

### Programming Steps

- 1 Press the VOICE MAIL GROUPS flexible button (FLASH 80, button **#12**). The following message displays on the phone:

INITIALIZE VM GROUP  
PRESS HOLD

- 2 To initialize the VM Group Parameters, press the HOLD button. Confirmation tone is heard.

### Description

VM Group Parameters may be initialized setting all data fields to their original, default values.

Program Code	Flex Button	Features	Default Value After Initialization
Flash 65	VOICE MAIL GROUPS		
	I-8	Voice Mail Groups( 440-447)	None
	9	Alternate Voice Mail Group	None
	10	Leave Mail Index Entry	440=0; 441-447=None
	11	Retrieve Mail Index Entry	440=1; 441-447=None
Flash 66	I-8	Voice Mail In-Band Signaling	Table 0: Pre=P7, Suf=None Table 1: Pre=P7, Suf=*
	9	Voice Mail Disconnect Table	None
Flash 67	1	Voice Mail In-Band Digits	Enabled
	2	Voice Mail Transfer/Forward	Enabled
	3	Voice Mail Broker	Enabled
Flash68	1	Voice Mail Group	None
	2	Voice Mail ID Number	None

Table 1 I-I 0: Voicemail Group Defaults





## Initialize Verified Account Code Table

### Programming Steps

- 1 Press the VERIFIED ACCT CODES flexible button (**FLASH 80, button #14**). The following message displays on the phone:

INITIALIZE ACCT CODES  
PRESS HOLD

- 2 To initialize the Verified Account Code Table, press the HOLD button. Confirmation tone is heard.

### Description

The Verified Account Code Table may be initialized setting all data fields to their original, default values,

Program Code	Flex Button	Features	Def ault Value After <i>Initial</i> ization
Flash 31	VERIFIED ACCOUNT CODES		
	1	Class of Service (COS)	
	2	Account Code	None
	3	Delete Account Code	/
	4	Erase Digits	

Table II-II: Verified Account Code Table Defaults





## System Reset

### Programming Steps



If the System must be reset but not initialized:

- 1 Press the RESET flexible button (**FLASH 80, button #20**). The following message displays on the phone:

RESET SYSTEM
PRESS HOLD

- 2 To reset the system without initializing the database, press the HOLD button. No Confirmation tone is heard and the system now resets.

### Description

This feature provides a hard system reset from the **keyset** instead of the KSU. This is useful in cases where miscellaneous data errors have occurred and the system needs to be reset without initializing the entire database.









# 12 Print System Database Parameters

## Introduction

### Print Database Parameters

#### Programming Steps

- 1 Press FLASH and dial **[85]**. The following message displays on the phone:

```

PRINT DATABASE
ENTER BUTTON NUMBER
  
```

#### Description

This section describes the procedures and steps necessary to print the system database parameters and various portions of the system. The buttons on the key telephone are defined as shown below when entering the Print Database Parameters programming area:

<b>SYSTEM PARAMETERS</b>	<b>CO LINE ATTRIBUTES</b>	<b>STATION ATTRIBUTES</b>	<b>PORT - STA/CO</b>
* <b>[1] Q</b>	* <b>[2] W</b>	* <b>[3] E</b>	* <b>[4] R</b>
<b>EXCEPTION TABLES</b>	<b>SYSTEM SPEED NUMBERS</b>	<b>LCR TABLES</b>	<b>ENTIRE SYSTEM</b>
* <b>[5] T</b>	* <b>[6] Y</b>	* <b>[7] U</b>	* <b>[8] I</b>
<b>ICLID-DID TABLES</b>	<b>DIRECTORY DIAL TABLE</b>	<b>HUNT GROUPS</b>	<b>ACD* OR UCD GROUPS</b>
* <b>[9] O</b>	* <b>[10] P</b>	* <b>[11] A</b>	* <b>[12] S</b>
<b>VOICEMAIL GROUPS</b>		<b>VERIFIED ACCT CODES</b>	
* <b>[13] D</b>	* <b>[14] F</b>	* <b>[15] G</b>	* <b>[16] H</b>
* <b>[17] J</b>	* <b>[18] K</b>	* <b>[19] L</b>	<b>ABORT PRINT</b>
			* <b>[20] :</b>
* <b>[21] Z</b>	* <b>[22] X</b>	* <b>[23] C</b>	* <b>[24] V</b>

\* Features available with optional software.

This command dumps the entire database as a permanent record which can serve as a hardcopy of the database. The system baud rate must match that of the printer or receiving device.





Refer to the following figures for examples of the database printouts. Also refer to the following paragraphs for instructions on printing portions of the database.

## Print System Parameters

### Programming Steps

- 1 Press the SYSTEM PARAMETERS flexible button (FLASH 85, button **#1**). The following message displays on the display phone:

```
PRINT SYS PARAM
PRESS HOLD
```

- 2 To print the System Parameters database, press the HOLD button. The following message displays on the display phone:

```
PRINT SYS PARAM
```

When the system finishes sending the information to the printer, a confirmation tone is heard.

### Description

The currently stored customer database can be printed or uploaded into a file. This command dumps the entire database as a permanent record which can serve as a hardcopy of the database. The system baud rate must match that of the printer or receiving device.

When printing the System Parameters the following data prints:

- ❖ All System Timers
- ❖ All System Wide Options (e.g., External Night Ringing, Hold Preference, etc.)
- ❖ Attendant Station(s) Programming
- ❖ Other System Assignments (e.g., Page/Relay Assignments, Executive/Secretary, SMDR, etc.)
- ❖ Weekly Night Mode Schedule

Refer to *Figure 12-1: System Parameters (Continued)* for an example of the System Parameters database printout.



Introduction



PRINTING SYS PARAM		BARGE IN WARN TONE	ENABLED.
adm>SYSTEM PARAMETERS		CO RING TONES	ENABLED
-----		VERIFIED ACCT CODES	DISABLED
Eng. Ver. 1.31-1EFB		CALL FWD DISPLAY	ENABLED
SYS HOLD RECALL	60	EXTERNAL DAY RING	DISABLED
EXC HOLD RECALL	180	OVERFLOW STA FWD	DISABLED
ATND RECALL TIMER	1	DIRECT XFER	ENABLED
TRANSFER RECALL	45	STATION LOCK	DISABLED
PRESET FWD TIMER	10	LCR CALL PROGRESS	ENABLED
CALL FWD NO ANS	15	RECORDING WARN TONE	ENABLED
PAUSE TIMER	2	MAINTENANCE	DISABLED
CALL PARK TIMER	180	RINGBACK ON XFER	DISABLED
CONFERENCE TIMER	10		
PAGING TIMEOUT	15	SYSTEM LED FLASH RATES	
CO RING DETECT	3	-----	
SLT RCVR TIMER	20	INC CO RING	RED 480 IPM FLUTTER
M/W TONE TIMER	0	INC ICM RING	RED 120 IPM FLUTTER
HOOK SWITCH TIME	10	CALL FORWARD BTN	RED STEADY ON
HOOK SWT BOUNCE	10	MSG WAIT VM BTN	RED STEADY ON
SMDR CALL QUAL	30	MSG CBCK DSS/BLF	RED 120 IPM FLUTTER
AUTO CALL BACK	3	DND DSS/BLF	RED 60 IPM DBL WINK OFF
REMINDER RING	0	AUTO CBCK DSS/BLF	RED 120 IPM FLASH
RELEASE GUARD	3	UCD UNAVL DSS/BLF	RED 60 IPM DBL WINK OFF
INTERDIGIT T/O	5	TRANSFER CO RING	RED 120 IPM FLASH
RPT REDIAL	60	RECALL CO RING	RED 480 IPM FLUTTER
ATTENDANT DISPLAY	1	EXCLUSIVE HOLD	GREEN 120 IPM FLASH
CALL COVERAGE RING	5	QUEUED CO RING	GREEN 480 IPM FLUTTER
MODEM ANSWER T/O	25	SYSTEM HOLD	RED 60 IPM DBL WINK OFF
INT DIGIT PULSE	300	IN USE HOLD	GREEN 60 IPM FLASH
DTMF ON/OFF TIME	1	CAMP ON BTN	RED 120 IPM FLASH
		CALL BACK BTN	RED 120 IPM FLASH
		LINE QUEUE BTN	RED 480 IPM FLUTTER
SYSTEM FEATURES		DND BTN	RED STEADY ON
-----		ICM HOLD BTN	RED 15 IPM FLASH
ATTENDANT OVERRIDE	DISABLED	LEADING DIGIT 1	LEADING DIGIT
HOLD PREFERENCE	SYSTEM	LEADING DIGIT 2	NONE
EXTERNAL NIGHT RING	DISABLED	LEADING DIGIT 3	NONE
EXECUTIVE WARNING	ENABLED	LEADING DIGIT 4	NONE
PAGE WARNING TONE	ENABLED	LEADING DIGIT 5	NONE
BACKGROUND MUSIC	ENABLED	LEADING DIGIT 6	NONE
LEAST COST ROUTING	DISABLED	LEADING DIGIT 7	NONE
FORCED ACCOUNT CODE	DISABLED	LEADING DIGIT OPTION	DISABLED
GROUP LISTENING	DISABLED	CENTREX DIGITS	4
IDLE SPEAKER MODE	DISABLED	VM ID DIGITS	3
CALL COST DISPLAY	DISABLED		
MUSIC ON HOLD	ENABLED		
CALL QUALIFIER TONE	DISABLED		

