

LEVEL II

INSTALLATION SERVICE MANUAL

Level I 6X16 Level II 48 to 64 Ports

September 1992

NEC America, Inc.

PREFACE

THIS MANUAL

This Installation Service Manual provides the information required to install, program, and maintain the Electra Professional Level II system.

This manual is divided into three chapters as follows:

Chapter 1: Hardware Installation

Chapter 1 provides the information required to prepare and install the system, including applicable FCC requirements and UL regulatory information.

Chapter 2: Programming

Chapter 2 provides detailed instructions for performing System Programming.

Chapter 3: System Maintenance

Chapter 3 provides maintenance instructions and flowcharts for the system.

SUPPORTING DOCUMENTS

In addition to the Installation Service Manual, the Electra Professional Level II system is supported by the following technical manuals:

Electra Professional Level II General Description Manual (Stock Number 722020)

Designed and developed to provide a general overview of the Electra Professional Level II system, its features, configuration, service features, specifications, and standards.

Electra Professional Level II Features and Specifications Manual (Stock Number 722021)

Provides an expanded discussion of each feature that is available to the Electra Professional Level II system. In addition, the Features and Specifications Manual provides Station Application, Operating Procedures, and Service Conditions.

Electra Professional Level II Installation Service Manual (Stock Number 722022)

Designed and developed for the service technician, the Installation Service Manual provides detailed instructions for system installation, programming, and maintenance.

Electra Professional Level II Station Operation Manual (Stock Number 722023)

This manual explains in detail the station operations for all station user features. This manual is designed for use by installers and end users.

Electra Professional Level II Job Specifications Manual (Stock Number 722024)

Used in conjunction with the Installation Service Manual, the Job Specifications Manual is designed for the service technicians who are responsible for planning the system installation, maintaining the system, and keeping records of system programming and configuration. (This manual is included with every CPU-F(10)-20 KTU.)

N E C Electra Professional

Tech Assist Code NE-0593-HEPCH

CHAPTER 1 HARDWARE SPECIFICATIONS AND INSTALLATION

Chapter 1 - Table

CHAPTER 1

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CHAPTER 1 HARDWARE SPECIFICATIONS AND INSTALLATION

SECTION 1 INTRODUCTION

1.1 General Information

The Electra Professional Level II is a fully digital system serving a maximum of 56 outside (CO/PBX, DID, T1/FT1, and Tie) lines and a maximum of 56 terminals. The Electra Professional Level II allows flexible configuration, allowing the customer to purchase only what is needed. The basic cabinet can accommodate a combined total of 40 ports, consisting of outside lines and/or telephones and/or other options. As a customer's business grows the system can be expanded to accommodate a combined total of 64 ports. Additional equipment such as: Single Line Telephones, external speakers, voice mail, facsimile machines, etc., can be connected to the system to enhance the capabilities of the Electra Professional Level II. (Figure 1-1 - Outside View of the Electra Professional Level II KSUs.)

This chapter is designed to provide the technician, installing the Electra Professional Level II, a comprehensive explanation of the Electra Professional Level II specifications, hardware, and installation procedures. The technician should read this chapter in its entirety before installing the system. This will enable more efficient installation and cut-over.

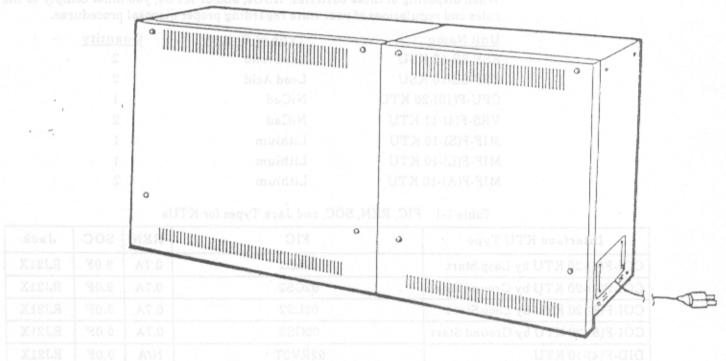


Figure 1-1 Outside View of the Electra Professional Level II KSUs

1.2 Regulatory Information

The Federal Communications Commission (FCC) has established rules that permit this telephone system to be directly connected to the telephone network. A jack is provided by the telephone company. Jacks for this type of customer provided equipment will not be provided on party lines or coin lines.

The telephone company may make changes in its technical operations and procedures. If such changes affect the compatibility or use of this system, the telephone company is required to give adequate notice of the changes.

1.2.1 Company Notification

Before connecting this telephone system to the telephone network, the following information must be provided to the telephone company:

- 1. Your telephone number. not a more la la second
- 2. FCC registration number: geology appolition
- If the system is to be installed as a Key System (no dial access to Trunk Groups/Route Advance Blocks) use the following number:

AY5USA-73702-KF-E

• If the system is to be installed as a Multi-Function System, use the following number:

AY5USA-73705-MF-E

 Facility Interface Codes (FIC), Ringer Equivalence Number (REN), Service Order Codes (SOC), and Jack types are shown in Table 1-1 -FIC, REN, SOC, and Jack Types for KTUs.

1.2.2 Battery Disposal

The Electra Professional Level II System includes the following batteries. When disposing of these batteries, KSUs, and/or KTUs, you must comply to the rules and regulations of your state regarding proper disposal procedures.

Unit Name	Type of Battery	Quantity
ESF-SB-10 KSU	Lead Acid	2
ESF-SE-10 KSU	Lead Acid	2
CPU-F(10)-20 KTU	NiCad	1
VRS-F(4)-11 KTU	NiCad	2
MIF-F(S)-10 KTU	Lithium	1
MIF-F(L)-10 KTU	Lithium	1
MIF-F(A)-10 KTU	Lithium	2

Table 1-1 FIC, REN, SOC, and Jack Types for KTUs

Interface KTU Type	6 FIC	REN	SOC	Jack
COI-F(4)-20 KTU by Loop Start	02LS2	0.7A	9.0F	RJ21X
COI-F(4)-20 KTU by Ground Start	02GS2	0.7A	9.0F	RJ21X
COI-F(8)-20 KTU by Loop Start	02LS2	0.7A	9.0F	RJ21X
COI-F(8)-20 KTU by Ground Start	02GS2	0.7A	9.0F	RJ21X
DID-F(4)-10 KTU	02RV2T	N/A	9.0F	RJ21X
TLI-F(2)-10 KTU of M Lead	TL31M	N/A	9.0F	RJ21X
TLI-F(2)-10 KTU of E Lead	TL31E	N/A	9.0F	RJ21X
LLT-F(2G)-10 KTU	oussimmed and OL13C	N/A	9.0F	RJ21X
DTI-F()-10 KTU	04DU9-BN, 04DU9-DN, 04DU9-1KN, 04DU9-1SN, 04DU9-1ZN	N/A	6.0P	N/A

IMPORTANT NOTE

"This equipment is capable of providing user's access to interstate providers of operator services through the use of equal access codes. Modifications by aggregaters to alter these capabilities may be a violation of the Telephone Operator Consumer Service Improvement Act of 1990 and Part 68 of FCC Rules."

1.2.3 Incidence of Harm

If the system is malfunctioning, it may also be causing harm to the telephone network. The telephone system should be disconnected until the source of the problem can be determined and until repair has been made. If this is not done, the telephone company may temporarily disconnect service.

1.2.4 Radio Frequency Interference

In compliance with FCC Part 15 rules, the following statement is provided:

IMPORTANT NOTE

"This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the Installation Service Manual, may cause interference to radio communications. This equipment has been tested and approved for compliance with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this telephone system in a residential area is likely to cause interference, in which case, the user, at his or her own expense, will be required to take whatever measures may be required to correct the interference."

1.2.5 Hearing Aid Compatibility

The NEC Multiline Terminals and NEC Single Line Telephones that are provided for this system are hearing aid compatible. The manufacturer of other Single Line Telephones for use with the system must provide notice of hearing aid compatibility to comply with FCC rules. FCC rules prohibit the use of non-hearing aid compatible telephones (after August 16, 1989).

1.2.6 Direct Inward Dialing

Allowing this equipment to be operated in such a manner as to not provide for proper answer supervision is a violation of Part 68 of the FCC's rules.

Proper answer supervision is provided when either of the following cases exist:

- A. This equipment returns answer supervision to the Public Switched Telephone Network (PSTN) and Direct Inward Dialing (DID) calls are:
 - Answered by the called station.
 - Answered by the Attendant.
 - Routed to a recorded announcement that can be administered by the Customer Premise Equipment (CPE) user.
 - Routed to a dial prompt.
- B. This equipment returns answer supervision on all DID calls forwarded to the PSTN. Permissible exceptions are:
 - A call is unanswered.
 - A busy tone is received.
 - A reorder tone is received.

1.2.7 Voice Announcement/Monitoring Over DID Lines

CAUTION

The use of the Voice Announcement feature to eavesdrop or record sound activities at the other end of the telephone line may be illegal under certain circumstances and laws. Consult a legal advisor before implementing any practice involving the monitoring or recording of a telephone conversation. Some federal and state laws require a party monitoring or recording a telephone conversation to use a beep-tone(s), make notification to all parties to the telephone conversation and/or obtain consent of all parties to the telephone conversation. In monitoring or recording sound activities at the other end of the telephone line by means of the Voice Announcement feature, the sound of the alert tone at the beginning of the Voice Announcement may or may not be considered sufficient under applicable laws. Some of the applicable laws provide for strict penalties for illegal monitoring or recording of telephone conversations.

1.2.8 Service Requirements

In the event of equipment malfunction, all repairs should be performed by an authorized agent of NEC America, Inc. or by NEC America, Inc. It is the responsibility of users requiring service to report the need for service to one of NEC America, Inc.'s authorized agents or to NEC America, Inc.

1.2.9 UL Regulatory Information

This equipment has been listed by Underwriters Laboratories and found to comply with all applicable requirements of the standard for telephone equipment UL 1459 2nd Edition.

1.3 Equipment List

The following equipment is available for use in the Electra Professional Level II system. The maximum quantities that can be installed in each system are listed in the following tables.

Table 1-2 KSUs and PSUs

Equipment Designation	Maximum Quantity/System	Description Jasanques aids galwolf A	
ESF-SB-10 KSU	1	Basic KSU with Wall and Floor Mount Brackets	
ESF-SE-10 KSU	s provided when sitt	Expansion KSU with Wall and Floor Mount Brackets	
PSF-S-20 PSU	1 for each KSU	Power Supply Unit	
Battery	2 for each KSU	For Battery Backup	

Table 1-3 Common Control KTU

Equipment Designation	Maximum Quantity/System	Description	Slot
CPU-F(10)-20 KTU	1 tara egoi	Central Processing Unit, PBR 4-channel, TNG, CNF, MOH Mounted	Fixed
CLK-F-21 Unit	1	T1/FT1 synchronization unit piggybacked on CPU-F(10)-20 KTU	On CPU-F(10)-20 KTU

Table 1-4 Station Interface KTUs

Equipment Designation	Maximum Quantity/System	Description	ngupa .
ESI-F(8)-21 KTU	ny with bu r it-in speak cys. and-ADA comput	8-channel, 2-wire Electronic Station Interface	Interface
SLI-F(8G)-21 KTU	Compact 31th built-in	8-channel SLT/VM Interface with RSG, MW, PFT (2-channel)	Interface
LLT-F(2G)-10 KTU	Deluxe w 6h built-in	2-channel Off-Premise Extension	Interface

Table 1-5 Trunk Interface KTUs

Equipment Designation	Maximum Quantity/System	Allidages diag Description	Slot
COI-F(4)-20 KTU	Consols 7 tth 12 fur	4-channel, Loop or GND Start Trunk Interface	Interface
COI-F(8)-20 KTU	Adapter 70r connec cc, external speaker	8-channel, Loop or GND Start Trunk Interface	Interface
DID-F(4)-10 KTU	Adaptor (7 or connect	4-channel, DID Line Interface	Interface
TLI-F(2)-10 KTU	7	2-channel, 4-wire E&M Tie Line Interface	Interface
DTI-F()-10 KTU	Line Telephone Adm	T1/FT1 (Fractional T1) Trunk Interface with Loop and Ground Start Trunk Signaling capability	Interface

one Electro Paul KTUs 9 care Table 1-6 Other Optional KTUs 9 care is

Equipment Maximum Designation Quantity/System		actuoe slauld b Description was blold as	Slot	
PBR-F(4)-11 KTU	1	4-channel, DTMF/Push Button Receiver (PBR)	Interface	
VRS-F(4)-11 KTU	2	4-channel, Voice Recording Service (VRS)	Interface	
ECR-F-11 KTU Inno		Eight relays for Paging, External Tode Ringers, and Night Chime, two RCA jacks for in/output paging, output ring tone.	Interface	
MIF-F(S)-10 KTU	i ues os estas a	PC and SMDR Interface	Application	
MIF-F(L)-10 KTU	or attended to the last	PC, SMDR, and LCR Interface	Application	
MIF-F(A)-10 KTU	and KTU1 ESI, SL	ACD and MIS Interface of the stole	Application	

Table 1-7 Terminals and Optional Units

Equipment Designation	Maximum Quantity/System	Description Jassaglapa			
ETW-8-1 (BK) TEL	sones 55	8-line non-display with built-in speakerphone, large LED, eight function keys, and ADA compatible			
ETW-16DC-1(BK) TEL	Hallwas 56	16-line Display Compact with built-in speakerphone, large LED, eight function keys, and ADA compatible			
ETW-16DD-1 (BK) TEL	потарь 56 3 одгатат	16-line Display Deluxe with built-in speakerphone, la LED, eight function keys, 20 programmable One-To keys with red LEDs, ADA compatible			
ETW-24DS-1 (BK) TEL	56 Description	24-line Display Special with built-in speakerphone, dual path capability, large LED, eight function keys, 12 programmable One-Touch key, and ADA compatible			
EDW-48-1 (BK) DSS/BLF	inusTerule GKD se	48-line DSS/BLF Console with 12 function keys			
ADA(1)-W (BK) Unit	56 QKO 10	Ancillary Device Adaptor (for connection of headset, recording interface, external speakerphone)			
ADA(2)-W (BK) Unit	16 sochasel sei.	Ancillary Device Adaptor (for connection of an SLT, modem, answering machine, or fax)			
WMU-W (BK) Unit	56	Wall Mount Unit			
SLT-F(1G)-10 ADP	55	1-channel Single Line Telephone Adaptor			

1.4 Equipment General Information

One Electra Professional Level II Job Specifications Manual (Stock No. 722024) is included with each ESF-SB-10 KSU. All optional equipment: external amplifiers, Music on Hold source, Background Music source, external speakers, etc., must be locally provided.

1.5 Equipment Description

.5.1 Key Service Units and Power Supply Units

ESF-SB-10 KSU

The Key Service Unit (KSU) of the Electra Professional Level II system provides service for outside lines, DSS/BLF Consoles, and interconnection of Multiline Terminals. The basic KSU provides 40 ports and can be expanded to 64 ports with an expansion module. A PSF-S-20 PSU Power Supply Unit and backup batteries are included with this KSU.

Fixed slots are intended for the CPU and MIF KTUs. The remaining interface slots are intended for 2-, 4-, or 8-channel KTUs: ESI, SLI, COI, DID, TLI, PBR, VRS, ECR, LLT, DTI. (Only one DTI can be installed. It must be installed in the first interface slot.)

and 10/20 pps Dial Puiss or

ESF-SE-10 KSU

This expansion unit provides for an additional 24 ports that can accommodate up to three KTUs.

This KSU is designed to accommodate 2-, 4-, or 8-channel interface cards. A PSF-S-20 PSU Power Supply Unit and backup batteries are included with this KSU.

PSF-S-20 PSU

This power supply unit is provided with both the basic and expansion KSUs. It has a backup interface, accepts 117 Vac and outputs +5V, -5V, and -24V to the system.

1.5.2 Common Control Key Telephone Unit

CPU-F(10)-20 KTU

The Central Processing Unit KTU contains a 16-bit microprocessor which has overall control of the system. This KTU provides an advanced feature package for the Electra Professional Level II system user. Included with this KTU are six, 4-party conference circuits, PBR (four channels are included), TNG, MOH input, and a built-in music source.

noisib 3 bag 0841 MU darw zeilgm CLK-F-21 Unit

to aciss required has not saturated and a The CLK-F-21 (Clock) Unit provides synchronization for a T1 line that is UTA side can align as (2002 connected to the system. This unit is attached to the CPU-F(10)-20 KTU and has saturated because works in conjunction with the DTI-F()-10 KTU.

One CLK-F-21 Unit can be installed in the system.

1.5.3 Station Interface Key Telephone Units

ESI-F(8)-21 KTU

This Electronic Station Interface KTU contains eight circuits, each of which can support any type Multiline Terminal, EDW-48-1 (BK) DSS/BLF Console, or an SLT Adaptor.

A maximum of seven ESI-F(8)-21 KTUs can be installed in interface slots.

SLI-F(8G)-21 KTU

The Single Line Interface KTU can support eight Single Line Telephones and/or voice mail ports. This KTU provides Ringing Signal Generator (RSG), Power Failure Transfer (PFT), and Message Waiting (MW) LED voltage to the Single Line Telephones.

A maximum of six SL1-F(8G)-21 KTUs can be installed in interface slots.

LLT-F(2G)-10 KTU

The Long Line Telephone (LLT) KTU provides for the termination and operation of up to two Off-Premise Extensions (OPX). Each LLT-F(2G)-10 KTU has a built-in ringer (RSG). Up to 1500 ohms of loop resistance (including the Single Line Instrument) is acceptable between the LLT-F(2G)-10 KTU and SLT.

A maximum of six LLT-F(2G)-10 KTUs can be installed in the system.

1.5.4 Trunk Interface Key Telephone Units

COI-F(4)-20 KTU

This Central Office Interface KTU complies with UL 1459 2nd Edition requirements. Electrical fuses (posistors) are built into this KTU. The COI-F(4)-20 KTU supports four outside (CO/PBX) lines and provides circuitry for ring detection, holding, and dialing. The outside lines can be any combination of Loop or Ground start, DTMF, or Dial Pulse dialing trunks.

A maximum of seven COI-F(4)-20 KTUs can be installed in interface slots.

COI-F(8)-20 KTU

This Central Office Interface KTU complies with UL 1459 2nd Edition requirements. Electrical fuses (posistors) are built into this KTU. The COI-F(8)-20 KTU supports eight outside (CO/PBX) lines and provides circuitry for ring detection, holding, and dialing. The outside lines can be any combination of Loop or Ground Start, DTMF, or Dial Pulse dialing trunks.

MOM, DWT (belowless) or a slowand A maximum of seven COI-F(8)-20 KTUs can be installed in interface slots.

DID-F(4)-10 KTU -

A maximum of seven DID-F(4)-10 KTUs can be installed in interface slots.

TLI-F(2)-11 KTU

This Tie Line Interface KTU supports the termination and operation of up to two E&M Tie Lines (4-wire, type I and type V, and 10/20 pps Dial Pulse or DTMF). Immediate or wink start, delay start, or second dial tone signaling is accommodated.

A maximum of seven TLI-F(2)-11 KTUs can be installed in interface slots.

DTI-F()-10 KTU

The Digital Trunk Interface (DTI) KTU provides for the termination of a T1/Fractional T1 (24 DS-0 channels or fewer) line. The DTI-F()-10 KTU contains circuitry for outside ring detection, hold, dialing, and control functions.

A combination of Loop and Ground Start Trunks can be used on one DTI. DTMF or Dial Pulse dialing is also supported.

The two interface slots to the right of this KTU may need to be left vacant. A CLK-F-21 Unit must be connected to the CPU-F(10)-20 KTU.

One DTI-F()-10 KTUs can be installed in the system.

1.5.5 Optional Key Telephone Units

ECR-F-11 KTU

The External Control Relay (ECR) KTU provides common audible tone signaling with relay contacts for external ringing equipment and a music source input for Music on Hold (MOH). Eight relays are provided, four for External Tone Ringer control, one for Night Chime, and three for External Paging.

One ECR-F-11 KTU can be installed in a system.

PBR-F(4)-11 KTU

The Push Button Receiver KTU detects and translates DTMF tones generated only by Single Line Telephones, modems, or facsimile machines. The PBR-F(4)-11 KTU provides four circuits.

The interface slots can accommodate one PBR-F(4)-11 KTU for a maximum of eight circuits per system with a CPU-F(10)-20 KTU.

VRS-F(4)-11 KTU

The Voice Recording Service KTU provides voice recording messages for internal stations and automatic answering of incoming CO/PBX calls by a voice recorded message.

A maximum of two VRS-F(4)-11 KTUs can be installed in interface slots providing eight channels.

MIF-F(S)-10 KTU

The Multipurpose Interface KTU provides two capabilities. First, it generates detailed call records of incoming, outgoing, conference, and transferred outside calls. Reports include digits dialed, call duration, trunks used, etc. Secondly, this KTU also allows interfacing between a personal computer, with the PC software programming package, and the CPU-F(10)-20 KTU for programming System Data and up/down loading System Data.

One MIF-F(S)-10 KTU can be installed in the application slot or any of the first four interface slots (IF1 to IF4) provided in the ESF-SB-10 KSU.

MIF-F(L)-10 KTU

The MIF-F(L)-10 KTU provides three features: it allows the connection of a personal computer for performing System Programming and Up/Down loading of System Data, provides Station Message Detail Recording (SMDR) to be output via an RS-232 cable to a printer, and provides Least Cost Routing (LCR) capability.

One MIF-F(L)-10 KTU can be installed in the application slot or any of the first four interface slots (IF1 to IF4) provided in the ESF-SB-10 KSU.

Refer to the Electra Professional Level II System Least Cost Routing Manual (included with the LCR software) for LCR instructions.

MIF-F(A)-10 KTU

The MIF-F(A)-10 KTU provides the ACD feature and an interface to an MIS terminal.

One MIF-F(A)-10 KTU can be installed in the application slot or any of the first four interface slots (IF1 to IF4) provided in the ESF-SB-10 KSU.

1.5.6 Multiline Terminals and Associated Equipment

ETW-8-1 (BK) TEL

This Multiline Terminal is a fully modular instrument with eight Flexible Line keys (each with a two-color LED), eight function keys, built-in speakerphone, ADA compatibility, and a large LED to indicate incoming calls and messages.

A maximum of 55 ETW-8-1 (BK) TELs can be installed in a system.

ETW-16DC-1 (BK) TEL

This Multiline Terminal is a fully modular instrument with 16 Flexible Line keys (each with a two-color LED), eight function keys, built-in speakerphone, a 16-character Liquid Crystal Display (LCD), ADA compatibility, and a large LED to indicate incoming calls and messages.

A maximum of 56 ETW-16DC-1 (BK) TELs can be installed in a system.

ETW-16DD-1 (BK) TEL

This Multiline Terminal is a fully modular instrument with 16 Flexible Line keys (each with a two-color LED), eight function keys, built-in speakerphone, a 16-character Liquid Crystal Display (LCD), 20 programmable One-Touch keys with red LEDs, ADA compatibility, and a large LED to indicate incoming calls and messages.

A maximum of 56 ETW-16DD-1 (BK) TELs can be installed in a system.

ETW-24DS-1 (BK) TEL

This Multiline Terminal is a fully modular instrument with 24 Flexible Line keys (each with a two-color) LED, eight function keys, built-in speakerphone, dual path capability, 12 programmable One-Touch keys, ADA compatibility, and a large LED to indicate incoming calls and messages.

A maximum of 56 ETW-24DS-1 (BK) TELs can be installed in a system.

EDW-48-1 (BK) DSS/BLF

The Direct Station Selection/Busy Lamp Field Console is equipped with 48 programmable keys with two-color (red and green) LED indications and 12 function keys with one-color (red) LED. The 48 programmable keys can be assigned as Direct Station Selection keys or as function keys.

A maximum of four EDW-48-1 (BK) DSS/BLF Consoles can be installed in the system.

ADA (1)-W (BK) Unit

The ADA (1)-W (BK) Unit (Ancillary Device Adaptor) provides the Multiline Terminal with connection for a headset, external speakerphone, tape recorder, or other ancillary devices. An ADA (1)-W (BK) Unit can be installed in any Multiline Terminal.

A maximum of 56 ADA (1)-W (BK) Units can be installed in a system, one per Multiline Terminal.

ADA (2)-W (BK) Unit

The ADA (2)-W (BK) Unit (Ancillary Device Adaptor) provides the Multiline Terminal with connection for a cordless Single Line Telephone, modem, facsimile, or answering machine. An ADA (2)-W (BK) Unit can be installed in any Multiline Terminal.

A maximum of 16 ADA (2)-W (BK) Units can be installed in a system, one per Multiline Terminal.

WMU-W (BK) Unit

The WMU-W is a universal Wall Mount Unit which can be used to mount any Multiline Terminal.

1.5.7 Single Line Telephone Adaptor

SLT-F(1G)-10 ADP

This Single Line Telephone Adaptor provides an interface for a Single Line Telephone or similar device from an ESI-F(8)-21 KTU channel.

A maximum of 55 SLT-F(1G)-10 ADP adaptors can be installed in a system.

SECTION 2 SYSTEM SPECIFICATIONS

2.1 General Information

The following diagrams and tables show specifications for the Electra Professional Level II system. The technician should review these carefully before attempting to install the system.

2.2 System Block Diagram

The system block diagram shows a conceptual representation of an installed system. (Refer to Figure 1-2 - System Block Diagram. Also refer to Table 1-8 - Abbreviations for a list of abbreviations used in the system block diagram.)

Table 1-8 Abbreviations

Abbreviation	Description	Abbreviation	Description
CLK	Digital Network Synchronous Clock Oscillator	PBR	DTMF Signal Receiver Circuit Unit (Push Button Receiver)
COI	Central Office Line Interface	PC	Personal Computer (with RS-232C Interface)
CPU	Central Processing Unit	PRT	Printer with RS-232C Interface
DID	Direct Inward Dial Trunk	ROM/RAM	Read Only Memory/Random Access Memory
DSS	Direct Station Selection Console	RTC	Real Time Clock
DTI	Digital Trunk Interface	SLI	Single Line Telephone Interface
ECR	External Control Relay	SLT	Single Line Telephone
ESI	Electronic Station Interface	SLT ADP	
FAX	Facsimile Transceiver	SMDR	Single Line Telephone Adaptor
LLT	Long Line Telephone	SPK	Station Message Detail Recording
MIF	Multipurpose Interface		External Speaker
MLT	Multiline Terminal		Time Division Switch
4MC			Tie Line Interface
	Module Memory Controller	VMU	Voice Mail Unit
APU	Microprocessor	1 1 15 - 15	Voice Recording Service

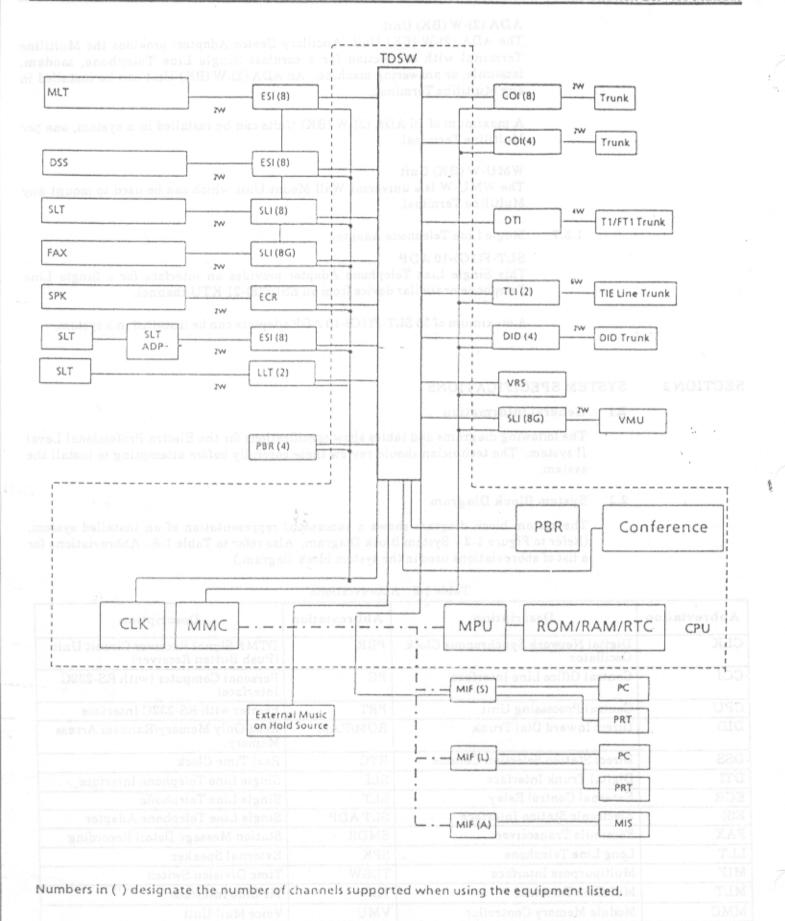


Figure 1-2 System Block Diagram

System Control Capacities 2.3

The control capacities of the system are shown in Table 1-9- System Control Capacities.

perole.			Table 1-9	System Control C	apacities	
do senosepia Tiella de la		Basic Frame	Basic + Expansion Frame	70	No. of Circuits or No. of	
	Slot	Interface	5	5 8	Unit	Telephones to be Connected/Unit
	5100	Application	1	1		Tenant
Numb	er of Outside	Lines	32	56	N/A	Trunk Groups NA, ANA Hook
	CO/PBX Li	nes All	32	0001 56 oeros	COI	System Sp8/4 Dial
	DID Lines	m	16	28	DID	4
	E-& M (4-w	ire)	U908	Seleber14.000 e	TLI	Alaredmun adl' Klateki - Mote 2: 2 our of the sign
	TI/FT1 Lin	es	1 (24 channels)	1 (24 channels)	DTI	1
Numbe	er of Intercon	Lines	Non-Blocking		N/A	N/A
Lines a	num number and Stations aneously con Blocking)	that can be	10040	connected with by a se 46 ata tw Table 1-10 - Mu	N/A	N/A
Multili	ine Terminal	g laubivibai bar	32	56 West	ESI	8
DSS Co	onsole (Note 1)	og and Cable Le	op Rysistor	D.lanim467 and	ESI	8
Single	Line Telepho	nes umixaM	24	48	SLI	8
SLT A	laptor	1 Pair Cub	31	55	ESI	8 Termina
Extern	al Speaker fo	r Paging	(e.3.d0)	3	ECR	3
	Signal Recei		8	8	PBR	4 (Note 2)
Voice R	lecording Ser	vices	8	8	VRS	4
Station (SMDR	Message Det	ail Recording	1, 8	1	MIF(S) MIF(L)	ust dia magli wta
	gramming an p/Down Load		1	1 tolgabi	MIF(S) MIF(L)	187 (181) 141 - WG3
	ost Routing (1	1	MIF(L)	SLT-POC)-11 ADP
ACD wi	th MIS Term	inal	gneflens	Ged SLT Adapter	MIF (A)	Note 2: 1 The length f

(Continued on next page.)

Item No. of Circuits or No. o	Basic Frame	Expansion Erame	Unit	No. of Circuits or No. of Telephones to be Connected/Unit
TO SERVICE AND ADDRESS OF THE PROPERTY OF THE	6	6	CPU	N/A
Tenant	48	48	N/A	N/A
Trunk Groups	32	32	N/A	N/A
Route Advance Block	16	16	N/A	N/A
System Speed Dial	1000/90	1000/90	N/A	N/A

Note 1: The number of DSS Consoles is included in the number of Multiline Terminals.

Note 2: Four of the eight channels are accommodated in the CPU.

2.4 Cabling Requirements

2.4.1 Cabling Specifications

The KSU is connected with each of the Multiline Terminals and Single Line Telephones by a separate twisted 1-pair cable or 2-pair cable (only for Multiline Terminals). Table 1-10 - Multiline Terminal Loop Resistance and Cable Length and Table 1-11 - Single Line Telephone Connection Cable Length show the cables used for wiring between the KSU and individual terminals or adaptors.

Table 1-10 Multiline Terminal Loop Resistance and Cable Length

			~ *********	
Terminal or Adaptor		Maximum Loop Resistance	Maximum Feet by Twisted 1-Pair Cable	Maximum Feet by Twisted 2-Pair Cable
		(Ohms)	24AWG	24AWG
ETW-8-1 (BK) TEL		61	600	1500
ETW-16DC-1 (BK) TEL		46	450	1300
ETW-16DD-1 (BK) TEL		37	360	820
ETW-24DS-1 (BK) TEL		46	450	820
EDW-48-1 (BK) DSS/BLF with AC Ada	ptor	102	1000	2000
SLT-F(1G)-11 ADP		61	600	1200

Note I: When installing a DSS Console, the use of an AC Adaptor is required.

Note 2: The length for the specified SLT Adaptor is the length between the ESI KTU and the SLT Adaptor.

Note 3: When additional length is required between the ESI and a Multiline Terminal, DSS/BLF Console, or SLT Adaptor, use twisted 2-pair cable as shown in Figure 1-3 - Connecting the ESI to the Multiline Terminal Using Twisted 2-Pair Cable.

(xaM)-

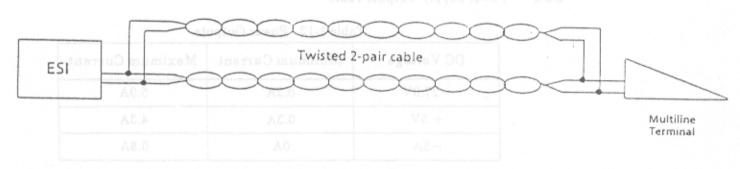


Figure 1-3 Connecting the ESI to the Multiline Terminal Using Twisted 2-Pair Cable

Table 1-11 Single Line Telephone Connection Cable Length

Connected Equipment	Cable	Maximum Feet or Loop Resistance (24 AWG)
SLI-F(8G)-21 KTU	Twisted 1-pair	600 ohm
LLT-F(2G)-10 KTU	Twisted 1-pair	a8 3000 ohm
SLT-F(1G)-10 ADP	Twisted 1-pair	H + sleet 500 ohm
ADA(2)-W (BK) Unit	Twisted 1-pair	10 feet

Note: Mixing digital and analog ports through the same 25-pair cable runs is not recommended.

The following types of cabling are required for the equipment listed below:

Music Source: Hi-Fi Shielded Audio Cable
 External Amplifier: Hi-Fi Shielded Audio Cable

2.4.2 Cabling Precautions

When selecting cables and Main Distribution Frames (MDF), future expansion or assignment changes should be given due consideration. Avoid running cables in the following places:

- A place exposed to wind or rain.
- A place near heat radiating equipment or where the quality of station
 cable covering could be affected by gases and chemicals.
- An unstable place subject to vibration.

2.5 Power Requirements

2.5.1 Power Supply Inputs

AC Input (PSF-S-20 PSU):

- 117 Vac ± 10%
- 60 Hz ± 10%
- Single Phase
- 1.5A maximum current
- A dedicated outlet, separately fused and grounded, is required.

2.5.2 Power Supply Outputs Table

Table 1-12 Power Outputs

DC Voltage	Minimum Current	Maximum Current	
-27.3V	0.3A	5.9A	
+ 5V	0.3A	4.3A	
-5A	. 0A	0.8A	

Power Consumption and Dissipation Table 2.5.3

Table 1-13 Power Consumption and Dissipation

Module	Maximum RMS Current	Watts Used (Idle)	Watts Used (Max.)
Basic araq-1	balaiwT 1.3A U	120	150
Basic + Expansion	PalaiwT 1.9A	180	220

2.5.4 Fuse Replacement Table

Table 1-14 Fuse Replacement

Unit	Fuse No.	Specifications	Description	Dimensions
PSF-S-20 PSU	F1	125V, 4.0A	AC Input	1/4" X 1-1/4"
	F2	125V, 7.0A	DC Input	1/4" X 1-1/4"

Note: All fuses are normal blown glass tube. Do not use slow blow fuses.

2.6 Environmental Conditions

- Temperature.

 - 1. Operating: 50°F ~ 104°F (10°C ~ 104°C)
- Recommended Long Term: 50°F ~ 90°F (10°C ~ 32.2°C)
- Operating Humidity:
- 10% ~ 90% non-condensing

2.7 Outside Line Types

- 2-wire, Loop Start or Ground Start Trunks
- 2-wire, Loop Dial, DID Lines (Dial Pulse or DTMF)
- 4-wire, E & M Tie Lines (Type I or V, Dial Pulse or DTMF)
- Digital Trunk T1/FT1 (Loop Start or Ground Start Signaling)

2.8 Network and Control Specifications

2.8.1 Transmission

· Data Length:

From Multiline Terminal to ESI-F(8)-21 KTU: 23 bits From ESI-F(8)-21 KTU to Multiline Terminal: 23 bits

Data Transmission Rates:

Between ESI-F(8)-21 KTU and Multiline Terminal:

184K bits/sec.

(voice and signaling)

Scanning Time for each Multiline Terminal:

32 ms.

2.8.2 Network

TDM Switching: PCM (µ Law)

TDM Clock:

2.048 MHz

TDM Data Bus:

8 bit

TDM Timeframe: 125 us.

2.8.3 Control

· Control:

Stored program with distributed processing

Central Processor:

16-bit microprocessor

· Clock:

8 MHz

Interface KTU:

4 bit microprocessor

Optional KTUs (MIF and DTI):

8 bit microprocessor

Multiline Terminal and

DSS/BLF Console:

4 bit microprocessor

· SLT Adaptor:

4 bit microprocessor

2.9 Dialing Specifications

2.9.1 Dial Pulse Address Signaling

· Pulse Rate:

 $10 \pm 0.5 \text{ pps/}20 \pm 1.0 \text{ pps}$

· Percent Break:

60 ± 1.5%

Interdigit Interval:

10 pps/20 pps 770 ms. ~ 830 ms.

2.9.2 DTMF Address Signaling

· Frequencies:

Two sinusoidal signals, one from a high group of three frequencies and one from a low group of four frequencies.

· Frequency deviation:

Less than ± 1.0 percent

Signal level:

Nominal level per frequency:

-6 ~ -4 dBm

Minimum level per frequency:

Low Group:

-10 dBm

High Group:

-8 dBm

Maximum level per frequency pair: 0 dBm

· Rise time:

Within 5 ms.

Duration of dual frequency signal:

100 ms, default/70 ms, minimum

Interdigital time:

70 ms. default/60 ms. minimum

Nominal High Group
Frequencies (Hz)

		1209	1336	1477
	697	1	2	3
Nominal Low Group Frequencies (Hz)	770	4	5	6
	852	7	8	9
	941	New	0	#

2.10 Battery Backup

The system has two battery backup functions: one is for system backup and a second for -- memory backup.

2.10.1 System Backup

The system is backed up by a rechargeable battery. This battery backup will support all of the system functions for approximately 30 minutes in the event of a power failure.

2.10.2 Memory Backup and to substitute the substitute of the subst

A backup battery is equipped on the CPU-F(10)-20 KTU, VRS-F(4)-11 KTU, MIF-F(S)-10 KTU, MIF-F(L)-10 KTU, and the MIF-F(A)-10 KTU. These batteries, when fully charged, retain the system memory in the event of a power failure. (Refer to Table 1-15 - KTU Battery Backup Time for the approximate back up times for the KTUs.)

Table 1-15 KTU Battery Backup Time

KTU ₈	Approximate Backup Time
CPU-F(10)-20 KTU	14 days
VRS-F(4)-11 KTU	1 hour
MIF-F(S)-10 KTU	1 month
MIF-F(L)-10 KTU	1 month
MIF-F(A)-10 KTU	1 month

2.11 Weights and Dimensions

Table 1-16 Weights and Dimensions

eral Level 1 - 1	Table 1-16	Weights and Dimer	1310118	
Unit	Shipping Weight*	Height	Width	Depth
ESF-SB-10 KSU	37 lbs. 6 oz.	14.96"	15.67"	9.06"
	(17 kg)	(380 mm)	(398 mm)	(230 mm)
ESF-SE-10 KSU	26 lbs. 8 oz.	14.96"	11.54"	9.06"
	(12 kg)	(380 mm)	(293 mm)	(230 mm)
PSF-S-20 PSU	4 lbs. 13 oz.	14.96"	3.54"	7.09"
	(2.2 kg)	(380 mm)	(90 mm)	(180 mm)
ETW-8-1 (BK) TEL	2 lbs.	3.98"	6.89"	8.81"
	(0.9 kg)	(101 mm)	(175 mm)	(223 mm)
ETW-16DC-1 (BK) TEL	2 lbs. 3 oz.	3.98"	6.89"	8.81"
	(1 kg)	(101 mm)	(175 mm)	(223 mm)
ETW-16DD-1 (BK) TEL	2 lbs. 7 oz.	3.98"	8.07"	8.81"
	(1.1 kg) -	(101 mm)	(205 mm)	(223 mm)
ETW-24DS-1 (BK) TEL	2 lbs. 7 oz.	3.98"	8.07"	8.81"
	(1.1 kg)	(101 mm)	(205 mm)	(223 mm)
EDW-48-1 (BK) DSS/BLF	3 lbs. 1 oz.	2.72"	6.89"	8.81"
	(1.4 kg)	(69 mm)	(175 mm)	(223 mm)
ETE-1-2 TEL (SLT)	1 lb. 14 oz.	3.15"	6.30"	9.06"
	(0.9 kg)	(80 mm)	(160 mm)	(230 mm)
ETE-1HM-2 TEL (SLT)	1 lb. 10 oz.	2.36"	6.30"	9.06"
	(0.7 kg)	(60 mm)	(160 mm)	(230 mm)
SLT-F(1G)-10 ADP	9 oz.	1.80"	2.80"	4.80"
	(0.29 kg)	(45 mm)	(70 mm)	(120 mm)

Shipping weight includes the shipping carton.

2.12 External Equipment Interface

2.12.1 M			
nibiW.	Auxiliary Input: Input Impedance:	0.6V RMS Sign 10K Ω	nal Level
2.12.2 Ex	xternal Paging (Audio)		
(223 mm)	Output Power: Output Impedance:	- 10 dBm Sigr 600 Ω	nal Level
3.541	Relay Contact Ratin	g: 500 mA, 24 Vd	25.F-S-20 PSU
2.12.3 E	cternal Tone Ringer/Nig	ht Chime Output	
6,89" (175 mm)	Output Level: Output Impedance:	- 10 dBm 600 Ω	
6.89" (175 mm)	Relay Contact Ratin		ETW-16DC-1 (BK) TEL
2.12.4 St	MDR Output Female Connector	(System Outpu	LET (AE) 1 GG81 WTE
(2.12.5) PC	Connection(II)	2 lbs. 7 oz. (1.1 kg)	ETW-24DS-1 (BK) TEL
• 6,89" (175 mm).	Female Connector	(System Outpu	it) Standard RS-232C

In-lance Consideration ... I Installation

2.13 Visual and Audible Indications

2.13.1 Tone Patterns Table

Sanaula 9 dag Table 1-17 Tone Patterns 81 1 alda T

Tone	Frequency (Hz)	Tone Patterns
Dial Tone	350/440	
Second Dial Tone	350/440	2012
Busy Tone	+30/620	with the
Call Waiting Tone	440	60 154
Ringback Tone (1)	440/480	I now, ON 2 now, OFF
Ringback Tone (2)	440/480	TARSON AMERICAN
Reorder Tone	480/620	
• Attendant/Tone Override • Camp-On Tone	440	last last garmoon! MO!
Call Forward Alert Tone Call Forward Confirmation Tone	350/440	0.25 ON = 2 - 2 byrete
Confirmation LCR Dial Tone	440	Voice Mail Mussage Rec
Error Tone Burst	620	0 26 ec. ON s 2 - 3 burns
Recall Tone	1024	
CO/PBX Ring Tone (1)	480/606	Aference OPPe U DIRECT AND ADMINISTRATION ADMINISTR
CO/PBX Ring Tone (2)	480/606	C COUPM C
Internal Ring Tone	480/606	Lees, ON Zees, OFF
Attendant Ring Tone	480/606	0.5 pre.
Tone Burst	440	netion Calibrek Set No. 2011
Howler Tone	2400	Continuous 16 Hz modulation
DIT Alert Tone	480/620 Hz	0.6 rs. ON

2.13.2 Multiline Terminal LED Flash Pattern Table

Table 1-18 Multiline Terminal LED Flash Patterns

LED	Condition	Color		Flash Patterns
Line Key	I-Use Busy Incoming Call I-Hold Call Hold Hold Recall Transfer Recall	Green Red Red Green Red Green Green	280/440 >40/820 >40/480	Carl Waiting Toue
Microphone	ON	Red _	- USAUFF	
ICM	I-Use ICM Incoming Call	Red _	480/620	
Large LED	Incoming Internal Call Incoming Outside Call Message from Attendant Voice Muil Message	Red _ Green _ Green _ Red _	050/440	- Cili Forward Confirmation Tone
Speaker	ON System Data Entry	Red -		result and Total
Conference	Conference in Progress All Conference Circuits Used Hold Conference Call ICM Call Hold SPD Confirmation	Red Red Red Red Red Red Red	303031 303081 303081	COP BX Ring Tote (1) COP BX Ring Tote (2) Tates at Birg Tote
Answer	Incoming Trunk Exclusive Hold	Red -	803/08	Attaclast Ring Trac
Function	Callback Set Auto Repeat Set ON (to set function)	Red - Red - Red -	440	Jarui Jarui
LNR/SPD	Other Tenant CO Line Key Seized Exclusive Hold	Green -	480/620 112	
BLF or DSS Key	Use, Hold DND, Call FWD-All Calls Set Special Mode (While pressing FNC key or going off-line)	Red Red Red		

2.13.3 DSS/BLF LED Indications Table

Table 1-19 DSS/BLF LED Indications

	Thurcacions	
med alleveed (Me) Function off JUTH 18/812	Color	Status
	Green	ON
Idle	Danasa <u>a</u>	OFF
Talking (Other) ansimplop2 box	Deter ben Red Lega	ИО 3.2
Hold	p3 noll Red 13.0	ON
FWD All (DND)	Red (Flashing)	ИО
Other Use (Multiline Terminal is off-line, station user is programming Feature Access/One-Touch keys, etc.)	Red (Flashing)	ON
	Function Attendant Message Idle Talking (Other) Hold FWD All (DND) Other Use (Multiline Terminal is off-line, station user	Attendant Message Green Idle Talking (Other) Red Hold Red FWD All (DND) Red (Flashing) Other Use (Multiline Terminal is off-line, station user Red (Flashing)

SECTION 3 - HARDWARE REQUIREMENTS

3.1 General Information

Before configuring the system, complete the worksheets in the Electra Professional Level II Job Specifications Manual (Stock No. 722024). Make sure all types of station equipment, timeouts, and feature options are considered when completing the worksheets. It is necessary to understand System Programming to properly complete these worksheets. (Refer to Chapter 2 - Programming in this manual.)

Note: One Electra Professional Level II Job Specifications Manual is included with each ESF-SB-10 KSU.

The Basic KSU has five interface slots and the Expansion KSU has three interface slots. Each slot supports up to eight ports. The hardware requirements dictate the number of the ports available for installing station equipment.

When possible, the same type KTUs should be paired together within a cable binder (25-pair cable binders to the MDF should be used.) This will simplify MDF wiring.

3.1.1 Programming Stations

A maximum of three programming positions are available in the system. Station equipment, connected to the first two ports of the first ESI-F(8)-21 KTU, are automatically set as programming positions and must be an ETW-16DC-1 (BK) TEL, ETW-16DD-1 (BK) TEL, or ETW-24DS-1 (BK) TEL.

A third programming position becomes available when an MIF-F(S)-10 KTU, MIF-F(L)-10 KTU, and the Electra Professional Level II System Program Technician software (Stock No. 722300) are installed.

3.1.2 Attendant Station

A maximum of four Attendant positions can be installed in a system with EDW-48-1 (BK) DSS/BLF Consoles. Each DSS/BLF Console must be supported by an ESI-F(8)-21 KTU. The EDW-48-1 (BK) DSS/BLF Console can be attached to Multiline Terminals using a metal bracket that is supplied with each EDW-48-1 (BK) DSS/BLF Console. A maximum of four EDW-48-1 (BK) DSS/BLF Consoles can be installed in each system.

3.2 Determining Required Equipment

3.2.1 Station Equipment

Determine the type and quantity of station equipment being installed. The type of station equipment that is available includes:

- ETW-8-1 (BK) TEL (8-line Multiline Terminal without LCD)
 ETW-16DC-1 (BK) TEL (16-line Multiline Terminal with LCD)
- ETW-16DD-1 (BK) TEL (16-line Multiline Terminal with LCD)
- ETW-24DS-1 (BK) TEL (24-line Multiline Terminal with LCD and built-in Dual Path Adaptor)
- Single Line Telephone with Message Wait Lamp
- · Single Line Telephone without Message Wait Lamp
- EDW-48-1 (BK) DSS/BLF
- SLT-F(1G)-10 ADP

3.2.2 Interface KTUs

A. Slot and System Port Numbers are shown in Figure 1-4 - Interface Slots and System Port Numbers.

			AP/IF1			AP/IF4	IF5	IF6	IF7	IF8
	S II leve		1			25	33	41	49	57
						26		42	50	58
						27		43	51	59
						28		44	52	60
P	old Almy	C	5	13	21	29	37	45	53	61
			6	14	22	30	38	46	54	62
	IM Wrige					31	39	47	55	63
	Livil than so.	Canal In	8	16	24	32	40	48	56	64

Figure 1-4 Interface Slots and System Port Numbers

B. Telephone and CO Port Numbers

Telephone and CO Ports Numbers are available in the system. The port numbers are used to count the number of station numbers and trunk numbers when programming System Data. (Refer to Figure 1-5 - Telephone and CO Port Number Example.)

			In the fo	llowinge	xample th	ie KTU	s installed i	n anch ela	1 0 40.	
		AP/IF1 D					KTU DTI-F()-10 OPEN		utare:	
APMEL - APMEA and IFS - IF8			AP/IF4 AVI DESI-F(8							
			IF5 IF6	KTU						
APAFI - APAFA			IF7SLI-F(8G)-21 KTU TIS IF8DID-F(4)-10 KTU TH 12 (8)4-							
	3		le Line Lail ports				EXPA	NSION I	(SU	
		C8	C16	C24	Т8	1 889	C36	T16		7
		C7	C15	C23	T7	8 889	C35	T15	[-F(4)]-1	1
		C6	C14	C22	Т6	Divide used by	C34	T14	-F(4)-10	
APREL - APRE		C5	C13	C21	T5		C33	T13		-
and IFS - IFB	7	C4	C12	C20	T4	Shivid of boats	C32	T12	C42	þ
		C3	C11	C19	Т3	Thenu	C31	TII	C41	1
		C2	C10	C18	T2	C26	C30	T10	C38	1
		C1	C9	C17	Т1	C25	C29	T 9	C37	
		Р/ГГ1	АР/ІГ2	AP/IF3	AP/IF4	IF5	IF6	IF7	IF8	1
		= 0	### ##################################						Ym	
		ote 1:	The Tlused.	LI KTU H		vailable	channels,			
AP and/or AP/IFI ~ AP/IF4	N	ote 2;	te 2: The DID KTU has eight available channels, but only four are used. golds agon as the participant							
			Figure 1-5 Telephone and CO Port Number Example							

C. Interface KTUs

To determine the quantity of interface KTUs that are required, refer to Table 1-20 - Number of Required Interface KTUs.

Table 1-20 Mumber of Required Interface KTUs

KTU	Circuits per KTU	Calculations/Comments	Maximum KTUs per System	Allowed Insertion Slots
COI-F(4)-20 KTU	STEP A	Divide the number of CO/PBX/Centrex lines being used by 4.	7	AP/IF1 ~ AP/IF4 and IF5 ~ IF8
COI-F(8)-20 KTU	01-(2)-10 01-1 8 0-20	Divide the number of CO/PBX/Centrex lines being used by 8.	7	AP/IF1 ~ AP/IF4 and IF5 ~ IF8
ESI-F(8)-21 KTU	1D F8 10	Divide the number of Multiline Terminals, DSS/BLF Consoles, SLT Adaptors being used by 8.	7	AP/IF1 ~ AP/IF4 and IF5 ~ IF8
SLI-F(8G)-21 KTU	8 8	Divide the number of Single Line Telephones and/or Voice Mail ports being used by 8.	6	AP/IF1 ~ AP/IF4 and IF5 ~ IF8
PBR-F(4)-11 KTU	880 4	PBR Requirements (Refer to Section D - PBR Requirements on the next page.)	1	AP/IF1 ~ AP/IF4 and IF5 ~ IF8
DID-F(4)-10 KTU	4	Divide the number of DID trunks being used by 4.	7	AP/IF1 ~ AP/IF4 and IF5 ~ IF8
TLI-F(2)-10 KTU	2	Divide the number of Tie lines being used by 2.	7	AP/IF1 ~ AP/IF4 and IF5 ~ IF8
DTI-F()-10 KTU	24	The number of T1/FT1 channels being used.	1	АР/ГГ1
ECR-F-11 KTU	8 Relays	Required when installing multiple zones for external paging, tone ring and/or chime.	1	AP/IF1 ~ AP/IF4 and IF5 ~ IF8
MIF-F(S)-10 KTU		Required when connecting an SMDR printer and/or when using System Program Technician Software.	1 1 T	AP and/or AP/IFI ~ AP/IF4
MIF-F(L)-10 KTU	channels, t	Required when connecting an SMDR printer, and/or when using System Program Technician Software, and/or LCR.	oK 1	AP and/or AP/IF1 ~ AP/IF4
MIF-F(A)-10 KTU		Required when connecting an ACD - MIS terminal.	1	AP and/or AP/IF1 ~ AP/IF4
VRS-F(4)-11 KTU	Numper E	Automated Attendant, DISA, Voice Prompt and/or Delay Announcement.	2	AP/IF1 ~ AP/IF4 and IF5 ~ IF8

D.

PBR Requirements

The Electra Professional Level II system has four channels of built-in PBR circuits in the CPU-F(10)-20 KTU. The PBR circuit can detect DTMF signals from a Single Line Telephone, facsimile, modem, and voice mail ports. Incoming DTMF signals can also be detected from a CO trunk by an Automated Attendant and DISA feature. An optional PBR-F(4)-11 KTU can only detect DTMF signals from Single Line Telephones, facsimiles, modems, and voice mail. bear as the agent at

The quantity of PBR-F(4)-11 KTUs that are needed depends on the number of Single Line Telephones, modems, facsimiles, voice mail ports, and whether Automated Attendant/DISA trunks are connected to the system. Up to 24 Single Line Telephones or Automated Attendant/DISA trunks can be supported by one PBR circuit.

Installation Example 3.3

The following example will aid in understanding some of the requirements when configuring an Electra Professional Level II system. (Refer to Table 1-21 - System Configuration Example.) The equipment used in this example include:

- 12 CO Lines with Automated Attendant Feature
- 12 Multiline Terminals [ETW-16DD-1 (BK) TEL only]
- Voice Mail Connection (4 ports)
- SMDR
- External Paging

ACIM tol batteries agas and to appliance the Table 1-21 System Configuration Example

serally permit the MDF to b	Device Type	Units	Quantity
		ESF-SB-10 KSU	1
	tant a bronness.	ESF-SE-10 KSU	1
	Power Supply	PSF-S-20 PSU	2
	CO Line of basemil son sud	COI-F(8)-20 KTU	2
egardless of its suitability.	Multiline Terminal Interface	ESI-F(8)-21 KTU	2
	Multiline Terminal	ETW-16DD-1 (BK) TEL	12
	Voice Mail Connection	SLI-F(8G)-21 KTU	1
	SMDR basery rel basery elds	MIF-F(S)-10 KTU	1
	External Paging	ECR-F-11 KTU	1

SECTION 4 KSU INSTALLATION

4.1 General Information

This section provides the requirements for installing the system. The installer should be familiar with this section before installing the system.

4.2 Site Preparation and MDF/IDF Construction

The technician should plan the installation before actual work begins. Advanced planning will minimize time, cost, and disruption of the customer's business activities. Additional benefits include flexibility for changes and expansion, efficient maintenance, and increased customer satisfaction.

4.2.1 Precautionary Information

The following warnings shall be observed during installation:

- Never install telephone wiring during a lightning storm.
- Never install telephone jacks in wet locations unless the jack is specifically designed for wet locations.
 - 3. Never touch uninsulated telephone wires or terminals unless the telephone line has been disconnected at the network interface.
 - 4. Use caution when installing or modifying telephone lines.

4.2.2 Site Survey

In most cases, a survey of the customer's premises is needed to determine the placement of the Main Distribution Frame (MDF). A second visit to the site may be necessary to obtain the exact dimensions of the area selected for MDF, cable lengths, and possible IDF (Intermediate Distribution Frame) locations.

Collected information about the job site will generally permit the MDF to be partially assembled at the technician's shop, which helps to minimize time spent at the customer's premises.

4.2.3 Site Limitations

In selecting a permanent site for the MDF, the technician may encounter problems such as, but not limited to, the following:

- Limited space is available and must be used regardless of its suitability.
- The available space may be adequate but may pose one or more environmental hazards.
- The proposed location has limitations, such as, insufficient lighting or the lack of a suitable ground for grounding the KSUs.

Whatever the nature of the adversities encountered, the technician must make the necessary decisions to arrive at the best possible solution for installing the equipment. It is beyond the scope of this document to cover all possible situations, precautions, and actions.

4.2.4 Site Selection Conditions

KSU Installation Site:

The following conditions should be met at the site selected for the key service unit (KSU).

- KSUs are normally wall mounted to protect against accident or flooding.
- The KSU should not be located directly beneath pipes, due to the possibility of leaks or condensation causing damage to the Electra Professional Level II system equipment.
- The area where the KSU is to be located must be free of corrosive and inflammable gases, excessive chemical or industrial dusts, and other materials that could cause a hazard to personnel or to the proper functioning of the equipment.
 - Operating ambient temperature and humidity must be within the limits specified in Section 2.6 Environmental Conditions.
- The operation of the system is virtually noiseless and allows a wide selection of installation sites, care should be taken to ensure the KSUs do not present a hazard to office traffic. For purposes of economy, a central location to minimize cabling is often used.
 - The KSU must be located at a site where it can be easily connected to an AC power source.
- The Basic KSU weighs approximately 40 lb. ~ 70 lb. (Basic and Expansion KSUs); therefore, select a strong wall for mounting purposes.
- Place the KSU according to the following spacing specifications:

Space distance between the KSU and the ceiling: 20 in. or more

Space distance on both sides of the KSU:

12 in, or more

Space distance on front of KSU:

20 in. or more

 Avoid connection of the KSU to an AC receptacle used in common with any other device (computer, facsimile machine, copier, etc.)

Telephone Installation Site: Week you and wallished

The following conditions should be met at the site selected for Multiline Terminals.

- Ensure the cable length and line resistance (loop), between the KSU and the telephones, comply with the specifications shown in Table 1-10 Multiline Terminal Loop Resistance and Cable Length and Table 1-11 Single Line Telephone Connection Table Length.
- Some devices require an external power supply. Select a place where they
 can be easily connected to an AC outlet.

4.2.5 MDF Construction

The Main Distribution Frame (MDF) consists of two different types of standard quick-connect terminals blocks that are mounted on a 3/4" plywood backboard. It is recommended that the blocks be mounted on standoffs for ease of access. The recommended blocks are: 66B50 type, for termination of the MDF Cable Assembly and 66M50 type, for termination of the station cables.

The Intermediate Distribution Frame (IDF) requires only the 66M50 type blocks.

Both the MDF and IDF utilize standard bridging clips for each type of terminal block. The bridging clips are used to mate the left half of the terminal block (terminated cable run) to the right half of the terminal block (cross-connection wire) to the terminal block (cross-connection wire). The bridging clips are also useful during trouble shooting to help isolate the cable runs and terminals/telephones from the central equipment and the Central Office Network from the system. (Refer to Figure 1-6 - Typical Full MDF Layout. Also refer to Section 4.3.4 - Wall Mounting the Basic and/or Expansion KSUs.)

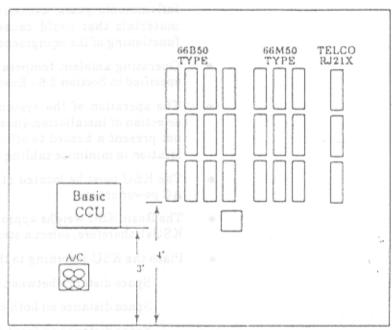


Figure 1-6 Typical Full MDF Layout

4.3 Installing the Key Service Unit (KSU)

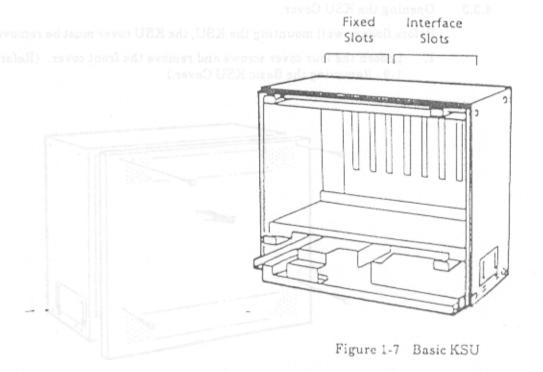
Installation Precautions

Before installation and cabling of the KSU observe these precautions:

- Before starting the work, be sure the PSU power switch is OFF and disconnect the power cord from the AC outlet.
- Do not directly touch the soldered surfaces of the KTUs with your hands.

