

NEC

Aspire

Networking Manual

01.17

This manual has been developed by NEC America. It is intended for the use of its customers and service personnel, and should be read in its entirety before attempting to install or program the system. Any comments or suggestions for improving this manual would be appreciated. Forward your remarks to:

NEC America, Inc., Corporate Networks Group
4 Forest Parkway, Shelton, CT 06484
cng.nec.com

Nothing contained in this manual shall be deemed to be, and this manual does not constitute, a warranty of, or representation with respect to, any of the Equipment covered. This manual is subject to change without notice and NEC America has no obligation to provide any updates or corrections to this manual. Further, NEC America also reserves the right, without prior notice, to make changes in equipment design or components as it deems appropriate. No representation is made that this manual is complete or accurate in all respects and NEC America shall not be liable for any errors or omissions. In no event shall NEC America be liable for any incidental or consequential damages in connection with the use of this manual. This document contains proprietary information that is protected by copyright. All rights are reserved. No part of this document may be photocopied or reproduced without prior written consent of NEC America.

© 2003 by NEC America, Inc. All Rights Reserved
Printed in U.S.A.

Table of Contents

Introduction	1
<i>About Networking</i>	1
What is Networking?	1
Aspire PCBs.	2
Available Features	3
<i>About This Manual</i>	5
Using This Manual.	5
Unique Considerations.	6
Setting Up The Networking Feature	7
<i>Required System Programming</i>	7
Basic System Programming.	7
ISDN Networking	7
Voice Over IP Networking	9
Numbering Plan	12
Features	17
<i>Network Settings and Operation</i>	19
ARS/F-Route	19
Barge In	20
Call Forwarding	21
Call Forwarding / Do Not Disturb Override	22
Call Forward, Off-Premise.	23
Call Forwarding with Follow Me	24
Call Waiting / Camp On	25
Caller ID Display	26
Central Office Calls, Placing: Seizing a trunk in a networked system	27
Conference	28
Department Calling	29
Department Step Call.	30
Direct Inward Dialing (DID)	31
Direct Inward Line (DIL).	31
Direct Inward System Access (DISA).	32
Hold	33
Hotline / Direct Station Selection (DSS).	34
Intercom	35
Last Number Redial.	36
Message Waiting	37
Paging	38
Park	39
Ringdown Extension, Internal/External.	40
Selectable Display Messaging	41
Toll Restriction	42
Transfer	43
Voice Mail, Centralized.	45

Table of Contents

Programming	51
<i>Programming Basics</i>	53
Before Reading This Section	53
How to Use This Section	53
How to Enter the Programming Mode	54
How to Exit the Programming Mode	55
Using Keys to Move Around in the Programs	56
Programming Names and Text Messages	57
Using Soft Keys For Programming	58
What the Soft Key Display Prompts Mean	58
10-03 : <i>PCB Setup</i>	59
Description	59
Feature Cross Reference	65
Telephone Programming Instructions	66
10-12 : <i>NTCPU Network Setup</i>	67
Description	67
Feature Cross Reference	67
Telephone Programming Instructions	68
10-20 : <i>LAN Setup for External Equipment</i>	69
Description	69
Feature Cross Reference	69
Telephone Programming Instructions	70
10-27 : <i>IP System ID</i>	71
Description	71
Feature Cross Reference	71
Telephone Programming Instructions	72
11-01 : <i>System Numbering</i>	73
Description	73
Description (Cont d)	74
Feature Cross Reference	81
Telephone Programming Instructions	81
11-02 : <i>Extension Numbering</i>	82
Description	82
Feature Cross Reference	82
Telephone Programming Instructions	83
11-07 : <i>Department Group Pilot Numbers</i>	84
Description	84
Feature Cross Reference	84
Telephone Programming Instructions	85
11-10 : <i>Service Code Setup (for System Administrator)</i>	86
Description	86
Feature Cross Reference	87
Telephone Programming Instructions	88

Table of Contents

<i>11-11 : Service Code Setup (for Setup/Entry Operation)</i>	89
Description	89
Feature Cross Reference	91
Telephone Programming Instructions	91
<i>11-12 : Service Code Setup (for Service Access)</i>	92
Description	92
Feature Cross Reference	94
Telephone Programming Instructions	95
<i>11-16 : Single Digit Service Code Setup</i>	96
Description	96
Feature Cross Reference	96
Telephone Programming Instructions	97
<i>14-01 : Basic Trunk Data Setup</i>	98
Description	98
Feature Cross Reference	101
Telephone Programming Instructions	101
<i>16-01 : Department Group Basic Data Setup</i>	102
Description	102
Feature Cross Reference	103
Telephone Programming Instructions	104
<i>16-02 : Department Group Assignment for Extensions</i>	105
Description	105
Feature Cross Reference	105
Telephone Programming Instructions	106
<i>22-05 : Incoming Trunk Ring Group Assignment</i>	107
Description	107
Feature Cross Reference	107
Telephone Programming Instructions	108
<i>22-08 : DIL/IRG No Answer Destination</i>	109
Description	109
Feature Cross Reference	109
Telephone Programming Instructions	110
<i>22-10 : DID Translation Table Setup</i>	111
Description	111
Feature Cross Reference	111
Telephone Programming Instructions	112
<i>22-11 : DID Translation Number Conversion</i>	113
Description	113
Feature Cross Reference	115
Telephone Programming Instructions	115
<i>22-12 : DID Intercept Ring Group</i>	116
Description	116
Feature Cross Reference	116
Telephone Programming Instructions	117

Table of Contents

25-03 : <i>DID/DISA Transfer Ring Group With Incorrect Dialing</i>	118
Description	118
Feature Cross Reference	118
Telephone Programming Instructions	119
25-04 : <i>DID/DISA Transfer Ring Group With No Answer/Busy</i>	120
Description	120
Feature Cross Reference	120
Telephone Programming Instructions	121
44-01 : <i>System Options for ARS/F-Route</i>	122
Description	122
Feature Cross Reference	122
Telephone Programming Instructions	122
44-02 : <i>Dial Analysis Table for ARS/F-Route Access</i>	123
Description	123
Feature Cross Reference	124
Telephone Programming Instructions	125
44-03 : <i>Dial Analysis Extension Table</i>	126
Description	126
Feature Cross Reference	127
Telephone Programming Instructions	127
44-04 : <i>ARS/F-Route Selection for Time Schedule</i>	128
Description	128
Feature Cross Reference	128
Telephone Programming Instructions	128
44-05 : <i>ARS/F-Route Table</i>	129
Description	129
Feature Cross Reference	130
Telephone Programming Instructions	130
44-06 : <i>Additional Dial Table</i>	131
Description	131
Feature Cross Reference	131
Telephone Programming Instructions	131
44-07 : <i>Gain Table for ARS/F-Route Access</i>	132
Description	132
Feature Cross Reference	132
Telephone Programming Instructions	133
44-08 : <i>Time Schedule for ARS/F-Route</i>	134
Description	134
Feature Cross Reference	134
Telephone Programming Instructions	135
44-09 : <i>Weekly Schedule for ARS/F-Route</i>	136
Description	136
Feature Cross Reference	136
Telephone Programming Instructions	137

Table of Contents

<i>44-10 : Holiday Schedule for ARS/F-Route</i>	138
Description.....	138
Feature Cross Reference	138
Telephone Programming Instructions	138
<i>45-01 : Voice Mail Integration Options</i>	139
Description.....	139
Feature Cross Reference	140
Telephone Programming Instructions	140
<i>84-02 : H.225, H.245 Information Basic Setup</i>	141
Description.....	141
Feature Cross Reference	142
Telephone Programming Instructions	143
<i>84-05 : VOIPU IP Address Setup</i>	144
Description.....	144
Feature Cross Reference	144
Telephone Programming Instructions	145

Table of Contents

Introduction

What is Networking?

The Networking package provides a seamless connection of multiple systems into a single “virtual” communications system using ISDN (PRI/BRI) and VoIP lines with a unified numbering plan. Networking will allow many companies to connect their telephone systems so they appear as one. An extension user in the network can easily dial another extension or transfer a call within the Networking System. Calls are passed from network node to network node using a protocol that contains information about the source of the call, the type of call and the destination of the call.

- **Centralized Attendant Service (CAS)**

Centralized Attendant Service allows multiple networked systems to share a single centralized attendant. This centralized attendant can receive calls from and transfer calls to any destination in any network node. Unanswered calls recall and route as if they were part of a single, much larger system.

Optionally, up to four Voice Mail systems can share the voice messaging requirements of an entire network. Each of the Voice Mail systems is dedicated to a portion of the total network and is responsible only for supporting that portion. *Currently, only the use of an external voice mail is supported for centralized voice mail.*

- **Flexible Network Routing**

Use network routes to set up “single channel” networking between many separate systems - or use multiple networking channels per system for greater network performance. Data tables in the system program define the routing for each extension in each network node. These tables are easily customized to meet the requirements of each networking configuration.

Users may place an intercom call or transfer a call to any extension at any location by simply dialing an extension number. The system analyzes each extension number received and determines how to route the call to its final destination. The feature which handles this route selection is called Flexible Routing (F-Routing). F-Routing also has the ability to select alternate routes to the destination extension if the primary destination is busy. Up to 48 routes are available for networking. Once an extension number is dialed, the system checks the routing, accesses the assigned trunk group and places the call. Each extension is assigned a route or routes that decides which trunk group to access and any modified dialed data if required.

Introduction

About Networking

Aspire PCBs

Kind of available connection is show in following table.

Interface	Description	Note
ISDN	Using Q.931 protocol, Basic rate interface and Primary rate interfaces are available.	A PRIU or BRIU PCB is required for connection. A minimum version of firm-ware is required. Refer to the table below.
VoIP	Using H.323 protocol for voice transmit protocol.	A VOIPU PCB is required. No specific firmware version required.

When connecting a network using ISDN PCB, the PCBs must have the following firmware version or higher.

PCB	Version
PRIU	2.0
BRIU	2.6

Using ISDN trunks provides up to 256 B-channel ports which can be used for Networking.

Available Features

Feature Name
ARS/F-Route
Barge In
BLF Indication
Call Forwarding Override
Caller ID Display
Call Forwarding: Immediately Busy No Answer Both Ring
Call Forwarding, Follow Me
Call Forwarding, Off-Premise
Call Waiting / Camp On
Callback
Central Office Calls, Placing: Seizing a trunk in networked system
Conference
Department Step Calling
Direct Inward Dialing (DID)
Direct Inward Line (DIL)
Direct Inward System Access (DISA)
Department Calling
Hold
Hotline
Intercom: Change Voice/Signal Ring
Last Number Redial
Message Waiting
Paging
Park
Ringdown Extension, Internal/External
Selectable Display Messaging
Toll Restriction
Transfer
Voice Mail, Centralized

Introduction

About Networking

Using This Manual

This manual is in three sections:

- **Section 1: Setting Up the Networking Feature**
This section guides you step by step in setting up a basic Networking system. You'll learn how to:
 - Program the Aspire system for Networking
 - Program the Aspire system for Networking with Voice Mail
 - Set Up the Voice Mail for Networking
- **Section 2: Features**
This section provides details on system features and how they work with a networked system.
- **Section 3: Programming Basics**
This section describes the programming basics for the Aspire phone system.

Telephone Programming Instructions shows you how to enter the program's data into system memory. For example:

1. Enter the programming mode.
2. 15-07-01



A screenshot of a telephone display with a black background and white text. The first line shows "15-07-01 TEL301". The second line shows "KY01 = *01". Below the text are two white arrows, one pointing left and one pointing right, indicating cursor movement.

tells you to enter the programming mode, dial 150701 from the telephone dial pad. After you do, you'll see the message "15-07-01 TEL301" on the first line of the telephone display. This indicates the program number (15-07), item number (01), and that the options are being set for extension 301. The second row of the display "KY01 = *01" indicates that Key 01 is being programmed with the entry of *01. The third row allows you to move the cursor to the left or right, depending on which arrow is pressed. To learn how to enter the programming mode, see **How to Enter the Programming Mode** (page 54).

Introduction

About This Manual

Unique Considerations

◆ Read These Notes ◆

Simplifying Keypad Operation with One-Touch Keys...

A keypad user can access many features through Service Codes (e.g., Service Code *0 answers a Message Waiting from a co-worker). To streamline the operation of their phone, a keypad user can store these codes under One-Touch Keys. This provides one-button operation for almost any feature. To find out more, read the One-Touch Calling feature in your Software Manual.

Programmable Keys...

When reading an instruction using programmable keys, you will see a notation similar to (*PGM 15-07 or SC 851: 06*). This means that the key requires function code 06, and you can program this code through Program 15-07 or by dialing Service Code 851. Refer to the Programmable Function Keys feature in your Software Manual if you need more information.

Using Handsfree...

The manual assumes each extension has Automatic Handsfree. This lets a user just press a line key or CALL key to answer or place a call. For extensions without Automatic Handsfree, the user must:

Lift the handset or press SPK for Intercom dial tone

Lift the handset or press SPK, then press a line key for trunk dial tone

Section 1

Setting Up The Networking Feature

Basic System Programming

The selection of an ISDN PRI, BRI, or VoIP PCB determines the type of programming you must do on the Aspire. Refer to either the ISDN Networking or VoIP Networking section below.

ISDN Networking

◆→ **10-03-01 : PCB Setup - ISDN Line Mode**

Determine the line mode of the ISDN. If Basic Rate Interface (BRI) is chosen, the setting must be done for each line. The settings must match in all networked systems. The following entries are acceptable for Networking.

ISDN Line Number	01-08
------------------	-------

Item No.	Item	Input Data	Default
01	ISDN Line Mode	3 = Network Mode (Leased Line) 4 = Network Mode (Interconnected Line) 5 = Interconnection (Interconnected Line, Fixed Layer 1 Forced NT Mode)	1

Setting Up The Networking Feature

Required System Programming

➤ **10-03-03: PCB Setup - Connection Type**

The connection type should be changed if Basic Rate Interface (BRI) is used. Only Point-to-Point connection (1) is available for system interconnection.

ISDN Line Number		01-08	
Item No.	Item	Input Data	Default
03	Connection Type	0 = Point-to-Multipoint (not available for Networking) 1 = Point-to-Point	0

Example:

System – A	System – B
1: Point-to-Point	1: Point-to-Point

➤ **10-03-10 : PCB Setup - Master/Slave System**

Determine which system will be the master system and which one(s) will be the slave system(s). If one system is set as the Master, all the other systems must be set as the Slave. Make sure the switch on the ISDN PCB is set as follows: Master = S-Point, Slave = T-Point.

ISDN Line Number		01-08	
Item No.	Item	Input Data	Default
10	Master/Slave System (Network Mode Only)	0- Slave System 1- Master System	0

Example:

System – A	System – B
1: Master	2: Slave

➤ **10-03-11 : PCB Setup - Networking System Number**

The Networking ID is used to select the access route. You can choose any number 0 to 50 (0 equals no operation). This ID is used when setting the numbering plan for the networked systems. The same ID number must be set in both 10-03-11 and 11-01. Refer to **Numbering Plan** (page 12) for more on the numbering plan settings.

ISDN Line Number		01-08	
Item No.	Item	Input Data	Default
10	Networking System Number (Network Mode Only)	0-50	0

Example:

System – A	System – B
Networking ID: 1	Networking ID: 1

Setting Up The Networking Feature

Required System Programming

Voice Over IP Networking

- ➔ **10-12-01 : NTCPU Network Setup - IP Address**
Select the IP address of the NTCPU (default: 172.16.0.10). A static IP address is required by the NTCPU. The system must be reset in order for the change to take effect.
- ➔ **10-12-02 : NTCPU Network Setup - Subnet Mask**
Select the Subnet Mask to be used by the IP server (default: 255.255.0.0).

Item No.	Item	Input Data	Default	Conditions
01	NTCPU IP Address	1.0.0.1 - 126.255.255.254 128.1.0.1 - 191.254.255.254 192.0.1.1 - 223.255.254.254	172.16.0.10	
02	NTCPU Subnet Mask	128.0.0.0 192.0.0.0 224.0.0.0 240.0.0.0 248.0.0.0 252.0.0.0 254.0.0.0 255.0.0.0 255.128.0.0 255.192.0.0 255.224.0.0 255.248.0.0 255.252.0.0 255.254.0.0 255.255.0.0 255.255.128.0 255.255.192.0 255.255.224.0 255.255.248.0 255.255.252.0 255.255.254.0 255.255.255.0 255.255.255.128 255.255.255.192 255.255.255.224 255.255.255.240 255.255.255.248 255.255.255.252 255.255.255.254 255.255.255.255	255.255.0.0	The setting of Subnet-Mask is mistaken when all Host Address are 0. If the network section is: 0, 127 128.0 191.255 192.0.0 223.255.255 The setting of Subnet-Mask is mistaken.

Example:

System – A	System – B
IP Address: 172.16.0.10	IP Address: 172.16.0.11
Subnet Mask: 255.255.0.0	Subnet Mask: 255.255.0.0

Setting Up The Networking Feature

Required System Programming

➤ **84-05-01 : VOIPU IP Address Setup - IP Address**

For each VOIPU PCB, enter the IP address for the VOIPU PCB (default: slot 1=173.16.0.20, slot 2 = 172.16.0.21, etc). The IP address should be increased according to the number of VOIPU PCBs. This entry becomes invalid if Program 84-04 is set to "1" (DHCP enabled).

Slot Number	01-16
--------------------	--------------

Item	Input Data	Default	Description	Related Program
IP Address	1.0.0.1–126.255.255.254 128.1.0.1–191.254.255.254 192.0.1.1–223.255.254.254	Slot 1: 173.16.0.20 Slot 2: 173.16.0.21 Slot 3: 173.16.0.22 Slot 4: 173.16.0.23 Slot 5: 173.16.0.24 Slot 6: 173.16.0.25 Slot 7: 173.16.0.26 Slot 8: 173.16.0.27	Set IP Address of VoIPU PCB. IP Address will be increased in accordance with number of slot.	84-04 This becomes invalid data if Program 84-04 is set to 0:Disable.

Example:

System – A	System – B
IP Address: 172.16.0.20	IP Address: 172.16.0.21
Subnet Mask: 255.255.0.0	Subnet Mask: 255.255.0.0

➤ **10-27 : IP System ID - IP Address**

Set the System ID, IP address, and Call Procedure Port of the networked IP systems.

System ID	01-50
-----------	-------

Item No.	Item	Input Data	Default	Related Program
01	IP Address System ID is related with the System ID in the Numbering Plan (Program 11-01-03). When the digits are analyzed and the system ID is determined from the system data set in the Numbering Plan, the Networking call will be sent to the IP Address set in this program. The IP Address should be the IP Address of the peer NTCPU (Program 10-12-01).	1.0.0.1_126.255.255.254 128.1.0.1_191.254.255.254 192.0.1.1_223.255.254.254	0.0.0.0	11-01-03 10-12-01

Setting Up The Networking Feature

Required System Programming

02	Call Procedure Port The Port Number should be set with the same value as the H.225 setup port in Program 84-02-33.	1-65535	1730	84-02-33
----	--	---------	------	----------

Example:

System – A	System – B
System ID: 1	System ID: 1
IP Address: 172.16.0.20	IP Address: 172.16.0.21
Port: 1730	Port: 1730

➔ **10-20-01 : LAN Setup for External Equipment - TCP Port**

Define the TCP port number for communicating to external equipment. The port number defined should be the same in each networked system.

Type of external equipment	1- CTI Server 2- ACD MIS 3- - Reserve - 4- Network Listener 5- SMDR
----------------------------	---

Item No.	Item	Input Data	Default
01	TCP Port	0-65535	External Device 1 = 7625 External Device 2 = 7625 External Device 3 = 0 External Device 4 = 0 External Device 5 = 0

Example:

System – A	System – B
External Equipment: 4	External Equipment: 4
Port: 30000	Port: 30000

➔ **84-02-35 : H.225, H.245 Information Basic Setup - Fast Start Mode**

If VoIP is used for networking, the Fast Start option must be enabled.

Item No.	Item	Input Data	Default
35	Fast Start	0: Disable 1: Enable	1

Setting Up The Networking Feature

Required System Programming

Numbering Plan

➔ 11-01-01 : System Numbering

Set the system's internal (Intercom) numbering plan and system ID to route to networked systems. The numbering plan assigns the first and second digits dialed and affects the digits an extension user must dial to access other extensions and features, such as service codes and trunk codes, within a networking node or to reach another node.

Consider using a "Unified Numbering Plan" for extensions. This gives every extension in the network a unique extension number. The extension number can then be used to route a call to the proper node. This also allows the same extension number to be dialed at any node to reach a given extension.

CAUTION

Improperly programming this option can adversely affect system operation. Make sure you thoroughly understand the default numbering plan before proceeding. If you must change the standard numbering, use the chart for **System Numbering** (page 79) to keep careful and accurate records of your changes.

Before changing your numbering plan, use the PC Program or Web PC Program to make a backup copy of your system's data.

Changing the numbering plan consists of three steps:

1. Enter the digits you want to change.
2. Specify the length of the code you select to change.
3. Assign a function to the code selected.

Step 1: Enter the digit(s) you want to change

You can make either single or two digit entries. In the Dialed Number column in the **System Numbering** (page 79) table, the nX rows (e.g., 1X) are for single digit codes. The remaining rows (e.g., 11, 12, etc.) are for two digit codes.