Figure 12-1: System Parameters



MUSIC CHANNEL [3. .8] CO - ### ## #	F 4 0800 1700
	s 5 #### ##
ATTENDANT STATIONS	S 6 #### ##
100 ### ##	
	DIAL PULSE 60/40 10 PPS
DATE & TIME FORMAT	
MM/DD/YY, 12 HOURS	
	CABINET SLOT TYPE
PBX DIALING CODES	
## ## ## ## ##	0 0 LCOB
	0 1 DTIB
EXECUTIVE/SECRETARY PAIRINGS	0 2 LCOB
1 = ### ##	0 3 DTIB
2 = ### ##	0 4 LCOB
3 = ### ##	0 5 DTIB
4 = ### ##	0 6 LCOB
	0 7 DTIB
ON BOARD RELAY RELAY ASSIGNMENTS	
NONE NONE	
	POWER SUPPLY TYPES
I/O BAUD RATE	
-----	10 AMPS 10 AMPS 10 AMPS 10 AMPS
Port 1 = 9600	
Port 2 = 9600	ALARM DESCRIPTION ALARM PERIOD THRESHOLD
Port 3 = 9600	
Port 4 = 9600	MINOR MAJOR
	CARRIER LOSS Y 5 15 30
ACCESS CODE	BLUE ALARM Y 5 15 30
1 DISA ACCESS 100	YELLOW ALARM Y 5 15 30
2 ADMIN PASSWORD 3226	RED ALARM Y 5 15 30
	BIPOLAR VARIATIONS Y 5 15 30
SDR TPE PNT BAUD PORT	SLIP ALARM Y 5 15 30
N LD 80 9600 3	DATA ERRORS Y 5 15 30
AUTO NIGHT MODE N	COLINE GROUP QUEUING
WEEKLY NIGHT MODE SCHEDULE	GROUP 0 ENABLED
	GROUP 1 ENABLED
	GROUP 2 ENABLED
	GROUP 3 ENABLED
	GROUP 4 ENABLED
	GROUP 5 ENABLED
	GROUP 6 ENABLED
	GROUP 7 ENABLED
END START	
DAY TIME TIME	
M 0 0800 1700	
T 1 0800 1700	
W 2 0800 1700	
T 3 0800 1700	

Figure 12-1: System Parameters (Continued)





## Print CO Line Attributes

### Programming Steps

- 1 Press the CO LINE ATTRIBUTES flexible button (**FLASH 85, button #2**). The following message displays on the display phone:

```

PRINT CO LINES
PRESS HOLD
  
```

- 2 To print the data for ALL CO Lines, press the HOLD button. To print CO Line data for a specified CO Line Range, enter 6 digits to specify the CO Line Range (3 digits for the first line within the range and 3 digits for the last line in the range):

If a only one line is desired, enter that line twice: [001001]

- 3 Then press the HOLD button. The following message displays on the display phone and the CO Line data prints:

```

PRINTING CO LINES
  
```

When the system finishes sending the requested information to the printer, a confirmation tone is heard.

### Description

This command dumps the entire database as a permanent record which can serve as a hardcopy of the database. The system baud rate must match that of the printer or receiving device.

When printing the CO Line attributes the following data prints:

- ❖ All CO Line parameters within the specified range.
- ❖ CO Line ringing assignments within the specified range.
- ❖ Dial Pulse Ratio and Speed settings



Refer to *Figure 12-Z: CO Line Attributes* for an example of the CO Line Attributes database printout.

CO LINE ATTRIBUTES	
-----	
co 001	co 02
DIAL PULSE/DTMF DTMF	DIAL PULSE/DTMF DTMF
PBX/CO c o	PBX/CO CO
UNIVERSAL NIGHT ANS ENABLED	UNIVERSAL. NIGHT ANS ENABLED
DISA TRK TO TRK ENABLED	DISA TRK TO TRK . ENABLED
PRIVACY ENABLED	PRIVACY ENABLED
LOOP SUPERVISION 4	LOOP SUPERVISION . 4
DISA TYPE NONE	DISA TYPE . NONE
LINE GROUP 1	LINE GROUP . 1
CLASS OF SERVICE . 1	CLASS OF SERVICE . 1
LINE IDENTIFICATION LINE 001	LINE IDENTIFICATION LINE 002
CO DIRECTION . INCOMING-OUTGOING	CO DIRECTION . INCOMING-OUTGOING
RING ASSIGNMENTS	RING ASSIGNMENTS
100A	100A
T-1 SIGNAL TYPE . LOOP START	T-1 SIGNAL TYPE LOOP START
T-1 RINGBACK ENABLED	T-1 RINGBACK . ENABLED
T-1 DIALTONE . DISABLED	T-1 DIALTONE . DISABLED
TRANSMIT VOLUME ODB	TRANSMIT VOLUME ODB
PRESET FORWARD DEST . NONE	PRESET FORWARD DEST . NONE
PRESET FWD VMID NONE	PRESET FWD VMID . NONE
UNIVERSAL DAY ANSWER . DISABLED	UNIVERSAL DAY ANSWER DISABLED
MOH CHANNEL 1	MOH CHANNEL . 1
RING TONE . 0	RING TONE 0
FLASH TIMER . 10	FLASH TIMER . 10
RING DELAY TIMER 0	RING DELAY TIMER . 0
WINK TIMER 140	WINK TIMER . 140
RELEASE TIMER . 20	RELEASE TIMER . 20
RESEIZE TIMER . 200	RESEIZE TIMER 200
GUARD TIMER 50	GUARD TIMER 50
SIEZE TIMER . 10	SEIZE TIMER 10
PRESET FWD TIMER . 100	PRESET FWD TIMER 100
DID COLLECT TIMER . 150	DID COLLECT TIMER 150
TI COLLECT TIMER 150	TI COLLECT TIMER . 150
	...and so on through CO lines 012

Figure 12-2: CO Line Attributes





## Print Station Attributes

### Programming Steps

- 1 Press the STATION ATTRIBUTES flexible button (FLASH 85, button **#3**). The following message displays on the display phone:

```
PRINT STATIONS  
PRESS HOLD
```

- 2 To print data for all stations, press the HOLD button. To print Station data for a specified Station Range, enter six digits to specify the Station range (three digits for the first station within the range and three digits for the last station in the range):

[100-131] = Triad-S

If only one station is desired, enter that station twice: [I 01101]

- 3 Then press the HOLD button. The following message displays on the display phone and the requested information prints:

```
PRINTING STATIONS
```

When the system finishes sending the requested information to the printer, a confirmation tone is heard.

### Description

This command dumps the entire database as a permanent record which can serve as a hardcopy of the database. The system baud rate must match that of the printer or receiving device.

When printing the Station attributes the following data prints:

- ❖ All current station parameters

Refer to *Figure 12-3: Station Attributes* for an example of the Station Attributes database printout.