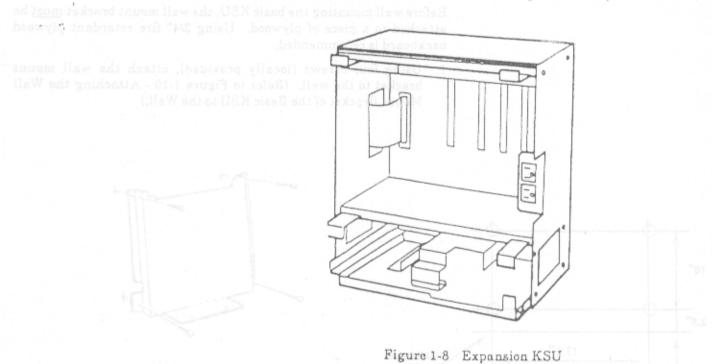
4.3.1 Basic KSU (ESF-SB-10-KSU)

The ESF-SB-10 KSU is the basic system cabinet. There are two fixed slots for the CPU and MIF KTUs, one PSU slot, a battery installation space, and five interface slots for the installation of telephones, CO/PBX lines, Tie lines, VRS, DID, Digital Trunk (T1), PBR, and ECR KTUs. The KSU can be either floor mounted or wall mounted. (Refer to Figure 1-7 - Basic KSU.)



4.3.2 Expansion KSU (ESF-SE-10 KSU)

The ESF-SE-10 KSU is the expansion cabinet that provides the system with one PSU slot, battery installation space, and three additional interface slots. Only one expansion KSU can be installed with the system. This KSU is floor or wall mounted with the ESF-SB-10 KSU. (Refer to Figure 1-8 - Expansion KSU.)



Attaching the Wall Mount Bracket of the Basic ESU to the Wall

4.3.3 Opening the KSU Cover

Before floor or wall mounting the KSU, the KSU cover must be removed.

 Loosen the four cover screws and remove the front cover. (Refer to Figure 1-9 - Removing the Basic KSU Cover.)

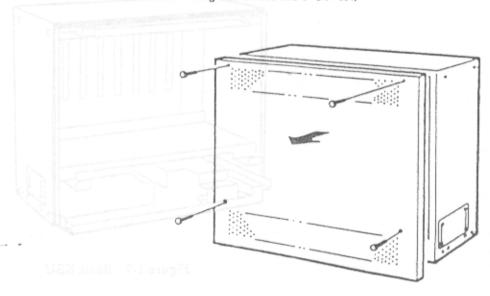


Figure 1-9 Removing the Basic KSU Cover

4.3.4 Wall Mounting the Basic and/or Expansion KSUs

4.3.4.1 Wall Mounting the Basic KSU

Before wall mounting the basic KSU, the wall mount bracket <u>must</u> be attached to a piece of plywood. Using 3/4" fire retardant plywood backboard is recommended.

 Using four screws (locally provided), attach the wall mount bracket to the wall. (Refer to Figure 1-10 - Attaching the Wall Mount Bracket of the Basic KSU to the Wall.)

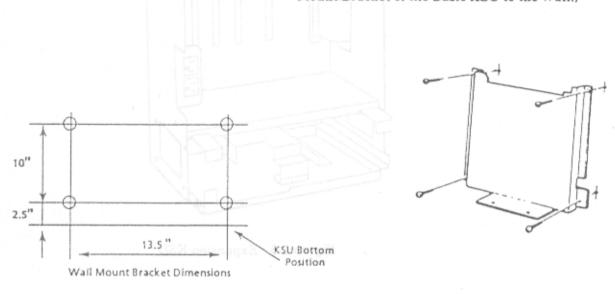


Figure 1-10 Attaching the Wall Mount Bracket of the Basic KSU to the Wall

2. Holding the Basic ESF-SB-10-KSU, lower the two hooks that protrude from the rear of the KSU over the wall mount bracket. (Refer to Figure 1-11 - Attaching the Basic KSU to the Wall Mount Bracket.)

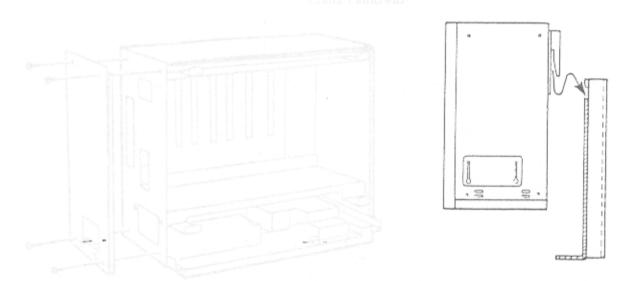


Figure 1-11 Attaching the Basic KSU to the Wall Mount Bracket

3. Using the two provided bolts, secure the KSU to the wall mount gainers and of research forces lies USA 01-36 bracket from the bottom. (Refer to Figure 1-12 - Securing the lies and secure the KSU to the Wall Mount Bracket.)

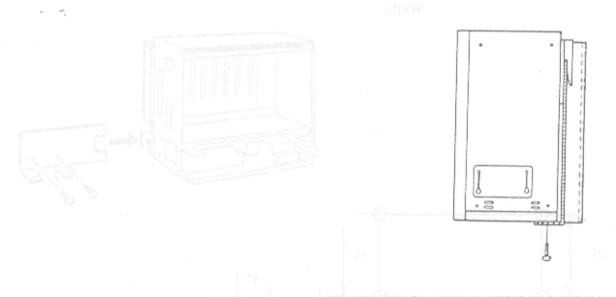


Figure 1-12 Securing the KSU to the Wall Mount Bracket

Figure 1-14 Attaching the Wall Mount Bracket of the Expansion KSU to the Wall

4.3.4.2 Wall Mounting the Expansion KSU

 Remove the side panel (four screws) from the Basic KSU before installing the expansion KSU. (Refer to Figure 1-13- Removing the Side Panel.)



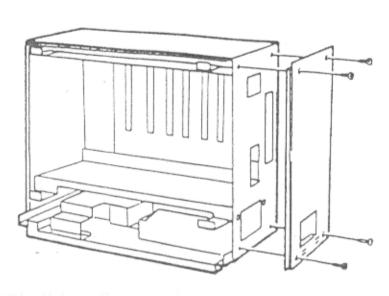


Figure 1-13 Removing the Side Panel

2. Attach the ESF-SE-10 KSU wall mount bracket to the existing ESF-SB-10 KSU wall mount bracket and attach it to the wall using two (locally provided) screws. (Refer to Figure 1-14 - Attaching the Wall Mount Bracket of the Expansion KSU to the Wall.)

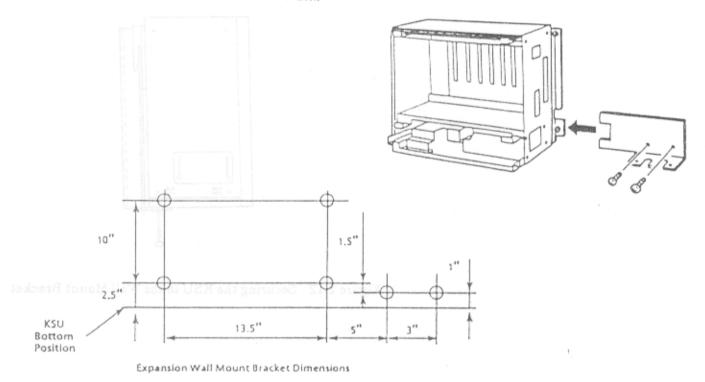
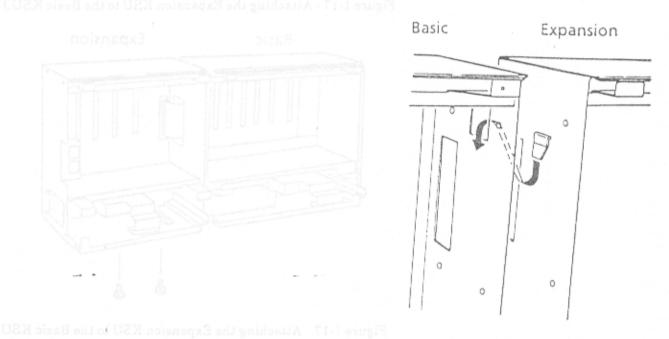
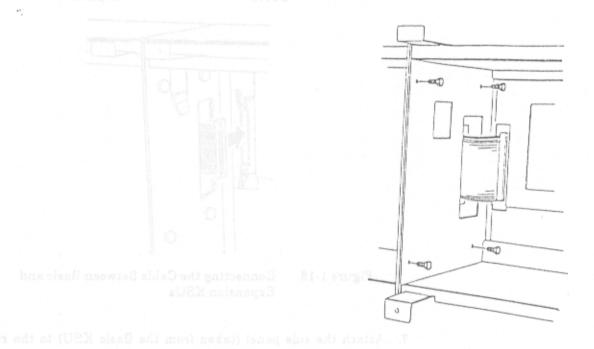


Figure 1-14 Attaching the Wall Mount Bracket of the Expansion KSU to the Wall



USH golden squal self no belouses seldes not Figure 1-15. Hooking the Basic and Expansion KSUs Together

 Bolt the Expansion KSU to the Basic KSU using the four provided bolts. (Refer to Figure 1-16 - Bolting the Expansion KSU to the Basic KSU.)



and raffe awards odd maldgiler bas stever loof Figure 1-16 Bolting the Expansion KSU to the Basic KSU at aUTA bas sides garbauery secretard JUES odd to goldeliated

5.0 Using the provided bolts, attach the ESF-SE-10 KSU to the sexpansion wall mounting bracket from the bottom. (Refer to Figure 1-17 - Attaching the Expansion KSU to the Basic KSU.)

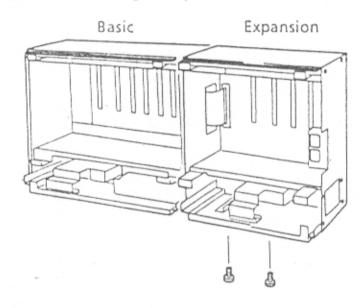


Figure 1-17 Attaching the Expansion KSU to the Basic KSU

6. Attach the ribbon cable, mounted on the Expansion KSU, through the opening between the Basic and Expansion KSUs. (Refer to Figure 1-18 - Connecting the Cable Between the Basic and Expansion KSUs.)

Basic

Expansion

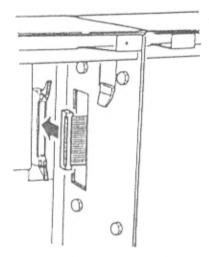


Figure 1-18 Connecting the Cable Between Basic and Expansion KSUs

- Attach the side panel (taken from the Basic KSU) to the right side of the Expansion KSU.
- Remount the front covers and retighten the screws after the installation of the PSU, batteries, grounding cable, and KTUs is complete.

4.3.5 Floor Mounting the Basic and/or Expansion KSUs

4.3.5.1 Floor Mounting the Basic KSU

1. Attach the two provided floor mounting brackets to the underside of the Basic KSU. (Refer to Figure 1-19 - Bottom View of the Floor Mounting Brackets.)

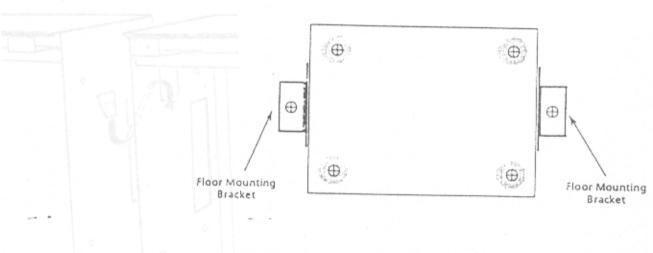
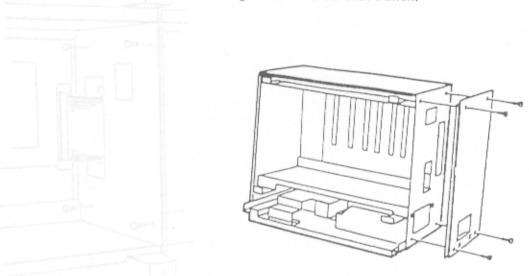


Figure 1-19 Bottom View of the Floor Mounting Brackets

 Set the Basic KSU on a level surface, near an AC outlet and against a wall. Using two screws (locally provided) attach the KSU to the floor.

4.3.5.2 Floor Mounting the Expansion KSU

 Remove the side panel on the Basic KSU. (Refer to Figure 1-20 -Removing the Basic KSU Side Panel.)



UEN size E add at UEN coleanex and galifor ES I amount 1-20 Removing the Basic KSU Side Panel

 Lift the Expansion KSU and attach it to the Basic KSU by placing the hook through the slot. (Refer to Figure 1-21 -Hooking the Basic and Expansion KSUs Together.)

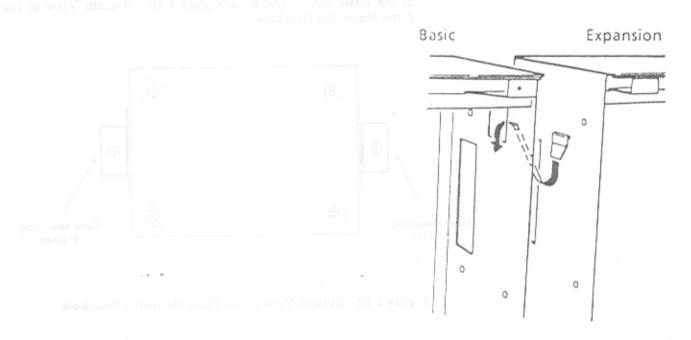


Figure 1-21 Hooking the Basic and Expansion KSUs Together

 Bolt the Expansion KSU to the Basic KSU using the four provided bolts. (Refer to Figure 1-22 - Bolting the Expansion KSU to the Basic KSU.)

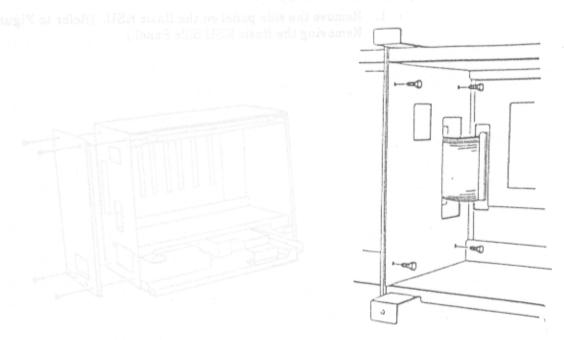


Figure 1-22 Bolting the Expansion KSU to the Basic KSU

 Attach the ribbon cable, mounted on the Expansion KSU, through the opening between the Basic and Expansion KSUs. (Refer to Figure 1-23 - Connecting the Cable Between the Basic and Expansion KSUs.)

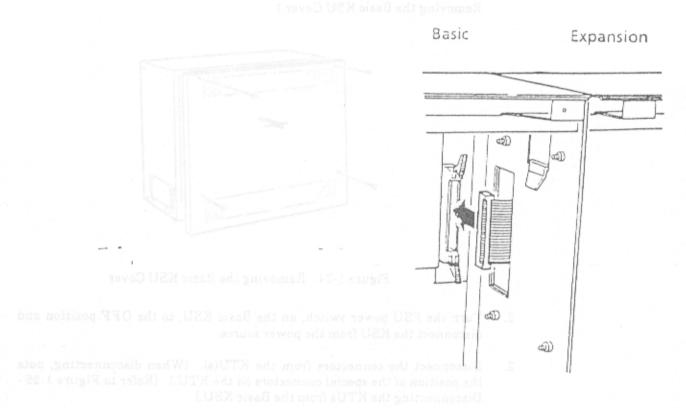
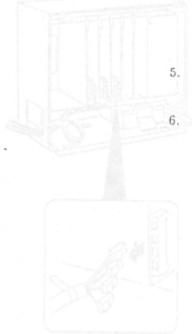


Figure 1-23 Connecting the Cable Between the Basic and Expansion KSUs



Attach the side panel (taken from the Basic KSU) to the right side of the Expansion KSU using the four screws.

 Remount the front covers and retighten the screws after the installation of the PSU, batteries, grounding cable, and KTUs is complete.

- 4.3.6 Adding the Expansion KSU to an Installed System
- 1. Loosen the four screws on the front cover and remove the cover panel.

 (Refer Section 4.3.3 Opening the KSU Cover and to Figure 1-24 Removing the Basic KSU Cover.)

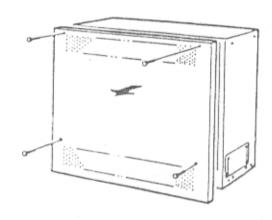


Figure 1-24 Removing the Basic KSU Cover

- Turn the PSU power switch, on the Basic KSU, to the OFF position and disconnect the KSU from the power source.
- Disconnect the connectors from the KTU(s). (When disconnecting, note
 the position of the special connectors on the KTU.) (Refer to Figure 1-25 Disconnecting the KTUs from the Basic KSU.)

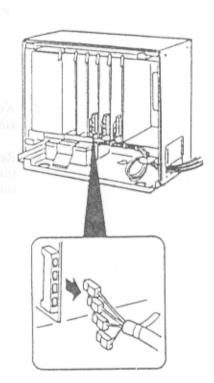


Figure 1-25 Disconnecting the KTUs from the Basic KSU

 Rémove the slide bracket, on the Basic KSU, and pull the cable through the opening. (Refer to Figure 1-26 - Removing the Slide Bracket on the Basic KSU.)

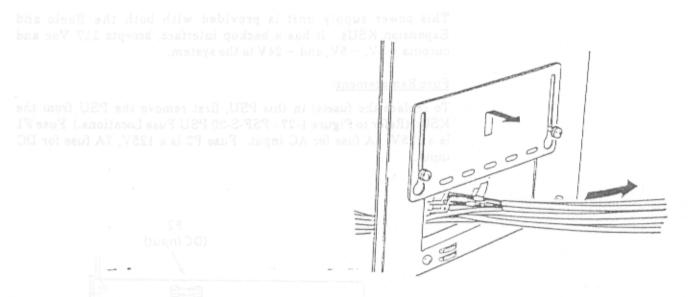


Figure 1-26 Removing the Slide Bracket on the Basic KSU

If wall mounting the system, refer to Section 4.3.4.2 - Wall Mounting the Expansion KSU.

If floor mounting the system, refer to Section 4.3.5.2 - Floor Mounting the Expansion KSU.

4.3.7 Installing a PSF-S-20 PSU in the Basic and Expansion KSUs

4.3.7.1 General Information

This power supply unit is provided with both the Basic and Expansion KSUs. It has a backup interface, accepts 117 Vac and outputs +5V, -5V, and -24V to the system.

Fuse Replacement:

To replace the fuse(s) in this PSU, first remove the PSU from the KSU. (Refer to Figure 1-27 - PSF-S-20 PSU Fuse Locations.) Fuse F1 is a 125V, 4A fuse for AC input. Fuse F2 is a 125V, 7A fuse for DC input.

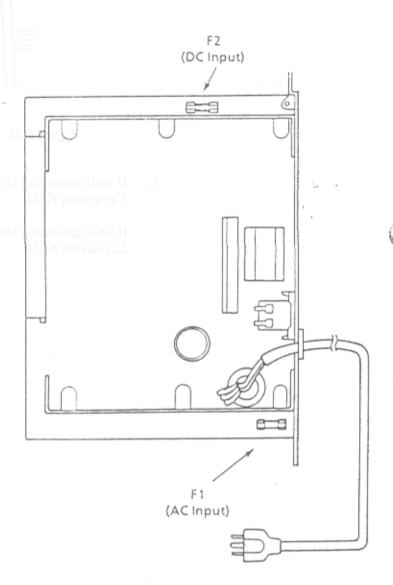


Figure 1-27 PSF-S-20 PSU Fuse Locations

4.3.7.2 Installing a PSF-S-20 PSU in the Basic KSU

 Mount the PSF-S-20 PSU into the left slot of the Basic KSU and secure using the two provided bolts. (Refer to Figure 1-28 -Installing the PSF-S-20 PSU into the Basic KSU.)

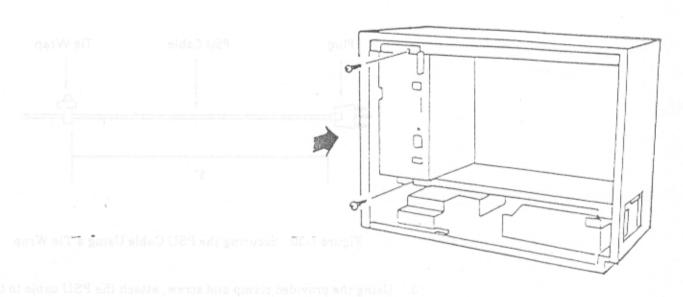


Figure 1-28 Installing the PSF-S-20 PSU into the Basic KSU

4.3.7.3 Installing a PSF-S-20 PSU in the Expansion KSU

 Mount the PSF-S-20 PSU into the left slot of the Expansion KSU and secure using the two provided bolts. (Refer to Figure 1-29 -Installing the PSF-S-20 PSU into the Expansion KSU.)

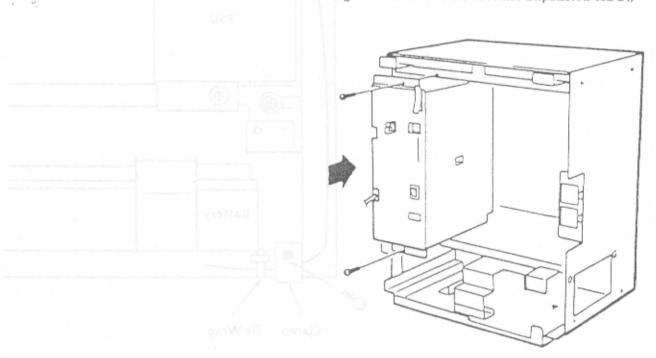
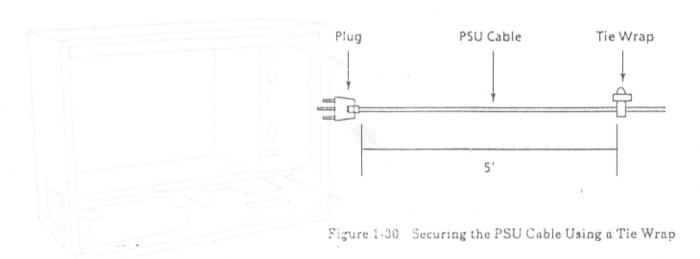


Figure 1-29 Installing the PSF-S-20 PSU into the Expansion KSU

 Attach a tie wrap (locally provided) 5 feet from the plug. (Refer to Figure 1-30 - Securing the PSU Cable Using a Tie Wrap.)



 Using the provided clamp and screw, attach the PSU cable to the KSU as shown in the following diagram. (Refer to Figure 1-31 -Attaching the PSU Cable to the KSU.)

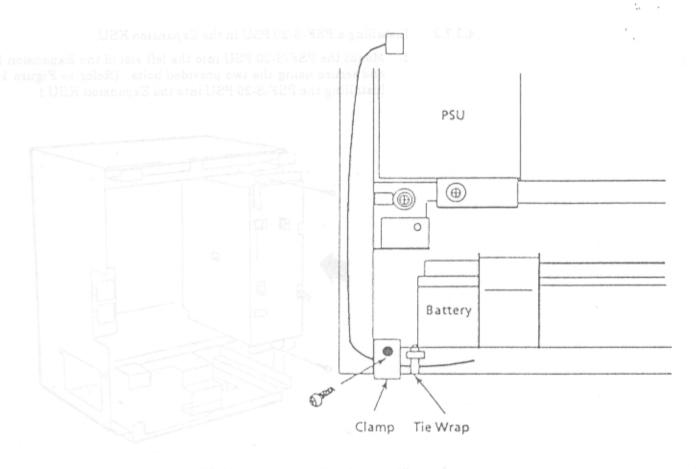


Figure 1-31 Attaching the PSU Cable to the KSU

4.3.8 Battery Installation

4.3.8.1 Connecting the Built-In Batteries

 Connect the two batteries in series. (Refer to Figure 1-32 -Connecting the Two PSF Built-In Batteries.)

Red Cord $\rightarrow \oplus$ Black Cord $\rightarrow \ominus$

CAUTION

Be careful not to reverse the \oplus and \ominus of the batteries.

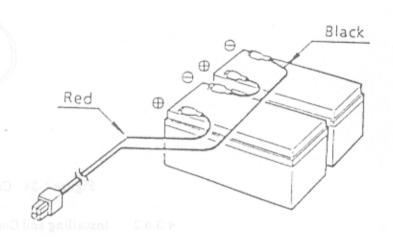


Figure 1-32 Connecting the Two PSF Built-In Batteries

 Mount the battery holddown plate and tighten the screw. (Refer to Figure 1-33 - Placing the Batteries in the KSU.)

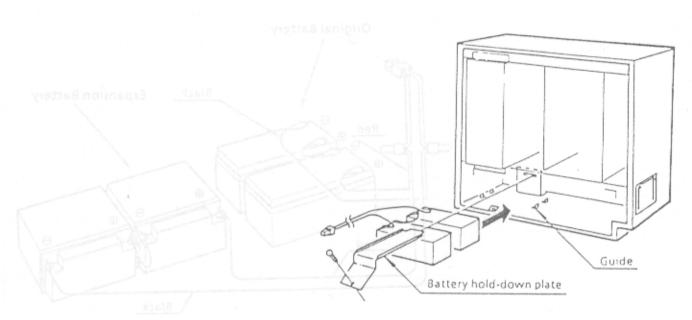


Figure 1-33 Placing the Batteries in the KSU

3. Connect the cord to the DC IN connector of the power supply unit.

(Refer to Figure 1-34 - Connecting the Batteries to the Power Supply Unit.)

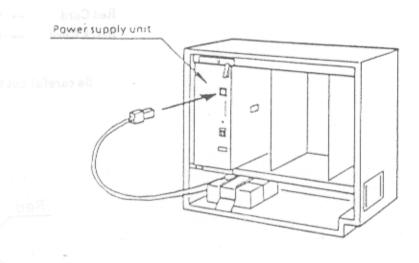


Figure 1-34 Connecting the Batteries to the Power Supply Unit

4.3.8.2 Installing and Connecting Expansion Batteries

- Take out the original batteries and disconnect the cords from the batteries.
- 2. Using the provided cords, connect the pairs of built-in batteries and expansion batteries in parallel with each other. (Refer to Figure 1-35 Disconnecting the Original Batteries.)

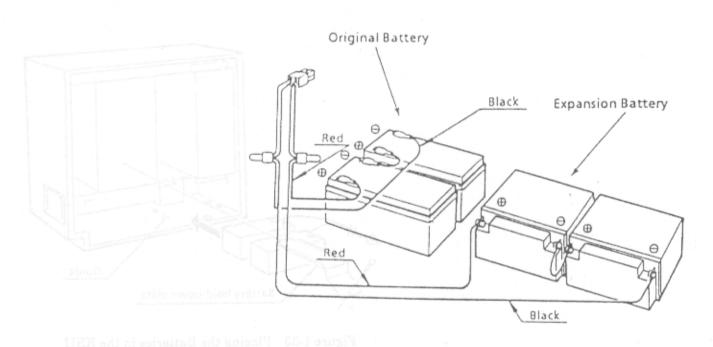


Figure 1-35 Disconnecting the Original Batteries

- Mount the original batteries into the KSU and install the expansion batteries outside of the KSU.
- Connect the cord to the DC IN on the power supply unit of the KSU. (Refer to Figure 1-36 - Connecting the Batteries to the Power Supply.)

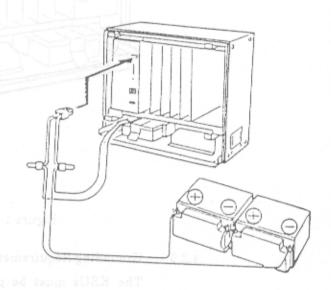


Figure 1-36 Connecting the Batteries to the Power Supply

NOITION Collegiona company procedures.

- Make sure the cord connected to the DC IN, on the power supply unit, is disconnected before connecting the batteries.
 - Be careful not to reverse the ⊕ and ⊖ polarities on the batteries.
 - When the batteries are connected, be sure the batteries are not in contact with any metal on the KSU.

4.3.8.3 Cable Routing

The cable routing (with only the Basic KSU) and the cable connections for built-in batteries are shown in Figure 1-37 - Cable Connections for the Expansion KSU.

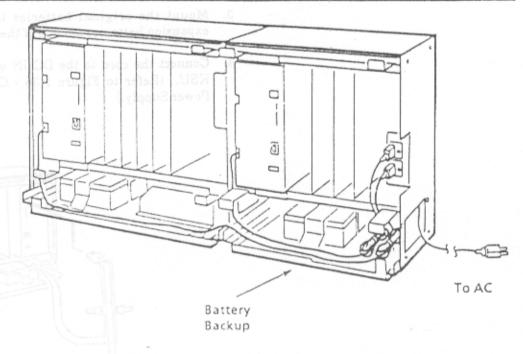


Figure 1-37 Cable Connections for the Expansion KSU

4.3.9 Grounding Requirements

The KSUs must be properly grounded. The KSU is provided with two redundant grounding methods:

- 1. A dedicated AC outlet.
- 2a. Provide a suitable cold water pipe ground in accordance with the local operating telephone company procedures.
- 2b. If no water pipe ground is available, a ground rod should be installed in accordance with the local operating telephone company procedures.
- 2c. A grounding terminal is provided on the ESF-SB-10 KSU. Connect the grounding conductor to the hexagonal screw with the green colored head terminal. (Refer to Figure 1-38 - KSU Grounding.)

Note: The provided ferrite core should be wrapped with the ground cable.

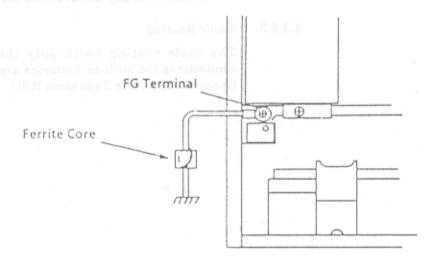


Figure 1-38 KSU Grounding

SECTION 5

INSTALLING A KEY TELEPHONE UNIT (KTU)

- 01-1 and 3 5.1 General Information

5.1.1 Installation Precautions

MOTTUABefore installation of the KTUs observe these precautions:

- To prevent accidental damage to equipment, it is recommended that east at at UTX and to desire all senses that seriously inconvenience the user.
 - The KTUs used in this system make extensive use of CMOS technology. CMOS technology is very susceptible to static; therefore, extreme care must be taken to avoid static discharge when handling KTUs.

5.1.2 KTU Installation

- Make any connections and switch settings on the KTUs before inserting them in the KSU. (Refer to Sections 5.2 - Common Control KTUs, 5.3 - Interface KTUs, and 5.4 - Optional KTUs for the switch settings for individual KTUs.)
- A switch (MB) is provided on the KTUs (except the CPU) to protect circuitry from any damage during installation. When the system power is ON (while installing KTUs), ensure the MB switch is in the OFF position. (Refer to Figure 1-39 - KTU Positions on the KSU.)

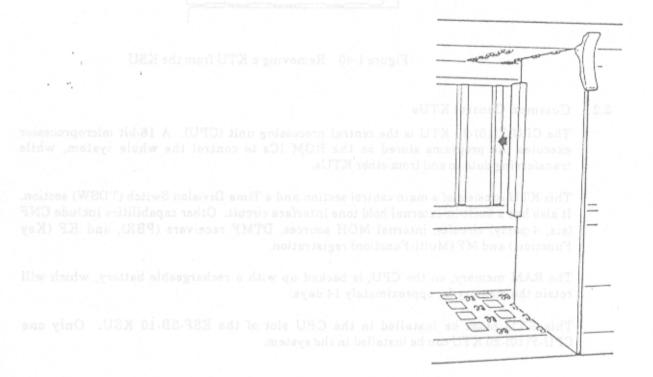


Figure 1-39 KTU Positions on the KSU

 The component side of all KTUs must face the left side of the KSU when installed. Ejector tabs are always on the top. (Refer to Figure 1-40 -Removing a KTU from the KSU.)

CAUTION

When a unit is mounted or removed, make sure that the power switch of the KSU is in the OFF position or that the MB switch of the KTU is in the OFF position.

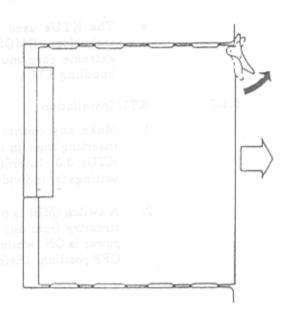


Figure 1-40 Removing a KTU from the KSU

5.2 Common Control KTUs

The CPU-F(10)-20 KTU is the central processing unit (CPU). A 16-bit microprocessor executes the programs stored on the ROM ICs to control the whole system, while transferring data to and from other KTUs.

This KTU consists of a main control section and a Time Division Switch (TDSW) section. It also has a built-in external hold tone interface circuit. Other capabilities include CNF (six, 4-party) circuits, internal MOH sources, DTMF receivers (PBR), and KF (Key Function) and MF (Multi-Function) registration.

The RAM memory, on the CPU, is backed up with a rechargeable battery, which will retain the memory for approximately 14 days.

This KTU must be installed in the CPU slot of the ESF-SB-10 KSU. Only one CPU-F(10)-20 KTU can be installed in the system.

Switch Settings:

Before programming System Data, the switch labeled BTS must be set to the ON position to allow memory retention in case of a power failure or brownout. Failure to activate the backup battery circuit (SW BTS ON) will result in System Data reset to the default values, the status of all stations will reset to the default values, and the data programmed on the station will clear, if a power failure or brownout occurs. [Refer to Chapter 2 - Programming in this manual for instructions, if programming using a Multiline Terminal. Refer to the Electra Professional Level II System Program Technician Manual (included with the System Program Technician Software - Stock No. 722300) for instructions, if programming using a PC.]

Anytime a CPU-F(10)-20 KTU is installed in the system, the clock/calendar must be set. This also applies when battery backup fails for any reason.

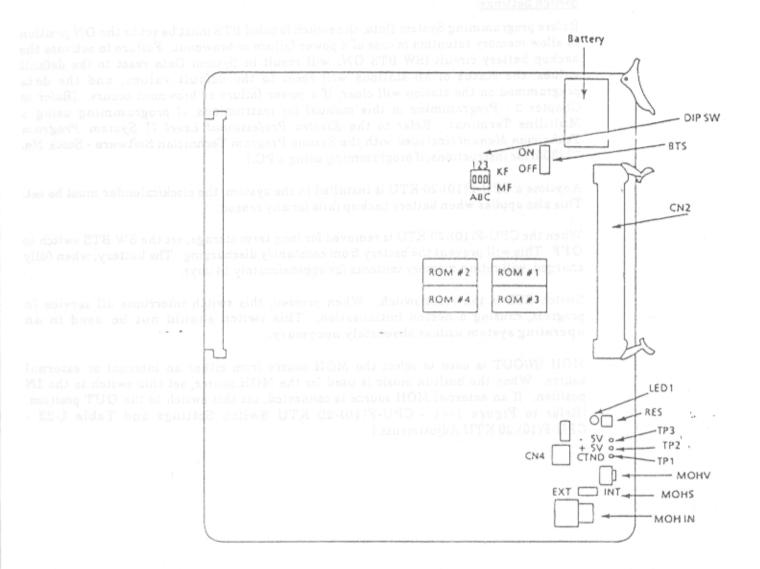
When the CPU-F(10)-20 KTU is removed for long term storage, set the SW BTS switch to OFF. This will prevent the battery from constantly discharging. The battery, when fully charged, will retain memory contents for approximately 14 days.

Switch RES is the reset switch. When pressed, this switch interrupts all service in progress, causing a Second Initialization. This switch should not be used in an operating system unless absolutely necessary.

MOH IN/OUT is used to select the MOH source from either an internal or external source. When the built-in music is used for the MOH source, set this switch to the IN position. If an external MOH source is connected, set this switch to the OUT position. [Refer to Figure 1-41 - CPU-F(10)-20 KTU Switch Settings and Table 1-22 - CPU-F(10)-20 KTU Adjustments.]

he operation verification (ED (LED1) always flashes when the system is in normal operation, and steadily lights when the system

Section 1 41 CFU-5 (10) 20 KTU Switch Settlings



The operation verification LED (LED1) always flashes when the system is in normal operation, and steadily lights when the system is reset.

Figure 1-41 CPU-F(10)-20 KTU Switch Settings

Table 1-22 CPU-F(10)-20 KTU Adjustments

Adjustment Item	Name of Switch	Initial Setting	ns si UTA sidT LTAS srougebA Adjustment
Memory Backup	BTS	OFF	Should be set to ON to retain system data. Note: Set the switch to ON before inserting the unit.
MOH INT/EXT	MOHS	TNI	Set the switch to "EXT" when an external hold tone source (MOH) is to be used. (Note 1)
MOH Volume Control	MOHV	Center	To adjust the volume of MOH.
the eight circuits of this KTU. (Refer to	DIPSWA(I)	OFF	Not Used
DIP Switch	DIP SW B (2)	OFF	Not Used
	DIPSWC(3)	ON	"OFF": Multi-Function System "ON": Key Function System (Note 2)
the vas.	CN2	N/A	Not Used
Connector	CN4	N/A	
+ 5V a +	CN101	N/A	For connecting the CLK-F-21 Unit.
	TP1	N/A	Ground voltage check terminal
TP	TP2	N/A	+ 5V voltage check terminal
L O NO	TP3	N/A	- 5V voltage check terminal

- Note 1: Internal MOH has two melodies. Select by System Programming melodies:
 - "Melody Fair"
 - 2. "Let It Be"
- Note 2: Refer to Section 1.2.1 Company Notification.

5.3 Interface KTUs

5.3.1 ESI-F(8)-21 KTU

This KTU is an interface for Multiline Terminals, DSS/BLF Consoles, and SLT Adaptors (SLT-F(1G)-10 ADP). The ESI allows connection of any combination of eight Multiline Terminals, DSS/BLF Consoles, or SLT Adaptors.

A maximum of seven ESI-F(8)-21 KTUs can be installed in the system.

Switch Settings/LED Indications:

When the green LED (LED2) is lit, it indicates the ESI KTU is receiving power. The red LED (LED1) indicates one or more of the eight circuits of the KTU is in use. Switch MB is the ON/OFF switch for this KTU. [Refer to Figure 1-42 - ESI-F(8)-21 KTU Switch Layout.]

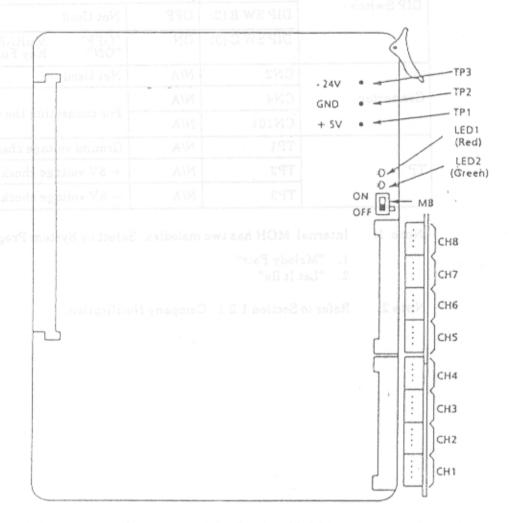


Figure 1-42 ESI-F(8)-21 KTU Switch Layout

5.3.2 SLI-F(8G)-21 KTU

The SLI-F(8G)-21 KTU is an interface for Single Line Telephones. It has a built-in ringing generator (RSG) and can support eight Single Line Telephones or Voice Mail ports. If connecting Voice Mail to an SLI-F(8G)-21 KTU, it must be assigned in System Programming.

solvies has addenugibles me The Single Line Telephone Interface Unit (SLI) provides circuitry for loop specified and signal from the RSG unit to said at last section of the RSG unit to said at last section of the RSG unit to said at last section and message waiting.

The PBR circuits in the CPU-F(10)-20 KTU or the PBR-F(4)-11 KTU is required with Voice Mail or Push Button Single Line Telephone connection.

A maximum six SLI-F(8G)-21 KTUs can be installed in the system.

Switch Settings/LED Indications:

An SLI can support up to eight Single Line Telephones, modems, Voice Mail ports, or fax ports. This SLI is required when power failure transfer of CO lines (two maximum per KTU) and/or message wait signaling to Single Line Telephones is used in the system.

When the green LED (LED1) is lit, it indicates that the SLI-F(8G)-21 KTU is receiving power. The red LED (LED2) indicates one or more of the eight circuits of the KTU are in use. Switch MB is the ON/OFF control for this KTU. [Refer to Figure 1-43 - SLI-F(8G)-21 KTU Switch Layout.]

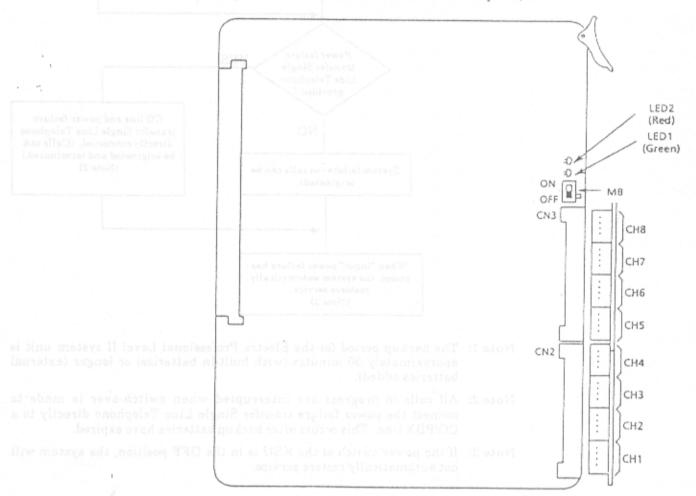
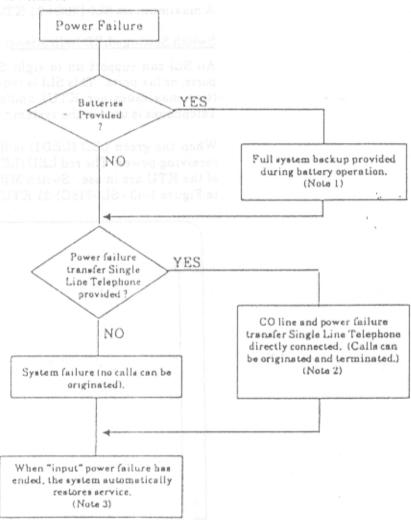


Figure 1-43 SLI-F(8G)-21 KTU Switch Layout

5.3.2.1 Power Failure Backup

Operation in the Event of a Power Failure

In the event of a power failure, the built-in batteries or external batteries (locally provided) provide full backup of system operation for a period of 30 minutes or longer if using external batteries (the period is dependent on the system configuration and service conditions). If a power failure transfer (PFT) Single Line Telephone Interface Unit (up to two channels can be connected to the SLI-F(8G)-21 KTU) is connected, the unit will connect a Single Line Telephone directly to a CO/PBX line to allow origination and termination of calls. (Refer to Figure 1-44 - Power Failure Backup Flowchart.)



- Note 1: The backup period for the Electra Professional Level II system unit is approximately 30 minutes (with built-in batteries) or longer (external batteries added).
- Note 2: All calls in progress are interrupted when switch-over is made to connect the power failure transfer Single Line Telephone directly to a CO/PBX line. This occurs after backup batteries have expired.
- Note 3: If the power switch of the KSU is in the OFF position, the system will not automatically restore service.

Figure 1-44 Power Failure Backup Flowchart

Operation When Input Power Failure Has Resumed

When input power is resumed, the system is automatically reset and restores service. A call in progress by the PFT Single Line Telephone will be disconnected.

Single Line Telephone for Power Failure Transfer

Only a Single Line Telephone can be used as a power failure transfer telephone.

Connections:

Connect a CO line and Single Line Telephone for power failure transfer via the SLI-F(8G)-21 KTU to the COI-F(4)-20 or COI-F(8)-20 KTU. A 4-conductor cable (locally provided) is required to connect the SLI-F(8G)-21 KTU to the 66 M150 block. (Refer to Figure 1-45-Connecting CO Line and Single Line Telephone for Power Failure Transfer.)

Note: When selecting a Single Line Telephone for power failure transfer, make sure it matches the dialing type of the CO line (10 pps, 20 pps, or DTMF) where it will be connected. If Ground Start trunks are used, a Single Line Telephone with a ground button must be used.

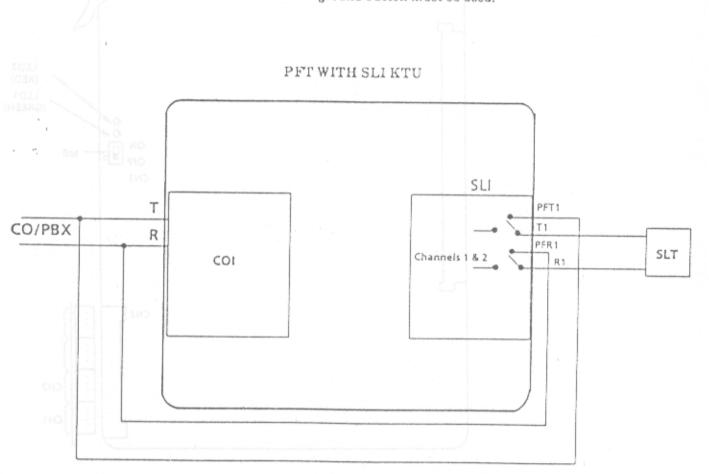


Figure 1-45 Connecting CO Line and Single Line Telephone for Power Failure Transfer

5.3.3 LLT-F(2G)-10 KTU

The Long Line Telephone (LLT) KTU provides for the termination and operation of up to two Off-Premise Extensions (OPX). Each LLT-F(2G)-10 KTU has a built-in ring supply generator (RSG). Up to 1500 ohms of loop resistance (including the Single Line Telephone) is acceptable between the LLT-F(2G)-10 KTU and a Single Line Telephone.

Switch Settings/LED Indications:

The green LED (LED1), when lit, indicates the LLT-F(2G)-10 KTU is receiving power. The red LED (LED2), when lit, indicates one or more of the two circuits of the KTU are in use. Switch MB is the ON/OFF control for this KTU. (Refer to Figure 1-46 - LLT-F(2G)-10 KTU Switch Layout.)

Note: PBR in the CPU-F(10)-20 KTU or PBR-F(4)-11 KTU is required with Push Button SLT Connection.

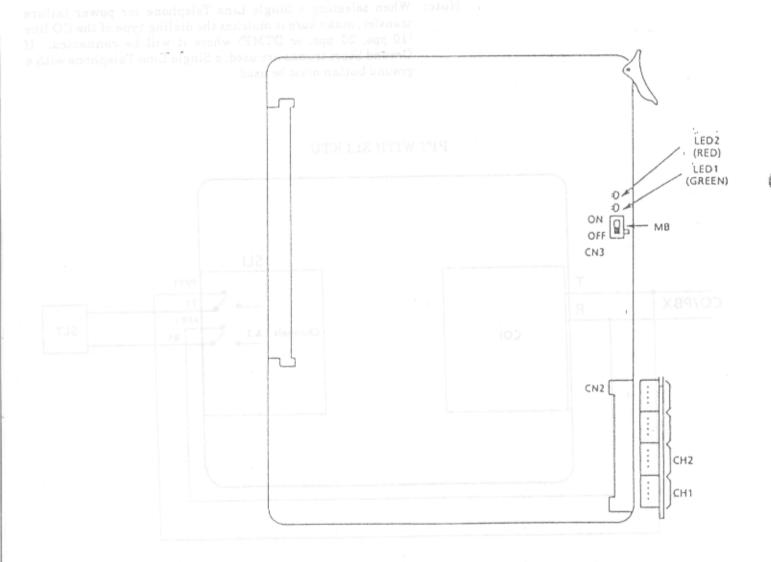


Figure 1-46 LLT-F(2G)-10 KTU Switch Layout

5.3.4 COI-F(4)-20 KTU

The Central Office Line Interface Unit (COI) contains circuitry for outside ring detection, hold, dialing, and control function.

Each COI-F(4)-20 KTU provides four identical circuits to support up to four CO trunks which can be any mix of Loop Start or Ground Start, DTMF or Dial Pulse dialing. In addition, Tip and Ring electrical fuses (posistor) PST101 ~ PST402 are provided to comply with UL 1459 2nd Edition requirements.

A maximum of seven CO1-F(4)-20 KTUs can be installed in the system.

Switch Settings/LED Indications:

This COI KTU contains four switches that are designated SWI ~ SW4 for the selection of trunk type (Loop or Ground Start). Each switch is associated with an individual circuit. Red LEDs (101~401) indicate the status of the circuit.

When a Loop Start trunk is connected to a circuit, its associated switch must be set to the LP position. If a Ground Start trunk is connected, the switch must be set to the GS position.

When the green LED (LED1) is lit, it indicates that the COI is receiving power. Switch MB is the ON/OFF control for this KTU. [Refer to Figure 1-47 - COI-F(4)-20 KTU Switch Layout.]

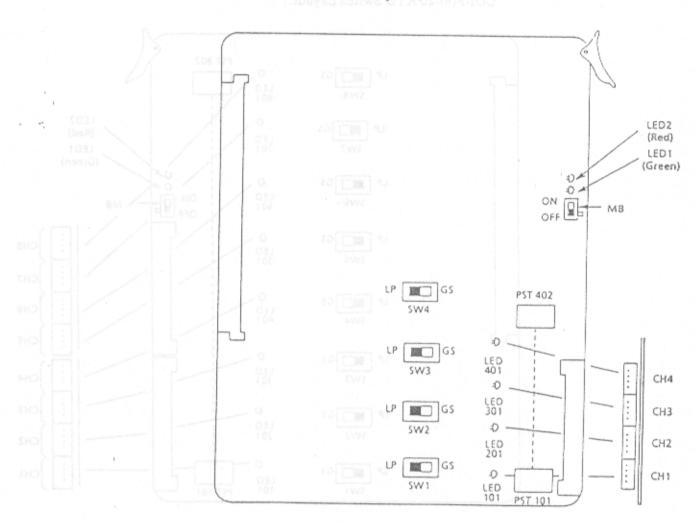


Figure 1-47 CO1-F(4)-20 KTU Switch Layout

5.3.5 COI-F(8)-20 KTU

The Central Office Line Interface Unit (COI) contains circuitry for outside ring detection, hold, dialing, and control function.

Each COI-F(8)-20 KTU provides eight identical circuits to serve up to eight CO trunks which can be any mix of Loop Start or Ground Start, DTMF or Dial Pulse dialing. Tip and Ring electrical fuses (posistors) PST101 ~ PST802 are provided to comply with UL 1459 2nd Edition requirements.

A maximum of seven COI KTUs can be installed per system.

Switch Settings/LED Indications:

This COI KTU contains eight switches that are designated SW1 ~ SW8 for the selection of trunk type (Loop or Ground Start). Each switch is associated with an individual circuit. LEDs (101 ~ 801) indicate the status of each circuit.

When a Loop Start trunk is connected to a circuit, its associated switch must be set to the LP position. If a Ground Start trunk is connected, the switch must be set to the GS position.

When the green LED (LED1) is lit, it indicates that the COI is receiving power. Switch MB is the ON/OFF control for this KTU. [Refer to Figure 1-48 - COI-F(8)-20 KTU Switch Layout.]

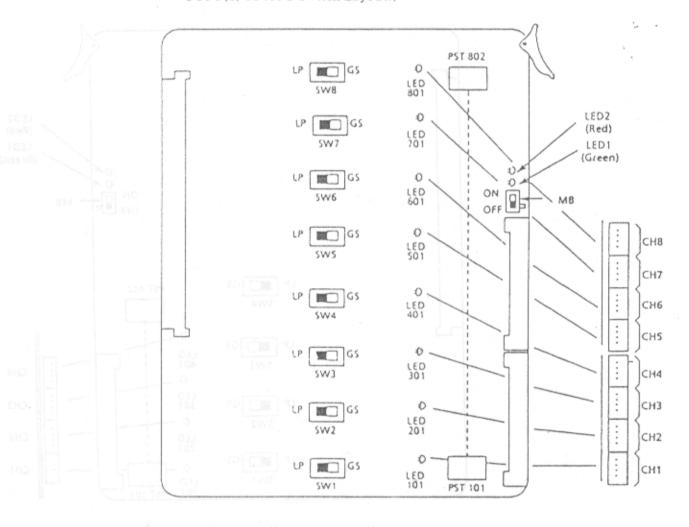


Figure 1-48 COI-F(8)-20 KTU Switch Layout

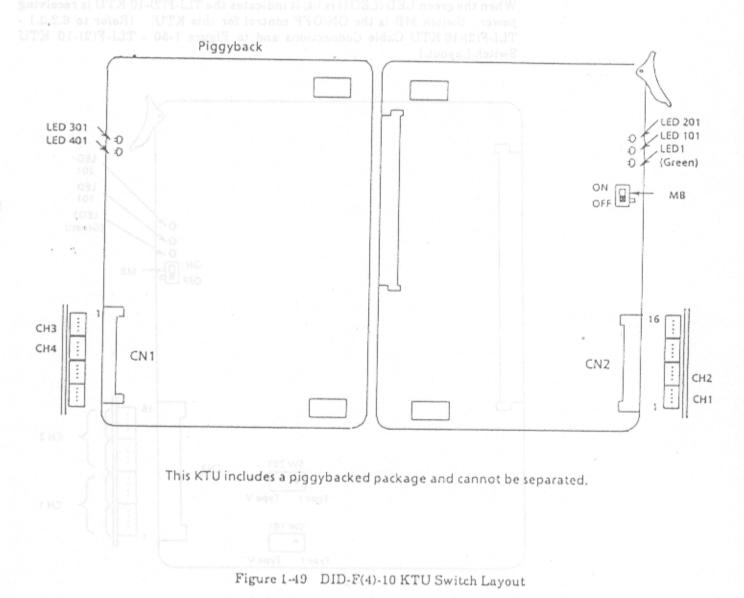
5.3.6 DID-F(4)-10 KTU

The DID KTU provides for the termination and operation of up to four DID lines. Wink start, delay start, or immediate start are accommodated. Dial Pulse and DTMF are supported.

A maximum of seven DID-F(4)-10 KTUs can be installed in the system.

Switch Settings/LED Indications: Make As A

When the green LED (LED1) is lit, it indicates that the DID-F(4)-10 KTU is receiving power. Switch MB is the ON/OFF control for this KTU. LEDs 101 \sim 401 represent the four individual circuits and their status. A busy line indication lamp (LED 101 \sim LED 401) lights when the associated line (CH1 \sim CH 4) is busy. [Refer to Figure 1-49 - DID-F(4)-10 KTU Switch Layout.]



5.3.7 TLI-F(2)-10 KTU

The TLI KTU provides for the termination and operation of up to two E&M Tie lines (4-wire E&M, Type I or Type V, 10 or 20 pps, Dial Pulse or DTMF). Immediate start, wink start, delay dial, and second dial tone signaling are provided.

A maximum of seven TLI-F(2)-10 KTUs can be installed in the system.

Switch Settings/LED Indications:

Switches designated SW101 and SW201 allow selection of Type I or Type V for channels 1 and 2 respectively.

Red LEDs 101 and 201 indicate the status of the two associated circuits.

When the green LED (LED1) is lit, it indicates the TLI-F(2)-10 KTU is receiving power. Switch MB is the ON/OFF control for this KTU. [Refer to 6.2.3.1 - TLI-F(2)-10 KTU Cable Connections and to Figure 1-50 - TLI-F(2)-10 KTU Switch Layout.]

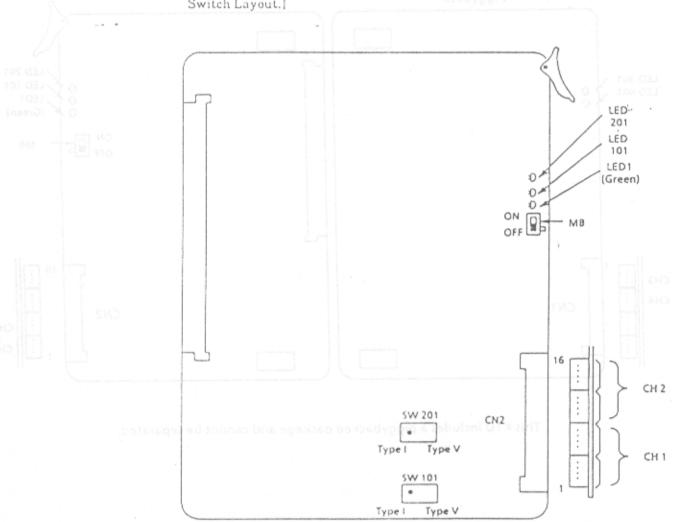


Figure 1-50 TLI-F(2)-10 KTU Switch Layout

5.3.8 DTI-F()-10 KTU/CLK-F-21 Unit

5.3.8.1 DTI-F()-10 KTU

The Digital Trunk Interface (DTI) KTU provides for the termination of a T1/FT1 [24 DS-0 (Digital Service - Level 0) or fewer] line.

A combination of Loop and Ground Start signaling can be used on one DTI. DTMF or dial pulse dialing is also supported.

Only one DTI-F()-10 KTU can be supported and must be installed in the AP/IF1 slot. If the DTI KTU is used, the interface slot(s) adjacent to the DTI interface slot may need to be left vacant. The number of slots that must remain vacant depends on the number of DTI channels being used. To use this KTU, a CLK-F-21 synchronization unit must be connected on the CPU-F(10)-20 KTU. (Refer to Figure 1-55 - Installing the DTI-F()-10 KTU in the ESF-SB-10 KSU and Table 1-27 - Required Slots for DTI-F()-10 KTU Installation.)

Switch Settings/LED Indications:

The green LED (LED11), when lit, indicates the DTI-F()-10 KTU is receiving power. LEDs 1 ~ 8 indicate various statuses depending on the switch setting. The red LED (LED9) is the operation verification lamp. LED9 flashes when the system is operating normally; it lights steadily when the system is reset. Switch MB is the ON/OFF control for this KTU. (Refer to Figure 1-51 -DTI-F()-10 KTU Switch Layout, Table 1-23 - DTI-F()-10 KTU Switch Settings for MB and SW1, and Table 1-24 - DTI-F()-10 KTU Switch Settings for SW2.]

Tigure 1-51 DTLET DERTU Switch Layou

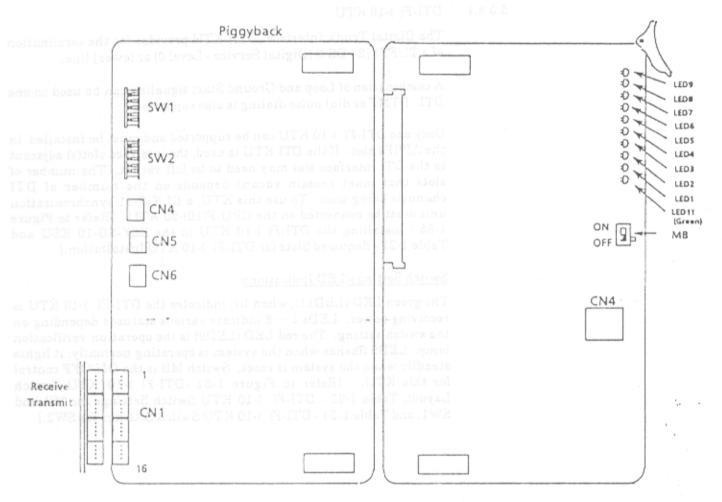


Figure 1-51 DTI-F()-10 KTU Switch Layout

Table 1-23 DTI-F()-10 KTU Switch Settings for MB and SW1

Switch	Switch Position	Initial Setting	Adjustment	
MB	N/A NO	OFF	Power supply to the KTU must be ON during operation.	
	1 1001 - 0 HO 2 10 HO - CH HO	OFF: 0 OFF: 0 OFF: 0	Loop Back Setting SW1-1 O O No Loop Back O 1 Future Use 1 O Line Loop Back ON 1 Not Used	2
SW1	the a latin from	a the status 0.	AIS Sending Switch 0: AIS Sending NO 1: AIS Sending YES	20
	the alarm from	OFF: 0	OFF: 0 If this switch is ON, LED I - 8 indicate trunk.	č.
_	5	OFF: 0	OFE - 0	
	6	OFF: 0	Not Used (Must be 0 when operating.)	
	7	OFF: Onle	OFF: 0 Not Used (Must be 0 when spec	
	8	OFF: 0		

- Note 1: Alarm Indication Signal (AIS) (also known as "blue" signal) is provided by the Central Office to ensure continuity of the output signal. AIS is applied to ensure that no more than 80 consecutive zeros are transmitted. When a valid signal is available, the AIS may be removed. The AIS is an unframed, all "ones" signal. Either the Central Office or far-end equipment may busy-out an entire DS-1 facility by sending an AIS. If an AIS is received (and since it is unframed), the Yellow Alarm is transmitted to the far-end.
- Note 2: Explanation of Switch Positions:
 - SW1-1 = 0 and SW1-2 = 0
 This position is used for normal operation (talking, idle, etc.).
 - SW1-1 = 0 and SW1-2 = 1
 Future use
 - SW1-1 = 1 and SW1-2 = 0
 This position is used to receive patterns, listed for inband line loopback, without framing, to accommodate embedded equipment that sends unframed control signals. When this position is set, the data signals that are received by the system are transmitted back to the network. These data signals are regenerated, by the system, without changing the framing format or removing any bipolar violations.
 - SW1-1 = 1 and SW1-2 = 1
 Not Used
 - SW1-3
 If the AIS is indicated, an entire T1 can be "busied-out" by sending an AIS by setting this switch to 1.)