- Entering a single digit affects all the Dialed Number entries beginning with that digit. For example, entering 6 affects all number plan entries beginning with 6. The entries you make in step 2 and step 3 below affect the entire range of numbers beginning with 6. (For example, if you enter 3 in step 2 the entries affected would be 600-699. If you enter 4 in step 2 below, the entries affected would be 6000-6999.)
- Entering two digits lets you define codes based on the first two digits a user dials. For example, entering 60 allows you to define the function of all codes beginning with 60. In the default program, only * and # use two-digit codes. All the other codes are single digit. If you enter a two digit code between 0 and 9, be sure to make separate entries for all the other two digit codes within the range as well. This is because in the default program all the two digit codes between 0 and 9 are undefined.

Step 2: Specify the length of the code you want to change

After you specify a single or two digit code, you must tell the system how many digits comprise the code. This is the **Number of Digits Required** column in the **System Numbering** (page 75) table. In the default program, all codes from 100-999 are three digits long. Codes beginning with 0 are one digit long. Codes beginning with * are 3 digits long and codes beginning with # are 4 digits long.

Setting Up The Networking Feature

Required System Programming

Step 3: Assign a function to the code selected

After entering a code and specifying its length, you must assign its function. This is the Dial Type column in the **System Numbering** (page 79) table. The choices are:

Dial Types	Dial Type Description	Related Program
0	- Not Used -	
1	Service Code	11-10 : Service Code Setup (for System Administrator) 11-11 : Service Code Setup (for Registration) 11-12 : Service Code Setup (for Service Access) 11-13 : Service Code Setup (for ACD) 11-14 : Service Code Setup (for HOTEL) 11-15 : Service Code Setup (Special access)
2	Extension Number	11-02 : Extension Numbers 11-04 : Virtual Extension Numbers 11-06 : 2PGDAD (ACI) Extension Numbers 11-07 : Department Calling Group Numbers 11-08 : 2PGDAD (ACI) Group Pilot Numbers
3	Trunk Access Code	11-09 : Trunk Access Code.
4	Special Trunk Access	11-09 : Trunk Access Code.
5	Operator Access	20-17 : Operator's Extension
6	ARS/F-Route Access	44-xx
8	Networking	10-03 : PCB Setup 10-12 : NTCPU Network Setup 10-20 : LAN Setup for External Equipment 10-27 : IP System IP

- Changing the *Dial Type* for a range of codes can have a dramatic affect on how your system operates. Assume, for example, the site is a hotel that has room numbers from 100-399. In order to make extension numbers correspond to room numbers, you should:
 - In Program 11-02, reassign extension numbers on each floor from 100 to 399. (Other applications might also require you to change entries in Program 11-10 through 11-16.)

Example:

This example shows two separate extension numbers assigned for the networked systems. System A dials 4xx to reach System B, while system B dials 3xx to reach System A.

System – A	System – B
Dial “3x”: • Digit “3” • Type 2 (Intercom)	Dial “3x”: • Digit “3” • Type 8 (Networking) • System ID “1”
Dial “4x”: • Digit “3” • Type 8 (Networking) • System ID “1”	Dial “4x”: • Digit “3” • Type 2 (Intercom)

Setting Up The Networking Feature

Required System Programming

The following example shows a unified extension number assignment. All users dial a 4-digit extension number (2xxx) to reach anyone within the network, regardless of which system they are connected. System A users have extension numbers 20xx, while system B users have extension numbers 23xx.

Programming	System – A		System – B	
Program 11-01	Dial “2”: • 2x = Digit “0” • 20 = Digit “4”, Type 2 (Intercom) • 23 = Digit “4”, Type 8 (Network), System ID “1” • 7x = Digit “1”, Type 6 (F-Route)		Dial “2”: • 2x = Digit “0” • 20 = Digit “4”, Type 8 (Network), System ID “1” • 23 = Digit “4”, Type 2 (Intercom) • 7x = Digit “1”, Type 6 (F-Route)	
Program 11-02	Port 1 = extension number 2001 Port 2 = extension number 2002 Port 3 = extension number 2003, etc.		Port 1 = extension number 2301 Port 2 = extension number 2302 Port 3 = extension number 2303, etc.	
Program 44-01-01	0 (Not Used)		0 (Not Used)	
Program 44-02	Table 1	Table 2	Table 1	Table 2
Program 44-02-01	720@@	723@@	720@@	723@@
Program 44-02-02	2	2	2	2
Program 44-02-03	1	2	1	2
Program 44-05	Table 1	Table 2	Table 1	Table 2
Program 44-05-01	255	101	101	255
Program 44-05-02	1	0	0	1

◆ **Program 11-02-01 : Extension Numbering**

Assign the extension numbers to the ports. The extension number can be up to eight digits long. The first/second digit(s) of the number should be assigned in Program 11-01. This lets an employee move to a new location (port) and retain the same extension number.

◆ **44-01-01 : System Options for ARS/F-Route - ARS/F-Route Time Schedule**

Set this option to ‘0’ so that the F-Route table selected is determined only by the digits dialed without any relation to the day or time of the call.

◆ **44-02-01 : Dial Analysis Table for ARS/F-Route Access - Dial**

Set the number of digits to be analyzed by the system for ARS routing. Using the 4-digit extension number example in Program 11-01-01, the entry would be: Analysis Table 1: 720@@; Analysis Table 2: 723@@.

◆ **44-02-02 : Dial Analysis Table for ARS/F-Route Access - Service Type**

Select the Service Type (0=no setting, 1=extension call, 2=ARS/F-Route table, 3=Dial extension analyze table). Using the 4-digit extension number example in Program 11-01-01, the entry would be: Analysis Table 1: 2 (ARS/F-Route table); Analysis Table 2: 2 (ARS/F-Route table).

◆ **44-02-03 : Dial Analysis Table for ARS/F-Route Access - Additional Data**

Enter the additional data required for the service type selected in Program 44-02-02, either the number of digits to be deleted or the table number to be used. Using the 4-digit extension number example in Program 11-01-01, the entry would be: 1 (delete 1 digit).

Setting Up The Networking Feature

Required System Programming

- ➔ **44-02-04 : Dial Analysis Table for ARS/F-Route Access - Dial Tone Simulation**
If enabled (1), this option sends dial tone to the calling party once the routing is determined. This may be required if the central office at the destination does not send dial tone. Using the 4-digit extension number example in Program 11-01-01, the entry would be: 0 (disabled).
- ➔ **44-05-01 : ARS/F-Route Table - Trunk Group Number**
Select the trunk group number to be used for the outgoing ARS call (0-100, 101-150, 255 [0 = No setting, 101-150 = Networking, 255 = Extension Call]). Using the 4-digit extension number example in Program 11-01-01, the entry would be: ARS/F-Route Table Number 1: Priority Number 1, Trunk Group = 255; ARS/F-Route Table Number 2: Priority Number 1, Trunk Group = 101.
- ➔ **44-05-02 : ARS/F-Route Table - Delete Digits**
Enter the number of digits to be deleted from the dialed number (0-255 [255 = Delete all]). Using the 4-digit extension number example in Program 11-01-01, the entry would be: ARS/F-Route Table Number 1: Priority Number 1, Delete Digits = 1; ARS/F-Route Table Number 2: Priority Number 1, Delete Digits = 0.
- ➔ **44-05-03 : ARS/F-Route Table - Additional Dial Number Table**
Enter the table number (defined in Program 44-06) for additional digits to be dialed (0-1000). Using the 4-digit extension number example in Program 11-01-01, the entry would be: ARS/F-Route Table Number 1: Priority Number 1, Additional Dial Number Table = 0; ARS/F-Route Table Number 1: Priority Number 1, Additional Dial Number Table = 0.

Setting Up The Networking Feature

Required System Programming

- For Your Notes -

Section 2

Features

Features

- For Your Notes -

Refer to the Aspire Software Manual (P/N 0893200) for complete description and programming information for the following features. The information detailed here applies only to the feature when used in a Networked system.

ARS/F-Route

When dialing the F-Route access code in an extension's own system which is specified as Routing to Networked system (Group 101-150), calls will be routed to the target system. The call will then be analyzed by the F-Route table in the target system. As a result, the call will be analyzed for the following:

- Outgoing call from trunk
- Extension access call
- Access to the other system
- No defined dial

Compared With Single System Configuration

In a single system with F-Route used, the dialing is analyzed when the call is initially dialed.

Operation

With the sample programming shown below, dialing the F-Route access number, which is defined in the F-Route table (811300), the system calls extension number 300 within System 1 (System ID 1). The telephone's display initially indicates the F-Route number in progress, then changes to appear as a normal intercom call.

(Sample Programming)

Kind of setting	System 1	System 2
PRG11-01-01 System Numbering	Dial "7" Digit "1" (1 digit) Type "6" (F-Route)	Dial "7" Digit "1" (1 digit) Type "6" (F-Route)
PRG44-02- Dial analysis table for F-Route access	01 "711300" "711@@@" (using wildcard) is available.	"711300" "711@@@" (using wildcard) is available.
	02 "2" (F-Routing)	"2" (F-Routing)
	03 Add Code = "1"	Add Code = "1"
PRG44-05- System Numbering	01 F-Route table-1 Trunk Group No. "101" (Route to System ID 1)	F-Route table-1 Trunk Group "255" (Route to Intercom)
	02 Delete Digit: 0	Delete Digit: 3

Features

Network Settings and Operation

Related Programs

Program Number	Title
11-01	Numbering Plan
44-01	System Options for F-Route Service
44-02	Dial Analysis Table for F-Route Access
44-04	F-Route Selection for time schedule
44-05	F-Route Table
44-06	Additional Dial Table
44-07	Gain Table for F-Route Access
44-08	Time Schedule for F-Route Service
44-09	Weekly Schedule for F-Route Service
44-10	Holiday Schedule for F-Route Service

Barge In

Barge In is available in the Networking feature with the following options:

- Barge into a conversation between an extension's own system and a networked system
- Barge into a conversation between callers in a networked system
- Barge into a call between two networked systems

Barge In can be used in either Monitor Mode (Silent Monitor) or Speech Mode (determined in Program 20-13-10).

Barge In *cannot* barge into calls across the network in the following instances:

- Conference calls
- Off hook signaling a telephone in the other system
- Barge into an extension's call without first calling the busy extension in the other system

Operation

To Barge In after calling a busy extension:

*The call must be set up for about 10 seconds before you can Barge In.
Listen for busy/ring or busy tone.*

1. Call busy extension.
2. Press Barge In key (PGM 15-07 or SC 851: 34).

Features

Network Settings and Operation

Related Programs

Program Number	Title
11-12-08	Service Code Setup (for Service Access) - Barge In
11-16-02	One Digit Service Code Setup - Barge In
20-13-15	Class of Service Options (Supplementary Service) - Barge In, Initiate
20-13-16	Class of Service Options (Supplementary Service) - Barge In, Receive
20-13-17	Class of Service Options (Supplementary Service) - Barge In Tone/ Display

Call Forwarding

Call Forwarding Immediate / Busy / No Answer / Busy-No Answer / Both Ring options are available with the Networking feature.

With a networked system, when Call Forwarding enabled, there is a slight difference in the telephone's display. With a single system, the extension name is displayed on the extension which has Call Forwarding. With a networked system, the extension number is displayed.

Operation

To activate or cancel Call Forwarding:

To activate or cancel Call Forwarding:

1. Press idle CALL key (or lift handset) + Dial *2 .
OR
Press Call Forwarding key (PGM 15-07 or SC 851: code 16).
2. Dial Call Forwarding condition:
1 = Personal Answering Machine Emulation (then skip to step 4 - refer also to "Voice Mail").
2 = Busy or not answered
4 = Immediate
6 = Not answered
7 = Immediate with simultaneous ringing (not for Voice Mail)
0 = Cancel
3. Dial destination extension, Voice Mail master number or press Voice Mail key.
4. Dial Call Forwarding type:
2 = All calls
3 = Outside calls only
4 = Intercom calls only

When you enable Call Forwarding, your Call Forwarding key flashes slowly. If you don't have a Call Forwarding key, DND flashes slowly.

Your DND or Call Forwarding (Station) Programmable Function Key flashes when Call Forwarding is activated.

OR

Features

Network Settings and Operation

1. Press Call Forwarding key.
 - PGM 15-07 or SC 851: code 10 for Forward All Calls Immediately
 - PGM 15-07 or SC 851: code 11 for Forward when Busy
 - PGM 15-07 or SC 851: code 12 for Forward when Unanswered
 - PGM 15-07 or SC 851: code 13 for Forward Busy/No Answer
 - PGM 15-07 or SC 851: code 14 for Forward with Both Ringing
 - PGM 15-07 or SC 851: code 15 for Follow Me
 - PGM 15-07 or SC 851: code 16 for Forward to Station (forward type is selected at the time the option is set by the user)
 - PGM 15-07 or SC 851: code 17 for Forward to Device
2. Dial 1 plus extension to enable; dial 0 to disable.
 - Once you activate Call Forwarding, only your Call Forwarding destination can place an Intercom call to you.*
3. Dial destination extension, Voice Mail master number or press Voice Mail key.
 - You'll hear stutter dial tone when placing a new call.*
 - Your Call Forwarding Programmable Function Key flashes when Call Forwarding is activated.*

Related Programs

Program Number	Title
11-11-01	Service Code: Call Forward – Immediate
11-11-02	Service Code: Call Forward – Busy
11-11-03	Service Code: Call Forward – No Answer
11-11-04	Service Code: Call Forward – Busy/No Answer
11-11-05	Service Code: Call Forward – Both Ring
11-11-06	Service Code: Call Forwarding (Select Option)
20-11-01	Call Forward – Immediate Class of Service
20-11-02	Call Forward – Busy Class of Service
20-11-03	Call Forward – No Answer Class of Service
20-11-04	Call Forward – Both Ring Class of Service

Call Forwarding / Do Not Disturb Override

The extension user may be able to call an extension which has Call Forwarding or Do Not Disturb set.

Operation

To override an extension's Call Forwarding or Do Not Disturb:

1. Call the forwarded or DND extension.
2. Press Override key (PGM 15-07 or SC 851: 37).

Related Programs

Program Number	Title
11-12-01	Service Code Setup (for Service Access) : Call Forwarding / Do Not Disturb Override
11-16-06	Single Digit Service Code Setup : DND/Call Forward Override
15-07-01	Programming Function Keys
20-06-01	Class of Service for Extensions
20-13-04	Class of Service Options (Supplementary Service) - Call Forwarding/ DND Override

Call Forward, Off-Premise

Off-Premise Call Forwarding allows an extension user to forward their calls to an off-site location. This feature works the same in a networked system as it does a single system.

Operation

To activate Call Forwarding Off-Premise

- At keyset, press idle CALL key + Dial *4 .
OR
Press Call Forward (Device) key (PGM 15-07 or SC 851: 17)
OR
At SLT, lift handset Dial *4 .
- Dial 6 + trunk access code.
Trunk access codes are 9 (ARS/Trunk Group Routing), 804 + Line Group (1-9, 01-99 or 001- 100) or #9 + Line number (e.g., 05 or 005 for line 5).
- Dial the outside number to which your calls should be forwarded.
- (Keyset only) Press HOLD.
- Press SPK (or hang up at SLT) to hang up if you dialed *4 in step 1.
Your DND or Call Forwarding (Device) Programmable Function Key flashes.

To cancel Call Forwarding Off-Premise

- At keyset, press idle CALL key + Dial *4 .
OR
Press Call Forward (Device) key (PGM 15-07 or SC 851: 17)
OR
At SLT, lift handset and dial *4 .
- Dial 6 + HOLD.
- Press SPK (or hang up at SLT) to hang up if you dialed *4 in step 1.
Your DND or Call Forwarding (Device) Programmable Function Key stops flashing.

Features

Network Settings and Operation

Related Programs

Program Number	Title
13-01	Abbreviated Dial Function Setup
14-05	Trunk Group
14-06	Trunk Group Routing
21-02	Trunk Group Routing for Extensions
21-16	Trunk Group Routing for Networking

Call Forwarding with Follow Me

The extension user can program Call Forward Follow-Me to extension in a networked system. When the extension with the Follow Me setting receives an incoming call, both the original extension and the programmed destination extension starts ringing.

With a networked system, when Call Forward Follow-Me is enabled, there is a slight difference in the telephone's display. With a single system, the destination extension displays the extension name for the phone with Follow-Me enabled. With a networked system, the extension number is displayed.

Operation

To activate Call Forward Follow Me:

- At a keyset other than your own, press idle CALL key and dial *2 .
OR
Press Call Forward (Station) key (PGM 15-07 or SC 851: 15).
OR
At SLT other than your own, lift handset and dial *2 .
- Dial 3 + Dial your own extension number (i.e., the source).
- Dial Call Forwarding Type:
2 = All Calls
3 = Outside calls only
4 = Intercom calls only
- SPK (or hang up at SLT) if you dialed *2 in step 1.
Your Call Forwarding (Station) Programmable Function Key flashes when Call Forwarding is activated.

To cancel Call Forward Follow Me:

- At keyset, press idle CALL key and dial *2 .
OR
Press Call Forward (Station) key (PGM 15-07 or SC 851: 15).
OR
At SLT, lift handset and dial *2 .
- Dial 0.
- SPK (or hang up at SLT) if you dialed *2 in step 1.
Your Call Forwarding (Station) Programmable Function Key goes out.

Related Programs

Program Number	Title
11-11-07	Service Code of Follow Me
11-11-06	Call Forwarding (Select Option)

Call Waiting / Camp On

With Call Waiting, an extension user may call a busy extension and wait in line (Camp-On) without hanging up. When the user Camps-On, the system signals the busy extension with two beeps indicating the waiting call. The call goes through when the busy extension becomes free. Call Waiting helps busy extension users know when they have additional waiting calls. It also lets callers wait in line for a busy extension without being forgotten.

With a networked system, camping on to an idle extension and Trunk Queuing/Camp On for a trunk port are not supported.

With a networked system, when Call Waiting/Camp On is enabled, there is a slight difference in the telephone's display. With a single system, the target extension's name is displayed on the phone which has enabled Call Waiting. With a networked system, the extension number is displayed.

Operation

To Camp-On to a busy extension:

1. Call busy extension.
2. Dial 2 or press Camp-On key (PGM 15-07 or SC 851: 35).
3. Do not hang up.

To Camp-On to a trunk, see Trunk Queuing.

To cancel a Camp-On request:

1. Hang up.
2. At keyset, press idle CALL key and dial 870.
OR
At keyset, press Camp-On key (PGM 15-07 or SC 851: 35).
OR
At single line set, lift handset and dial 870.

Related Programs

Program Number	Title
11-12-05	Service Code: Setting Camp On
11-12-06	Service Code: Cancelling Camp On
11-16-05	One-Digit Service Code: Camp On

Features

Network Settings and Operation

Caller ID Display

Caller ID information can be sent to incoming target extension in a networked system and show the Caller ID on the phone's display. The ABB Name is also shown on LCD by searching ABB table.

Caller ID, however, cannot be shown in a networked system for incoming trunks defined as normal (0) in Program 22-02.

Operation

No change.

Related Programs

- **20-09-02 : Class of Service Options (Incoming Call Service) - Caller ID Display**
Define the option whether display Caller ID or not in each station port.

Item No.	Item	Input data	Default	
			COS 01-14	COS 15
02	Caller ID Display Enables/disables the Caller ID display at an extension.	0-Off 1-On	0	0

- **20-09-02 : Class of Service Options (Incoming Call Service) - Sub-Address Identification**
Define whether an extension displays the Caller Sub-Address.

Item No.	Item	Input data	Default	
			COS 01-14	COS 15
03	Sub Address Identification Define whether an extension displays the Caller Sub-Address.	0-Off 1-On	0	0

Features

Network Settings and Operation

➤ **13-04 : Abbreviated Dialing Number and Name**

Define the abbreviated dialing number and name. The ABB name will be shown on a phone's LCD when the ABB table has a matching number with the incoming Caller ID. The common abbreviated number table is used to search for a match.

Item No.	Item	Input Data	Default
01	Abbreviated Dialing Data	1-9, 0, *, #, Pause (Press line key 1), Recall/Flash (Press line key 2), @ for Additional Digit for ISDN Functionality (Press line key 3) (max. 24 digits)	No Setting
02	Name	Max. 12 Characters	No Setting

Central Office Calls, Placing: Seizing a trunk in a networked system

The system allows a user to seize a trunk in a networked system using the following methods:

Method of Outgoing	Available	Note
Specified Trunk Access (#9 + the trunk number)	N	
Specified Trunk Group Access (804 + group number)	N	
Trunk Route Access (9)	Y	
ARS/F-Route		See ARS/F-Route

Related Programs

The following example indicates the setting required to seize the trunk in a networked system (Extension in System A tries to make an external call using a trunk in System B).

Program	System – A	System – B
Program 14-06-01 Trunk Group Routing	Route 1 101 (Route to SystemID 1)	Route 1 1 (Route to Trunk Group 1)
Program 21-02-01 Trunk Group Routing for Extensions	Extension 301 (which make a call via networking) 1 (Route 1) This setting is referenced in Program 14-06-01	
Program 21-16-01 Trunk Group Routing for Networking		System ID 1 Route 1 This setting is referenced in Program 14-06-01

Features

Network Settings and Operation

Conference

The user can create a Conference call to include a user in a networked system.