STATION ATTRIBUTES	
.....	
STA 100	STA 101
PAGE ACCESS ENABLED	PAGE ACCESS ENABLED
DO NOT DISTURB ENABLED	DO NOT DISTURB ENABLED
CONFERENCE ENABLED	CONFERENCE ENABLED
EXEC OVERRIDE DISABLED	EXEC OVERRIDE DISABLED
PRIVACY ENABLED	PRIVACY ENABLED
SYSTEM SPEED ENABLED	SYSTEM SPEED ENABLED
LINE QUEUING ENABLED	LINE QUEUING ENABLED
PREF LINE ANSWER DISABLED	PREF LINE ANSWER DISABLED
OFF HOOK VOICE OVER DISABLED	OFF HOOK VOICE OVER DISABLED
CALL FORWARD ENABLED	CALL FORWARD ENABLED
FORCE LCR DISABLED	FORCE LCR DISABLED
ACD SUPV BARGE IN DISABLED	ACD SUPV BARGE IN DISABLED
EXEC OVERRIDE BLOCK DISABLED	EXEC OVERRIDE BLOCK DISABLED
COC RING OPTIONS MUTED RING	CO RING OPTIONS MUTED RING
NAME AT IDLE LCD EXT NUMBER	NAME AT IDLE LCD EXT NUMBER
STATION ID KEYSSET	STATION ID KEYSSET
DAY COS 1	DAY COS 1
NIGHT COS 1	NIGHT COS 1
SPEAKERPHONE FULL SPEAKERPHONE	SPEAKERPHONE FULL SPEAKERPHONE
PICKUP GROUPS 1	PICKUP GROUPS 1
PAGE ZONE 1	PAGE ZONE 1
PRESET FORWARD ###	PRESET FORWARD ###
LINE GROUP ACCESS 1	LINE GROUP ACCESS 1
LCR CLASS OF SERVICE 0	LCR CLASS OF SERVICE 0
OFFHOOK PREFENCE BTN 00 ENABLED	OFFHOOK PREFENCE BTN 00 ENABLED
KEYSET MDE INACTIVE MDE	KEYSET MDE INACTIVE MDE
VOICEMAIL ID 100	VOICEMAIL ID 101
BUTTONS	BUTTONS
01D100 02D101 03D102	01D100 02D101 03D102
04D103 05D104 060105	04D103 05C001 06C002
07D106 08D107 09D108	07LP 08PL1 09CBK
10D109 11D110 12D111	10PKU 11DND 12LQU
13C001 14C002 15C003	13 14 15
16C004 17C005 18C006	16 17 18
19LP 20PL1 21CBK	19 20 21
22PKU 23DND 24LQU	22 23 24
25SPD 26MSG 27XFR	25SPD
28CNF 29CPO 30FWD	
31MUT 32FLA 33MON	
37V0L	.and so on through stations 131

Figure 12-3: Station Attributes







The button printout for the 8-button keyset displays all flexible buttons and fixed buttons the same as a 24-button keyset.

## Print CO / Station Port Parameters

### Programming Steps

- 1 Press the PORT-STA/CO flexible button (FLASH 85, button #4). The following message displays on the display phone:

```

PRINT PORT   STA / CO
PRESS HOLD

```

- 2 To print the CO/Station Port parameters, press the HOLD button. The following message displays on the display phone:

```

PRINTING PORT - STA / CO

```

When the system finishes sending the requested information to the printer, a confirmation tone is heard.

### Description

This command dumps the entire database as a permanent record which can serve as a hardcopy of the database. The system baud rate must match that of the printer or receiving device.

```

CO PORT NUMBERS
.....
001 002 003
004 005 006
007 008 009
010 011 012

STATION PORT NUMBERS

100 101 102 103 104 105 106 107
108 109 110 111 112 113 114 115
116 117 118 119 120 121 122 123
124 125 126 127 128 129 130 131

```

Figure 12-4: CO / Station Port Attributes



## Print Exception Tables

### Programming Steps

- 1 Press the EXCEPT TABLES flexible button (FLASH 85, button **#5**). The following message displays on the display phone:

```
PRINT EX TABLES
PRESS HOLD
```

- 2 To print the Except Tables, press the HOLD button. The following message displays on the display phone:

```
PRINTING EX TABLES
```

When the system finishes sending the requested information to the printer, a confirmation tone is heard.

### Description

This command dumps the entire database as a permanent record which can serve as a hardcopy of the database. The system baud rate must match that of the printer or receiving device.

When printing information from the Exception Tables, the following data prints:

- ❖ Allow Table A
- ❖ Deny Table A
- ❖ Allow Table B
- ❖ Deny Table B
- ❖ Special Table 1
- ❖ Special Table 2
- ❖ Special Table 3
- ❖ Special Table 4

Refer to *Figure 12-5: Exception Tables* for an example of the Exception Tables database printout.

Introduction



ALLOW TABLE A	SPECIAL TABLE 1 AREA CODE
-----	
31 11	ALLOWED OFFICE CODES
32 12	
33 13	
14 14	
35 15	SPECIAL TABLE 2 AREA CODE
36 16	
37 17	ALLOWED OFFICE CODES
38 18	
39 19	
10 20	
	SPECIAL TABLE 3 AREA CODE
	-----
DENY TABLE A	ALLOWED OFFICE CODES
01 06	
02 07	
03 08	SPECIAL TABLE 4 HOME AREA CODE
04 09	
05 10	ALLOWED OFFICE CODES
ALLOW TABLE B	
01 11	
02 12	
03 13	
04 14	
05 15	
06 16	
07 17	
08 18	
09 19	
10 20	
DENY TABLE B	
-----	
01 06	
02 07	
03 08	
04 09	
05 10	

Figure 12-5: Exception Tables



## Print System Speed Numbers

### Programming Steps

- 1 Press the SYSTEM SPEED flexible button (FLASH 85, button **#6**). The following message displays on the display phone:

```
PRINT SYS SPEED NO
PRESS HOLD
```

- 2 To print the System Speed bins, press the HOLD button. The following displays on the display phone:

```
PRINTING SYS SPEED NO
```

When the system finishes sending the requested information to the printer, a confirmation tone is heard.

### Description

This command dumps the entire database as a permanent record which can serve as a hardcopy of the database. The system baud rate must match that of the printer or receiving device.

Introduction



Refer to *Figure 12-6: System Speed Numbers* for an example of the System Speed Numbers database printout.

SYSTEM SPEED NUMBERS	
20	45
21	46
22	47
23	48
24	49
25	50
26	51
27	52
28	53
29	54
30	55
31	56
32	57
33	58
34	59
35	60
36	61
37	62
38	63
39	64
40	65
41	66
42	67
43	68
44	... and so on through Speed Number 99

Figure 12-6: System Speed Numbers

### Print LCR Tables

#### Programming Steps

- 1 Press the LCR TABLES flexible button (FLASH 85, button **#7**). The following message displays on the display phone:

```

PRINT LCR TABLES
PRESS HOLD

```



- 2 To print the LCR Tables, press the HOLD button. The following displays on the display phone:

PRINTING LCR TABLES

When the system finishes sending the requested information to the printer, a confirmation tone is heard.

## Description

This command dumps the entire database as a permanent record which can serve as a hardcopy of the database. The system baud rate must match that of the printer or receiving device.

When printing information from the LCR Tables, the following data prints:

- ❖ Exception Table
- ❖ Route List Table
- ❖ Insert/Delete Table
- ❖ Daily Time Table
- ❖ Weekly Time Table
- ❖ Toll Tables
- ❖ 6-Digit Table
- ❖ 3-Digit Table

Refer to *Figure 12-7: LCR Tables* and *Figure 12-8: Three-Digit Table Defaults* for examples of the LCR Tables database printout.



adm>EXCEPTION CODE TABLE							DIGIT INS/DEL TABLE			
CODE	ROUTE NO						TABLE	DIGITS		
							0	PRE	P	
ROUTE LIST TABLE								1	PRE	P
RT	TIME	COST	CO	GRP	INS/DEL	GRP	PR			
0	1	026	1		0	1		2	PRE	P
	2	026	1		0	1		3	PRE	P
	3	026	1		0	1		4	PRE	P
	4	026	1		0	1		5	PRE	P
1	1	000	1		0	1		6	PRE	P
	2	000	1		0	1		7	PRE	P
	3	000	1		0	1		8	PRE	P
	4	000	1		0	1		9	PRE	P
2	1	010	1		0	1		10	PRE	P
	2	010	1		0	1		11	PRE	P
	3	010	1		0	1		12	PRE	P
	4	010	1		0	1		13	PRE	P
3	1	072	1		0	1		14	PRE	P
	2	072	1		0	1		15	PRE	P
	3	072	1		0	1		16	PRE	P
	4	072	1		0	1		17	PRE	P
								18	PRE	P
								19	PRE	P