Table 1-24 DTI-F()-10 KTU Switch Settings for SW2

Switch Position	Initial Setting		Switch Position	Switch		
1 50	OFF:) mul	If this switch is ON, LED 1 ~ 8 indicates the st DS-0) channel.	Latus of		he T1 (24
2	OFF: ()	If this switch is ON, LED 1 ~ 8 indicates the st DS-0) channel.			the T1 (24
3	OFF: M) sist	If this switch is ON, LED 1 ~ 8 indicates the st DS-0) channel.		CH 17~ 24 o	f the T1 (24
4	OFF: ()	If this switch is ON, LED 1 ~ 8 indicates the st trunk.	atus of	the alarm from	n the T1
5	OFF: ()	If this switch is ON, LED 1 ~ 8 indicates the st trunk.	atus of	the alarm from	n the T1
6	OFF: - ()	0	2010		
7	OFF: 0)	Not Used (Must be 0 when operating.)	OFFE:		
8	OFF: ()				

Note: If multiple switches are set to ON, the lower numbered switch has the highest priority. (This applies to SW2-1 ~ SW2-5.)

Table 1-25 DTI-F()-10 KTU LED Indications

LED SW2-1 ON (Note 1)		SW2-2 ON (Note I)	SW2-3 ON (Note 1)	SW2-4 ON (Notes 2 and 3)	SW2-5 ON (Notes 2,3, and 4
LED1	CH1	СН9	CH17	LSA detection	
LED2	CH2	CH10			TSC detection
LED3	СНЗ		CH18	AIS detection	ESA detection
BUSINESS IN	EL 20012 ST 184 O	CH11	CH19	OOF detection	LOS detection
LED4	CH4	CH12	CH20	RAI detection	
LED5	CH5	CH13	CH21	CRC detection	
LED6	CH6	CH14	CH22		
LED7	CUT			BPV detection	
	CH7	CH15	CH23	SLIP detection	
LED8	CH8	CH16	CH24		

Note 1: SW2-1 ~ SW2-3 indicates the status of T1 (24 DS-0) channels.

SW2-4 ~ SW2-5 indicates the status of the T1 trunk alarm. Note 2:

Note 3: Explanation of Alarm Conditions:

- LEDI: Line Synchronization Alarm (LSA) Detection If the T1 trunk has lost frame synchronization, the LED lights green.
- LED2: Alarm Indication Signal (AIS) Detection If the system is receiving AIS from the T1 trunk, the LED lights green.
- LED3: Out-of-Frame Condition (OOF) Detection If two of the four or five data framing bits that are received are in error, this LED lights
- LED4: Remote Alarm Indication (RAI) Detection If the remote alarm signal is received, this LED lights green.
- LED5: Cyclic Redundancy Check (CRC) Error Event Detection If a CRC error has occurred, the LED lights green.
- LED6: Excessive Bipolar Violations (BPV) Detection If an excessive bipolar violation condition is detected, the LED lights green.
- LED7: Controlled-Slip Event (Slip) Detection If the difference between the timing of a synchronous receiving terminal and the received signal exceeds the buffering capability of the synchronous terminal, the LED lights green.

Note 4: SW2-5 = 1

- LED1: Unused
- LED2: Unused
- LED3: Loss of Signal (LOS) Detection If the T1 signal from the trunk is not received, the LED lights green.

5.3.8.2 CLK-F-21 Unit

The CLK Unit provides synchronization for a T1 line that is connected to the system. This unit works in conjunction with the DTI-F()-10 KTU and is piggybacked on the CPU-F(10)-20 KTU.

Only one CLK-F-21 Unit can be installed in the system

Switch Settings/LED Indications:

LED1 lights when the 1.5 MHz clock is not provided from the T1 trunk. LED2 lights when the output clock to the CPU-F(10)-20 KTU (16 MHz) is not provided from the CLK-F-21 Unit. (Refer to Figure 1-52 - Mounted CLK-F-21 Unit.)

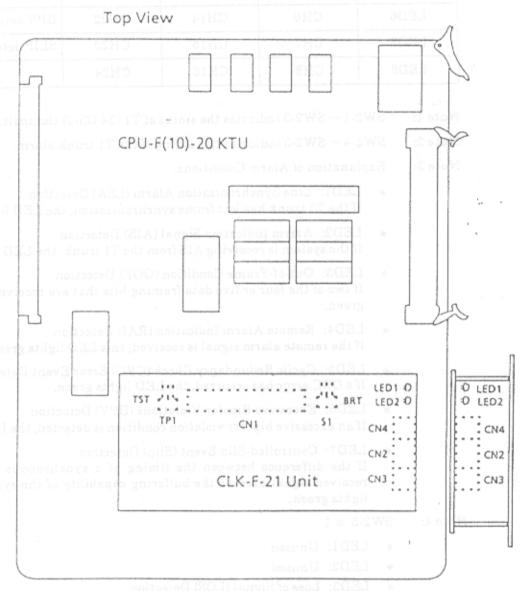


Figure 1-52 Mounted CLK-F-21 Unit

Connection

To connect the CPU-F(10)-20 KTU and the CLK-F-21 Unit make the following connections:

- CLK CN1 and CPU CN101
- CLK CN4 and CPU CN4

ormally because there will be no clock

lyurations: 12 multiframe and

5.3.8.3 T1 Considerations

General:

The term T1/FT1 refer to a physical communications facility (circuit) commonly referred to as T1/FT1 pipe with 1.544 mbps of bandwidth.

The T1/FT1 pipe can be divided into 24 channels, each rated DS-0 (Digital Signal, Level 0). This is equivalent to 24 or more voice circuits and/or multiple data channels (leased lines). Each DS-0 is 64 kbps of bandwidth. The carrier uses 8 Kbps of T1/FT1 bandwidth for network supervision and diagnostics, leaving 1.536 mbps for user data.

Electrical Specifications:

The electrical specifications describe the T1/FT1 interface and at the T1/FT1 cross-connect interface, the characteristics of the signals received from and transmitted to the T1/FT1 facility.

- 1. Support Digital Trunk Type: T1, FT1
- 2. Support Trunk Signal Type: CO/FX/WATS, Loop and Ground Start (Programmed in System Programming)
- 3. Support Line Coding: ZCS or B8ZS Method (Programmed in System Programming)
- smar Trague, 11d T as bas (leanadout) & 4. . Output Characteristics:

till bas neitarunitael amaritibe M-21 - Ec-1 amar Line Rate: 1.544 mbps + -50 bps

Line Impedance: 100 Ω

Pulse Amplitude (Base to Peak): CCITT G. 703

Input Characteristics:

Line Rate: 1.544 mbps + -200 bps

Pulse Amplitude (Base to Peak): 1.5V ~ 3V

Frame Synchronization: 12-Multiframe *

24-Multiframe *

Input Jitter: CCITT Fig. 1/G. 743

Cable Length from Electra

Professional Level II to CSU

or D Mark: Samassa Samaximum 655 ft. (with 22

AWG)

CSU: Channel Service Unit

D Mark: End Close Equipment

Refer to the notes for an explanation.

"24-Maltiframe
This frame as 24-Multiframes and each Multiframe bas a 24-Cha

Squee 1-54 - 24-Multiframe Configuration and Bit Assignment.

Notes:

Line Coding

If zero data is being continuously transmitted over a T1/FT1 trunk, the end equipment (Electra Professional Level II system or digital PBX) cannot operate normally because there will be no clock synchronization. EIA/TIA-464-A specifies two line coding methods for normal operation.

- 1. Zero Code Suppression (ZCS)
- Bipolar Eight Zero Substitution (B8ZS)
 This method depends on the LXC (Local Exchange)/IXC (Interexhange). The installer must ask the LXC/IXC to determine whether the configuration is 12- or 24-multiframe. The installer must assign this configuration via the Electra Professional Level II System Programming.

Frame Synchronization

According to EIA/TIA-464-A for 24-channel transmission, there are two types of frame configurations: 12-multiframe and 24-multiframe. This method depends on the LXC/IXC. The installer must ask the LXC/IXC to determine whether the configuration is 12- or 24-Multiframe. The installer must assign this configuration via the Electra Professional Level II System Programming.

12-Multiframe

This frame has 12-Multiframes and each Multiframe has a 24-channel PCM signal (8 bits/channel) and an F bit (Super Frame Bit). (Refer to Figure 1-53 - 12-Multiframe Configuration and Bit Assignment.)

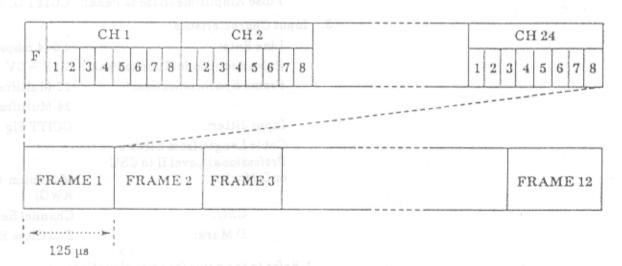


Figure 1-53 12-Multiframe Configuration and Bit Assignment

24-Multiframe

This frame as 24-Multiframes and each Multiframe has a 24-Channel PCM signal (8 bits/channel) and an F bit (Super Frame Bit). (Refer to Figure 1-54 - 24-Multiframe Configuration and Bit Assignment.

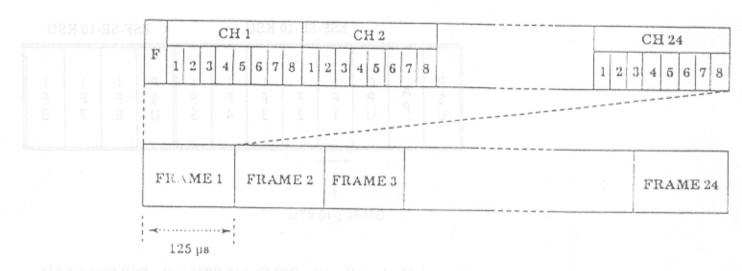


Figure 1-54 24-Multiframe Configuration and Bit Assignment

installation:

Required Equipment:

The following chart shows the equipment that is required for T1.

Table 1-26 Equipment Required for T1 Installation

Equipment	Description	Quantity
DTI-F()-10 KTU	24 channels T1/FT1 trunk interface board	
CLK-F-21 Unit	T1/FT1 Clock Synchronization Unit	1
o the MDF. (Refer	Connection cable between DTI and CLK package (4 MHz clock)	1 per DTI KTU and CLK interface (included with DTI KTU)
Installation Cable	Twisted pair transmission cable between DTI and MDF	
	Connection cable between DTI and CLK (1.5 MHz clock)	1 per CLK Unit (included with CLK Unit)

To install:

CHAO 19.40 MAD SAN BAS UTDA 1. (Install the DTI-F()-10 KTU and the CLK-F-21 Unit in the ESF-SB-10 KSU. (Refer to Figure 1-55 - Installing the DTI-F()-10 KTU in the ESF-SB-10 KSU.]

Note: alf the DTI KTU is used, the interface slot(s), adjacent to the DTI interface slot, must not be used. The number of slots that must remain empty depends on the number of DTI channels being used.

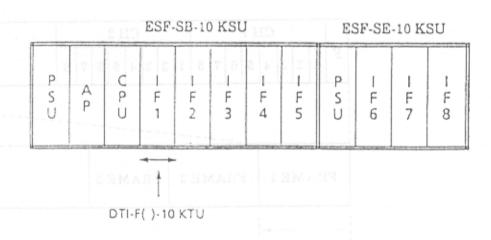


Figure 1-55 Installing the DTI-F()-10 KTU in the ESF-SB-10-KSU

Table 1-27 Required Slots for DTI-F()-10 KTU Installation

No. of DTI-F()-10 KTU Channels Used	Required Slots for DTI-F()-10 KTU Installation			
1 ~ 8	1	'		
9 ~ 16	2			
17 ~ 24	3			

- Install the cable between the T1/FT1 trunk and the DTI-F()-10 KTU.
 - Connect the T1/FT1 trunk to the MDF. (Refer to Table 1-42 -Connection Information/Connection and Port Relationships.)
 - b. To connect the cable from MDF to CN1:
- twice (2 turns) around a ferrite core.
 - (2) Connect the cable from the MDF to CN1 on the DTI-F()-10 KTU, using the MDF Cable Assembly. (Refer to 1-56 - Connecting the Cable Between the DTI-F()-10 KTU and the CLK-F-21 Unit.)
 - Note 1: The maximum distance from the DTI-F()-10 KTU to the CSU/D Mark is 655 feet, using 22 AWG.
 - Note 2: D Mark is installed by the telephone company.
 - Note 3: CSU is recommended by maintenance (loop back or alarm function) or surge protection. NEC recommends purchasing this CSU to install with the T1 trunk.

- c. To connect the DTI-F()-10 KTU and the CLK-F-21 Unit:
 - (1) Wrap the cables (provided with the DTI-F()-10 KTU) twice (2 turns) around a ferrite core.
- Connect CN6 and CN4, on the DTI-F()-10 KTU, to CN2 and CN3, on the CLK-F-21 Unit, using the provided cable with the DTI-F()-10 KTU. (Refer to Figure 1-56 Connecting the Cable Between the DTI-F()-10 KTU and the CLK-F-21 Unit.)

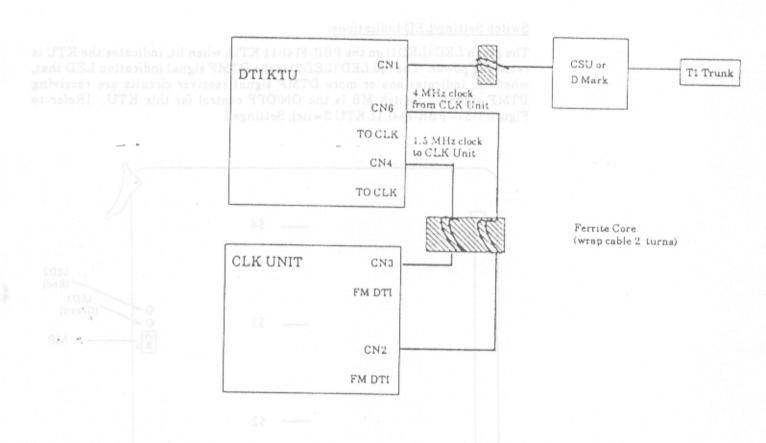


Figure 1-56 Connecting the Cable Between the DTI-F()-10 KTU and the CLK-F-21 Unit

5.4 Optional KTUs

5.4.1 PBR-F(4)-11 KTU

The Push Button Receiver (PBR) KTU detects and translates DTMF tones generated by Single Line Telephones, modems, or facsimile macnine. This KTU is required if the four built-in PBR channels (CPU) are not enough to support all of the single line devices of the system.

Only one PBR-F(4)-11 KTU can be installed in the system with a CPU-F(10)-20 KTU.

Switch Setting/LED Indications:

The green LED (LED1) on the PBR-F(4)-11 KTU, when lit, indicates the KTU is receiving power. The red LED (LED2) is the DTMF signal indication LED that, when lit, indicates one or more DTMF signal receiver circuits are receiving DTMF signals. Switch MB is the ON/OFF control for this KTU. [Refer to Figure 1-57 - PBR-F(4)-11 KTU Switch Settings.]

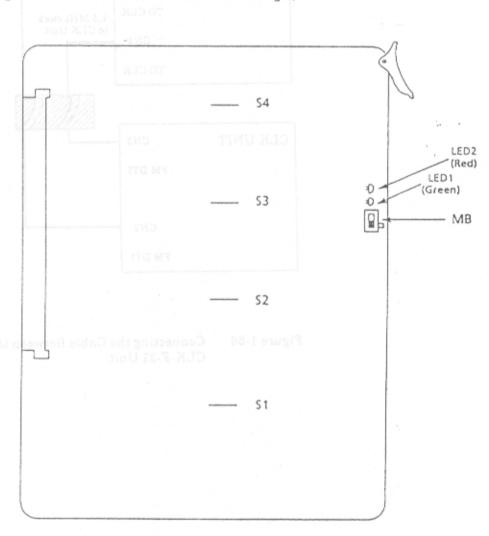


Figure 1-57 PBR-F(4)-11 KTU Switch Settings

If adjustment to the DTMF signal detection level is required, adjust using strap wire S1 ~ S4. (Refer to Table 1-28 - DTMF Signal Adjustments.)

Table 1-28 DTMF Signal Adjustments

Option	Strap Wire Settings	Default Settings	Adjustment
DTMF signal receiving gain	Strap wires: S1 ~ S4	Strapping wires connected	Default settings are done to allow reception of -34 dBm to -4 dBm DTMF signals. To increase the receiving gain, cut the strap wires (-42 to dBm to -12 dBm DTMF signals can be received). S1: Channel 1 receiving gain S2: Channel 2 receiving gain S3: Channel 3 receiving gain S4: Channel 4 receiving gain

5.4.2 VRS-F(4)-11 KTU

The VRS-F(4)-11 KTU provides record/playback of voice messages for the Automated Attendant, Voice Prompt, and Delay Announcement features.

A maximum of two VRS-F(4)-11 KTUs can be installed in the system.

Each VRS-F(4)-11 KTU has four record/playback channels. The maximum recording time of each channel is 240 seconds. The recording time for each channel can be divided as follows:

- 15 sec. 16 messages = 240 sec.
- 30 sec. 8 messages = 240 sec.
- 60 sec.
 4 messages = 240 sec.
- 120 sec.
 2 messages = 240 sec.

Switch Settings/LED Indications:

SW1 on both the Main and Expansion PCBs controls battery power for memory backup. These must be turned ON for retention of VRS memory for this KTU in case of power failure.

Note: Do not separate the Main or Expansion PCBs.

LEDs 1 and 2 (on the Main PCB) represent channels 1 and 2. LEDs 1 and 2 (on the Expansion PCB) represent channels 3 and 4. These LEDs light red when in use (recording or playing messages). The green LED 3 on the VRS-F(4)-11 KTU, when lit, indicates the KTU is receiving power. Switch MB is the ON/OFF control for this KTU. [Refer to Figure 1-58 - VRS-F(4)-11 KTU Switch Layout.]

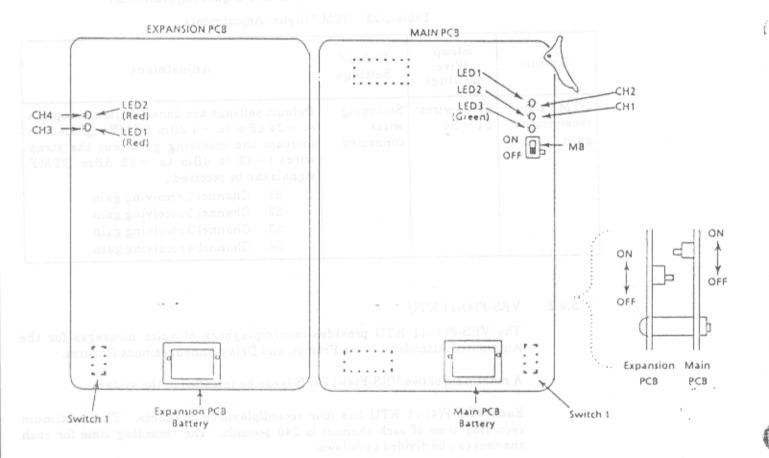


Figure 1-58 VRS-F(4)-11 KTU Switch Layout

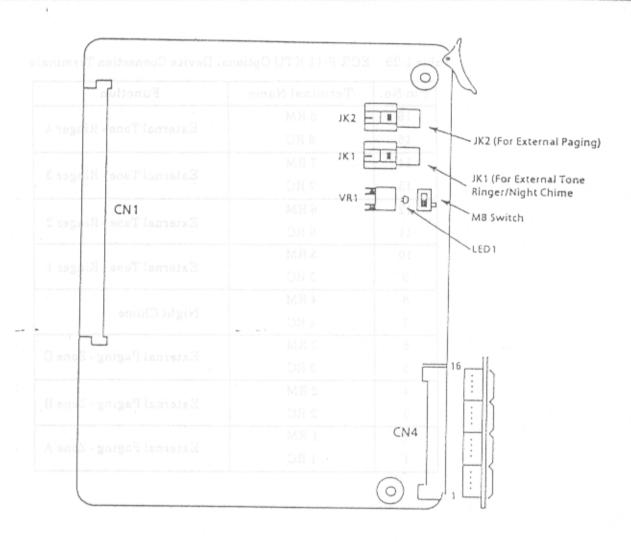
5.4.3 ECR-F-11 KTU

The ECR-F-11 KTU provides two RCA jacks and eight relay contacts. Three of the eight relays are used for External Paging contact, one is used for Night Chime contact, and the other four are used for External Tone Ringer. One of the two RCA jacks is used for External Tone Ringer/Night Chime audible output. The other RCA jack is used for External Paging audible input output.

Only one ECR-F-11 KTU can be installed in the system.

Switch Setting/LED Indications:

The green LED (LED1) on the ECR-F-11 KTU, when lit, indicates that this KTU is receiving power. Switch MB is the ON/OFF control for this KTU. (Refer to Figure 1-59 - ECR-F-11 KTU Switch Layout and Table 1-29 - ECR-F-11 KTU Optional Device Connection Terminals.)



Pable 1-30 ECR-F-11 KTU Connectors/Adjustments

For Maximum Volume: Turn Joseph Levijb A		lockwise 10 emaYi 15 witch	
To connect the External Speaker for External Flone Ringer/Night Chime	gure 1-59 E	CR-F-11 KTU Swite	External Tone Ringer
			External Paging
			External Tode Einger/Night Chime Volume Control

Table 1-29 ECR-F-11 KTU Optional Device Connection Terminals

Pin No.	Terminal Name	Function		
16	8 RM	13		
15	8 RC	External Tone - Ringer 4		
14	7 RM			
13	7 RC	External Tone - Ringer 3		
12	6 RM	TKD TKD		
11	6 RC	External Tone - Ringer 2		
10	5 RM	12		
9	5 RC	External Tone - Ringer 1		
8	4 RM	N: 1. 0:		
7	4 RC	Night Chime		
6	3 RM	Entered Perion 7		
5	3 RC	External Paging - Zone C		
-4	2 RM	D		
3	2 RC	External Paging - Zone B		
2	1 RM	External Paging, Zana A		
1	1 RC	External Paging - Zone A		

Table 1-30 ECR-F-11 KTU Connectors/Adjustments

Adjustment Item	Name of Switch	Initial Setting	Adjustment
External Tone Ringer	JK1	A/A	To connect the External Speaker for External Tone Ringer/Night Chime
External Paging	JK2	N/A	To connect the External Speaker for External Paging
External Tone Ringer/Night Chime Volume Control	VRI	Center	To adjust the External Tone Output Level

5.4.4 MIF-F(S)-10 KTU

The MIF KTU serves two purposes: it allows the connection of a personal computer to perform System Programming and Up/Down loading of System Data and it provides Station Message Detail Recording (SMDR) to be output via the RS-232 cable to a printer. (Refer to Figure 1-62 - SMDR Print Formats.) These two functions can be operated at the same time.

Only one MIF-F(S)-10 KTU can be installed in the system. [Refer to the *Electra Professional Level II System Program Technician Manual* (included with the System Program Technician software (Stock No. 722300) for programming instructions using a PC.]

Switch Settings/LED Indications:

The green LED (LED1), when lit, indicates the MIF-F(S)-10 KTU is receiving power. The red LED (LED2), when flashing, indicates the MIF is exchanging data communications with the system CPU. The red LED (LED3), when lit, indicates the SMDR function is outputting a call record. [Refer to Figure 1-60 - MIF-F(S)-10 KTU Switch Layout.]

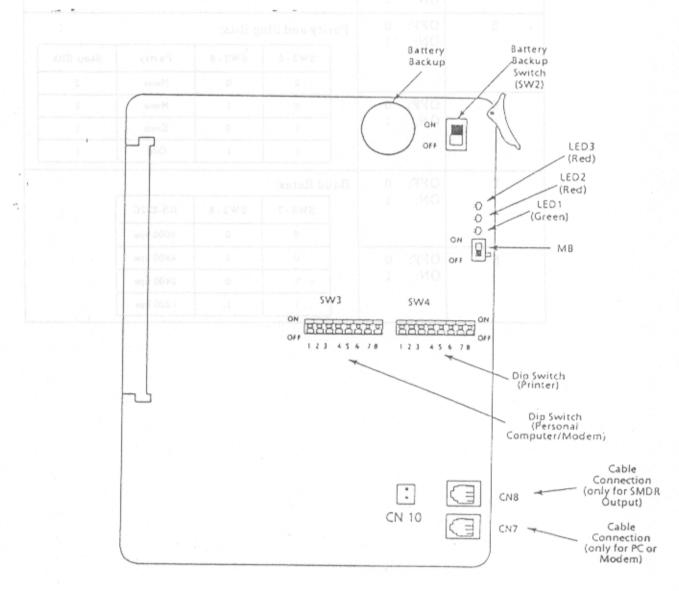


Figure 1-60 MIF-F(S)-10 KTU Switch Layout

Table 1-31 MIF-F(S)-10 KTU Switch (SW3) Settings for PC and MNP Modem Connections

Switch Position (SW3)	ON/O Sett			ning a or steas NES-EM and ad nas known on Description																
et in che system schaicten Man Rock No. 72236	OFF: ON:	0 I	1000 100	Connection to CN7 0: PC Direct 1: MNP Modem Connected																
2	OFF: ON:	0	No	Not Used																
es the miceles ing, indicates l	OFF: ON:	0	Not Used has edif nowed																	
z a call pecord.	OFF: ON:	0	Not	Not Used																
. 5	OFF: ON:	0	Par	,																
	RACIONE			SW3 - 5	SW3-6	Parity	Stop Bits													
2MS)				0	0	None	2													
6	OFF:			0	1	None	t													
	ON: 1												ON: 1		(1)		1	0	Even	1
	110 /			1	1	Odd	ı													
7	OFF:	0	Bar	ud Rates:																
	ON:	ON: 1	ON: 1	ON: 1	ON: 1		SW3.7	SW3-8	RS-232C											
				0	0	9600 bps														
8		0		0	1	4800 bps														
	ON:	1		1	0	2400 bps														
	avve .		EV	1	1	1200 bps														

0.0

Table 1-32 MIF-F(S)-10 KTU Switch (SW4) Switch Settings for Printers

	traight RS-232 Cable	Switch Position (SW4)	ON/OFF Setting	Description (8MO & TMO) 3LM						
		1 09	OFF: 0 ON: 1	Mode	Setting: : Operati					
	>		2 (SD)		1: Test Mode:					
	<		an t		Note: Operation of MIF stops when set to the Test Mode					
	>	12 277		Not	Used	CTS(CS)				
		8 875	ON: 1			1201270				
	<	3 9 980	OFF: 0 ON: 1	Not	Not Used (Ma)/ITG					
f Tsosso		4 08	OFF: 0	Data	Data Bits (RS-232C for Printer)					
	7.5.4		ON: 1	0: 8 bit SIGNED						
	x	8 000	Q07 8	Pa						
	iteranne	5	OFF: 0 ON: 1		SW4 - 5	SW4 - 6	Parity	Stop Bits		
	vers rado S		Tre 40-HOLIEST	ibladi w	0	0	None	2		
	-			_	0	1	None	L		
		6	OFF: 0 ON: 1			0	Even	L		
Register					1	1	Odd	1		
81201225	-	SE MNP Mod	G - UTN GL-							
	2232 - 232	H 7	OFF: 0 ON: 1	Ba	ud Rates:	Lens Street				
			Midke A		SW4 - 7	SW4-8	RS-232C			
			09(09)		0	0	4800 bps			
		8	OFF: 0 ON: 1		0	1	2400 bps			
			CR (G R)		- 1	0	1200 bpв			
			ang co		1	1	300 bps			
		3	(CS)CTS			1007	2770			

Vate: The arraws show the direction of data flow during operation.

Table 1-33 MIF-F(S)-10 KTU - DTE PC or Printer Connections

MIF(CN7 & CN8)		-	MIF Cable Assembly			Straight RS-232 Cable	PC or Printer	
FG (FG)	Jenilo :		1	(FG)FG	1		1	(FG)FG
RXD(RD)	5	+	2	(SD)TXD	2	<	2	(SD)TXD
TXD(SD)	4	-	3	(RD)RXD	3	>	3	(RD)RXD
CTS(CS)	6 best	1014	4	(RS)RTS	4	<	4	(RS)RTS
RTS(RS)	3	-	5	(CS)CTS	5	>	5	(CS)CTS
DTR(ER)	7	-	6	(DR)DSR	6	>	6	(DR)DSR
SG(SG)	8 8	umer-	7	(SG)SG	7		7	(SG)SG
DSR(DR)	2	←	20	(ER)DTR	20	<	20	(ER)DTR
DCD (CN10)	- ←	8	(CD)DCD	8	х	8	(CD)DCD

Note: The arrows show the direction of data flow during operation.

Table 1-34 MIF-F(S)-10 KTU - DCE MNP Modem Connections

MIF (C		Baud		MIF Cable Assembly		Reverse RS-232 Cable	M	INP Modem
FG(FG)	1	Ī	1	(FG)FG	1		1	(FG)FG
RXD(RD)	5	-	2	(SD)TXD	2	<	3	(RD)RXD
TXD(SD)	4	-	3	(RD)RXD	3	>	2	(SD)TXD
CTS(CS)	6	-	4	(RS)RTS	4	<	5	(CS)CTS
RTS(RS)	3	-	5	(CS)CTS	5	>	4 .	(RS)RTS
DTR(ER)	7	-	6	(DR)DSR	6	>	20	(ER)DTR
SG(SG)	8		7	(SG)SG	7		7	(SG)SG
CD (CN10)		+-	8	(CD)DCD	8	<	8	(CD)DCD
DSR(DR)	2	+-	20	(ER)DTR	20	<	6	(DR)DSR

Note: The arrows show the direction of data flow during operation.

Installation:

The MIF-F(S)-10 KTU can be installed into an Application Slot (AP) or into one of the four Application/Interface Slots (AP/IF1 ~ AP/IF4), in the Basic KSU. This KTU is shipped with two cable assemblies (MIF cable assembly). One end of each cable has an RJ35 (8-pin) connector. The other end of the cable terminates at an RS-232 connector. This connector must be mounted in the Basic KSU.

After installing the KTU, connect the RJ35 pin connectors to CN8 or CN7 into the MIF-F(S)-10 KTU. When connecting a PC, connect the small connector on the MIF Cable Assembly to CN10 on the MIF-F(S)-10 KTU, then remove the RS-232 connection bracket from the Basic KSU and attach the RS-232, on the MIF Cable Assembly, to the RS-232 connection bracket using the screws on the RS-232 connectors. (Refer to Figure 1-61 - Connecting MIF Cable Assembly and the MIF-F(S)-10 KTU to the Basic KSU.)

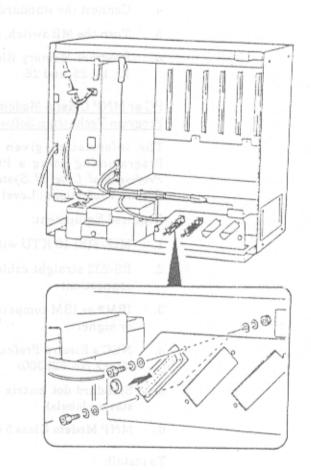


Figure 1-61 Connecting the MIF Cable Assembly and the MIF-F(S)-10 KTU to the Basic KSU

Printer Connection for SMDR:

Required Equipment:

- 1. MIF-F(S)-10 KTU with the NEC provided MDF Cable Assembly
- 2. RS-232 Straight Cable
- 3. Standard Printer

To install:

- 1. Set SW4 DIP switch to adjust for the printer on the MIF-F(S)-10 KTU.
- Install the MIF-F(S)-10 KTU into the Basic KSU.
- Connect the MIF Cable Assembly to CN8 on the MIF-F(S)-10 KTU and the Basic KSU. [Refer to Figure 1-61 - Connecting the MIF Cable Assembly and the MIF-F(S)-10 KTU to the Basic KSU.]
- Connect the standard printer using the straight RS-232 cable.
- Turn the MB switch, on the MIF-F(S)-10 KTU, to the ON position.
- Program Memory Blocks: System Mode (LK1) SMDR/LCR (LK5) No. 02, 13, 14, 25, and 26.

PC or MNP Class 5 Modem Connection for Electra Professional Level II System Program Technician Software:

The information given in this section is a basic overview of System Programming using a PC. For specific information, refer to the Electra Professional Level II System Program Technician Manual (included with the Electra Professional Level II System Technician software).

Required Equipment:

- 1. MIF-F(S)-10 KTU with NEC provided MIF Cable Assembly
- RS-232 straight cable (for direct connection) or reverse cable (for remote connection)
- IBM or IBM compatible PC with 286 or higher and MS-DOS Version 3.3 or higher.
- 4. NEC's Electra Professional Level II System Program Technician Software (Stock No. 722300)
- 5. Standard dot matrix printer (if required for printing job specifications or station labels)
- 6. MNP Modem Class 5 or higher (required for remote connection)

To install:

- Set SW3 DIP switch to adjust for a PC or modem on the MIF-F(S)-10 KTU.
- Install the MIF-F(S)-10 KTU into the Basic KSU.
- Connect the MIF Cable Assembly to CN7 and CN10 on the MIF-F(S)-10 KTU and the Basic KSU. (Refer to Figure 1-61 Connecting the MIF Cable Assembly and the MIF-F(S)-10 KTU to the Basic KSU.)
- Connect the PC using a straight RS-232 cable or connect the MNP modem using a reverse RS-232 cable.
- 5. Turn the MB switch, on the MIF-F(S)-10 KTU, to the ON position.

Outgoing Call

07/03/92	09:00AM	08-05-12	OG	123
A	B D	C 6 8 0	D	E
00.15.22	100005167			

2. Outgoing Call (LCR, Forced Account Code, Account Code)

07/03/92 A	09:00AM B	08-05-12 C	OG DMAG	0 (123 E	
00:15:32 G	1028851675: H	37000	_		
1234567890 I	A 1 2 3 5 6 7 8		_	LCR L	

Outgoing Call (LCR)

07/03/92 A	09:00AM B 08-05-12	OG D	123 E	
00:15:32 G	102885167537000 H			
			LCR L	

4. Call Forward Off-Premise (LCR, Account Code)

07/03/92 A	09:00 A M B 08-05-12	OG D	123 E	
00:15:32 G	102885167537000 H			
12345678 I	678		LCR L	FWD234 M

5. Call Forward Off-Premise (Account Code)

Note: A ~ M are the printout item numbers. (Refer to Figure 1-63 - SMDR Print Formats Item Numbers.)

Figure 1-62 SMDR Print Formats

6.	Incoming	Call
----	----------	------

07/03/92	09:00AM	08-05-12	IC	123
A	B	C	D	E
00:15:32				

7. Incoming Call (Account Call)

medining out (681 000			
07/03/92 A	09:00AM B	08-05-12 C	IC 123 D E	
00:15:32 G				
12345678				
1				

8. Transfer (Account Code)

07/03/92 A	09:00AM B	08-05-12 C	IT D	123 E	234 F
00:15:32 G					
12345678	80J				

9. DISA (Both incoming and outgoing are printed)

07/03/92 A	09:00AM B	08-05-12 C	IC D	999 E	
00:15:32					
EWD234	D1234	5678			
07/03/92	09:00 A M	08-05-12	6 6 0 G	999 E	

00:15:32	1028851675370	0 0	
G	H	102885167537900	
	D1234567	R	

D12345678 K

Note: A ~ M are the printout item numbers. 999 is the temporary station number. do eas M ~ A (Refer to Figure 1-63 - SMDR Print Formats Item Numbers.)

Figure 1-62 SMDR Print Formats (continued)

The following provides an explanation of each item that appears on the SMDR printout.

A. Start Date: 07/03/92

07 = month

03 = day

92 = year

B. Start Time: 09:00 A M

09 = hour

03 = minute

AM = AM or PM

C. Trunk Information: 08-05-12 | seed | seed

08 = Route Advance Block

05 = Trunk Group

12 = Trunk Number

D. Type of Call:

IC ac = placoming Call UTO market agt glaw knallesinummos alah

OG = Outgoing Calles a paintugue at noiseau) SCIMS and establish

ICC = Conference on Incoming Call works. I dishwa UTW 01-(J)W. The

OGC = Conference on Outgoing Call

IT = Transferred Incoming Call

OT = Transferred Outgoing Call

ITC = Conference on Transferred Incoming Call

OTC = Conference on Transferred Outgoing Call

E. Station Number: 123

This number depends on whether the system is set as 2-, 3-, or 4-digit station number in System Programming.)

F. Transferred Station Number: 234

This number depends on whether the system is set as 2-, 3-, or 4-digit station number in System Programming.)

G. Call Duration: 00:15:32

00 = hour

15 = minute

32 = seconds

H. Number Dialed: 102885167537000

Maximum number of characters is 24.

I. Account Code: 12345678

Maximum number of characters is 14.

J. Forced Account Code: A12345678

Maximum number of characters is 14.

K. DISA Forced Account Code: D12345678

Maximum number of characters is 14.

L. LCR

LCR = Least Cost Routing

M. Call Forward Off-Premise: FWD 234

FWD (Forward) + OG (Station Number)

Figure 1-63 SMDR Print Formats Item Numbers

5.4.5 MIF-F(L)-10 KTU

The MIF-F(L)-10 KTU serves three purposes: it allows the connection of a personal computer to perform System Programming and Up/Down loading of System Data, it provides Station Message Detail Recording (SMDR) to be output via the RS-232 cable to a printer, and it provides Least Cost Routing (LCR) capability.

Only one MIF-F(L)-10 KTU can be installed in the system. [Refer to the Least Cost Routing Manual (included with the Electra Professional Level II Least Cost Routing software Stock No. 722302) for LCR instructions. Refer to the Electra Professional Level II System Program Technician Manual (included with the Electra Professional Level II System Program Technician software Stock No. 72230) for programming instructions using a PC.1

Switch Settings/LED Indications:

The green LED (LED1), when lit, indicates the MIF-F(L)-10 KTU is receiving power. The red LED (LED2), when flashing, indicates the MIF is exchanging data communications with the system CPU. The red LED (LED3), when lit, indicates the SMDR function is outputting a call record. (Refer to Figure 1-64 - MIF-F(L)-10 KTU Switch Layout.)

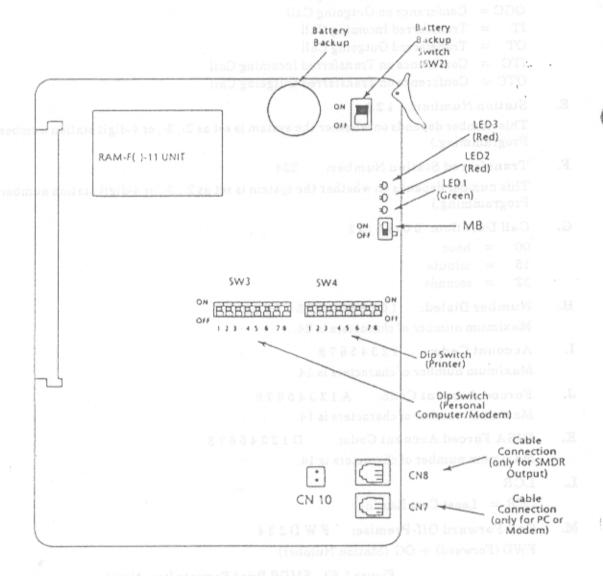


Figure 1-64 MIF-F(L)-10 KTU Switch Layout

Table 1-35 MIF-F(L)-10 KTU Switch (SW3) Settings for PC and MNP Modem Connections

		Switch Position (SW3)	ON/OFF Setting	OMOFF Settlog	Desc	ription	
		1 aboM noi	OFF: 0 ON: 1			nnected	
		2 2 V Operation of Manager	OFF: 0 ON: 1	Not Used			
		3	OFF: 0 ON: 1	Not Used			
		4	OFF: 0 ON: 1	Not Used	3		
***		32C for Printer	OFF: -0 - ON: 1	Parity and S	top Bits:		
			1181	SW3 - 5	SW3-6	Parity	Stop Bits
		-	0.1	U	0	None	2
		6	OFF: 0	0	1	None	1
	'arity		ON: 1	1	0	Even	1
	None			1	1	Odd	1
	nevă.	7	OFF: 0 ON: 1	Baud Rates:			
	140		ON.	SW3 - 7	SW3-8	RS-232C	
				U	0	9600 bps	
		8	OFF: 0	0 1/1	1	4800 bps	
	DEEE-E	SW4.8	ON: 1	1	0	2400 Бря	
	, eq 6 00 g	- 0	0	1	1	1200 Бре	
	400 bps	2 0		1 :720			

Table 1-36 MIF-F(L)-10 KTU Switch (SW4) Switch Settings for Printers

	Swi Posi (SW		ON/OFF Setting	Setting	Descr	iption		
			OFF: 0 ON: 1	Mode Setting: 0: Operating: 1: Test M	tion Mode			
			OFF: 0 ON: 1	Not Used				
		3	OFF: 0	Not Used	-			
Parity Ston Blue		4a18 q	OFF: 0 ON: 1 -	0: 8 bit				
				1: 7 bit				
		5	OFF: 0	Parity and Stop Bits:				
			ON: 1	SW4 - 5	SW4-8	Parity	Stop Bits	
	150			0	0	None	2	
		6	OFF: 0	1	U	None	1	
			ON: 100	0	1	Even	1	
		8 · CW8	5.W3+2	1	1	Odd	1	
		7	OFF: 0 ON: 1	Baud Rates:	8			
		. 0		SW4.7	SW4 - 7 SW4 - 8 RS-23	RS-232C	2C	
				0	0	4800 bps		
		8	OFF: 0 ON: 1	1	0	2400 bpa		
				0	1	1200 bps		
				1	1	300 bps		

Table 1-37 MIF-F(L)-10 KTU - DTE PC or Printer Connections

MIF(CN7 & CN8)		o cable S _{ed} a) s Thus co acting s	W35 etor.		Straight RS-232 Cable	PC or Printer		
FG(FG)	1		1	(FG)FG	1		1	(FG)FG
RXD(RD)	5	←	2	(SD)TXD	2	<	2	(SD)TXD
TXD(SD)	4	-	3	(RD)RXD	3	>	3	(RD)RXD
CTS(CS)	6	-	4	(RS)RTS	4	<	4	(RS)RTS
RTS(RS)	3		5	(CS)CTS	5	>	5	(CS)CTS
DTR(ER)	7	-	6	(DR)DSR	6	>	6	(DR)DSR
SG(SG)	8		7	(SG)SG	7		7	(SG)SG
DSR(DR)	2	+	20	(ER)DTR	20	<	20	(ER)DTR
DCD (CN10)		-	8	(CD)DCD	8	x i	8	(CD)DCD

Note: The arrows show the direction of data flow during operation.

Table 1-38 MIF-F(L)-10 KTU - DCE MNP Modem Connections

MIF (CN8)		MIF Cable Assembly			Reverse RS-232 Cable	MNP Modem	
FG (FG)	1		1	(FG)FG	1		1 (FG)FG
RXD(RD)	5	-	2	(SD)TXD	2	<	3 (RD)RXD
TXD(SD)	4	-	3	(RD)RXD	3	>	2 (SD)TXD
CTS(CS)	6	-	4	(RS)RTS	4	<	5 (CS)CTS
RTS(RS)	3		5	(CS)CTS	5	>	4 (RS)RTS
DTR(ER)	7		6	(DR)DSR	6	>	20 (ER)DTR
SG(SG)	8		7	(SG)SG	7		7 (SG)SG
CD (CN10)	uzz ša	aS ter i) i	8	(CD)DCD	8	<	8 (CD)DCD
DSR(DR)	2	←	20	(ER)DTR	20	<	6 (DR)DSR

Note: The arrows show the direction of data flow during operation.

Installation:

The MIF-F(L)-10 KTU can be installed into an Application Slot (AP) or into one of the four Application/Interface Slots (AP/IF1 \sim AP/IF4), in the KSU. This KTU is shipped with two cable assemblies (MIF cable assembly). One end of each cable has an RJ35 (8-pin) connector. The other end of the cable terminates at an RS-232 connector. This connector must be mounted in the Basic KSU. [Refer to Figure 1-65 - Connecting the MIF Cable Assembly and the MIF-F(L)-10 KTU to the Basic KSU.]

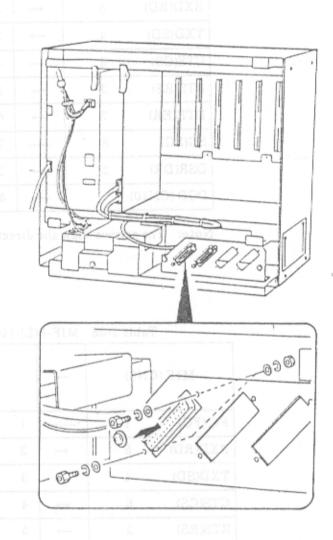


Figure 1-65 Connecting the MIF Cable Assembly and the MIF-F(L)-10 KTU to the Basic KSU

2751(2.9)

Printer Connection for SMDR:

Required Equipment:

- MIF-F(L)-10 KTU with the NEC provided MDF Cable Assembly
- 2. RS-232 Straight Cable
- 3. Standard Printer

To install:

- Set SW4 DIP switch to adjust for the printer, on the MIF-F(L)-10 KTU.
- Install the MIF-F(L)-10 KTU into the Basic KSU.
- Connect the MIF Cable Assembly to CN8 on the MIF-F(L)-10 KTU and the Basic KSU. [Refer to Figure 1-65 - Connecting the MIF Cable Assembly and the MIF-F(L)-10 KTU to the Basic KSU.]
- 4. Connect the standard printer using the straight RS-232 cable.
- 5. Turn the MB switch, on the MIF-F(L)-10 KTU, to the ON position.
- Program_Memory Blocks: System Mode (LK1) SMDR/LCR (LK5) No. 02, 13, 14, 25, and 26.

PC or MNP Class 5 Modem Connection for Electra Professional Level II System Program Technician Software:

The information given in this section is a basic overview of System Programming using a PC. For specific information, refer to the Electra Professional Level II System Program Technician Manual (included with the Electra Professional Level II System Technician software).

Required Equipment:

- 1. MIF-F(L)-10 KTU with NEC provided MIF Cable Assembly
- 2. RS-232 straight cable (for direct connection) or reverse cable (for remote connection)
- IBM or IBM compatible PC with 286 or higher and MS-DOS Version 3.3 or higher
- NEC's Electra Professional Level II System Program Technician Software (Stock No. 722300)
- Standard dot matrix printer (if required for printing job specifications or station labels)
- 6. MNP Modem Class 5 (required for remote connection)

To install:

- Set SW3 DIP switch to adjust for a PC or modem, on the MIF-F(L)-10 KTU.
- 2. Install the MIF-F(L)-10 KTU into the Basic KSU.
- Connect the MIF Cable Assembly to CN7 and CN10 on the MIF-F(L)-10 KTU and the Basic KSU. [Refer to Figure 1-65 - Connecting the MIF Cable Assembly and the MIF-F(L)-10 KTU to the Basic KSU.]
- using a reverse RS-232 cable.

 Connect the MNP modem
 - Turn the MB switch, on the MIF-F(L)-10 KTU, to the ON position.

5.4.6 MIF-F(A)-10 KTU

The MIF-F(A)-10 KTU allows an interface to an MIS (ACD) terminal.

Only one MIF-F(A)-10 KTU can be installed in the system. [Refer to the Electra Professional Level II Automatic Call Distribution Manual Stock No. 722027] for detailed instructions for the MIF-F(A)-10 KTU.]

Switch Settings/LED Indications:

The green LED (LED1), when lit, indicates the MIF-F(A)-10 KTU is receiving power. The red LED (LED2), when lit, indicates the MIF is exchanging data communications with the system CPU. [Refer to Figure 1-66 -MIF-F(A)-10 KTU Switch Layout.]

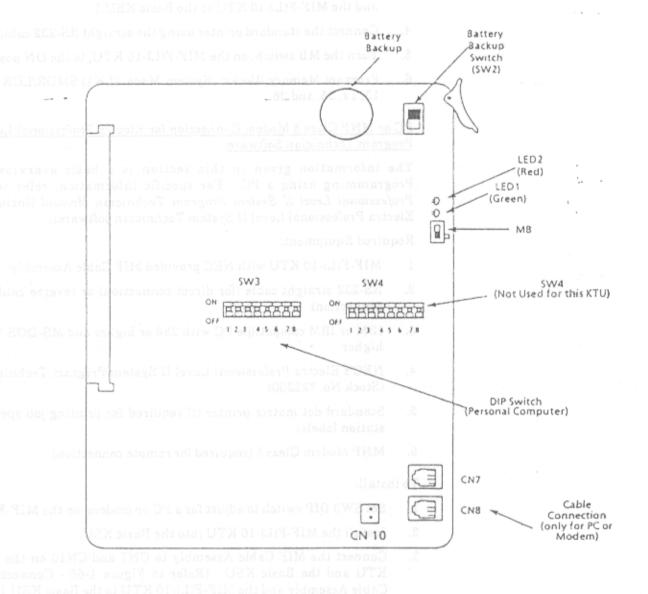


Figure 1-66 MIF-F(A)-10 KTU Switch Layout

Table 1-39 MIF-F(A)-10 KTU Switch (SW3) Settings for PC and MNP Modem Connections

	Jonnects Straight 48-202	Switch Position (SW3)	1.00	OFF tting		& CN8)	Desc	ription	
		1 09	OFF: ON:	0	Co	0: PC D			
		2 0 0 0 0	OFF:	0	No	t Used	woden Co		
ETR(E)) I			ON:	1	-				
		3 270	OFF: ON:	0	No	t Used			
		84 98G	OFF: ON:	0	No	t Used	TR(ER)		
n. (Sched		5	OFF:	1	-		10210		
		or are	11 -13 - 1	1	Pa	rity and St	op Bits:		
	k		10)		-	SW3-5	SWJ-0	Parity	Stop Bits
	-					0	0	None	2
	on sanda 3	6	OFF:		62 W	ous son	off Listo	None	1
			ON: 1 1 0 Even	Even	1				
						1	1	Odd	1
ancilons	demi Conn	7 am Skim soc	OFF: ON:	0	Ba	ud Rates:	4.50		
	ретако					SW3.7	SW3.8	RS-232C	
	202 21	7 BIG	MIEC			0	MD 0 IM	9600 Бра	
	Cable	8	OFF: ON:			0	1	4800 bpe	
	1000		ON:	1		1	0	2400 bps	
			(1)(02)	0		1	Land	1200 Брв	

Table 1-40 MIF-F(A)-10 KTU - DTE PC Connections

MIF(CN7&	CN8)	-	NOR	MIF Cable Assembly		Straight RS-232 Cable	P	C or Printer
FG (FG)	1	·	1	(FG)FG	1		1	(FG)FG
RXD(RD)	5	-	2	(SD)TXD	2	<	2	(SD)TXD
TXD(SD)	4980 2	И.	3	(RD)RXD	3	>	3	(RD)RXD
CTS(CS)	6	←	4	(RS)RTS	4	<	4	(RS)RTS
RTS(RS)	3	-	5	(CS)CTS	5	>	5	(CS)CTS
DTR(ER)	7 sec U	М-	6	(DR)DSR	6	>	6	(DR)DSR
SG(SG)	8		7	(SG)SG	7		7	(SG)SG
DSR(DR)	bg ii yar	647 -	20	(ER)DTR	20	<- <u>-</u>	20	(ER)DTR
DCD (CN10)	SW3.8	-	8	(CD)DCD	8	х і	8	(CD)DCD

Note: The arrows show the direction of data flow during operation.

Table 1-41 MIF-F(A)-10 KTU - DCE MNP Modem Connections

MIF (C	(8NS)	-	0	MIF Cable Assembly	- 8	Reverse RS-232 Cable	M	INP Modem
FG(FG)	1		1	(FG)FG	1		1	(FG)FG
RXD(RD)	5	-	2	(SD)TXD	2	<	3	(RD)RXD
TXD(SD)	4		3	(RD)RXD	3	>	2	(SD)TXD
CTS(CS)	6	-	4	(RS)RTS	4	<	5	(CS)CTS
RTS(RS)	3		5	(CS)CTS	5	>	4	(RS)RTS
DTR(ER)	7		6	(DR)DSR	6	>	20	(ER)DTR
SG(SG)	8		7	(SG)SG	7		7	(SG)SG
CD (CN10)		-	8	(CD)DCD	8	<	8	(CD)DCD
DSR(DR)	2	-	20	(ER)DTR	20	<	6	(DR)DSR

Note: The arrows show the direction of data flow during operation.

Installation:

The MIF-F(A)-10 KTU can be installed into an Application Slot (AP) or into one of the four Application/Interface Slots (AP/IF1 ~ AP/IF4), in the Basic KSU. This KTU is shipped with two cable assemblies (MIF cable assembly). One end of each cable has an RJ35 (8-pin) connector. The other end of the cable terminates at an RS-232 connector. This connector must be mounted on the Basic KSU. [Refer to Figure 1-67 - Connecting the MIF Cable Assembly and the MIF-F(A)-10 KTU to the Basic KSU.]

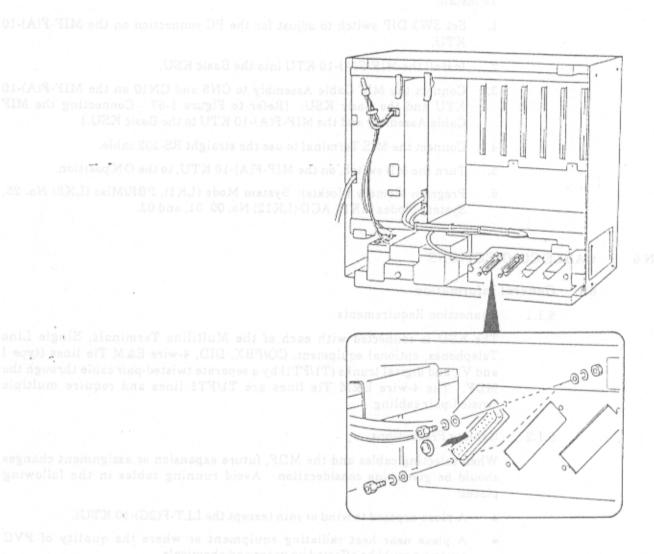


Figure 1-67 Connecting the MIF Cable Assembly and the MIF-F(A)-10 KTU to the Basic KSU

The Basic KSU is equipped with two MDF Cable Assemblies; the Expansion KSU is equipped with one MDF Cable Assembly. NEC recommends that the MDF Cable Assembly be used to connect the Multiline Terminals, Single Line Telephones (except PFT), COPBX, and DID lines. (Refer to Figure 1-68 - MDF Cable Assembly Diagram and Table 1-42 - Connection information/Connection and Port Relationships.) When matalling 4-wire E&M Tie lines. Single Line Telephones with PFT, and other optional equipment with the ECR-F-11 KTU, MEC provides the connector, however, the capling must be locally provided.

MIS Terminal Connection for ACD:

Required Equipment:

- 1. MIF-F(A)-10 KTU with NEC provided MDF Cable Assembly
- 2. RS-232 Straight Cable
- 3. IBM or IBM compatible PC with 286 or higher

To install:

- Set SW3 DIP switch to adjust for the PC connection on the MIF-F(A)-10 KTU.
- Install the MIF-F(A)-10 KTU into the Basic KSU.
- Connect the MIF Cable Assembly to CN8 and CN10 on the MIF-F(A)-10
 KTU and the Basic KSU. [Refer to Figure 1-67 Connecting the MIF
 Cable Assembly and the MIF-F(A)-10 KTU to the Basic KSU.]
- 4. Connect the MIS Terminal to use the straight RS-232 cable.
- Turn the MB switch, on the MIF-F(A)-10 KTU, to the ON position.
- Program Memory Block(s): System Mode (LK1), PBR/Misc (LK8) No. 25, System Modes (LK1), ACD (LK12) No. 00, 01, and 02.

SECTION 6

CABLE CONNECTIONS

6.1 General Information

6.1.1 Connection Requirements

The KSU is connected with each of the Multiline Terminals, Single Line Telephones, optional equipment, CO/PBX, DID, 4-wire E&M Tie lines (type I and V), and digital trunks (T1/FT1) by a separate twisted-pair cable through the MDF. The 4-wire E&M Tie lines are T1/FT1 lines and require multiple twisted-pair cabling.

6.1.2 Cabling Precautions

When selecting cables and the MDF, future expansion or assignment changes should be given due consideration. Avoid running cables in the following places:

- A place exposed to wind or rain (except the LLT-F(2G)-10 KTU).
- A place near heat radiating equipment or where the quality of PVC covering could be affected by gases and chemicals.
- An unstable place subject to vibration.

01-(A) 1-1114 6.2 Between the KSU and the MDF TO-1 sturied

6.2.1 KSU Cables land of

The Basic KSU is equipped with two MDF Cable Assemblies; the Expansion KSU is equipped with one MDF Cable Assembly. NEC recommends that the MDF Cable Assembly be used to connect the Multiline Terminals, Single Line Telephones (except PFT), CO/PBX, and DID lines. (Refer to Figure 1-68 - MDF Cable Assembly Diagram and Table 1-42 - Connection Information/Connection and Port Relationships.) When installing 4-wire E&M Tie lines, Single Line Telephones with PFT, and other optional equipment with the ECR-F-11 KTU, NEC provides the connector; however, the cabling must be locally provided. (Refer to Section 6.2.2 - Connecting Cables to Special Connectors.)

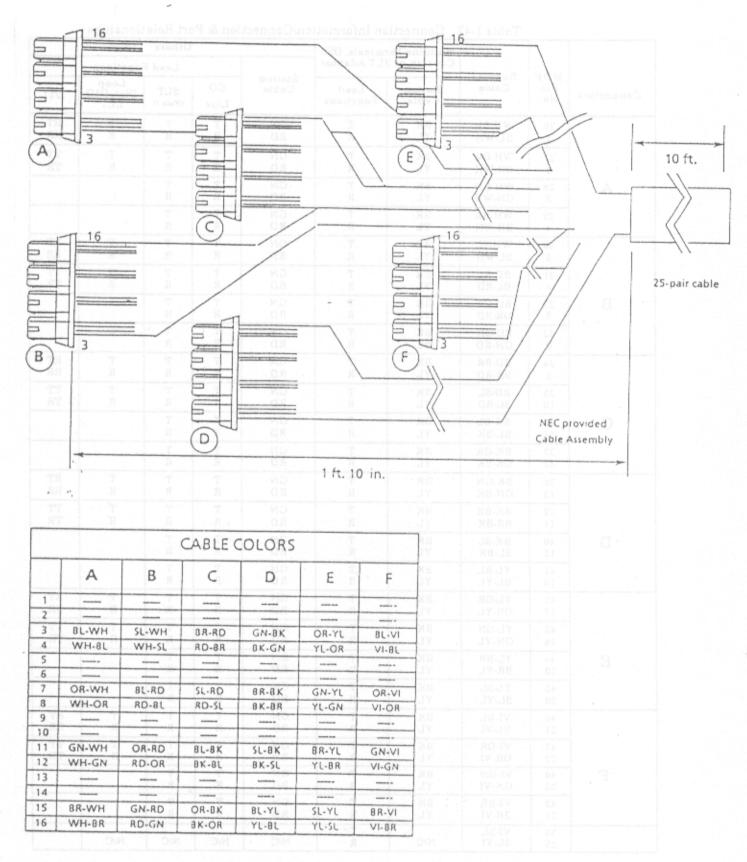


Figure 1-68 MDF Cable Assembly Diagram

	7	He and starting	Multiline Te	rminals, DSS		Others			
	MDF	Running		SLT Adaptor			Lead	Functions	
Connectors	Pin No.	Cable	Station Cable	Lead Functions	Station Cable	CO Line	SLT (Note I)	Loop Dial, DID LLT	DT
	26 1	WH-BL BL-WH	BK YL	T R	GN RD	T R	T R	T R	RT RR
	27	WH-OR OR-WH	BK YL	T R	GN RD	T R	T R	T R	TT
A	28	WH-GN GN-WH	BK YL	T R	GN RD	T R	T R		
	29	WH-BR BR-WH	BK YL	TR	GN RD	TR	TR		
7 1	30	WH-SL SL-WH	BK YL	TR	GN RD	TR	T R	T R	RT
	31	RD-BL BL-RD	BK YL	TR	GN RD	TR	TR	T R	TR
В	32	RD-OR OR-RD	BK YL	T R	GN RD	TR	TR	680000000	
	33	RD-GN GN-RD	BK	TR	GN RD	TR	TR	-	
	34	RD-BR BR-RD	BK YL	TR	GN RD	TR	T R	T R	R'I RR
	35 10	RD-SL SL-RD	BK YL	TR	GN RD	TR	TR	TR	TR
Cobie	36	BK-BL BL-BK	BK YL	TR	GN RD	T R	TR		
	37 12	BK-OR OR-BK	BK YL	TR	GN RD	TR	TR		
	38	BK-GN GN-BK	BK YL	TR	GN RD	TR	TR	T R	RT
	39	BK-BR BR-BK	BK YL	TR	GN RD	TR	T R	TR	TT
D	40	BK-SL SL-BK	BK YL	TR	GN RD	TR	TR		
	41	YL-BL BL-YL	BK YL	TR	GN RD	TR	T R	, Α,	
	42 17	YL-OR OR-YL	BK YL	TR	GN RD	TR	T R	T R	RT
	43 18	YL-GN GN-YL	BK YL	T R	GN RD	TR	T	T	TT
E	44	YL-BR BR-YL	BK YL	TR	GN RD	TR	TR		
	46 20	YLSL SL-YL	BK YL	TR	GN RD	TR	TR	18 107/-4	0
	46 21	VI-BL BL-VI	BK YL	TR	GN RD	TR	TR	TR	RT
	47	VI-OR OR-VI	BK YL	TR	GN RD	TR	TR	TR	TT
F	48 23	VI-GN GN-VI	BK YL	TR	GN RD	TR	TR	0.5	
	49 24	VI-BR BR-VI	BK YL	TR	GN RD	TR	TR	AD HW	As I
	50 25	VI-SL SL-VI	N/C	TR	N/C	N/C	N/C	N/C	

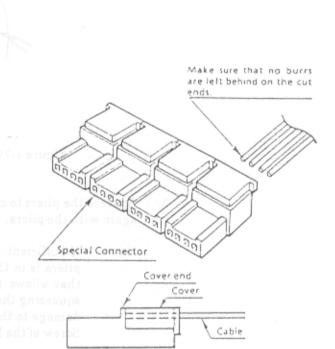
Note 1: SLI PFT required assembly of one 4-position connector by the installer. Only the first two channels provide for PFT connection, (Refer to Section 5.3.2.1 - Power Failure Backup for connector assembly.)