Operation

To establish a Conference:

Keypad

1. Establish Intercom or trunk call.
2. Press CONF or Conference key (PGM 15-07 or SC 851: 07).
3. Dial extension you want to add.
OR
Access outside call
OR
Retrieve call from Park orbit.
*To get the outside call, you can either press a line key or dial a trunk/trunk group code.
You can optionally go back to step 2 to add more parties to your Conference.*
4. When called party answers, press CONF or Conference key twice.
If you cannot add additional parties to your Conference, you have exceeded the system's Conference limit.
5. Repeat steps 2-4 to add more parties.

Single Line Set / 2-Button Telephone

1. Establish Intercom or trunk call.
2. ***Single Line Set***
Hookflash and dial #1.
2-Button Telephone
Press HOLD and dial #1.
3. Dial extension you want to add.
OR
Access trunk call.
OR
Retrieve call from Park orbit.
4. ***Single Line Set***
Hookflash and repeat step 3 to add more parties.
OR
Hookflash twice to set up the Conference.
2-Button Telephone
Press HOLD and repeat step 3 to add more parties.
OR
Press HOLD twice to set up the Conference.

If you cannot add additional parties to your Conference, you have exceeded the system's Conference limit.

Features

Network Settings and Operation

Related Programs

Program Number	Title
15-07-01	Programming Function Keys - Conference (code 07)
20-06-01	Calls of Service for Extensions
20-13-08	Class of Service Options (Supplementary Service) - Conference

Department Calling

Department Group access is available via Networking. When the extension at System A tries to make a Department Call to System B, System A should have a numbering plan which defines the Department Access code at System-B (must be defined as dial type 8, Networking in Program 11-01 : System Numbering).

The following Department Calling options are supported with the Networking feature.

Program Number	Mode	Same as Single System
16-01-02	Department Calling Cycle	Yes
16-01-03	Department Routing When Busy	Yes
16-01-04	Hunting Mode	No
16-01-05	All Ring Mode	When a call is transferred to a Department Group with All Ring, there is a difference in operation. In a single system, an extension within the same system can transfer a call to a Department Group and the call will ring an extension within the Department Group once the transferring user hangs up. In a networked system, the transfer will not go through and the call will recall the extension performing the transfer.
16-01-06	STG Withdraw Mode	No
16-01-07	Call Recall Restriction for STG	No
16-01-08	Maximum Queuing Number	No
16-01-10	Enhanced Hunting Mode	No

Operation

1. When dialing the Department access code for the networked system, the call is dialed in the the same way as the networking access code dialing the networked system.
2. A Department Call from the outgoing system will be routed to an available extension in the Department Group.

Features

Network Settings and Operation

Related Programs

Program Number	Title
11-07-01	Department Group Pilot Numbers
16-01	Department Group Basic Data Setup
16-02-01	Department Group Assignment for Extensions
22-07-01	DIL Assignment

Department Step Call

After calling a busy Department Calling Group member in a networked system, an extension user can have Department Step Calling Quickly call another member in the group.

Operation

To make a Step Call:

You step through Extension Groups set in Program 16-02.

1. Place call to busy Department Group member.
OR
Place call to Department Group pilot number.
2. Dial #.
OR
Press Step Call key (PGM 15-07 or SC 851: 36).
3. Repeat step 2 to call other Department Group members.

Related Programs

Program Number	Title
11-12-07	Service Code Setup (for Service Access) - Step Call
11-16-01	Single Digit Service Code Setup - Step Call
20-06-01	Class of Service for Extensions
20-08-12	Class of Service Options (Outgoing Call Service) - Department Step Calling

Direct Inward Dialing (DID)

An incoming DID call can be routed to an extension in a networked system.

Operation

For incoming DID calls, the system refers to Program 22-11 : DID Translation Number Conversion to determine how to route the call. If the number is determined to be in the networked system, the call will be routed to the proper system node.

The timer value is determined by the system data at the incoming trunk side if the incoming DID call is transferred to a ring group due to the no-answer timer expiring.

Related Programs

Program Number	Title
22-02	Incoming Service Type
22-09	DID Basic Data Setup
22-10	DID Conversion Area Setup
22-11	DID Conversion Table Data Setup
22-12	DID Transferred Destination Setup

Direct Inward Line (DIL)

A Direct Inward Line (DIL) is a trunk that rings an extension, virtual extension or Department Group directly. Since DILs only ring one extension or group (i.e., the DIL destination), employees always know which calls are for them. For example, a company operator can have a Direct Inward Line for International Sales Information. When outside callers dial the DIL's phone number, the call rings the operator on the International Sales line key. The DIL does not ring other extensions.

The outside party can call an extension at a networked system, if the DIL trunk is set to route to the other system.

Operation

1. An outside caller places a call to a DIL trunk.
2. The call will be routed to the networked system if the DIL target is defined as an extension in the networked system in Program 22-07 : DIL Assignment.

Related Programs

Program Number	Title
22-02	Incoming Service Type Setup
22-07	DIL Assignment
22-08	Second IRG Setup for Unanswered DIL/IRG

Features

Network Settings and Operation

Direct Inward System Access (DISA)

Networking allows DISA callers to place a call to an extension in a networked system. Some system features can also be accessed from the networked system. The Class of Service is determined by the password entered by the DISA caller. The password table is referred to by the system on the incoming trunk side.

The Networking feature allows the following DISA services as allowed in Program 20-14 : Class of Service Options for DISA/E&M.

Program Number	Service Name	Available
20-14-02	Trunk Route Access	Yes
20-14-03	Trunk Group Access	No
20-14-04	Common Abbreviated dialing	No
20-14-05	Operator access	Yes
20-14-06	Internal Paging	No
20-14-07	External Paging	Yes
20-14-08	Specified trunk access	No
20-14-09	Forced trunk disconnect	No
20-14-10	Call Forward setting	No
20-14-11	Break In	No

Operation

To place a DISA call into the system (from any 2500 type telephone):

1. Dial the telephone number that rings the DISA trunk.
2. Wait for the DISA trunk to automatically answer with a unique dial tone.
3. Dial the 6-digit DISA password (access code).
4. Wait for a second unique dial tone.
5. Dial an extension (301-556).
 - OR
 - Dial 9 for Trunk Group Routing or ARS.
 - OR
 - Dial Alternate Trunk Route Access Code (if enabled).
 - OR
 - Dial #9 + a trunk number (1-200) for an outside call.
 - OR
 - Dial 0 for the operator.
 - OR
 - Dial 803 + an External Paging Zone number (1-8 or 0 for All Call).

If the received digits are analyzed as a networked extension number, the call is routed to the proper network node.

Features

Network Settings and Operation

Related Programs

Program Number	Title
20-14	Class of Service Options for DISA/E&M
22-02	Incoming Service Type Setup
25-01	DID/DISA Line Basic Data Setup
25-02	DID/DISA VRS Error Message
25-03	DID/DISA Transfer Ring Group with Incorrect Dialing
25-04	DID/DISA Transfer Ring Group with No Answer/Busy
25-05	DID/DISA Error Message Setup
25-06	DID/DISA One-Digit Code Attendant Setup
25-07	System Timers for DID/DISA
25-08	System timer for DID/DISA Service
25-09	Class of Service for DISA User
25-10	Trunk Group Routing for DISA
25-11	Toll Restriction Class for DISA
25-12	Individual Trunk Group Routing for DISA
25-13	System Option DISA Service

Hold

This feature is available with no changes in programming or operation.

Features

Network Settings and Operation

Hotline / Direct Station Selection (DSS)

An extension user can have a Hotline key to a networked extension. The Hotline or DSS console keys can display the status lamp indication of an extension in a networked system. The lamp status, however, is not displayed in real time and is updated at the interval defined in system programming.

Only shows the status of an extension at other system. Lamp status is not update in real time. Status will be updated in the time interval specified in Program 20-01-04.

Operation

To place a call to your Hotline partner:

1. Press Hotline key (PGM 15-07 or SC 851: 01 + partner's extension number)
You can optionally lift handset after this step for privacy.

To transfer your outside call to your Hotline partner:

1. Press Hotline key.
2. Announce call and hang up.
OR
Hang up to have the call wait at your Hotline partner unannounced.
If unanswered, the call recalls like a regular transferred call.

To answer a call from your Hotline partner:

1. If you hear two beeps, speak toward phone.
OR
1. If your telephone rings, lift handset.

Calling an extension from your DSS Console:

1. *(Optional for 110-Button Consoles)* Press EXT.1 or EXT.2 to select the range.
2. Press DSS Console key.
*If the call voice-announces, you can make it ring by dialing 1.
If you don't have Handsfree, you must lift handset to speak.*

Related Programs

Program Number	Title
20-01-04	System Options - Network BLF Indication
20-02-03	System Options for Multi-Line Telephones - BLF Control
20-13-06	Class of Service Options (Supplementary Service) - Automatic Off Hook Signaling
20-06-01	Class of Service for Extensions
30-05-01	DSS Console Lamp Table

Intercom

An extension user can make an intercom call to a networked system if the networked extensions are defined with the Network Access Code (Program 11-01, Dial Type = 8)

A user can change the signaling type for the intercom call they place to either a voice announce or ringing call to extension in a networked system.

Operation

To place an Intercom call:

1. At keyset, press idle CALL key.

OR

At single line telephone, lift handset.

2. Dial extension number (or 0 for your operator).

Your call may voice-announce or ring the called extension. Dial 1 to change the way your call alerts the called extension.

If the extension you call is busy or doesn't answer, you can dial another extension without hanging up.

Related Programs

Program Number	Title
11-12-06	Service code of Voice/Signal Change
11-16-03	One digit service code of Voice/Signal Change
20-06-01	Class of Service for Extensions
20-08-01	Class of Service Options (Outgoing Call Service) - Intercom Calls

Features

Network Settings and Operation

Last Number Redial

Last Number Redial allows an extension user to quickly redial the last number dialed. When used with a networked system, the system can use the same trunk on which the call was originally placed, even if the trunk is a trunk in another system.

Operation

To redial your last call:

1. Without lifting the handset, press LND.
The last dialed number is displayed.
2. To redial the last number, press #.
OR
Search for the desired number from the Redial List by pressing the LND or VOLUME ▲ or VOLUME ▼ keys.
3. Lift the handset or press SPK to place the call.
The system automatically selects a trunk from the same group as your original call and dials the last number dialed.
OR
 1. At keyset, press idle line key (optional).
The system automatically selects a trunk from the same group as your original call.
 2. Press LND.
OR
 1. At keyset, press idle CALL key.
OR
At single line telephone, lift handset.
 2. Dial #5.
The system automatically selects a trunk from the same group as your original call and dials the last number dialed.

Related Programs

Program Number	Title
11-12-12	Service Code Setup (for Service Access) - Last Number Dial
15-02-13	Multi-Line Telephone Basic Data Setup - Redial List Mode
20-06-01	Class of Service for Extensions

Message Waiting

This feature can be used when placing an intercom call to a networked extension and receives either no answer or hears a busy tone.

With a networked system, when a Message Waiting has been left, there is a slight difference in the telephone's display. With a single system, the extension's name which left the message is displayed. With a networked system, the extension number is displayed.

Operation

To leave a Message Waiting:

1. Call busy or unanswered extension.
2. Dial 0 or press Message Waiting key (PGM 15-07 or SC 851: 38)
3. Hang up.

With keyset phones, the MW LED lights.

To answer a Message Waiting:

When you have a message, your MW LED flashes fast for keysets.

1. At a keyset, press idle CALL key and dial *0.
OR
Press Message Waiting key (PGM 15-07 or SC 851: 38).
OR

At single line telephones, lift the handset and dial *0.

If the called extension doesn't answer, dial 0 or press your Message Waiting key to automatically leave them a message.

Normally, your MW LED goes out. If it continues to flash, you have new messages in your "Voice Mail" mailbox or a new "General Message". Go to "To check your messages" below.

Related Programs

Program Number	Title
11-11-09	Service Code Setup (for Setup/Entry Operation) - Answer Message Waiting
11-11-10	Service Code Setup (for Setup/Entry Operation) - Cancel All Messages Waiting
11-11-11	Service Code Setup (for Setup/Entry Operation) - Cancel Message Waiting
11-16-07	Single Digit Service Code Setup: Message Waiting
20-13-07	Class of Service Options (Supplementary Service) - Message Waiting

Features

Network Settings and Operation

Paging

An extension user can make internal or external pages to a networked system. Paging to a networked system can only be activated by dialing a service code and the target network's system ID.

Operation

To Make an Internal Page

1. Dial 801.
2. Dial # and the system ID.
The system ID must be dialed as 2 digits (ex: #02).
3. Dial the Paging Zone number (00-64).
Dialing 00 calls All Call External Paging.
4. Make announcement to the networked system.
5. Press SPK to hang up.

To Make an External Page

1. Dial 803.
2. Dial # and the system ID.
The system ID must be dialed as 2 digits (ex: #02).
3. Dial the Paging Zone number (0-9).
Dialing 0 calls All Call Internal Paging.
4. Make announcement to the networked system.
5. Press SPK to hang up.

To Make a Combined Page

1. Dial *1.
2. Dial # and the system ID.
The system ID must be dialed as 2 digits (ex: #02).
3. Dial the Paging Zone number (0-9).
Dialing 0 calls All Call Combined Paging.
4. Make announcement to the networked system.
5. Press SPK to hang up.

Related Programs

Program Number	Title
11-12-19	Service Code Setup (for Service Access) - Internal Group Paging
11-12-20	Service Code Setup (for Service Access) - External Paging
11-12-24	Service Code Setup (for Service Access) - Combined Paging
31-01	System Options for Internal/External Paging
31-02	Internal Paging Group Assignment
31-03	Internal Paging Group Settings
31-04	External Paging Zone Group
31-07	Combined Paging Assignment

Park

Park places a call in a waiting state (called a Park Orbit) so that an extension user may pick it up. Any extension user who is in the same Park Group as the extension which placed the call in Park can answer the call. This includes extension users in a networked system. For example, when an extension user in Park Group 3 within System A places a call in Park, the extension users in Park Group 3 at any connected system can retrieve the call by pressing the flashing park key or dialing a service code.

With a single system, when two users within the same Park Group try to place a call in the same page zone at the same time, one user will get the zone while the other user's call will either ring back or it will remain an active call, depending on how the park zone was accessed. With Network-
ing, if both users try to access the same zone, one user will get the zone, while the other will hear ringback, at which time they can park the call in a different zone.

Operation

To Park a call in a system orbit:

You can Park Intercom or trunk calls.

1. Press Park key (PGM 15-07 or SC 852: *04 + orbit).

The Park key LED lights.

If you hear busy tone, the orbit is busy. Try another orbit.

2. Use Paging to announce call.
3. Press SPK to hang up.

If not picked up, the call will recall to you.

OR

1. At keyset or 2-Button telephone, press HOLD.

OR

At a 500/2500 single line telephone, hookflash.

2. Dial #6 and the Park orbit (1-64).

If you hear busy tone, the orbit is busy. Try another orbit.

Features

Network Settings and Operation

3. Use Paging to announce call.
4. Press SPK to hang up.

If not picked up, the call will recall to you.

Note: The parked call recalls after the Park Hold Time (Program 24-01-06). The call rings the extension to which it recalled for the Hold Recall Callback Time (Program 24-01-02). The call then goes on Hold for the Park Hold Time - then recalls again for the Hold Recall Callback Time. The call continues to cycle between Hold and recall until the extension user answers the call or the outside party hangs up.

To pick up a parked call:

1. Lift handset.
2. Press Park key (PGM 15-07 or SC 852: *04 + orbit).
OR
1. At keyset or 2-Button telephone, press idle CALL key.
OR
At single line telephone, lift handset.
2. Dial *6 and the Park orbit (1-64).

Related Programs

Program Number	Title
11-12-31	Service Code Setup (for Service Access) - Placing a Call in Park
11-12-32	Service Code Setup (for Service Access) - Retrieving Call from Park
20-11-19	Class of Service Options (Hold/Transfer Service) – Normal/Extended Park If enabled, the recall timer set in Program 24-01-07 is used. If this option is disabled, the timer in Program 24-01-06 is used.
24-01-06	System Options for Hold - Park Hold Recall Timer – Normal
24-01-07	System Options for Hold - Park Hold Recall Timer – Extended
24-03-01	Park Group

Ringdown Extension, Internal/External

A networked system can have a phone defined as a Ringdown Extension to dial either an internal or external number.

Operation

To place a call if your extension has ringdown programmed:

1. Lift handset.

If you want to place a trunk call, press a line key before lifting the handset.

Depending on the setting of your ringdown timer, you may be able to dial an Intercom call before your ringdown goes through.

If the destination has Handsfree Answerback enabled, your call will voice announce.

If the destination has Forced Intercom Ringing enabled, your call will ring.

Related Programs

Program Number	Title
20-06-01	Class of Service for Extensions
20-08-09	Class of Service Options (Outgoing Call Service) - Hotline/Extension Ringdown
21-01-09	System Options for Outgoing Calls - Ringdown Extension Timer
21-11-01	Extension Ringdown (Hotline) Assignments

Selectable Display Messaging

An extension user can select a preprogrammed Selectable Display Message for their extension. This message will be displayed on an incoming intercom caller's LCD when they call the extension in a networked system.

Operation

To select a message:

1. Press idle CALL key + dial *4.
OR
Press Call Forward (Device) key (PGM 15-07 or SC 851: 17).
OR
Press idle CALL key + press Text Message key (PGM 15-07 or SC 851: 18) + enter digits to append, if needed + SPK to hang up. Skip the remaining steps.
2. Dial 3 + Message number (01-20).
Use VOL ▲ or VOL ▼ to scroll through the messages.
3. (Optional for messages 1-8 and 10)
Dial the digits you want to append to the message.
*You can append messages 1-8 and 10 with digits (e.g., the time when you will be back).
You enter the time in 24-hour format, but it displays in 12-hour format.*
4. Press SPK to hang up.

To cancel a message:

1. Press idle CALL key + dial *4.
OR
Press Call Forward (Device) key (PGM 15-07 or SC 851: 17).
OR
Press idle CALL key + press Text Message key (PGM 15-07 or SC 851: 18) + SPK to hang up.
2. Dial 3.
3. Press SPK to hang up.

Features

Network Settings and Operation

Related Programs

Program Number	Title
20-13-19	Class of Service Options (Supplementary Service) - Selectable Display Messaging
20-16	Selectable Display Messages

Toll Restriction

Toll Restriction limits the numbers an extension user may dial. The Toll Restriction Class of Service is received the calling extension's system, but the Toll Restriction table is used from the system which has the outgoing trunk.

Since the restriction table is used for the system which has the outgoing trunk, the definition of the Class of Service may be different, unless all Toll Restriction Classes of Service and Toll Restriction Tables are defined the same between systems.

Operation

Example:

The extension user in System A, which has a Toll Restriction Class 2, dials an outside party after seizing a trunk from a networked system (System B). The received digits are compared to the Class 2 Restriction Table in System B. The call is then either allowed or rejected based on this table.

Related Programs

Program Number	Title
21-04	Toll Restriction Class Assignment for Extensions
21-05	Toll Restriction Class Setup
21-06	Toll Restriction Table Setup

Transfer

The following types of Transfer are available with Networking:

- Screened Transfer
- Unscreened Transfer
- Transfer Without Holding (transfer to busy extension)

Operation

Transferring Trunk Calls

To Transfer a trunk call to a co-worker's extension:

1. At keyset or 2-Button telephone, press HOLD.
OR
At 500/2500 single line telephone, hookflash.
You hear Transfer dial tone.
2. Dial co-worker's extension number.
If the extension is busy or doesn't answer, you can dial another extension number or press the line key to return to the call. In addition, you may be able to hang up and have the call Camp-On.
*SLT users can retrieve the call by pressing hookflash. If a call has been transferred and the 500/2500 user has hung up the handset, the call can be retrieved by dialing ** and the extension number to which it had been transferred.*
3. Announce call and hang up.
If you don't have Automatic On Hook Transfer, you must press CONF or your Transfer Programmable Function Key to Transfer the call.
If your co-worker doesn't want the call, press the flashing line key to return to the call.
*SLT users can retrieve the call by pressing hookflash. If a call has been transferred and the 500/2500 user has hung up the handset, the call can be retrieved by dialing ** and the extension number to which it had been transferred.*
If you don't want to screen the call, hang up without making an announcement.

Transferring Without Holding

To Transfer without holding (keyset only):

1. Lift handset.
2. Press busy line key.
3. When original caller hangs up, you are connected.

Features

Network Settings and Operation

Transferring Intercom Calls

To Transfer your Intercom call:

1. At keyset, press HOLD.

OR

At single line telephone, hookflash.

2. Dial extension to receive your call.

If the extension is busy, doesn't answer or does not want the call, you can dial another extension number or press the lit CALL key to return to the call. In addition, you may be able to hang up and have the call Camp-On.

*SLT users can retrieve the call by pressing hookflash. If a call has been transferred and the 500/2500 user has hung up the handset, the call be can retrieved by dialing ** and the extension number to which it had been transferred.*

3. Announce your call and hang up.

With Automatic On Hook Transfer

When you hang up, the call is automatically transferred.

Without Automatic On Hook Transfer

You must press your Transfer Programmable Function Key to Transfer the call.