Figure 12-7: LCR Tables



4	7	171	1	0	1	DAILY START TIME TABLE
	2	171	1	0	1	TABLE TIME
	3	171	1	0	1	1 800
	4	171	1	0	1	2 1700
5	1	106	1	0	1	3 2300
	2	106	1	0	1	4 ####
	3	106	1	0	1	WEEKLY SCHEDULE TABLE
	4	106	1	0	1	START
6	1	277	1	0	1	TIME M T W T F S S
	2	277	1	0	1	-----
	3	277	1	0	1	800 1 1 1 1 1 3 3
	4	277	1	0	1	1700 2 2 2 2 2 3 2
						2300 3 3 3 3 3 3 3
						#### 3 3 3 3 3 3 3
						LCR ROUTE FOR 555-1212
						0
						6 DIGIT TABLE
						AREA ROUTE OFFICE CODES
						CODE NO

Figure 12-7: LCR Tables (Continued)





Introduction



3 DIGIT TABLE	
CODE LEADING 1 NON-LEADING 1	597 2 8 N 1 7 N
RR PP 6 RR PP 6	598 2 8 N 1 7 N
	599 2 8 N 1 7 N
11 ## ## N 6 ## N	600 0 11 N 1 7 N
200 0 11 N 1 7 N	601 0 11 N 1 7 N
201 0 11 N 1 7 N	602 0 11 N 1 7 N
202 0 11 N 1 7 N	603 0 11 N 1 7 N
203 0 11 N 1 7 N	604 0 11 N 1 7 N
204 3 11 N 1 7 N	605 0 11 N 1 7 N
205 0 11 N 1 7 N	606 0 11 N 1 7 N
206 0 11 N 1 7 N	607 0 11 N 1 7 N
207 0 11 N 1 7 N	608 0 11 N 1 7 N
208 0 11 N 1 7 N	609 0 11 N 1 7 N
209 0 11 N 1 7 N	610 0 11 N 1 7 N
210 0 11 N 1 7 N	611 ## ## N 1 7 N
211 ## ## N 1 7 N	612 0 11 N 1 7 N
212 0 11 N 1 7 N	613 3 11 N 1 7 N
213 0 11 N 1 7 N	614 0 11 N 1 7 N
214 0 11 N 1 7 N	615 0 11 N 1 7 N
215 0 11 N 1 7 N	616 0 11 N 1 7 N
216 0 11 N 1 7 N	617 0 11 N 1 7 N
217 0 11 N 1 7 N	618 0 11 N 1 7 N
218 0 11 N 1 N	619 0 11 N 1 7 N
219 0 11 N 1 7 N	620 2 8 N 1 7 N
220 2 8 N 1 7 N	621 2 8 N 1 7 N
221 2 8 N 1 7 N	622 2 8 N 1 7 N
222 2 8 N 1 7 N	623 2 8 N 1 7 N
223 2 8 N 1 7 N	624 2 8 N 1 7 N
224 2 8 N 1 7 N	625 2 8 N 1 7 N
225 2 8 N 1 7 N	626 0 11 N 1 7 N
226 2 8 N 1 7 N	627 2 8 N 1 7 N
227 2 8 N 1 7 N	628 2 8 N 1 7 N
228 0 11 N 1 7 N	629 2 8 N 1 7 N
2 2 9 2 8 N 1 7 N	630 0 11 N 1 7 N
230 2 8 N 1 7 N	631 2 8 N 1 7 N
231 2 8 N 1 7 N	632 2 8 N 1 7 N
232 2 8 N 1 7 N	633 2 8 N 1 7 N
233 2 8 N 1 7 N	634 2 8 N 1 7 N
234 2 8 N 1 7 N	635 2 8 N 1 7 N
235 2 8 N 1 7 N	636 2 8 N 1 7 N
	637 2 8 N 1 7 N
	638 2 8 N 1 7 N

Figure 12-8: Three-Digit Table Defaults



236 2 8 N 1 7 N	539 2 8 N 1 7 N
237 2 8 N 1 7 N	540 2 8 N 1 7 N
23828 N17 N	541 2 8 N 1 7 N
239 2 8 N 1 7 N	542 2 8 N 1 7 N
240 0 11 N 1 7 N	543 2 8 N 1 7 N
24128 N17 N	544 2 8 N 1 7 N
242 2 8 N 1 7 N	545 2 8 N 1 7 N
24328 N17 N	546 2 8 N 1 7 N
24428 N17 N	547 2 8 N 1 7 N
24528 N17 N	548 2 8 N 1 7 N
24628 N17 N	549 2 8 N 1 7 N
24728 N17 N	550 0 11 N 1 7 N
248 0 11 N 1 7 N	551 2 8 N 1 7 N
24928 N17 N	552 2 8 N 1 7 N
250 2 8 N 1 7 N	553 2 8 N 1 7 N
251 2 8 N 1 7 N	554 2 8 N 1 7 N
25228 N17 N	555 2 8 N 1 7 N
253 0 11 N 1 7 N	556 2 8 N 1 7 N
254 0 11 N 1 7 N	557 2 8 N 1 7 N
25528 N 1 7 N	558 2 8 N 1 7 N
256 2 8 N 1 7 N	559 2 8 N 1 7 N
25728 N 1 7 N	560 0 11 N 1 7 N
25828 N17 N	561 2 8 N 1 7 N
25928 N17 N	562 2 8 N 1 7 N
260 2 8 N 1 7 N	563 2 8 N 1 7 N
261 2 8 N 1 7 N	564 2 8 N 1 7 N
282 2 8 N 1 7 N	565 2 8 N 1 7 N
28328 N 1 7 N	666 2 8 N 1 7 N
264 2 8 N 1 7 N	667 2 8 N 1 7 N
265 2 8 N 1 7 N	66828 N 1 7 N
266 2 8 N 1 7 N	669 2 8 N 1 7 N
267 2 8 N 1 7 N	670 2 8 N 1 7 N
26828 N 1 7 N	671 2 8 N 1 7 N
26928 N17 N	672 2 8 N 1 7 N
270 2 8 N 1 7 N	673 2 8 N 1 7 N
2712 8 N 1 7 N	674 2 8 N 1 7 N
272 2 8 N 1 7 N	675 2 8 N 1 7 N
27328 N 1 7 N	676 28 N 1 7 N
274 2 8 N 1 7 N	677 2 8 N 1 7 N
275 2 8 N 1 7 N	67828 N 1 7 N
276 2 8 N 1 7 N	679 2 8 N 1 7 N
277 2 8 N 1 7 N	680 2 8 N 1 7 N
278 2 8 N 1 7 N	68128 N17 N

Figure 12-8: Three-Digit Table Defaults



Introduction



279 2 8 N 1 7 N	682 2 8 N 1 7 N
280 2 8 N 1 7 N	683 2 8 N 1 7 N
281 0 11 N 1 7 N	684 2 8 N 1 7 N
282 2 8 N 1 7 N	685 2 8 N 1 7 N
283 2 8 N 1 7 N	686 2 8 N 1 7 N
284 2 8 N 1 7 N	687 2 8 N 1 7 N
285 2 8 N 1 7 N	688 2 8 N 1 7 N
286 2 8 N 1 7 N	689 2 8 N 1 7 N
287 2 8 N 1 7 N	690 2 8 N 1 7 N
288 2 8 N 1 7 N	691 2 8 N 1 7 N
289 2 8 N 1 7 N	692 2 8 N 1 7 N
290 2 8 N 1 7 N	693 2 8 N 1 7 N
291 2 8 N 1 7 N	694 2 8 N 1 7 N
292 2 8 N 1 7 N	695 2 8 N 1 7 N
293 2 8 N 1 7 N	696 2 8 N 1 7 N
294 2 8 N 1 7 N	697 2 8 N 1 7 N
295 2 8 N 1 7 N	698 2 8 N 1 7 N
296 2 8 N 1 7 N	699 2 8 N 1 7 N
297 2 8 N 1 7 N	700 0 11 N 1 7 N
298 2 8 N 1 7 N	701 0 11 N 1 7 N
299 2 8 N 1 7 N	702 0 11 N 1 7 N
300 0 11 N 1 7 N	703 0 11 N 1 7 N
301 0 11 N 1 7 N	704 0 11 N 1 7 N
302 0 11 N 1 7 N	705 3 11 N 1 7 N
303 0 11 N 1 7 N	706 4 11 N 1 7 N
304 0 11 N 1 7 N	707 0 11 N 1 7 N
305 0 11 N 1 7 N	708 0 11 N 1 7 N
306 3 11 N 1 7 N	709 3 11 N 1 7 N
307 0 11 N 1 7 N	710 0 11 N 1 7 N
308 0 11 N 1 7 N	711 ## ## N 1 7 N
309 0 11 N 1 7 N	712 0 11 N 1 7 N
310 0 11 N 1 7 N	713 0 11 N 1 7 N
311 ## ## N 1 7 N	714 0 11 N 1 7 N
312 0 11 N 1 7 N	715 0 11 N 1 7 N
313 0 11 N 1 7 N	716 0 11 N 1 7 N
314 0 11 N 1 7 N	717 0 11 N 1 7 N
315 0 11 N 1 7 N	718 0 11 N 1 7 N
316 0 11 N 1 7 N	719 0 11 N 1 7 N
317 0 11 N 1 7 N	720 2 8 N 1 7 N
318 0 11 N 1 7 N	721 2 8 N 1 7 N
319 0 11 N 1 7 N	722 2 8 N 1 7 N
320 0 11 N 1 7 N	723 2 8 N 1 7 N
321 2 8 N 1 7 N	724 0 11 N 1 7 N