Note 2: The TL1-F(2)-10 KTU and ECR-F-11 KTU require assembly of the connectors by the installer. (Refer to Sections 6.2.3.1 - TL1-F(2)-10 KTU Cable Connections and 6.2.3.2 - ECR-F-11 KTU Cable Connections.)

6.2.2 Connecting Cables to Special Connectors

If installing a TLI-F(2)-10 KTU, ECR-F-11 KTU and/or an SLI-F(8G)-21 KTU with PFT, the cables must be connected to the provided connectors, in the KTU packing box. The following instructions explain this procedure.

 Cut the four cables the same length and insert them into the connector. Ensure that all four cables have been inserted all the way to the end of the cover. (Refer to Figure 1-69 - Attaching the Cables to the Connector.)





the lor of the Linux 1-71 - Positioning the

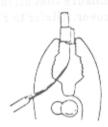
	Adaptable Ca	ble
	Core	Covering Outside Diameter
	0.40 mm.	0.66 mm.
ICT Cable	0.50 mm.	0.80 mm.
	0.65 mm.	1.20 mm. +0

Figure 1-69 Attaching the Cables to the Connector

Lightly hold the connecter with the pliers. In this case, make sure that the
crimping portion is held between the lower portion of the jaws of the plier.
(Refer to Figure 1-70 - Holding the Connector with the Pliers.)



Right Way



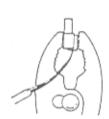


Figure 1-70 Holding the Connector with the Pliers

 Squeeze the pliers to crimp the cables. If the cover is loose, press the cover again with the pliers.

Note: If sufficient pressure cannot be applied when the screw of the pliers is in the center position, change the position of the screw that allows the jaws of the pliers to close. Be careful when squeezing the hands of the pliers, excessive pressure could cause damage to the connector. (Refer to Figure 1-71 - Positioning the Screw of the Pliers.)

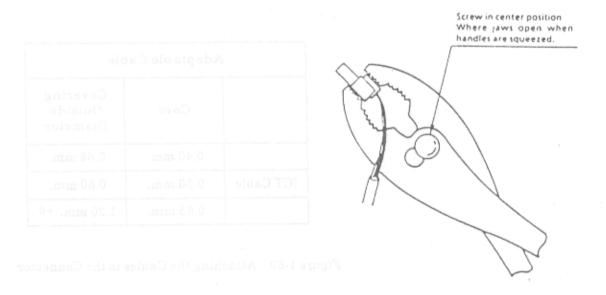


Figure 1-71 Positioning the Screw of the Pliers

6.2.3 Outside Lines

The FCC authorized connector for the connection of CO lines is an RJ21X. The CO lines will be connected in sequence within this termination block. Therefore, the lines must be ordered in the appearance order best suited to the customer's usage. (Refer to Table 1-42 - Connection Information/Connection & Port Relationships for information about the MDF Connector Assembly Cable positions, the cable number, and lead functions.)

Ground Start and/or Loop Start, Loop Dial, DID, 4-wire E&M Tie lines (types I and V) and T1 can be connected to this system. It is recommended that only twisted pair wiring be used to cross-connect the lines from the RJ21X termination block to the MDF.

Half-tapping or parallel connections must not be used on outside lines connected to the system.

6.2.3.1 TLI-F(2)-10 KTU Cable Connections

		Channel	Pins	
Night Chime	38 + 1		16	T12
			1.5	R12
			14	T2
		2	13	R2
			12	E2
			11	M2
		8	10	
			9	
			8	T11
			7	R11
			6	TI
		1 1	5	R1
			4	Εt
			3	M1
		RO3 :1 0 0	2	
			1	

Note 1: TLI-F(2)-10 KTU contains one, 4-position connector for assembly by the installer.

Note 2:

The NEC provided six, 4-position connector cable CANNOT be used to support 4-wire E&M service. (Refer to Figure 1-68 - MDF Cable Assembly Diagram.)

Note 3:

Connector pins 1~16 are counted from the bottom to the top of the KTU when it is installed into an interface slot.

6.2.3.2 ECR-F-11 KTU Cable Connections

Pin No.	Terminal Name	Function
16	8 RM	D I I D
15	8 RC	External Tone - Ringer 4
14	7-RM	D. Im Di o
13	7 RC	External Tone - Ringer 3
12	6 RM	D
11	6 RC	External Tone - Ringer 2
10	5 RM	B
9	5 RC	External Tone - Ringer 1
8	4 RM	N: 1 - 01 :
7	4 RC	Night Chime
6	3 RM	Enternal Parine Zone C
5	3 RC	External Paging - Zone C
4	2 RM	D
3	2 RC	External Paging - Zone B
2	1 RM	Enternal Perion 7 A
1	1 RC	External Paging - Zone A

- Note 1: ECR-F-11 KTU contains one, 4-position connector and two RCA plugs.
- Note 2: The NEC provided six, 4-position connector cable CANNOT be used to support this KTU. (Refer to Figure 1-68 MDF Cable Assembly Diagram.)
- Note 3: Connector pins 1 ~16 are counted from the bottom to the top of the KTU when it is installed into an interface slot.
- Note 4: External speakers and amplifiers must be locally provided.
- Note 5: External speakers must be 600 Ω .

6.2.3.3 DTI-F()-10 KTU Cable Connections

To install the cable between the T1/FT1 trunk and the DT1-F()-10 KTU:

- Connect the T1/FT1 trunk to the MDF. (Refer to Figure 1-72 - MDF Trunk Connection.)
- Connect this cable from the MDF to the DTI-F()-10 KTU by twisted-pair cable. (Refer to Figure 1-72 - MDF Trunk Connection.)

Pins	Terminal Name
1	
2	
3	RT
4	RR
5	
6	
7	TT
8	TR
9	
10	
11	
12	
13	
14	
15	
16	

	2.

Channels I and 2 can be used for the Connector cable
used, the NEC provided six, 4-position connector cable
CANNOT be used for channels 1—4. However, It can be
used for channels 5—8. (Refer to Section 5.3.2, 1-Power
Failure Backup.)

mis, DSS/BLF Consoles, or SLT Adaptors to

Note 1: The maximum distance from the DTI-F()-10 KTU to CSU/D Mark is 655 feet, using 22 AWG.

Note 2: D Mark is installed by the telephone company.

Note 3: CSU is recommended for maintenance (loop back or alarm function) or surge protection. The customer needs to purchase and install the CSU.

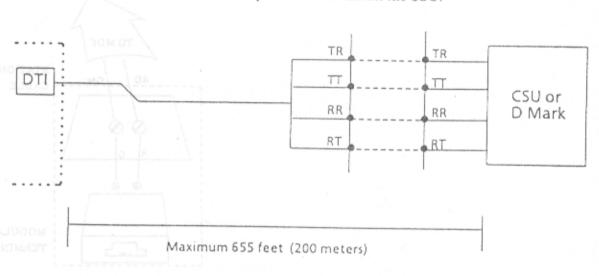


Figure 1-72 MDF Trunk Connection

1-105

6.2.3.4 SLI-F(8G)-21 KTU Cable Connections

Chann	el Pins	
	16	T4
4	15	R4
_	14	
	13	
	12	T3
3.	11	R3
٥.	10	
	9	
	8	T2
2	7	R2
-	ti	PF T2
	5	PF R2
	4	T1
1	3	R1
	2	PF T1

Note 1: SLI-F(8G)-21 KTU contains two, 4-position connectors providing eight channels.

PF R1

Note 2: Channels 1 and 2 can be used for PFT. If PFT is to be used, the NEC provided six, 4-position connector cable CANNOT be used for channels 1~4. However, it can be used for channels 5~8. (Refer to Section 5.3:2.1 - Power Failure Backup.)

6.2.4 Modular Terminal Connections

When connecting Multiline Terminals, DSS/BLF Consoles, or SLT Adaptors to the MDF or IDF, individually twisted 1-pair cabling must be used. Refer to Table 1-42 - Connection Information/Connection and Port Relationships for lead functions. [Refer to Figure 1-73 - Modular Terminal for Connection of Multiline Terminals and DSS/BLF Consoles for station modular jack (RJ13C/W) connection.]

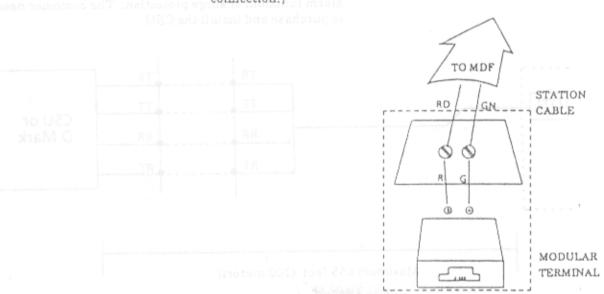


Figure 1-73 Modular Terminal for Connection of Multiline Terminals and DSS/BLF Consoles

Only DTMF dial, Single Line Telephones, standard 2500 type, are able to dial within the system. One-pair cabling is required, it is recommended that twisted pair cabling be used. (Refer to Table 1-42 - Connection Information/Connection and Port Relationships for lead functions. Refer to Figure 1-74 - Simplified Schematic of Single Line Telephone Connection for station termination.)

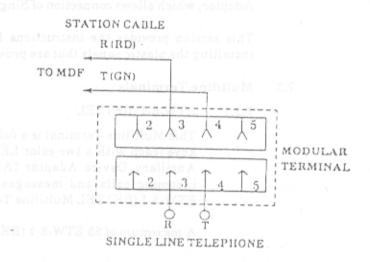


Figure 1-74 Simplified Schematic of Single Line Telephone Connection

For additional CO line connections to additional Single Line Telephones, similar cross connections should be made.

Since all of the Single Line Telephones must be equipped with DTMF dialing, the outside lines must allow tone dialing if dialing during power failure is required. If trunks are Ground Start, then Single Line Telephones must be equipped with a ground button.

When Single Line Telephones are installed, they can operate as power failure telephones, via cross connection on the MDF. (Refer to Figure 1-75 - Cross Connection of Single Line Telephones.)

Note: Single Line Telephones used for Power Failure Transfer must be supported by an SLI-F(8G)-21 KTU.

$$\begin{array}{cccc} \underline{CO3} & \underline{SLI\text{-}F(8G)} & \underline{SLT} \\ \hline TIP & & \underline{PT} & & \underline{TIP} \\ \hline RING & & \underline{PR} & & \underline{RING} \\ \end{array}$$

Figure 1-75 Cross Connection of Single Line Telephones

SECTION 7 TERMINAL INSTALLATIONS

7.1 General Information

The system has four kinds of Multiline Terminals, a DSS/BLF Console, and an SLT Adaptor, which allows connection of Single Line Telephones.

This section provides the instructions for wall mounting a Multiline Terminal, for installing the plastic panels that are provided with the telephones, etc.

7.2 Multiline Terminals

7.2.1 ETW-8-1 (BK) TEL

This Multiline Terminal is a fully modular instrument with eight Flexible Line keys (each with a two-color LED), eight function keys, built-in speakerphone, Ancillary Device Adaptor (ADA) compatibility, a large LED to indicate incoming calls and messages, and a tilt stand. [Refer to Figure 1-76 - ETW-8-1 (BK) TEL Multiline Terminal.]

A maximum of 55 ETW-8-1 (BK) TELs can be installed in a system.



Figure 1-76 ETW-8-1 (BK) TEL Multiline Terminal

7.2.2 ETW-16DC-1 (BK) TEL

This Multiline Terminal is a fully modular instrument with 16 Flexible Line keys (each with a two-color LED), eight function keys, built-in speakerphone, Ancillary Device Adaptor (ADA) compatibility, 16-character by 2-line Liquid Crystal Display (LCD), a large LED to indicate incoming calls and messages, and a tilt stand. [Refer to Figure 1-77 - ETW-16DC-1 (BK) TEL Multiline Terminal.]

A maximum of 56 ETW-16DC-1 (BK) TELs can be installed in a system.



Figure 1-77 ETW-16DC-1 (BK) TEL Multiline Terminal

7.2.3 ETW-16DD-1 (BK) TEL

This Multiline Terminal is a fully modular instrument with 16 Flexible Line keys (each with a two-color LED), eight function keys, built-in speakerphone, Ancillary Device Adaptor (ADA) compatibility, 16-character by 2-line Liquid Crystal Display (LCD), 20 programmable One-Touch keys (with red LEDs for BLF), a large LED to indicate incoming calls and messages, and a tilt stand. [Refer to Figure 1-78 - ETW-16DD-1 (BK) TEL Multiline Terminal.]

A maximum of 56 ETW-16DD-1 (BK) TELs can be installed in a system.



Figure 1-78 ETW-16DD-1 (BK) TEL Multiline Terminal

7.2.4 ETW-24DS-1 (BK) TEL

This Multiline Terminal is a fully modular instrument with 24 Flexible Line keys (each with a two-color LED), eight function keys, built-in speakerphone, built-in dual path capability, Ancillary Device Adaptor (ADA) compatibility, 16-character by 2-line Liquid Crystal Display (LCD), 12 programmable One-Touch keys, a large LED to indicate incoming calls and messages, and a tilt stand. [Refer to Figure 1-79 - ETW-24DS-1 (BK) TEL Multiline Terminal.]

A maximum of 56 ETW-24DS-1 (BK) TELs can be installed in a system.



Figure 1-79 ETW-24DS-1 (BK) TEL Multiline Terminal

7.2.5 Connecting a Multiline Terminal to the System

- Plug a telephone cord into the modular jack on the bottom side of the Multiline Terminal. (Refer to Figure 1-80 - Connecting a Multiline Terminal to the System.)
- Lead the cord out through the cord groove.

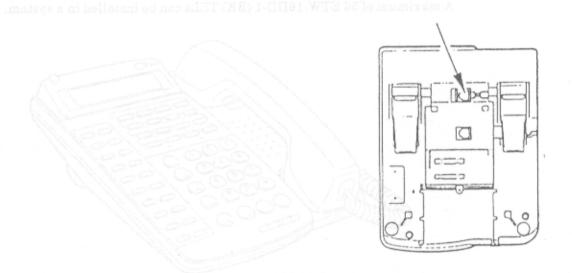


Figure 1-80 Connecting a Multiline Terminal to the System

- 7.2.6 Installing the Designation Card, Plastic Panel, and Labels on a Multiline Terminal
 - Place the designation card over the keys on the Multiline Terminal. (Refer to Figure 1-81 - Installing the Designation Card, Plastic Panel, and Labels on a Multiline Terminal.)
 - Insert the top hooks of the clear plastic panel in the appropriate holes on the Multiline Terminal, then place the bottom hooks in the Multiline Terminal. Snap the plastic panel into place to secure it. (Refer to Figure 1-31 - Installing the Designation Card, Plastic Panel, and Labels on a Multiline Terminal.)
 - Remove the station number label and place on the handset hook.
 - 4. Remove the Directory Card from the sheet and put it on the Directory Tray. (Refer to Figure 1-81 Installing the Designation Card, Plastic Panel, and Labels on a Multiline Terminal.)

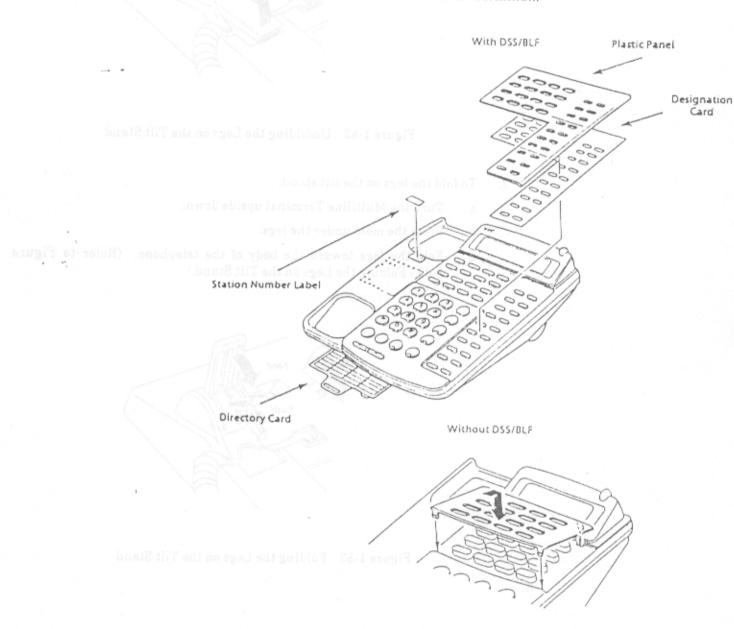


Figure 1-81 Installing the Designation Card, Plastic Panel, and Labels on a Multiline Terminal

7.2.7 Tilt Stand Adjustment

- molest) indimuol entities and no a 1. To unfold the legs on the tilt stand:
 - a. Turn the Multiline Terminal upside down.
 - Unfold the legs until they lock. (Refer to Figure 1-82 Unfolding the Legs on the Tilt Stand.)

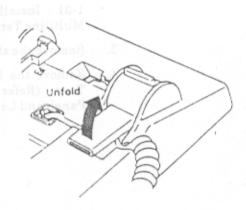


Figure 1-82 Unfolding the Legs on the Tilt Stand

- 2. To fold the legs on the tilt stand:
 - a. Turn the Multiline Terminal upside down.
 - b. Press the mold under the legs.
 - c. Fold the legs toward the body of the telephone. (Refer to Figure 1-83 Folding the Legs on the Tilt Stand.)

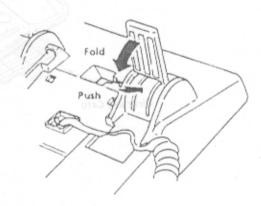
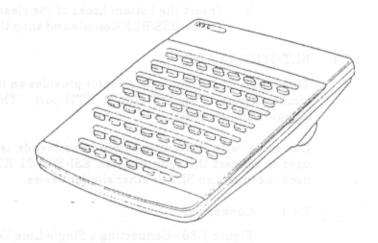


Figure 1-83 Folding the Legs on the Tilt Stand

7.3 EDW-48-1 (BK) DSS/BLF

The Direct Station Selection/Busy Lamp Field Console is equipped with 48 programmable keys with two LEDs (red and green), 12 function keys with one-color LED (red), and a tilt stand. [Refer to Figure 1-84 - EDW-48-1 (BK) DSS/BLF.]

A maximum of four EDW-48-1 (BK) DSS/BLF Consoles can be installed in the system.



enodgeleTeniJelgaiZe of freq UTX 12-(8) 4 Figure 1-84 EDW-48-1 (BK) DSS/BLF Console

7.3.1 Connecting the EDW-48-1 (BK) DSS/BLF to the System

The EDW-48-1 (BK) DSS/BLF Consoles may be associated with any of the following Multiline Terminals: ETW-16DC-1 (BK) TEL, ETW-16DD-1 (BK) TEL, or ETW-24DS-1 (BK) TEL.

- Plug a telephone cord into the modular jack on the bottom side of the DSS/BLF Console.
- Lead the cord out through the cord groove. (Refer to Figure 1-85 -Connecting a DSS/BLF Console to the System.)

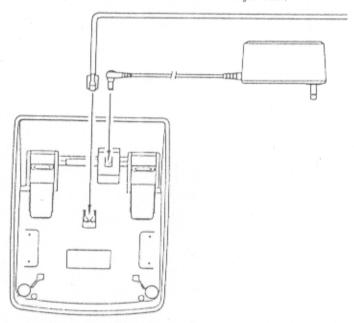


Figure 1-85 Connecting a DSS/BLF Console to the System

3. Plug the AC/DC Adaptor into the jack located on the bottom of the DSS/BLF Console.

7.3.2 Installing the Plastic Panel on a DSS/BLF Console

- 1. Place the Designation Card over the keys on the DSS/BLF Console.
- Insert the bottom hooks of the clear plastic panel in the appropriate holes in the DSS/BLF Console and snap the panel into place.

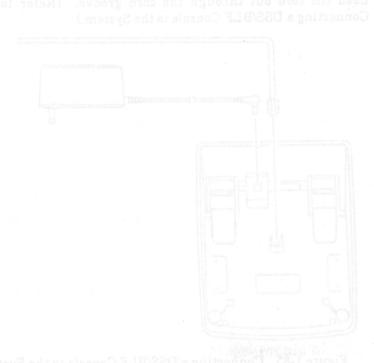
7.4 SLT-F(1G)-10 ADP

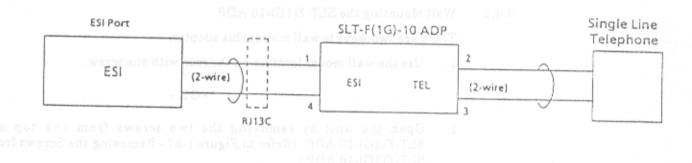
This Single Line Telephone Adaptor provides an interface for a Single Line Telephone or similar device to an ESI-F(8)-21 KTU port. This adaptor includes a built-in ringing signal (RSG) generator.

One cable, with RJ11 connections at both ends, is provided with this unit. This cable is used to connect the adaptor to an ESI-F(8)-21 KTU port. The other RJ11 connector is used to connect an SLT or other similar device.

7.4.1 Connection

Figure 1-86 - Connecting a Single Line Telephone using the SLT-F(1G)-10 ADP, shows the connection from an ESI-F(8)-21 KTU port to a Single Line Telephone using the SLT-F(1G)-10 ADP.





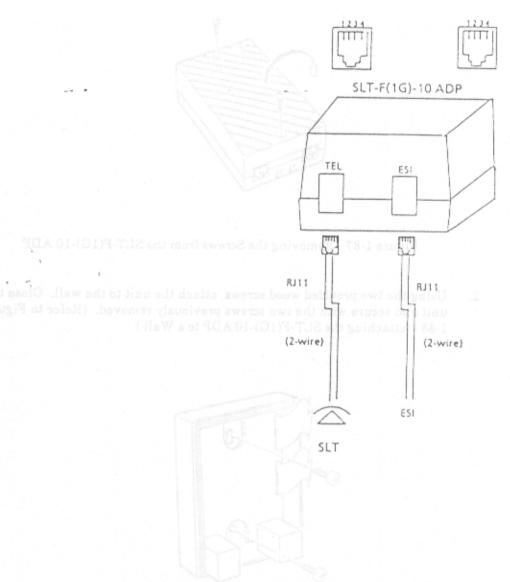


Figure 1-86 Connecting a Single Line Telephone using the SLT-F(1G)-10 ADP

Navere 1-88 Attaching the SUT-FILED IO ADP to a Wall

7.4.2 Wall Mounting the SLT-F(1G)-10 ADP

There are two ways to wall mount this adaptor.

Use the wall mount location on the rear with one screw.

· OR ·

 Open the unit by removing the two screws from the top of the SLT-F(1G)-10 ADP. (Refer to Figure 1-87 - Removing the Screws from the SLT-F(1G)-10 ADP.)

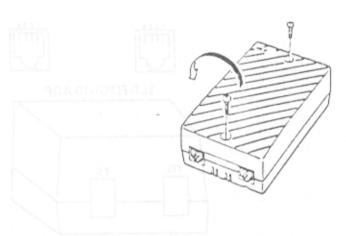


Figure 1-87 Removing the Screws from the SLT-F(1G)-10 ADP

Using the two provided wood screws, attach the unit to the wall. Close the
unit and secure with the two screws previously removed. (Refer to Figure
1-88 - Attaching the SLT-F(1G)-10 ADP to a Wall.)

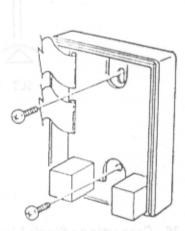


Figure 1-88 Attaching the SLT-F(1G)-10 ADP to a Wall

7.5 Wall Mounting Unit

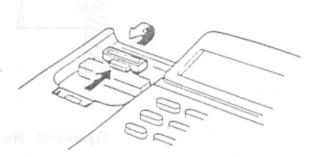
7.5.1 General Information

The WMU-W (BK) Unit is a universal Wall Mount Unit which can be used to mount any Multiline Terminal.

7.5.2 Installing the Wall Mounting Unit [WMU-W (BK)]

The WMU-W Unit can be connected to any Multiline Terminal in the system.

- 1. Remove the station number plate and designation strip.
- Remove the hanger by sliding it out. Remount it back in the original
 position with the projected side facing upward. (Refer to Figure 1-89 Wall
 Mounting Preparation.)



Mount the Multiline Terminal onto the wall mounting unit by aligning the

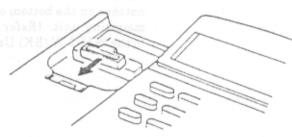


Figure 1-89 Wall Mounting Preparation

3. Reinstall the station number plate and designation strip.

 Fasten the optional WMU-W (BK) Unit to the wall using the two provided screws. (Refer to Figure 1-90 - Mounting the WMU-W (BK) Unit to the Wall.)

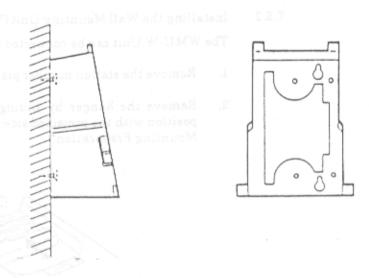


Figure 1-90 Mounting the WMU-W (BK) Unit to the Wall

Mount the Multiline Terminal onto the wall mounting unit by aligning the
notches on the bottom of the Multiline Terminal with the rails on the wall
mounting unit. [Refer to Figure 1-91 - Mounting the Multiline Terminal
to the WMU-W (BK) Unit.]

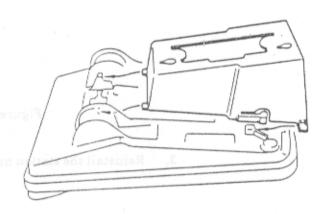


Figure 1-91 Mounting the Multiline Terminal to the WMU-W (BK) Unit

SECTION 8 ANCILLARY DEVICE CONNECTION

8.1 General Information

ADA(1)-W (BK) Unit

This Ancillary Device Adaptor Unit provides the Multiline Terminal with connection for a headset, external speakerphone, or other ancillary devices. An ADA(I)-W (BK) Unit can be installed in any Multiline Terminal.

A maximum of 56 ADA(1)-W (BK) Units can be installed in a system, one per Multiline Terminal.

ADA(2)-W (BK) Unit

This Ancillary Device Adaptor Unit provides the Multiline Terminal with a Single Line Telephone interface. An ADA(2)-W (BK) Unit can be installed in any Multiline Terminal and allows connection of a Single Line Telephone, cordless telephone, fax, modem, an automatic dialer (which generates DTMF tones for dialing), and an answering machine. The maximum distance between the ADA(2)-W (BK) Unit and the equipment is 10 feet, using 24 AWG. An AC/DC adaptor is required for power supply to the ADA(2)-W (BK) Unit. The ADA(2)-W (BK) Unit has a built-in RSG; hookflash detection, Message Wait, and disconnect signal are not supported.

A maximum of 16 ADA(2)-W (BK) Units can be installed in a system, one per Multiline Terminal.

8.2 Installing the Ancillary Device Adaptor Unit [ADA(1)-W (BK) or ADA(2)-W (BK)] in the Multiline Terminal

The ADA(1)-W (BK) Unit or ADA(2)-W (BK) Unit can be connected to any Multiline Terminal in the system.

- Unplug the line and handset cords.
- 2. Turn the Multiline Terminal upside down and place it on a dry surface.
- Remove the knockout (second from the top) on the bottom of the Multiline Terminal. [Refer to Figure 1-92 - Removing the Knockouts to Install ADA(1)-W (BK) Unit or ADA(2)-W (BK) Unit.]

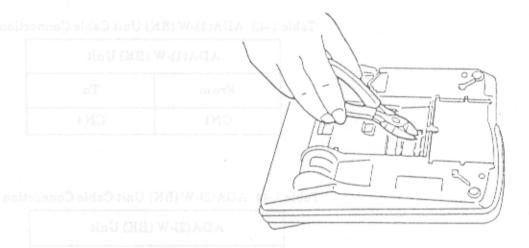


Figure 1-92 Removing the Knockouts to Install ADA(1)-W (BK) Unit or ADA(2)-W
(BK) Unit

- 4. Plug the connector labeled CN1, from the ADA(1)-W (BK) Unit or ADA(2)-W (BK) Unit, into the jack labeled CN4, on the Main Board. [Refer to Figure 1-93 ADA(1)-W (BK) Unit or ADA(2)-W (BK) Unit Installation, Table 1-43 ADA(1)-W (BK) Unit Cable Connection, and Table 1-44 ADA(2)-W (BK) Unit Cable Connection.]
- Mount the ADA(1)-W (BK) Unit into the Multiline Terminal using the screw provided (component side down). [Refer to Figure 1-93 - ADA(1)-W (BK) Unit or ADA(2)-W (BK) Unit Installation.]
- 6. Connect the external device (fax, modem, answering machine, etc.) using the information provided in ETIs.

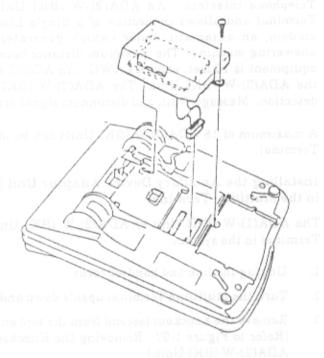


Figure 1-93 ADA(1)-W (BK) Unit or ADA(2)-W (BK) Unit Installation

Table 1-43 ADA(1)-W (BK) Unit Cable Connection

ADA(1)-W	V (BK) Unit
From	То
CN1	CN4

Table 1-44 ADA(2)-W (BK) Unit Cable Connection

ADA(2)-W (BK) Unit		
From	То	
CN1	CN4	

- 7a. For ADA(2)-W (BK) Unit only:
 - Plug the AC/DC adaptor in the jack, located on the side of the ADA(2)-W (BK) Unit.
- 7b. Plug in the handset and line cords.
- Test the operation of the Multiline Terminal and then test the operation of the external device.

SECTION 9 OPTIONAL EQUIPMENT CONNECTION

9.1 General Information

The system can support the following:

- External Music On Hold
- · External Paging
- External Tone Ring/Night Chime

9.2 Music On Hold

Provision has been made to allow connection of a locally provided external music source to provide Music On Hold for held calls.

Music source input is made using the MOH jack located on the CPU-F(10)-20 KTU. For music source input level and impedance, refer to Section 2.12.1 - Music On Hold, in this chapter.

Note: In compliance with FCC Part 15 regulations, the following procedure must be implemented any time a Music On Hold source is connected to this system.

To install:

- Make a slit on the cable insulation approximately 1-1/2 inches long, at a distance of 12 inches from the plug end, on the cable to be connected to the MOH jack. Take special care not to cut into the shield wire and inner wire insulation.
- 2. Make a circular cut in the cable insulation at one end of the slit.
- Pull the cut insulation from the cable to expose the shield for the length of the slit
 and cut the insulation off.
- Bend the cable near the middle of the exposed shield and separate the shield from the inner insulation in preparation for soldering. (Refer to Figure 1-94 - MOH Cable Shield Ground Exposed.)

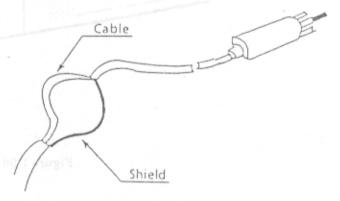


Figure 1-94 MOH Cable Shield Ground Exposed

- 5. Obtain a 7 inch length of 20~24 AWG stranded wire and connect a ring tongue type connector at one end.
- Strip a 1/2 inch length of insulation from the other end of the 7 inch wire. Solder
 this end to the shield previously exposed in step 3. Place tape around this
 connection to prevent the possibility of short circuits.
- Connect the plug end into the CPU-F(10)-20 KTU MOH jack. (Refer to Figure 1-95 -Music Source Connection.)

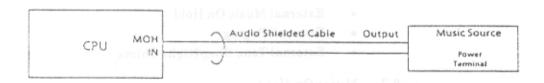


Figure 1-95 Music Source Connection

8. Route the cable down and to the right side of the KSU to avoid interference with the insertion and the removal of KTUs. Exit the other end of the cable at the right rear side of the KSU. (Refer to Figure 1-96 - MOH Cable Route.)

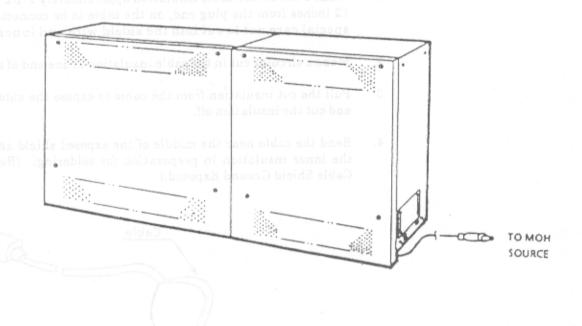


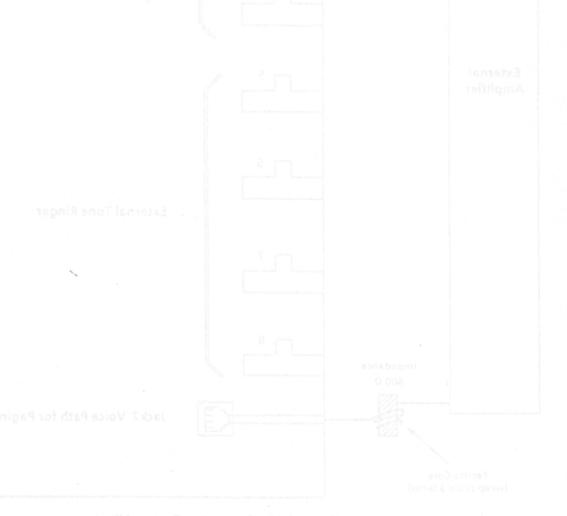
Figure 1-96 MOH Cable Route

9.3 External Paging

The ECR-F-11 KTU provides audio output for External Paging (which is available at phone jack JK2 on the ECR-F-11 KTU) and three contact closures (one per zone) for use in zone paging with Meet-Me Answer. These contacts are labeled 1RC and 1RM, 2RC and 2RM, 3RC and 2RM. (Refer to Section 6.2.3.2 - ECR-F-11 KTU Cable Connection.) A maximum of one ECR-F-11 KTU can be installed in a system providing a total of three paging zones.

It is necessary for the audio output to be connected to a locally provided amplifier and speaker(s), which are connected to the output of the amplifier. If the amplifier is a two-way amplifier, two-way paging is available. Shielded audio cable should be used for external paging audio connections. This audio cable, from JK2 to the external amplifier, should be wrapped three turns around a ferrite core. (For connection information to a locally provided amplifier, refer to Figure 1-97 - Connecting External Paging. For external paging audio output level and impedance, refer to Section 2.12 - External Equipment Interface, in this chapter.)

When External Paging is answered by Meet-Me Answer, the external paging audio circuit and the control circuits in the ECR-F-11 KTU are released to allow access for another page.



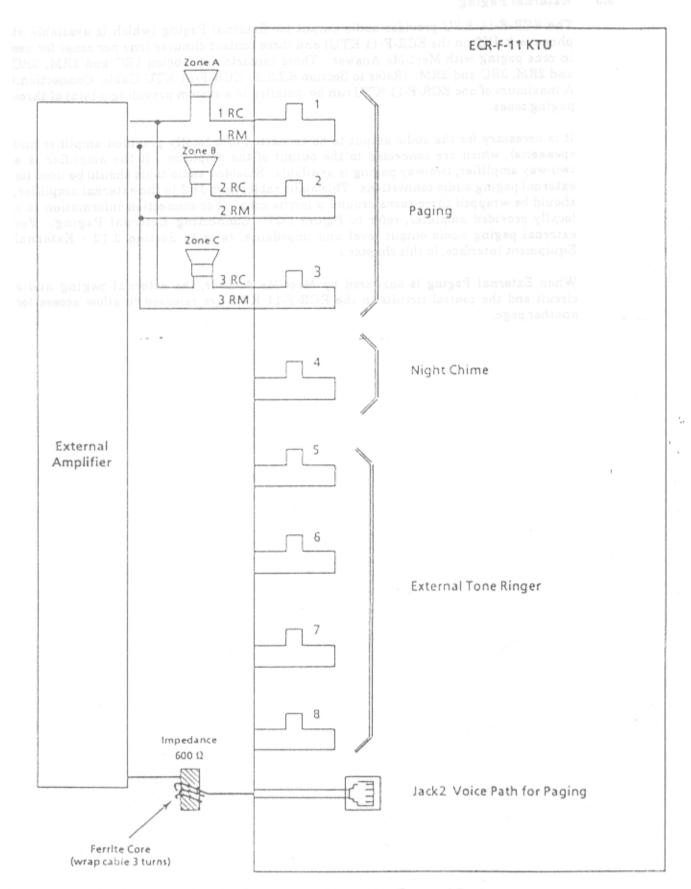


Figure 1-97 Connecting External Paging

SECTION 10 LCD INDICATIONS TABLE

Table 1-45 LCD Indications

Display soldianed Location soldered Definition valor			
07:43 SEP 02 SUN	All Stations with	Clock/Calendar TO SUAS JIA T	
FWD 100->[]		Setting Call Forward - All Calls	
ALL FWD CANCLD	Sxternal Speaker	Canceling DND/Call Forward - All Calls System-Wide	
FWD CANCLD	Originator	Canceling DND/Call Forward - All Calls at Individual Stations	
SET FWD () ROBERT MARKET MARKET	Originator	Setting Call Forward - All Calls From Forward to Extension	
RESET FWD []	Originator	Resetting Call Forward - All Calls From Forward to Extension	
FWDB 100 - > [] relamen Now	Originator mose A	Setting Call Forward - Busy	
FWDB CANCLD	Originator	Canceling Call Forward - Busy AAM OT 2MS	
FWDNA 100 -> [] bersind	Originator	Setting Cail Forward - No Answer YTAMA-	
FWDNA CANCLD	Originator Desga	Canceling Call Forward - No Answer	
FWDBN 100-> []	Originator	Setting Call Forward - Busy/No Answer	
FWDBN CANCLD	Originator	Canceling Call Forward - Busy/No Answer	
BACK / :	Originator Manag	Setting Customized Message 80999	
MESSAGE CLEAR	Originator	Canceling Customized Message System-Wide or fa Individual Station	
NIGHT MODE SET	Originator	Night Mode Switch	
NIGHT MODE RESET	Originator	Resetting Night Mode	
N T TENANT	Originator	Setting Night Mode for Tenant	
CALLBACK CANCLD	Originator	Canceling Callback	
FNC LED OFF	Originator	Resetting FNC LED	
CURRNT PASSWORD ?	Originator	Telephone Password (1)	
NEW PASSWORD ?	Originator	Telephone Password (2)	
ENTER PASSWORD	Originator	Setting Password (CO/PBX Restriction)	
RESTRICT SET	Originator	After Setting Password	
CALL DENIED	Originator	Display On Restricted Telephones	
RESTRICT CANCLD	Originator	After Canceling Outgoing Call Restriction	
CANCEL TEL ???	Originator	Canceling Restriction on Another Telephone	
RLY 0 ON	Originator	Relay On	
RLY 0 OFF	Originator	Relay Off	
ALARM AM 00:00	Originator	Setting Alarm for A.M.	
ALARM PM 00:00	Originator	Setting Alarm for P.M.	
ALL ALARM CANCLD	Originator	Canceling Alarm System-Wide	
SET TIME REMINDER	Originator	Setting Timed Alarm for SLT	
DND SET	Originator	Setting Do Not Disturb	
SAVE & REPEAT	Originator	S & R Number Is Stored	

Display noillaned	Location	Definition yalgaid	
INT ALL PAGE	Originator	Internal All Zone Paging	
INT PAGE A		Group Paging	
TENT []		Tenant Paging	
SPKR [A]	Originator	External Speaker GEOMAS GWILL	
TEST PRINT	Originator	Test Print	
NO PRINTER	Originator by ball	No Printer Connected	
TRNS SET CO =	Originator	Setting Automatic Tandem Trunk Transfer IN/OUT Trunk	
TRNS CNCL CO = 100 IA-b	Originator	Resetting Automatic Tandem Trunk Transfer	
TRNS TO CO = Vana.	Originator	Setting or Confirmation of Transferred Trunk of Automatic Tandem Trunk Transfer	
TRNS TO N/A	Originator	Transferred Trunk Not Assigned GUOMAD SOW	
00: EMPTY Taward A oV.	Originator	No Speed Dial Number Entered	
00:0123456789	Originator	Speed Dial Number Confirmation GLOMAG AMON	
NEC *** SERIES	Originator	System Name Confirmation	
NO SMDR	Originator	Station Message Detail Recording Not Available	
ERROR	Originator	Error Message	
BUSY	Originator	Busy Message	
PRINTER TROUBLE	Originator	Printer Problems	
SPKR [A,B,C]	Originator	External All Paging	
LINE NOW IDLE	Originator	Trunk Queuing; CO/PBX Trunk Idle	
TRUNK QUE SET	Originator	Trunk Queuing Set	
LNR [#]/SPD[]	Vancenng Campack	Press LNR/SPD Key	
TRUNK QUE CANCLD	Originator	Trunk Queue Canceled	
HOLD: 01,02,03,04	Originator	Hold Recall Online Canowazas Pussi	
120 < -[110] TRANSF	Attendant Position	Ring Transfer	
120 = = [110] TRANSF	O D Blow BEET HELDS	Automatic Ring Transfer	
OVD > []	News or gained tours	Barge-In on CO/PBX Line (1)	
OVD - > CO[]	Display Un Nesurcui	Barge-In on CO/PBX Line (2)	
100 < - TIE LINE	and summing same	Tie Line Answer	
100 < - DID CALL 01	Danceing Kosmichin	DID Answer	
ENTRY ERROR	Originator	Error While Placing a Call Using Speed Dial Number	
DATA ENTRY	Relay Cal	Entering Data via System Programming	

SECTION 11 FEATURE ACCESS CODES

Some of the codes are set as system defaults and some codes have no default defined but are programmable in System Programming. The table is divided according to the status of the telephone. An explanation of the notes column is listed below, these are referenced throughout the table. (Refer to Table 1-46 - Access Codes Tables.)

Explanation of Notes Column:

Installation:

Operable only on telephones specified at the time of installation.

Single Line Only:

Operable only on Single Line Telephones.

Single Line OK:

Operable on Multiline Terminals or Single Line Telephones.

Note 1:

The controls in parentheses are not necessary for your own telephone or own tenant.

Note 2:

Operable only when the Speed Dial number is set to 2 digits (90 mode).

Note 3:

Enter the new values in the Access Code Table.

Note 4:

No system default is defined, this code must be assigned in System Programming. 602 - 10) sadmult red heavy = I

Table 1-46 Access Code Tables

When the telephone is idle (handset is on-hook):

Function	Operation		Notes
Microphone ON/OFF	FNC - Dial 1	· · · · · · · ·	Kassaga Diapa
System Name Confirmation	FNC - Dial 3		
Verifying Station Number	FNC Dial 4		
Confirming Timed Alarm	FNC → Dial 51 → FNC		
Resetting Timed Alarm System	FNC → Dial 58 → FNC I ai beselone anolicisque OME = 81 laid = OME	harimo	Installation
Resetting Timed Alarm	FNC → Dial 59 → FNC		-
Setting Do Not Disturb	FNC - Dial 60 - FNC	baximo	anceling Cus
Setting Call Forward - All Calls	FNC → Dial 60 → Dial XXX → FNC XXX = Extension number where call is to be forwarded.		Installation

Function	behivib at alder out an Operation material aldernmenging	Notes
Setting Automatic Trunk-to-Trunk Transfer Mode	FNC → Dial 61 → Dial XX → FNC XX = Incoming Trunk Port Number (01 ~ 56; 00 = All Trunks)	Installation
Canceling Automatic Trunk-to-Trunk Transfer to Outside Mode	FNC → Dial 62 → Dial XX → FNC XX = Incoming Trunk Port Number (01 ~ 56; 00 = All Trunks)	Installation
Setting Automatic Trunk-to-Trunk Transfer Outgoing Trunk	FNC → Dial 63 → Dial XX → Dial # → Dial Y → FNC XX = Incoming Trunk Port Number (maximum of 24 digits) YY = Transfer Telephone Number (maximum 24 digits)	Installation
Confirming Transfer Number for Automatic Trunk-to-Trunk Transfer	FNC → Dial 64 → Dial XX → FNC XX = Trunk Port Number (01 ~ 56)	Installation
Canceling Call Forward - All Calls by System -	FNC → Dial 68 → FNC	Installation
Canceling Do Not Disturb/Call Forward - All Calls	FNC - Dial 69 - FNC	Installation
Setting Customized Message Display	FNC → Dial 70 → Dial * → Dial # → [Dial XX:XX, YY:YY] → FNC	icraphane Öh
	* = Selects Display # = Sets Display XX:XX = Date of Return YY:YY = Time of Return Operations enclosed in [] are optional.	erifying Statil
Canceling Customized Message Display by System	FNC → Dial 78 → FNC	Installation
Canceling Customized Message Display	FNC - Dial 79 - FNC	ting Do Not
Setting/Canceling Night Mode Switch (System)	FNC → Dial 80 → FNC	Installation Attendant Only
Setting Automated Attendant Mode	FNC → Dial 81 → Dial XX → FNC XX = Incoming Trunk Port No. (01 ~ 56; 00 = All Trunks)	Installation
Canceling Automated Attendant Mode	FNC → Dial 82 → Dial XX → FNC XX = Incoming Trunk Port No. (01 ~ 56, 00 = All Trunks)	Installation
Setting/Canceling Night Mode Switch (Tenant)	FNC → Dial 85 → Dial XX → FNC XX = Tenant Number (00 ~ 47)	Installation

Function	Operation Operation		Notes
Canceling Callback Message by System	FNC - Dial 88 - FNC		Installation
SMDR Test Print	FNC - Dial 9 FNC date M vertical land lessel = Xe		Installation
Canceling FNC LED	FNC - Dial 99 - FNC - G98/8/4/ - OMS	Peature	gaimmargo
Programming System Speed Dial Buffer Number	FNC → LNR/SPD → Dial XXX → Dial YYYY - ZZ ~ Z → [HOLD → Dial xx ~ x] → FNC	+ Dial	Installation
	XXX = Speed Dial Buffer Number (00 ~ 89 / 000 ~ 999) YYYY = Access Code (maximum 4 digits) ZZ ~ Z = Telephone Number (maximum 24 digits)		
<pre>Key → Installation XX - X → Note 2</pre>	Operations enclosed in [are optional.		ogranoming cossa Keys (f
Programming Station Speed Dial Buffer Number	FNC → LNR/SPD → Dial XX → Dial YYYY → [HOLD → Dial xx ~ x] → FNC	Dial ZZ ~ Z -	Note 2
	XX = Speed Dial Buffer Number (90 ~ 99) YYYY = Access Code (maximum 4 digits) ZZ - Z = Telephone Number (maximum 24 digits) xx - x = Name of Other Party (maximum 13 letters)		
	Operations enclosed in [are optional		gaiomargo
Confirming System Speed Dial Number	CNF LNR/SPD Dial XXX XXX = Speed Dial Buffer Number (00 ~ 89 / 000 ~ 999)	30129734	11 8 (8 2) 8 (1) (a.i)
Confirming Station Speed Dial Number	CNF → LNR/SPD → Dial XX XX = Speed Dial Buffer Number (90 ~ 99)		Note 2
Canceling System Speed Dial Number	FNC - LNR/SPD - Dial XXX - FNC		Installation
	XXX = Speed Dini Buffer Number (00 ~ 89 / 000 ~ 999)		nimmango
Canceling Station Speed Dial Number	FNC → LNR/SPD → Dial XX → FNC XX = Speed Dial Buffer Number (90 ~ 99)	r Feature	Note 2
Placing a Call - Speed Dial	LNR/SPD Key Dial XXX XXX = Speed Dial Buffer Number (00 ~ 89 / 000 ~ 999)	вызор А стан	safirming Fe
Confirming Last Number Dialed Memory	CNF - LNRVSPD - Dial - G9808MJ - DM9	ште Ассеза	neceling Feat ey
Placing a Call Using Store & Repeat/Save & Repeat	LNR/SPD - Dial #	vith Feature	acing a Call scess Key
Setting/Canceling Answer Preset (Ringing Line Preference)	FNC - ANS SUBJECT OF STREET		ogradiming sys (for DSS/

Function	Operation	Notes
Last Dialed Number Memory to a Station Speed Dial	FNC → LNR/SPD → Dial9 X → LNR/SPD → FNC	Note 2
Buffer Number	9X = Speed Dial Buller Number (90 ~ 99). Enter 0 ~ 9 for last digit.	Infl Test Pri
Programming Feature Access Keys (for DSS/BLF)	FNC → LNR/SPD → Dial 9 X → Feature Access Key → Dial 1 → Dial YYYY → [Dial 1] → FNC	Installation Note 2
	9X = Speed Dial Buffer Number (90 ~ 99). Enter 0 ~ 9 for last digit. YYYY = Station number (2, 3, or 4 digits)	egramming S al Buffer Viii
	Operations enclosed in lare optional (when the digit 1 is dialed, the call is switched from Voice to Tone or from Tone to Voice).	
Programming Feature Access Keys (for Station Speed Dial)	FNC → LNR/SPD → Dial 9 X → Feature Access Key → Dial 0 → Dial Y → Dial ZZ ~ Z → [HOLD → Dial XX ~ X] → FNC	Installation Note 2
	9X = Speed Dial Buffer Number (90 ~ 99). Enter 0 ~ 9 for last digit. Y = CO/PBX Access Code (maximum 4 digits) ZZ ~ Z = Telephone Number to stored (maximum 22 digits) XX ~ X = Name to be stored using the Character Code (maximum 13 characters)	ei Buller Nur
	Operations enclosed in [are optional.	
Programming Feature Access Keys (for Nesting Dial)	FNC → LNR/SPD → 9 X → Feature Access Key → Dial 0 → Dial Y → ANS → Dial ZZ → [ANS → ZZ (repeat up to 3 times)] → [HOLD → Dial XX ~ X] → FNC	Installation Note 2
	9X = Speed Dial Buffer Number (90 ~ 99). Enter 0 ~ 9 for last digit. Y = CO/PBX Access Code (maximum 4 digits) ZZ = System or Station Speed Dial Buffer Number (00 ~ 99) XX ~ X = Name to be stored using the Character Code (maximum 13 characters)	al Number al Ruming Sta al Number
	Operations enclosed in [are optional. M OME IniO bessed m	naciling Syste
Programming Feature Access Keys (for Feature	FNC → LNIVSPD → 9 X → Feature Access Key → Dial # → Dial YY → FNC	Installation Note 2
Access)	9X = Speed Dial Buffer Number (90 ~ 99). Enter 0 ~ 9 for last digit. YY = Feature Access Code	meenng zenti
Confirming Feature Access Key	FNC - Feature Access Key - YEAR CHEVING HAICI beengd	Note 2
Canceling Feature Access	FNC - LNRVSPD - Dial 9 X - FNC - NKO redample	Note 2
Key	9X = Speed Dial Buffer Number(90 ~ 99). Enter 0 ~ 9 for last digit.	Mercory
Placing a Call with Feature Access Key	Press the Fenture Access Key programmed for the desired feature.	Note 2
Programming One-Touch Keys (for DSS/BLF)	(ting/Concell
	YYY = Station number (2, 3, or 4 digita)	sset (Ringing sference)
(continued on next page)	Operations enclosed in [] are optional (when the digit 1 is dialed, the call is switched from Voice to Tone or from Tone to Voice).	

Function	noise operation (Default)		Notes
Programming One-Touch Keys (for Station Speed Dial)	FNC → LNR/SPD → One-Touch Key → Dial 0 → Dial Y - Dial ZZ ~ Z → FNC	pasvi	7th Route A. Seizure
	Y = CO/PBX Access Code (maximum 4 digits).		Sth Route A. Seizure
Programming One-Touch Keys (for Nesting Dial)	FNC → LNR/SPD → One-Touch Key → Dial 0 → Dial Y → ANS → Dial ZZ → (ANS → Dial ZZ (repeat up to 3 times)] FNC		Call Pickup Line (Anoth
	O'D IsiG lar		Call Picking
	Y = CO/PBX Access Code (maximum 4 digits). ZZ = System or Station Speed Dist Buffer Number (00 - 99) Operations enclosed in are optional.		Call Transf Tenant
Programming One-Touch Keys (for Feature Access)	FNC → LNR/SPD → One-Touch Key → Dial # → Dial YY	XEE SY	Specified Cl Seizure
e Installation	YY = Feature Access Code qU gash DD [sid] gains		Setting Tru
Confirming One-Touch Key	FNC - One-Touch Key (- FNC) med W selevi		
polisialisad	Operation in { } is required only if the arrow is displayed.	dnur	Canceling
Canceling One-Touch Key	FNC → LNR/SPD → One-Touch Key → FNC		
Placing a Call with One-Touch Key	Press the One-Touch key programmed for the desired feature	lean	Specified To Line Seizur

While the extension is being seized (handset is lifted or the SPKR key is pressed and ICM lamp is lit):

Note: The default setting for the Access Codes are shown in this table.

Function		Operation (Default)		Notes
1st Route Advance Block Seizure (Trunk Group 1)	Dial 9	Dial CO - Dial XX		CO/PBX Trunk (Outgoing)
2nd Route Advance Block Seizure	Dial 8	x V = Teneds Munifer (80 m 47) Dini 50	nified Tenont)	Tie Trunk
3rd Route Advance Block Seizure	Dial 70	Dial 51		laternal All laternal Zon
4 th Route Advance Block Seizure	Dial 71	Dia153		laternal Zon
5 th Route Advance Block Seizure	Dial 72	Dial S .		Aaswering s
6 th Route Advance Block Seizure	Dial 73		BERT 19210 1 317	(anno)

Function	nollaring Operation (Default)	Notes
7th Route Advance Block Seizure	Das-Touch FNC - LNIUSFII - One-Touch Hey - PT Laid	
8th Route Advance Block Seizure	Dial 75 Access Code a manuscriment of the Code of Structures 1 of the file of the code of the structures 1 of the file of the code of the structures 1 of the structur	
Call Pickup CO/PBX/Tie Line (Another Tenant)	One-Teuch ENC - LNRLSTD - One-Touch Key - laid og Diel ANS - Diel ZZ - IANS - Diel ZZ Gepalen	Note 4
Call Pickup Internal	Dial O	Note 4
Call Transfer within Tenant	Dial Codmittee Speed Bial Buffer States of Dial Codmittee of Speed Bial Buffer States of Dial Codmittee of Speed Bial Buffer Speed Bial Bu	Note 4
Specified CO/PBX Line Seizure		Note 4
Setting Trunk Queuing	Dial □□ → Hang Up Note: When busy tone is heard.	Installation Note 4
Canceling Trunk Queuing	Dial □□ → Hang Up and para at International Office Dial □□ → Hang Up and para at International Office Dial □□ → Hang Up and para at International Office Dial □□ → Hang Up and para at International Office Dial □□ → Hang Up and para at International Office Dial □□ → Hang Up and para at International Office Dial □□ → Hang Up and para at International Office Dial □□ → Hang Up and para at International Office Dial □□ → Hang Up and para at International Office Dial □□ → Hang Up and para at International Office Dial □□ → Hang Up and para at International Office Dial □□ → Hang Up and para at International Office Dial □□ → Hang Up and para at International Office Dial □□ → Hang Up and para at International Office Dial □□ → Hang Up and para at International Office Dial □□ → Hang Up and para at International Office Dial □□ → Hang Up at Dial □□ → Hang	Installation Note 4
Specified Tenant CO/PBX Line Seizure	Dial □ □ → Dial XX XX = Tenant Number (00 ~ 47)	Note 4-
Call Pickup Intra-Tenant	Dial 68	Note 4
Call Pickup for the Tie Line within Same Tenant	Dial C C C C C C C C C C C C C C C C C C C	Note 4
Call Pickup for PBX Line within Same Tenant	The default setting for the Access Codes are shown in the laid	Note 4
Call Pickup for the CO Line within Same Tenant	Dial Co Colorado Constitución de la colorado Col	Note 4
Specified CO/PBX Line Seizure (Specified Tenant)	Dial □ □ → Dial XX (I quos 0 s XX = Tenant Number (00 ~ 47)	Note 4
Emergency All Call Paging	Dial 50 State Dial 8	20d Route Adv
Internal All Zone Paging	Dial 51	LA ALCONO
Internal Zone 1 Paging	Dial 52	Seizure
Internal Zone 2 Paging	Dial 53 IT laid 25018 epps	A Route Adv
Internal Zone 3 Paging	Dial 54	ourgrad
Answering a Page with "Meet-Me" (All Telephone Zones)	Dial 5 • Evisio Dial 73	5th Kouta Adv Seizure 6th Route Adv

Function	Operation (Default)	Notes
External All Zone Paging	Dial 55	
External Zone A Paging	Dial 56	E OU BOUDER
External Zone B Paging	Dial 57	Calls
External Zone C Paging	Dial 58	
Telephone External/Internal All Zone Paging	Dial 59 Dial 43 - Dial	All Cathanna
Answering a Page with "Meet-Me" (All External Zones)	Dial 5 # XXXX Sigle - Nigle - Diawie's H.	
Trunk Group (1 ~ 32)	Dial OO	Notes 3 & 4
Route Advance (9 ~ 16)	Dial O O	Notes 3 & 4
Calling DSS Console 1	Dial Co guard - Sking - Sking brawnoll	Note 4
Calling DSS Console 2	Dial O O	Note 4
Direct Paging Access (0)	Dial O qU mand - XXX teld - Thind HA - blawte	Note 4
Direct Paging Access (1)	Dial OO argine salamani kenadajum salatak = XXX	Note 4
Direct Paging Access (2)	Dial Co QU gnaH XXX Dial XXX Hang Up	Note 4
Direct Paging Access (3)	Dial DD	Note 4
Setting Timed Alarm for Single Line Telephone	Dial □ □ → Dial XXXX → Dial YY:YY → Hang Up XXXX = Station number	Installation Note 4
Canceling Timed Alarm or Single Line Telephone	Dial □□ → Dial XXXX → Dial 9999 → Hang Up XXXX = Station number Dial Dial	Installation Note 4
Setting Telephone Password (Outgoing Restriction)	Dial □□ → Dial XX ~ X → Hang Up XX = Password (maximum 10 digits)	Installation Note 4
Canceling Telephone Password (Outgoing Restriction)	Dial □□ → Dial XXX → Hang Up Dial XXX → Hang Up Dial XXX → Password (maximum 10 digits)	Note 4
Setting Password	Dial □ → Dial XX ~ X → Dial YY ~ Y → Hang Up XX = Old Password (maximum 10 digits) YY = New Password (maximum 10 digits)	Installation Note 4
Canceling Telephone Password from Another Celephone	Dial □□ → Dial XXXX → Hang Up (stinements aborder & midbals used + DienetT = XX:XX XXXX = Station number	Installation Note 4

Function	Operation (Default)	Notes
Setting Do Not Disturb	Dial 40 Hang Up	Installation
Setting Call Forward - All Calls	Dial 41 → Dial XXXX → Hang Up XXXX = Station number of forward destination	Installation
Canceling Call Forward - All Calls/Do Not Disturb	Dial 42 → Hang Up	Installation
Setting Call Forward - No Answer	Dial 43 → Dial XXXX XXXX = Station number of forward destination as a laid discount of the page.	Installation
Canceling Call Forward - No Answer	Dial 44 → Dial XXXX XXXX = Station number of forward destination	Installation
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Setting Timed Alarm by Single Line Telephone neithlisteni	Dial □ → Dial XX:XX qU gash → XXXX Isid → □ Isid assord XX:XX = Time (24-hour clock in 5 minute increments)	Installation Note 4
Canceling Timed Alarm by Single Line Telephone	Dial □□ → Hang Up	Installation Note 4

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Interrupting a Call on CO/PBX Line (Barge-In by Station Number)	FNC CNF Dial XXXX FNC XXXX = Station number to be interrupted	Cellback	Installation
Interrupting a Call on CO/PBX Line (Barge-In by Trunk Number)	FNC → CNF → Dial * → Dial XX → FNC XX = CO/PBX Trunk Number (01 ~ 56) to be interrupted		Installation
Transfer to Call Park - System	Dial 4 * → Dial X X = Call Park Number (0 ~ 9)	shi	mevO emoT
Answer or Retrieve Call Park - System	Dial 4 # - Dial X X = Call Park Number (0 ~ 9)	030889	Caliback M
Automated Attendant Message (Recording/Confirmation/	Dial □ □ → Dial X → Dial 1 → Dial 4 → Dial Z X = 1 = Recording	nellon	Note 4
Erasing)	= 2 = Confirmation = 3 = Erasing		Microphon
	Y = Enter Automated Attendant Number (1 ~ 8) OMB Z = 1 = Day Mode = 2 = Night Mode		Seized Out Number Di
	= 3 = Weekend Mode Timid - OMR		Store and R
Voice Prompt Message Recording/Confirmation/	Dial □ □ → Dial X → Dial Z → Dial Y	peat	Note 4
Erasing)	X = 1 = Recording = 2 = Confirmation = 3 = Erasing Y = 1 = Message for Dial Tone 2 = Message for Call Waiting Tone	lilo.	Exclusive !
Attendant Call	Dial 0		Installation

While calling an extension:

Function		Operation	Notes
Tone/Voice Switching	Dial 1		
Callback Message	Dial#		Installation

While a call is waiting (when calling an extension and Call Waiting Tone is heard):

Function	Operation	Notes
Automatic Callback	Dial 0 → Hang Up	Installation
Step Call	Dial 1	Single Line OK (only for DP type telephones)
Tone Override	Dial * Final - * blaid - 236	Installation
Callback Message	Dial#	Installation

While seizing a CO/PBX Line:

Function	Operation	Note
Microphone ON/OFF	FNC → Dial 1	Emsing
Seized Outside Line Number Display	FNC → Dial 3 ** ** ** ** ** ** ** ** ** ** ** **	
Store and Repeat	FNC → Dial 7	
Save and Repeat	FNC - Dial 9	paeri esteV
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CHAPTER 2 PROGRAMMING

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SECTION 1 GENERAL

1.1 INTRODUCTION

The Electra Professional Level II System is a stored program controlled system. When the system is initially powered up, the Electra Professional Level II System CPU-F(10)-20 KTU scans each of the possible interface slots (maximum of eight) to determine the hardware configuration. The system stores this information as well as the system default values in memory. This area of memory is referred to as the Resident System Program. After the system has been initially powered up, a trained technician can change the Resident System Program to meet the specific needs of the individual customer.