To Transfer the call unscreened, press your Transfer Programmable Function Key and hang up without making an announcement.

Related Programs

Program Number	Title
20-11-06	Class of Service Options (Hold/Transfer Service) - Unscreened Transfer
20-11-07	Class of Service Options (Hold/Transfer Service) - Transfer Without Holding
20-11-08	Class of Service Options (Hold/Transfer Service) - Transfer Display
20-11-18	Class of Service Options (Hold/Transfer Service) - No Recall
24-02-01	System Options for Transfer - Busy Transfer

Voice Mail, Centralized Attendant Service

Networking will support the use of a single voice mail for the entire network. A user may call into the voice mail from anywhere in the network and perform most functions as if the voice mail were located on their premises. *Currently, only the use of an external voice mail is supported for centralized voice mail.*

With a networked system, when voice mail is busy, there is a slight difference in the telephone's display. With a single system, the extension calling a busy voice mail will see WAITING VOICE MAIL on their display. With a networked system, the extension will display CALLING XXX (XXX = extension number).

The system allows both a local voice mail pilot number and a centralized voice mail pilot number to be assigned. Define the Department Group for the local voice mail pilot number in Program 45-01-01 (assign the pilot number to each Department Group using Program 11-07-01). Use Program 45-01-02 to assign the voice mail master name for the local voice mail.

Program 45-01-07 is used to define the pilot number of the centralized voice mail. Program 45-01-08 sets the Department Group and Program 45-01-09 sets the voice mail master name for the centralized voice mail.

Operation

Pilot Call

When the extension in System B dials the centralized voice mail access number (Program 45-01-07), they connect to the voice mail in their own system (Program 45-01-08). It is not possible for the user to access the voice mail in System A.

Service Codes

When the voice mail service code (Program 11-12-51) is dialed, the system calls either the voice mail at the same site as the user, or if the centralized voice mail access number is defined in Program 45-01-07, then the centralized voice mail is called.

One-Digit Service Code

If an extension user hears either a busy signal or a ring back tone when placing an intercom call and dials the one-digit service code for voice mail, the call is connected to the voice mail at the same site, or if the centralized voice mail access number is defined in Program 45-01-07, then the centralized voice mail is called.

Voice Mail Message Key

If an extension user presses their Voice Mail Message key (Program 15-07 or SC 851: 77), the voice mail at the same site as the user is called, or if the centralized voice mail access number is defined in Program 45-01-07, then the centralized voice mail is called.

Conversation Recording

If an extension user presses their Conversation Recording key (Program 15-07 or SC 851: 78), the voice mail at the same site as the user is called, or if the centralized voice mail access number is defined in Program 45-01-07, then the centralized voice mail is called and the conversation is recorded to that voice mail.

Automatic Attendant

If an extension user presses their Automatic Attendant Message key (Program 15-07 or SC 851: 79), the voice mail at the same site as the user is called, or if the centralized voice mail access number is defined in Program 45-01-07, then the centralized voice mail is called.

Features

Network Settings and Operation

Incoming Calls - Normal Trunks

If centralized voice mail is set in Program 22-05:103 as the destination of an incoming call, this call is automatically transferred to the centralized voice mail.

If 102 (in-skin/external voice mail) is selected for the ring group instead of 103, the voice mail within the extension's own system will be called. The call can not be transferred to the networked system.

No Answer at Incoming Ring

If centralized voice mail is set in Program 22-08:103 as the destination, normal incoming calls or DIL calls which receive no answer are transferred to the centralized voice mail

If 102 (in-skin/external voice mail) is selected for the ring group instead of 103, the voice mail within the extension's own system will be called. The call can not be transferred to the networked system.

Transferred Destination for Each DID Translation Table

If centralized voice mail is set in Program 22-11-05: and 22-11-06:103 for the transferred destination for each DID translation table, then the call will be transferred to the system which has the centralized voice mail.

If 102 (in-skin/external voice mail) is selected for the ring group instead of 103, the voice mail within the extension's own system will be called. The call can not be transferred to the networked system.

DID, DISA: Mis-Dial Calls

If the centralized voice mail is set in Program 25-03:103 as the transferred destination for DID/DISA mis-dial calls, then the call will be transferred to the centralized voice mail.

If 102 (in-skin/external voice mail) is selected for the ring group instead of 103, the voice mail within the extension's own system will be called. The call can not be transferred to the networked system.

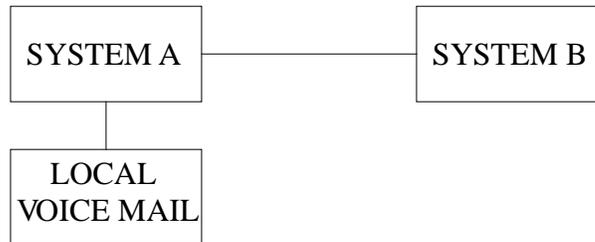
DID, DISA: No Answer and Busy Calls

If the centralized voice mail is set in Program 25-04:103 as the transferred destination for DID/DISA no answer and mis-dial calls, then the call will be transferred to the centralized voice mail.

If 102 (in-skin/external voice mail) is selected for the ring group instead of 103, the voice mail within the extension's own system will be called. The call can not be transferred to the networked system.

System Configuration Examples

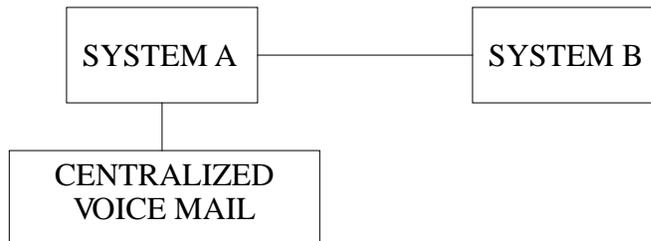
Only Local Voice Mail



System A		System B	
16-02-01	Voice Mail Port-Group 2	16-02-01	None
45-01-01	2	45-01-01	None
45-01-08	None	45-01-08	None
11-07-01	Group 2-600	11-07-01	None
45-01-07	None	45-01-07	None

The inbound and outbound calls in System-A can access the local voice mail (600), but the inbound and outbound calls in System-B can not reach the local voice mail (600). Access to the voice mail is available only when a called telephone has Call Forward set to the local voice mail (600).

Only Centralized Voice Mail



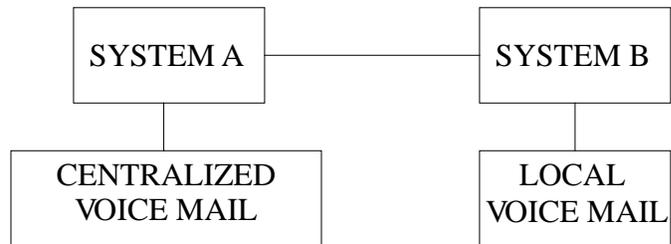
System A		System B	
16-02-01	Voice Mail Port-Group 2	16-02-01	None
45-01-01	None	45-01-01	None
45-01-08	2	45-01-08	None
11-07-01	None	11-07-01	None
45-01-07	600	45-01-07	600

The inbound and outbound calls in Systems A and B can access the centralized voice mail (600). If Program 11-07-01 is set to "0" in System-A, the inbound and outbound calls in System-B can not access the centralized voice mail (600).

Features

Network Settings and Operation

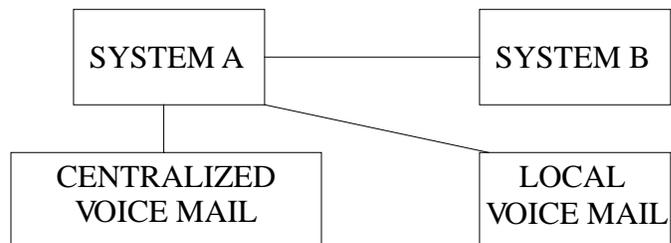
Centralized Voice Mail and Local Voice Mail



System A		System B	
16-02-01	Voice Mail Port A -Group 2 Voice Mail Port B -Group 3	16-02-01	None
45-01-01	3	45-01-01	None
45-01-08	2	45-01-08	None
11-07-01	500	11-07-01	None
45-01-07	600	45-01-07	600

With the above settings, the extensions and trunks that connect to System A can access both the centralized voice mail (600) and local voice mail (500). System A will also allow access to local voice mail when the service codes or Voice Mail Message key is used. The extensions and trunks that connect to System B can only access the centralized voice mail (600).

Centralized Voice Mail and Local Voice Mail (Mix)



System A		System B	
16-02-01	Voice Mail Port A -Group 2 Voice Mail Port B -Group 3	16-02-01	None
45-01-01	3	45-01-01	None
45-01-08	2	45-01-08	None
11-07-01	500	11-07-01	None
45-01-07	600	45-01-07	600

Features

Network Settings and Operation

With the above settings, centralized voice mail (600) and local voice mail (500) can both access extensions and trunks in System A. Only the centralized voice mail (600) can access the extensions and trunks in System B. When a user in System A presses their voice mail key or dials *8, they will access the local voice mail (500).

Conditions

The local voice mail cannot be accessed from the remote system as it does not send any voice mail protocol signals (preventing the user from leaving a message, hearing a message, etc.).

In cases where a call is forwarded to the local voice mail from the remote voice mail, protocol signals are sent only when the telephone which set the Call Forward is called from the other system.

Related Programs

Program Number	Title
11-07	ICM Pilot Calling Number
11-12-51	Service Code (Call Own Mailbox)
16-02	ICM Group
22-05	Destination for normal incoming ringing
22-08	Destination for no answering
22-11-05	Transferred destination-1 for each DID translation table
22-11-06	Transferred destination-2 for each DID translation table
22-12	Transferred destination for each DID translation table area
25-03	Destination for DID/DISA: Mis-Dial
25-04	Destination for DID/DISA: No Answer/Busy Status
45-01-01	Voice Mail Integration Options - Voice Mail Department Group Number
45-01-07	Voice Mail Integration Options - Mailbox Number
45-01-08	Voice Mail Integration Options - Networked Voice Mail Department Group Number
45-01-09	Voice Mail Integration Options - Networked Voice Mail Master Name

Features

Network Settings and Operation

- For Your Notes -

Section 3

Programming

Programming

- For Your Notes -

Before Reading This Section

This section provides you with detailed information about the system programs. By changing a program, you change the way the feature associated with that program works. In this section, you find out about each program, the features that the program affects and how to enter the program data into system memory.

Do not start customizing your system without first reading Section 1, Setting Up the Networking Feature.

When you want to customize a feature, find it in Section 1 and learn about it. (If you have trouble finding the feature, try cross-referencing it in the Index at the back of this book.) Section 1 will tell you what programs you have to change to get the operation you want. Then, look the program up in this section if you have any questions about how to enter the data.

How to Use This Section

This section lists each program in numerical order. For example, Program 10-01 is at the beginning of the section and Program 92-01 is at the end. The information on each program is subdivided into the following headings:

Description describes what the program options control. The Default Settings for each program are also included. When you first install the system, it uses the Default Setting for all programs. Along with the Description are the *Conditions* which describe any limits or special considerations that may apply to the program.

The reverse type (white on black) just beneath the Description heading is the program's access level. You can only use the program if your access level meets or exceeds the level the program requires. Refer to **How to Enter the Programming Mode** (page 54) for a list of the system's access levels and passwords.

Feature Cross Reference provides you with a table of all the features affected by the program. You'll want to keep the referenced features in mind when you change a program. Customizing a feature may have an effect on another feature that you didn't intend.

Telephone Programming Instructions shows you how to enter the program's data into system memory. For example:

1. Enter the programming mode.
2. 15-07-01

```
15-07-01 TEL301
KY01 = *01
←                →
```

tells you to enter the programming mode, dial 150701 from the telephone dial pad. After you do, you'll see the message "15-07-01 TEL301" on the first line of the telephone display. This indicates the program number (15-07), item number (01), and that the options are being set for extension 301. The second row of the display "KY01 = *01" indicates that Key 01 is being programmed with the entry of *01. The third row allows you to move the cursor to the left or right, depending on which arrow is pressed. To learn how to enter the programming mode, see **How to Enter the Programming Mode** below.

Programming

Programming Basics

How to Enter the Programming Mode

Depending on the mode of programming, the system may allow more than one person in the programming mode at one time. With telephone programming, two people can program simultaneously. Using the PC Program, only one person is allowed in programming. With the Web Program, up to four people can be programming the system at once. If the same program number is being defined simultaneously, the last changes made to the program will be accepted.

To enter the programming mode:

1. Go to any working display telephone.
In a newly installed system, use extension 301 (port 1).
2. Do not lift the handset.
3. Press CALL1.
4. # * # *

Password

5. Dial the system password + HOLD.
Refer to the following table for the default system passwords. To change the passwords, use Program 90-02.

Password	User Name	Level	Programs at this Level
374772	NEC-I	1 (MF)	All programs
12345678	ASPIRE	2 (IN)	All programs in this section not listed below for SA and SB
0000	ADMIN1	3 (SA)	10-01, 10-02, 10-12, 10-13, 10-14, 10-15, 10-16, 10-17, 10-18, 10-22, 12-02, 12-03, 12-04, 15-01, 15-07, 15-09, 15-10, 15-11, 20-16, 21-07, 21-14, 22-04, 22-11, 25-08, 30-03, 32-02, 40-02, 41-02, 41-03, 41-04, 41-05, 41-06, 41-07, 41-08, 41-09, 41-10, 41-11, 41-12, 41-13, 41-14, 41-15, 41-16, 41-17, 41-18, 90-03, 90-04, 90-06, 90-07, 90-18, 90-19
9999	ADMIN2	4 (SB)	13-04, 13-05, 13-06

How to Exit the Programming Mode

To exit the programming mode:

When you are done programming, you must be out of a program's options to exit (pressing the MSG key will exit the program's option).

1. Press MSG key to exit the program's options, if needed.



Program Mode
Base Service OP1 OP2

2. Press SPK. You see, "Saving System Data" if changes to were to the system's programming.
3. The display shows "Complete Data Save" when completed and will exit the phone to an idle mode.

To save a customer's database, a blank PC-ATA card is required. Insert the card into the NTCPU and, using Program 90-03, save the software to the PC-ATA card. (Program 90-04 is used to reload the customer data if necessary.) Note that a PC-ATA card can only hold one customer database. Each database to be saved will require its own separate card.

Programming

Programming Basics

Using Keys to Move Around in the Programs

Once you enter the programming mode, use the keys in the following chart to enter data, edit data and move around in the menus.

Keys for Entering Data	
Use this key...	When you want to . . .
0-9, * and #	Enter data into a program.
HOLD	Complete the programming step you just made (like pressing Enter on a PC keyboard). When a program entry displays, press HOLD to bypass the entry without changing it.
CONF	Delete the entry to the left (like pressing Backspace on a PC keyboard).
MSG	Exit one step at a time from the program window currently being viewed. For example, if you're programming item 5 in 15-03, pressing MSG will allow you to enter a new option in program 15-03. Pressing MSG again will allow you to select a new program in the 15- series. Pressing MSG a third time will allow you to enter a new program beginning with '1'. Pressing MSG one last time will bring you to the beginning program display, allowing you to enter any program number.
FLASH	Switch extension, line, etc. being programmed by pressing FLASH. The cursor moves up to the top row of the display. Pressing FLASH again moves the cursor back to the middle row.
LINE KEYS	Use pre-programmed settings to help with the program entry. These settings vary between programs from LINE 1 = 0 (off) and LINE 2 = 1 (on) to preset values for timers where LINE 1 = 5, LINE 2 = 10, LINE 3 = 15, etc. For programs with this option, the line key which currently matches the programmed setting will light steady. The display may also indicate Soft Keys which will allow you to select the values as well (-1 and +1 will step through these pre-programmed settings.)
LINE KEY 1	Program a pause into an Abbreviated Dialing bin.
LINE KEY 2	Program a recall/flash into an Abbreviated Dialing bin.
LINE KEY 3	Program a @ into an Abbreviated Dialing bin.
VOL ▲	Scroll backward through a list of entry numbers (e.g., from extension 301 to 302, 303, etc.) or through entries in a table (e.g., Common Permit Table). <i>If you enter data and then press this key, the system accepts the data before scrolling forward.</i>
VOL ▼	Scroll forward through a list of entry numbers (e.g., from extension 301 to 302, 303, etc.) or through entries in a table (e.g., Common Permit Table). <i>If you enter data and then press this key, the system accepts the data before scrolling backward</i>

Programming Names and Text Messages

Several programs (e.g., Program 20-16: Selectable Display Messages) require you to enter text. Use the following chart when entering and editing text. When using the keypad digits, press the key once for the first character, twice for the second character, etc. For example, to enter a C, press key “2” three times. Press the key six times display the lower case letter.

Key for Entering Names	
Use this keypad digit . . .	When you want to . . .
1	Enter characters: 1 @ [¥] ^ _ ‘ { } ← → Press repeatedly to scroll through the list. After selecting your entry, press the next letter or use the left scroll or right scroll Soft Key to move the cursor.
2	Enter characters A-C, a-c, 2. After selecting your entry, press the next letter or use the left scroll or right scroll Soft Key to move the cursor.
3	Enter characters D-F, a-f, 3. After selecting your entry, press the next letter or use the left scroll or right scroll Soft Key to move the cursor.
4	Enter characters G-I, g-i, 4. After selecting your entry, press the next letter or use the left scroll or right scroll Soft Key to move the cursor.
5	Enter characters J-L, j-l, 5. After selecting your entry, press the next letter or use the left scroll or right scroll Soft Key to move the cursor.
6	Enter characters M-O, m-o, 6. After selecting your entry, press the next letter or use the left scroll or right scroll Soft Key to move the cursor.
7	Enter characters P-S, p-s, 7. After selecting your entry, press the next letter or use the left scroll or right scroll Soft Key to move the cursor.
8	Enter characters T-V, t-v, 8. After selecting your entry, press the next letter or use the left scroll or right scroll Soft Key to move the cursor.
9	Enter characters W-Z, w-z, 9. After selecting your entry, press the next letter or use the left scroll or right scroll Soft Key to move the cursor.
0	Enter characters: 0 ! “ # \$ % & ‘ () Press repeatedly to scroll through the list. After selecting your entry, press the next letter or use the left scroll or right scroll Soft Key to move the cursor.
*	Enter characters: * + , - . / : ; < = > ? Press repeatedly to scroll through the list. After selecting your entry, press the next letter or use the left scroll or right scroll Soft Key to move the cursor.
#	# = Accepts an entry (only required if two letters on the same key are needed - ex: STA). Pressing # again = Space.
CONF	Clear the character entry one character at a time.
FLASH	Clear all the entries from the point of the flashing cursor and to the right.

Programming

Programming Basics

Using Soft Keys For Programming

Each Aspire display telephone provides interactive soft keys for intuitive feature access. The options for these keys will automatically change depending on where you are in the system programming. Simply press the Soft Key located below the option you wish and the display will change accordingly.



Pressing the VOLUME ▲ or VOLUME ▼ will scroll between the menus.



What the Soft Key Display Prompts Mean

When using a display phone in programming mode, you will see various Soft Key options displayed. These keys will allow you to easily select, scan, or move through the programs.

Soft key Display Prompts	
If you press this Soft Key . . .	The system will . . .
back	Go back one step in the program display. You can press VOLUME ▲ or VOLUME ▼ to scroll forwards or backwards through a list of Programs.
↑	Scroll down through the available programs.
↓	Scroll up through the available programs.
select	Select the currently displayed program.
←	Move the cursor to the left.
→	Move the cursor to the right.
-1	Move back through the available program options.
+1	Move forward through the available program options.

Level:	Aspire
IN	<ul style="list-style-type: none"> Available.

Description

Use **Program 10-03 : PCB Setup** to setup and confirm the Basic Configuration data for each PCB. When changing a defined terminal type, first set the type to '0' and then plug the new device in to have the system automatically define it or redefine the type manually.

Note: The items highlighted in gray are read only and cannot be changed.