Figure 12-8: Three-Digit Table Defaults



322	28117	N	725	2 8 N 1 7 N
323	0 11 N 1 7 N		726	2 8 N 1 7 N
324	2 8 N 1 7 N		727	2 8 N 1 7 N
325	28117	N	728	2 8 N 1 7 N
326	2 8 N 1 7 N		729	2 8 N 1 7 N
327	2 8 N 1 7 N		730	2 8 N 1 7 N
328	28N 17 N		731	2 8 N 1 7 N
329	2 8 N 1 7 N		732	0 11 N 1 7 N
330	0 11 N 1 7 N		733	2 8 N 1 7 N
331	2 8 N 1 7 N		734	0 11 N 1 7 N
332	2 8 N 1 7 N		735	28N 17N
333	28 N17 N		736	28N 17N
334	0 11 N 1 7 N		737	28N 17N
335	2 8 N 1 7 N		738	2 8 N 1 7 N
336	2 8 N 1 7 N		739	2 8 N 1 7 N
337	2 8 N 1 7 N		740	0 11 N 1 7 N
338	2 8 N 1 7 N		741	2 8 N 1 7 N
339	2 8 N 1 7 N		742	2 8 N 1 7 N
340	2 8 N 1 7 N		743	28 N17 N
341	2 8 N 1 7 N		744	28N 17N
342	2 8 N 1 7 N		745	28N 17N
343	2 8 N 1 7 N		746	28N 17N
344	2 8 N 1 7 N		747	28N 17N
345	2 8 N 1 7 N		748	2 8 N 17N
346	2 8 N 1 7 N		749	28N 17N
347	2 8 N 1 7 N		750	28N 17N
348	2 8 N 1 7 N		751	2 8 N 1 7 N
349	2 8 N 1 7 N		752	2 8 N 1 7 N
350	2 8 N 1 7 N		753	2 8 N 1 7 N
351	2 8 N 1 7 N		754	28N 17N
352	0 11 N 1 7 N		755	2 8 N 1 7 N
353	2 8 N 1 7 N		756	2 8 N 17N
354	2 8 N 1 7 N		757	0 11 N 1 7 N
355	2 8 N 1 7 N		758	2 8 N 1 7 N
356	2 8 N 1 7 N		759	28N 17N
357	2 8 N 1 7 N		760	0 11 N 1 7 N
358	2 8 N 1 7 N		761	2 8 N 1 7 N
359	2 8 N 1 7 N		762	2 8 N 1 7 N
360	0 11 N 1 7 N		763	2 8 N 1 7 N
361	28 N17 N		764	2 8 N 1 7 N
362	28 N 1 7 N		765	0 11 N 1 7 N
363	28 N 17 N		766	2 8 N 1 7 N
364	28 N 1 7 N		767	2 8 N 1 7 N

Figure 12-8: Three-Digit Table Defaults



Introduction



365 2 8 N 1 7 N	768 2 8 N 1 7 N
366 2 8 N 1 7 N	769 2 8 N 1 7 N
367 2 8 N 1 7 N	770 0 11 N 1 7 N
368 2 8 N 1 7 N	771 2 8 N 1 7 N
369 2 8 N 1 7 N	772 2 8 N 1 7 N
370 2 8 N 1 7 N	773 0 11 N 1 7 N
371 2 8 N 1 7 N	774 2 8 N 1 7 N
372 2 8 N 1 7 N	775 2 8 N 1 7 N
373 2 8 N 1 7 N	776 2 8 N 1 7 N
374 2 8 N 1 7 N	777 2 8 N 1 7 N
375 2 8 N 1 7 N	778 2 8 N 1 7 N
376 2 8 N 1 7 N	779 2 8 N 1 7 N
377 2 8 N 1 7 N	780 2 8 N 1 7 N
378 2 8 N 1 7 N	781 0 11 N 1 7 N
379 2 8 N 1 7 N	782 2 8 N 1 7 N
380 2 8 N 1 7 N	783 2 8 N 1 7 N
381 2 8 N 1 7 N	784 2 8 N 1 7 N
382 2 8 N 1 7 N	785 0 11 N 1 7 N
383 2 8 N 1 7 N	786 2 8 N 1 7 N
384 2 8 N 1 7 N	787 2 8 N 1 7 N
385 2 8 N 1 7 N	788 2 8 N 1 7 N
386 2 8 N 1 7 N	789 2 8 N 1 7 N
387 2 8 N 1 7 N	790 2 8 N 1 7 N
388 2 8 N 1 7 N	791 2 8 N 1 7 N
389 2 8 N 1 7 N	792 2 8 N 1 7 N
390 2 8 N 1 7 N	793 2 8 N 1 7 N
391 2 8 N 1 7 N	794 2 8 N 1 7 N
392 2 8 N 1 7 N	795 2 8 N 1 7 N
393 2 8 N 1 7 N	796 2 8 N 1 7 N
394 2 8 N 1 7 N	797 2 8 N 1 7 N
395 2 8 N 1 7 N	798 2 8 N 1 7 N
396 2 8 N 1 7 N	799 2 8 N 1 7 N
397 2 8 N 1 7 N	800 0 11 N 1 7 N
398 2 8 N 1 7 N	801 0 11 N 1 7 N
399 2 8 N 1 7 N	802 0 11 N 1 7 N
400 0 11 N 1 7 N	803 0 11 N 1 7 N
401 0 11 N 1 7 N	804 0 11 N 1 7 N
402 0 11 N 1 7 N	805 0 11 N 1 7 N
403 3 11 N 1 7 N	806 0 11 N 1 7 N
404 0 11 N 1 7 N	807 3 11 N 1 7 N
405 0 11 N 1 7 N	808 0 11 N 1 7 N
406 0 11 N 1 7 N	809 5 11 N 1 7 N
407 0 11 N 1 7 N	810 0 11 N 1 7 N

Figure 12-8: Three-Digit Table Defaults



108 0 11 N 1 7 N	311 ## ## N 1 7 N
109 0 11 N 1 7 N	312 0 11 N 1 7 N
110 0 11 N 1 7 N	313 0 11 N 1 7 N
111 14 N 1 3 N	314 0 11 N 1 7 N
112 0 11 N 1 7 N	315 0 11 N 1 7 N
113 0 11 N 1 7 N	316 0 11 N 1 7 N
114 0 11 N 1 7 N	917 0 11 N 1 7 N
115 0 11 N 1 7 N	318 0 11 N 1 7 N
116 3 11 N 1 7 N	919 0 11 N 1 7 N
117 0 11 N 1 7 N	820 2 8 N 1 7 N
118 3 11 N 1 7 N	521 2 8 N 1 7 N
119 0 11 N 1 7 N	822 2 8 N 1 7 N
120 2 8 N 17N	823 2 8 N 17N
121 2 8 N 1 7 N	824 2 8 N 1 7 N
S2228 N17 N	82528N 17N
123 0 11 N 1 7 N	826 28N 17N
12428 N 1 7 N	827 2 8 N 1 7 N
425 0 11 N 1 7 N	82828N 17N
12628 N17 N	82928 N 1 7 N
42728 N17 N	830 0 11 N 1 7 N
428 2 8 N 1 7 N	831 0 11 N 1 7 N
42928 N17 N	832 2 8 N 1 7 N
43028 N17 N	833 28N 17N
431 2 8 N 1 7 N	834 2 8 N 1 7 N
43228 N17 N	835 2 8 N 1 7 N
43328 N 1 7 N	83628 N 1 7 N
43428 N 1 7 N	837 2 8 N 1 7 N
435 0 11 N 1 7 N	838 2 8 N 1 7 N
43628N 17N	839 2 8 N 1 7 N
43728 N 1 7 N	840 2 8 N 1 7 N
43828 N 1 7 N	841 2 8 N 1 7 N
439 2 8 N 17N	842 2 8 N 1 7 N
440 0 11 N 1 7 N	843 0 11 N 1 7 N
441 5 11 N 1 7 N	844 28 N17 N
442 2 8 N 1 7 N	845 2 8 N 1 7 N
443 0 11 N 1 7 N	846 2 8 N 1 7 N
44428 N17 N	847 0 11 N 1 7 N
44528 N17 N	848 2 8 N 1 7 N
44628 N17 N	84928 N 1 7 N
44728N 17 N	850 0 11 N 1 7 N
44828 N 1 7 N	851 2 8 N 1 7 N
449 2 8 N 1 7 N	85228N 17N
4502 8N 17 N	85328N 17N