Before attempting to program the system, the Job Specifications Worksheets should be completed. These Worksheets help organize the customer's programming needs. Copies of the Worksheets should be retained at the job site and on file at the technician's office. (Refer to the Electra Professional Level II System Job Specifications Manual included with the CPU.)

WARNING: The battery on the CPU-F(10)-20 KTU must be on. Failure to ensure the battery is on, before programming begins, may result in the loss of data in the event of a power outage.

1.2 USING THIS CHAPTER

This chapter is divided into the following sections:

Section 1 - General

Gives a general overview of System Programming.

Section 2 - System Data

Presents in outline format the terms and structure that the technician should be familiar with before attempting to program the Electra Professional Level II System.

Section 3 - System Data List

Presents a complete list of Data Numbers, Timer and Function Names, Default values, and Timing values.

Section 4 - Programming Procedures

Gives detailed instructions and procedures for programming all Memory Blocks.

Section 5 - Function timer Chart

Presents the parameters of the various timers utilized within the Electra Professional Level II System.

Section 6 - Code Restriction

Defines the parameters of dial restrictions that can be assigned on a per station basis.

1.3 ENTERING THE PROGRAMMING MODE

To program information into the system, an ETW-16DC-1 (BK), ETW-16DD-1 (BK) or ETW-24DS-1 (BK) Multiline Terminal can be used as programming stations. (Two stations are automatically assigned as programming stations.) These stations are assigned to the two lowest ports (Port Numbers 01 and 02) in the system.

2-1

When entering any area of programming, the programming station must be in the OFF-LINE mode.

TO GO OFF-LINE

- A. Press the FNC key, then the HOLD key.
- B. Dial #, 0, * in sequence.

After completing the above steps, the LCD on the Multiline Terminal will show:

PROGRAM MODE					
TIME	DISPLAY				

While the programming terminal is OFF-LINE it cannot be signaled by any station in the system.

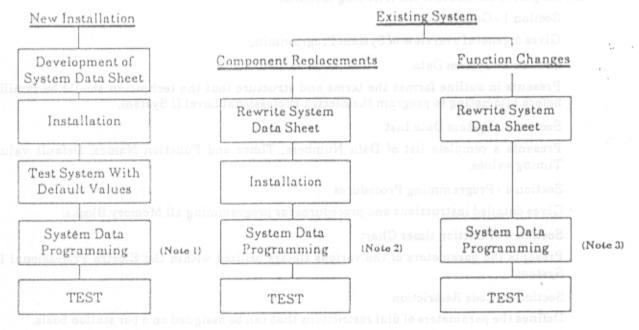
Note: The off-line mode does not timeout.

1.4 SYSTEM DATA PROGRAMMING

System Data Programming may be required for the following reasons:

- When the system is installed for the first time.
- · When components of an existing system are replaced.
- When functions of an existing system are changed.

A programming flowchart is shown below in Figure 2-1



Note I: In new installations, system default values are assigned when the power is turned on. Therefore, program only the System Data that is to be changed.

- Note 2: In component replacements, program the relevant System Data.
- Note 3: In function changes, program the System Data that is to be revised.

Figure 2-1 Programming Flowchart

There are eight types of system data (listed below).

- 1. System Mode
- 2. Tenant Mode
- 3. CO/PBX Line Mode
- 4. Telephone Mode

- 5. Trunk Group Mode
- 6. Copy Mode
- 7. KTU Mode
- Special Mode

SECTION 2 SYSTEM PROGRAMMING

2.1 FEATURES

- The system will operate from a default program after initial power up. Program only the parameters that need to be changed from the default assignment.
- The System Programming characters will be displayed on the LCD.
- Several types of System Programming can be entered at the same time.
- Data that has been programmed for one telephone (i.e., Tenant Mode, CO/PBX Line Mode, Telephone Mode, etc.) can be copied to another telephone.
- Two Multiline Terminals, connected to Port Numbers 01 and 02, can be used to program at the same time.

2.2 SYSTEM PROGRAMMING

System Programming is divided into eight Modes and subdivided into Sub-Modes

Mode		Sub-M	lode
LK 1	System Mode	LK 1	CO Line
		LK 2	ICM
		LK 3	SLT
		LK 4	Transfer/Automated Attendant (A.A.)
		LK 5	SMDR/LCR Salate'l visalmiles 1 2
		LK 6	DSS - Metalon of System
		LK 7	ESP
		LK 8	PBR/Miscellaneous
		LK9	DISA James guiano argoril
		LK 11	DTI
		LK 12	METTING OF SYSTEM DATA DA
LK 2	Tenant Mode		
LK 3	CO/PBX Line Mode		
LK4	Telephone Mode		
LK 5	Trunk Group Mode		
LK 6	Copy Mode	LK 2	Tenant Mode Copy
			CO Line Mode Copy
		LK 4	Telephone Mode Copy
		LK 5	Trunk Group Mode Copy
LK 7	KTU Interface Mode		
LK 8	Special Mode	LK I	ROM Version Confirmation
		LK 2	Speed Dial Clear (System)
		LK 3	Speed Dial Clear (Station)
		LK 4	Second Initialization
		LK 8	Third Initialization

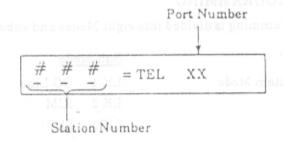
2.3 PREPARATION BEFORE PROGRAMMING

1. Check Points:

- Confirmation of ROM version Some features may not be available depending on the ROM version. (Refer to Section 4 ROM Version.)
- Port numbers are used for System Programming. Confirmation of Port Number Refer to Section 4 KTU Mode, Card Interface Assignment.

To confirm station numbers from display terminals, press:

FNC



2. Preliminary Points:

- Selection of System Programming
- Prepare System Programming sheet

Refer to Section 1.4 "System Programming Flowchart" to select the data to be programmed.

--- Refer to Section 4 "System Programming Procedures" to enter the data.

WRITING OF SYSTEM DATA 2.4

After turning the system power on, Programming System Data can be performed from a Multiline Terminal that is connected to Port 01 or 02 (the Multiline Terminal must be idle). Although System Programming can be performed while other Multiline Terminals are in use, some of the System Programming is written into memory immediately after the programming process, while other System Programming will not be written until the stations are idle.

In the latter case, the programming station display will show "DATA ENTRY" even after the programming process is completed, indicating that the System Programming is still underway. When the in-use stations becomes idle, the data will be written and the display will show only the time.

The following System Programming is not written while certain equipment is in use:

When telephones are in use: Memory Block 2-01 (Trunk to Tenant Assignment)

Memory Block 2-05 (Line Key Selection)

Memory Block 2-07 (System Speed Dial Display Assignment)

Memory Block 4-09 (Telephone to Tenant Assignment)

Memory Block 1-8-01 (SLT or Automated Attendant/DISA to PBR When PBR is in use: Selection)

Memory Block 1-8-02 (PBR Receive Level Assignment for

Automated Attendant/DISA)

2.5 PROGRAMMING METHODS

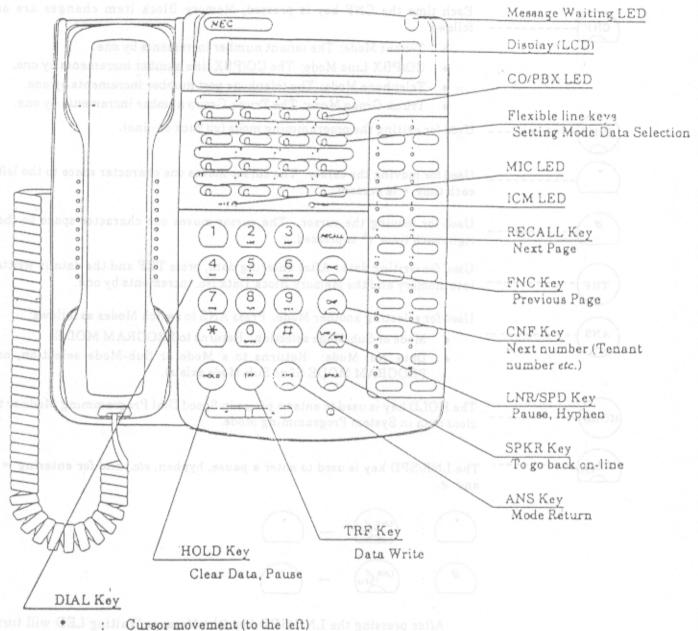
2.5.1 Initializing the System

Turn the Key Service Unit (KSU) power on. After 30 seconds, the system will operate with system default values.

2.5.2 How To Use the Multiline Terminal For Programming

System Programming is performed using a Multiline Terminal (with LCD) connected to Station Ports 01 or 02.

The following describes the key operations, LED indications, and the display for System Programming and add as assured at least at val SMM and



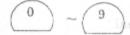
Data input (from dial pad)

soltanoi Mool By grow Figure 2-2 Electra Professional Level II System Multiline Terminal

[#] Cursor movement (to the right) lo man live bon oc

Key Functions: The Flexible Line keys are used to specify a Mode or Sub-Mode when CO/PBX selecting a Memory Block, or to select programming data for input. RECALL Use this key to proceed to the next page in System Programming. The FNC key is used to return to the preceding page in registering System Programming. Each time the CNF key is pressed, Memory Block item changes are as CNF follows: Tenant Mode: The tenant number increments by one. CO/PBX Line Mode: The CO/PBX line number increments by one. Telephone Mode: The telephone port number increments by one. Trunk Group Mode: The Trunk Group number increments by one. Used for exiting the programming mode (go back on-line). SPKR Used for moving the cursor. The cursor moves one character space to the left each time . is pressed. Used for moving the cursor. The cursor moves one character space to the right each time # is pressed. Used for writing data. After entering data, press TRF and the data is written into memory and the Memory Block Data No. increments by one. TRF Used for selecting another Mode. Press ANS to switch Modes as follows: ANS Mode or Sub-Mode selection: Returns to PROGRAM MODE. Data No. Mode: Returns to a Mode or Sub-Mode selection, or PROGRAM MODE (if no Sub-Mode exists). The HOLD key is used to enter a pause in Speed Dial Programming Mode or to HOLD clear data in System Programming Mode. The LNR/SPD key is used to enter a pause, hyphen, etc., and for entering * HPU and #.

After pressing the LNR/SPD key (the Message Waiting LED will turn on and will turn off after pressing * or #), the desired selection will be entered.



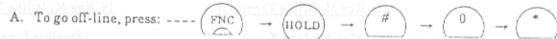
Used to enter data from the dial pad and to specify a Memory Block location in each input mode.

LED Indications (MIC and ICM)

These LED indications for mode selection status indicate the following:

MIC	ICM	
	•	(Both LEDs off): Waiting for Mode selection.
0	•	(Only MIC LED on): Mode selected. Waiting for Sub-Mode selection.
0	10	(Both LEDs on): Sub-Mode selected. (If no Sub-Mode exists, both LEDs light when a Mode is selected.)

Off-Line Program Mode:



After entering the off-line mode for programming, the following displays appear: PROGRAM MODE B. Selecting Memory Block locations TIME DISPLAY System Mode LK 1 SYSTEM BASE LA = Line Key TIME DISPLAY LK 1 00 : PAUSE 3.0s TIME DISPLAY LK 2 Tenant Mode 00 / 00 : NOT USED TIME DISPLAY LK 3 CO/PBX Line Mode TIME DISPLAY LK 4 Telephone Mode 01 / 01 : NOT USED TIME DISPLAY LK 5 Trunk Group Mode 01 / 00 : ADD/DEL 000 TIME DISPLAY Copy Mode LK 6 COPY MODE TIME DISPLAY TNAT_ LK 2 TIME DISPLAY LK 7 KTU Mode ASSIGNMENT MODE TIME DISPLAY LK 8 Special Mode SPECIAL MODE TIME DISPLAY LK 1 SP 171 : MMC = 01 1 - 0C : CPU = 1.00

2.5.3 Page Switching

To select System Programming data, CO/PBX line numbers, tenant numbers, etc., use the Flexible Line keys.

In Memory Block 1-1-18 (System Speed Dial Restriction by Tenant) tenant numbers 00~07 are assigned to the Flexible Line keys on the first page. Tenant numbers 08~15 are assigned to the Flexible Line keys on the second page. The tenant number corresponding to Flexible Line key 1 of the current page is displayed at the right side of the display.

Example: CO/PBX line keys on each page and corresponding tenant numbers.

		24-K	Cey N	Ault	iline	Ter	mina	1			16-K	ey M	ulti	line '	Termin
(Disp	lay)	(1	lexi	ble I	Line	Key	s)				(Flex	ible	Line	Keys)
Page 1 5 0	0	00	01	02	03	04	05		5	00		00	01	02	03
		06	07	08	09	10	11			-		04	05	06	07
		12	13	1.4	15	16	17	a popular				08	09	10	11
AE . BAET		18	19	20	21	22	23	Un)				12	13	14	15
Page 2 5 0	8	08	09	10	11	12	13	1 × 753	5	08		08	09	10	11
PAUSE 3.0.	: 00	14	15	16	17	18	19				•	12	13	14	15
		20	21	22	23	24	25					16	17	18	19
		26	27	28	29	30	31	HJD)				20	21	22	23

For System Programming, a value (piece of data) is assigned to each Flexible Line key. When there are more value assignments than there are Flexible Line keys, entering value assignments can continue on the following page. The page number is displayed at the right side of the display.

Example: Flexible Line keys and corresponding data on each page (when there are 10 data entries).

16 Key Multiline Terminal

(Display) (Flexible Line Key)

Page 1 01 Data 2 Data 3 Data 4

Data 5 Data 6 Data 7 Data 8

Page 2 02 Data 9 Data 10

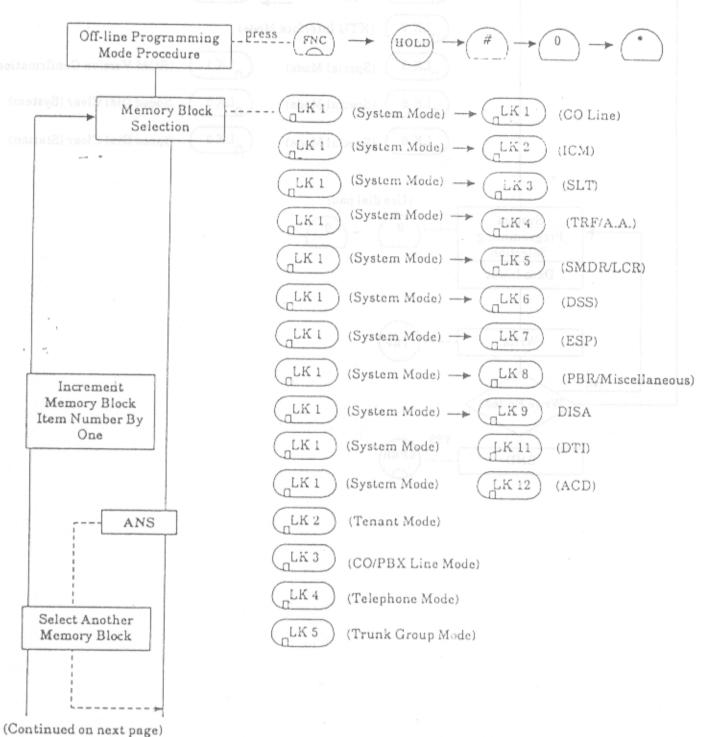
Note: Press the RECALL key to advance to the next page. Press the FNC key to turn back to the previous page.

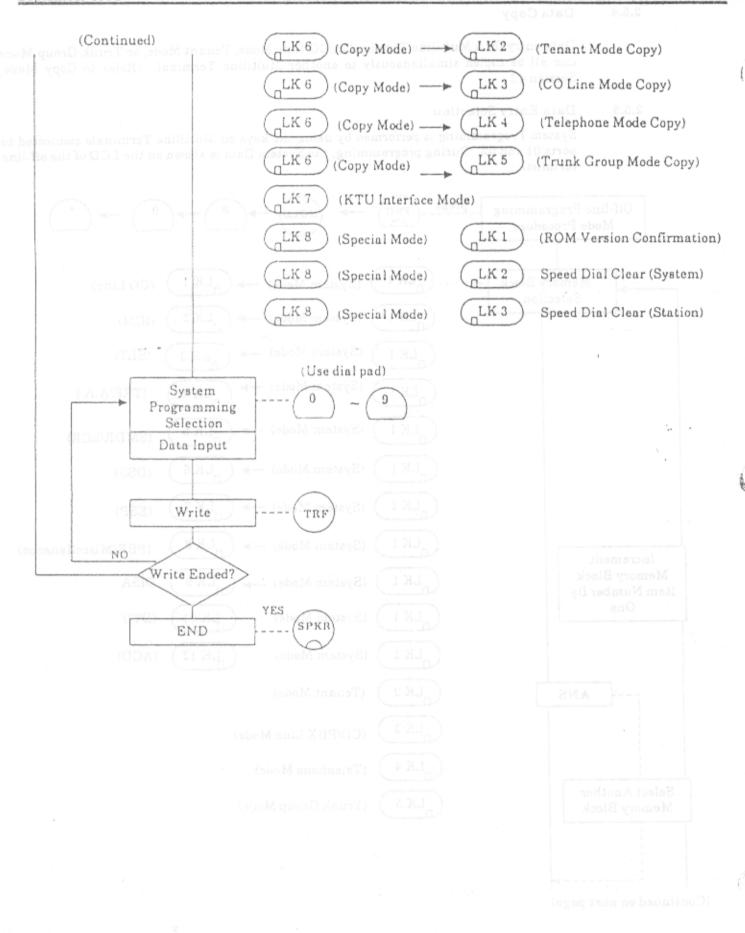
2.5.4 Data Copy

Data entry for a Multiline Terminal in CO Line Mode, Tenant Mode, or Trunk Group Mode can all be copied simultaneously to another Multiline Terminal. (Refer to Copy Mode, Section 4.)

2.5.5 Data Entry Selection

System Programming is performed by using the keys on Multiline Terminals connected to ports 01 and 02. During programming, the System Data is shown on the LCD of the off-line terminal.





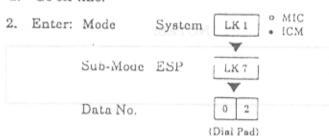
A CHARLES AND A CARLO

EXTERNAL SPEAKER CONNECTION SELECTION

System	ESP	Data No.
AGING ALE	9 147	02

OPERATION:

Go off-line.





- Press the CO/PBX line key corresponding to each ESP Zone.
 - The LED indication changes to indicate the data each time the CO/PBX line key is pressed.

LK 1	LK 2	3 KLK 3 KM	LK 4
ESP A	ESP B	ESP C	
LK 5	LK 6	LK 7	LK 8

Default

COLED	M OFF	Д∦ои
Data	МО	YES

CO/PBX line keys

- Pressing the TRF key will write the selected data and advance to Memory Block 1-7-03 (External Paging Alert Tone Selection).
- 5. Press the SPKR key to go back on-line.

M Additional Programming

	D	ata _	System	Data	
9	511D-MOHO 1	io.	Required	May Be Required	
	-	_	Roquired	Requi	

NOTES:

 A maximum of three external speaker zones can be connected to the system.

GENERAL INFORMATION - EXTERNAL SPEAKER CONNECTION SELECTION

This Memory Block is used to specify if external speakers are connected to the system.

EXTERNAL PAGING ALERT TONE SELECTION

System	ESP	Data No.
1	7	03

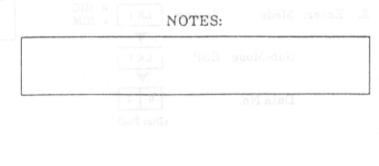
OPERATION:

(Dial Pad)

- 1. Go off-line.
- 2. Enter: Mode System LK1 MIC
 ICM

 Sub-Mode ESP LK7

 Data No. 0 3





- Press the corresponding CO/PBX line key to to change the data option.
 - To change YES to NO, press CO/PBX line key 2.

LK 5	LK 6	LK 7	LKS
YES	NO		
LK 1	LK 2	LK 3	LK 4

- Pressing the TRF key will write the selected data and advance to Memory Block 1-7-06 (External Paging Timeout Selection).
- 5. Press the SPKR key to go back on-line.

5. Fress the SFAR key to go buck on

	4 1 3 4 4 5	Th.
200	Additional	Programming

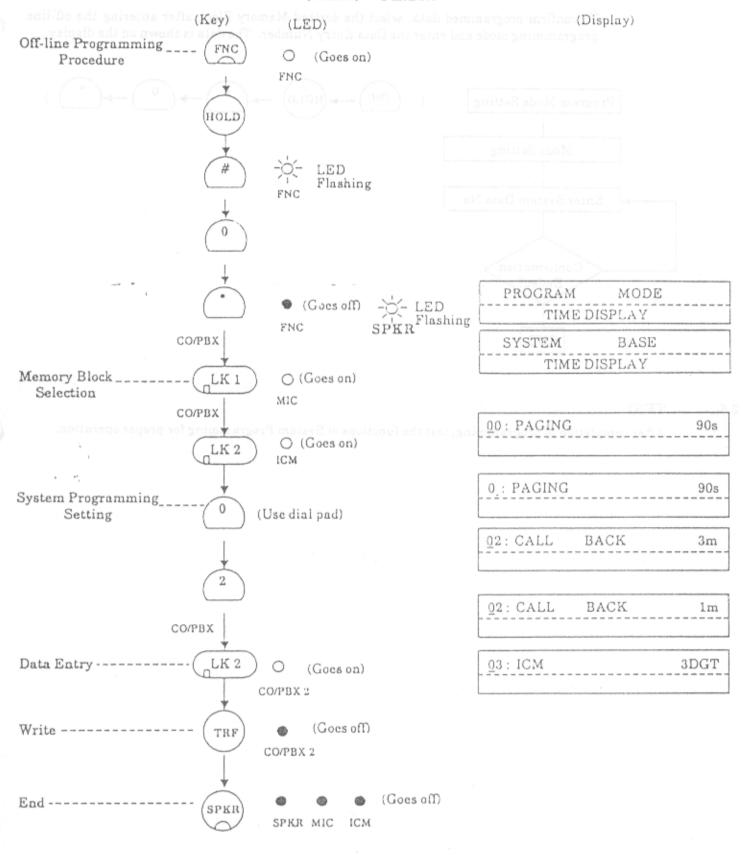
		Data	System	Data	
Mode	Sub-Mode	No.	Required	May Be Required	
System (LK 1)	ESP(LK 7)	02			

Sub-Mode	

GENERAL INFORMATION - EXTERNAL PAGING ALERT TONE SELECTION

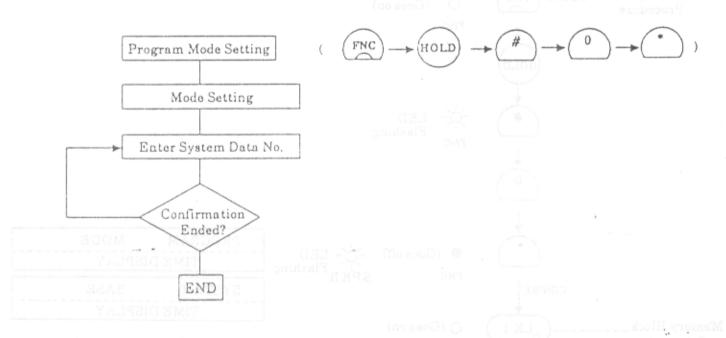
This Memory Block is used to specify if a Paging Alert Tone is sent on External Zone Paging (all speakers/individual speakers).

Example: Memory Block 1-2-02 (Automatic Callback Release Timer Selection) 3 minutes (default) → 1 minute



2.5.6 Confirmation

To confirm programmed data, select the desired Memory Block after entering the off-line programming mode and enter the Data Entry Number. The data is shown on the display.



2.6 TEST

After completion of programming, test the functions of System Programming for proper operation.

SECTION 3 SYSTEM DATA LIST

LK1 System Mode

LK	100	Line	
----	-----	------	--

	LK ICO Line		
DATA NO.	9810 FUNCTION NAME	DEFAULT	PROGRAMMING VALUE
00	Pause Time Selection	3 sec.	1 sec. 3 sec.
01	DP Interdigit Time Selection	Pattern B	Pattern A, Pattern B assessed
02	Hookflash Time Selection	600 ms.	Page 1: 20 ms., 40 ms., 60 ms., 80 ms., 100 ms., 40 ms., 160 ms., 200 m Page 2: 400 ms., 600 ms., 800 ms., 1 sec. 1.5 sec., 2 sec., 3 sec., 5 sec.
03	Hold Recall Timer Selection (Non-Exclusive Hold)	1 min.	1, 2, imin.), No Limit discolor
04	Automatic Redial Time Selection	Table 1 30s Table 2 60s Table 3 2 times	Table 1 1 ~ 100 sec. Table 2 1 - 100 sec. Table 3 1 ~ 255 times
05	Elapsed Call Start Timer Selection	20 sec. 900 faicl (I.A	10 sec., 20 sec., 30 sec.
06	CO/PBX Incoming Ringing Alarm Time Selection	No Limit	10 sec., 20 sec., 30 sec., No Limit
07	Tie/DID Line Delay Ringing Timer Selection	No Limit	10 sec., 20 sec., 30 sec., No Limit
09	Manual Pause Selection	No	No. Yes JaemagizaA
11 .	System Transfer/Camp-On Selection	Yes Amena	No, Yes an and Je and Oo 18
12	Station Transfer/Camp-On Recall Timer Selection	60 sec. 8 manage	30 sec., 60 sec., 120 sec., 240 sec.
18	System Speed Dial Restriction by Tenant	Not Restricted	LED ON: Not Restricted LED OFF: Restricted
24	PBX/CTX Access Code Assignment I	Pattara C - e	Up to six digits (three numeric, three pauses)
25	PBX/CTX Access Code Assignment II	Pattern H - 8	Up to six digits (three numeric, three pauses)
26	Off-Hook Ringing Selection	Yes	Yes, No aniT sausant X89000 va
27	Automatic Day/Night Mode Switching Time Assignment	Not Specified	Day/Night Mode Start Time (24 hours)
28	Distinctive Ringing by Telephone or CO Selection	Tel esy	Tel, CO
29	Private Line Assignment	Not Specified	CO/PBX Line Number. Tel Port Number up to two lines
	Route Advance Block Assignment	All Block 00 (not set)	Priority Trunk Group Number
31	Manual Line Seizure Selection	No	No, Yes
	Day/Night Mode by Day of Week Selection	Sunday~Saturday = Pattern 1	Pattern 1, Pattern 2

LK 1 CO Line (continued)

DATA NO.	FUNCTION NAME	DEFAULT	PROGRAMMING VALUE	
33	Speed Dial Number/Name Display Selection	Dial Number	Dial NBR DISP, Message DISP	
34	Tie/DID Line First Ring Pattern Selection	Pattern 3	Pattern 1, Pattern 2, Pattern 3, Patter ICM, Voice	
35	Speed Dial Buffer Allocation	100 memories am 000	100 memories, 1000 memories	
36	CO/PBX Call Forward - All Calls Selection CO . an OUP	No	No. Yes	
37	Trunk Queuing Timeout Selection	10 sec.	10 sec., 20 sec., 30 sec., 60 sec.	
46	Access Code (1-Digit) Assignment	Refer to Memory Block	Group paging etc.	
47	Access Code (2-Digit) Assignment -	Refer to Memory Block	Group paging etc.	
48	Access Code (3-Digit) Assignment	All Dial 000	Group paging etc.	
49	Networking Trunk Group/Route Advance Assignment	Not Specified	Alarm Time Sejection 07 - Tie/DID Line Delay Riccing	
50	CO/PBX Outgoing Digit Add Assignment	Not Specified	Timer Selection O9 Manual Pause Selection	
51	CO Line First Ringing Pattern Selection	Pattern A as Y	Pattern A~H, Nil anay T maissed	
52	PBX Line First Ringing Pattern Selection	Pattern B	12 Station TransliN, H~A arstacle	
53	Tie Line Delay Ring Pattern	Ring Pattern Doff Join	Pattern A~H, Nil beeg analev 81	
54	Automated Attendant Transfer Ring Pattern	Pattern C	24 PBX/CTX Access Code Assignment I	
56	CO/PBX Ringing Pattern 63 qU Selection (ASSERTED)	Pattern H	Pattern A~H, Nil SA XTOXX89 88	
57	CO/PBX Prepause Timer Selection	1 sec. as Y	1 sec. 2 sec. 3 sec. 4 sec. 5 sec. 6 sec. 7 sec. 8 sec. 9 sec. 10 sec. 11 sec. 12 sec. 13 sec. 14 sec. 15 sec. None	
59	Synchronous Ringing Selection	Yes	Yes, No northered CO to	
60	8-Digit Matching Table Assignment	Refer to Memory Block	29 Private Lloe Assignment	
61	8-Digit Matching Table to Class Assignment	Refer to Memory Block	20 Route Advance Block	
	No, Yes	No	31 Manual Line Seizure Selection	
		Sunday-Saturday. = Pattern 1		

LK 1 CO Line (continued)

DATA NO.	FUNCTION NAME	DEFAULT	PROGRAMMING VALUE
62	System Speed Dial Override by Class Selection	No Restriction	LK2 ICM
63	Hold Recall Time Selection (Exclusive)	1 min.	0.5 min. 1 min. 1.5 min. 2 min. 3 min. 5 min. 8 min. No Limit
64	DSS/BLF Console Transfer/Camp-On Recall Timer Selection	1 min.	0.5 min. 1 min. 1.5 min. 2 min. 3 min. 5 min. 8 min. 10 min.
65	Class Allow/Deny Selection	Class 01~04 Allow Class 05~14 Deny	01 Intercom Cail Voice/Tone Signal Selection
66	8-Digit Matching Table to Normal Dial Assignment	Table 00~14 Use Table 15 Unused	02 Automatic Gallback Reiease Timer Selection
67	OCC Table Assignment	Tuble 00~15 Blank Tuble 16 10XXX	03 2-, 3-, 4-Digit Station Number Selection
68	8-Digit Matching Table to OCC Table Assignment	Table 00~15 Unused Table 16 Use	08 - Special Station Access Code Assignment
69	Tie Line Code Restriction Assignment	All Restricted GMG	Absence Meserge 1-10
70	Code Restriction Class Assignment When Lockout is Set	Class 15 T seenisus (8	60
71	First Delay Announcement Start Time Selection	20 sec. epmono juo m	0 sec. 10 sec. 20 sec. 30 sec. 40 sec. 50 sec. 60 sec.
72	First Delay Announcement Repeat Time Selection	Pattern E smiT 1	1, 2, 3, 4, 5, 6, 7, 8 times
73	First to Second Delay Announcement Interval Time Selection	20 sec. A 900T	sec. 10 sec. 20 sec. 30 sec. 40 sec. 50 sec. 60 sec.
74	Second Delay Announcement Repeat Time Selection	1 Time ship 1	1, 2, 3, 4, 5, 6, 7, 8 times
75	Second Delay Announcement Repeat Interval Time Selection	20 sec. Zoold yaogeM of relad	0 sec. 10 sec. 20 sec. 30 sec. 40 sec. 50 sec. 60 sec. No Limit
76	Barge-In Alert Tone Assignment	Yes gay spoT	Yes = Send Alert Tone No = Do not send Alert Tone

		LK1 CO Line (continued)
September 1992	Electra Professional Level II	Installation Service Manual

LK 2 ICM		No Restriction	2 System Speed Dial Override by Olass Selection	
DATA NO.	FUNCTION NAME	DEFAULT	PROGRAMMING VALUE	
00	Internal Paging Timeout Selection	90 sec.	90 sec., 120 sec., No Limit	
01	Intercom Call Voice/Tone Signal Selection	Voice A DO-10 santO	Tone, Voice and woll A seef a	
02	Automatic Callback Release Timer Selection	Table 00-1+ .nim 00 Table 15 Unused	5 min., 10 min., 20 min., 30 min.	
03	2-, 3-, 4-Digit Station Number Selection	2-digit 31-00 slduT XXX01 31 sldaT	2-digit, 3-digit, 4-digit and T OOO V	
08	Special Station Access Code Assignment	00 01 01~23 Not Set	Station No. ldaT gnidstaM signQ-8	
09 ∫ 18	Absence Message 1~10 Assignment - 0 sec. 10 sec. 20 sec. 30 sec. 40 sec. 50 sec. 50 sec.	1) DND 2) Meeting 3) Business Trip 4) Not In 5) With Guest 6) Out of Office 7~18) Not Specified	A maximum of 13 characters. (Refer to Character Code Table.)	
19	Intercom Ring Pattern Selection	Pattern B	Pattern A~Pattern H	
20	Intercom Ring Tone Selection	Tone A	Tone A~Tone H	
22	Call Forward No Answer Timer Selection	10 sec.	10 sec., 20 sec., 30 sec., 60 sec., 120 sec., 240 sec.	
23	System Call Park Recall Time Selection	1 min.	.5 min., 1 min., 1.5 min., 2 min., 3 min., 5 min., 8 min., 10 min.	
24	Intercom Feature Access Code Assignment	Refer to Memory Block	Repeat Interval Time Selection	
25	Internal Paging Alert Tone	Tone Yes	Tone Yes Tone No	

DATA NO.	FUNCTION NAME	DEFAULT	PROGRAMMING VALUE
01	Bounce Protect Time Selection	300 ms.	Page 1: 0 ms., 100 ms., 200 ms., 300 ms
	130 mm. I hr., 2 kr., 3 kr.	ad I	400 ms., 500 ms., 600 ms., 700 ms.
	10 acc., 20 sec., 30 sec., 40 sec., 50 acc., 50 acc., 50 sec.	20 sec.	Page 2: 800 ms., 900 ms., 1000 ms., 1100 ms., 1200 ms., 1300 ms., 1400 ms., 1500 ms.
0.5	SLT Hookflash Signal Selection	Hold	Hold, Flash
03	First Digit PBR Release Timer Selection	10 sec.	10 sec., 30 sec., 40 sec., 50 sec., 60 sec.
04	Dial 1 (DP) Hookflash Selection	Yes	Yes, No managara a weak
05	Hookflash Start Time Selection 88 = 17918 5 - 888 = 17918 5 880 = 17918 5	300 ms.	Page 1: 100 ms., 150 ms., 200 ms., 250 ms., 300 ms., 350 ms., 400 ms., 450 ms., 500 ms., 650 ms., 750 ms., 750 ms., 800 ms., 850 ms.
06	Hookflash End Time Selection	Refer to Memory Block	Bellosiac obelic Jagres
07	Voice Mail Digit Add Assignment	All Blank	OB Automated Aitendant PUR Timeout Response Selection
08	Voice Mail DTMF Delay Timer Selection	1 sec. 219	0 sec., 1 sec., 2 sec., 3 sec., 4 sec., 5 sec., 6 sec., 8 sec.
09	Voice Mail Disconnect Time	1.5 sec.	0.6 sec., 1 sec., 1.5 sec., 2 sec., 3 sec., 5 sec
10	Voice Mail DTMF Duration/Interdigit Time Selection	100/70 ms.	70/60 ms., 100/70 ms., 400/100 ms., 600/100 ms., 900/720 ms.
	758. è		13 Delay Time Assignment

One Time, Two Times, Three Times,

LK 4 Transfer/Automated Attendant (A.A.)

DATA NO.	FUNCTION NAME sm 000 ms, 100 ms, 300 ms	DEFAULT	PROGRAMMING VALUE
00	Tandem Transfer Automatic Disconnect Timer Selection	1 hr.	30 min., 1 hr., 2 hr., 3 hr.
01	Automated Attendant PBR Release Timer Selection	20 sec.	10 sec., 20 sec., 30 sec., 40 sec., 50 sec., 60 sec.
02	Automated Attendant Transfer Delayed Ringing Time Selection	No limit	10 sec., 20 sec., 30 sec., #, No Limit
03	Automated Attendant No Answer Disconnect Time Selection	2 min.	1 min., 2 min., 3 min., 4 min.
04	Tandem Transfer SMDR Print Extension Assignment	99/999	2-digit = 99 3-digit = 999 4-digit = 9999
05	Automatic Tandem Trunk by Night Mode Selection	No Refer to Memory Black	Yes, No
08	Automated Attendant PBR Timeout Response Selection	Normal Call Maria HA	Normal Call, Release Managers 19
09	Automated Attendant PBR Start Time Selection	FR Des 1	FR = Same time G HaM selev . 80 AF = After noticeled
11	Automated Attendant Message Day/Night Mode Selection	No on	Yes, No Liseannessi CliaM objevi 90
12	Automated Attendant Message to Tenant Assignment	00em 05/001	All Automated Attendant Messages: Tenant Number 00
13	Automated Attendant Answer Delay Time Assignment	4 sec.	All Automated Attendant Messages: 4 sec.
14	Automated Attendant Message Access Code (1-Digit) Assignment	Refer to Memory Block	
15	Automated Attendant Message Access Code (2-Digit) Assignment	Refer to Memory Block	i :
16	Automated Attendant Message Repeat Selection	One Time	One Time, Two Times, Three Times, Four Times, Five Times, Six Times, Seven Times, Eight Times

LK 5 SMDR/LCR

DATA NO.	FUNCTION NAME	DEFAULT	PROGRAMMING VALUE	L
02	SMDR Print Format	All	All, Mask	.014
13	Printer Connected (Alarm) Selection	No	No, Non, Yes	10
14	Printer Line Feed Con rol Selection	Yes must be	Yes, No see level evil self and a	20
24	DISA ID Code Digit Selection	3-digit	1-digit, 2-digit, 3-digit	104
25	SMDR Valid Call Time Assignment	40 sec. name M as seles	0~990 sec. State of the sec. O	07
26	SMDR Incoming/Outgoing Print Selection	Outgoing	All, Outgoing, Incoming	80

LK 6 DSS

DATA NO.	FUNCTION NAME	DEFAULT	PROGRAMMING VALUE
01	DSS/BLF to Telephone Port Assignment	Refer to Memory Block	2 VRS Message Recording Time
03	DSS Call Voice/Tone Signal Selection	Voice syssesM oV	Tone, Voice
05	DSS/BLF Key Selection	Refer to Memory Block	4 Alarm Remieder Kapeau

LK7 ESP

NO.	FUNCTION NAME	DEFAULT	PROGRAMMING VALUE
02	External Speaker Connection Selection	All Speakers (A~C)	Yes, No
03	External Paging Alert Tone Selection	Yes ballmage sold	Yes/No
06	External Paging Timeout Selection	5.0 min.	0.5 min. 1 min. 1.5 min. 2 min. 3 min. 5 min. 8 min. No Limit
07	External Tone Ring Cycle Selection	Pattern 3	Refer to Memory Block

DATA NO.	FUNCTION NAME	DEFAULT	PROGRAMMING VALUE
01	SLT or Automated Attendant/DISA to PBR	Single Line Telephones	On = Automated Attendant/DISA
02	PBR Receive Level Assignment for Automated Attendant/DISA	- 36.1 dBm 85Y	Refer to Memory Block Anthony Block
04	Time Display (12h/24h) Selection	12 hr. Display anglib-0	12 hr. Display, 24 hr. Display
07	Class of Service (Attendant) - Feature Selection 1	Refer to Memory Block	is SMDR Valid Cail Time Assignment
08	Class of Service (Station) Feature Selection 2	Refer to Memory Block	16 SMDR Incoming Outgoing Frant Selection
09	Music On Hold Pattern Selection	Pattern A	Pattern A, ~ Pattern D
10	PBR Interdigit Release Time Selection	7 sec.	3 sec., 4 sec., 5 sec., 6 sec., 7 sec., 8 sec., 9 sec., 10 sec.
11	System Refresh Timer Assignment	4 hr. 130A330	No Reiresh, 4 hr., 8 hr., 12 hr., 24 hr.
12	VRS Message Recording Time Selection	15 sec. / 16 messages	Assignment
13	VRS Message Function Assignment	No Message	Selection
14	Alarm Reminder Repeat Selection	No	No, Yes
15	Tone Assignment	Refer to Memory Block	E27 TW.
16	Voice Prompt to Tone Assignment	Refer to Memory Block	TA FUNCTION NAME
17	PC Programming Password Assignment	Class 1, 2 All Blank	2 External Speaker Connection
18	Site Name Assignment	No Assignment	
25	ACD Group Agent Assignment	Not Specified	Calendar agraga vices i osa

LK9 DISA

DATA NO.	FUNCTION NAME	DEFAULT	PROGRAMMING VALUE
00	DISA ID Code Assignment	Refer to Memory Block	.021
02	DISA Password Effect/Invalid Selection	DISA Password Invalid	DISA Password Invalid DISA Password Effect

LK 11 DTI

DATA NO.	FUNCTION NAME	DEFAULT	PROGRAMMING VALUE
00	Signal Format Selection	ESF anomagiez A old	SF ESF eT of ymle 2 arg 2 arg
01	Clear Channel Selection	B8ZS	B8ZS ZCS
02	Line Length Selection	0 - 131 ft.	0.655 ft. aboM and XETNOD E MJ
03	Robbed Bit Signaling Channel Selection	4-State DARNO	4-state (A and B), 16-State (A, B, C, and D
04	DTI Maintenance Selection	Remote Loopback	Remote Loopback Local Loopback
05	TI Channel Selection	24-Channel	02 Trunk Slatus Selection
06	Signaling Selection	Loop Start	Loop Start Ground Start

LK 12 ACD

DATA NO.	FUNCTION NAME	DEFAULT	PROGRAMMING VALUE
00	ACD Group Pilot Number Assignment	Not Specified	Assignment Constitution Constitution
01	ACD Group Overflow Destination Assignment	Not Specified	At Tie/DIB Line Type Assignment
02	ACD Overflow Timer Selection	O sec. 200 Tange 1.00 to 10 to	0 sec. 10 sec. 30 sec. 60 sec. 120 sec. 180 sec. 240 sec.

2-21

LK2 Tenant Mode

DATA NO.	FUNCTION NAME	DEFAULT	PROGRAMMING VALUE
01	Trunk to Tenant Assignment	Refer to Memory Block	02 DISA Password Effect/Invalid
05	Line Key Selection	Telephone Mode	Tenant-Wide Mode, Telephone Mode
06	Line Key Selection for Tenant Mode	Refer to Memory Block	LK 11 DTT
07	System Speed Dial Display Assignment	All Speed Dial Confirmation Allowed	DATA FUNCTION NAME
08	ECR Relay to Tenant Assignment	No Assignment	00 Signal Format Solection

LK 3 CO/PBX Line Mode

K3 C	O/PBX Line Mode	- 4181-0	02 Line Leagth Selection
DATA NO.	(A) of a FUNCTION NAME also	DEFAULT	leaned PROGRAMMING VALUE
00	Telephone Number to Trunk Assignment	Not Specified	A maximum of 13 digits (numbers hyphens, spaces)
02	Trunk Status Selection	Out and In an ad Out 2	Out and In, In
03	Trunk-to-Trunk Group Assignment	Refer to Memory Block	06 Signaling Selection
04	Trunk-to-Trunk Transfer Yes/No Selection	No	No, Yes
05	Trunk Incoming Answer Mode Selection	Normal	Normal, Automatic Trunk-to-Trun Transfer, Automated Attendant/DISA
06	Automatic Tandem Trunk Assignment	Not Specified	00 - ACD Group Pilot Number
07	CO/PBX Ringing Variation	Medium (M)	Medium (M), Low (L), High (H)
14	Tie/DID Line Type Assignment	2nd Dial Tone	2nd Dial Tone, Immediate, Delayed, Win
15	Trunk DTMF Duration/Interdigit Selection	2nd Dial Tone: 100 ms. Interdigit Time: 70 ms.	70 ms 60 ms. 400 ms 100 ms. 900 ms 200 ms.

LK 3 CO/PBX Line Mode (continued)

DATA NO.	FUNCTION NAME	DEFAULT	PROGRAMMING VALUE
16	Tie Line Prepause Time Selection	0 sec.	0 sec. 0.5 sec. 1 sec.
			1.5 sec. 2 sec. 3 sec.
	1 Sec.		
			11027 188 272 272 23 27 3 2 2 2 2 2
			5 500.
	115 sec. No Limit		10 sec. 11 sec. 12 sec. 13 sec.
17	Ti ti A D		To sec.
	Tie Line Answer Detect Time	520 ms.	0 ms. 130 ms. 260 ms.
	Selection as Ca assett assett		390 ms. 520 ms. 650 ms.
	115 sec. Na Limit		780 ms. 910 ms. 1040 ms.
	Land I flags Clares Class	702	1170 ms. 1300 ms. 1430 ms.
	Sanc Nacc Tyses Bade		1560 ms. 1690 ms. 1820 ms.
14 501	110 sec 11 sec 12 sec 13 sec		1950 ms.
18	Tie Line Release Detect Time	520 ms.	
The second second	Selection	700 113.	0 ms. 130 ms. 260 ms.
		2.5)	390 ms. 520 ms. 650 ms.
	lokbymbend ink. ten i palbrok l	Sending (Yes)	780 ms. 910 ms. 1040 ms.
	Hab Sht	17 4. 17	1170 ms. 1300 ms 1430 ms.
	1 Ab21 Ab8	4.0	1560 ms. 1690 ms. 1820 ms.
	100		1950 ms.
19	Tie Line/CO/PBX Incoming Signal Detect Time Selection	Refer to Memory Block	20 Tie Line Internal Receive PAD
20	Tie Line Loop Off-Guard Time	2 sec.	0 sec. 0.5 sec. 1 sec.
77.1.	Selection		1.5 sec. 2 sec. 3 sec.
81.1	01 850 958		4 sec. 5 sec. 6 sec.
Silv	1 02 10		7 sec. 8 sec. 9 sec.
			10 sec. 11 sec. 12 sec.
8.6	842 245	943	13 sec. 12 sec.
07	m: r: r		86333482
21	Tie Line Length of Wink Signal	180 ms.	30 ms. 60 ms. 90 ms.
sec _	Selection	3926	120 ms., 150 ms. 180 ms.
.099	3 sec		210 ms. 240 ms. 270 ms.
,00	B. Osa T		300 ms. 330 ms. 360 ms.
100	2 sec. 1.0 sec. 1.2		390 ms. 420 ms. 450 ms.
.098	1.3 sec. 1.4 sec. 1.5		480 ms.
22	Tie Line Length of Delay Signal	300 ms. Jagassald i	0 ms. 300 ms. 600 ms.
	Selection Selection		
150 ms			
150 ms	200 ms. 250 ms., 100 ms., 200 ms. 250 ms., 300 ms.,	350 ms.	
auri 000	400 ms 500 ms 700 ms, 1		2700 ms. 3000 ms. 3300 ms.
om: 000	1500 ma. 2000 ms. 3000 ms., 5		3600 ms. 3900 ms. 4200 ms.
-			4500 ms.
		12 sec.	1 sec. 1.5 sec. 2 sec.
	Selection		3 sec. 4 sec. 5 sec.
		Justiniana A oki I	6 sec. 7 sec. 8 sec.
		and the same of th	9 sec. 10 sec. 11 sec.
		Jaammink oki j	12 sec. 13 sec. 14 sec.
	CO PRX TWOID line Vecant		15 sec. No Limit

LK3 CO/PBX Line Mode (continued)

NO.	FUNCTION NAME	DEFAULT	PROGRAMMING VALUE
24	Tie Line Incoming Interdigit Timeout Selection	6 sec.	1 sec. 1.5 sec. 2 sec. 3 sec. 4 sec 5 sec. 6 sec. 7 sec. 8 sec. 9 sec 10 sec. 11 sec. 12 sec. 13 sec. 14 sec 15 sec. No Limit
25 .am (Tie Line Wink/Delay Signal Detect Timeout Selection	7 sec.	1 sec. 1.5 sec. 2 sec. 3 sec. 4 sec 5 sec. 6 sec. 7 sec. 8 sec. 9 sec 10 sec. 11 sec. 12 sec. 13 sec. 14 sec 15 sec. No Limit
26	Tie Line Outgoing Guard Time Selection	3 sec.	1 sec. 1.5 sec. 2 sec. 3 sec. 4 sec 5 sec. 6 sec. 7 sec. 8 sec. 9 sec 10 sec. 11 sec. 12 sec. 13 sec. 14 sec 15 sec. No Limit
27	Tie Line Dial Tone Selection	Yes	Yes, No notinalad
28	Tie Line Reorder Tone Selection	Sending (Yes)	Sending (Yes) Not Sending (No)
29	Tie Line Internal Transmit PAD Selection	2 dB	2 dB 4 dB 6 dB 8 dB 12 dB 16 dB S1 S2 0 dB
30	Tie Line Internal Receive PAD Selection	2 dB	2 dB 4 dB 6 dB 8 dB 12 dB 16 dB S1 S2 0 dB
31	Tie Line External Transmit PAD Selection	2 dB	2 dB 4 dB 6 dB 8 dB 12 dB 16 dB S1 S2 0 dB
32	Tie Line External Receive PAD Selection	2 dB	2 dB 4 dB 6 dB 8 dB 12 dB 6 dB S1 S2 0 dB
33	360 ms. 330 ms. 360	.3 sec.	0 sec1 sec2 sec .3 sec4 sec5 sec. .6 sec7 sec8 sec. .9 sec. 1.0 sec. 1.2 sec. 1.3 sec. 1.4 sec. 1.5 sec.
38	Automated Attendant Message to Trunk Selection	Message 1 .am 000	22 Tie Line Length of Delay Signal. Selection
	Automatic Release Signal Detection Time Selection	350 ms.	0 ms., 50 ms., 100 ms., 150 ms. 200 ms., 250 ms., 300 ms., 350 ms. 400 ms., 500 ms., 700 ms., 1000 ms. 1500 ms., 2000 ms., 3000 ms., 5000 ms.
41	Delay Announcement Assignment	NO 368 S I	NO = Do not Send Delay Announcement YES = Send Delay Announcement
42	DIT Assignment	No Assignment	
43	ANA Assignment	No Assignment	
91	Trunk Type Selection	CO	CO. PBX, Tie/DID line, Vacant
92	Trunk (Installed, DP/DTMF) Selection	MF	Nil, DP 10 pps, DP 20 pps, MF

LK 4 Telephone Mode

NO.	FUNCTION NAME	DEFAULT	PROGRAMMING VALUE
01	O1 CO/PBX Ring Assignment (Day Mode) Telephones connected to Port Numbers 01 and 02 ring on all incoming	24 SUT Hookfash Helsass	
		CO/PBX calls. Telephones connected to	26 DISA ID Number Station Assignment
		Port Numbers 03~36 do not ring on any incoming CO/PBX calls.	28 Binnguni Lou mateman
02	CO/PBX Ring Assignment (Night Mode)	Telephones connected to Port Numbers 01 and 02	place The Manner Tubers 000
		ring on all incoming CO/PBX calls. Telephones connected to	31 Receiving Internal/Ali Call I Scherton
		Port Numbers 03~56do not ring on any incoming	32 Trunk Digit Resurction
05	CIP	CO/PBX calls.	33 Fax Indication Station
07	Code Restriction Class Assignment (Day Mode)	All Stations Class 00	24 Fax Indication Networking Assignment
08	Code Restriction Class Assignment (Night Mode)	All Stations Class 00	35 Voice Mail/SLT/Selection 36 Voice Premou Salection
09	Telephone to Tenant Assignment	All Telephones Tenant 00	Tenant Number
10	Station Number Assignment	Refer to Memory Block	Azangnment (Day Mode)
11 "	Ringing Line Preference Selection	No	No, Yes
12	Line Key Selection (or Telephone Mode	Refer to Memory Block	20 A.D.A. (O) Ring Mode Carignan 40 LCR Class Selection
13	CO/PBX Busy Forward Station Assignment	Not Specified	98 SUT Data Line Security Assignment
14	Intercom Master Hunt Number Selection	No (M) mulkeld	91 Telephone Kinging Variation Scientics
15	Intercom Master Hunt Number Forward Assignment	All Telephones Not Specified	Station Number
17	Station to Class of Service Feature Assignment	n No	Refer to Memory Block
18	Station Name Assignment	Not Specified	Up to 6 digits (characters)
19	Trunk Outgoing Restriction		No (Not Restricted) Yes (Restricted)
20	Off-Hook Voice Announcement Terminal Assignment		No = Off-hook Voice Deny Yes = Off-hook Voice Allow
23	Prime Line/Hot Line Assignment	Not Specified	

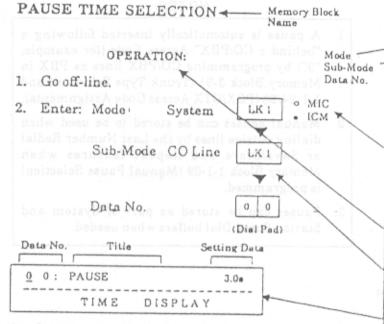
LK 4 Telephone Mode (continued)

NO.	FUNCTION NAME	DEFAULT	PROGRAMMING VALUE
24	SLT Hookflash Release Assignment	Hold State Name	(aboM
26	DISA ID Number Station Assignment	Refer to Memory Block	
28	Bilingual LCD Indication Selection	English	
29	HFU Selection	No	
30	Hold/Transfer Recall Display Selection	Yes and man hog	(Might Mode)
31	Receiving Internal/All Call Page Selection	Yes .allao X87000	
32	Trunk Digit Restriction	00 (No Limit)	
33	Fax Indication Station Assignment	00 for all ports	
34	Fax Indication Networking Assignment	00 for all ports	07 Code Restriction Class Assignment (Day Mode)
35	Voice Mail/SLT Selection	All Stations Classon	88 Code Restriction Class
36	Voice Prompt Selection	No	Assistment (IAStut mode)
37	Extension Line Key Ring Assignment (Day Mode)	All Telephones: No Ring	03 Telephona to Tenont Assignment 10 Station Number Assignment
38	Extension Line Key Ring Assignment (Night Mode)	All Telephones: No Ring	11 Ringing Line Preference
39	ADA (2) Ring Mode Assignment	Station Number Only	
40	LCR Class Selection	DOLO CHARAM OF INION PH	Mode
90	SLT Data Line Security Assignment	SLT Norm Manage John	SLT Norm - SLT Data 8 9.00
91	Telephone Ringing Variation Selection	Medium (M)	Medium (M), Low (L), High (H)
92	Receiving Volume Selection	Down Basson Basson Basson	13 Intercom Musicer Fluct Wilmer
93	Internal Zone Paging Selection	No	No, Zone A, Zone B, Zone C
94	3-Minute Alarm Selection	No	No, Yes Insmirigias A equiso 2
95	DTMF/DP SLT Type Selection	DTMF	DP, DTMF
96	SLT Connected Selection	No	No, Yes

Data No. 0.0

Section 4 describes each data item function and registration procedures (programming).

EXAMPLE



Press the corresponding CO/PBX line key to change data entry.

18	LK2	- CKI	LK 4
LK 5	LK 6	LK 7	LK 8

CO/PBX line key

Default

- To change Pause Time from J seconds to I second. press CO/PBX line key 1.
- Press the TRF key to write the data. Press the SPKR key to go back on-line.

Additional Programming

Wada A	2.1.1.	Data	System Data	
Mode 4	Sub-Mode	No.	Required	May Be Required
System (LK 1)	CO Line (LK 1)	19		
System (LK 1)	CO Line (LK 1)	24		
System (LK 1)	CO Line (LK 1)	25		
CO/PBX (LK 3)		01		
CO/PBX (LK 3)		91		

The NOTE section is used to slert the Technician of exceptions to programming.

NOTES:

CO Line

Status indication LEDs

When CO/PBX line key I (System Mode) is pressed, the MIC LED lights. When CO/PBX line key 1 is pressed a second time (CO line), the ICM LED lights.

The OPERATIONS are for guiding the Technician through the procedures for programming a specific Memory Block.

Press these keys in this sequence.

Display

Data assigned to associated CO/PBX line keys.

System

In some instances, additional data must be programmed before or after a specific Memory Block can be programmed. This table contains those additional Memory Blocks.

If additional information is needed on this page, some or all of the notes in the NOTE section will continue on the next page.

A brief description of the function(s) of a specific Memory Block.

GENERAL INFORMATION - PAUSE TIME SELECTION

A pause may be inserted between digits dialed on CO/PBX and Tie lines. This Memory Block specifies the length of the pause. A pause is automatically inserted following a "behind a PBX-CO" Access Code (for example, "9") by registering Memory Blocks 24 and 25 for CO line in the System Mode.

PAUSE TIME SELECTION

OPERATION:

- 1. Go off-line. o MIC 2. Enter: Mode LK I System · ICM A Sub-Mode CO Line LK I 0 0 Data No. (Dial Pad) Setting Data Data No. PAUSE-0 0: TIME DISPLAY
 - Press the corresponding CO/PBX Line key to change data option.
 - To change Pause Time from 3 seconds to 1 second, press CO/PBX Line key 1.

LK 1	LK 2	LK 3	LK 4
l sec.	3 вес		
LK 5	LK 6	LK 7	LK8

CO/PBX line keys

Default

- Pressing the TRF key will write the selected data and advance to Memory Block 1-1-01 (DP Interdigit Time Selection).
- 5. Press the SPKR key to go back on-line.
- Management Additional Programming

	esquin la lebasità	Data No.	System Data	
Mode	Sub-Mode		Required	May Be Required
System (LK 1)	CO Line (LK 1)	09		
System (LK 1)	CO Line (LK 1)	24		
System (LK 1)	CO Line (LK 1)	25		
CO/PBX (LK 3)		91		

System	CO Line	Data No.
othen I ment clo	n notes lase) to	0.0

NOTES:

- 1. A pause is automatically inserted following a "behind a CO/PBX" Access Code (for example, "9") by programming CO/PBX lines as PBX in Memory Block 3-91 (Trunk Type Selection) and 1-1-24/25 (PBX/CTX Access Code Assignments).
- Manual pauses can be stored to be used when dialing outside lines by the Last Number Redial or Save/Store and Repeat features when Memory Block 1-1-09 (Manual Pause Selection) is programmed.
- Pauses can be stored as part of System and Station Speed Dial buffers when needed.

GENERAL INFORMATION - PAUSE TIME SELECTION

A pause can be inserted between digits dialed on CO/PBX and Tie lines. This Memory Block specifies the length of the pause.

DP INTERDIGIT TIME SELECTION

OPERATION:

Go off-line.

Enter: Mode System

LK I Sub-Mode CO Line

Data No.

0 1 MIC

ICM.

(Dial Pad)

- Title Data No. Setting Data 0 1: INTER TIME DISPLAY
- 3. Press the corresponding CO/PBX line key to change data option.
 - To change Pattern B to Pattern A, press CO/PBX line key 2.

LK I	LK2	LK 3	LK 4
Pattern A	Pattern B		
LK 5	LK 6	LK 7	LK 8

- 4. Pressing the TRF key will write the selected data and advance to Memory Block 1-1-02 (Hookflash Time Selection).
- 5. Press the SPKR key to go back on-line.

System CO Line Data No. 1 1 0 1

NOTES:

This Memory Block is used when CO/PBX or Tie Lines are assigned to send Dial Pulse signaling in Memory Block 3-92 [Trunk (Installed, DP/DTMF) Selectioni.



DP dial	10 ppa	20 pps
Pattern A	650 ms.	500 ms.
Pattern B	800 ms.	800 ms.

Additional Programming

Wasta		Data	System Data	
Mode	Sub-Mode	No.	Required	May Be Required
CO/PBX (LK 3)		92		

GENERAL INFORMATION - DP INTERDIGIT TIME SELECTION

The DP Interdigit Time is the minimum pause time interval between Dial Pulse dialing. Either Pattern A or Pattern B can be selected.

HOOKFLASH TIME SELECTION

OPERATION:

1. Go off-line.

2. Enter: Mode

System

LK 1 ° MIC

Sub-Mode CO Line

LK 1

W

Data No.

0 2

(Dial Pad)



- Press the corresponding CO/PBX line key to change data option.
 - To change 600 ms. to 140 ms.
 - · Press the RECALL key to go to page 1.
 - Press CO/PBX line key 6.

Page 1

LK t o	LK 2	LK 3	LK 4
20 ms.	40 ms.	60 ms.	80 ma.
LK 5	LK 6 m 0	LK 7	LK 8
100 ms.	140 ms.	160 ms.	200 ms

CO/PBX line keys

Default

Page 2

LK 1	LK 2	LK 3	LK 4
400 ms.	600 ma.	800 ms.	l sec.
LK 5	LK 6	LK 7	LK B
1.5 sec.	2 sec.	3 вес.	5 вес.

M Additional Programming

		Data !		Data
Mode	Sub-Mode	No.	Required	May Be Required
System (LK 1)	CO Line (LK 1)	46		
System (LK 1)	CO Line (LK 1)	47		
System (LK 1)	SLT(LK 3)	02	The second secon	

Sy	stem	COL	ine	Data	No.
	.limma	20201		0	2

RECALL

key

Next page.