Input Data

For ESIU Unit

Physical Port Number		01-16	
B-Channel 1			
Item No.	Item	Input Data	Default
01	Terminal Type	0- Not set 1- Keyset/DSL 2- SLT Adapter 3- -- Not used -- 4- -- Not used -- 5- -- Not used -- 6- PGD (Paging) 7- PGD (Tone Ringer) 8- PGD (Doorbox) 9- PGD (ACI) 10- DSS Console 11- -- Not used --	0
02	Logical Port Number	0: Not set 1: Keyset 2: SLT Adapter 3: Not used 4: Not used 5: 2DCI Adapter 1 - 32 6: PGD (Paging) 7: PGD (for Tone Ringer) 1-8 8: PGD (for Door Box) 1-8 9: PGD (for Analog I/F) 1-96 10: DSS 11: Not used	0

Programming

10-03 : PCB Setup

03	Additional Data	<i>This option is reserved for future use.</i> 3: Not used 4: Not used 01-16 (port number) A port number is automatically set as the order which the terminal started.	0
04	Optional Installed Unit 1	0- none 1- APR Module 2- APA Module 3- ADA Module 4- CTA Module 5- CTU Module	0
05	Optional Installed Unit 2	0- none 1- APR Module 2- APA Module 3- ADA Module 4- CTA Module 5- CTU Module	0

B-Channel 2			
Item No.	Item	Input Data	Default
06	Terminal Type	0- Not set 1- -- Not used -- 2- -- Not used -- 3- -- Not used -- 4- -- Not used -- 5- -- Not used -- 6- PGD (Paging) 7- PGD (Tone Ringer) 8- PGD (Door Box) 9- PGD (ACI) 10- -- Not used -- 11- -- Not used -- 12- APR	0
07	Logical Port Number	0: Not set 6: PGD (Paging) 7: PGD (for Tone Ringer) 1-8 8: PGD (for Door Box) 1-8 9: PGD (for ACI) 1-96 12:APR (for B2 mode) 193-256	0

Programming

10-03 : PCB Setup

For SLIU Unit

Physical Port Number	01-16
----------------------	-------

Item No.	Item	Input Data	Default
01	Logical Port Number	0-256	0
02	Not used		
03	Transmit Gain Level (S-Level)	1-63 (-15.5 +15.5dB)	32 (0dB)
04	Receive Gain Level (R-Level)	1-63 (-15.5 +15.5dB)	32 (0dB)

For COIU Unit

Physical Port Number	01-08
----------------------	-------

Item No.	Item	Input Data	Default
01	Logical Port Number	0-200	0

For TLIU Unit

Physical Port Number	01-08
----------------------	-------

Item No.	Item	Input Data	Default
01	Logical Port Number	0-200	0
02	2/4Wire	0- 2Wire 1- 4Wire	1

For DIOPU Unit

Physical Port Number	01-08
----------------------	-------

Item No.	Item	Input Data	Default
01	LD/OPX assignment	0- LD Trunk 1- OPX Trunk	0
02	Logical Port Number	0: For LD Trunk 0-200 1: For OPX 0-256	0

Programming

10-03 : PCB Setup

For BRIU Unit

ISDN Line Number	01-08
------------------	-------

Item No.	Item	Input Data	Default
01	ISDN Line Mode	0 = Not set 1 = T-Bus 2 = S-Bus 3 = Network Mode (Leased Line) 4 = Network Mode (Interconnected Line) 5 = Network Mode (Interconnected Line, Fixed layer 1=NT) 6 = S-Point (Leased Line)	1
02	Logical Port Number (see Note 1)	0: Net set 1: For T-Bus (1-200) 2: For S-Bus (1-256)	0
03	Connection Type	0 = Point-to-Multipoint (not available for Networking) 1 = Point-to-Point	0
04	Layer 3 Timer Type (see Note 2)	1-5	1
05	- Not Currently Used - CLIP Information Announcement	0 = disable 1 = enable	1
06	Connection Bus Mode (S-point only)	0 = Extended Passive Bus 1 = Short Passive Bus	0
07	S-point DID digits	0-4	0
08	Dial sending Mode	0 = Enblock sending 1 = Overlap sending	1
09	Dial Information Element (Only for Overlap Sending Mode)	0 = Keypad Facility 1 = Called Party Number	0
10	Master/Slave System (NW mode only)	0 = Slave System 1 = Master System	0
11	Networking System Number (NW mode only)	0-50	0
12	- Not Currently Used -		0
13	- Not Currently Used -		0
14	Service Protocol for S-Point	0 = Keypad Facility 1 = Specified Protocol for Aspire System	0

Note 1. The start port number of a BRI line is displayed. Two logic ports are automatically assigned to a BRI line.

Note 2. Each timer value of Layer3 are set up for every type of Program 81-06 (T-Bus) and Program 82-06 (S-Bus).

Programming

10-03 : PCB Setup

For PRIU Unit

Item No.	Item	Input Data	Default
01	ISDN Line Mode	0- Not set 1- T-Bus 2- S-Bus 3- Network Mode (Leased Line) 4- Network Mode (Interconnected Line) 5- Network Mode (Interconnected Line, Fixed Layer 1=NT) 6- S-Point (Leased Line)	1
02	Logical Port Number (see Note 1)	1: for T-Bus 1-200 2: for S-Bus 1-256	0
03	CRC Multi-frame(CRC4) (Only E1[30B+D] Mode)	0- off 1- on	0
04	Layer 3 Timer Type	1-5	1
05	- Not Currently Used - CLIP Information Announcement	0- disable 1- enable	1
06	Length of a cable	0- 0 40m 1- 40 81m 2- 81 122m 3- 122 162m 4- 162 200m	0
07	S-point DID digits	0-4	0
08	Dial Sending Mode	0- Enblock Sending 1- Overlap Sending	0
09	Dial Information Element (Only for Overlap Sending Mode)	0- Keypad Facility 1- Called Party Number	0
10	Master/Slave System (Network Mode only)	0- Slave System 1- Master System	0
11	Networking System Number (Network Mode only)	0-50	0
12	short / long-haul	0- short-haul 1- long-haul	0

Programming

10-03 : PCB Setup

Item No.	Item	Input Data	Default
13	Loss-Of-Signal detection limit	In short-haul mode 0- 0.91V 1- 0.74V 2- 0.59V 3- 0.42V 4- 0.32V 5- 0.21V 6- 0.16V 7- 0.10V In long-haul mode 0- 1.70V 1- 0.84V 2- 0.84V 3- 0.45V 4- 0.45V 5- 0.20V 6- 0.10V 7- not defined	0
14	Service Protocol for S-Point	0- Keypad Facility 1- Specified Protocol for Aspire System	0

Note 1. The start port number of a PRI line is displayed. Thirty logic ports are automatically assigned to a PRI line.

Note 2. Each timer value of Layer3 are set up for every type of Program 81-06 (T-Bus) and Program 82-06 (S-Bus).

For VOIPU Unit

Physical Port Number	01-32
----------------------	-------

Item No.	Item	Input Data	Default
01	Trunk Logical Port Number	0-200	0

For T1 Unit

Physical Port Number	01-32
----------------------	-------

Item No.	Item	Input Data	Default
01	Logical Port Number	0-200	0
02	Frame Type Setup	0- D4 (12 Multi Frame) 1- ESF (24 Multi Frame)	0
03	Zero Code Suppression Setup ZCS_B8ZS	0- B8ZS 1- AMI/ZCS	0
04	DTI<->CSU Distance Setup	0= 0 feet – 133 feet 1= 133 feet – 266 feet 2= 266 feet – 399 feet 3= 399 feet – 533 feet 4= 533 feet – 655 feet	0
05	T1 Clock Source Master/Slave	0 - Slave 1 - Master	0

Conditions

- (A.) When changing a defined terminal type, first set the type to '0' and then plug the new device in to have the system automatically define it or redefine the type manually.
- (B.) The system must have a PCB installed in order to view/change the options for that type of PCB.

Feature Cross Reference

None

Programming

10-03 : PCB Setup

Telephone Programming Instructions

To enter data for Program 10-03 (PCB Setup):

1. Enter the programming mode.
2. 10 03

```
10-02-01 Slot No 1
ES|port01 CH1 1 :TEL |1
back ↑ ↓ select
```

3. Enter the number of the item you want to program.

```
10-02-nn Slot No 1
nnnnn
back ↑ ↓ select
```

4. Select a slot number to be programmed by pressing the VOLUME ▲ or VOLUME ▼ keys. Or, press FLASH once to select the slot number or press FLASH twice to select a port number. Enter the slot or port number.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
OR
Press MSG once to enter a new item number.
OR
Press MSG until you've exited that series's programming section.

Programming

10-12 : NTCPU Network Setup

Level:	Aspire
SA	<ul style="list-style-type: none"> • Available.

Description

Use **Program 10-12 : NTCPU Network Setup** to setup the IP Address, Subnet-Mask, and Default Gateway addresses.

Input Data

Item No.	Item	Input Data	Default	Conditions
01	IP Address	1.0.0.1 - 126.255.255.254 128.1.0.1 - 191.254.255.254 192.0.1.1 - 223.255.254.254	172.16.0.10	
02	Subnet Mask	128.0.0.0 192.0.0.0 224.0.0.0 240.0.0.0 248.0.0.0 252.0.0.0 254.0.0.0 255.0.0.0 255.128.0.0 255.192.0.0 255.224.0.0 255.248.0.0 255.252.0.0 255.254.0.0 255.255.0.0 255.255.128.0 255.255.192.0 255.255.224.0 255.255.248.0 255.255.252.0 255.255.254.0 255.255.255.0 255.255.255.128 255.255.255.192 255.255.255.224 255.255.255.240 255.255.255.248 255.255.255.252 255.255.255.254 255.255.255.255	255.255.0.0	The setting of Subnet-Mask is mistaken when all Host Address are 0. If the network section is: 0, 127 128.0 191.255 192.0.0 223.255.255 The setting of Subnet-Mask is mistaken.
03	Default Gateway	1.0.0.1 - 126.255.255.254 128.1.0.1 - 191.254.255.254 192.0.1.1 - 223.255.254.254	0.0.0.0	IP Address for Router
04	Time Zone	-12 thru +12 Hours	+9 Hours	Enter the difference for standard time.
05	NIC	0: Auto Detect 1: 100Mbps, Full Duplex 2: 100Mbps, Half Duplex 3: 10Mbps, Full Duplex 4: 10Mbps, Half Duplex	0	NIC Auto Negotiate

Conditions

The system must be reset in order for these changes to take affect.

Feature Cross Reference

- VoIP

Programming

10-12 : NTCPU Network Setup

Telephone Programming Instructions

To enter data for Program 10-12 (NTCPU Network Setup):

1. Enter the programming mode.
2. 10 12

```
10-12-01
IP_Add 172.16 .0 .10
back ↑ ↓ select
```

3. Enter the number of the item you want to program.

```
10-12-nn
nnnnn
← →
```

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
OR
Press MSG once to enter a new item number.
OR
Press MSG until you've exited that series's programming section.

Programming

10-20 : LAN Setup for External Equipment

Level:
IN

Aspire

- Available.

Description

Use **Program 10-20 : LAN Setup for External Equipment** to define the TCP port/address/etc. for communicating to external equipment.

Input Data

Type of external equipment	1- CTI Server 2- ACD MIS 3- - Reserve - 4- Network Listener 5- - Reserve -
----------------------------	--

Item No.	Item	Input Data	Default
01	TCP Port	0-65535	External Device 1 and 2 = 7625 External Device 3-5 = 0
02	Not used		
03	Keep alive time	1-255 (Sec)	30

Conditions

None

Feature Cross Reference

None

Programming

10-20 : LAN Setup for External Equipment

Telephone Programming Instructions

To enter data for Program 10-20 (LAN Setup for External Equipment):

1. Enter the programming mode.
2. 10 20

```
10-20-01 Ex-Device1
TCP_Port      0
back  ↑      ↓  select
```

3. Enter the number of the item you want to program.

```
10-20-nn
nnnnn
←          →
```

4. Select the device number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
OR
Press MSG once to enter a new item number.
OR
Press MSG until you've exited that series's programming section.

Level:	Aspire
IN	<ul style="list-style-type: none"> Available.

Description

Use **Program 10-27 : IP System ID** to set the IP address of the networked IP systems.

Input Data

System ID	01-50
-----------	-------

Item No.	Item	Input Data	Default	Related Program
01	<p>IP Address System ID is related with the System ID in the Numbering Plan (Program 11-01-03). When the digits are analyzed and the system ID is determined from the system data set in the Numbering Plan, the Networking call will be sent to the IP Address set in this program.</p> <p>The IP Address should be the IP Address of the peer NTCPU (Program 10-12-01).</p>	1.0.0.1_126.255.255.254 128.1.0.1_191.254.255.254 192.0.1.1_223.255.254.254	0.0.0.0	11-01-03 10-12-01
02	<p>Call Procedure Port The Port Number should be set with the same value as the H.225 setup port in Program 84-02-33.</p>	1-65535	1730	84-02-33

Conditions

None

Feature Cross Reference

None

Programming

10-27 : IP System ID

Telephone Programming Instructions

To enter data for Program 10-27 (IP System ID):

1. Enter the programming mode.
2. 10 27

```
10-27-01 SysID1
IP Add  0 .0 .0 .0
back  ↑      ↓  select
```

3. Enter the number of the item you want to program.

```
10-27-nn
nnnnn
←  -1  +1  →
```

4. Select a circuit/resource number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
OR
Press MSG once to enter a new item number.
OR
Press MSG until you've exited that series's programming section.

Level:

IN

Aspire

- Available.

Description

Use **Program 11-01 : System Numbering** to set the system's internal (Intercom) numbering plan. The numbering plan assigns the first and second digits dialed and affects the digits an extension user must dial to access other extensions and features, such as service codes and trunk codes. If the default numbering plan does not meet the site requirements, use this program to tailor the system numbering to the site.

CAUTION

Improperly programming this option can adversely affect system operation. Make sure you thoroughly understand the default numbering plan before proceeding. If you must change the standard numbering, use the chart for **System Numbering** (page 75) to keep careful and accurate records of your changes.

Before changing your numbering plan, use the PC Program or Web PC Program to make a backup copy of your system's data.

Changing the numbering plan consists of three steps:

1. Enter the digits you want to change.
2. Specify the length of the code you select to change.
3. Assign a function to the code selected.

Step 1: Enter the digit(s) you want to change

You can make either single or two digit entries. In the Dialed Number column in the **System Numbering** (page 75) table, the nX rows (e.g., 1X) are for single digit codes. The remaining rows (e.g., 11, 12, etc.) are for two digit codes.

- Entering a single digit affects all the Dialed Number entries beginning with that digit. For example, entering 6 affects all number plan entries beginning with 6. The entries you make in step 2 and step 3 below affect the entire range of numbers beginning with 6. (For example, if you enter 3 in step 2 the entries affected would be 600-699. If you enter 4 in step 2 below, the entries affected would be 6000-6999.)
- Entering two digits lets you define codes based on the first two digits a user dials. For example, entering 60 allows you to define the function of all codes beginning with 60. In the default program, only * and # use two-digit codes. All the other codes are single digit. If you enter a two digit code between 0 and 9, be sure to make separate entries for all the other two digit codes within the range as well. This is because in the default program all the two digit codes between 0 and 9 are undefined.

Programming

11-01 : System Numbering

Description (Cont'd)

Step 2: Specify the length of the code you want to change

After you specify a single or two digit code, you must tell the system how many digits comprise the code. This is the *Number of Digits Required* column in the **System Numbering** (page 75) table. In the default program, all codes from 100-999 are three digits long. Codes beginning with 0 are one digit long. Codes beginning with * are 3 digits long and codes beginning with # are 4 digits long.

Step 3: Assign a function to the code selected

After entering a code and specifying its length, you must assign its function. This is the Dial Type column in the **System Numbering** (page 75) table. The choices are:

Dial Types	Dial Type Description	Related Program
0	- Not Used -	
1	Service Code	11-10 : Service Code Setup (for System Administrator) 11-11 : Service Code Setup (for Registration) 11-12 : Service Code Setup (for Service Access) 11-13 : Service Code Setup (for ACD) 11-14 : Service Code Setup (for HOTEL) 11-15 : Service Code Setup (Special access)
2	Extension Number	11-02 : Extension Numbers 11-04 : Virtual Extension Numbers 11-06 : 2PGDAD (ACI) Extension Numbers 11-07 : Department Calling Group Numbers 11-08 : 2PGDAD (ACI) Group Pilot Numbers
3	Trunk Access Code	11-09 : Trunk Access Code.
4	Special Trunk Access	11-09 : Trunk Access Code.
5	Operator Access	20-17 : Operator's Extension
6	ARS/F-Route Access	44-xx
8	Networking	10-03 : PCB Setup 10-12 : NTCPU Network Setup 10-20 : LAN Setup for External Equipment 10-27 : IP System IP

- Changing the *Dial Type* for a range of codes can have a dramatic affect on how your system operates. Assume, for example, the site is a hotel that has room numbers from 100-399. In order to make extension numbers correspond to room numbers, you should:
 - In Program 11-02, reassign extension numbers on each floor from 100 to 399. (Other applications might also require you to change entries in Program 11-10 through 11-16.)

Default

See the following tables.

Programming

11-01 : System Numbering

System Numbering				
Dial Types: 1=Service Code, 2=Extension Number, 3=Trunk Access, 4=Special Trunk Access, 5=Operator Access, 6=Flexible Routing, 8=Networking, 0=Not Used				
Dialed Number	Number of Digits Required		Dial Type	
	Default	New	Default	New
1X	3		1	
11	0		0	
12	0		0	
13	0		0	
14	0		0	
15	0		0	
16	0		0	
17	0		0	
18	0		0	
19	0		0	
10	0		0	
1*	0		0	
1#	0		0	
2X	3		2	
21	0		0	
22	0		0	
23	0		0	
24	0		0	
25	0		0	
26	0		0	
27	0		0	
28	0		0	
29	0		0	
20	0		0	
2*	0		0	
2#	0		0	

Programming

11-01 : System Numbering

System Numbering				
Dial Types: 1=Service Code, 2=Extension Number, 3=Trunk Access, 4=Special Trunk Access, 5=Operator Access, 6=Flexible Routing, 8=Networking, 0=Not Used				
Dialed Number	Number of Digits Required		Dial Type	
	Default	New	Default	New
3X	3		2	
31	0		0	
32	0		0	
33	0		0	
34	0		0	
35	0		0	
36	0		0	
37	0		0	
38	0		0	
39	0		0	
30	0		0	
3*	0		0	
3#	0		0	
4X	3		2	
41	0		0	
42	0		0	
43	0		0	
44	0		0	
45	0		0	
46	0		0	
47	0		0	
48	0		0	
49	0		0	
40	0		0	
4*	0		0	
4#	0		0	

Programming

11-01 : System Numbering

System Numbering				
Dial Types: 1=Service Code, 2=Extension Number, 3=Trunk Access, 4=Special Trunk Access, 5=Operator Access, 6=Flexible Routing, 8=Networking, 0=Not Used				
Dialed Number	Number of Digits Required		Dial Type	
	Default	New	Default	New
5X	3		2	
51	0		0	
52	0		0	
53	0		0	
54	0		0	
55	0		0	
56	0		0	
57	0		0	
58	0		0	
59	0		0	
50	0		0	
5*	0		0	
5#	0		0	
6X	3		2	
61	0		0	
62	0		0	
63	0		0	
64	0		0	
65	0		0	
66	0		0	
67	0		0	
68	0		0	
69	0		0	
60	0		0	
6*	0		0	
6#	0		0	

Programming

11-01 : System Numbering

System Numbering				
Dial Types: 1=Service Code, 2=Extension Number, 3=Trunk Access, 4=Special Trunk Access, 5=Operator Access, 6=Flexible Routing, 8=Networking, 0=Not Used				
Dialed Number	Number of Digits Required		Dial Type	
	Default	New	Default	New
7X	3		2	
71	0		0	
72	0		0	
73	0		0	
74	0		0	
75	0		0	
76	0		0	
77	0		0	
78	0		0	
79	0		0	
70	0		0	
7*	0		0	
7#	0		0	
8X				
8X	3		1	
81	0		0	
82	0		0	
83	0		0	
84	0		0	
85	0		0	
86	0		0	
87	0		0	
88	0		0	
89	0		0	
80	0		0	
8*	0		0	
8#	0		0	

Programming

11-01 : System Numbering

System Numbering				
Dial Types: 1=Service Code, 2=Extension Number, 3=Trunk Access, 4=Special Trunk Access, 5=Operator Access, 6=Flexible Routing, 8=Networking, 0=Not Used				
Dialed Number	Number of Digits Required		Dial Type	
	Default	New	Default	New
9X	1		3	
91	0		0	
92	0		0	
93	0		0	
94	0		0	
95	0		0	
96	0		0	
97	0		0	
98	0		0	
99	0		0	
90	0		0	
9*	0		0	
9#	0		0	
0X	1		5	
01	0		0	
02	0		0	
03	0		0	
04	0		0	
05	0		0	
06	0		0	
07	0		0	
08	0		0	
09	0		0	
00	0		0	
0*	0		0	
0#	0		0	

Programming

11-01 : System Numbering

System Numbering				
Dial Types: 1=Service Code, 2=Extension Number, 3=Trunk Access, 4=Special Trunk Access, 5=Operator Access, 6=Flexible Routing, 8=Networking, 0=Not Used				
Dialed Number	Number of Digits Required		Dial Type	
	Default	New	Default	New
*X	2		1	
*1	0		0	
*2	0		0	
*3	0		0	
*4	0		0	
*5	0		0	
*6	0		0	
*7	0		0	
*8	0		0	
*9	0		0	
*0	0		0	
**	0		0	
*#	0		0	
 				
#X	0		0	
#1	2		1	
#2	2		1	
#3	2		1	
#4	2		1	
#5	2		1	
#6	2		1	
#7	2		1	
#8	2		1	
#9	2		1	
#0	2		1	
#*	4		1	
##	2		1	

Conditions

None

Feature Cross Reference

- Flexible System Numbering

Telephone Programming Instructions

To enter data for Program 11-01 (System Numbering):

1. Enter the programming mode.
2. 11 01



11-01-01 Dial 1
1x Digit 3
back ↑ ↓ select

3. Enter the number of the item you want to program.



11-01-nn
nnnnn
← →

4. Select the dial number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
OR
Press MSG once to enter a new item number.
OR
Press MSG until you've exited that series's programming section.

Programming

11-02 : Extension Numbering

Level:

IN

Aspire

- Available.

Description

Use **Program 11-02 : Extension Numbering** to set the extension number. The extension number can be up to eight digits long. The first/second digit(s) of the number should be assigned in Program 11-01. This lets an employee move to a new location (port) and retain the same extension number.