Figure 12-8: Three-Digit Table Defaults



Introduction



451 2 8 N 1 7 N	954 2 8 N 1 7 N
452 2 8 N 1 7 N	855 2 8 N 1 7 N
953 2 8 N 1 7 N	856 2 8 N 1 7 N
154 2 8 N 1 7 N	857 2 8 N 1 7 N
155 2 8 N 1 7 N	858 2 8 N 1 7 N
456 2 8 N 1 7 N	859 2 8 N 1 7 N
457 2 8 N 1 7 N	860 0 11 N 1 7 N
458 2 8 N 1 7 N	861 2 8 N 1 7 N
459 2 8 N 1 7 N	862 2 8 N 1 7 N
460 2 8 N 1 7 N	863 2 8 N 1 7 N
461 2 8 N 1 7 N	864 0 11 N 1 7 N
462 2 8 N 1 7 N	865 2 8 N 1 7 N
463 2 8 N 1 7 N	866 2 8 N 1 7 N
464 2 8 N 1 7 N	867 2 8 N 1 7 N
165 2 8 N 1 7 N	868 2 8 N 1 7 N
466 2 8 N 1 7 N	869 2 8 N 1 7 N
467 2 8 N 1 7 N	870 0 11 N 1 7 N
468 2 8 N 1 7 N	871 2 8 N 1 7 N
469 2 8 N 1 7 N	872 2 8 N 1 7 N
470 2 8 N 1 7 N	873 2 8 N 1 7 N
471 2 8 N 1 7 N	874 0 11 N 1 7 N
472 2 8 N 1 7 N	875 2 8 N 1 7 N
473 2 8 N 1 7 N	876 2 8 N 1 7 N
474 2 8 N 1 7 N	877 2 8 N 1 7 N
475 2 8 N 1 7 N	878 2 8 N 1 7 N
476 2 8 N 1 7 N	879 2 8 N 1 7 N
477 2 8 N 1 7 N	880 2 8 N 1 7 N
478 2 8 N 1 7 N	881 2 8 N 1 7 N
479 2 8 N 1 7 N	882 2 8 N 1 7 N
480 2 8 N 1 7 N	883 2 8 N 1 7 N
481 2 8 N 1 7 N	884 2 8 N 1 7 N
482 2 8 N 1 7 N	885 2 8 N 1 7 N
483 2 8 N 1 7 N	886 2 8 N 1 7 N
484 2 8 N 1 7 N	887 2 8 N 1 7 N
485 2 8 N 1 7 N	888 2 8 N 1 7 N
486 2 8 N 1 7 N	889 2 8 N 1 7 N
487 2 8 N 1 7 N	890 2 8 N 1 7 N
488 2 8 N 1 7 N	891 2 8 N 1 7 N
489 2 8 N 1 7 N	892 2 8 N 1 7 N
490 2 8 N 1 7 N	893 2 8 N 1 7 N
491 2 8 N 1 7 N	894 2 8 N 1 7 N
492 2 8 N 1 7 N	895 2 8 N 1 7 N
493 2 8 N 1 7 N	896 2 8 N 1 7 N

Figure 12-8: Three-Digit Table Defaults



494 2 8 N 1 7 N	897 2 8 N 1 7 N
495 2 8 N 1 7 N	898 2 8 N 1 7 N
496 2 8 N 1 7 N	899 2 8 N 1 7 N
497 2 8 N 1 7 N	900 0 11 N 1 7 N
498 2 8 N 1 7 N	901 0 11 N 1 7 N
499 2 8 N 1 7 N	902 3 11 N 1 7 N
500 0 11 N 1 7 N	903 0 11 N 1 7 N
501 0 11 N 1 7 N	904 0 11 N 1 7 N
501 0 11 N 1 7 N	905 4 11 N 1 7 N
503 0 11 N 1 7 N	906 0 11 N 1 7 N
504 0 11 N 1 7 N	907 0 11 N 1 7 N
505 0 11 N 1 7 N	908 0 11 N 1 7 N
506 3 11 N 1 7 N	909 0 11 N 1 7 N
507 0 11 N 1 7 N	910 0 11 N 1 7 N
508 0 11 N 1 7 N	911 14 N 13 N
509 0 11 N 1 7 N	912 0 11 N 1 7 N
510 0 11 N 1 7 N	913 0 11 N 1 7 N
511 ## ## N 1 7 N	914 0 11 N 1 7 N
512 0 11 N 1 7 N	915 0 11 N 1 7 N
513 0 11 N 1 7 N	916 0 11 N 1 7 N
514 3 11 N 1 7 N	917 0 11 N 1 7 N
515 0 11 N 1 7 N	918 0 11 N 1 7 N
516 0 11 N 1 7 N	919 0 11 N 1 7 N
517 0 11 N 1 7 N	920 0 11 N 1 7 N
518 0 11 N 1 7 N	921 2 8 N 1 7 N
519 3 11 N 1 7 N	922 2 8 N 1 7 N
520 0 11 N 1 7 N	923 2 8 N 1 7 N
521 2 8 N 1 7 N	924 2 8 N 1 7 N
522 2 8 N 1 7 N	925 0 11 N 1 7 N
523 2 8 N 1 7 N	926 2 8 N 1 7 N
524 2 8 N 1 7 N	927 2 8 N 1 7 N
525 2 8 N 1 7 N	928 2 8 N 1 7 N
526 2 8 N 1 7 N	929 2 8 N 1 7 N
527 2 8 N 1 7 N	930 2 8 N 1 7 N
528 2 8 N 1 7 N	931 0 11 N 1 7 N
529 2 8 N 1 7 N	932 2 8 N 1 7 N
530 0 11 N 1 7 N	933 2 8 N 1 7 N
531 2 8 N 1 7 N	934 2 8 N 1 7 N
532 2 8 N 1 7 N	935 2 8 N 1 7 N
533 2 8 N 1 7 N	936 2 8 N 1 7 N
534 2 8 N 1 7 N	937 0 11 N 1 7 N
535 2 8 N 1 7 N	938 2 8 N 1 7 N
536 2 8 N 1 7 N	939 2 8 N 1 7 N