FNC

key

Previous page.

- 4. Pressing the TRF key will write the selected data and advance to Memory Block 1-1-03 [Hold Recall Timer Selection (Non-Exclusive Hold)].
- 5. Press the SPKR key to go back on-line.

NOTES:

- A 1- or 2-digit Access Code can be assigned in Memory Block 1-1-46/47 (Access Code 1- or 2-digit Assignment) for Single Line Telephones to send a hooktlash signal on a CO/PBX line.
- On a per Single Line Telephone basis, a hookflash from the Single Line Telephone can put an existing call on Hold or send a hookflash signal on the CO/PBX line.

GENERAL INFORMATION - HOOKFLASH TIME SELECTION

This Memory Block specifies the length of break time for a hookflash signal (that breaks the DC loop of a CO/PBX line) sent to the CO or PBX when the RECALL key on a Multiline Terminal is pressed, or an SLT generates a hookflash and the system is assigned to send the hookflash

HOLD RECALL TIMER SELECTION (Non-Exclusive Hold)

(Dial Pad)

System CO Line Data No. 1 1 0 3

OPERATION:

- Go off-line.
- 2. Enter: Mode System LK1 MIC ICM

 Sub-Mode CO Line LK1

Data No. Title Setting Data

O 3: HOLD RECL 1 m

TIME DISPLAY

Data No.

- Press the corresponding CO/PBX line key to change data option.
 - To change 1 min. to 2 min., press CO/PBX line key 2.

LKI	LK 2	LK 3	CK 4
1 minute	2 minutes	4 minutes	No Limit
LK 5	LK 6	LK 7	LK 8

CO/PBX line keys



- Pressing the TRF key will write the selected data and advance to Memory Block 1-1-04 (Automatic Redial Time Selection).
- 5. Press the SPKR key to go back on-line.
- M Additional Programming

35. /		Data	System Data		
Mode	Sub-Mode	No.	Required	May Be Required	
System (LK I)	CO Line (LK 1)	63			
System (LK 1)	ICM (LK 2)	23			

NOTES:

- Calls put on Exclusive Hold will recall using the data selected in Memory Block 1-1-63.
- Calls parked on Tenant Call Park line keys will recall using this Memory Block.
- Calls parked in System Call Park locations will recall using Memory Block 1-2-23.

Diel pad 0 - 9 To move cursor.

Toble 1: Calling Time 30 acc.

Default Table 2: Call Waiting Time 60 acc.

GENERAL INFORMATION - HOLD RECALL TIMER SELECTION

(Non-Exclusive Hold)

This Memory Block specifies the time interval of a Non-Exclusive held outside call until a recall tone is generated. If "No Limit" is selected, no hold alarm tone is generated.

AUTOMATIC REDIAL TIME SELECTION

System CO Line Data No. 1 04 1

OPERATION:

- Go off-line.
- o MIC LK 1 Enter: Mode System JCM w Sub-Mode CO Line LK 1 Data No. (Dial Pad) Setting Data Title Table No. Data No. 4: REDIAL (1/2/3) 030
- 3. Use the dial pad to enter the table number and Setting Data.

TIME DISPLAY

To move cursor. Dial pad To enter data.

Table 1: Calling Time 30 sec. Default Table 2: Call Waiting Time 60 sec. Table 3: Call Attempts

- Start Timer Selection).

NOTES:

Definitions:

Calling Time: The time that the system will automatically ring the busy CO/PBX number. After the specified time limit is reached, the ringing will stop.

Call Waiting Time: The time the system will wait before redialing the called party's number.

Call Attempts: The number of times the system will redial the busy CO/PBX number.

Setting Data (Allowed)

Table 1: Calling Time (001~100 sec.) Table 2: Call Waiting Time (001~100 sec.)

Table 3: Call Attempts (001~255 times)

(000 cannot be entered.)

4.	After	enter	ing	data	for	Table	3, p	ressing	the
	TRF	key '	will	writ	e th	e sel	ected	i data	and
	advan	ce to	Men	nory	Block	c 1-1-	05 (E	Clapsed	Call
	Start	m:man	. Cal	antin	10				

5. Press the SPKR key to go back on-line.

Additional Programming

			System Data	
Mode	Sub-Mode	No.	Required	May Be Required

GENERAL INFORMATION - AUTOMATIC REDIAL TIME SELECTION

When the called party is busy, the station user dials an Access Code and restores the handset. As programmed . I in this Memory Block, the system will automatically redial the busy CO/PBX number. After the specified I number of call attempts with no answer, the system will cease trying to dial.

ELAPSED CALL START TIMER SELECTION

System CO Line Data No.

NOTES:

OPERATION:

- Go off-line.
- 2. Enter: Mode

System

LK 1 ° MIC

Sub-Mode CO Line

LK 1

Data No.

0 5

(Dial Pad)

Data No. Title Setting Data

O 5: -- CALLSTART 20:

TIME DISPLAY

- Press the corresponding CO/PBX line key to change data option.
 - To change 20 sec. to 10 sec., press CO/PBX line key 1.

LK I	LK 2	LK 3	LK 4
10 вес.	20 нес	30 sec.	40 sec.
LK 5	LK 6	LK 7	LK 8
50 aec.	60 sec.	70 sec.	80 sec.

CO/PBX line keys

Default

- Pressing the TRF key will write the selected data and advance to Memory Block 1-1-06 (CO/PBX Incoming Ringing Alarm Time Selection).
- 5. Press the SPKR key to go back on-line.

Additional Programming

		Data	System Data		
Mode	Sub-Mode	No.	Required	May Be Required	
CO/PBX (LK 3)	-	01			
CO/PBX (LK 3)		90.			

GENERAL INFORMATION - ELAPSED CALL START TIMER SELECTION

This Memory Block specifies the time interval after dialing until the start of call duration display.

o MIC

ICM

CO/PBX INCOMING RINGING ALARM TIME SELECTION

System	CO Line	Data No.
1	1	0.6

OPERATION:

- Go off-line.
- 2. Enter: Mode System

Sub-Mode CO Line LK1

Data No.

(Dial Pad)

LK I

6

Data No. Title Setting Data

O 6: RING ALM

TIME DISPLAY

- Press the corresponding CO/PBX line key to change data option.
 - To change No Limit to 10 sec., press CO/PBX line key 1.

LK 1	LK 2	LK 3	LK 4
10 sec.	20 нес.	30 sec.	
LK 5	LK 6	LK 7	LK 8

CO/PBX line keys

- Default
- Pressing the TRF key will write the selected data and advance to Memory Block 1-1-07 (Tie/DID Line Delay Ringing Timer Selection).
- 5. Press the SPKR key to go back on-line.

NOTES:

- When programming Memory Blocks 4-01 and 4-02 [CO/PBX Ring Assignment (Day Mode/Night Mode)], must be set to RING.
- CO/PBX lines assigned for DIT/ANA will not activate this feature.
- Tie/DID lines assigned for Delayed Ringing will follow this assignment after the delayed ringing starts.
- 4. This feature uses the same ringing tone (Low, Medium, High) that can be selected in Memory Blocks 3-07 (Ringing Variation Selection) and 4-91 (Telephone Ringing Variation Selection). If "High" is selected in those Memory Blocks, this feature will not function.

Additional Programming

	1307	Data	System	Data
Mode	Sub-Mode	No.	Required	May Be Required
System (LK 1)	CO Line (LK 1)	07		
CO/PBX (LK 3)	Runing Same	07	PBX Box logs	00
CO/PBX (LK 3)		42		
CO/PBX (LK 3)		43		
Telephone (LK 4)	vill wrate the temory Bloc	01	ag the TKE	
Telephone (LK 4)	aslA galga	02		(CO/E
Telephone (LK 4)	enti-no xised d	91	the SPECE	

GENERAL INFORMATION - CO/PBX INCOMING RINGING ALARM

TIME SELECTION

This Memory Block specifies the time interval from the incoming of a CO/PBX call until the ringing tone changes to a different ringing tone ("higher pitch") level if the call is not answered. If "No Limit" is selected, the ringing tone does not change.

TIE/DID LINE DELAY RINGING TIMER SELECTION

System	CO Line	Data No.
1	1	0.7

OPERATION:

- 1. Go off-line.
- Enter: Mode

o MIC System LK 1 · ICM W Sub-Mode CO Line

Data No.

0 (Dial Pad)

LK 1

y

Title Data No. Setting Data 0 7: -TL DLYRNG TIME DISPLAY

- 3. Press the corresponding CO/PBX line key to change data option.
 - To change No Limit to 10 sec., press CO/PBX line key 1.

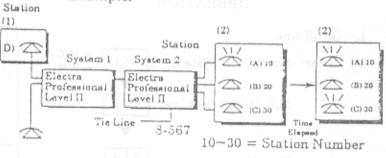
LK 1	LK 2	LK 3	See LK 4/14)
10 sec.	20 sec.	30 sec.	1 1 1 1 00 1 3 A
LK 5	LK 6	LK 7	LK 8
**,	SE DEKEY.	OTAIN SUL	the fairful baseque

CO/PBX line keys



- 4. Pressing the TRF key will write the selected data and advance to Memory Block 1-1-09 (Manual Pause Selection).
- Press the SPKR key to go back on-line.

Example:



- System 1 and 2 are connected to each other.
- Station A (ext. 10) and station C (ext. 30) are ring assigned on the Tie Line.

NOTES:

- When station user D wishes to speak to station user A:
 - a. Dial ext. 8-567 on the tie line.
 - b. Confirm the second dial tone.
 - Dial ext. 10. C.
- 2) At station A:
 - a. The ICM LED blinks and a ring tone different from the normal ringing tone is heard.
 - b. The call can be answered by lifting the handset.
 - c. In this instance, station B and C cannot answer the call.
- 3) If station user A does not answer within the specified time:
 - a. The ringing tone changes to the normal tone and station C starts ringing.
 - b. Any station (A, B, or C) can answer the call.

Additional Programming

W- I		Data	System Data	
Mode	Sub-Mode	No.	Required	May Be Required
System (LK 1)	CO Line (LK 1)	34		

GENERAL INFORMATION - TIE/DID LINE DELAY RINGING TIMER SELECTION

This Memory Block specifies the delay interval between the time a telephone (accessed by a ringing call on a Tie line) is not answered (within a specified time) and the time other telephones (assigned to ring on that Tie line) start ringing. Refer to the example and the notes above.

MANUAL PAUSE SELECTION REMITORIE

System	CO Line	Data No.
PECHON	dd 1	0.9

OPERATION:

- 1. Go off-line.
- 2. Enter: Mode

ystem LK1 • MIC

Sub-Mode CO Line

*

Default

LK !

Data No.

(Dial Pad)

Data No. Title Setting Data

O 9: MAN PAUSE NO

TIME DISPLAY

- 3. Press the corresponding CO/PBX line key to change data option.
 - To change NO to YES, press CO/PBX line key 2.

di aniffil v	d because	ad and il	de balld
LK 5	LK 6	LX 7	LLK 8
NO	YES	di mod in	mallib
LK1	LK 2	LKJ	LK4

 Pressing the TRF key will write the selected data and advance to Memory Block 1-1-11 (System Transfer/Camp-On Selection).

5. Press the SPKR key to go back on-line.

M Additional Programming

CO/PBX line keys

	Data		System Data	
Mode	Sub-Mode	No.	Required	May Be Required

NOTES:

 If you dial 907-4000 LNR/SPD 12345 after seizing a CO/PEL

When manual pause is not specified.

dialed number 907 4000 XXX 345 is sent out.

(Data in Speed Dial buffer 12.)

When manual pause is specified.

dialed number 907 4000 12345 is sent out.

(Pause)

- The pause is inserted if Last Number Redial, Save and Repeat, or Store and Repeat is used to redial the number.
- When this feature is Allowed, Multiline Terminal users will not be capable of using consecutive Speed Dial via the LNR/SPD key.

GENERAL INFORMATION - MANUAL PAUSE SELECTION

This Memory Block specifies either "Pause Insertion" or "Last Number Dialed/Speed Dial" to be executed. I using the LNR/SPD key if it is pressed after one or more digits of a dialed number has been entered. Refer to I the notes above.

SYSTEM TRANSFER/CAMP-ON SELECTION

System	CO Line	Data No.
	1	11

OPERATION:

- 1. Go off-line.
- 2. Enter: Mode

System LK1 • MIC

Sub-Mode CO Line

LK I

Data No.

(Dial Pad)

Data No. Title Setting Data

1 1: RING TRF YS

TIME DISPLAY

- Press the corresponding CO/PBX line key to change data option.
 - To change YES to NO, press CO/PBX line key 1.

LK 1	LK 2	LK 3	LK 4
МО	YES		
LK 5	LK 6	LK 7	LK 8
THE O	- CA O	LA	LA

CO/PBX line keys



- Pressing the TRF key will write the selected data and advance to Memory Block 1-1-12 (Station Transfer/Camp-On Recall Timer Selection).
- 5. Press the SPKR key to go back on-line.

M Additional Programming

		Data	System Data	
Mode	Sub-Mode	No.	Required	May Be Required
System (LK 1)	CO Line (LK 1)	12		
System (LK 1)	CO Line (LK 1)	64		

GENERAL INFORMATION - SYSTEM TRANSFER/CAMP-ON SELECTION

This Memory Block is used to Allow or Deny station users the capability of performing a Ring Transfer or Station Camp-On on a system-wide basis. When Allowed, Multiline Terminal users can perform a Ring! Transfer by pressing the TRF key.

NOTES:

Press the corresponding CO/PBX line

lian key 3.

| 20 sec. | 20 sec. | 240 sec. |

Pressing the TRF key will write the selecte data and advance to Memory Block 1-1-1 (System Speed Dial Restriction by Tenant).

Press the SPKR key to go back on-line.

Sen (LK1) | DSSTLK 65

STATION TRANSFER/CAMP-ON RECALL TIMER SELECTION

System	CO Line	Data No.
1	1	12

OPERATION:

- Go off-line.
- 2. Enter: Mode

System

LK 1 • MIC

Sub-Mode CO Line

LK 1

Data No.

[1 2]

Data No.	Title	Setting Date
<u>1</u> 2:	TRF RECL	60 в
TIME	DISPLAY	

- Press the corresponding CO/PBX line key to change data option.
 - To change 60 sec. to 120 sec., press CO/PBX line key 3.

LK 1	LK 2	LK 3	LK 4
30 вес.	ВО вес.	120 sec.	240 вес
LK 5	LK 6	LK 7	LK 8

CO/PBX line keys



- Pressing the TRF key will write the selected data and advance to Memory Block 1-1-18 (System Speed Dial Restriction by Tenant).
- 5. Press the SPKR key to go back on-line.
- m Additional Programming

		Data	System Data	
Mode	Sub-Mode	No.	Required	May Be Required
System (LK 1)	CO Line (LK 1)	11		
System (LK 1)	CO Line (LK 1)	64		
System (LK 1)	DSS (LK 6)	01		
System (LK 1)	PBR/Misc. (LK 8)	08		

NOTES:

 When a station with a DSS/BLF Console assigned to it transfers or camps on a call to a station and the call goes unanswered, the call recalls using Memory Block 1-1-64 (DSS/BLF Console Transfer/Camp-On Recall Timer Selection).

Pressing the TRF key will write the selected data and advance to Memory Bleck 1-1-12 (Station Transfer/Camp-On Recall Timer

Press the SPER key to go back on-line.

M Additional Programming System Data
Made Sub-Made Pa. System Data
Hay
System (LK 1) CO Line (LK 1) 12
System (LK 1) CO Line (LK 1) 64

GENERAL INFORMATION - STATION TRANSFER/CAMP-ON RECALL TIMER SELECTION

This Memory Block specifies the time interval before a Ring Transfer or Station Camp-On from a station I without a DSS/BLF Console will recall back to the originating station if the call is not answered.

SYSTEM SPEED DIAL RESTRICTION BY TENANT

System	CO Line	Data No.
LRESPHICT	ALG GOLD DIA	18

OPERATION:

- Go off-line.
- 2. Enter: Mode

System

o MIC LK t ICM W

Sub-Mode CO Line

LK I

Data No.

8

Speed Dial

(Dial Pad)

No. Title OX-XX Setting Data Data No. 8: SPEED (0X) 100 TIME DISPLAY

3. Press the corresponding CO/PBX line key for each tenant.

RECALL

key

: Next page.

FNC

key

Previous page.

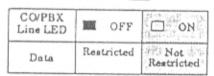
#

To move cursor.

Dial pad

0

To enter data.



Defauit

- 4. The LED indication changes to indicate the option entry each time the CO/PBX line key is pressed.
- 5. After entering all pages of Access Code OX, press the TRF key to display the next 1X.
- Use the dial pad to change the Access Code.
- 7. After entering all pages of 8X, pressing the TRF key will write the selected data and advance to Memory Block 1-1-24 (PBX/CTX Access Code Assignment I).
- 8. Press the SPKR key to go back on-line.

Page Switching:

Tenant Number (00~47) corresponds to CO/PBX line

Page I (Tenanta 00~1)7)

LK 1	LK 2	LKJ	LK 4
00	01	02	03
LK 5	LK 6	LK 7	LK 8
04	05	06	07

LKI	LK 2	LK 3	LK 4
08	09	10	11
LK 5	LX 6	LX 7	LK8
12	13	14	15

Page 3 (Tenents 16-23)

LK 1	LK 2	LK 3	LK 4
16	17	18	19
LK 5	LK 6	LK 7	LK 8
20	21	22	23

Page 4 (Tenanta 24~31)

LK I	LK 2	LK 3	LK 4
24	25	26	27
LK 5	LK 6	LK 7	LK 8
28	29	30	31

Page 5 (Tenanta 32~39)

LK 1	LK 2	LK 3	LK 4
32	33	34	35
LK 5	LK 6	LK 7	LK 8
36	37	38	39

LK 1	LK 2	LK 3	LK 4
40	41	42	43
LK 5	LK 6	LK 7	LK 8
44	45	. 46	47

CO/PBX line keys

(Continued on next page.)

SYSTEM SPEED DIAL RESTRICTION BY TENANT (continued)

System	CO Line	Data No.
1	1	18

System Speed Dial Number Access Code Table

Access Code	Speed Dial Number		
Access Code	100 Codes	1000 Codes	
0X	00 ~ 09	000 ~ 099	
1X	10 ~ 19	100 ~ 199	
s J ao	S 80	5	
7X	70 ~ 79	700 ~ 799	
8X	80 ~ 89	800 ~ 899	

Default	All System Speed Dial buffers can
	be dialed from any tenant.

NOTES

- Speed Dial buffers are divided into nine groups. (Refer to System Speed Dial Number Access Code Table.)
- One or more tenants can be enabled to use each of the groups.
- This Memory Block determines which tenants can use each group.
- When Speed Dial is set to 1000, 900 ~ 999 cannot be restricted.
- 5. "X" in each Access Code is displayed even if it is not entered.

M Additional Programming

		Data	System	Data
Mode	Sub-Mode	No.	Required	May Be Required
System (LK 1)	CO Line (LK 1)	33		
System (LK 1)	CO Line (LK 1)	35		
Telephone (LK 4)		00		

pressed.

After entering all pages of Access Code 0X, pres-

the THF key to display the next 4 X.

Use the dial pad to change the Access Code.

After entering all pages of BX, pressing the TR key will write the selected data and advance Memory Block 1-1-24 (PBX/CTX Access Cod

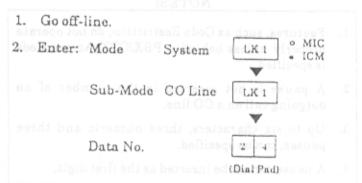
GENERAL INFORMATION - SYSTEM SPEED DIAL RESTRICTION BY TENANT

This Memory Block specifies if System Speed Dial is enabled for each tenant.

PBX/CTX ACCESS CODE ASSIGNMENT I

System	CO Line	Data No.
S CULIE ASS	ICHU AN YO	24

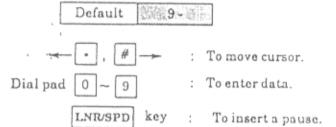
OPERATION:



Data No.	Title	Setting Date
2 4:	PBX AC	2 .
TIME	DISPLAY	

 Enter data by using the dial pad.
 Example: To program 91 pause, dial: 91 LNR/SPD.

(Use the LNR/SPD key to insert a pause.)



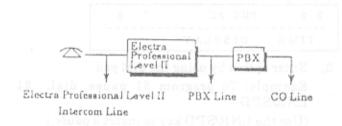
HOLD key : To clear all data.

- Pressing the TRF key will write the selected data and advance to Memory Block 1-1-25 (PBX/CTX Access Code Assignment II).
- 5. Press the SPKR key to go back on-line.
- Additional Programming

26.1		Data	Systen	Data
Mode	Sub-Mode	No.	Required	May Be Required
CO/PBX (LK 3)		16		

NOTES:

- Features, such as Code Restriction, do not operate properly unless a behind PBX/CTX Access Code is specified.
- A pause is not inserted in the number of an outgoing call on a CO line.
- Up to six characters, three numeric and three pauses can be specified.
- A pause cannot be inserted as the first digit.



GENERAL INFORMATION - PBX/CTX ACCESS CODE ASSIGNMENT I

This Memory Block specifies a CO/PBX line Access Code together with pauses for outgoing calls from a station of the system that is connected behind a PBX or Centrex.

PBX/CTX ACCESS CODE ASSIGNMENT II

System	CO Line	Data No.
1	1	25

OPERATION:

- Go off-line.
- o MIC LK I 2. Enter: Mode System W Sub-Mode CO Line LK 1

Data No.

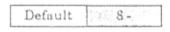
5 (Dial Pad) ICM

Title Setting Data Data No. PBX AC 2 5: 8 . TIME DISPLAY

Enter option by using the dial pad.

Example: To program 81 pause, dial: LNR/SPD.

(Use the LNR/SPD key to insert a pause.)



To move cursor.

To enter data. Dial pad 9

> To insert a pause. LNTUSPD key (Cannot be inserted as

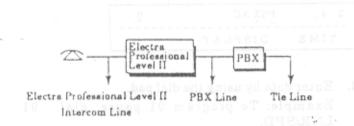
> > first digit.)

To clear all data. HOLD key

- 4. Pressing the TRF key will write the selected data and advance to Memory Block 1-1-26 (Off-Hook Ringing Selection).
- 5. Press the SPKR key to go back on-line.

NOTES:

- 1. Features, such as Code Restriction, do not operate properly unless behind a PBX/CTX Access Code is specified.
- 2. A pause is not inserted in the number of an outgoing call on a CO line.
- 3. Up to six characters, three numeric and three pauses, can be specified.
- 4. A pause cannot be inserted as the first digit.



Additional Programming

		Data	System	Data
Mode	Sub-Mode	No.	Required	May Be Required
CO Line (LK 3)		91	700000	55 4 3000

GENERAL INFORMATION - PBX/CTX ACCESS CODE ASSIGNMENT II

This Memory Block specifies a CO/Tie/OPX/FX Access Code, together with pauses for outgoing calls from a station of the system that is connected behind a PBX or Centrex.

OFF-HOOK RINGING SELECTION

System	CO Line	Data No.
DAMMIG	TAHOTU	26

OPERATION:

- Go off-line.
- 2. Enter: Mode System LK1 MIC ICM

 Sub-Mode CO Line LK1

Data No. 2 6 2 6

Data No. Title Setting Data

2 6: -OFF RING YS

TIME DISPLAY

- Press the corresponding CO/PBX line key to change the data option.
 - To change YES to NO, press CO/PBX line key 2.

LK 2	LK 3	LK 4
ИО		
LK 6	LK 7	LK 8
	NO	NO

CO/PBX line keys



- Pressing the TRF key will write the selected data and advance to Memory Block 1-1-27 (Automatic Day/Night Mode Switching Time Assignment).
- 5. Press the SPKR key to go back on-line.
- M Additional Programming

M-1-	0.11	Data	Systen	Data .
Mode	Sub-Mode	No.	Required	May Bo Requires
Telephone (LK 4)		01		Telaphone
Telephone (LK 4)		02		10-71-0-1

NOTES:

 Off-hook ring tone volume is lower than on-hook ring volume.

GENERAL INFORMATION - OFF-HOOK RINGING SELECTION

This Memory Block specifies if a ringing tone is generated to a station for calls coming into a ring-assigned CO/PBX line at a station that is off-hook.

AUTOMATIC DAY/NIGHT MODE SWITCHING TIME ASSIGNMENT

System CO Line Data No. 1 1 27

OPERATION:

1.	Go off-	line.			
2.	Enter:	Mode	System	LK 1	 MIC ICM
				W	
		Sub-Mode	CO Line	LK 1	
				W	
		Data No.		2 7	

		-			-	and and and		an complex
: 1			:				:	
	-		100 000	 	 			 -
		M E		 	 			

- 3. Enter data by using the dial pad.
 - Example: To switch Time number 1, enter 08:00 and 20:00.



HOLD key : To clear all data when cursor is at Data No. position.

Default Not Specified

- 4. Press the TRF key to write the data.
 - · Number 2 Switching Time is displayed.
- 5. Use dial pad to change Time numbers.
- Pressing the TRF key will write the selected data and advance to Memory Block 1-1-28 (Distinctive Ringing by Telephone or CO Selection).
- 7. Press the SPKR key to go back on-line.

NOTES:

- The system can be placed into Day or Night Mode at any time from a terminal assigned this feature.
- The start times of Day Mode and Night Mode can be specified in System Programming to automatically switch modes at the specified times.
- A start time for Day Mode only or Night Mode only cannot be programmed.
- Day Mode and Night Mode cannot be programmed to have the same start time.
- 5. The time is entered in military time only.
- 6. The first time input represents when Day Mode begins. The second time input represents the beginning of Night Mode.

Additional Programming

		Data	System	Data
Mode	Sub-Mode	No.	Required	May Be Required
System (LK 1)	CO Line (LK 1)	32		
System (LK 1)	PBR/Misc. (LK 8)	07	g une ing nd advance	data a
Telephone (LK 4)	lode Switchi	07		angisaA
Telephone (LK 4)	badk on-line	80	as SPECK ka	Propet
CLK 4)		09	l Programation	ingisibhA
Telephone (LK 4)	ive	17	Sub-Slor	obeM.
Telephone (LK 4)	9111/2011	37		ano inalaT
Telephone (LK 4)		38		(E.J.J.)

GENERAL INFORMATION - AUTOMATIC DAY/NIGHT MODE SWITCHING TIME ASSIGNMENT

This Memory Block allows automatic switching of the system between Day Mode and Night Mode.

DISTINCTIVE RINGING BY TELEPHONE OR CO SELECTION

System	CO Line	Data No.
ionsquare	1 3 L. V.	28

OPERATION:

1. Go off-line.

2. Enter: Mode System LKI • MIC • ICM

Sub-Mode CO Line LKI

Data No. 2 8

(Dial Pad)

Data No.	Title	Setting Duta
2 8:	DST RING	TEL
TIME	DISPLAY	

- 3. Press the corresponding CO/PBX line key to change the data option.
 - To change TEL to CO, press CO/PBX line key 2.

CO/PBX	line keys	Def	nult
LK 5	LK 6	LK 7	LK 8
TEL	CO		
LKI	LK 2	LK 3	LK 4

- Pressing the TRF key will write the selected data and advance to Memory Block 1-1-29 (Private Line Assignment).
- 5. Press the SPKR key to go back on-line.

NOTES:

- TEL refers to Telephone Mode.
 - The type of ringing tone is specified for each telephone in Memory Block 4-01, 4-02, or 4-91.
- 2. CO refers to CO/PBX Line Mode.
 - The type of ringing tone is specified for each CO/PBX line in Memory Block 3-07.

Additional Programming

	122.6 (3.	Data	System Data	
Mode	Sub-Mode	No.	Required	May Be Required
Telephone (LK 4)	ne is displaye	01	ita (or the se	(G a
Telephone (LK 4)	ange the duta	02	hanus aiG eve	M o
Telephone (LK 4)	ono sarre da Josef Bayro es		tiple off the	
CO/PBX (LK 3)	(Coemmy te	07	di manya.	siunki)

GENERAL INFORMATION - DISTINCTIVE RINGING BY TELEPHONE OR CO SELECTION

This Memory Block allows assignment of distinctive ringing tones on a per telephone or per CO/PBX line

PRIVATE LINE ASSIGNMENT

System	CO Line	Data No.
T I I I I I I I I I I I I I I I I I I I	1	29

OPERATION:

- 1. Go off-line.
- 2. Enter: Mode

System

LK I • MIC

Sub-Mode CO Line

LK t

Data No.

2 9 (Dial Pad)

Combination

No. (1~2)

CO No. Tel Port No. (01~56) (01~64)

2 9: P 1 C = T =

TIME DISPLAY

- 3. Enter options by using the dial pad.
 - Example: CO line 5 is assigned as Private Line of TEL port number 11.

→ • , # →

To move cursor.

Dial pad

0 ~ 9

To enter CO No. and Setting Data.

HOLD key

:

To clear all data

when cursor is at CO No. or Setting

Data.

- 4. Press the TRF key to write the data.
 - Data for the second line is displayed.
 - · Move the cursor to change the data.
- Pressing the TRF key will write the selected data and advance to Memory Block 1-1-30 (Route Advance Block Assignment).
- 6. Press the SPKR key to go back on-line.

Default Not Specified

-

-		Data	System Data	
Mode	Sub-Mode	No.	Required	May Be Required
Tenant (LK 2)		0.5		
Tenant (LK 2)		06		
Telephone (LK 4)		12		

GENERAL INFORMATION - PRIVATE LINE ASSIGNMENT

This Memory Block is used to assign an outside line for use as a Private Line. The Private Line cannot be seized by any other telephone, and no LED indication is provided to other terminals.

NOTES:

- The two Private Lines can be assigned to one Multiline Terminal or one Private Line can be assigned to two Multiline Terminals.
- Private Lines cannot be assigned to Single Line Telephones.

ROUTE ADVANCE BLOCK ASSIGNMENT

System	CO Line	Data No.
antolyting.	TRILL TOWN	30

OPERATION:

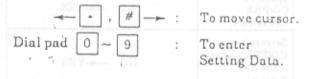
1. Go off-line.

TIME

- MIC 2. Enter: Mode LK 1 System ICM Y Sub-Mode CO Line LK I Data No. 0 (Dial Pad) Block No. Priority No. Setting Data Data No. 3 0 : RT ADV
- Enter option by using the dial pad.

DISPLAY

 Example: To select Trunk Group 05 as priority 1 for block 1.



- 4. Press the TRF key.
 - Data for priority 2 ~ 4 is displayed successively.
 - After entering the data for priority 4, press the TRF key.
 - Data for priority I in the next block is displayed
 - · After entering the data for priority 4;
- After entering data for Block 16, pressing the TRF key will write the selected data and advance to Memory Block 1-1-31 (Manual Line Seizure Selection).
- 6. Press the SPKR key to go back on-line.

NOTES:

- If 00 (not set) is programmed, no trunks will be accessed for this priority setting.
- If Route Advance Block Numbers are assigned and the TRF key is pressed, or an Access Code is dialed, the system will start searching for an idle line in a specified group (beginning with the Trunk Group assigned priority 1).
- If all CO/PBX lines are in use, the line with the next highest priority is seized.

Block No.	Priority No.	Set Data
e key to	Priority 1	Trunk Group No. 01~32
	Priority 2	Trunk Group No. 01~32
Block 1	Priority 3	Trunk Group No. 01~32
	Priority 4	Trunk Group No. 01~32

1 1261	DIA	a A.J. J. Sandalises
8 NJ	Priority 1	Trunk Group No. 01~32
	Priority 2	Trunk Group No. 01~32
Block 16	Priority 3	Trunk Group No. 01~32
	Priority 4	Trunk Group No. 01~32

HI	3lock	00
	11	II Block

Additional Programming 03 01 01 482 213 12 863 8863

W-1-		Data	System Data	
Mode	Sub-Mode	No.	Required	May Be Required
CO/PBX (LK 3)		03	B-dull .	shold

GENERAL INFORMATION - ROUTE ADVANCE BLOCK ASSIGNMENT

This Memory Block is used to assign priority levels (1~4) to each Trunk Group in Memory Block 3-03. The system has a total of 16 blocks that can be specified.

MANUAL LINE SEIZURE SELECTION

System	CO Line	Data No.
1	1	31

OPERATION:

Go off-line.

 MIC LK 1 2. Enter: Mode System · ICM 7 Sub-Mode CO Line LK 1 Data No.

(Dial Pad)

NOTES:

1. Selecting YES allows manual access of idle CO/PBX lines for an outgoing call or answering an incoming CO/PBX call as shown in the table below.

Setting Data Data No. MAN LY SEL NO 3 1: TIME DISPLAY

- 3. Press the corresponding CO/PBX line key to change data option.
 - To change No to YES, press CO/PBX line key 2

Collo pla gra	Trainle Gr	Princity 3	
LK 5	LK 6	LK 7	LK 8
NO	YES		
LK L	LK 2	LK 3	LK.

- 4. Pressing the TRF key will write the selected data and advance to Memory Block 1-1-32 (Automatic Day/Night Mode by Day of Week Selection).
- Press the SPKR key to go back on-line.

OPERA'	PROGRAMMING	Automatic Line Scizure = NO Telephone Mode Data No. 05/06	Manual Line Seizure = YES
Own Tenant CO/PBX	Automatic Line Seizure	ples Toxelact pearity 1	тахЗио
Specified CO/PBX line service		NO -	→YES
Seizure by CO/PBX line ke (Line Key System)			Dial pad 0
Tenant CO/PBX Line Spec CO/I	Automatic Line Seizure	TRF k on	L Ponethe
	Specified CO/PBX line setzure	NO -YES	
Seizure by CO/PBX line k (Line Key System)		NO -	→ YES

Default NO

Additional Programming

		Data	System	Data
Mode	Sub-Mode	No.	Required	May Be Required

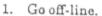
GENERAL INFORMATION - MANUAL LINE SEIZURE SELECTION

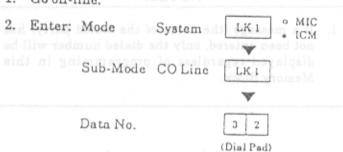
This Memory Block allows a CO/PBX line that cannot be seized automatically via Prime Line pickup to be accessed manually.

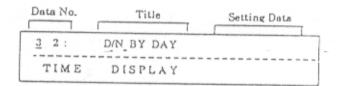
AUTOMATIC DAY/NIGHT MODE BY DAY OF WEEK SELECTION

System	CO Line	Data No.
	or and d	32

OPERATION:







- Press the corresponding CO/PBX line key to change the day of week.
 - The LED indication changes to indicate the data set when a CO/PBX line key is pressed.

LK1	LK 2	LK 3	LK 4
SUN	MON	TUE	WED
LK 5	LK 6	LK 7	LK 8
THU	FRI	SAT	

COLED	m or	Оп
Data	Day/Night Automatics Switching Pattern 1	ight Automatic

Default	Sunday to Saturday = Pattern 1

CO/PBX line keys

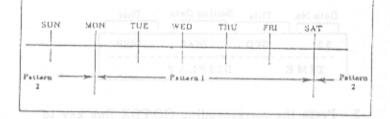
- Pressing the TRF key will write the selected data and advance to Memory Block 1-1-33 (Speed Dial Number/Name Display Selection).
- 5. Press the SPKR key to go back on-line.

NOTES:

 By designating two time settings in Memory Block 1-1-27, one of the two settings can be assigned to each day of the week.

Example:

 To specify Day/Night Mode automatic switching time 1 for Monday~Friday, and Day/Night Mode automatic switching time 2 for Saturday and Sunday, press CO/PBX line keys 1 and 7.



COST BX How keys

Additional Programming law was AMT and amissard

W-1-00		Data	Systen	Data
Mode	Sub-Mode	No.	Required	May Be Required
System (LK 1)	CO Line (LK 1)	27		
System (LK 1)	PBR/Misc. (LK 8)	07	galeinierger'i	ASOLIDAN
Telephone (LK 4)	bertupali A	17	baM-sag	elroM
Telephone (LK 4)		09	Elientico (System (L.K.)

GENERAL INFORMATION - AUTOMATIC DAY/NIGHT MODE

BY DAY OF WEEK SELECTION

This Memory Block determines automatic switching between day and night mode.

Default

SPEED DIAL NUMBER/NAME DISPLAY SELECTION

System	CO Line	Data No.
1	1	33

OPERATION:

- 1. Go off-line.
- 2. Enter: Mode System

o MIC LK 1 ICM W

Sub-Mode CO Line

LK 1

and XEGO Data No. abase box

3 3 (Dial Pad)

Setting Data Title Data No. Title 3 3: SPD DISP TIME DISPLAY

- 3. Press the corresponding CO/PBX line key to change data option.
 - To change the dialed number to a name, press CO/PBX line key 2.

	line keys	Def	ault
LK 5	LK 6	LK 7	LK 8
Dialed Number	NAME		
LK 1	LK 2	LK 3	LK 4

- 4. Pressing the TRF key will write the selected data and advance to Memory Block 1-1-34 (Tie/DID Line First Ring Pattern Selection).
- 5. Press the SPKR key to go back on-line.
- Additional Programming

		Data	System	Data
Mode	Sub-Mode	No.	Required	May Be Required
System (LK 1)	CO Line (LK 1)	18		0.2(3)
System (LK 1)	CO Line (LK 1)	35		

NOTES:

1. If a message (the name of the dialed party) has not been entered, only the dialed number will be displayed regardless of programming in this Memory Block.

The LED indication changes to indicate

the data set when a COPSA line key is

GENERAL INFORMATION - SPEED DIAL NUMBER/NAME DISPLAY

SELECTION

This Memory Block specifies either the dialed number or name to be displayed first at the originating station when an outgoing call is made via Speed Dial.

TIE/DID LINE FIRST RING PATTERN SELECTION

System	CO Line	Data No.
UFFFERAL	HUAMUGE	34

OPERATION:

(Dial Pad)

- 1. Go off-line.
- o MIC 2. Enter: Mode System LK 1 CM W Sub-Mode CO Line LK I Data No. 3 4

Data No. Title Setting Data 3 4: TLI RNG CO 3 TIME DISPLAY

- 3. Press the corresponding CO/PBX line key to change data option.
 - To change Pattern 3 to Pattern 2, press CO/PBX line key 2.

LK I	LK 2	LK 3	LK 4
PATTERN 1	PATTERN 2	PATTERN 3	PATTERN 4
LK 5	LK 6	LK 7	LK 8
ICM	VOICE		

- 4. Pressing the TRF key will write the selected data and advance to Memory Block 1-1-35 (Speed Dial Buffer Allocation).
- Press the SPKR key to go back on-line.
- Additional Programming

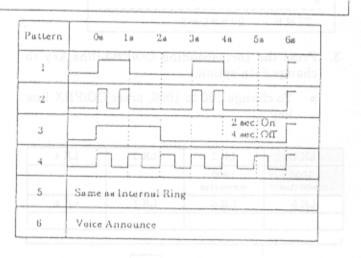
CO/PBX line keys

W - 1	Sub-Mode	Data No.	System Data	
Mode			Required	May Be Required
System (LK 1)	CO Line (LK 1)	07		1.
System (LK 1)	CO Line (LK 1)	53		1
Telephone (LK 4)		01		
Telephone (LK 4)		02		

NOTES:

- 1. Specify one of the following ringing tones for incoming calls on Tie Lines.
 - 1. Pattern 1

 - Pattern 4
 - 5. Intercom call (Signal Tone)
 - Voice Tone
- 2. If Voice is selected, switching from Voice to Tone is not allowed and Memory Block 1-1-07 (Tie/DID Line Delay ringing Timer Selection) is not used.



GENERAL INFORMATION - TIE/DID LINE FIRST RING PATTERN SELEC

This Memory Block allows specific ringing tones for incoming calls on Tie Lines.

SPEED DIAL BUFFER ALLOCATION

System	CO Line	Data No.
1	1	35

OPERATION:

- 1. Go off-line.
- 2. Enter: Mode

System

LK 1 • MIC

Sub-Mode CO Line

LK 1

Data No.

3 5

(Dial Pad)

Data No.	T	itle	Set	ting Data
<u>3</u> 5:	SPD 7	TLO		100
TIME	DISI	YAJS		

- Press the corresponding CO/PBX line key to change data option.
 - To change 100 to 1000, press CO/PBX line key 2.

LK1	LK 2	LK 3	LK 4
100 memories	1000 memories		
LK 5	LK 6	LK 7	LK 8

CO/PBX line keys

- Default
- Pressing the TRF key will write the selected data and advance to Memory Block 1-1-36 (CO/PBX Call Forward - All Calls Selection).
- 5. Press the SPKR key to go back on-line.
- Additional Programming

		Data	System Data	
Mode	Sub-Mode	No.	Required	May Be Required
System (LK-1)	CO Line (LK 1)	18		
System (LK 1)	CO Line (LK 1)	33		

NOTES:

- The 100 code option allows for 90 System Speed Dial memories and 10 Station Speed Dial memories.
- The 1000 code option does not allow for Station Speed Dial memories.

CO/PBX line key 2.

Pressing the TRF key will write the selected data and edvance to Memory Black 1-1-35 (Speed Diet Buffer data and selected)

Press the SPKR key to go back on line.
Additional Programming

_	7		CO Libertik D	
_				
d				
_				

GENERAL INFORMATION - SPEED DIAL BUFFER ALLOCATION

This Memory Block specifies either the 100 memories or 1000 memories allocation.

CO/PBX CALL FORWARD - ALL CALLS SELECTION

System	CO Line	Data No.
FUCZIMITE	Minning	36

OPERATION:

- Go off-line.
- 2. Enter: Mode System LKI MIC . ICM

 Sub-Mode CO Line LKI

 Data No. J 6

(Dial Pad)

Default

Da	ta No.		Title	Setting Dau
3	6:	CO	FWDG	МО
1	TIME		DISPLA	λY

- Press the corresponding CO/PBX line key to change data option.
 - To change No to YES, press CO/PBX line key 2.

LK 5	LK 6	LK 7	LK 8
NO	YES		
LK 1	LK 2	LK 3	LK 4

- Pressing the TRF key will write the selected data and advance to Memory Block 1-1-37 (Trunk Queuing Timeout Selection).
- 5. Press the SPKR key to go back on-line.
- Additional Programming

CO/PBX line keys

W.J.		Data	System Data	
Mode	Sub-Mode	No.	Required	May Be Required
Telephone (LK 4)		01		
Telephone (LK 4)		02		

NOTES:

 If YES is programmed, and outside lines are assigned to ring at a station that has Call Forward - All Calls set to another Multiline Terminal or Single Line Telephone, the second telephone rings instead of the first telephone.

GENERAL INFORMATION - CO/PBX CALL FORWARD-ALL CALLS SELECTION

This Memory Block determines if incoming CO/PBX calls will follow a Call Forward - All Calls setting.

TRUNK QUEUING TIMEOUT SELECTION

System	CO Line	Data No.
1	1	37

OPERATION:

- 1. Go off-line.
- 2. Enter: Mode

System

LK I • MIC

Sub-Mode CO Line

LK 1

Data No.

3 7 (Dial Pad)

Data No. Title Setting Data

3 7: TRUNK QUE 104

TIME DISPLAY

- Press the corresponding CO/PBX line key to change data option.
 - To change 10 sec. to 30 sec., press CO/PBX line key 3.

60.0 sec.
ov.u sec.
LK 8

- Pressing the TRF key will write the selected data and advance to Memory Block 1-1-46 (Access Code (1-Digit) Assignment).
- 5. Press the SPKR key to go back on-line.

Additional Programming

Mode	Sub-Mode	Duta No.	System Data	
			Required	May Be Required

NOTES:

 When all trunks in a particular Trunk Group are busy, the station user can dial an Access Code to "queue" onto the busy Trunk Group. When a Trunk (within that group) becomes idle, the queued station will be signaled.

Pressing the TRF key will write the selected data and advance to Memory Block 1-1-37 (Trunk Oueslas Timeout Selection)

Additional Programming

1			

GENERAL INFORMATION - TRUNK QUEUING TIMEOUT SELECTION

This Memory Block determines the length of time that a station, where Trunk Queue was set, will ring before the queue is automatically canceled.

ACCESS CODE (1-DIGIT) ASSIGNMENT

System	CO Line	Data No
(III) IUII	adop acc	46

OPERATION:

- Go off-line.
- 2. Enter: Mode System

LK 1 ° MIC

Sub-Mode CO Line

LK I

Data No.

(Dias Pad)

Data No. Title 0~9. #. Function No.

4 6: 1DG (0) = 176

TIME DISPLAY

3. Enter option using the dial pad.

Example: Enter 030 (Call Forward) on dial 1.

← . # →

To move cursor.

Dial pad

0 ~ 9

To enter data.

Data: Function Number:

000~132, 176~199,201~216, 250~253, 301~304, 401~416, 501~502.

Dial Number:

0~9, *, # (LNR/SPD, *, #)

- Press the TRF key, data of dial 2~9,*, #, and 0 are displayed successively.
- 5. Enter the data of dial 0.
- 6. Press the TRF key, next data is displayed.
- Pressing the TRF key will write the selected data and advance to Memory Block 1-1-47 (Access Code (2-Digit) Assignment).
- 8. Press the SPKR key to go back on-line.
- M Additional Programming

Waste.		Data	System Data	
Mode	Sub-Mode	No.	Required	May Be Required

NOTES:

- The assigned Access Code can be dialed after lifting the handset or after the SPKR key is pressed.
- Select options from the list of function numbers and assign a number (from 0~9, * or #) to each selected function.
 - When a function is assigned a 1-digit Access Code, 2-digit Access Codes with the same first digit become invalid (i.e., if a function is assigned to Access Code 5, Access Codes 50~59, 5*, and 5# cannot be used.)
- To enter # or " as part of an Access Code: Press LNR/SPD then # or ".

Default

Dial No.	Function No.	Function Name	
0	176	Specified Intercom Cal	
1~3	001	Station Number	
4 - 7	000	Not Used	
N N	102	Trunk Group 2	
9 1031	1012 see 1	Trank Group 2	
	096	Last Number Redial	
	026	Callback Message Anawer	

Default Dial No.	Function No.	Call Pictors C	Function Name
1, 2, 3	001		r (Only valid in this M.B.) Not Used
	DO SOUTH PLEASE		
areT vistor	10 X 10 Y 10		
er Call Pi	bringer X.4		100
hibit wa	100		
			toor
of Line Se	SUC-mun		
			830 "0
THE REAL PROPERTY.	0.10	Tride Kits BRO L	Not Used

Continued on next page.

ACCESS CODE (1-DIGIT) ASSIGNMENT (continued)

System	CO Line	Data No.
1	1	46

Default Dial No.	Function No.	Function Name	enii-Be
MARIE OF	016	MIC - lifting the beneder to	ec Mode System UKI
	017	Open haaseng MO	er Mode System LKt
	018		
unetien vo	019	Not Used	- Commission of the Commission
(A 3 5 7 5	020	Call Forward No Answer Set	Sub-Mode. CO Line LK:
100 30 11	021	Call Forward No Answer Cancel	Sergmouth and from F
	022	Call Forward Busy Set Se	W. Carlotte and Ca
	023	Call Forward Busy Cancel	proposers proposition
ligib43 a	024	Call Forward Busy/No Answer Set	Data No.
as salf rul	025	Call Forward Busy/No Answer Cancel Callback Message Answer	hamadaniya
G#	026 027	SLT Hookslash	Glad caldy
0 #	027	The state of the s	
appropriate passi	029	Open	o Mile Committee
41	030	Call Forward All Call Set	of nothern the contraction to
-10	031	DND Set	Annual lands
42	032	Call Forward All Cull/DND Cancel	ner = 701 - 001.
47	033	Call Forward All Set from Destination	and a second and a second
48	_034	Call Forward All Call Cancel from Destination	n land a second
	035	Telephone Password Set	TIME DISPLAY
	036	Telephone Password Cancel	
	037	Change Password	option using the dial pad.
	038	Reset Password from Attendant	"Pand trent stra Strang read of a
small neid	039		uple: Enter 030 (Call Forward) on the
	040		mid the thirth and a trade age to to the
D morreson D	041	0000	
-	042	Open	
ned must see	043	100	power, power,
	044	Timed Alarm Set at SLTs	commovement W
District	045	Timed Alarm Cancel at SLTs	The second secon
K Group 2	046	Set and Cancel of Timed Alarm for Single Line	d S - 9 : To enter data
		Telephone from Attendant	The state of the s
1 91450 1	047	Call Park System Transfer	
4 #	048	Call Park System Answer	unction Numbers
60	049	Volume/LCD Control	
and annual	050	Specified Tenant on CO/PBX/Centrex Line	100-132, 178-199, 201-216, 250-263,
1100 1 2 200 12	277	Seizure (1-digit)	01-304, 401-416, 301-502,
	051	Specified Tenant on CO/PBX/Centrex Line	Dial Mumber:
	250	Seizure (2-digit)	1
	052	Call Pickup CO/PBX by Tenant (1-digit)	-9, ", # (LNESPD, ", #)
	063	Call Pickup CO/PBX/Centrex by Tenant	
	054	(2-digit)	
	054 055	Specified Tenant Paging (1-digit)	the TRF key, data of diat 2-9 ", #, an
		placetted tetratic taking to arkies	isplayed auccessively.
Maidral b		Internal All Call Paging	Stanteenong mafeider
68	057	Intra-Tenant Ringing Cull Pickup Night Chime Call Pickup	r the data of dial O.
69	058	OPEN OPEN	, out of the first of the life
	060	Cull Pickup CO/PBX for other Tenants	the TRE key, next data is displayed.
	061	Internal/CO/PRX Transfer Call Pickup in Sam	10
	001	Tenant	ing the TRF key will write the select
	062	SLT Park to Non-Exclusive Hold	
	063	Specified CO/PBX/Centrex Line Seizure	and advance to Memory Black 111.
	0.00	(1-digit)	as Code (2-Digit) Assignment).
	064	Specified CO/PBX/Centrex Line Seizure	
	004	(2-digit)	the SPKE key to go back on line.
	065	OPEN	
6*	066	Call Pickup CO/PBX in Same Tenant	
	067	Call Pickup(TTE) outside call ringing to	
		Internal Zone Paging Groups	naf Programming
	068	Call Pickup (PBX only) in Same Tenant	
	069	Call Pickup (CO only) in Same Tenant	System Di
51	070	Internal All Zone Paving	Solo-Mode electronic
52	071	Group A Paying	1 1 22 1 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1
53	072	Group B Paging	

(Continued on next page.)

ACCESS CODE (1-DIGIT) ASSIGNMENT (continued)

System	CO Line	Data No.
I	1	46

54 5*	No.	Name	
5*		T. WALLS	
	073	Group C Paging	
	074	Answering Zone/Group Paging	
55	075	External All Paging	
56	076	Speaker A Paging	
57	077	Speaker B Paging	
58	078	Speaker C Paging	
5#	079	Answering External All/Group Page	-1
	080	Outgoing (CO only) Access in Same	ging Tooloo
	000	from Lowest to Highest	elenant
59	180	Internal/External All Paging	
	982	System I.D. Number for Tie Line N	atherbine
1	083	The state of the state of	cewor king
	084	Not Used	
	085		
	086	Tie Line Seizure in Same Tenant	
	087	PBX Line Seizure in Same Tenant	
78	088	Trunk Queuing Set	
79	089	Trunk Queuing Cancel	
76	090	Station Speed Die Programme	The state of the state of
	030	Station Speed Dial Programming (S Telephone)	
77	095	Station Speed Dial Call	
11	096	Station Speed Dist Call	
	097	Last Number Redial Age	
	098	OPEN AND DECEMBER OF THE PROPERTY OF THE PROPE	
		DSS 1 CALL	
	099	DSS 2 CALL	
	100	OPEN	
9	101	Trunk Group 01	
8	102	Trunk Group 02	
70	103	Trunk Group 03	
71	104	Trunk Group 04	
72	105	Trunk Group 05	
73	106	Trunk Group 06	
74	107	Trunk Group 07	
75	108	Trunk Group 08	
1	San Jeyleno F	VES Voice Meaning Spents	
		Trunk Group 32	
	133	Voice Mad Manage Set	
	1	Open	
	136		
	137		
	ſ	Not Used	
	169		
	160		
	1		
	175		
0		Specified Station Access Code	00
	177	Specified Dealers Access Code	01
1	178		02
	179		03
: [180		
	181		04
	182		05
			06
	183		07
	184		0.8
	185		09
	186		10
les es securio de la companya	187		11
	188		12
	189		13
1	190		14
	191		15
and a soul a low	192		16

(Continued on next page.)

ACCESS CODE (1-DIGIT) ASSIGNMENT (continued)

System	CO Line	Data No.
(Drumur	1	46

Default Dial No.	Function No.	Function Name		
	193	Specified Access Code	10 17	13
	194	External All Paring	18	
	195	Sugalar A Probact	19	
		Speakent B Paging		
	196		20	
	197	Speaker C Paging	21	
	198		22	
	199	ar maso A fylne CD; annoghro	23	
	200	OPEN Sall of the work ason		
	201	Route Advance Block 01		
	nauknoftelkani	System i.D. Number for The L		
	216	Route Advance Block 16		
	217	beatlist !		
		l l l l l l l l l l l l l l l l l l l		
	200	Tales Representation 1 of 1		
	223	Carlo Share at a desired south at a		
	224	OPEN		
	225	The second of th		
	226	Trunk Questing Concel		
	anid eb∳dilit ani	State on Speed Bial Properties		
	249	Calaganes		
	250	Not Uned and bessed ned all		
	251	DISA Password Set		
	252	DISA Password Reset		
	253	DISA Password Confirmation		
		DISK Password Confirmation		
	254	OPEN		
- 11	255	71830		
	301	Third Digit Table Number 01 -	-	
	ſ	Truck Group 32	-	
	304	Third Digit Table Number 04 — 2-digit Numbering Pla entered.		ly be
	401			
		Closed Number Block 01		
	,	Closed Number Block 16		
	416	- BO quosid shurtl }	801	
	501 502	VRS Voice Message Record/Veri (Voice Prompt, Automated Atten Voice Mail Message Set		
		Voice Mail Message Set		
	503	Voice Mail Message Cancel		
		and the same of th		
		Not Used		
		Specified Station Acress Code		
1				
1				
1				

GENERAL INFORMATION - ACCESS CODE (1-DIGIT) ASSIGNMENT

This Memory Block allows assignment of a 1-digit number as an Access Code or station number.

o MIC

7

(Dial Pad)

ICM

ACCESS CODE (2-DIGIT) ASSIGNMENT

System	CO Line	Data No.
1	1	47

OPERATION:

1. Go off-line.

2. Enter: Mode System LKI

Sub-Mode CO Line LK:

Data No.

Dial No.

Dial No.

Dial No.

00~99.*. # Function No.

4 7: 2DG 00 = 000

TIME DISPLAY

3. Enter data using the dial pad.

Example: Enter 030 (Call Forward) on dial 11 using dial pad.

Dial pad 0 ~ 9 : To enter data.

Data: Function Number: 000~132, 176~199,201~216, 250~253, 401~416, 501~502.

Dial Number: 0~9, *, # (LNR/SPD, *, #)

- Press the TRF key, data of the next Dial No. is displayed successively.*
- 5. Dial 00.
- 6. Press the TRF key, next data is displayed.
- 7. Pressing the TRF key will write the selected data and advance to Memory Block 1-1-48 (Access Code (3-Digit) Assignment).
- 8. Press the SPKR key to go back on-line.
 - The order of Dial No. to be displayed.
 11~19, 10
 - → 21~29,20
 - → 91~99,90
 - → 01~09,00

NOTES:

- The assigned Access Code can be dialed after lifting the handset or after the SPKR key is pressed.
- Select options from the list of function numbers in Memory Block 1-1-46 and assign to an Access Code (from 00~99 including *, and #) to each selected function.
 - When a function is assigned a 1-digit Access Code, 2-digit Access Codes with the same first digit become invalid (i.e., if a function is assigned to Access Code 5, Access Codes 50~59, 5*, and 5# cannot be used.)
- A Station Number is not assigned in this Memory Block.
- To enter # or * as part of the Access Code: Press LNR/SPD, then # or *.
- All items except Function No. 001 (Station Number) in 1-digit Assignment are valid in this Memory Block.

Additional Programming

	Sorge's A Year	Data	System Dat	
Mode	Sub-Mode	No.	Required	May Be Required
System (LK 1)	CO Line (LK 1)	46	870	88

(Continued on next page.)

ACCESS CODE (2-DIGIT) ASSIGNMENT (continued)

System	CO Line	Data No.
1	1	47

rasi S.H	Side and made	Default	Olim o	I	Default
Dial No.	Function No.	Function Name	Dial No.	Function No.	Function Name
00 ~ 39	bas 000 abula	Not Useu 1 month about	5 *	074	Answering Zone/Group Paging
3*,3#	000	Not Used	5 *	079	Answering Speaker/Group Paging
40	031	DND Set Se	60	049	Volume Control
11	030	Call Forward All Call Set	61 ~ 67	000	Not Used
2	bosu 032 000 00	Call Forward All Cull/DND Cancel	68	057	Intra-Tenant Call Pickup
3 11 6	024	Call Forward No Answer Set	69	-058	Night Chime Call Pickup
4	025	Call Forward No Answer Cancel	6 *	066	CO/PBX Call Pickup
5	000	Call Forward Busy Set	6 #	027	ICM Call Pickup alab sada
6	000	Call Forward Busy Cancel	70	103	Trunk Group 03
7	033	Call Forward All Calls Set from	71	104	Trunk Group 04
		Destination	72	105	Trunk Group 05
8	034	Call Forward All Call Cancel from Destination	73	106	Trunk Group 06
9	000	Not Used	74	107	Trunk Group 07
	047	Call Park System Transfer	75	108	Trunk Group 08
	048	Call Park System Answer	76	090	Station Speed Dial Program (SLT
0	000	Emergency All Call Paging	77	095	Station Speed Dial (Use)
1	070	Internal Zone Paging	78	880	Trunk Queuing Set
2	071	Group A Paging	79 81 .OV	089	Trunk Queuing Cancel
3	072	Group B Paging	7 *,7 *	000	Not Used .00 IniCi
4	073	Group C Paging	80 ~ 89	000	Not Used A R.R.T. add anoth
5	075	External/All Paging	8 *. 8 *	000	Not Used III only goldson
5	076	Speaker A Paging	90 ~ 99	000	Not Used Code (Code (A code)
Zi yali	077	Speaker B Paging	9 *. 9 *	000	Press the SPETE best son
B B	078	Speaker C Paging	00~00	000	Not Used to rebro adT
9	081	Internal/External All Paging			21-29, 20

GENERAL INFORMATION - ACCESS CODE (2-DIGIT) ASSIGNMENT

This Memory Block allows assignment of a 2-digit number as an Access Code.

ACCESS CODE (3-DIGIT) ASSIGNMENT

System	CO Line	Data No.
ISSA (INDICA)	adod sear	48

OPERATION:

1. Go off-line.

TIME

- MIC Enter: Mode LK 1 System ICM A Sub-Mode CO Line LK I Data No. 4 8 (Dial Pad) Third Digit Table No. Dial No. 01-04 $0 \sim 9$ Function Data No. Title No. 8: JDG (0) 0.00
- Enter option using the dial pad.
 Example: Enter 101 (Trunk Group 01) on Table No. 01.

DISPLAY

· To move cursor.

Dial pad 0 ~ 9 : To enter data.

. LNR + *, #.

Data: Table No. Function No.

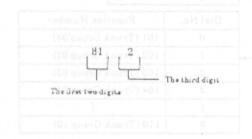
01~04 0~9,*,# 000~132,176~199,
201~216,250~253,
401~416,501~502

Default All Dial 000 (Not Used)

- Press the TRF key, numbers 2~9 and 0 are displayed successively.
- 5. Dial 04.
- 6. Press the TRF key, next data is displayed.
- Pressing the TRF key will write the selected data and advance to Memory Block 1-1-49.
- 8. Press the SPKR key to go back on-line.

NOTES:

- 1. The assigned Access Code can be dialed after lifting the handset or after the SPKR key is pressed.
- Select options from the list of function numbers and assign to a 3-digit Access Code.
 - When a function is assigned a 1-digit Access Code, 3-digit Access Codes with the same first digit become invalid (i.e., if a function is assigned to Access Code 5, Access Codes 50~59, 5*, and 5# or 5XX cannot be used.)
- A Station Number is not assigned in this Memory Block.
- To enter # or * as part of the Access Code: Press LNR/SPD, then # or *.
- All items except function number 001 (Station Number) in 1-digit Assignment are valid in this Memory Block.
- Four groups of Access Codes can be used (0~9, * and # on four Tables).
- Before using this function, assign function numbers 301~304 (table number for third digit) in Memory Block 1-1-47 (Access Code 2-Digit Assignment).



* Additional Programming

		Data	System Data		
Mode	Sub-Mode	No.	Required	May Be Required	
System (LK 1)	CO Line (LK 1)	46			
System (LK 1)	CO Line (LK 1)	47			

s lo los markes (Continued on next page.)

ACCESS CODE (3-DIGIT) ASSIGNMENT (continued)

System	CO Line	Data No.
1	1	48

NOTES:

- Assign function number 301 (Third Digit Table Number 01) to 81. (Make the assignment using Access Code (2-digit assignment).)
- The third digit number automatically corresponds to one of the numbers (00~09) in Table 01. Set the appropriate function number.

Example: To set Access Code 812 for Trunk Groups 02.