Input Data

Extension Port Number	001-512
-----------------------	---------

Extension Number	Description
Dial (Up to 8 digits)	<ul style="list-style-type: none">• Set up extension numbers for Key Telephones, Single Line Telephones (Including ISLIA, APR), and IP Telephones.• Extension number assignments cannot be duplicated,

Default

Extension Port Number	Extension Number
1	301
2	302
3	303
:	:
199	499
200	5000
:	:
512	5312

Conditions

None

Feature Cross Reference

- Department Calling
- Flexible System Numbering
- Intercom

Telephone Programming Instructions

To enter data for Program 11-02 (Extension Numbering):

1. Enter the programming mode.
2. 11 02

```
11-02-01 Extn Port1
Extension_No. 301
back ↑ ↓ select
```

3. Enter the number of the item you want to program.

```
11-02-nn Extn Portnnn
nnnnn
← →
```

4. Select the extension port number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
OR
Press MSG once to enter a new item number.
OR
Press MSG until you've exited that series's programming section.

Programming

11-07 : Department Group Pilot Numbers

Level:

IN

Aspire

- Available.

Description

Use **Program 11-07 : Department Group Pilot Numbers** to assign pilot numbers to each Department Group set up in Program 16-02. The pilot number is the number users dial for Department Calling and Department Step Calling. The pilot number can be up to eight digits long. The first/second digit(s) of the number should be assigned in Program 11-01 as type 2.

Input Data

Department (Extension) Group Number	01-64
-------------------------------------	-------

Extension Group Pilot Number	Description	Related Program
Dial (Up to 8 digits)	Use this program to assign department group pilot numbers. The number set up by Program 11-02 (Extension Numbering) cannot be used. The extension number cannot be duplicated in Programs 11-02, 11-04, 11-06 and 11-08.	<ul style="list-style-type: none">• 16-01 : Department (Extension) Group Basic Data Setup• 16-02 : Department Group Assignment for Extensions• 16-03 : Secondary Department Group

Default

Group Numbers 01-64: No setting

Conditions

None

Feature Cross Reference

- Department Calling
- Department Step Calling

Telephone Programming Instructions

To enter data for Program 11-07 (Department Group Pilot Numbers):

1. Enter the programming mode.
2. 11 07

```
11-07-01 TEL Group1
Pilot_Call_No.
back ↑ ↓ select
```

3. Enter the number of the item you want to program.

```
11-07-nn TEL Groupnnn
nnnnn
← →
```

4. Select the telephone group number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
OR
Press MSG once to enter a new item number.
OR
Press MSG until you've exited that series's programming section.

Programming

11-10 : Service Code Setup (for System Administrator)

Level:

IN

Aspire

- Available.

Description

Use **Program 11-10 : Service Code Setup (for System Administrator)** to customize the Service Codes for the System Administrator. You can customize additional Service Codes in Programs 11-11 through 11-16. The following chart shows:

- The number of each code (01-27)
- The function of the Service Code.
- What type of telephones can use the Service Code
- The code's default entry. For example, dialing *3 (item 26) allows users to force a trunk line to disconnect.
- Programs that may be affected with the changing the code.

If you change a Service Code, be sure to record your entry in the "New" column.

Input Data

Item No.	Item	Terminals	Default	New	Related Program
01	Day / Night Mode Switching	KTS, SLT	818		12-xx 20-07-01
02	Changing the Music on Hold Tone	KTS	881		10-04
03	Setting the System Time	KTS	828		
04	Storing Common Abbreviated Dialing Numbers	KTS	853		
05	Storing Group Abbreviated Dialing Numbers	KTS	854		
06	Setting the Automatic Transfer for Each Trunk Line	KTS	833		
07	Canceling the Automatic Transfer for Each Trunk Line	KTS	834		
08	Setting the Destination for Automatic Trunk Transfer	KTS	835		
09	Not Used		No Setting		
10	Not Used	-	-	-	-
11	Entry of Credit for Toll Restriction - Not Used		No Setting		
12	Night Mode Switching for Other Group	KTS	118		12-xx 20-07-01
13	Not Used	-	-	-	-
14	Not Used	-	-	-	-
15	Not Used	-	-	-	-

Programming

11-10 : Service Code Setup (for System Administrator)

Item No.	Item	Terminals	Default	New	Related Program
16	Leaving Message Waiting	KTS	126		11-11-09
17	Dial Block by Supervisor	KTS	101		90-19
18	Off-Premise Call Forward by Door Box	KTS	822		13-05
19	Not Used	-	-		-
20	VRS - Record/Erase Message	KTS	116		20-07-13
21	VRS - General Message Playback	KTS	111		20-07-14
22	VRS - Record or Erase General Message	KTS	112		20-07-15
23	SMDR - Extension Accumulated Printout Code	KTS	121		20-07-18
24	SMDR - Group Accumulated Printout Code	KTS	122		20-07-19
25	Account Code Accumulated Printout Code	KTS	123		20-07-20
26	Forced Trunk Disconnect	KTS, SLT	*3		20-07-11
27	Trunk Port Disable	KTS	145		20-07-12
28	Not Used	-	-	-	-
29	Not Used	-	-	-	-

Conditions

None

Feature Cross Reference

Refer to chart above.

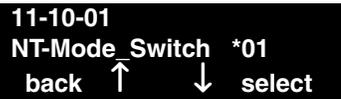
Programming

11-10 : Service Code Setup (for System Administrator)

Telephone Programming Instructions

To enter data for Program 11-10 (Service Code Setup (for System Administrator)):

1. Enter the programming mode.
2. 11 10



11-10-01
NT-Mode Switch *01
back ↑ ↓ select

3. Enter the number of the item you want to program.



11-10-nn
nnnnn
← →

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
OR
Press MSG once to enter a new item number.
OR
Press MSG until you've exited that series's programming section.

Programming

11-11 : Service Code Setup (for Setup/Entry Operation)

Level:	Aspire
IN	<ul style="list-style-type: none"> • Available.

Description

Use **Program 11-11 : Service Code Setup (for Setup/Entry Operation)** to customize the Service Codes which are used for registration and setup. You can customize additional Service Codes in Programs 11-10, and 11-12 through 11-16. The following chart shows:

- The number of each code (01-38)
- The function of the Service Code.
- What type of telephones can use the Service Code
- The code's default entry. For example, dialing 825 (item 18) allows users to turn on or turn off Background Music.
- Programs that may be affected with the changing the code.

If you change a Service Code, be sure to record your entry in the "New" column.

Input Data

Item No.	Item	Terminals	Default	New	Related Program
01	Call Forward - Immediate	KTS, SLT	No Setting		
02	Call Forward - Busy	KTS, SLT	No Setting		
03	Call Forward - No Answer	KTS, SLT	No Setting		
04	Call Forward - Busy/No Answer	KTS, SLT	No Setting		
05	Call Forward - Both Ring	KTS, SLT	No Setting		
06	Call Forwarding - Select Option	KTS, SLT	*2		
07	Call Forwarding - Follow-Me	KTS, SLT	No Setting		
08	Do Not Disturb	KTS, SLT	847		
09	Answer Message Waiting	KTS, SLT	*0		11-10-16
10	Cancel All Messages Waiting	KTS, SLT	873		
11	Cancel Message Waiting	KTS, SLT	871		
12	Alarm Clock	KTS, SLT	827		20-01-06
13	Display Language Selection	KTS	178		15-02
14	Text Message Setting	KTS	No Setting		
15	Enable Handsfree Incoming Intercom Calls	KTS	821		20-09-05 20-02-12

Programming

11-11 : Service Code Setup (for Setup/Entry Operation)

Item No.	Item	Terminals	Default	New	Related Program
16	Force Ringing of Incoming Intercom Calls	KTS	823		20-09-05 20-02-12
17	Programmable Function Key Programming (Dialing 851 Service Code)	KTS	851		15-07 11-11-38
18	BGM On/Off	KTS	825		
19	Key Touch tone On/Off	KTS	824		
20	Change Incoming CO and ICM Ring Tones	KTS	820		15-02
21	Check Incoming Ring Tones	KTS	811		
22	Extension Name Programming	KTS	800		15-01
23	Second Call for DID/DISA/DIL	KTS	179		
24	Change Extension Class of Service Allows an extension user to change the COS of another extension. Must be allowed in Program 20-13-28.	KTS	177		20-13-28
25	Automatic Transfer Setup for Each Extension Group	KTS, SLT	102		20-11-17 24-05
26	Automatic Transfer Cancellation for Each Extension Group	KTS, SLT	103		
27	Destination of Automatic Transfer Each Extension Group	KTS	104		20-11-17 24-05
28	Delayed Transfer for Every Extension Group	KTS, SLT	105		20-11-17 24-05 24-02-08
29	Delayed Transfer Cancellation for Each Extension Group	KTS, SLT	106		20-11-17
30	DND Setup for Each Extension Group	KTS, SLT	107		
31	DND Cancellation for Each Extension Group	KTS, SLT	108		
32	Not Used	-	-	-	-
33	Dial Block	KTS, SLT	100		
34	Temporary Toll Restriction Override	KTS, SLT	875		21-07
35	Pilot Group Withdrawing	KTS, SLT	150		
36	Toll Restriction Override	KTS, SLT	163		21-14
37	Adjusting Ring Volume	KTS	829		
38	Programmable Function Key Programming (Dialing 852 Service Code)	KTS	852		15-07 11-11-17

Programming

11-11 : Service Code Setup (for Setup/Entry Operation)

Item No.	Item	Terminals	Default	New	Related Program
39	One Touch Dial Number Entry	KTS	855		
40	Off-Premise Call Forwarding	KTS, SLT	*4		
41	Tandem Ringing	KTS, SLT	No Setting		15-07 30-03

Conditions

None

Feature Cross Reference

Refer to chart above.

Telephone Programming Instructions

To enter data for Program 11-11 (Service Code Setup (for Setup/Entry Operation)):

1. Enter the programming mode.
2. 11 11

```
11-11-01
Call_Forward-Imm901
back ↑ ↓ select
```

3. Enter the number of the item you want to program.

```
11-11-nn
nnnn
← →
```

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
OR
Press MSG once to enter a new item number.
OR
Press MSG until you've exited that series's programming section.

Programming

11-12 : Service Code Setup (for Service Access)

Level:
IN

Aspire
• Available.

Description

Use **Program 11-12 : Service Code Setup (for Service Access)** to customize the Service Codes which are used for service access. You can customize additional Service Codes in Programs 11-10, 11-11, and 11-13 through 11-16. The following chart shows:

- The number of each code (01-48)
- The function of the Service Code.
- What type of telephones can use the Service Code
- The code's default entry. For example, dialing 805 (code 05) will cancel a previously set Camp-On.
- Programs that may be affected with the changing the code.

If you change a Service Code, be sure to record your entry in the "New" column.

Input Data

Item No.	Item	Terminals	Default	New	Related Program
01	Call Forwarding / Do Not Disturb Override Activating Call Forwarding/Do Not Disturb Override. This code is only available if you disable the voice mail Single Digit dialing code in Program 11-16-09.	KTS, SLT	807		11-16-09
02	Conference	KTS, SLT	#1		
03	Override (Off-Hook Signaling)	KTS, SLT	809		
04	Set Camp-On	KTS, SLT	850		
05	Cancel Camp-On	KTS, SLT	870		
06	Switching of Voice Call and Signal Call	KTS, SLT	812		
07	Step Call	KTS, SLT	808		
08	Barge-In	KTS, SLT	810		
09	Change to STG All Ring	KTS, SLT	No Setting		16-02
10	Common/Extension Abbreviated Dialing	KTS, SLT	#2		
11	Group Abbreviated Dialing	KTS, SLT	#4		
12	Last Number Dial	KTS, SLT	#5		
13	Saved Number Dial	KTS, SLT	815		
14	Trunk Group Access	KTS, SLT	804		
15	Specified Trunk Access	KTS, SLT	#9		

Programming

11-12 : Service Code Setup (for Service Access)

Item No.	Item	Terminals	Default	New	Related Program
16	Trunk Access Via Networking	KTS	No Setting		
17	Clear Last Number Dialing Data	KTS, SLT	876		
18	Clear Saved Number Dialing Data	KTS, SLT	885		
19	Internal Group Paging	KTS, SLT	801		31-01-01
20	External Paging	KTS, SLT	803		
21	Meet Me Answer to Specified Internal Paging Group	KTS, SLT	864		
22	Meet Me Answer to External Paging	KTS, SLT	865		
23	Meet Me Answer in Same Paging Group	KTS, SLT	863		
24	Paging Combine	KTS, SLT	*1		31-07
25	Direct Call Pickup - Own Group	KTS, SLT	856		
26	Call Pickup for Specified Group	KTS, SLT	868		
27	Call Pickup	KTS, SLT	*#		
28	Call Pickup for Another Group	KTS, SLT	869		
29	Direct Extension Call Pickup	KTS, SLT	**		
30	Specified Trunk Answer	KTS, SLT	172		
31	Park	KTS, SLT	#6		24-03
32	Answer for Park	KTS, SLT	*6		24-03
33	Group Hold	KTS, SLT	832		
34	Answer for Group Hold	KTS, SLT	862		
35	Personal (Extension) Park	KTS, SLT	857		
36	Door Box Access	KTS, SLT	802		
37	Common Canceling Service Code	KTS, SLT	120		
38	Not Used	-	883	-	-
39	VRS Access	KTS, SLT	884		
40	Personal Abbreviated Dialing	KTS, SLT	#7		
41	Voice Over	KTS	890		11-16-08
42	Flash on Trunk lines	SLT	#3		
43	Universal Answer	SLT	#0		14-05 14-06
44	Callback Test for SLT	SLT	899		

Programming

11-12 : Service Code Setup (for Service Access)

Item No.	Item	Terminals	Default	New	Related Program
45	Enabled On Hook When Holding (SLT)	SLT	849		15-03-07
46	Answer On Hook When Holding (SLT)	SLT	859		15-03-08
47	Call Waiting Answer / Split Answer for SLT Splitting (switching) between calls	SLT	894		11-12-03
48	Account Code	SLT	##		
49	Not Used	-	-	-	-
50	General Purpose Relay	KST	880		
51	Call Own Mailbox		*8		
52	Live Monitoring (VRS)		No Setting		
53	Live Recording at SLT	SLT	154		
54	VRS Routing for ANI/DNIS Setting Up ANI/DNIS Routing to the VRS Automated Attendant. Using the Transfer feature, this also allows a call to be transferred to the VRS.		882		
56	E911 Alarm Shut Off Enter the Service Code that an extension user can dial to shut off the E911 Alarm Ring.		886	-	-
57	Unsupervised Conference/Tandem Trunking	KST/SLT	#8		

Conditions

None

Feature Cross Reference

Refer to chart above.

Programming

11-12 : Service Code Setup (for Service Access)

Telephone Programming Instructions

To enter data for Program 11-12 (Service Code Setup (for Service Access)):

1. Enter the programming mode.
2. 11 12



```
11-12-01
Bypass_Call 801
back ↑ ↓ select
```

3. Enter the number of the item you want to program.



```
11-12-nn
nnnnn
← →
```

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
OR
Press MSG once to enter a new item number.
OR
Press MSG until you've exited that series's programming section.

Programming

11-16 : Single Digit Service Code Setup

Level:

IN

Aspire

- Available.

Description

Use **Program 11-16 : Single Digit Service Code Setup** to customize the one-digit Service Codes used when a busy or ring back signal is heard. You can customize additional Service Codes in Programs 11-10 through 11-15. The following chart shows:

- The number of each code (01-10)
- The function of the Service Code.
- What type of telephones can use the Service Code
- The code's default entry. For example, dialing 1 (code 03) when calling an extension will switch the call from either a voice or signal call (depending on how it's currently defined).
- Programs that may be affected by changing these codes.

If you change a Service Code, be sure to record your entry in the "New" column.

Input Data

Item No.	Item	Default	New	Related Program
01	Step Call	#		
02	Barge In	No Setting		
03	Switching of Voice/Signal Call	1		
04	Intercom Off Hook Signaling	7		
05	Camp-On	2		
06	DND/Call Forward Override	No Setting		
07	Message Waiting	0		
08	Voice Over	6		
09	Access to Voice Mail	8		
10	STG All Ring Mode	No Setting		16-01-05

Conditions

None

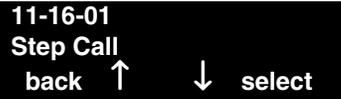
Feature Cross Reference

Refer to chart above.

Telephone Programming Instructions

To enter data for Program 11-16 (Single Digit Service Code Setup):

1. Enter the programming mode.
2. 11 16



11-16-01
Step Call
back ↑ ↓ select

3. Enter the number of the item you want to program.



11-16-nn
nnnnn
← →

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
OR
Press MSG once to enter a new item number.
OR
Press MSG until you've exited that series's programming section.

Programming

14-01 : Basic Trunk Data Setup

Level:

IN

Aspire

- Available.

Description

Use **Program 14-01 : Basic Trunk Data Setup** to set the basic options for each trunk port. Refer to the chart below for a description of each option, its range and default setting.

Input Data

Trunk port number	1-200
-------------------	-------

Item No.	Item	Input Data	Default	Related Program
01	Trunk Name Set the names for trunks. The trunk name displays at display keysets for incoming and outgoing calls.	Up to 12 characters	1 = Line 001 Line 200 = Line 200	
02	Transmit CODEC Gain Type Use this option to select the CODEC gain for the trunk. The option sets the amount of gain (signal amplification) for the trunk you are programming.	1~63 (-15.5 - +15.5dB in .5dB intervals)	32 (0dB)	
03	Receive CODEC Gain Type Use this option to select the CODEC gain for the trunk. The option sets the amount of gain (signal amplification) for the trunk you are programming.	1~63 (-15.5 - +15.5dB in .5dB intervals)	32 (0dB)	
04	Transmit Gain Level for Conference and Transfer Calls Use this option to select the CODEC gain type used by the trunk when it is part of an Unsupervised Conference.	1~63 (-15.5 - +15.5dB in .5dB intervals)	22 (-5dB)	
05	Receive Gain Level for Conference and Transfer Calls Use this option to select the CODEC gain type used by the trunk when it is part of an Unsupervised Conference.	1~63 (-15.5 - +15.5dB in .5dB intervals)	22 (-5dB)	
06	SMDR Print Out Use this option to have the system include/exclude the trunk you are programming from the SMDR printout. See Program 35-01 and 35-02 for SMDR printout options.	0- No print out 1- Prints out	0	

Programming

14-01 : Basic Trunk Data Setup

Item No.	Item	Input Data	Default	Related Program
07	Outgoing Calls Use this option to allow/prevent outgoing calls on the trunk you are programming.	0- prevented 1- allowed	1	
08	Toll Restriction Use this option to enable/disable Toll Restriction for the trunk. If enabled, the trunk follows Toll Restriction programming (ex: Programs 21-05, 21-06). If disabled, the trunk is a toll free line.	0- Restriction disable 1- Restriction enable	1	21-04 21-05 21-06
09	Private line	0- Private line disable 1- Private line enable	0	
10	DTMF Tones for Outgoing Calls Use this option to enable (1) or disable (0) DTMF tones for outgoing trunk calls.	0- disable 1- enable	0	
11	Account code required	0- disable 1- enable	1	
12	- Not Used -		1	
13	Loop Disconnect Supervision Use this option to enable (1) or disable (0) loop supervision for the trunk. This option is required for Call Forwarding Off-Premise and Tandem Trunking only.	0- disable 1- enable	1	
14	Long Conversation Cutoff Use this option to enable or disable the Long Conversation Cutoff feature for each trunk.	0- disable 1- enable	0	20-21-03 20-21-04
15	Long Conversation Alarm Before Cut Off Use this option to enable or disable the Long Conversation Alarm for each trunk.	0- disable 1- enable	0	20-21-01 20-21-02
16	Forced Release of Held Call Use this option to enable/disable forced release for calls on Hold. If enabled, the system disconnects a call if it is on Hold longer than a programmed interval (Program 24-01-05). If disabled, forced disconnection does not occur. Program 24-01-01 also affects this option.	0- disable 1- enable	0	24-01-05
17	Trunk to Trunk Warning Tone for Long Conversation Alarm Use this option to enable or disable the Warning Tone for Long Conversation feature for DISA callers.	0- disable 1- enable	0	

Programming

14-01 : Basic Trunk Data Setup

Item No.	Item	Input Data	Default	Related Program
18	Warning Beep Tone Signaling	0- disable 1- enable	0	
19	Privacy Mode Toggle Option Use this option to enable or disable a trunk's ability to be switched from private to non-private mode by pressing the line key or Privacy Release function key.	0- disable 1- enable	0	
20	Block Outgoing Caller ID Allow (1) or prevent (0) the system from automatically blocking outgoing Caller ID information when a user places a call. If allowed (i.e. block, enabled), the system automatically inserts the Caller ID block code *67 (defined in 14-01-21) before the user dialed digits.	0- Allow 1- Block	0	
21	Caller ID Block Code Enter the code, up to 8 digits, that should be used as the Caller ID Block Code. This code is automatically inserted before dialed digits if Program 14-01-20 is set to '1'.	Dial (up to 8 digits)	*67	
22	Caller ID to Voice Mail Enable or disable the system's ability to send the Caller ID digits (Remote Log-On Protocol) to voice mail.	0- disable 1- enable	0	
23	LCR Enable (1) or disable (0) a trunk's ability to use Least Cost Routing.	0 = LCR Off 1 = LCR On 2 = LCR On (Cost Center Code Only)	0	

Default

Trunk Port Number	Name
001	LINE 001
002	LINE 002
:	:
200	LINE 200

Conditions

None

Feature Cross Reference

Refer to features in above chart.