Figure 12-8: Three-Digit Table Defaults





Introduction



537 2 8 N 1 7 N	940 0 11 N 1 7 N
538 2 8 N 1 7 N	941 0 11 N 1 7 N
539 2 8 N 1 7 N	942 2 8 N 1 7 N
540 0 11 N 1 7 N	943 2 8 N 1 7 N
541 0 11 N 1 7 N	944 2 8 N 1 7 N
542 2 8 N 1 7 N	945 2 8 N 1 7 N
543 2 8 N 1 7 N	946 2 8 N 1 7 N
544 2 8 N 1 7 N	947 2 8 N 1 7 N
545 2 8 N 1 7 N	948 2 8 N 1 7 N
546 2 8 N 1 7 N	949 0 11 N 1 7 N
547 2 8 N 1 7 N	950 2 8 N 1 7 N
548 2 8 N 1 7 N	951 2 8 N 1 7 N
549 2 8 N 1 7 N	952 2 8 N 1 7 N
550 2 8 N 1 7 N	953 2 8 N 1 7 N
551 2 8 N 1 7 N	954 0 11 N 1 7 N
552 2 8 N 1 7 N	955 2 8 N 1 7 N
553 2 8 N 1 7 N	956 0 11 N 1 7 N
554 2 8 N 1 7 N	957 2 8 N 1 7 N
555 2 8 N 1 7 N	958 2 8 N 1 7 N
556 2 8 N 1 7 N	959 2 8 N 1 7 N
557 2 8 N 1 7 N	960 2 8 N 1 7 N
558 2 8 N 1 7 N	961 2 8 N 1 7 N
559 2 8 N 1 7 N	962 2 8 N 1 7 N
560 2 8 N 1 7 N	963 2 8 N 1 7 N
561 0 11 N 1 7 N	964 2 8 N 1 7 N
562 0 11 N 1 7 N	965 2 8 N 1 7 N
563 2 8 N 1 7 N	966 2 8 N 1 7 N
564 2 8 N 1 7 N	967 2 8 N 1 7 N
565 2 8 N 1 7 N	968 2 8 N 1 7 N
566 2 8 N 1 7 N	969 2 8 N 1 7 N
567 2 8 N 1 7 N	970 0 11 N 1 7 N
568 2 8 N 1 7 N	971 2 8 N 1 7 N
569 2 8 N 1 7 N	972 0 11 N 1 7 N
570 2 8 N 1 7 N	973 0 11 N 1 7 N
571 2 8 N 1 7 N	974 2 8 N 1 7 N
572 2 8 N 1 7 N	975 2 8 N 1 7 N
573 0 11 N 1 7 N	976 2 8 N 1 7 N
574 2 8 N 1 7 N	977 2 8 N 1 7 N
575 2 8 N 1 7 N	978 0 11 N 1 7 N
576 2 8 N 1 7 N	979 2 8 N 1 7 N
577 2 8 N 1 7 N	980 2 8 N 1 7 N
578 2 8 N 1 7 N	981 2 8 N 1 7 N
579 2 8 N 1 7 N	982 2 8 N 1 7 N

Figure 12-8: Three-Digit Table Defaults





580 0 11 N 1 7	983 2 8 N 1 7 N
581 2 8 N 1 7	984 2 8 N 1 7 N
582 2 8 N 1 7	985 2 8 N 1 7 N
583 2 8 N 1 7	986 2 8 N 1 7 N
584 2 8 N 1 7	987 2 8 N 1 7 N
585 2 8 N 1 7 N	988 2 8 N 1 7 N
586 2 8 N 1 7	989 2 8 N 1 7 N
587 2 8 N 1 7 N	990 2 8 N 1 7 N
588 2 8 N 1 7 N	991 2 8 N 1 7 N
589 2 8 N 1 7 N	992 2 8 N 1 7 N
590 2 8 N 1 7 N	993 2 8 N 1 7 N
591 2 8 N 1 7 N	994 2 8 N 1 7 N
592 2 8 N 1 7 N	995 2 8 N 1 7 N
593 2 8 N 1 7 N	996 2 8 N 1 7 N
594 2 8 N 1 7 N	997 2 8 N 1 7 N
595 2 8 N 1 7 N	998 2 8 N 1 7 N
596 2 8 N 1 7 N	999 2 8 N 1 7 N

Figure 12-8: Three-Digit Table Defaults

## Print Entire System Database

### Programming Steps

- 1 Press the ENTIRE SYSTEM flexible button (FLASH 85, button **#8**). The following message displays on the display phone:



- 2 To print the entire database, press the HOLD button. The display updates to indicate what portion of the database is printing.

When the system finishes sending the database to the printer, a confirmation tone is heard.

### Description

This command dumps the entire database as a permanent record which can serve as a hardcopy of the database. The system baud rate must match that of the printer or receiving device. Printing the entire database takes a while to print. The database is printed in the following order:

- ❖ All System Parameters
- ❖ All CO Line programming





- ❖ All CO Ports
- ❖ All Station Attributes
- ❖ All Station Ports
- ❖ Exception Tables (Allow, Deny and Special)
- ❖ System Speed Dial Numbers (Bins 20–99)
- ❖ LCR Tables
- ❖ ICLID Parameters and Table(s)
- ❖ ICLID Ringing Assignment Table
- ❖ Directory Dialing Table
- ❖ Hunt Group Parameters
- ❖ ACD\* or UCD Group Parameters
- ❖ Voice Mail Group Parameters
- ❖ DID Translation Table
- ❖ DID-TIE Timers
- ❖ Verified Account Codes Table

*\*This feature is available with optional software.*

## Print ICLID - DID Tables

### Programming Steps

- 1 Press the ICLID-DID TABLES flexible button (**FLASH 85, button #9**). The *following* message displays on the display phone:

PRINT	ICLID-DID
PRESS	HOLD

- 2 To print the ICLID-DID Table(s), press the HOLD button. The following message displays on the display phone:



PRINTING ICLID-DID

PRINTING ROUTE

PRINTING DID TRANS NO

When the system finishes sending the requested information to the printer, a confirmation tone is heard.

## Description

This command dumps the entire database as a permanent record which can serve as a hardcopy of the database. The system baud rate must match that of the printer or receiving device. When printing the ICLID-DID Table(s), the following data prints:

- ❖ ICLID Features
- ❖ ICLID Translation Table
- ❖ ICLID Unanswered Call Table
- ❖ ICLID Ringing Assignments Table
- ❖ DID Translation Table

Refer to *Figure 12-9: ICLID / DID Tables* for an example of the ICLID-DID Tables database printout.





ICLID	NAME	BAUD	PORT	
N	Y	9600	1	
				ICLID UNANSWERED CALL TABLE
ICLID TRANSLATION TABLE				NONE
-				
ENTRY	ROUTE	NAME	NUMBER	ROUTE RING ASSIGNMENTS
600	##			
601	##			00
602	##			NONE
603	##			
604	##			01
605	##			NONE
606	##			
607	##			02
608	##			NONE
609	##			
610	##			03
611	##			NONE
612	##			
613	##			04
614	##			NONE
615	##			
616	##			05
617	##			NONE
618	##			
619	##			06
620	##			NONE
621	##			
622	##			07
623	##			NONE
624	##			
625	##			08
626	##			NONE
627	##			
628	##			09
629	##			NONE
630	##			
631	##			10
632	##			NONE
633	##			
634	##			11
635	##			NONE
636	##			
637	##			12
638	##			NONE
639	##			
640	##			13
. . and so on through 799				NONE

Figure 12-9: ICLID / DID Tables



16	NONE	108	108A
17	NONE	109	109A
18	NONE	110	110A
19	NONE	...	....
20	NONE	...	....
21	NONE	...	
22	NONE	...	
23	NONE	155	155A
24	NONE	156	156A
25	NONE	157	157A
...	and so on through 99	158	158A
100	100A	159	159A
101	101A	160	160A
102	102A		
103	103A		
104	104A	....	and so on through 252

Figure 12-9. ICLID / DID Tables (Continued)





## Print Directory Dial Table Parameters

### Programming Steps

- 1 Press the DIRECTORY DIAL TABLE flexible button (FLASH 85, button #10). The following message displays on the display phone:

```
PRINT DIR - DIAL
PRESS HOLD
```

- 2 To print the Directory Dialing Table parameters, press the HOLD button. The **following** message displays on the display phone:

```
PRINTING DIR - DIAL
```

When the system finishes sending the requested information to the printer, a confirmation tone is heard.

### Description

This command dumps the entire database as a permanent record which can serve as a hardcopy of the database. The system baud rate must match that of the printer or receiving device. Refer to *Figure 12-10. Directory Dialing Table* for an example of the Directory Dialing Table database printout,



LST BIN NAME	050 150
	051 151
000 100	052 152
001 101	053 153
002 102	054 154
003 103	055 155
004 104	056 156
005 105	057 157
006 106	058 158
007 107	059 159
008 108	060 160
009 109	061 161
010 110	062 162
011 111	063 163
012 112	064 164
013 113	065 165
014 114	066 166
015 115	067 167
016 116	068 168
317 117	069 169
018 118	070 170
319 119	071 171
320 120	072 172
321 121	073 173
322 122	074 174
323 123	075 175
324 124	076 176
325 125	077 177
326 126	078 178
327 127	079 179
328 128	080 180
329 129	081 181
330 130	082 182
331 131	083 183
132 132	084 184
133 133	085 185
334 134	086 186
135 135	087 187
136 136	088 188
137 137	089 189
338 138	090 190
141 141	093 193
142 142	094 194
343 143	095 195
144 144	096 196
145 145	097 197
146 146	098 198
147 147	099 199
148 148	
349 149	.. and so on through bin 199

Figure 12-10: Directory Dialing Table







# Print Hunt Group Parameters

## Programming Steps

- 1 Press the HUNT GROUPS flexible button (FLASH 85. button #11). The following message displays on the display phone:

```
PRINT HUNT GROUP
PRESS HOLD
```

- 2 To print data for Hunt Group Parameters, press the HOLD button. The following display displays on the display phone:

```
PRINTING HUNT GROUP
```

When the system finishes sending the requested information to the printer, a confirmation tone is heard.