Refer to Memory Block: 1-1-47 and all

Dial 81 2

① Numbering Plan (2-digit)

Dial No. Function Number

81 301 (3rd dgt Table No. 01)

82 302 (3rd dgt Table No. 02)

83 303 (3rd dgt Table No. 03)

84 304 (3rd dgt Table No. 04)

② Numbering Plan (3-digit)

3rd dgt Table No. 01

Dial No. Function Number

0 101 (Trunk Group 01)

2

3

System Data				
May Be Required				

. [oboN			
			lgma		
			lgma	Ex.	
				Ex.	
				Ex	

GENERAL INFORMATION - ACCESS CODE (3-DIGIT) ASSIGNMENT

This Memory Block allows assignment of a 3-digit number as an Access Code.

102 (Trunk Group 02)

103 (Trunk Group 03) 104 (Trunk Group 04)

110 (Trunk Group 10)

NETWORKING TRUNK GROUP/ROUTE ADVANCE ASSIGNMENT

System	CO Line	Data No.
10 011001	no Araco	49

OPERATION:

- Go off-line.
- 2. Enter: Mode

System

LK 1 • MIC

Sub-Mode CO Line

LK I

Data No.

(Dial Pad)

Closed Number
Block
01~16
Data No.

Trunk Group (1 - 32)

Route Advance Block (1 ~ 16)

4 9: 01- =- RT TIME DISPLAY

 Use the dial pad to enter the Trunk Group or Route Advance Block to be used.

. # ---

To move cursor.

Dial pad 0 ~ 9

To enter data.

HOLD

key:

To clear all data.

Default Not Specified

- Pressing the TRF key will write the selected data and advance to Memory Block 1-1-50 (CO/PBX Outgoing Digit Add Assignment).
- Press SPKR to go back on-line.
- Additional Programming

		Data	System Data		
Mode	Sub-Mode	No.	Required	May Be Required	
System (LK 1)	CO Line (LK 1)	30			
CO/PBX (LK 3)		03		-	

NOTES:

Function Number 101~132 (Trunk Group 1~32 respectively) or 201~216 (Route Advance Block 1~16 respectively) is assigned to Tie Line blocks 1~16.

nispost beriupad

GENERAL INFORMATION - NETWORKING TRUNK GROUP/ROUTE

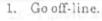
ADVANCE ASSIGNMENT

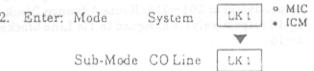
This Memory Block is used to assign the number of the Trunk Group to be used when connecting an Electra Professional Level II System or to CO/PBX/CTX lines.

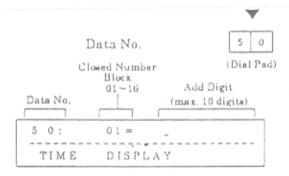
CO/PBX OUTGOING DIGIT ADD ASSIGNMENT

System CO Line Data No. 1 1 50

OPERATION:





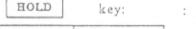


3. Use the dial pad to enter the digits to be added.





: To enter Add Digits.



: To clear all data.



- Pressing the TRF key will write the selected data and advance to Memory Block 1-1-51 (CO Line First Ringing Pattern Selection).
- 5. Press the SPKR key to go back on-line.
- M Additional Programming

		Data	System Data	
Mode	Sub-Mode	No.	Required	May Be Required

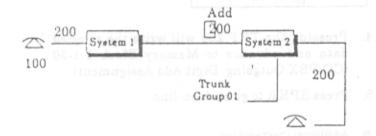
Example:

To assign the following in System Programming:

System 2
 Access Code No. 46 (1-digit) 2 → 082 (Intraoffice Terminating Call)

NOTES:

- System 1
 Access Code No. 46 (1-digit) 2 → 082 (Intraoffice Terminating Call)
- System 1 Access Code No. 46 (1-digit) 2 → 101 (Trunk Group 01)
- System 1
 Tie Line Assignment 49 Block 01 → 101 (Trunk Group 01)
- System 1 → System 1 → Assign 2
 Memory Block 50 (1-digit) Block 01 → Assign 2
- System 2 Trunk Group 00) Trunk Group 1 01 → 2 (Add Assign)



GENERAL INFORMATION - CO/PBX OUTGOING DIGIT ADD ASSIGNMENT

This Memory Block is used to allow an additional 10 digits (maximum) to be specified when a Trunk within the Trunk Group or Route Advance Block (assigned in Memory Block 1-1-49), is seized and a number is dialed.

o MIC

ICM

CO LINE FIRST RINGING PATTERN SELECTION

System CO Line Data No.

OPERATION:

- Go off-line.
- 2. Enter: Mode System LK1

Sub-Mode CO Line LK1

Data No. 5 1 (Diel Pad)

Setting Data

Data No. Title Page No.

6 1: CO PTN A 11

TIME DISPLAY

- Press the corresponding CO/PBX line key to change data option.
 - To change Ring Pattern A to Ring Pattern B, press CO/PBX line key 2.

RECALL key

: Next page.

FNC key

: Previous page.

Page 1

LK1	LK 2	LK 3	LK 4
Ring Pattern	Ring Pattern B	Ring Pattern C	Ring Pattern D
LK 5	LK 6	LK7	LK 8
Ring Pattern E	Ring Pattern	Ring Pattern G	Ring Pattern

CO/PBX line keys

Default

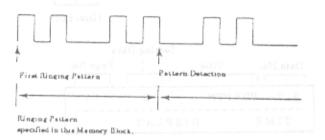
Page 2

	LK 3	LK 4
NIL	A 18 A 14	
LK 5 LK 6	LK 7	LK 8

- Pressing the TRF key will write the selected data and advance to Memory Block 1-1-52 (PBX Line First Ringing Pattern Selection).
- 5. Press the SPKR key to go back on-line.

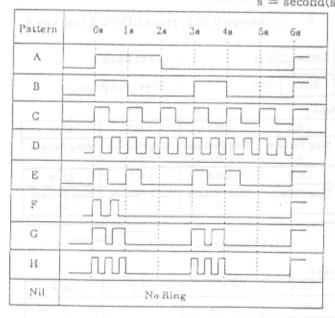
NOTES:

- After an actual ringing pattern is detected, ringing in the pattern specified in Memory Block 1-1-56 (CO/PBX Ringing Pattern Selection) is used.
- Do not program this Memory Block if Memory Block 1-1-59 (Synchronous Ring Selection) is assigned YES.



Ring patterns are as follows:

s = second(s)



M Additional Programming

Mode & L	as and address	Data	System Data	
	Sub-Mode	No.	Required	May Be Required
System (LK 1)	CO Line (LK 1)	56	STEUR Key	Press the

GENERAL INFORMATION - CO LINE FIRST RINGING PATTERN SELECTION

This Memory Block is used to select an initial ringing pattern for incoming calls on a CO Line.

PBX LINE FIRST RINGING PATTERN SELECTION

System CO Line Data No. 1 1 52

OPERATION:

- Go off-line.
- 2. Enter: Mode System LK1 MIC

 Sub-Mode CO Line LK1

Data No.

5 2

Default

Setting Data

Data No. Title Page No.

5 2: PBX PTN B 11

TIME DISPLAY

- Press the corresponding CO/PBX line key to change data entry.
 - To change B to F, press CO/PBX line key 6.

RECALL key : Next page.

FNC key : Previous page.

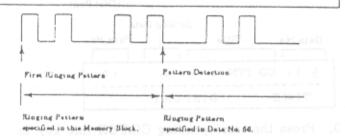
Page 1 LKI LK 2 LK 3 LK 4 Ring Pattern Ring Pattern Ring Pattern Ring Pattern В A C D LK 5 LK 6 LK 7 LK 8 Ring Pattern Ring Pattern Ring Pattern Ring Pattern E

- Pressing the TRF key will write the selected data and advance to Memory Block 1-1-53 (Tie/DID Line Delay Ring Pattern Selection).
- 5. Press the SPKR key to go back on-line.

CO/PBX line keys

NOTES:

- After an actual ringing pattern is detected, ringing in the pattern specified in Memory Block 1-1-56 (CO/PBX Ringing Pattern Selection) is used.
- Do not program this Memory Block if Memory Block 1-1-59 (Synchronous Ring Selection) is assigned YES.



Ring patterns are as follows:

Pattern	0.0	1.6	24	3#	4 m	5s	6в
A							
В					二		J
c D			П			П	T
D	N	V	N	M	M	W	Ţ
Ε			ad (S)		in	8 67	od of s
F	LIL.	1					j
G .				П	001	Admi	
11		n_		1			100
Nil		1	lo Rin	ıg			TIM

M Additional Programming

	W-1		Data	System	System Data	
	Mode	Sub-Mode	No.	Required	May Be Required	
4	System (LK 1)	CO Line (LK 1)	56	a First Rine	LUI X 83)	

GENERAL INFORMATION - PBX LINE FIRST RINGING PATTERN SELECTION

This Memory Block is used to select an initial ringing pattern for incoming calls on a PBX Line.

TIE/DID LINE DELAY RING PATTERN SELECTION

System	CO Line	Data No.
PAGENCEL		53

OPERATION:

1. Go off-line.

 MIC 2. Enter: Mode System LKI ICM V

Sub-Mode CO Line

Data No.

(Dial Pad) Setting Data Page No.

LKI

Data No. Title 5 3: TLI PTN TIME DISPLAY

- 3. Press the corresponding CO/PBX line key to change data option.
 - To change D to F, press CO/PBX line key 6.

RECALL key

: Next page.

FNC key

: Previous page.

Page 1

LK 1	LK 2	LK 3	1280 LK 4
Ring Pattern	Ring Pattern	Ring Pattern	Ring Pattern,
A	B	C	
LK 5	LK 6	LK 7	LK8
Ring Pattern	Ring Pattern	Ring Pattern	Ring Pattern
E	F	G	

CO/PBX line keys

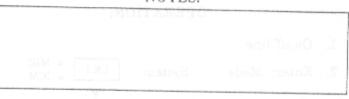
Default

Page 2

LK I	LK 2	LK 3	LK 4
NIL			
LK 5	LK 6	LK 7	LKd

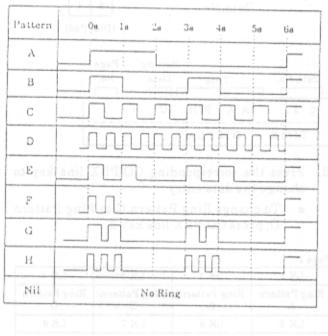
- 4. Pressing the TRF key will write the selected data and advance to Memory Block 1-1-54 (Automated Attendant Transfer Ring Pattern).
- Press the SPKR key to go back on-line.

NOTES:



Ring patterns are as follows:

s = second(s)



Additional Programming

Mode	Sub-Mode	Data	System Data		
		No.	Required	May Be Required	
System (LK 1)	CO Line (LK 1)	07	ART only	Research	
System (LK 1)	CO Line (LK 1)	34	samevin b.	6 6365	

GENERAL INFORMATION - TIE/DID LINE DELAY RING PATTERN SELECTION

This Memory Block is used to select a ringing pattern for incoming calls on a tie line.

AUTOMATED ATTENDANT TRANSFER RING PATTERN

System	CO Line	Data No.
1	1	54

OPERATION:

- 1. Go off-line.
- 2. Enter: Mode

System

LK 1 • ICM

Sub-Mode CO Line

LK 1

V

Data No.

(Dial Pad)

Setting Page

Data No. Title Data No.

5 4: A A PTN C 1 1

TIME DISPLAY

- Press the corresponding CO/PBX line key to change the data entry.
 - To change Ring Pattern C to Ring Pattern D, press CO/PBX line key 3.

Page 1

LK 1	LK 2	LK3	LK 4
Ring Pattern	Ring Pattern	Ring Pattern	Ring Pattern
A	B	C	D
LK 5	LK 6	LK 7	LK 8
Ring Pattern	Ring Pattern	Ring Pattern	Ring Pattern
E	F	G	

CO/PBX line keys

Default

Page 2

LK 1	LK 2	LKJ	LK 4
NIL		gonta	nergerf land
LK 5	LK 6	LK7	LK 8

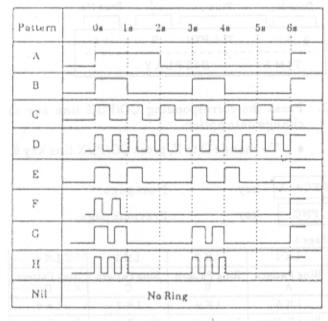
- Pressing the TRF key will write the selected data and advance to Memory Block 1-1-56 (CO/PBX Ringing Pattern Selection).
- 5. Press the SPKR key to go back on-line.

NOTES:

- If no ringing pattern is specified in this Memory Block, there will not be a ring tone.
- 2. Ringing patterns are shown below.

Ring patterns are as follows:

s = second(s)



M Additional Programming

		Data	System Data	
Mode	Sub-Mode	No.	Required	May Be Required
12.1.	norv Block it	sM of	d advaince	data alab

GENERAL INFORMATION - AUTOMATED ATTENDANT TRANSFER RING

PATTERN

This Memory Block is used to specify the ringing pattern sent to the Multiline Terminal when an incoming call is received at the Automated Attendant and transferred.

CO/PBX RINGING PATTERN SELECTION

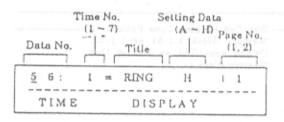
OPERATION:

- 1. Go off-line.
- 2. Enter: Mode System LK1 MIC

 Sub-Mode CO Line LK1

 Data No. 5 6

 (Dial Pad)



- Press the corresponding CO/PBX line key to change data option.
 - To change Ring Pattern H on Time No. 1 to Ring Pattern G, press CO/PBX line key 7.

RECALL

key

: Next page.

FNC

key

: Previous page.

Page 1

LK 1	LK 2	LK 3	LK 4
Ring Pattern	Ring Pattern	Ring Pattern	Ring Pattern
A	B	C	D
LK 5	LK 6	LK 7	LK 8
Ring Pattern	Ring Pattern	Ring Pattern	Ring Pattern
E	F	G	H

CO/PBX line keys	Default

Page 2

LK 1	LK 2	LK 3	LK 4
NIL			
LK 5	LK 6	LK 7	LK 8

System	CO Line	Data No.
PATTIERNS	BY HINGING	56

- Pressing the TRF key will write the selected data and advance to the next Ring Pattern.
- After all Ring pattern data has been entered, pressing the TRF key will write the selected data and advance to Memory Block 1-1-57 (CO/PBX Prepause Timer Selection).
- Press the SPKR key to go back on-line.

1,50 --- 2.50 sec.

NOTES:

- Ringing Tone for calls on CO/PBX lines are sent to the telephones as is.
- 2. Ringing Tones, A~H are available.
- Continuous ringing time is divided into seven ranges (1~7). Refer to the Ringing Time Range Table on the following page.
- If a ringing pattern is not specified in this Memory Block, a ringing tone that has been specified in 1-1-51 or 1-1-52 will be used, even after the continuous ringing time is detected.

Additional Programming

		Data	System Data	
Mode	Sub-Mode	No.	Required	May Be Required
System (LK 1)	CO Line (LK 1)	51	THEO	
System (LK 1)	CO Line (LK 1)	52		

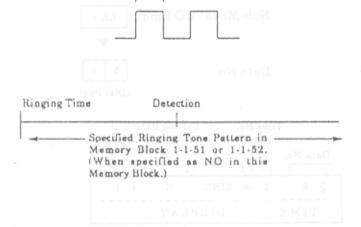
(Continued on next page.)

CO/PBX RINGING PATTERN SELECTION (continued)

System	CO Line	Data No.
1	1	56

Defaults for Continuous Ringing Time are as follows:

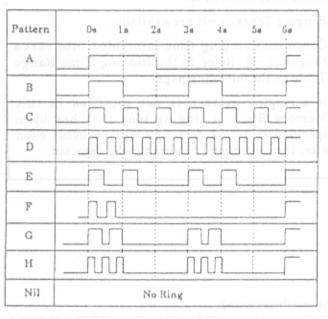
Default Default				
Time No.	Continuous Ringing Time Range	Ringing Time Pattern		
1	0.10 - 0.30 sec.	-axaHoo		
2	0.30 - 0.45 sec.	PresD the S.P.		
3	0.45 - 0.65 sec.	E		
4	0.65 - 0.90 sec.	E		
5	0.90 - 1.50 sec.	В		
6	1.50 2.50 sec.	A		
7	over 2.5 sec.	A		



Continuous Ring Time

Patterns for ringing tones are as follows:

s = second(s)





GENERAL INFORMATION - CO/PBX RINGING PATTERN

SELECTION

This Memory Block is used to select a continuous ringing pattern (A~H) for incoming calls on a CO/PBX line.

CO/PBX PREPAUSE TIMER SELECTION

System	CO Line	Data No.
BINGING	HROMOU	57

OPERATION:

- 1. Go off-line.
- o MIC Enter: Mode System LK 1 W Sub-Mode CO Line LK I V Data No. (Dial Pad) Title Setting Data Data No. Page No. 5 7: PRE PAUSE 15
- Press the corresponding CO/PBX line key to change data option.

- TIME

 To change NONE to 1 sec., press CO/PBX line key 2.

DISPLAY

Page 1

LK 1	LK 2	LK3	LK 4
None	1 sec.	2 sec.	З нес.
LK 5	LK 6	LK 7	LK 8
, 4 agc.	5 nec.	б нес.	7 sec.

Page 2

.ammmina

LK 1	LK 2	LK 3	LK 4
8 вес.	9 лес.	10 Aec.	ll sec.
LK 5	LK 6	LK 7	LK 8
2 вес.	13 sec.	14 mec.	15 sec.

CO/PBX line keys



- Pressing the TRF key will write the selected data and advance to Memory Block 1-1-59 (Synchronous Ringing Selection).
- 5. Press the SPKR key to go back on-line.

NOTES:

	NOTES);	77900	1
NOI . LXI				
procession of the second				
W				
		Data No.		

Press the corresponding COTEX line key to thenge data option.

reasing the TRE key will write the selected air and advance to Memory Block 1-1-60 8-Digit Matching Table Assignment).

■ Additional Programming

Mode		Data No.	System	Data
es years	Sub-Mode		Required	May Be Required
			The second business of the second	

GENERAL INFORMATION - CO/PBX PREPAUSE TIMER SELECTION

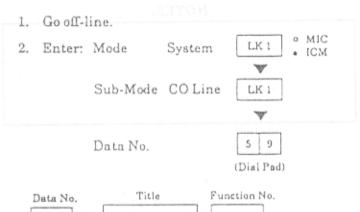
This Memory Block allows an assignment of a pause time to be set before dialed digits can be sent over a CO/PBX line (after the trunk is seized by a system user).

59:

SYNCHRONOUS RINGING SELECTION

	System	CO Line	Data No.
Г	1	1	59

OPERATION:



NOTES:

Synchronous Ringing is supported only with the following:

COI-F(8)-20 KTU COI-F(4)-20 KTU ESI-F(8)-21 KTU SLI-F(8G)-21 KTU

 Synchronous Ringing does not apply to incoming DID calls, off-hook ringing calls, or CO/PBX ring transfer calls.

Press the corresponding CO/PBX line key to change data option.

SYNCHRONUS

TIME

 To change YES to NO, press CO/PBX line key 2.

DISPLAY

YS

LKS	LAG	LA I	LAG
LK 5	LK 6	LK 7	LK 8
YES	NO		
LK1	LK 2	LK 3	LK 4

CO/PBX line keys Default

- Pressing the TRF key will write the selected data and advance to Memory Block 1-1-60 (8-Digit Matching Table Assignment).
- 5. Press the SPKR key to go back on-line.
- M Additional Programming

yatam Data	Sub-Mode	Data No.	System Data	
Mode			Required	May Be Required

9 ge 2

LK 1 LK 2 LK 3 LK 4

8 mac. 9 mc. 10 mc. 11 mc.

LK 6 LK 6 LK 7 LK 6

12 mc. 13 mc. 14 mc. 15 mc.

Pressing the TRF key will write the selected data and advance to Mamory Black 1-1-55 (Evachrooms Ringing Selection)

Press the SPKE key to go back on line.

GENERAL INFORMATION - SYNCHRONOUS RINGING SELECTION

Incoming CO/PBX calls can be programmed for Synchronous Ringing.

8-DIGIT MATCHING TABLE ASSIGNMENT

System	CO Line	Data No.
SA1 DYL	HULAM II	60

OPERATION:

- 1. Go off-line.
- 2. Enter: Mode

System

LK 1 • MIC

Sub-Mode CO Line

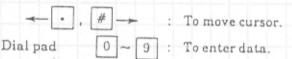
LK I

Data No.

6 0

	(Dial Pa	d
Data No.	Title	
<u>6</u> 0:	8 DIGIT TABLE	
00/00	= 911	

Use the dial pad to enter the data.



Data: "Matching Table:

00 ~ 15 (8-digit)

Dial Code: Dial Digit:

00 ~ 15 0 ~ 9, • #,

NANP = X, P, N

(Maximum eight digits)

HOLD key:

Data Clear

Operation Data:

(Move cursor to the left)

- Press the TRF key to write the selected data and advance to the next Dial Code. After all Dial Codes have been entered, pressing the TRF key will advance to Memory Block 1-1-61
- 5. Press the SPKR key to go back on-line.

D	o	Ce	5.1	ŀ

	Detaut		
Matching Table	A Dial Code	Setting Data	
00	00	911	
	00	0	
12	00 800	976	
13	00	1800	
14	00	LX	
15	00	X	

Operation Date in	Dial Number	Operation
Х	0-9,	LNRVSPD key + 7
Pind an	0-1	LNRVSPD key + 8
N	2 - 9.	LNR/SPD key + 9
		LNR/SPD key + *
#	# YAS	LNR/SPD key + #

NOTES:

- There are 16, 8-Digit Matching Tables. Each 8-Digit Matching Table contains 16 Dial Codes. Each Dial Code can be assigned a maximum of eight digits, including *, #, X, P, and N.
- 2. NANP = North American Numbering Plan.

M Additional Programming

Mode	Sub-Mode	Data No.	System Data		
			Required	May Be Required	
System (LK 1)	CO Line (LK 1)	61			
Telephone (LK 4)		07			
Telephone (LK 4)	3100 ted	08	PBX line kays	00	

GENERAL INFORMATION - 8-DIGIT MATCHING TABLE ASSIGNMENT

This Memory Block is used to assign the outgoing dial digit for Code Restriction (except OCC Dial. Digit-Normal Dial). There are two ways to program this assignment: a) If the user dials a digit(s) and there is I a match, the system can allow free dialing or deny dialing by disconnecting. This is programmed in Memory Block 1-1-61 (8-Digit Matching Table for Class Assignment). b) If the user dials a digit(s) and there is not a match, the system can allow free dialing or deny dialing by disconnecting. This is programmed in Memory I Block 1-1-65 (Class All/Deny Selection).

2-75

Cla

8-DIGIT MATCHING TABLE TO CLASS ASSIGNMENT

System	CO Line	Data No.	
1	1	61	

OPERATION:

- 1. Go off-line.
- 2. Enter: Mode

System

o MIC LK 1 ICM V

Sub-Mode CO Line

LK 1 V

Data No.

6 1 (Dial Pad)

Class No. Table No. 01-14 00-15 Data No. Title Setting Data

6 1: CLS TIME DISPLAY

3. Press the corresponding CO/PBX line key to change data option.

Data: Class: anishnes a 01~14 dainM irgid.8

8-digit matching table: 00-15 * 0 laid doad

eight digits, including . A. X. P. and N

Class 00 and 15 cannot be programmed. WAV

Class 00: No Restriction

Class 15: Restricted Outgoing

Setting Data: YS

= Allow

NO = Deny

NON = Not Used

LK 1	LK2	LK 3	LK 4
Non	Allow (Y6)	Deny (NO)	
LK 5	LK 6	LK 7	LK 8

CO/PBX line keys

Default

- 4. Pressing the TRF key will write the selected data and advance to the next Table.
- 5. Press the TRF key to advance to Memory Block 1-1-62 (System Speed Dial Override by Class Selection).
- 6. Press the SPKR key to go back on-line.

NOTES:

Class 00 and 15 cannot be programmed.

Class 00: No Restriction

Class 15: Restricted Outgoing

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
01	Α									i i i i		D		,eY	D	D
02	Α							0			rstz	D		Α	D	D
J	Α										-	D	D	A	D	D
4	A										110			A	D	D
5	۸						rait	ile	d				lai		O COL	āч
6	Α						(8	100	0 /				sibo	03	in la	o T
Ţ	Α															
В	Α				M.C.	9. B.		500	9.9	20	9	BHI	96		SU.	
9	Α	1	100		W/N	0.0	T			19-10-				,_	-9-	
0	Α												Treese			
1	٨		Unit to	50 S	DVE	0.0					-			7	1 12	
12	Α		in 2	6-8	si		00		io-l	ie"	311	ini	dø.	M	1.0	l n (
3	Α				5	-	00				tes	00	Lai	a.		
4	A			18		.0	-0				Ji)	ĮŪ,	is	α,		- Forest

Additional Programming

		Data	System Data		
Mode	Sub-Mode	No.	Required	May Be Required	
System (LK 1)	CO Line (LK 1)	60		Li neng	
Telephone (LK 4)		07			
Telephone (LK 4)	MOTTAM	80	ERAL IN	13(0)	

GENERAL INFORMATION - 8-DIGIT MATCHING TABLE TO CLASS ASSIGNMENT

Each 8-Digit Matching Table can be programmed as Allow or Deny on a per class basis. Class 00 and 15 are fixed (non programmable). Classes 01 ~ 14 can be programmed.

SYSTEM SPEED DIAL OVERRIDE BY CLASS SELECTION

System	CO Line	Data No.
ic dilli	SULT ULL	62

OPERATION:

- Go off-line.
- 2. Enter: Mode

System

LK 1 • ICM

Sub-Mode CO Line

LK 1

Data No.

G 2 (Dial Pad)

Class

Ol ~ 14 Setting Data

6 2: SPDOVR (01) = YS

TIME DISPLAY

Data:

Class: 01 ~ 14

- Press the corresponding CO/PBX line key to change data option.
 - To change Not Restricted to Restricted, press CO/PBX line key 1.

LK i	LK2	LK 3	LK 4
Restricted (NO)	Not Restricted (YS)		
LK 5	LK 6	LK 7	LK 8

CO/PBX line keys



Default

Setting Data: YS = Restricted

NO = Not Restricted

- 4. Press the TRF key to advance to the next
- 5. After all data has been entered, pressing the TRF key will write the selected data and advance to Memory Block 1-1-63 [Hold Recall Time Selection (Exclusive)].
- 5. Press the SPKR key to go back on-line.

NOTES:

8-Digit Matching Table

Default:

		00	
	0.1		1
	01	N	
	02	N	
	03	N	Т
	04	N	1.0
	05	N	
	06	И	
	07	N	
Class	80	N	
	09	N	
	10	N	
	11	N.	

Additional Programming

Mode	Soll-ne Xbad		System	Data
mode	Sub-Mode	No.	Required	May Be Required
System (LK 1)	CO Line (LK 1)	18		-

13

GENERAL INFORMATION - SYSTEM SPEED DIAL OVERRIDE BY CLASS SELECTION

This Memory Block allows System Speed Dial restriction to be assigned for each restricted Class.

2-27

HOLD RECALL TIME SELECTION (EXCLUSIVE)

System CO Line Data No. 1 1 63

OPERATION:

- Go off-line.
- 2. Enter: Mode

System

LK 1 • ICM

Sub-Mode CO Line

LK I

W

Data No.

6 3

(Dial Pad)

Data No.	Title	Setting Date
<u>G</u> 3:	HOLD-RECL	1.0
TIME	DISPLAY	

- Press the corresponding CO/PBX line key to change data option.
 - To change 1 min. to 1.5 min., press CO/PBX line key 3.

LK 1	LK 2	LK 3	LK 4
0.5 min.	I min.	1.5 min.	2 min.
LK 5	LK 6	LK 7	LK 8
3 min.	5 min.	8 min.	No Limit

CO/PBX line keys



- Pressing the TRF key will write the selected data and advance to Memory Block 1-1-64 (DSS/BLF Console Transfer/Camp-On Recall Timer Selection).
- 5. Press the SPKR key to go back on-line.
- M Additional Programming

	83	Data	System	Data	
Mode	Sub-Mode	No.	Required	May Be Required	
System (LK 1)	CO Line (LK 1)	03			
System (LK 1)	ICM (LK 2)	23			

NOTES:

		ine.	L Cooff
-			

Data No. Tillo 01-14 Settine Cate

0 2: SPDOVE (011 a YS

TIME DISPLAY

Press the corresponding CO/PBX line key to change data option.

To change Not Restricted to Restricted, press CO/PBX line key 1.

Setting Date: YS = Restricted
NO = Not Restricted

After all date has been entered, pressing the TMF key will write the selected data and advance to Memory Block 1-1-60 (Hold Recall Time Selection (Exclusive)).

GENERAL INFORMATION - HOLD RECALL TIME SELECTION (EXCLUSIVE)

This Memory Block specifies the time interval for Exclusive Hold Recall tone. If "No Limit" is selected, no Exclusive Hold tone is provided.

DSS/BLF CONSOLE TRANSFER/CAMP-ON RECALL TIMER SELECTION

System	CO Line	Data No.
ide Macin	Valua ac	64

OPERATION:

- 1. Go off-line.
- 2. Enter: Mode System LK1 MIC ICM

 Sub-Mode CO Line LK1

 Data No. 6 4

Data No.	Title	Setting Data
6 4:	DSS RECL	1.0
TIME	DISPLAY	

- Press the corresponding CO/PBX line key to change data option.
 - To change 1 min, to 1.5 min., press CO/PBX line key 3.

LK 1	LK 2	LK 3	LK 4
0.5 min.	1 min.	1.5 min.	2 min.
LK 5	LK 6	LK 7	LK 8
3 min.	5 min.	8 min.	10 min.

- Pressing the TRF key will write the selected data and advance to Memory Block 1-1-65 (Class Allow/Deny Selection).
- 5. Press the SPKR key to go back on-line.
- M Additional Programming

W1-		Data	System Data	
Mode	Sub-Mode	No.	Required	May Be Required
System (LK 1)	DSS (LK 6)	01		
System (LK 1)	CO Line (LK 1)	11		
System (LK 1)	CO Line (LK 1)	12		
System (LK 1)	PBR/Misc. (LK 8)	08		

NOTES:

 When a station without a DSS/BLF Console assigned to it transfers or camps on a call to a station, and the call goes unanswered, the call recalls using Memory Block 1-1-12 (Station Transfer/Camp-On Recall Timer Selection).

Allow CYS (Deny 190)
LKS LKS LKS LKS
COMPRESSION AND ADDRESS AND A

dots and advance to Memory Block 1-1-06 (8-Digit Matching Table to Mormal Dial Assignment).

Assignmentl.

Press the SPECE key to go back on line.

estreall besiness on the state of the state

GENERAL INFORMATION - DSS/BLF CONSOLE TRANSFER/CAMP-ON RECALL TIMER SELECTION

This Memory Block specifies the time interval before a Ring Transfer or Station Camp-On from a station with a DSS/BLF Console will recall back to the originating station if the call is not answered.

CLASS ALLOW/DENY SELECTION

System	CO Line	Data No.
1	1	65

OPERATION:

1. Go off-line.

2. Enter: Mode System LK 1 • MIC • ICM

Sub-Mode CO Line LK 1

Data No.

6 5

(Dial Pad)

Data No.		Title		01 ·	- 14	Function
					- 1	
<u>6</u> 5:	С	LASS		(0	1) :	× YS
TIM	Ε	DISPL	ΑΥ			

Data: Class: 01 ~ 14

Press the corresponding CO/PBX line key to change data option.

LK 1	LK 2	LK 3	LK 4
Allow (YS)	Deny (NO)		
LK 5	LK 6	LK 7	LK 8

CO/PBX line keys

Default	Class 01~04 Allow (Yes) Class 05~14 Deny (No)

- Pressing the TRF key will write the selected data and advance to Memory Block 1-1-66 (8-Digit Matching Table to Normal Dial Assignment).
- 5. Press the SPKR key to go back on-line.

Additional Programming

Mode		Data	System Dat	
	Sub-Mode	N -	Required	May Be Required

data and advance to Memory Block 1-1-65 (Class Allow/Dony Selection). Press the SPKR key to go back on-line.

System (LK 1) CO Line (LK 1) [1]
System (LK 2) CO Line (LK 1) [1]
System (LK 2) CO Line (LK 1) [2]
System (LK 2) PUCM(ac. 08

GENERAL INFORMATION - CLASS ALLOW/DENY SELECTION

This Memory Block allows the assignment of Allow or Deny for the Class Assignment tables. This assignment is used when there is no match in the 8-Digit Matching Table or if numbers overlap (duplicate numbers with I different Allow/Deny designations within the same Class of Service Table) in the 8-Digit Matching Tables.

On

USED

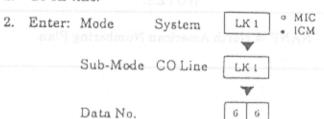
8-DIGIT MATCHING TABLE TO NORMAL DIAL ASSIGNMENT

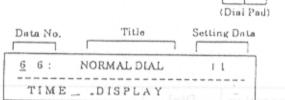
System	CO Line	Data No.
MADIREAGU	OCCTAB	66

NOTES:

OPERATION:

1. Go off-line.





Press the corresponding CO/PBX line key to change data option.

LK 1	LK 2	LK 3	LK 4
Table 00	Table 01	Table 02	Table 03
LK 5	LK 6	LK 7	LK 8
Table 04	Table 05	Table 06	Table 07

LK 1	LK 2	LK 3	LK 4
Table 08	Table 09	Table 10	Table 11
LK 5	LK 6	LK 7	LK 8
Table 12	Table 13	Table 14	Table 15

CO/PBX line keys

Default	Table 00~14 Use Table 15 Unused
---------	------------------------------------

RECALL key :

Next page.

FNC

key

Previous page.

- Pressing the TRF key will write the selected data and advance to Memory Block 1-1-67 (OCC Table Assignment).
- 5. Press the SPKR key to go back on-line.

10,900 00 00

COLED

Data

33

Off

UNUSED

 Mode
 Sub-Mode
 Data No.
 System Data

 System (LK 1)
 CO Line (LK 1)
 60

 System (LK 1)
 CO Line (LK 1)
 61

sa sass no go ouch on this.

GENERAL INFORMATION - 8-DIGIT MATCHING TABLE

TO NORMAL DIAL ASSIGNMENT

This Memory Block is used to assign the 8-Digit Matching Table by class basis for normal dialing as used or lunused. If the 8-Digit Matching Table is assigned as unused, the system does not check during normal dialing leven if Memory Block 1-1-61 (8-Digit Matching Table to Class Assignment) is programmed.

OCC TABLE ASSIGNMENT

OPERATION:

1. Go off-line.

2. Enter: Mode System LK1

▼
Sub-Mode CO Line LK1

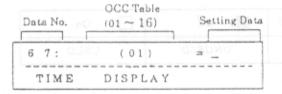
000 11000 00 21110

Data No.

(Dial Pad)

o MIC

ICM



3. Use the dial pad to change data option.

→ , # → : To move cursor.

Dial pad 0 ~ 9 : To enter data.

Data: OCC Table:

01~16

Setting Data:

0~9, * #,

NANP = X, P, N

(maximum 8 digits)

HOLD

key:

Set Data Clear

Operation Data:

	OCC Table 01 ~ 15 Blank Table 16 16 10XXX
--	--

- Press the TRF key to write the selected data and advance to the next OCC Table.
- After data for all OCC Tables has been entered, press the TRF to advance to Memory Block 1-1-68 (8-Digit Matching Table to OCC Table Assignment).
- 6. Press the SPKR key to go back on-line.

System	CO Line	Data No.
1	1	67

NOTES:

1. NANP = North American Numbering Plan

Operation Data	Dial Number	Operation
Х	0~9,*,#	LNR/SPD key + 7
P	0,1	LNR/SPD key + 8
N	2~9	LNR/SPD key + 9
0 pida 🍦	O side 1	LNR/SPD key + *
523	#	LNR/SPD key + #

DE .	Additional	Programming		adnayba b	dota an
(6.			Cinon	System Data	
	Mode	de Sub-Mode Data	Required	May Be Required	
-	Marie and American Street, or other Designation of the Control of		-		

GENERAL INFORMATION - OCC TABLE ASSIGNMENT

This Memory Block allows an OCC code (maximum of eight digits) to be assigned in this table. Up to 16 numbers can be assigned in this table.

8-DIGIT MATCHING TABLE TO OCC TABLE ASSIGNMENT

OPERATION:

- Go off-line.
- Enter: Mode

System

o MIC LK 1 ICM V

Sub-Mode CO Line

Data No.

(Dial Pad)

LK 1

OCC Table

Title 01 ~ 16 Function No. Data No. 6 8: 8DG OCC (0 1) 1 TIME DISPLAY

3. Press the corresponding CO/PBX line key to change data option.

Page 1

LK 1	LK 2	LK3	4
Table 00	Table 01	Table 02	Table 03
LK 5	LK 6	LK 7	LK 8
Table 04	Table 05	Table 06	Table 07

CO/PBX line keys

Page 2

LK 1	LK 2	LK 3	LK 4
Table 08	Table 09	Table 10	Table 11
LK 5	LK 6	LK 7	LK 8
Table 12	Table 13	Table 14	Table 15

RECALL

key:

Next Page

FNC

Default

key:

Previous Page

OCC Table 01 - 15 = All 8-Digit Matching Table Not Used

OCC Table 16

= 8-Digit Matching Table 00-14 Not Used 8-Digit Matching

Table 15 Used

System	CO Line	Data No.
TUTTUUT	ZPA I	68

- 4. Press the TRF key to write the selected data and advance to the next OCC Table.
- 5. After data for all OCC Tables has been entered, press the TRF to advance to Memory Block 1-1-69 (Tie Line Code Restriction Assignment).
- Press the SPKR key to go back on-line.

MOTEC.

 1 57	* TOAR SIE TO ST

Additional Programming

		Data No.	System Data	
Mode	Sub-Mode		Required	May Be Required
System (LK 1)	CO Line (LK 1)	60	awad awil 1886	uhm .
System (LK 1)	CO Line (LK 1)	66		
System (LK 1)	CO Line (LK 1)	67	ST. I VI	milet I

COLED	Class nosig	On about
Data	UNUSED	USED

GENERAL INFORMATION - 8-DIGIT MATCHING TABLE

TO OCC TABLE ASSIGNMENT

This Memory Block can be used to assign each of the 8-Digit Matching Tables to each of the OCC Code Tables.

TIE LINE CODE RESTRICTION ASSIGNMENT

OPERATION:

- 1. Go off-line.
- 2. Enter: Mode

System

LK1 • MIC

Sub-Mode CO Line

•

Data No.

6 9 (Dial Pad)

LK 1

Data No. Title Setting Data

6 9: TIE REST = YS

TIME DISPLAY

- Press the corresponding CO/PBX line key to change data option.
 - To change Restriction to No Restriction, press CO/PBX line key 1

LK 1	LK 2	LK 3	LK 4
No Restriction (NO)	Restriction (YS)		
LK 5	LK 6	LK 7	LK 8
a Data	Syates		

CO/PBX line keys

Default Restriction

- Pressing the TRF key will write the selected data and advance to Memory Block 1-1-70 (Code Restriction Class Assignment When Lockout is Set).
- 5. Press the SPKR key to go back on-line.
- M Additional Programming

			System Data	
Mode	Sub-Mode	No.	Required	May Be Required
System (LK 1)	CO Line (LK 1)	60		

System	CO Line	Data No.
1	1	69

NOTES:

 When Tie Lines are to be code restricted, the Access Code used to dial out of the distant system must be entered in front of the dialed number in the 8-Digit Matching Tables.

	4.26.
	Table 00
	15 X.3

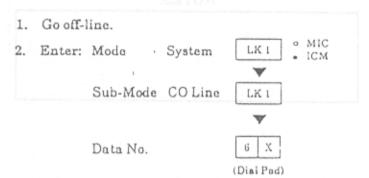
GENERAL INFORMATION - TIE LINE CODE RESTRICTION ASSIGNMENT

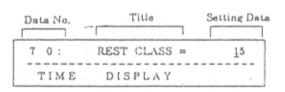
This Memory Block can be used to assign Restriction/No Restriction to outgoing Tie Line dialed digits.

CODE RESTRICTION CLASS ASSIGNMENT WHEN LOCKOUT IS SET

System	CO Line	Data No.
randing to	A V ATTORY	70

OPERATION:





 Use the dial pad to enter the class restriction (00~15).

- Pressing the TRF key will write the selected data and advance to Memory Block 1-1-71 (First Delay Announcement Start Time Selection).
- 5. Press the SPKR key to go back on-line.

NOTES:

 When a station is locked out, the Code Restriction Class Assignment of this Memory Block is used instead of the Code Restriction Class assigned to the station in Memory Blocks 4-07 (Code Restriction Class Assignment Day Mode) and 4-08 (Code Restriction Class Assignment Night Mode).



Additional Programming

		Data	System Data	
	Sub-Mode	No	Required	May Be Required
System (LK 1)	CO Line (LK 1)	61	assalled b.A	Kulan
System (LK 1)	CO Line (LK 1)	62	bl HMRR ad	Reen I
System (LK 1)	CO Line (LK 1)	65		
Telephone (LK 4)		07	aimmampril le	noilliús, n
Telephone (LK 4)	1700 02 02 02 02 02 02 02 02 02 02 02 02 0	08	Sep-Ma	ebo M

GENERAL INFORMATION - CODE RESTRICTION CLASS ASSIGNMENT WHEN

LOCKOUT IS SET

This Memory Block is used to assign the restriction class when a station user sets the Station Lockout or when the Attendant sets the Attendant Station Lockout feature.

FIRST DELAY ANNOUNCEMENT START TIME SELECTION

OPERATION:

1. Go off-line.

2. Enter: Mode System LK1 • MIC • ICM

Sub-Mode CO Line LK1

Data No.	Title	Se	tting Date
7 1:	MSG START	22	20
TIME	DISPL	, A Y	

Data No.

- Press the corresponding CO/PBX line key to change data option.
 - To change 20 sec. to 10 sec., press CO/PBX line key 2

LK 1	LK 2	LK 3	LK 4
0 вес.	10 sec.	20 вес.	30 нес.
LK 5	LK 6	LK 7	LK 8
40 sec.	50 sec.	60 sec.	

CO/PBX line keys



(Dial Pad)

- Pressing the TRF key will write the selected data and advance to Memory Block 1-1-72 (First Delay Announcement Repeat Selection).
- 5. Press the SPKR key to go back on-line.
- Additional Programming

	8.0	Data	System Data	
Mode	Sub-Mode	No.	Required	May Be Required
System (LK 1)	CO Line (LK 1)	72		
System (LK 1)	PBR/Miac. (LK 8)	13	ONCLAS	TOLHI
CO/PBX (LK3)		41	17	T IS 31

System CO Line Data No.

NOTES:

L. Gooff-line.

2. Enter: Modo System LK: CM

Sub-Mode CO Line LK:

Data No. 77th Saiding Data
7 0: REST CLASS = 15
TIME DISPLAY

Data: Restriction Class: 00-15

--[-] # -- : To move cursor.
Dial pad 0 - 9 : To enter data.

Pressing the TRF key will write the selected data and advance to Memory Black 1-1-71 (First Delay Announcement Start Time Selection).

GENERAL INFORMATION - FIRST DELAY ANNOUNCEMENT START TIME
SELECTION

This Memory Block specifies the delayed time between receiving a CO call and sending a First Delay!
Announcement to the calling party.

FIRST DELAY ANNOUNCEMENT REPEAT SELECTION

OPERATION:

1. Go off-line.

2. Enter: Mode System LK1 • MIC ICM
Sub-Mode CO Line LK1

Data No. Title Setting Data

7 2: MSG1 SEND = 1

TIME - DISPLAY

- Press the corresponding CO/PBX line key to change data option.
 - To change 1 Time to 2 Times, press CO/PBX line key 2.

LK1	LK 2	LK 3	LK 4
1 Time	2 Times	3 Times	4 Times
LK 5	LK 6	LK 7	LK 8
5 Times	6 Times	7 Times	8 Times

CO/PBX line keys

Default

(Dial Pad)

- Pressing the TRF key will write the selected data and advance to Memory Block 1-1-73 (First to Second Delay Announcement Interval Time).
- 5. Press the SPKR key to go back on-line.

M Additional Programming

Weste		Data No.	System Data	
Mode	Sub-Mode		Required	May Be Required
System (LK 1)	CO Line (LK 1)	71		
System (LK 1)	PBR/Misc. (LK 8)	12		
System (LK 1)	PBR/Misc. (LK 8)	13		
CO/PBX (LK 3)		41		

System	CO Line	Data No.
COND DEL	RST IOSE	72

NOTES:

Table 1	CO Line	aboM-dus	

Data No. Title Setting Dave

2 3: MSC (NTVL = 20

TIME DISPLAY

| Line key 3. | LK 1 | LK 2 | LK 4 | O sec. | 10 sec. | 20 sec. | 20 sec. | LK 4 | LK 5 | LK 6 | LK

Pressing the TRF key will write the selected data and advance to Memory Block 1-1-74 (Second Delay Announcement Repeat Selection).

GENERAL INFORMATION - FIRST DELAY ANNOUNCEMENT

REPEATSELECTION

This Memory Block specifies the number of times the First Delay Announcement will be repeated.

2-87

FIRST TO SECOND DELAY ANNOUNCEMENT INTERVAL TIME

OPERATION:

- 1. Go off-line.
- 2. Enter: Mode

System

LK I • ICM

Sub-Mode CO Line

LK 1

Data No.

7 3

(Dial Pad)

Data No.	Tit	.le	Setting	Date
<u>7</u> 3:	MSG IN	TVL =	= 20	0
TIME	D	ISPLAY		

- Press the corresponding CO/PBX line key to change data option.
 - To change 20 sec. to 10 sec., press CO/PBX line key 2.

LK 1	LK 2	LKS	LK 4
О вес.	10 вес.	20 sec.	ЗОнес.
LK 5	LK 6	LK 7	LK 8
40 вес.	50 вес.	60 sec.	No Limit

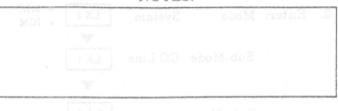
CO/PBX line keys

- Default
- Pressing the TRF key will write the selected data and advance to Memory Block 1-1-74 (Second Delay Announcement Repeat Selection).
- 5. Press the SPKR key to go back on-line.
- Additional Programming

		Data		System Data		
Mode	Sub-Mode	No.	Required	May Be Required		
System (LK 1)	CO Line (LK 1)	74				
System (LK 1)	CO Line (LK 1)	75				
System (LK 1)	PBR/Misc. (LK 8)	13				
CO/PBX (LK 3)		41				

System	CO Line	Data No.
1 MOI	OPERAL	73

NOTES:



The second secon

and VAROUS and and

1 Time to 2 Times, press CO/PBX

easing the TRF key will write the selecter ta and advance to Memory Block 1-1-73 (Firs

ress the SPKR key to go back on-line.

Mode Sub-Mode No. Required May D. System (L.K.1) CO Line (L.K.1) 71 . System (L.K.1) PBIVMisc. 12 . (L.K.8) PBRMisc. 13

GENERAL INFORMATION - FIRST TO SECOND DELAY ANNOUNCEMENT

INTERVAL TIME

This Memory Block specifies the interval time between First Delay Announcement sending time finish and the send start time of Second Delay Announcement to the calling party.

SECOND DELAY ANNOUNCEMENT REPEAT SELECTION

OPERATION:

Go off-line.

2. Enter: Mode System LK1 • MIC ICM

Sub-Mode CO Line LK1

Data No. 7 4

(Dial Pad)

Dat	a No.	Title		Seu	ing Date
			7		
7	4:	MSG2 SEND	=		1
7	IME	 DISPL	ΑY		

- Press the corresponding CO/PBX line key to change data option.
 - To change 1 Time to 2 Times, press CO/PBX line key 2.

LK1	LK 2	LK 3	LK 4
1 Time	2 Times	3 Times	4 Times
LK 5	LK 6	LK 7	LK 8
5 Times	6 Times	7 Times	8 Times

- Pressing the TRF key will write the selected data and advance to Memory Block 1-1-75 (Second Delay Announcement Repeat Interval Time Selection).
- 5. Press the SPKR key to go back on-line.

System	CO Line	Data No.
NNOTH	AYA IRCC	74

N	О	T	Ε	S	:

Sub-Mode CO Base Liking						
Sub-Mode CO Date List						
Sub-Meda CO Dan Liki						
		 	9m2 00	sbo	Miduž	

Additional Programming

	Unearry	Data	System Data		
Mode	Sub-Mode	No.	Required	May Be Required	
System (LK 1)	CO Line (LK 1)	73		-101610	
System (LK 1)	CO Line (LK 1)	74			
System (LK 1)	PBR/Misc. (LK 8)	12	old-duk	Mede	
System (LK 1)	PBR/Misc. (LK 8)	13	Died Doc G	N.J. motory2	
CO/PBX (LK 3)	, t	41	Hamil Ook 8	M.D motors	

GENERAL INFORMATION - SECOND DELAY ANNOUNCEMENT REPEAT SELECTION

This Memory Block specifies the number of times for repeating Second Delay Announcement.

SECOND DELAY ANNOUNCEMENT REPEAT INTERVAL TIME SELECTION

System	CO Line	Data No.
1 MO	OFERAM	75

OPERATION:

- Go off-line.
- 2. Enter: Mode

System

o MIC LK 1 ICM

Sub-Mode CO Line

LK 1

Data No.

5

(Dial Pad)

Data No.	Title	5	Setting Dat
<u>7</u> 5:	MSG2 RPET	225	20 s
TIME	DISPL	AY	

- 3. Press the corresponding CO/PBX line key to change data option.
 - To change 20 sec. to 10 sec., press CO/PBX line key 2.

LK 1	LK 2	LK 3	LK 4
0 вес.	10 нес.	20 nec:	30 sec.
LK 6	LK 6	LK 7	LK 8
40 sec.	50 нес.	60 sec.	No Limit

CO/PBX line keys

Default

- 4. Pressing the TRF key will write the selected data and advance to Memory Block 1-1-76 (Barge-In Alert Tone Assignment).
- 5. Press the SPKR key to go back on-line.
- M Additional Programming

	12	Data	System Data	
Mode	Sub-Mode	No.	Required	May Be Required
System (LK 1)	CO Line (LK 1)	73	(E 2471)	
System (LK 1)	CO Line (LK 1)	74	- 40	KIDXBRO.
CO/PBX (LK 3)		41		

NOTES:

Sub-Mode CO Line [LK:]	MOI »	(24)	System	Mode	Enter	

GENERAL INFORMATION - SECOND DELAY ANNOUNCEMENT REPEAT INTERVAL TIME SELECTION

This Memory Block specifies the internal time to repeat Second Delay Announcement.

BARGE-IN ALERT TONE ASSIGNMENT

OPERATION:

1. Go off-line.

2. Enter: Mode System LK1 • MIC • ICM
Sub-Mode CO Line LK1

TIME DISPLAY

Data No.

- Press the corresponding CO/PBX Line key to change data option.
 - To change YES to NO, press CO/PBX line key 2.

YES = Send Alert Tone

NO = Do Not Send Alert Tone

LK.1	LK 2	LK 3	LK 4
YES	NO		
. LK 5	LK 6	LK 7	LK 8

CO/PBX line keys



(Dial Pad)

- Pressing the TRF key will write the selected data and advance to Memory Block 1-2-00 (Internal Paging Timeout Selection).
- 5. Press the SPKR key to go back on-line.

M Additional Programming

36 .		Data No.	System Data	
Mode	Sub-Mode		Required	May Be Required
System (LK 1)	PBR/Misc. (LK 8)	80		
Telephone (LK 4)		17		

GENERAL INFORMATION - BARGE-IN ALERT TONE ASSIGNMENT

This Memory Block specifies if Barge-In Alert Tone is Allowed or Denied.

System CO Line Data No.
1 1 76

NOTES:

Monitoring telephone conversations may be illegal under certain circumstances and laws. Consult a legal advisor before implementing the monitoring of telephone conversations. Some federal and state laws require a party monitoring a telephone conversation to use an alert tone to notify all parties to the telephone conversation, and/or obtain consent from all parties to the telephone conversation. Some of these laws provide strict penalties for illegal monitoring of telephone conversations.

2-91

INTERNAL PAGING TIMEOUT SELECTION

OPERATION:

1. Go off-line.

TIME

- o MIC Enter: Mode System LK I CM W Sub-Mode ICM LK 2 Data No. (Dial Pad) Title Data No. Setting Data 0 0: PAGING 90 a
- Press the corresponding CO/PBX line key to change data option.

DISPLAY

To change 90 sec. to 120 sec., press
 CO/PBX line key 2.

LK1	LK 2	LK 3	LK 4
90 eea.	120 sec.	No Limit	
LK 5	LK 6	LK 7	LK 8

- Pressing the TRF key will write the selected data and advance to Memory Block 1-2-01 (Intercom Call Voice/Tone Signal Selection).
- 5. Press the SPKR key to go back on-line.
- Additional Programming

		Data No.	System Data	
Mode	Sub-Mode		Required	May Be Required
System (LK 1)	ESP (LK 7)	02		
System (LK 1)	ESP (LK 7)	06		
Telephone (LK 4)		93		

System	ICM	Data No.
THEORY	IAD 2100	00

NOTES:

- 1. There are five types of paging:
 - Internal Zone Paging (52~54)
 - Internal All Zone Paging (56)
 - External Zone Paging (all speakers) (55)
 - External Zone Paging (individual speakers) (56~58)
 - Internal/External Zone Paging (59)
- There are three selections for length of internal paging time; 90 sec., 120 sec., and No Limit.
- External Paging Timeout is programmed in Memory Block 1-7-06.

GENERAL INFORMATION - INTERNAL PAGING TIMEOUT SELECTION

This Memory Block is used to program the length of time allowed for paging.

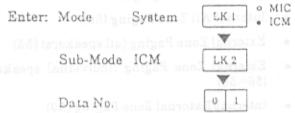
1-93

INTERCOM CALL VOICE/TONE SIGNAL SELECTION

System ICM Data No. 2 01 1

OPERATION:

- Go on-inc.



(Dial Pad)

Data No.	Setting Data	Title
<u>0</u> 1:	VOICE	CALL
TIME	DISPLA	· · · · · · · · · · · · · · · · · · ·

- 3. Press the corresponding CO/PBX line key to change data option.
 - To change Voice to Tone, press CO/PBX line key 1.

LK 1	LK 2	LK 3	LK 4
Tone	Voice V		
LK 5	LK 6	LK7	LK 8

- 4. Pressing the TRF key will write the selected data and advance to Memory Block 1-2-02 (Automatic Callback Release Timer Selection).

NOTES:

- 1. Switching from voice to tone signaling or from tone to voice can be accomplished by dialing a station number, then dialing the digit 1.
- 2. If tone signaling is programmed in this Memory Block, the called party cannot answer handsfree unless the originator of the call switches to Voice by dialing the digit 1.
- 3. Call voice/tone signaling from the DSS/BLF Console is programmed in Memory Block 1-6-03.

	A died

COVERN line key 2

5. Press the SPKR key to go back on-line.

Additional Programming

		Data	System	Data
Mode	Sub-Mode	No.	Required	May Be Required

GENERAL INFORMATION - INTERCOM CALL VOICE/TONE

SIGNAL SELECTION

This Memory Block is used to determine if signal tone or voice is used first for an intercom call.

AUTOMATIC CALLBACK RELEASE TIMER SELECTION

System	ICM	Data No.
1	2	02

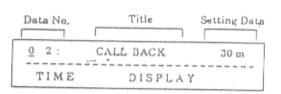
OPERATION:

(Dini Pad)

- Go off-line.
- 2. Enter: Mode System LKI MIC ICM
 Sub-Mode ICM LK2

 Data No.

	NOTES:	
3401	DAREGO	



- Press the corresponding CO/PBX line key to change data option.
 - To change 3 min. to 30 sec., press CO/PBX line key 1.

LKI	LK 2	LK 3	2 LK 4
5 min.	10 min.	20 min.	30 min.
LK 5	LK 6	LK 7	LK 8

CO/PBX line keys Default

- Pressing the TRF key will write the selected data and advance to Memory Block 1-2-03 (2-, 3- or 4-Digit Station Number Selection).
- 5. Press the SPKR key to go back on-line.

Pressing the TRF key will wrote the selected data and advance to Mamory Block 1-2-08 (Special Station Access Code Assignment).

M Additional Programming

Mada		Data	Systen	Data
Mode	Sub-Mode	No.	Required	May Be Required
			-	1

GENERAL INFORMATION - AUTOMATIC CALLBACK RELEASE

TIMER SELECTION

This Memory Block is used to determine the length of time allowed for an automatic callback to occur before the request is automatically canceled.

2-, 3-, or 4-DIGIT STATION NUMBER SELECTION

System ICM Data No. 1 2 03

OPERATION:

- Go off-line.
- 2. Enter: Mode System LK1 ICM

 Sub-Mode ICM LK2

 Data No. 0 3

Data No. Title Setting Data

O 3: STA. NO. 3 DGT

TIME DISPLAY

- Press the corresponding CO/PBX line key to change data option.
 - To change 3-digit to 2-digit, press CO/PBX line key 1.

LK 1	LK2	LK 3	LK 4
2-digit	9-digit	4-digit	
LK 5	LK 6	LK 7	LK 8

CO/PBX line keys

Default

(Dial Pad)

- Pressing the TRF key will write the selected data and advance to Memory Block 1-2-08 (Special Station Access Code Assignment).
- 5. Press the SPKR key to go back on-line.
- M Additional Programming

	Data Data		System	1 Data
Mode	Sub-Mode	No.	Roquired	May Be Required
Telephone (LK 4)	,	10		

NOTES:

- The Station Numbering Plan can be 2-, 3-, or 4-digits, however, only one plan can be used at a time.
- After a change is made in this Memory Block, all station numbers must be reassigned in Memory Block 4-10 (Station Number Assignment).

LEG 1 LEG 12. C. 1. C. 1

Pressing the TRF key will write the selected data and advance to Memory Black 1-2.03 (2-, 3-or a-Digit Station Number Selection).

Press the SPKR key to go back an-line.

GENERAL INFORMATION - 2-, 3-, or 4-DIGIT

STATION NUMBER SELECTION

This Memory Block is used to determine the number of digits for station numbers. Either 2-digit (00~99), 3-digit (000~999), or 4-digit (0000~9999) assignment is available.

SPECIAL STATION ACCESS CODE ASSIGNMENT

System	ICM	Data No.
SAGER-10	SIN2IOV	08

OPERATION:

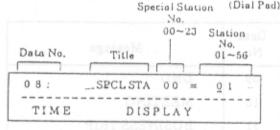
1. Go off-line.

2. Enter: Mode System LK1 • MIC • ICM

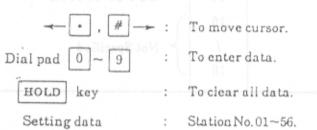
Sub-Mode ICM LK2

Data No. 0 8

Special Statues (Diel Pad)



- 3. Enter data using the dial pad.
 - To assign a Special Station Access Code (00~23) to Station Number 01, enter Access Code from the dial pad.



Special Station Access Code : 00-23

- Press the TRF key, Station No. 01 is displayed.
- After entering Special Station No. Access Code; press the TRF key to advance to the next Station No.
- After entering all data, pressing the TRF key will write the selected data and advance to Memory Block 1-2-09 (Absence Message 1~10 Assignment).
- 5. Press the SPKR key to go back on-line.

NOTES:

- A specified station can be called by lifting the handset (or by pressing the SPKR key) and dialing an Access Code.
 - Up to 24 stations can be assigned a specific ringing assignment.

Default	Special Station 00: 01 Special Sattion 01~23: Not Set
---------	--

Additional Programming

	Dac Dac		System Data	
Mode	Sub-Mode	No.	Required	May Be Required
CO/PBX (LK 3)		11	Subskip	0.0076

GENERAL INFORMATION - SPECIAL STATION ACCESS CODE ASSIGNMENT

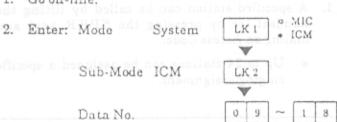
This Memory Block is used to assign specific stations the capability to be called using abbreviated dialing. Up to 24 stations can be assigned.

ABSENCE MESSAGE 1~10 ASSIGNMENT

System	ICM	Data No.
1	2	09~18

OPERATION:

Go off-line.



(Dial Pad)

NOTES:

1. Ten messages are available, the first six are assigned at default.

Data No. Setting Data (13 digits max.) 0 9: DND TIME DISPLAY

Enter data using the dial pad.

To move cursor.

To enter setting data, Dial pad

use Character Code Table in Appendix.

HOLD To clear all data when key

the cursor is at the Setting Data position.

- 4. Enter the characters that are to be displayed.
 - Refer to the Character Code Table in the Appendix.
- After entering all data for Memory Block 1-2-9~18, pressing the TRF key will write the selected data and advance to Memory Block 1-2-19 (Intercom Ring Pattern Selection).
- 6. Press the SPKR key to go back on-line.

	Data No.	Message
	09	DND
	10	MEETING
	11	BUSINESS TRIP
Default	12	NOT IN
	13	WITH GUEST
	14	OUT OF OFFICE
	15	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	ſ	Not Specified
	18	Dial pad and

Additional Programming

Mode	Sub-Mode	Data	System Data	
		No.	Required	May Be Required

GENERAL INFORMATION - ABSENCE MESSAGE 1~10 ASSIGNMENT

This Memory Block is used to program various messages that can be set at a station LCD. ICM calls to that station will show the message in the LCD (if equipped) at the calling station.