Telephone Programming Instructions

To enter data for Program 14-01 (Basic Trunk Data Setup):

1. Enter the programming mode.
2. 14 01

```
14-01-01   Trunk1
TRK Name = LINE 001
back  ↑    ↓  select
```

3. Enter the number of the item you want to program.

```
14-01-nn   Trunknnn
nnnnn
←          →
```

4. Select the trunk number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
OR
Press MSG once to enter a new item number.
OR
Press MSG until you've exited that series's programming section.

Programming

16-01 : Department Group Basic Data Setup

Level:

IN

Aspire

- Available.

Description

Use **Program 16-01 : Department Group Basic Data Setup** to set the function mode for each department group.

Input Data

Department Group Number	01-64
-------------------------	-------

Item No.	Item	Input Data	Default	Related Program
01	Department Name	Max. 12 characters	No setting	11-07
02	Department Calling Cycle Use this option to set the call routing for Department Calling. Routing can be either circular (cycles to all phones in group) or priority (cycles to highest priority extensions first).	0- Priority Routing 1- Circular Routing	0	16-02
03	Department Routing When Busy Use this option to set how the system routes an Intercom call to a busy Department Group member. Intercom callers to the extension can either hear busy or route to the first available department number. This only occurs for calls to the extension directly, not the department number.	0- Normal (Intercom caller to busy department member hears busy) 1- Circular (Intercom callers to busy department member routes to idle member)	0	16-02
04	Hunting Mode	0- A last extension is called and hunting is stopped. 1- Circular	0	
05	Extension Group All Ring Mode Operation	0- Manual 1- Automatic	0	11-16-10

Programming

16-01 : Department Group Basic Data Setup

Item No.	Item	Input Data	Default	Related Program
06	STG withdraw mode	0- Disable (Camp On) 1- Enable (Overflow Mode)	0	
07	Call Recall Restriction for STG	0- Disable(Recall) 1- Enable (non-Recall)	0	
08	Maximum Queuing Number of Extension Group Call	0-32 (0 : No limitation)	0	
09	Department Hunting No Answer Time Set how long a call will ring a Department group extension before hunting occurs.	0-64800 seconds	15	
10	Hunt Type Set the type of hunting for each Extension (Department) Group:	0- No queuing 1- Hunting When Busy 2- Hunting When Not Answered 3- Hunting When Busy or No Answer	0	

Conditions

None

Feature Cross Reference

- Department Calling

Programming

16-01 : Department Group Basic Data Setup

Telephone Programming Instructions

To enter data for Program 16-01 (Department Group Basic Data Setup):

1. Enter the programming mode.
2. 16 01

```
16-01-01 TEL Group1
Dept.Name =
back ↑ ↓ select
```

3. Enter the number of the item you want to program.

```
16-01-nn TEL Groupnn
nnnnn
← →
```

4. Select the Department Group number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
OR
Press MSG once to enter a new item number.
OR
Press MSG until you've exited that series's programming section.

16-02 : Department Group Assignment for Extensions

Level: IN	Aspire
	<ul style="list-style-type: none"> Available.

Description

Use **Program 16-02 : Department Group Assignment for Extensions** to set the Department Groups. The system uses these groups for Department Calling. Assign pilot numbers to Department Groups you set up in Program 16-01. This lets system users place calls to the departments. Also use this program to set the priority of each extension within each Department Group. When a call comes into the group, it may ring the extensions in order of their priority.

Input Data

Extension Number	Max. 8 digits
------------------	---------------

Group Number	Priority	Default	Description	Related Program
1-64	1-999	1 – xxx (See Note Below)	Set up the Department Group called by the pilot number and the extension priority when a group is called. Call Pickup Groups are set up in 23-02.	11-07

Note: The initial value of a priority becomes the ports numerical order assigned in Program 11-02 and 11-04.

Conditions

None

Feature Cross Reference

- Department Calling

Programming

16-02 : Department Group Assignment for Extensions

Telephone Programming Instructions

To enter data for Program 16-02 (Department Group Assignment for Extensions):

1. Enter the programming mode.
2. 16 02

```
16-02-01 TEL301
Extension Group1
back ↑ ↓ select
```

3. Enter the number of the item you want to program.

```
16-02-nn TELnnn
nnnnn
← →
```

4. Select the telephone number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
OR
Press MSG once to enter a new item number.
OR
Press MSG until you've exited that series's programming section.

Programming

22-05 : Incoming Trunk Ring Group Assignment

Level:
IN

Aspire

- Available.

Description

Use **Program 22-05 : Incoming Trunk Ring Group Assignment** to assign trunks to incoming Ring Groups.

Input Data

Trunk Port Number	001-200
-------------------	---------

Day/Night Mode	Incoming Group Number	Default	Description	Related Program
1-8	0 (No setting) 1-100 (Incoming Group) 101 (DSPDB Voice Mail) 102 (In-Skin/External Voice Mail) 103 (Centralized Voice Mail)	1	Use this program to assign Normal Ring Trunks (22-02) to Incoming Ring Groups (22-04).	22-04 22-06

Conditions

None

Feature Cross Reference

- Ring Groups

Programming

22-05 : Incoming Trunk Ring Group Assignment

Telephone Programming Instructions

To enter data for Program 22-05 (Incoming Trunk Ring Group Assignment):

1. Enter the programming mode.
2. 22 05

```
22-05-01  Trunk1
Mode1     =1
back  ↑   ↓  select
```

3. Enter the number of the item you want to program.

```
22-05-nn  Trunknnn
nnnnn
←         →
```

4. Select the trunk number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
OR
Press MSG once to enter a new item number.
OR
Press MSG until you've exited that series's programming section.

Programming

22-08 : DIL/IRG No Answer Destination

Level:

IN

Aspire

- Available.

Description

For DIL Delayed Ringing, use **Program 22-08 : DIL/IRG No Answer Destination** to assign the DIL No Answer Ring Group. An unanswered DIL rings this group after the DIL No Answer Time expires (Program 22-01-04). DIL Delayed Ringing can also reroute outside calls ringing a Ring Group.

You make eight assignments, one for each Night Service mode.

Input Data

Trunk Port Number	001-200
-------------------	---------

Day/Night Mode	Incoming Group Number	Default
1-8	0 (No setting) 1-100 (Incoming Group) 101 (DSPDB Voice Mail) 102 (In-Skin/External Voice Mail) 103 (Centralized Voice Mail)	1

Conditions

None

Feature Cross Reference

- Direct Inward Line (DIL)
- Ring Group

Programming

22-08 : DIL/IRG No Answer Destination

Telephone Programming Instructions

To enter data for Program 22-08 (DIL/IRG No Answer Destination):

1. Enter the programming mode.
2. 22 08

```
22-08-01 Trunk1
Mode1    =1
back  ↑   ↓  select
```

3. Enter the number of the item you want to program.

```
22-08-nn Trunknnn
nnnnn
←           →
```

4. Select the trunk number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
OR
Press MSG once to enter a new item number.
OR
Press MSG until you've exited that series's programming section.

Programming

22-10 : DID Translation Table Setup

Level:
IN

Aspire

- Available.

Description

Use **Program 22-10 : DID Translation Table Setup** to specify the size of the DID Translation Tables. There are 2000 Translation Table entries that you can allocate among 20 Translation Tables.

Conditions

None

Input Data

Conversion Table Area Number	01-20
------------------------------	-------

Item	Input data
1st Area Setup (Start Address)	0-2000 (0: No setting)
1st Area Setup (End Address)	
2nd Area Setup (Start Address)	
2nd Area Setup (End Address)	

Default

Conversion Table Area	1st		2nd	
	Start Table	End Table	Start Table	End Table
1	1	100	0	0
2	101	200	0	0
3	201	300	0	0
4	301	400	0	0
:	:	:	:	:
20	0	0	0	0

Conditions

None

Feature Cross Reference

- Direct Inward Dialing (DID)

Programming

22-10 : DID Translation Table Setup

Telephone Programming Instructions

To enter data for Program 22-10 (DID Translation Table Setup):

1. Enter the programming mode.
2. 22 10

```
22-10-01 Conv Area1
No.1_Start_Add1
back ↑ ↓ select
```

3. Enter the number of the item you want to program.

```
22-10-nn Conv Areann
nnnnn
← →
```

4. Select the Conversion Table Area number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
OR
Press MSG once to enter a new item number.
OR
Press MSG until you've exited that series's programming section.

Programming

22-11 : DID Translation Number Conversion

Level:	Aspire
SA	<ul style="list-style-type: none"> • Available.

Description

Use **Program 22-11 : DID Translation Table Number Conversion** to specify for each Translation Table entry (2000):

- The digits received by the system (eight max.)
- The extension the system dials after translation (24 digits max.)
- The name that should show on the dialed extension's display when it rings (twelve characters max.)
- The Transfer Target-1 and 2
If the Transfer Targets are busy or receive no answer, those calls are transferred to the final transfer destination (Program 22-10).
- Operation mode

Use the following chart when entering and editing text for names. Press the key once for the first character, twice for the second character, etc. For example, to enter a C, press "2" three times.

Key for Entering Names	
Use this keypad digit . . .	When you want to . . .
1	Enter characters: 1 @ [¥] ^ _ ' { } ← → Press repeatedly to scroll through the list. After selecting your entry, press the next letter or use the left scroll or right scroll Soft Key to move the cursor.
2	Enter characters A-C, a-c, 2. After selecting your entry, press the next letter or use the left scroll or right scroll Soft Key to move the cursor.
3	Enter characters D-F, a-f, 3. After selecting your entry, press the next letter or use the left scroll or right scroll Soft Key to move the cursor.
4	Enter characters G-I, g-i, 4. After selecting your entry, press the next letter or use the left scroll or right scroll Soft Key to move the cursor.
5	Enter characters J-L, j-l, 5. After selecting your entry, press the next letter or use the left scroll or right scroll Soft Key to move the cursor.
6	Enter characters M-O, m-o, 6. After selecting your entry, press the next letter or use the left scroll or right scroll Soft Key to move the cursor.
7	Enter characters P-S, p-s, 7. After selecting your entry, press the next letter or use the left scroll or right scroll Soft Key to move the cursor.
8	Enter characters T-V, t-v, 8. After selecting your entry, press the next letter or use the left scroll or right scroll Soft Key to move the cursor.
9	Enter characters W-Z, w-z, 9. After selecting your entry, press the next letter or use the left scroll or right scroll Soft Key to move the cursor.
0	Enter characters: 0 ! " # \$ % & ' () Press repeatedly to scroll through the list. After selecting your entry, press the next letter or use the left scroll or right scroll Soft Key to move the cursor.

Programming

22-11 : DID Translation Number Conversion

Key for Entering Names	
Use this keypad digit . . .	When you want to . . .
*	Enter characters: * + , - . / : ; < = > ? Press repeatedly to scroll through the list. After selecting your entry, press the next letter or use the left scroll or right scroll Soft Key to move the cursor.
#	# = Accepts an entry (only required if two letters on the same key are needed - ex: STA). Pressing # again = Space.
CONF	Clear the character entry one character at a time.
FLASH	Clear all the entries from the point of the flashing cursor and to the right.

Input Data

Conversion Table Number	1-2000
-------------------------	--------

Item No.	Item	Input Data	Default
01	Received Number	Max. 8 digits	No setting
02	Target Number	Max. 24 digits	No setting
03	DID Name	Max. 12 characters	No setting
04	Transfer Operation Mode	0- No transfer 1- Busy 2- No answer 3- Busy / No answer	0
05	Transfer Destination Number -1	0: No setting	0
06	Transfer Destination Number -2	1-100: Incoming Group 101: DSPDB Voice Mail 102: In-Skin/External Voice Mail 103: Centralized Voice Mail 201-264: Extension Group 400: DID 401: DISA 1000-1999: Abbreviated Number (000-999)	0
07	Call Waiting	0: Disable 1: Enable	0
08	Maximum Number of DID Calls	0-200 (0: no limit)	0
09	Music on Hold Source	0: IC/MOH Port 1: BGM Port 2: ACI Port	0
10	ACI Music Source Port	When a sound source type is 2 in above : (0-96)	0

Programming

22-11 : DID Translation Number Conversion

Conditions

None

Feature Cross Reference

- Direct Inward Dialing (DID)

Telephone Programming Instructions

To enter data for Program 22-11 (DID Translation Number Conversion):

1. Enter the programming mode.
2. 22 11

```
22-11-01  Conv TBL 1
Received_Dial
back ↑ ↓ select
```

3. Enter the number of the item you want to program.

```
22-11-nn  ConvTBLnnnn
nnnnn
← →
```

4. Select the Conversation Table number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
OR
Press MSG once to enter a new item number.
OR
Press MSG until you've exited that series's programming section.

Programming

22-12 : DID Intercept Ring Group

Level: IN	Aspire
<ul style="list-style-type: none"> • Available. 	

Description

For each DID Translation Table, use **Program 22-12 : DID Intercept Ring Group** to define the first destination group for DID calls.

Depending on the entry in Program 22-09 and 22-11, the incoming calls will route to the first destination group by the following:

- Vacant number intercept (vacant number means that there is no phone connected, no station card installed, or the extension number is not defined in Program 11-02)
- Busy intercept
- Ring-no-answer intercept

If the destination is '0', the calls will be forwarded to the trunk ring group defined in Program 22-11 based on the table assigned to the DID trunk.

Note: If Program 22-11-05 and 22-11-06 are set, the priority of transferring will be in this order:
 Program 22-11-05  Program 22-11-06  Program 22-12.

Input Data

Conversion Table Area Number	01-20
------------------------------	-------

Day/Night Mode	Incoming Group Number	Default
1-8	0 (No Setting) 1-100 (Incoming Group) 101 (DSPDB Voice Mail) 102 (In-Skin/External Voice Mail)	1

Conditions

None

Feature Cross Reference

- Direct Inward Dialing (DID)

Telephone Programming Instructions

To enter data for Program 22-12 (DID Intercept Ring Group):

1. Enter the programming mode.
2. 22 12

```
22-12-01 Conv Area1
Mode1      =1
back  ↑    ↓  select
```

3. Enter the number of the item you want to program.

```
22-12-nn Conv Areann
nnnnn
←                →
```

4. Select the Conversion Table Area number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
OR
Press MSG once to enter a new item number.
OR
Press MSG until you've exited that series's programming section.

Programming

25-03 : DID/DISA Transfer Ring Group With Incorrect Dialing

Level: IN	Aspire <ul style="list-style-type: none">Available.
---------------------	--

Description

Use **Program 25-03 : DID/DISA Transfer Ring Group With Incorrect Dialing** to set what happens to a call when the DISA or Automated Attendant caller dials incorrectly or waits too long to dial. The call can either disconnect (0) or Transfer to an alternate destination (a ring group or voice mail). When setting the DISA and DID Operating Mode, you make an entry for each Night Service mode.

Input Data

Trunk Port Number	001-200
-------------------	---------

Day/Night Mode	Incoming Group Number	Default	Related Program
1-8	0 (Disconnect) 1-100 (Incoming Group) 101 (DSPDB Voice Mail) 102 (In-Skin/External Voice Mail) 103 (Centralized Voice Mail)	0	22-04

Conditions

None

Feature Cross Reference

- Direct Inward System Access (DISA)

Telephone Programming Instructions

To enter data for Program 25-03 (DID/DISA Transfer Ring Group With Incorrect Dialing):

1. Enter the programming mode.
2. 25 03

```
25-03-01 Trk Port 1
Mode1 Target_IRG=0
back ↑ ↓ select
```

3. Enter the number of the item you want to program.

```
25-03-nn Trk Portnnn
nnnnn
← →
```

4. Select the Trunk Port number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
OR
Press MSG once to enter a new item number.
OR
Press MSG until you've exited that series's programming section.

Programming

25-04 : DID/DISA Transfer Ring Group With No Answer/Busy

Level: IN	Aspire • Available.
---------------------	-------------------------------

Description

Use **Program 25-04 : DID/DISA Transfer Ring Group With No Answer/Busy** to set the operating mode of each DISA trunk. This sets what happens to the call when the DISA or Automated Attendant caller calls a busy or unanswered extension. The call can either disconnect (0) or Transfer to an alternate destination (a ring group or voice mail). When setting the DISA and DID Operating Mode, you make an entry for each Night Service mode.

Input Data

Trunk Port Number	001-200
-------------------	---------

Day/Night Mode	Incoming Group Number	Default	Related Program
1-8	0 (Disconnect) 1-100 (Incoming Ring Group) 101 (DSPDB Voice Mail) 102 (In-Skin/External Voice Mail) 103 (Centralized Voice Mail)	0	22-04

Conditions

None

Feature Cross Reference

- Direct Inward System Access (DISA)

Telephone Programming Instructions

To enter data for Program 25-04 (DID/DISA Transfer Ring Group With No Answer/Busy):

1. Enter the programming mode.
2. 25 04

```
25-04-01 Trk Port 1
Mode1 Target_IRG=0
back ↑ ↓ select
```

3. Enter the number of the item you want to program.

```
25-04-nn Trk Portnnn
nnnnn
← →
```

4. Select the Trunk Port number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
OR
Press MSG once to enter a new item number.
OR
Press MSG until you've exited that series's programming section.

Programming

44-01 : System Options for ARS/F-Route

Level: IN	Aspire • Available.
---------------------	-------------------------------

Description

Use **Program 44-01 : System Options for ARS/F-Route** to define the system options for the ARS/F-Route feature.

Input Data

Item No.	Item	Input Data	Default
01	ARS/F-Route Time Schedule If this option is set to '0', the F-Route table selected is determined only by the digits dialed without any relation to the day or time of the call. If this option is set to '1', the system first refers to Program 44-10. If there is a match, the pattern defined in that program is used. If not, the F-Route pattern in Program 44-09 and time setting in 44-08 are used.	0- Not Used 1- Used	0

Conditions

None

Feature Cross Reference

- Automatic Route Selection (ARS)/F-Route

Telephone Programming Instructions

To enter data for Program 44-01 (System Options for ARS/F-Route):

1. Enter the programming mode.
2. 44 01

```
44-01-01
F-Route_Mode 0:No
back ↑ ↓ select
```

3. Enter the number of the item you want to program.

```
44-01-nn
nnnnn
← →
```

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
OR
Press MSG once to enter a new item number.
OR
Press MSG until you've exited that series's programming section.

Programming

44-02 : Dial Analysis Table for ARS/F-Route Access

Level:
IN

Aspire

- Available.

Description

Use **Program 44-02 : Dial Analysis Table for ARS/F-Route Access** to set the Pre-Transaction Table for selecting ARS/F-Route.

Input Data

Dial Analysis Table Number	1-120
----------------------------	-------

Item No.	Item	Input Data	Default
01	<p>Dial Set the number of digits to be analyzed by the system for ARS routing.</p>	<p>Up to 8 digits (Use line key 1 for a “Don’t Care” digit, @)</p>	No setting
02	<p>Service Type</p> <ul style="list-style-type: none"> • Service Type 1 (Extension number) The number goes to an extension after deleting the front digit(s). <p><i>Additional data</i> Assign the digit(s) to be deleted on top of the number for extension number usage. There must be at least one digit deleted.</p> <ul style="list-style-type: none"> • Service Type 2 (ARS/F-Route) The number is controlled by ARS/F-Route table. <p><i>Additional data</i> If the ARS/F-Route Time Schedule is not used, assign the ARS/F-Route table number for Program 44-05. If the ARS/F-Route Time Schedule is used, assign the ARS/F-Route selection number for Program 44-04.</p> <ul style="list-style-type: none"> • Service Type 3 (Dial Extension Analyze Table) The total length of the number exceeds more than 8 digits. <p><i>Additional data</i> Assign the Dial Extension Analysis Table number to be used in Program 44-03.</p>	<p>0=No setting 1=Extension Call 2=ARS/F-Route Table 3=Dial Extension Analyze Table</p>	0

Programming

44-02 : Dial Analysis Table for ARS/F-Route Access

Item No.	Item	Input Data	Default
03	Additional Data For the Service Type selected in 44-02-02, enter the additional data required. <ul style="list-style-type: none">1: Delete Digit = 0-255 (255=delete all digits)2: <i>[Program 44-01 : 0]</i> ARS/F-Route Table Number = 0-500 (0=No setting) Refer to Program 44-05. <i>[Program 44-01 : 1]</i> ARS/F-Route Select Table Number = 0-500 (0=No setting) Refer to Program 44-04.3: Dial Extension Analyze Table Number = 0-4 (0=No setting) Refer to Program 44-03.	<ul style="list-style-type: none">1: Delete Digit = 0-255 (255 : delete all digits)2: 0-500 (0=No setting)3: Dial Extension Analyze Table Number = 0-4 (0=No setting)	0
04	Dial Tone Simulation If enabled, this option sends dial tone to the calling party once the routing is determined. This may be required if the central office at the destination does not send dial tone.	0=off 1=on	0

Conditions

None

Feature Cross Reference

- Automatic Route Selection (ARS)/F-Route

Telephone Programming Instructions

To enter data for Program 44-02 (Dial Analysis Table for ARS/F-Route Access):

1. Enter the programming mode.
2. 44 02

```
44-02-01  Analyze TBL1
Dial
back  ↑    ↓  select
```

3. Enter the number of the item you want to program.

```
44-02-nn  Analyze TBLnnn
nnnnn
←          →
```

4. Select the Analyze Table number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
OR
Press MSG once to enter a new item number.
OR
Press MSG until you've exited that series's programming section.