## Description

This command dumps the entire database as a permanent record which can serve as a hardcopy of the database. The system baud rate must match that of the printer or receiving device. Refer to *Figure 12-11: Hunt Group Parameters* for an example of the Hunt Group Parameter database printout.

HUNT GROUPS	RAN HUNT GROUPS
HG 0..450 PILOT HUNT	HG 8..458 PILOT HUNT
HG 1..451 PILOT HUNT	HG 9..459 PILOT HUNT
HG 2..452 PILOT HUNT	HG10..460 PILOT HUNT
HG 3..453 PILOT HUNT	HG11..461 PILOT HUNT
HG 4..454 PILOT HUNT	
HG 5..455 PILOT HUNT	
HG 6..456 PILOT HUNT	
HG 7..457 PILOT HUNT	

Figure 12-1 1: Hunt Group Parameters



## Print ACD / UCD Group Parameters

### Programming Steps

- 1 Press the **ACD\*** or UCD GROUPS flexible button (FLASH 85, button **#12**). The following message displays on the display phone:

```
PRINT ACD GROUP
PRESS HOLD
```

- 2 To print data for the **ACD\*** or UCD Group Parameters, press the HOLD button. The following display displays on the display phone:

```
PRINTING ACD GROUP
```

When the system finishes sending the requested information to the printer, a confirmation tone is heard.

*\*This feature is available with optional software.*

### Description

This command dumps the entire database as a permanent record which can serve as a hardcopy of the database. The system baud rate must match that of the printer or receiving device. Refer to *Figure 12-12: ACD Group Parameters* for an example of the ACD or UCD Group Parameters database printout.





ACD ALT OVR ANO SUP WRAP CIQ STN#	ACD TIMERS													
550	4	0						RING	MIT	OVER	WRAP	NAT	NAR	FRT
551	4	0						60	60	60	4	0	300	5
552	4	0						ANNOUNCEMENT TABLE						
553	4	0						-----						
554	4	0						TABLE	TYPE	INDEX	TIME			
555	4	0						1	#	###	###			
557	4	0						2	#	###	###			
558	4	0						3	#	###	###			
559	4	0						4	#	###	###			
560	4	0						5	#	###	###			
562	4	0						6	#	###	###			
563	4	0						7	#	###	###			
564	4	0						8	#	###	###			
565	4	0						ACD SMDR REPORTING						
								CO	ICM	EVT	I/O	BAUD		
								N	N	N	1	9600		

Figure 12-12: ACD Group Parameters

## Print Voicemail Group Parameters

### Programming Steps

- 1 Press the VOICE MAIL GROUP flexible button (**FLASH 85, button #13**). The following message displays on the display phone:

```

PRINT VM GROUP
PRESS HOLD
    
```

- 2 To print data for Voice Mail Group Parameters, press the HOLD button. The following display displays on the display phone:

```

PRINTING VM GROUP
    
```

When the system finishes sending the requested information to the printer, a confirmation tone is heard,



## Description

This command dumps the entire database as a permanent record which can serve as a hardcopy of the database. The system baud rate must match that of the printer or receiving device. When printing the VM Group Parameters, the following data prints:

- ❖ Voice Mail Group Parameters
- ❖ Voice Mail Outpulsing Table (including the disconnect table)
- ❖ Voice Mail Options

Refer to *Figure 12-13: Voicemail Group Parameters* for an example of the VM Group Parameters database printout.





VM ALT LEV RET STN#	Mailbox Table
4-40 0## #	
4-41 ### #	
4-42 ### #	Index Group ID
4-43 ### #	1 440
4-44 ### #	2 440
4-45 ### #	3 440
4-46 ### #	4 440
4-47 ### #	5 440
	6 440
	7 440
	8 440
	9 440
	10 440
	11 440
	12 440
	13 440
	14 440
	15 440
	16 440
	17 440
	18 440
	19 440
	20 440
	.. ..
	.. ..
	.. ..
	246 440
	241 440
	242 440
	243 440
	244 440
	245 440
	246 440
	.. ..
	.. ..
	255 440'

Figure 12-1 3: Voicemail Group Parameters



## Print Verified Account Codes

### Programming Steps

- 1 Press the VERIFIED ACCT CODES flexible button (FLASH 85, button **#15**). The following message displays on the display phone:

```
PRINT ACCT CODES
PRESS HOLD
```

- 2 To print the VERIFIED ACCT CODES, press the HOLD button. The following message displays on the display phone:

```
PRINT ACCT CODES
```

When the system finishes sending the requested information to the printer, a confirmation tone is heard.

### Description

This command dumps the entire database as a permanent record which can serve as a hardcopy of the database. The system baud rate must match that of the printer or receiving device. Refer to *Figure 12-14: Verified Account Codes* for an example of the Verified Account Codes database printout.





ACCOUNT CODE TABLE			
-----			
NTRY	COS	DGTS	
00	##		51 ##
01	##		52 ##
02	##		53 ###
03	##		54 ##
04	##		55 ##
05	##		56 ##
06	##		57 ##
07	##		58 ##
08	##		59 ###
09	##		60 ##
10	##		61 ##
11	##		62 ##
12	##		63 ###
13	##		64 ##
14	##		65 ##
15	##		66 ###
16	##		67 ##
17	##		68 ##
18	##		69 ###
19	##		70 ##
20	##		71 ##
21	##		72 ##
22	##		73 ##
23	##		74 ###
24	##		75 ##
25	##		76 ##
26	##		77 ##
27	##		78 ##
28	##		79 ##
29	##		80 ##
30	##		81 ##
31	##		82 ###
32	##		83 ###
33	##		84 ##
34	##		85 ##
35	##		86 ##
36	##		87 ##
37	##		88 ##
38	##		89 ##
39	##		90 ##
40	##		91 ##
41	##		92 ##
42	##		93 ###
			94 ##
			95 ##
			96 ##
			97 ##
			98 ##
			107 ##
			108 ##
			109 ##
			110 ##
			111 ##
			112 ##
			113 ##
			114 ##
			115 ##
			116 ##
			117 ##
			118 ##
			119 ##
			120 ##
			121 ##
			122 ##
			123 ##
			124 ##
			125 ##
			126 ##
			127 ##
			128 ##
			129 ##
			130 ##
			131 ##
			132 ##
			133 ##
			134 ##
			135 ##
			136 ##
			137 ##
			138 ##
			139 ##
			140 ##
			141 ##
			142 ##
			143 ##
			144 ##
			145 ##
			146 ##
			147 ##
			148 ##
			149 ##
			150 ##
			151 ##
			152 ##
			153 ##
			154 ##

Figure 12-14: Verified Account Codes





163	##	221	##
164	##	222	##
165	##	223	##
166	##	224	##
167	##	225	##
168	##	226	##
169	##	227	##
170	##	228	##
171	##	229	##
172	##	230	##
173	##	231	##
174	##	232	##
175	##	233	##
176	##	234	##
177	##	235	##
178	##	236	##
179	##	237	##
180	##	238	##
181	##	239	##
182	##	240	##
183	##	241	##
184	##	242	##
185	##	243	##
186	##	244	##
187	##	245	##
188	##	246	##
189	##	247	##
190	##	248	##
191	##	249	##
192	##		
193	##		
194	##		
195	##		
196	##		
197	##		
198	##		
199	##		
200	##		
201	##		
202	##		
203	##		
204	##		
205	##		
206	##		
207	##		
208	##		
209	##		
210	##		

Figure 12-15. Verified Account Codes (Continued)





## Abort Printing

### Programming Steps



To abort a printout:

- i Press the ABORT PRINTING flexible button (FLASH 85, button #20).
- 2 Press the HOLD button. The message currently on the display phone remains unchanged, however, printing aborts.