Programming

44-03 : Dial Analysis Extension Table

Level: IN	Aspire
• Available.	

Description

When Program 44-02-02 is set to type “3”, use **Program 44-03 : Dial Analysis Extension Table** to set the dial extension analysis table. These tables are used when the analyzed digits must be more than 8 digits. If the received digits do not match the digits set in tables 1-250, table number 252 is used refer to the next Extension Table Area (1-4) to be searched. If the received digits are not identified in tables 1-250, the F-Route selection table number defined in table 251 is used.

Input Data

Extension Table Area Number	1-4
Dial Analysis Table Number	1-252

Dial Analysis Table Number : 1-250

Item No.	Item	Input Data	Default
01	Dial	Up to 24 digits Digits = 1-9, 0, *, #, @ (Press Line Key 1 for wild character @)	No setting
02	ARS/F-Route Select Table Number	0-500 (ARS/F-Route Table Number) With Program 44-01 set to 0, Program 44-05 is then checked. With Program 44-01 set to 1, Program 44-04 is then checked.	0

Dial Analysis Table Number : 251

Item No.	Item	Input Data	Default
03	ARS/F-Route Select table Number	0-500 (ARS/F-Route Table Number) With Program 44-01 set to 0, Program 44-05 is then checked. With Program 44-01 set to 1, Program 44-04 is then checked.	0

Programming

44-03 : Dial Analysis Extension Table

Dial Analysis Table Number : 252

Item No.	Item	Input Data	Default
04	Next Table Area Number	0-4	0

Conditions

None

Feature Cross Reference

- Automatic Route Selection (ARS)/F-Route

Telephone Programming Instructions

To enter data for Program 44-03 (Dial Analysis Extension Table):

1. Enter the programming mode.
2. 44 03

```
44-03-01  Exp-Table 1
001:Dial =
back ↑      ↓ select
```

3. Enter the number of the item you want to program.

```
44-03-nn  Exp-Table n
nnnnn
←          →
```

4. Select the Extension Table number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
OR
Press MSG once to enter a new item number.
OR
Press MSG until you've exited that series's programming section.

Programming

44-04 : ARS/F-Route Selection for Time Schedule

Level: IN	Aspire <ul style="list-style-type: none">• Available.
---------------------	--

Description

Use **Program 44-04 : ARS/F-Route Selection for Time Schedule** to assign each ARS/F-Route Selection number to an ARS/F-Route table number for each ARS/F-Route time mode. There are 8 time modes for ARS/F-Route Access.

Input Data

ARS/F-Route Selection Number	1-500
------------------------------	-------

ARS/F-Route Time Mode	ARS/F-Route Table Number	Default
1-8	0-500	0

Conditions

None

Feature Cross Reference

- Automatic Route Selection (ARS)/F-Route

Telephone Programming Instructions

To enter data for Program 44-04 (ARS/F-Route Selection for Time Schedule):

1. Enter the programming mode.
2. 44 04

```
44-04-01  Select No 1
F-Route Mode1=0
back  ↑  ↓  select
```

3. Enter the number of the item you want to program.

```
44-04-nn  Select No nnn
nnnnn
←  →
```

4. Select the ARS/F-Route Selection number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
OR
Press MSG once to enter a new item number.
OR
Press MSG until you've exited that series's programming section.

Programming

44-05 : ARS/F-Route Table

Level:
IN

Aspire

- Available.

Description

Use **Program 44-05 : ARS/F-Route Table** to set the ARS/F-Route table. There are 4 kinds of order. If the higher priority trunk groups are busy, the next order group will be used. If a lower priority route is selected, the caller may be notified with a beep tone.

Input Data

ARS/F-Route Table Number	1-500
--------------------------	-------

Priority Number	1-4
-----------------	-----

Item No.	Item	Input Data	Default
01	Trunk Group Number Select the trunk group number to be used for the outgoing ARS call.	0-100, 101-150, 255 (0 = No setting, 101-150 = Networking, 255 = Extension Call)	0
02	Delete Digits Enter the number of digits to be deleted from the dialed number.	0-255 (255 = Delete all)	0
03	Additional Dial Number Table Enter the table number (defined in Program 44-06) for additional digits to be dialed.	0-1000	0
04	Beep Tone Select whether or not a beep is heard if a lower priority trunk group is used to dial out.	0 = off 1 = on	0
05	Gain Table Number for Internal Calls Select the gain table number to be used for the internal call (defined in Program 44-07).	0-500 (0 = No setting)	0
06	Gain Table Number for Tandem Connections Select the gain table number to be used for the tandem call (defined in Program 44-07).	0-500 (0 = No setting)	0
07	ARS Class of Service Select the ARS Class of Service to be used for the table. An extension's ARS COS is determined in Program 26-04-01.	0-16	0

Programming

44-05 : ARS/F-Route Table

08	Dial Treatment Select the Dial Treatment to be used for the table. If a Dial Treatment is selected, Programs 44-05-02 and 44-05-03 are ignored and the Dial Treatment defined in Program 26-03-01 is used instead.	0-15	0
----	--	------	---

Conditions

None

Feature Cross Reference

- Automatic Route Selection (ARS)/F-Route

Telephone Programming Instructions

To enter data for Program 44-05 (ARS/F-Route Table):

1. Enter the programming mode.
2. 44 05

```
44-05-01 F-route TBL1
PRI1:TRK GP =0
back ↑ ↓ select
```

3. Enter the number of the item you want to program.

```
44-05-nn F-route TBLnnn
nnnnn
← →
```

4. Select the ARS/F-Route Table number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
OR
Press MSG once to enter a new item number.
OR
Press MSG until you've exited that series's programming section.

Level:	Aspire
IN	<ul style="list-style-type: none"> • Available.

Description

Use **Program 44-06 : Additional Dial Table** to set the additional dial table to add prior to the dialed ARS/F-Route number. The Additional Dial Table used is determined in Program 44-05-03.

Input Data

Additional Dial Table Number	1-1000
------------------------------	--------

Additional Dial	Default
Up to 24 digits Enter: 1-9, 0, *, #, Pause (press line key 1 to enter a pause)	No setting

Conditions

None

Feature Cross Reference

- Automatic Route Selection (ARS)/F-Route

Telephone Programming Instructions

To enter data for Program 44-06 (Additional Dial Table):

1. Enter the programming mode.
2. 44 06

```

4-06-01  Add TBL1
Dial =
back  ↑   ↓  select
```

3. Enter the number of the item you want to program.

```

44-06-nn  Add TBLnnnn
nnnnn
←         →
```

4. Select the Additional Dial Table number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
 - OR
 - Press MSG once to enter a new item number.
 - OR
 - Press MSG until you've exited that series's programming section.

Programming

44-07 : Gain Table for ARS/F-Route Access

Level: IN	Aspire
• Available.	

Description

Use **Program 44-07 : Gain Table for ARS/F-Route Access** to set the gain/PAD table. If an extension dials ARS/F-Route number;

- The Extension Dial Gain Table is activated, which is assigned in Program 44-05.
- The Extension Dial Gain Table follows “Outgoing transmit” and “Outgoing receive” settings.

If the incoming call is transferred to another line using ARS/F-Route;

- The Tandem Gain Table is activated, which is assigned in Program 44-05.
- The Tandem Gain Table follows the “Incoming transmit” and “Incoming receive” settings for incoming line, and “Outgoing transmit” and “Outgoing receive” settings for the outgoing line.

Note: For ARS/F-Route calls, the CODEC gains defined in Program 14-01-02 and 14-01-03 are not activated.

Input Data

Gain Table Number	1-500
-------------------	-------

Item No.	Item	Input Data	Default
01	Incoming Transmit	1-63 (-15.5 ...+15.5dB)	32
02	Incoming Receive	1-63 (-15.5 ...+15.5dB)	32
03	Outgoing Transmit	1-63 (-15.5 ...+15.5dB)	32
04	Outgoing Receive	1-63 (-15.5 ...+15.5dB)	32

Conditions

None

Feature Cross Reference

- Automatic Route Selection (ARS)/F-Route

Programming

44-07 : Gain Table for ARS/F-Route Access

Telephone Programming Instructions

To enter data for Program 44-07 (Gain Table for ARS/F-Route Access):

1. Enter the programming mode.
2. 44 07

```
44-07-01  Gain TBL 1
INC Transmit 32
back  ↑      ↓  select
```

3. Enter the number of the item you want to program.

```
44-07-nn  Gain TBL nnn
nnnnn
←          →
```

4. Select the Gain Table number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
OR
Press MSG once to enter a new item number.
OR
Press MSG until you've exited that series's programming section.

Programming

44-08 : Time Schedule for ARS/F-Route

Level: IN	Aspire
<ul style="list-style-type: none"> Available. 	

Description

Use **Program 44-08 : Time Schedule for ARS/F-Route** to define the daily pattern of the ARS/F-Route feature. ARS/F-Route has 10 time patterns. These patterns are used in Program 44-09 and 44-10. The daily pattern consists of 20 time settings.

Input Data

Schedule Pattern Number	01-10
-------------------------	-------

Time Number	Start Time	End Time	Mode
01-20	0000-2359	0000-2359	1-8

Default

All Schedule Patterns : 0:00 – 0:00, Mode 1

Example:

Pattern 1

0:00	8:00	18:00	22:00	0:00
Mode 3	Mode 1	Mode 2	Mode 3	

Time Number 01 : 00:00 – 08:00 Mode 3

Time Number 02 : 08:00 – 18:00 Mode 1

Time Number 03 : 18:00 – 22:00 Mode 2

Time Number 04 : 22:00 – 00:00 Mode 3

Pattern 2

0:00	0:00
Mode 2	

Time Number 01 : 0:00 – 0:00 Mode 2

Conditions

None

Feature Cross Reference

- Automatic Route Selection (ARS)/F-Route

Telephone Programming Instructions

To enter data for Program 44-08 (Time Schedule for ARS/F-Route):

1. Enter the programming mode.
2. 44 08

```
44-08-01  Time Pttn 1
T-Zone01:Start =00:00
back  ↑      ↓  select
```

3. Enter the number of the item you want to program.

```
44-08-nn  Time Pttn nn
nnnnn
←          →
```

4. Select the Time Pattern number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
OR
Press MSG once to enter a new item number.
OR
Press MSG until you've exited that series's programming section.

Programming

44-09 : Weekly Schedule for ARS/F-Route

Level:

IN

Aspire

- Available.

Description

Use **Program 44-09 : Weekly Schedule for ARS/F-Route** to define a weekly schedule for using ARS/F-Route. The pattern number is defined in Program 44-08-01.

Input Data

Day Number	Schedule Pattern Number	Default
1 : Sunday	1-10	Pattern 1
2 : Monday	1-10	Pattern 1
3 : Tuesday	1-10	Pattern 1
4 : Wednesday	1-10	Pattern 1
5 : Thursday	1-10	Pattern 1
6 : Friday	1-10	Pattern 1
7 : Saturday	1-10	Pattern 1

Conditions

None

Feature Cross Reference

- Automatic Route Selection (ARS)/F-Route

Telephone Programming Instructions

To enter data for Program 44-09 (Weekly Schedule for ARS/F-Route):

1. Enter the programming mode.
2. 44 09

```
44-09-01
Sunday Pattern=1
back ↑ ↓ select
```

3. Enter the number of the item you want to program.

```
44-09-nn
nnnnn
← →
```

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
OR
Press MSG once to enter a new item number.
OR
Press MSG until you've exited that series's programming section.

Programming

44-10 : Holiday Schedule for ARS/F-Route

Level:

IN

Aspire

- Available.

Description

Use **Program 44-10 : Holiday Schedule for ARS/F-Route** to define a yearly schedule for ARS/F-Route. This schedule is used for setting special days such as national holidays. The pattern number is defined in Program 44-08-01.

Input Data

Date	Schedule Pattern Number	Default
0101- 1231	0-10 (0 : No setting)	No Setting

Conditions

None

Feature Cross Reference

- Automatic Route Selection (ARS)/F-Route

Telephone Programming Instructions

To enter data for Program 44-10 (Holiday Schedule for ARS/F-Route):

1. Enter the programming mode.
2. 44 10

```
44-10-01
Date01/01  =PTTN_0
back  ↑    ↓  select
```

3. Enter the number of the item you want to program.

```
44-10-nn
nnnnn
←      →
```

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
OR
Press MSG once to enter a new item number.
OR
Press MSG until you've exited that series's programming section.

Programming

45-01 : Voice Mail Integration Options

Level:
IN

Aspire

- Available.

Description

Use **Program 45-01 :Voice Mail Integration Options** to customize certain voice mail integration options.

Input Data

Item No.	Item	Input Data	Default
01	Voice Mail Department Group Number Assign which Extension (Department) Group number is to be assigned as the voice mail group.	0 - 64 (0=no voice mail)	0
02	Voice Mail Master Name Enter the Voice Mail master name.	Up to 12 Characters	Voice Mail
03	Voice Mail Screening Enable/disable the system's ability to process the Call Screening commands (1 + extension number) sent from the Voice Mail. You should normally <i>enable</i> this option to allow for Voice Mail Call Screening. Disable this option if your system has been modified so that extensions begin with the digit 1 (e.g., 101, 102, etc.). Also see the Flexible System Numbering feature.	0 = Off 1 = On	1
04	Park and Page Enable/disable the system's ability to process the Voice Mail's Park and Page (*) commands. You should normally <i>enable</i> this option.	0 = Off 1 = On	1
05	Message Wait Enable/disable the system's ability to process the Voice Mail's Message Wait (#) commands. You should normally <i>enable</i> this option. If enabled, be sure that the programmed Message Notification strings don't contain the code #9 for trunk access.	0 = Off 1 = On	1
06	Record Alert Tone Interval Time This timer sets the interval between voice Mail Conversation Record alerts	0-64800 seconds	0

Programming

45-01 : Voice Mail Integration Options

07	Mailbox Number Enter the extension number of the voice mail to be accessed as the centralized voice mail unit when the Networking feature is used.	Up to 8 Digits	-
08	Networked Voice Mail Department Group Number Assign which Extension (Department) Group number is to be assigned as the voice mail group (networked system).	0 - 64 (0=no voice mail)	0
09	Networked Voice Mail Master Name Enter the Voice Mail master name (networked system).	Up to 12 Characters	C.V.M.

Conditions

None

Feature Cross Reference

- Voice Mail

Telephone Programming Instructions

To enter data for Program 45-01 (Voice Mail Integration Options):

1. Enter the programming mode.
2. 45 01

3. Enter the number of the item you want to program.



4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
OR
Press MSG once to enter a new item number.
OR
Press MSG until you've exited that series's programming section.

Programming

84-02 : H.225, H.245 Information Basic Setup

Level:

IN

Aspire

- Available.

Description

Use **Program 84-02 : H.225, H.245 Information Basic Setup** to define the data of H.225 and H.245.

Input Data

Item No.	Item	Input Data	Default	Description
01	H.225 Alerting Timer	0-255 sec	180 sec	
02	H.225 Setup Acknowledge Timer	0-255 sec	9 sec	
03	H.225 Setup Timer	0-255 sec	4 sec	
04	H.225 Info Ack Timer	0-255 sec	9 sec	
05	H.225 Call Proceeding Timer	0-255 sec	10 sec	
06	-- Not Used --			
07	H.245 Master Slave Determination Timer	0-255 sec	5 sec	
08	H.245 Master Slave Determination Retry Count	0-255 sec	3 sec	
09	H.245 Capability Exchange Timer	0-255 sec	5 sec	
10	H.245 Logical Channel Establishment Timer	0-255 sec	50 sec	Unidirectional or bi-directional logical channel establishment timer
11	H.245 Mode Request Procedures Timer	0-255 sec	50 sec	
12	H.245 Close Logical Channel Timer	0-255 sec	50 sec	
13	H.245 Round Trip Delay Timer	0-255 sec	50 sec	
14	H.245 Maintenance Loop	0-255 sec	50 sec	
15	RAS GRQ Timer	0-255 sec	5 sec	
16	GRQ Retry Count	0-255	2	
17	RAS RRQ Timer	0-255 sec	5 sec	
18	RRQ Retry Count	0-255	3	
19	RAS URQ Timer	0-255 sec	3	
20	URQ Retry Count	0-255	1	
21	RAS ARQ Timer	0-255 sec	5 sec	

Programming

84-02 : H.225, H.245 Information Basic Setup

Item No.	Item	Input Data	Default	Description
22	ARQ Retry Count	0-255	2	
23	RAS BRQ Timer	0-255 sec	5 sec	
24	BRQ Retry Count	0-255	2	
25	RAS IRR Timer	0-255 sec	5 sec	
26	IRR Retry Count	0-255	2	
27	RAS DRQ Timer	0-255 sec	8 sec	
28	DRQ Retry Count	0-255	2	
29	RAS LRQ Timer	0-255 sec	5 sec	
30	LRQ Retry Count	0-255	2	
31	RAS RAI Timer	0-255 sec	3 sec	
32	RAI Retry Count	0-255	2	
33	Call Signaling Port Number	0-65535	1730	It is control port for IP Telephone
34	- Not Used -			
35	Fast Start	0: Disable 1: Enable	1	If VoIP is used for networking, the Fast Start option must be enabled.
36	RAS	0-65535	20001	
37	Terminal Type	0-255	60	H.245 Terminal Type

Conditions

None

Feature Cross Reference

- VoIP

Telephone Programming Instructions

To enter data for Program 84-02 (H.225, H.245 Information Basic Setup):

1. Enter the programming mode.
2. 84 02

```
84-02-01
H225 Alert Time 180sec.
back ↑ ↓ select
```

3. Enter the number of the item you want to program.

```
84-02-nn
nnnnn
← →
```

4. Enter data for the item you selected + HOLD.
5. Enter data for the next item in the program.
OR
Press MSG once to enter a new item number.
OR
Press MSG until you've exited that series's programming section.

Programming

84-05 : VOIPU IP Address Setup

Level: IN	Aspire
• Available.	

Description

Use **Program 84-05 : VOIPU IP Address Setup** to define the IP Address of the VOIPU PCB.

Input Data

Slot Number	01-16
--------------------	--------------

Item	Input Data	Default	Description	Related Program
IP Address	1.0.0.1–126.255.255.254 128.1.0.1–191.254.255.254 192.0.1.1–223.255.254.254	Slot 1: 172.16.0.20 Slot 2: 172.16.0.21 Slot 3: 172.16.0.22 Slot 4: 172.16.0.23 Slot 5: 172.16.0.24 Slot 6: 172.16.0.25 Slot 7: 172.16.0.26 Slot 8: 172.16.0.27 Slot 9: 172.16.0.28 Slot 10: 172.16.0.29 Slot 11: 172.16.0.30 Slot 12: 172.16.0.31 Slot 13: 172.16.0.32 Slot 14: 172.16.0.33 Slot 15: 172.16.0.34 Slot 16: 172.16.0.35	Set IP Address of VoIPU PCB. IP Address will be increased in accordance with number of slot.	84-04 This become invalid data if Program 84-04 is set to 0:Disable.
LAN	0: Auto Detect 1: 100 Mbps, Full Duplex 2: 100 Mbps, Half Duplex 3: 10 Mbps, Full Duplex 4: 10 Mbps, Half Duplex	0	NIC Auto Negotiation	

Conditions

The system programming must be exited before these program options to take affect.

Feature Cross Reference

- VoIP

Telephone Programming Instructions

To enter data for Program 84-05 (VOIPU IP Address Setup):

1. Enter the programming mode.
2. 84 05

```
84-05-01 Slot1
IP Add 172.16 .0 .20
back ↑ ↓ select
```

3. Enter the number of the item you want to program.

```
84-05-nn Slotnn
nnnnn
← →
```

4. Select the slot number to be programmed by pressing the FLASH or the VOLUME ▲ or VOLUME ▼ keys.
5. Enter data for the item you selected + HOLD.
6. Enter data for the next item in the program.
OR
Press MSG once to enter a new item number.
OR
Press MSG until you've exited that series's programming section.

Programming

84-05 : VOIPU IP Address Setup

NEC

NEC America, Inc., Corporate Networks Group
4 Forest Parkway, Shelton, CT 06484
Tel: 800-365-1928 Fax: 203-926-5458
cng.nec.com

Other Important Telephone Numbers

Sales:203-926-5450
Customer Service:203-926-5444
Customer Service FAX:203-926-5454
Technical Service:203-925-8801
Discontinued Product Service:900-990-2541
Technical Training:203-926-5430
Emergency Technical Service (After Hours)203-929-7920

(Excludes discontinued products)

NEC

NEC America, Inc., Corporate Networks Group
4 Forest Parkway, Shelton, CT 06484
TEL: 203-926-5400 FAX: 203-929-0535
cng.nec.com



0893207

September 19, 2003
Printed in U.S.A.