INTERCOM RING PATTERN SELECTION

System	ICM	Data No.
TONE SEL	MIR 2000	9 9 19

OPERATION:

OFERATION

Go off-line.

2. Enter: Mode

System

LK 1 • MIC

Sub-Mode ICM

LK 2

(Dial Pad)

Data No.

Data No.	Т	itle S	etting	Data	Page
19:	ICM	PTN	E	3 1	2
TIME		DISE	LAY		

- Press the corresponding CO/PBX line key to change data option.
 - To change Pattern H to Pattern A, press CO/PBX line key 3.

Page 1

LK 1	LK 2	LKJ	184 LK 4 94
Tone Off,	Tone On	Pattern A	Pattern B
LK 5	LK 6	LK 7	LK 8
Pattern'C	Pattern D	Pattern E	Pattern F

Page 2

LK 1	LK 2	LK3	LK 4
Pattern G	Pattern H		
LK 5	LK 6	LK 7	LK 8

CO/PBX line keys

Default

RECALL key

Next page.

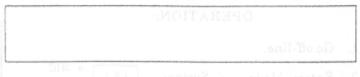
FNC

key

Previous page.

- Pressing the TRF key will write the selected data and advance to Memory Block 1-2-20 (Intercom Ring Tone Selection).
- 5. Press the SPKR key to go back on-line.

NOTES:



Pattern Line Ja Key LK 1 Off Tone LK 2 On A LKD B LK4 C LK 5 D LK 6 Ε LK 7 LK 8 F

Additional Programming

LK I

(Page 2) LK 2 (Page 2)

G

		Data	System Data	
Mode	Sub-Mode	No.	Required	May Bo Required
off walt		Jul 3	Sub-Mad	Mode

GENERAL INFORMATION - INTERCOM RING PATTERN SELECTION

This Memory Block is used to select a Ring Pattern when ICM calls are made.

INTERCOM RING TONE SELECTION

System	ICM	Data No.
1	2	20

OPERATION:

- 1. Go off-line.
- 2. Enter: Mode

System

LKI • ICM

Sub-Mode ICM

LK 2

Data No.

(Dial Pad)

Data No. Title Data

2 0: ICM TONE A

TIME DISPLAY

- Press the corresponding CO/PBX line key to change data option.
 - To change Tone A to Tone B, press CO/PBX line key 2.

LK1	LK 2	LK3	LK 4
Tone A	Tone B	Tone C	Tone D
LK 5	LK 6	LK 7	LK 8
Tone E	Tone F	Tone G	Tone H

CO/PBX Line keys

Default

- Pressing the TRF key will write the selected data and advance to Memory Block 1-2-22 (Call Forward No Answer Timer Selection).
- 5. Press the SPKR key to go back on-line.

M Additional Programming

17111 pest		Data	Systen	Data
Mode	Sub-Mode	No.	Required	May Be Required

NOTES:

1. The available tones are shown below.

Tone A = (480/606):

Modulation (16 Hz)

Tone B = (480/606):

Modulation (8 Hz)

Tone C = (1024/1285)

Tone C - (1024) 1.

Tone D = (1024)Tone E = (500)

Tone F = (1024/1285):

Modulation (16 Hz)

Tone G = (600/700):

Modulation (16 Hz)

Tone H = (1024):

Envelope 2 sec.

To change Pattern H to Pottern A. press

GENERAL INFORMATION - INTERCOM RING TONE SELECTION

This Memory Block is used to select a ring tone for ICM calls, making and

CALL FORWARD NO ANSWER TIMER SELECTION

System	ICM	Data No.
PART PRATE	2	22

NOTES:

OPERATION:





Data No.	Title	Settin
2 2:	FWD NOANS	10 =
TIME	DISPLAY	

- Press the corresponding CO/PBX line key to change data option.
 - To change 10 sec. to 20 sec., press CO/PBX line key 2.

LIK 1	LK 2	LK 3	LK 4
10 вес.	20 мес.	30 яес.	60 sec.
LK 5	LK 6	LK 7	LK 8
120 sec.	240 вес.		

CO/PBX line keys



- Pressing the TRF key will write the selected data and advance to Memory Block 1-2-23 (System Call Park Recall Time Selection).
- 5. Press the SPKR key to go back on-line.

5.57.1

Lanca and			Date	Data	System Data	
Mode	Sub-Mode	No.	Required	May Be Required		
System (LK 1)	CO Line (LK 1)	46				
System (LK 1)	CO Line (LK 1)	47				
System (LK 1)	CO Line (LK 1)	48	THE MAIN	CURRENT'S		
System (LK 1)	ICM (LK 2)	01	BOABVRS B	0.8 ES - 8.0		
System (LK 1)	PBR/Misc. (LK 8)	08		Dynaum)		
Telephone (LK 4)		17				

Additional Programming

GENERAL INI	FORMATION	-CALL F	ORWARD	NO ANSWER	TIMER
		SELECTI	ON		

This Memory Block specifies the time before incoming ICM calls or incoming CO/PBX lines are forwarded to another station number when the called party does not answer.

2-101

Prom. ing

x-/0/

SYSTEM CALL PARK RECALL TIME SELECTION

System	ICM •	Data No.
1	2	23

OPERATION:

- 1. Go off-line.
- 2. Enter: Mode System LKI MIC ICM

Sub-Mode ICM

Data No. 2 3 (Dial Pad)

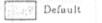
LK 2

Data No.	Title	Setting
2 3:	PARK RECL	1.0
TIME	DISPLAY	

- Press the corresponding CO/PBX line key to change data option.
 - To change 1 min. to 1.5 min., press CO/PBX line key 3.

LK 1	LK 2	LK 3	LK 4
.5 min.	min.	1.5 min.	2 min.
LK 5	LK 6	LK 7	LK 8
3 min.	5 min.	8 min.	10 min.

CO/PBX line keys



- Pressing the TRF key will write the selected data and advance to Memory Block 1-2-24 (Intercom Feature Access Code Assignment).
- 5. Press the SPKR key to go back on-line.

NOTES:

		eal	I. Good-i
ENJ	мог	Sub-Mode	
		Data No.	

To chapge 10 sec. to 20 sec., press COPBX

| LK 2 | LK 3 | LK 4 | LK 5 | LK 4 | LK 5 | LK 4 | LK 5 | LK 5 | LK 4 | LK 5 | LK 6 | So nov. | So nov. | LK 6 | LK 7 | LK 6 | LK 7 | LK 6 | LK 7 | LK 6 | LS 0 nov. | LS 0 nov. | S 10 no

Pressing the TRF key will write the selected dath and advance to Memory Block 1-2-23 (System Cail Park Recall Time Selection).

GENERAL INFORMATION - SYSTEM CALL PARK RECALL TIME SELECTION

This Memory Block is used to specify the time before the system will recall the user's station when using Call Park.

INTERCOM FEATURE ACCESS CODE ASSIGNMENT

(Dial Pad)

System	ICM	Data No.
JULY GIA LUE	2	24

OPERATION:

- 1. Go off-line.
- o MIC Enter: Mode System LK 1 ICM W Sub-Mode ICM LK 2 Data No. 2 4

Data No.	Title	Dial No.	Setting Date
2 4:	_FEA AC	(0)	004
TIME	DIS	PLAY	

3. Use the dial pad to enter the Setting Data.

Setting Data: 000~005

To move cursor.

Dial pad To enter data.

	Setting Code 0 = 004
	$ \begin{array}{ccc} 1 & = & 001 \\ 2 & = & 002 \end{array} $
Default	3~9 = 000
	• = 003
	# = 005

- 4. Press the TRF key to write the data and advance to the next Dial No.
- 5. After entering all data, pressing the TRF key will write the selected data and advance to Memory Block 1-2-25 (Internal Paging Alert Tone Selection).
- 6. Press the SPKR key to go back on-line.

The state of the s		
AIOMIN	2	2
TUTTO I		

NOTES:

1. Features can be assigned to more than one dial number.

Setting Code	Feature
000	Not Used
001	Voice/Tone Change
002	Step Call
003	Tone Override
004	Automatic Callback
005	Callback Indication

Additional Programming

Mode	Sub-Mode	Data No.	System Data	
			Required	May Be Required
System (LK 1)	ICM (LK 2)	01		
System (LK 1)	PBR/Misc.	80	shak duk	n lao M
Telephone (LK 4)		17		

GENERAL INFORMATION - INTERCOM FEATURE ACCESS CODE

ASSIGNMENT

This Memory Block is used to assign the Access Code for Voice/Tone change, Step Call etc.

INTERNAL PAGING ALERT TONE SELECTION

(Dial Pad)

Default

-	System	ICM	Data No.
	1	2	25

OPERATION:

more than one dis

Go off-line.



Data No.	Title	Setting Data
2 5:	IN PG TON	YS
TIME	DISPL	A Y

- Press the corresponding CO/PBX line key to change data option.
 - To change Tone YES to Tone NO, press CO/PBX line key 2.

	OLIMANDOL E.	TOTAL .	000
LK 5	LK 6	LK 7	LK 8
Tone Y9	Tone NO	matica	200
LK 1	LK 2	LK 3	LK 4

CO/PBX line keys

- Pressing the TRF key will write the selected data and advance to Memory Block 1-3-01 (Bounce Protect Time Selection).
- 5. Press the SPKR key to go back on-line.

-	4 2 1 4 4 4 4 4 4	Y3	2 (2.254)
74	Additional	LLOKLW	mming

System Data	
Required May Be	

NOTES:

		.6781	19789 000
	36.		

Use the dist pad to enter the Setting Data. Setting Datas | 000-005

Dial gad [0] - [9] To color data.

Defaul: 3 = 002 3 0 = 000 5 = 003 4 = 005

Press the FEE key to write the date and advence to the next Dial No.
After entering all data, pressing the TEE key

lemory Block 1-2-25 (Internal Pagnag Aleri one Selection).

GENERAL INFORMATION - INTERNAL PAGING ALERT TONE SELECTION

This Memory Block is used to determine if a call alert tone is provided when Internal Paging is used.

BOUNCE PROTECT TIME SELECTION

System	SLT	Data No.
HSICHALS	2A 3 0	01

VDED TAION:

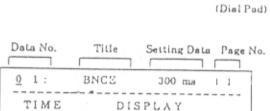
NOTES:

1. Go off-line.

2. Enter: Mode System LK1 • MIC

Sub-Mode ICM LKJ

Data No. 0 1 (Dial Pad



- Press the corresponding CO/PBX line key to change the data option.
 - To change 300 ms. to 700 ms., press
 CO/PBX line key 8 while on Page 1.

Page 1

LK 1	LK 2	LK3	LK 4
0 mė.,	100 ms.	200 ms.	300 ms.
LK 5	LK 6	LK 7	LK 8
400 ms.	500 ms.	600 ms.	700 ms.

Page 2

LK 1	LK 2	LK 3	LK 4
800 шя.	900 ms.	1000 ms.	1100 ms
LK 5	LK 6	LK 7	LK 8
1200 ms.	1300 ms.	1400 ms.	1500 ms

CO/PBX line keys



- Pressing the TRF key will write the selected data and advance to Memory Block 1-3-02 (SLT Hookflash Signal Selection).
- 5. Press the SPKR key to go back on-line.

M Additional Programming

Mode G	Sub-Mode	Data No.	System Data	
			Required	May Be Required
Telephone (LK 4)		96		aconing days

GENERAL INFORMATION - BOUNCE PROTECT TIME SELECTION

This Memory Block is used to specify the length of time before a valid hookflash is detected from a Single Line Telephone or Voice Mail system.

SLT HOOKFLASH SIGNAL SELECTION

System	SLT	Data No.
1	3	02

OPERATION:

- 1. Go off-line.
- 2. Enter: Mode

System LK1 • ICM

Sub-Mode ICM

Data No.

(Dial Pad)

LK 3

Data No.	Title	Setting Date
0 2:	SIGNAL	HOLD
771/2	DICUL	
TIME	DISPL	V 1

- Press the corresponding CO/PBX line key to change data option.
 - To change HOLD to FLASH, press CO/PBX line key 2.

LK1	LK 2	LK3	LK 4
HOLD	FLASH		
LK 5	LK 6	LK 7	LK 8

CO/PBX line keys



- Pressing the TRF key will write the selected data and advance to Memory Block 1-3-03 (First Digit PBR Release Timer Selection).
- 5. Press the SPKR key to go back on-line.

NOTES:

 If HOLD is specified, the CO/PBX line is put on Exclusive Hold.

	· Less

COPED discussion states in the Prince.

M Additional Programming

		Data	System Data	
Mode	Sub-Mode	No.	Required	May Be Required
Telephone (LK 4)		96		0.23

GENERAL INFORMATION - SLT HOOKFLASH SIGNAL SELECTION

This Memory Block is used to specify if a line is held, or if behind a PBX, a hookflash signal is sent to the line when an SLT user performs a hookflash.

FIRST DIGIT PBR RELEASE TIMER SELECTION

0 3 (Dinl Pad)

System	SLT	Data No.
BUNCHIASH	3	03

OPERATION:

- Go off-line.
- MIC Enter: Mode System LK I ICM V Sub-Mode ICM LK 3

Data No. Title Setting Data 0 3: PBR RLS 10 # TIME DISPLAY

Data No.

- Press the corresponding CO/PBX line key to change data option.
 - To change 10 sec. to 20 sec., press CO/PBX line key 2.

LKI	LK 2	LK3	LK 4
10 sec.	20 sec.	30 нес.	40 вес.
LK 5	LK 6	LK 7	LK 8
50 sec.	60 нес.		

CO/PBX line keys

Default

- 4. Pressing the TRF key will write the selected data and advance to Memory Block 1-3-04 (Dial 1 (DP) Hookflash Selection).
- Press the SPKR key to go back on-line.
- Additional Programming

mmina

	Sub-Mode	Data	System Data	
Mode		No.	Required	May Be Required
System (LK 1)	PBR/Misc. (LK 8)	03		
System (LK 1)	PBR/Misc. (LK 8)	10		
Telephone (LK 4)		95		
Telephone (LK 4)		96		

NOTES:

2	Out-pook		
Specified Time	Dial ton	ne is sent (PBR connec	ted).
(Default = 10 sec.)			
(Default 7 sec.)	Dialthe	first digit.	
Memory Block	7 X83100	gnibongaerroo escalator	

The second digit.

5 The third digit.

3

Seven sec.

After timer elapse, PBR is released.

GENERAL INFORMATION - FIRST DIGIT PBR RELEASE TIMER SELECTION

This Memory Block is used to specify the time interval during which a receiver circuit is connected when a DTMF type Single Line Telephone user goes off-hook and dials the first digit.

DIAL 1 (DP) HOOKFLASH SELECTION

System	SLT	Data No.
1	3	04

OPERATION:

Go off-line.

2. Enter: Mode

System

LK I • ICM

Sub-Mode ICM

LK 3

(Dial Pad)

Data No.

Data No.	Title	Setting Date
0 4:	DIAL LFLSH	YS
TIME	DISPL	Dear the Y

- Press the corresponding CO/PBX line key to change data option.
 - To change YES to NO, press CO/PBX line key 2.

LH 1	LK 2	LK 3	LK 4
YES	NO		
LK 5	LK 6	LK 7	LK 8

CO/PBX line keys



- Pressing the TRF key will write the selected data and advance to Memory Block 1-3-05 (Hookflash Start Time Selection).
- 5. Press the SPKR key to go back on-line.
- M Additional Programming

		Data No.	System Data		
Mode	Sub-Mode		Required	May Be Required	
Telephone (LK 4)		90			
Telephone (LK 4)		95			
Telephone (LK 4)		96			

NOTES:

	5.44	1001	300377-000	

To change 10 sec. to 20 sec., press COFRX

dots and advance to Memory Block 1-3-64 (Diai I (DP) Hockflesh Selection).

Press the SPKH key to go back an-line.
Additional Pregressment

GENERAL INFORMATION - DIAL 1 (DP) HOOKFLASH SELECTION

This Memory Block is used to specify if dialing the digit 1 during an intercom call or a CO/PBX call on a DP Single Line Telephone provides a hookflash signal.

HOOKFLASH START TIME SELECTION

System	SLT	Data No.
ESMIT CHAP	3 3	05

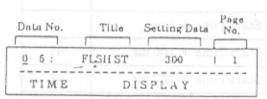
OPERATION:

- 1. Go off-line.
- 2. Enter: Mode System LK1 MIC ICM

 Sub-Mode ICM LK3

 Data No. 0 5

 (Dial Pad)



- Press the corresponding CO/PBX line key to change data option.
 - To change 300 ms. to 400 ms., press
 CO/PBX line key 7 while on Page 1.

тэ	_	_	_	-
r	л	ø	e	- 1
٠.		r.	**	-

LK 1	LK 2	LK 3	LK 4
100 ms.	150 ms.	200 ms.	250 mл.
LK 5	LK 6	LK7	LK 8
300 ma.	350 ms.	400 ms.	450 ms.

Page 2

LK 1	LK 2	LKJ	LK4
500 ms.	550 ma.	600 ms.	650 ms.
LK 5	LK 6	LK7	LK 8
700 ms.	750 ms.	800 ms.	850 ma.

CO/PBX line keys



- Pressing the TRF key will write the selected data and advance to Memory Block 1-3-06 (Hookflash End Time Selection).
- 5. Press the SPKR key to go back on-line.

NOTES:

- Performing a hookflash during a CO/PBX call places the line on hold or sends a hookflash to the CO/PBX.
- When a hookflash is 0.1 second or less, or 2.5 seconds or more, it is not considered as a flash.

M Additional Programming

	ignment)	Data	System	Data	
Mode	Sub-Mode	Sub-Mode No	Required	May Be Required	
System (LK 1)	SLT(LK 3)	06		V	

GENERAL INFORMATION - HOOKFLASH START TIME SELECTION

This Memory Block is used to specify a minimum hookflash duration from a Single Line Telephone in order to receive second dial tone.

HOOKFLASH END TIME SELECTION

1	System	SLT	Data No.
	1	3	06

OPERATION:

- 1. Go off-line.
- 2. Enter: Mode

System

LKI • MIC

Sub-Mode ICM

0 6

(Diel Pad)

LK 3

Data No.

Data No. Title Setting Data No.

O 6: FLSH END = 07 | 1

TIME DISPLAY

- Press the corresponding CO/PBX line key to change data option.
 - To change 700 ms. to 400 ms., press CO/PBX line key 5 while in Page 1.

Page 1

LK 1	LK 2	LK 3	LK 4
HST+0	HST+100 ms.	HST + 200 ms.	HST + 300 ms.
LK 5	LK 6	LK 7	LK 8
HST + 400 ms.	HST + 500 ms.	HST + 600 ms.	HST + 700 ma.

HST = Hookflash Start Time

CO/PBX line keys

Default

Page 2

LK 1	LK 2	LK 3	LK 4
HST + 800 ms.	HST + 900 ms.	HST + 1000 ms.	HST + 1100 ms.
LK 5	LK 6	LK 7	LK 8
HST+ 1200 ms.	HST+ 1300 ms.	HST+ 1400 ms.	HST + 1500 ms.

HST = Hookflash Start Time

- Pressing the TRF key will write the selected data and advance to Memory Block 1-3-07 (Voice Mail Digit Add Assignment).
- 5. Press the SPKR key to go back on-line.

NOTES:

 Refer to the table below for data and corresponding display.

Setting Data	Setting Data Display
Hookflash Start Time + 0 ms.	00
Hookflash Start Time + 100 ms.	01
Hookflash Start Time + 200 ms.	02
Hookflash Start Time + 300 ms.	03
Hookflash Start Time + 400 ms. 300 at	04
Hookflash Start Time + 500 ms.	05
Hookflash Start Time + 600 ms.	06
Hookflash Start Time + 700 ms.	07
Hookflash Start Time + 800 ms.	08
Hookflash Start Time + 900 ms.	09
Hookflash Start Time + 1000 ms.	10
Hookflash Start Time + 1100 ms.	11
Hookflash Start Time + 1200 ms.	12
Hookflash Start Time + 1300 ms.	13
Hookflash Start Time + 1400 ms.	14
Hookflush Start Time + 1500 ms.	15

M Additional Programming weld of conceybe box stab

	-(030735	Date	System	Data
Mode	Sub-Mode	No.	Required	May Be Required
System (LK 1)	SLT(LK 3)	05	V	

GENERAL INFORMATION - HOOKFLASH END TIME SELECTION

This Memory Block is used to specify a maximum duration from a Single Line Telephone in order to receive a second dial tone.

VOICE MAIL DIGIT ADD	ASSIGNMENT
----------------------	------------

(Dial Pad)

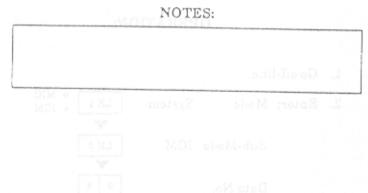
System	SLT	Data No.
ISO MMTO	TIVIS 30	07

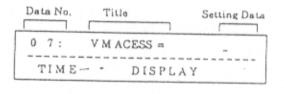
OPERATION:

- 1. Go off-line.
- 2. Enter: Mode System LKI MIC ICM

 Sub-Mode ICM LK3

 Data No. 0 7





Default All Blank

3. Enter data using the dial pad.

Dial pad 0 ~ 9 To enter data.

To enter *, #, press the LNR/SPD key first, then press * or #.

- Pressing the TRF key will write the selected data and advance to Memory Block 1-3-08 (Voice Mail DTMF Delay Timer Selection).
- 5. Press the SPKR key to go back on-line.

M Additional Programming

Mode	0.1.16	Data	System	Data
Mode	Sub-Mode	No.	Required	May Be Required

data and advance to Mamory Block 1-3-09
(Voice Mail Disconnect Time Selection).

Press the SPKR You to so onch on line.

GENERAL INFORMATION - VOICE MAIL DIGIT ADD ASSIGNMENT

This Memory Block is used to assign up to four digits in front of a station number that is sent to the Voice Mail when a call has been forwarded.

VOICE MAIL DTMF DELAY TIMER SELECTION

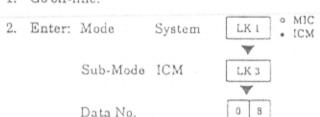
System	SLT	Data No.
1	3	08

OPERATION:

(Dial Pad)

Default





Data No.		Title	_	Setting Data
0 8:	VM	DELAY		1 a
TIME		DIS	PLAY	

- Press the corresponding CO/PBX line key to change data option.
 - To change 1 sec. to 2 sec., press CO/PBX line key 3.

LK 1	LK 2	LK 3	LK 4
О вес.	1 sec	2 sec.	З лес.
LK 5	LK 6	LK 7	LK 8
4 sec.	5 вес.	6 вес.	8 sec.

CO/PBX line keys

- Pressing the TRF key will write the selected data and advance to Memory Block 1-3-09 (Voice Mail Disconnect Time Selection).
- 5. Press the SPKR key to go back on-line.

M Additional Programming

Data .	Dyaren	Data
No.	Required	May Be Required
		N/

NOTES:

D116 0		Syste	Mode	2. Entert
	TESE .	MOI	Sub-Mode	
			Data No.	

Dial pad 0 - 0

key first, then press or st.

Fressing the TRE key will write the selec-

Proset the SPER key to go back en-line.

Mode Sub-Meda Data Required May I

GENERAL INFORMATION - VOICE MAIL DTMF DELAY TIMER SELECTION

This Memory Block is used to specify the delay time before DTMF tones are sent to the VMI ports.

VOICE MAIL DISCONNECT TIME SELECTION

System	SLT	Data No.
MEDIRATI		09

NOTES:

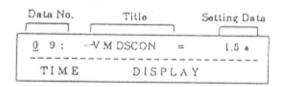
OPERATION:



Sub-Mode ICM LK3

Data No. 0 9

(Dial Pad)



- Press the corresponding CO/PBX line key to change data option.
 - To change 1.5 sec. to 2.0 sec., press CO/PBX line key 4.

LK I	LK 2	LK 3	LK 4
0.6 Hec.	1.0 нес.	1.5 anc.	2.0 нес.
LK 6	LK 6	LK 7	LK 8
3.0 вес.	5.0 sec.		

CO/PBX line keys

 Pressing the TRF key will write the selected data and advance to Memory Block 1-3-10 (Voice Mail DTMF Duration/Interdigit Time Selection).

Default

- 5. Press the SPKR key to go back on-line.
- M Additional Programming

Mode		Data	System Data		
	Sub-Mode	No.	Required	May Be Required	

Pressing the TRE key will write the a

Timer Solection). Press the SPKR key to go cack on-line.

GENERAL INFORMATION - VOICE MAIL DISCONNECT TIME SELECTION

This Memory Block is used to specify the timing of a disconnect signal that is sent to the connected equipment.

2-113

Data No.

10:

TIME

VOICE MAIL DTMF DURATION/INTERDIGIT TIME SELECTION

(Dial Pad)

Default

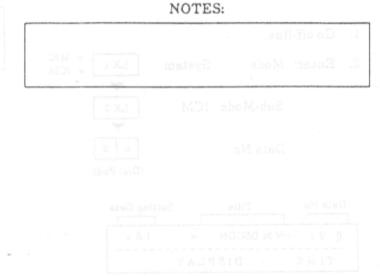
Setting Data

100/70

System	SLT	Data No.
1	3	10

1. Go off-line. 2. Enter: Mode System LK: • MIC • ICM Sub-Mode ICM LK3 Data No.

OPERATION:



3. Press the corresponding CO/PBX line key to change data option.

DISPLAY

Title

VM MF =

LK 1	LK.2	LK 3	LK 4
70/60 гля.	100/70 ma.	400/100 ms.	600/100 ms.
LK 5	LK 6	LK 7	LK 8
900/200 ma.			

10 age. | 60.00 | 60.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.0

Default	Duration Time: 100 ms. Interdigit Time: 70 ms.
	threater gre trine; 70 ms.

- Pressing the TRF key will write the selected data and advance to Memory Block 1-4-00 (Tandem Transfer Automatic Disconnect Timer Selection).
- 5. Press the SPKR key to go back on-line.

84	Additional	Programming
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CO/PBX line keys

Mode		Data	System	Duta	
	Sub-Mode	No.	Required	May Be Required	
-	-	-		Required	

GENERAL INFORMATION - VOICE MAIL DTMF DURATION/INTERDIGIT TIME SELECTION

This Memory Block is used to specify the DTMF duration and interdigit time for voice mail.

TANDEM TRANSFER AUTOMATIC DISCONNECT TIMER SELECTION

System	Transfer/A.A.	Data No.
MACH	4 4 4	00

OPERATION:

 Go off-line. o MIC 2. Enter: Mode LK 1 System ICM

W Sub-Mode Transfer/A.A. LK4 Data No. (Dial Pad)

Data No. Title Setting Data -AUTO DIS 1H TIME DISPLAY

- 3. Press the corresponding CO/PBX line key to change data option.
 - To change 1hr. to 3 hr., press CO/PBX line key 4.

LK 2	LK 3	LK 4
1 hr. 11	2 hr.	3 hr.
LK 6	LK 7	LK 8
	1 hr.	

Default CO/PBX line keys

- 4. Pressing the TRF key will write the selected data and advance to Memory Block 1-4-01 (Automated Attendant PBR Release Timer Selection).
- 5. Press the SPKR key to go back on-line.

Additional Programming

	Data		System Data	
Sub-Mode	No.	Required	May Be Required	
	Sub-Mode	Sub-Mode Data	Sub-Mode No.	

NOTES:

GENERAL INFORMATION - TANDEM TRANSFER AUTOMATIC DISCONNECT TIMER SELECTION

This Memory Block is used to specify a maximum time before an automatic disconnect of Trunk-to-Trunk connections occurs.

AUTOMATED ATTENDANT PBR RELEASE TIMER SELECTION

System Transfer/A.A. Data No. 1 4 01

OPERATION:

- Go off-line.
- 2. Enter: Mode

System

LK 1 • ICM

Sub-Mode Transfer/A.A.

LK 4

Data No.

(Dial Pad)

Data No. Title Setting Data

O 1: AA PBR TIME 20 *

TIME DISPLAY

- Press the corresponding CO/PBX line key to change data option.
 - To change 20 sec. to 30 sec., press CO/PBX line key 3.

LK 1	LK 2	LK 3	LK 4
10 вес.	20 вес.	30 вес.	40 sec.
LK 5	LK 6	LK 7	LK 8
50 вес.	60 нес.		

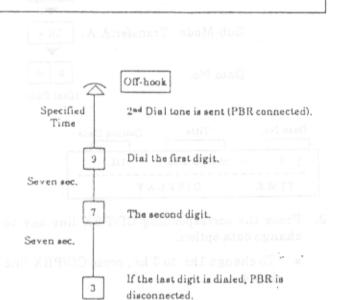
CO/PBX line keys

Default

- Pressing the TRF key will write the selected data and advance to Memory Block 1-4-02 (Automated Attendant Transfer Delayed Ringing Time Selection).
- 5. Press the SPKR key to go back on-line.
- M Additional Programming

		Data	System Data	
Mode	Sub-Mode	No.	Required	May Bo Required
			D .	

NOTES:



Pressing the TRP key will write the selected data and advance to Mamory Block 1-4-01 (Automated Attendant PBR Release Timer

Mede Sub-Mede No. Hequired May

GENERAL INFORMATION - AUTOMATED ATTENDANT PBR RELEASE TIMER SELECTION

This Memory Block is used to specify the time interval during which a receiver is connected when a calling party, through an Automated Attendant trunk, is dialing.

AUTOMATED ATTENDANT NO ANSWER DISCONNECT TIME SELECTION

System	Transfer/A.A.	Data No.	
1	4	03	

OPERATION:

- 1. Go off-line.
- 2. Enter: Mode

System

LK1 • MIC

Sub-Mode Transfer/A.A.

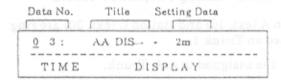
Data No.

0 3 (Dial Pad)

LK 4

NOTES:

 If the called party does not answer within the predetermined time, the call is dropped.



- Press the corresponding CO/PBX line key to change data option.
 - To change 2 min, to 3 min., press CO/PBX line key 3.

LK 1	LK 2	LK 3	LK 4
l min.	2 mln.	3 min.	4 min.
LK 5	LK 6	LK 7	LK8
M BELLE	a bha axnul	CM LED	e adl .

CO/PBX line keys

Default

- Pressing the TRF key will write the selected data and advance to Memory Block 1-4-04 (Tandem Transfer SMDR Print Extension Assignment).
- 5. Press the SPKR key to go back on-line.
- M Additional Programming

Data		8, or 0) can	System	Data
Sub-Mode	No.	Required	May Be Required	
	Sub-Mode	Sub-Mode Data No.	Sub-Mode Data	

To change No Limit to 30

Pressing the TRF key will write the selected data and advance to Memory Block 1 4-03 (Automated Stiercented Stiercented

Press the SPECE key to go back on-line.
Additional Programmana

GENERAL INFORMATION - AUTOMATED ATTENDANT NO ANSWER DISCONNECT TIME SELECTION

This Memory Block is used to determine how long the Automated Attendant will ring a station before dropping the caller.

TANDEM TRANSFER SMDR PRINT EXTENSION ASSIGNMENT

System	Transfer/A.A.	Data No.	
I	4	04	

NOTES:

OPERATION:

- Go off-line.
- 2. Enter: Mode

System

LK I • ICM

Sub-Mode Transfer/A.A.

A.A. LK 4

(Diul Pad)

Data No. Title Setting Data

0 4: _TAND EXT = 999

TIME DISPLAY

Data No.

Setting Data: 2-digit number = 00~99

3-digit number = 000~999

4-digit number = 0000~9999

Default 2-digit number = 99 3-digit number = 999 4-digit number = 9999

- Pressing the TRF key will write the selected data and advance to Memory Block 1-4-05 (Automatic Tandem Trunk by Night Mode Selection).
- Press the SPKR key to go back on-line.

Additional Programming

		Data	System Data	
Mode	Sub-Mode	No.	Required	May De Required
System (LK 1)	ICM (LK 2)	03		

GENERAL INFORMATION - TANDEM TRANSFER SMDR PRINT EXTENSION

ASSIGNMENT

This Memory Block is used to specify a special number to be output from SMDR for an automatic Trunk-to-Trunk Transfer.

AUTOMATIC TANDEM TRUNK BY NIGHT MODE SELECTION

System Transfer/A.A. Data No. 1 4 05

OPERATION:

- 1. Go off-line.
- 2. Enter: Mode

System

LK1 • ICM

Sub-Mode Transfer/A.A.

Data No.

LK 4

(Dial Pad)

Data No.	Title	Setting Date
0 5:	TAND BY NT	NO
TIME	DISPLA	\ Y

- Press the corresponding CO/PBX line key to change data option.
 - To change NO to YES, press CO/PBX line key 2.

TK.1	LK 2	LK3	LK 4
NO	YES		
LK 5	LK 6	LK7.	LK 8

CO/PBX line keys

Default

- Pressing the TRF key will write the selected data and advance to Memory Block 1-4-08 (Automated Attendant PBR Timeout Response Selection).
- 5. Press the SPKR key to go back on-line.
- m Additional Programming

Mode		Data No.	System Data	
Mode	Sub-Mode		Required	May Be Required
NOISNE	TYGIND	3 24.0	UNI G ZI CLE	CHANGE.

NOTES:

2. Enter: Mode System LKT . Sub-Mode Transfer/A.A. LKT

Diserve, Tide Setting Date

10 4: TAND EXT = 205

TIME DISPLAY

0-dign number = 000-999

2-digis number = 90. Default | 3-digis number = 900 | 4-digis number = 9999

data and edvance to Menory Block 1-4-(Automatic Tandam Trunk by Night Me Solection).

Additional Programming

Data

Mode

GENERAL INFORMATION - AUTOMATIC TANDEM TRUNK BY NIGHT MODE

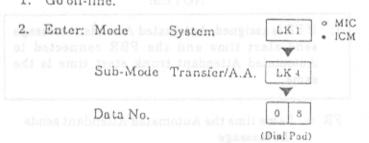
SELECTION

This Memory Block is used to determine if the automatic Trunk-to-Trunk Transfer feature will follow the Night Mode assignment.

AUTOMATED ATTENDANT PBR TIMEOUT RESPONSE SELECTION

OPERATION:

1. Go off-line.



Data No.	Title	Setting Data
0 8:	-AA-RES	NORMAL
TIME	DISP	LAY

- Press the corresponding CO/PBX line key to change data option.
 - To change Normal Call to Release, press CO/PBX line key 2.

LK I	LK 2	LK 3	LK -
LK 5	Reiense LK 6	LK 7	110
, 014,0	BIC 0	LK I	LK

- Pressing the TRF key will write the selected data and advance to Memory Block 1-4-09 (Automated Attendant PBR Start Time Selection).
- 5. Press the SPKR key to go back on-line.

Additional Programming

	Sub-Mode	Data No.	System Data	
Mode			Required	May Be Required
System (LK 1)	Trans/A.A. (LK 4)	03	V	

System	Transfer/A.A.	Data No.
ENDIANT	TTA CATAMO	08

NOTES:

- In a Normal Call situation, an internal station will ring if DTMF tone is not received after after a predetermined time (default: 2 min.).
- If Release is set, and no DTMF tones are received within 30 seconds. the system will drop the call. The 30 seconds is a fixed timer.

To change FR to AF, press CO/PSX line key 2. Sey 2. Sey 2. Sey 2. Sey 2. Sey 3. Sey 3. Sey 4. Sey 6. Sey 6.

Pressing the TRP key will write the selected data and advance to Memory Black 1-4-11 (Automated Attendent Message Day/Pright Model Selection)

Press the SPKR key to go back on-line.

GENERAL INFORMATION - AUTOMATED ATTENDANT PBR TIMEOUT RESPONSE SELECTION

This Memory Block is used to specify how a call answered by the Automated Attendant should be processed if a DTMF tone is not received.

AUTOMATED ATTENDANT PBR START TIME SELECTION

System Transfer/A.A. Data No. 1 4 09

OPERATION:

- 1. Go off-line.
- 2. Enter: Mode System LK1 MIC

 Sub-Mode Transfer/A.A. LK4

 Data No. (Dial Pad)

Data No.	Title .	Setting Date
0 9:	PBR STRT	FR
TIME	- DISPLA	Υ

- Press the corresponding CO/PBX line key to change data option.
 - To change FR to AF, press CO/PBX line key 2.

LH 1	LK 2	LKJ	LK 4
FR. FR.	AF		
LK 5	LK 6	LK 7	LK 8

CO/PBX line keys



- Pressing the TRF key will write the selected data and advance to Memory Block 1-4-11 (Automated Attendant Message Day/Night Mode Selection).
- 5. Press the SPKR key to go back on-line.
- Additional Programming

		Data No.	System Data	
Mode	Sub-Mode		Required	May Be Required
System (LK 1)	PBR/Misc. (LK 8)	01		
System (LK 1)	PBR/Misc. (LK 8)	12		
System (LK 1)	PBR/Misc. (LK 8)	13		

NOTES:

- If FR is assigned, Automated Attendant message send start time and the PBR connected to Automated Attendant trunk start time is the same.
- FR = Same time the Automated Attendant sends
 the message
- AF = After the Automated Attendant sends the message

FREEDRICK LEAST LK 4
STORTGALGARD Baleane
LK 2 LK 6 LK 7 LK 8

Pressing the TRE key will write the selected data and advance to Memory Black 1-4-08 (Automated Attendant PBR Start Time

M. Additional Programming

Mode System Chile Required May

System (LE 11 Trans/A.A. 63

GENERAL INFORMATION - AUTOMATED ATTENDANT PBR START TIME SELECTION

The Automated Attendant is used to automatically answer incoming calls. This Memory Block assigns when the PBR will answer the trunk; while the Automated Attendant is sending the message or only after the message is completed.

AUTOMATED ATTENDANT MESSAGE DAY/NIGHT MODE SELECTION

System	Transfer/A.A.	Data No.
ENDIANT	ITA CHTAMO	111

OPERATION:

- Go off-line.
- 2. Enter: Mode

System

o MIC LK 1 ICM W

Sub-Mode Transfer/A.A.

LK 4

Data No.

1 (Dial Pad) Day/Night

Mode Setting Data No. Title Dota 1: AAMSG (DY) =NO TIME DISPLAY

- 3. Press the corresponding CO/PBX line key to change data option.
 - To change YES to NO, press CO/PBX line key 2.

LK 1	LK 2	LK 3	LK4
YES	BAND NO SOL		
LK 5	LK 6	LK 7	LK8

CO/PBX line keys

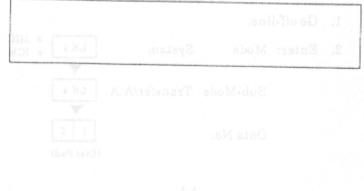
Additional Programming

Default

Press LNRUSPD key to toggle Day/Night Mode.

Use the Dial pad to specify the A.A. message number.

NOTES:



- 4. Press the TRF key to enter selected data and advance to the next Automated Attendant No.
- 5. After entering all data, pressing the TRF key will write the selected data and advance to Memory Block 1-4-12 (Automated Attendant Message to Tenant Assignment).
- 6. Press the SPKR key to go back on-line.

Data Mode Sub-Mode No. May Be Required Required

GENERAL INFORMATION - AUTOMATED ATTENDANT MESSAGE DAY/NIGH

MODESELECTION

This Memory Block is used to specify which Automated Attendant messages are available for use in a

System Data

Day/Night Mode setting.

AUTOMATED ATTENDANT MESSAGE TO TENANT ASSIGNMENT

System	Transfer/A.A.	Data No.
1	4	12

OPERATION:

- 1. Go off-line.
- 2. Enter: Mode

System

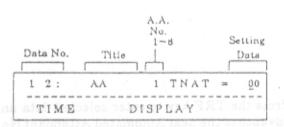
LK I . ICM

Sub-Mode Transfer/A.A.

Data No.

1 2 (Dial Pad)

LK 4



Data:

Automated Attendant Message No:

Setting Data:

Tenant No. 00 ~ 47

HOLD key:

Data Clear

Default	All Automated Attendant Messages:
Delaute	Tenant No. 00

3. Use the dial pad to enter the Tenant Number.

Dial pad 0 ~ 9

To enter Tenant Number

- Press the TRF key to write the selected data and advance to next Tenant Number.
- After all data has been entered, Pressing the TRF key will write the selected data and advance to Memory Block 1-4-13 (Automated Attendant Answer Delay Time Assignment).
- 6. Press the SPKR key to go back on-line.

2. Enter Moda System LKI . MGS

Sub-Mode Francism, A. CKY

Data Na. 2 1

NOTES:

To change YES to NO, press CO/PBX line

CKI LEG LK3 LK4
YES SEMBER
CKS LK6 LK7 CK8

Press LNIUSPD key to toggie Day/Night Mode Use the Dial ped 1 - 3 to specify the A.A.

M Additional Programming

		Data	System Data	
Mode	Sub-Mode	No.	Required	May Be Required
System (LK 1)	Trans./A.A. (LK 4)	11		
CO/PBX (LK 3)		39		

GENERAL INFORMATION - AUTOMATED ATTENDANT MESSAGE TO TENANT

ASSIGNMENT

This Memory Block is used to assign Tenant Numbers to one of the eight automated messages. If the tenant is I not assigned to a specific automated message, then the Automated Attendant will send the message assigned I in Memory Block 1-8-11 (Automated Attendant Assignment Day/Night Mode Selection).

AUTOMATED ATTENDANT ANSWER DELAY TIME ASSIGNMENT

	System	Transfer/A.A.	Data No.
MESSAG	ENTANT	TTA CATAMO	13

OPERATION:

- Go off-line.
- Enter: Mode

System

o MIC LK t ICM

Sub-Mode Transfer/A.A.

LK 4

Data No.

3 (Dial Pad)

Y

A.A. No. Data No.

Setting

1 3: AADLY 1 04 8 TIME DISPLAY

Data:

Automated Attendant Message No: 1~8

Setting Data:

00 ~ 99 sec.

All Automated Attendant Messages: Default 4 sec.

- Use the dial pad to enter the message number and seconds.
- 4. Press the TRF key to write the selected data and advance to the next Automated Attendant No.
- 5. After all data has been entered, pressing the TRF key will write the selected data and advance to Memory Block 1-4-14 (Automated Attendant Message Access Code (1-Digit) Assignment).
- 6. Press the SPKR key to go back on-line.

NOTES:

Additional Programming

Z-Digit)		Data . No.	System Data	
Mode	Sub-Mode		Required	May Be Required
System (LK 1)	Trans/A.A. (LK 4)	11		-
System (LK 1)	Trans/A.A. (LK 4)	12		
CO/PBX (LK 3)		39	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	

GENERAL INFORMATION - AUTOMATED ATTENDANT ANSWER DELAY TIME

ASSIGNMENT

This Memory Block is used to assign the number of seconds before the Automated Attendant will answer an incoming CO/PBX call.

AUTOMATED ATTENDANT MESSAGE ACCESS CODE (1-DIGIT) ASSIGNMENT

System	Transfer/A.A.	Data No.
1	4	14

OPERATION:

Go off-line.

2. Enter: Mode

System

LK 1 • ICM

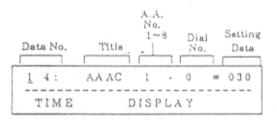
Sub-Mode Transfer/A.A.

Data No.

(Dial Pad)

Y

LK 4



3. Enter data using the dial pad.

Automated Attendant

. ~ 8

Message No.

Dial pad

0 ~ 9

To enter data.

Setting Data: A.A. Message Function Code

000 (unused), 001~053

- Press the TRF key will write the selected data and advance to the next Dial No., then Automated Attendant No.
- After all data has been entered, pressing the TRF key will write the selected data and advance to Memory Block 1-4-15 (Automated Attendant Message Access Code (2-Digit) Assignment).
- 6. Press the SPKR key to go back on-line.

M Additional Programming

2 8-8-1 (1-8-8)	ode Sub-Mode Data	Data	System Data	
Mode		Required	May Be Required	
System (LK 1)	Trans/A.A. (LK 4)	11 botan	out A ad t	pled shap
System (LK 1)	Trans/A.A. (LK 4)	12	×	
CO/PBX (LK 3)		38	~	

NOTES:

unction Code	Contents
000	Unregistered
001	Automated Attendant Message (1)
002	Automated Attendant Message (2)
003	Automated Attendant Message (3)
004	Automated Attendant Message (4)
005	Automated Attendant Message (5)
006	Automated Attendant Message (6)
007	Automated Attendant Message (7)
008	Automated Attendant Message (8)
009	
010	Internal Number
011	Bypass Automated Attendant
012	agulata; ,
013	
014	All Automated Attenders
015	Paging Zone A Call
016	Paging Zone B Call
017	Paging Zone C Call
018	Fax Status Indication (CO/PBX lines)
019	Toss the TEF key to write the a
020	DSS 1 Cally two node of somewha bro
021	DSS 2 Call
022	DISA Access Code
023	RE key will write the selected
024	dvance to Memory Block Lut-14-1
025	Stendart Message Access Cod
026	- Ontonia di con
029	ress the SPRICkey to go back on-
030	Specified Station Call (0)
031	Specified Station Call (1)
032	Specified Station Call (2)
033	Specified Station Call (3)

Continued on next page.

Atallation MATED ATTENDANT MESSAGE ACCESS CODE (1-DIGIT) ASSIGNMENT

System	Transfer/A.A.	Data No.
CLE LACE	LIA4 IIIA	14

(continued)

Function Code	Contents		
034	Specified Station Call (4)		
036	Specified Station Call (5)		
036	Specified Station Call (6)		
037	Specified Station Call (7)		
038	Specified Station Call (8)		
039	Specified Station Call (9)		
040	Specified Station Call (10)		
041	Specified Station Call (11)		
042	Specified Station Call (12)		
043	Specified Station Call (13)		
044	Specified Station Call (14)		
045	Specified Station Call (15)		
046	Specified Station Cail (16)		
047	Specified Station Call (17)		
048	Specified Station Call (18)		
049	Specified Station Call (19) 1010000 1 1ai		
050	Specified Station Call (20)		
051	Specified Station Call (21)		
052	Specified Station Call (22)		
053	Specified Station Call (23)		

	Sub-Made	

Default

Dial Number	Function Code	SS-73 Contents 22 DISA A	Pressing the TRF key will write the selected data and edvance to ackt the Dial No. then
0	030	Unregistered 000 98-31	Automated Attendant No.
1	010	Station Number	After all data has been entered, pressing to
2	010	Station Number	TRE key will write the selected data and
3	010	Station Number	advance to Memory Block 1-4-16 (Automated
4~9	000	Unregistered	Attendant Message Repent Selection).

key first, then press " or #

GENERAL INFORMATION - AUTOMATED ATTENDANT MESSAGE ACCESS

CODE (1-DIGIT) ASSIGNMENT

This Memory Block is used to route a call that has come in to the Automated Attendant by entering a 1-digit

AUTOMATED ATTENDANT MESSAGE ACCESS CODE (2-DIGIT) ASSIGNMENT

System	Transfer/A.A.	Data No.
roci i lin	7. U-1). 241UU C	15

OPERATION:

- Go off-line.
- 2. Enter: Mode

 MIC LKI System !CM \mathbb{A}

Sub-Mode Transfer/A.A.

Data No.

5 (Dial Pad)

LK 4

A.A. No. Setting Dial Data No. Title No. <u>1</u> 5: AA AC 0.0 TIME DISPLAY

Enter data using the dial pad.

: Message No. Automated Attendant

Dial pad

To enter data.

To enter *, #, press the LNR/SPD key first, then press * or #.

- 4. Pressing the TRF key will write the selected data and advance to next the Dial No., then Automated Attendant No.
- 5. After all data has been entered, pressing the TRF key will write the selected data and Additional Programming advance to Memory Block 1-4-16 (Automated Attendant Message Repeat Selection).
- 6. Press the SPKR key to go back on-line.

NOTES:

Contents	nousans a code
Specified Station Call (4)	
Specified Station Cell (8)	936

Default

	_	1	-
Dial Number	Function	Contents	049
00~50	030	Unused	051
51	011	Bypass Automated Attendant	952
52	015	Paging Zone A Call	000
53	016	Paging Zone B Call	
54	017	Paging Zone C Call	diamit
55~73	000	Unused moissans	IniCI
74	022	DISA Access Code	redgin)
75~99	000	Unused	0

Mode		Data	System Data	
	Sub-Mode	No.	Required	May Be Required
System (LK 1)	Trans./A.A. (LK 4)	11		
System (LK 1)	Trans/A.A. (LK 4)	12		
System (LK 1)	Trans/A.A. (LK 4)	14		
CO/PBX (LK 3)		39		

GENERAL INFORMATION - AUTOMATED ATTENDANT MESSAGE ACCESS

CODE (2-DIGIT) ASSIGNMENT

This Memory Block is used to route a call that has come in to the Automated Attendant by entering a

Programming

AUTOMATED ATTENDANT MESSAGE REPEAT SELECTION

System	Transfer/A.A.	Data No.	
1	4	16	

NOTES:

OPERATION:

- Go off-line.
- 2. Enter: Mode

System

LKI OMIC

Sub-Mode Transfer/A.A.

Data No.

l 6

LK 4

A.A. (Dial Pad)
No. 1-8 Setting
Data No. Title Data

1 6: AAMSG 1 1

TIME DISPLAY

- Press the corresponding CO/PBX line key to change data option.
 - To change One Time to Three Times, press CO/PBX line key 3.

TR T	LK 2	LK 3	LK 4
One Time	Two Times	Three Times	Four Times
LK 5	LK 6	LK7	LK 8
Five Times	Six Times	Seven Times	Eight Times

CO/PBX line keys

Default

Default All Messages One Time

- Press the TRF key write the selected data and advance to the next Automated Attendant No.
- After all data has been entered, Pressing the TRF key will write the selected data and advance to Memory Block 1-5-02 (SMDR Print Format).
- 6. Press the SPKR key to go back on-line.

Additional Programming

Mode		Data	System Data		
	Sub-Mode	No.	Required	May Be Required	
System (LK 1)	Trens A.A. (LK 4)	11			
CO/PBX (LK 3)		38			

GENERAL INFORMATION - AUTOMATED ATTENDANT MESSAGE REPEAT

SELECTION

This Memory Block is used to specify the number of times a message from the Automated Attendant will be repeated for the calling party.

Prommine

0 100

SMDR PRINT FORMAT

OPERATION:

1. Go off-line.

2. Enter: Mode System LK1 • MIC

Sub-Mode SMDR/LCR LK5

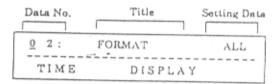
Data No. 0 2

(Dial Pad)

System	SMDR/LCR	Data No.
Imag	5	02

NOTES:

 This Memory Block is required only when an MIF-F(S)-10 KTU or an MIF-F(L)-10 KTU and printer are installed in the system.



- Press the corresponding CO/PBX line key to change data option.
 - To change ALL to MASK, press CO/PBX line key 2.

CORRY	line keye	Def	ault
LK 5	LK 6	LK 7	LK 8
ALL	MASK		
LK1	LK 2	LK 3	LK 4

- Pressing the TRF key will write the selected data and advance to Memory Block 1-5-13 (Printer Connected (Alarm) Selection).
- Press the SPKR key to go back on-line.

■ Additional Programming

Mode	0.1.14	Data	Systen	Data .	
	Sub-Mode	No.	Required	May Be Required	off v

GENERAL INFORMATION - SMDR PRINT FORMAT

This Memory Block specifies if ALL digits are to be printed. If not ALL digits are specified, the last four digits will be masked and "XXXX" is printed.

PRINTER CONNECTED (ALARM) SELECTION

OPERATION:

1.	Go off-	line.		
				LKI • ICM
		Sub-Mode	SMDR/LCR	LK 5
		Data No.		1 3 (Dial Pad)

Data No.	Title	Setting Duta
<u>1</u> 3:	PRINTER	NO
TIME	DISPLA	Y

- Press the corresponding CO/PBX line key to change data option.
 - To change NO to YES, press CO/PBX line key 2.

CO/PBX	line keys	Def	ault
LK 5	LK 6	LK 7	LK 8
NO	иои	YES	
LK, 1	LK 2	LK 3	LK 4

- Pressing the TRF key will write the selected data and advance to Memory Block 1-5-14 (Printer Line Feed Control Selection).
- 5. Press the SPKR key to go back on-line.
- M Additional Programming

		Data	System	Data	Data		
Mode	Sub-Mode	No.	Required	May Be Required	May Be Required		

System	SMDR/LCR	Data No.
1	5	13

NOTES:

- 1. Program for YES when a printer is connected.
- SMDR cannot be used if this Memory Block is programmed for NO or NON.
- Programming this Memory Block is required only when the MIF-F(S)-10 KTU or MIF-F(L)-10 KTU unit is installed.



change deta option.

Pressing the TRF key will write the selected data and advance to Memory Block 1-5-13 (Printer Connected (Alarm) Selection).

GENERAL INFORMATION - PRINTER CONNECTED (ALARM) SELECTION

This Memory Block should be programmed for YES when a printer is connected. If the printer is disconnected from the system, an alarm will sound at stations connected to Ports 01 and 02.

PRINTER LINE FEED CONTROL SELECTION

System SMDR/LCR Data No.

OPERATION:

- Go off-line.
- 2. Enter: Mode System LK1 MIC ICM

 Sub-Mode SMDR/LCR LK5

 Data No. 1 4

Data No.	Title	Setting Date
1 4:	LINE FEED	YS
TIME	DISPLAY	

- Press the corresponding CO/PBX line key to change data option.
 - To change YES to NO, press CO/PBX line key 2.

TK1	LK 2	LK 3	LK 4
YES	ИО		
LK 5	LK 6	LK 7	LK 8

CO/PBX line keys



- Pressing the TRF key will write the selected data and advance to Memory Block 1-5-24 (DISA ID Code Digit Selection).
- Press the SPKR key to go back on-line.
- M Additional Programming

		Data	Systen	Data
Mode	Sub-Mode	No.	Required	May Be Required
System (LK 1)	SMDR (LK 5)	13	V	
System (LK 1)	SMDR (LK 5)	02		

NOTES:

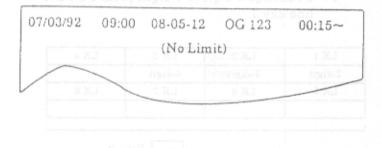
 Line Feed Control Assignment is valid only when an MIF-F(S)-10 KTU or MIF-F(L)-10 KTU and printer are installed and being used for SMDR.

Example: Settings to specify the format of communication data output to the printer.

· Line feed control in effect.

07/03/92	09:00 08-05-12	OG 123	
00:15:32	102885167537000	LCR	FWD234
12345678	A12345678		

No Line feed control.



Pressing the TRE key will write the salected data and advance to Memory Block 1-5-25 (SMDR Valid Call Time Assignment):

Additional Progressions

Bysiom Date

Mode Sub-Mode No. Required Re-

GENERAL INFORMATION - PRINTER LINE FEED CONTROL SELECTION

This Memory Block is used to specify the format of the data sent to the printer.

DISA ID CODE DIGIT SELECTION

System SMDR/LCR Data No. 1 5 24

OPERATION:

NOTES:

2. Enter: Mode System LK1 • MIC	2.	Enter:	Mode	System	LK 1	• ICM

Sub-Mode SMDR/LCR LK5

Data No.

2 4 (Dial Pad)

Data No.	Title	11-01-9	Setting Dat
SECTION OF	180.1 00	nette	a Laaslo
2 4:	IDCODE	m	3 DG

- Press the corresponding CO/PBX line key to change data option.
 - To change 3-digit to 4-digit, press CO/PBX line key 3.

LK 1	LK 2	LK 3	LK 4
2-digit	3-digit	4-digit	
LK 5	LK 6	LK 7	LK 8

CO/PBX line keys

Default

- Pressing the TRF key will write the selected data and advance to Memory Block 1-5-25 (SMDR Valid Call Time Assignment).
- 5. Press the SPKR key to go back on-line.

M Additional Programming

		Data	System Data			
Mode	Sub-Mode	No.	Required	May Be Required		

_	-					-						_	_			_		_		_	_		_	-	-	-	_			_		-			_	
	G	E	N	\mathbf{E}	RA	L	IL	1F	C	R	M	A	T	IC	10	V.	1	Ol	S.	A	IL) (0	0	DI	E	D	IC	FI	T	SEL	E	CT	I(NO	V

This Memory Block is used to select the DISA ID digit number.

SMDR VALID CALL TIME ASSIGNMENT

System	SMDR/LCR	Data No.
INGODUTG	MODIS FIGUR	25

OPERATION:

NOTES:

1. Go off-line.

2. Enter: Mode

System

LK 1 • MIC

Sub-Mode SMDR/LCR

Data No. 2

(Dial Pad)

5

LK 5

Data No. Title Setting Data

2 5: SMDR TIM = 040 #

TIME DISPLAY

Default 40 sec.

- 3. Enter data using the dial pad.
 - Minimum time assignment is 00.0 sec.
 - Time assignment can be set from 00.0 sec. ~990 sec. in increments of 10.
 - Example: To change 40.0 sec. to 90.0 sec., enter 09 from the dial pad.
- Pressing the TRF key will write the selected data and advance to Memory Block 1-5-26 (SMDR Incoming/Outgoing Print Selection).
- 5. Press the SPKR key to go back on-line.

Sub-Mode SMDRULCR LKS

Data No. 2 0

(Diel Pal)

Data No. 3etting Data

key 3.

LK L LK2 S. LK3 LK4

ALL OUT TO TWO

LK5 LK6 LK7 LK8

Pressing the TRF key will write the selected data and advance to Memory Block 1-6-01

(DSS/HLF to Telephone Port Assignment).

Press the SPKR key to se back co-line.

Additional Programming

		Data	System	Data		
Mode	Sub-Mode	No.	Required	May Be Required		

GENERAL INFORMATION - SMDR VALID CALL TIME ASSIGNMENT

This Memory Block is used to assign the minimum length of time before the SMDR will output a record of an outgoing CO/PBX call.

SMDR INCOMING/OUTGOING PRINT SELECTION

System	SMDR/LCR	Data No.
1 _{MOIT}	MAR 05	26

OPERATION:

- Go off-line.
- 2. Enter: Mode

System

LK1 • MIC

Sub-Mode SMDR/LCR

Data No.

LK 5

(Dial Pad)

Data No.	Titl	e Se	Setting Data		
26:	PRINT	MOD =	OUT		
TIME	- D1:	SPLAY			

- Press the corresponding CO/PBX line key to change data option.
 - To change OUT to INC, press CO/PBX line key 3.

LK 1	LK 2	LK 3	LK 4
ALL	OUT	INC	
LK 5	LK 6	LK 7	LK 8

CO/PBX line keys

Default

- Pressing the TRF key will write the selected data and advance to Memory Block 1-6-01 (DSS/BLF to Telephone Port Assignment).
- 5. Press the SPKR key to go back on-line.
- M Additional Programming

Mode		Data No.	System Data			
	Sub-Mode		Required	May Be Required		

NOTES:

Data No. Title Setting Date
2 5: SMDR TIM = 040+

Default | 40 sec. 8

Euter data using the dial pad.

rec. in increments of 10.

Example: To charge 40.0 sec. to 90.0

Pressing the TRF key will write the selected data and advance to Memory Block 1-5-26

Press the SPER key to go back on-lies.

GENERAL INFORMATION - SMDR INCOMING/OUTGOING

PRINT SELECTION

This Memory Block is used to specify the type of call records to be output from the SMDR; NON = no printing, OUT = print outgoing call records only, INC = print incoming call records only, ALL = print incoming and coutgoing call records.

DSS/BLF TO TELEPHONE PORT ASSIGNMENT

OPERATION:

- 1. Go off-line.
- 2. Enter: Mode System LK1 MIC ICM

 Sub-Mode DSS LK6

 Data No. 0 1

Data No.	Title	DSS No.	Settin	у Ди Са
0 1:	DSS	1 =	P	01
TIME		DISPLA	Y	

3. Enter data using the dial pad.

Example: Enter Tel port No. 01 on DSS 1.

← · , # → : To move cursor.

Dial pad, 0 ~ 9 : To enter data.

- 4. Press the TRF key to write the data.
 - DSS 2 is displayed.
- 5. Change data using the dial pad.
- After all data has been entered, pressing the TRF key will write the selected data and advance to Memory Block 1-6-03 (DSS Call Voice/Tone Signal Selection).
- 7. Press the SPKR key to go back on-line.
- M Additional Programming

Mode		Data	System Data			
	Sub-Mode	No.	Required	May Be Required		

System	DSS	Data No.
	6	01

NOTES:

- The telephone to which a DSS/BLF Console is connected must be specified by port number.
- A maximum of four DSS/BLF Consoles can be connected to a system.
- There can be a maximum of two DSS/BLF Consoles connected to one telephone.

DSS 1 -> Port No. 01
DSS 2 -> Port No. 02
DSS 3 -> Port No. 01
DSS 4 -> Port No. 02

s te m	Data	w Additional Programming	
May B Require	May Be Required		
-			

GENERAL INFORMATION - DSS/BLF TO TELEPHONE PORT ASSIGNMENT

This Memory Block is used to assign a DSS/BLF Console to a telephone port number.

DSS CALL VOICE/TONE SIGNAL SELECTION

System DSS Data No. 1 6 03

OPERATION:

- 1. Go off-line.
- 2. Enter: Mode System LK1

Sub-Mode DSS

Data No.

0 3 (Dial Pad)

LK 6

MIC

· ICM

		_	_
0 3:	VOICE		CALL

- Press the corresponding CO/PBX line key to change data option.
 - To change VOICE to TONE, press CO/PBX line key 1.

LK 1	LK 2: 000	LK 3	LK 4
TONE	VOICE		
LK 5	LK 6	LK 7	LK 8

CO/PBX line keys



- Pressing the TRF key will write the selected data and advance to Memory Block 1-6-05 (DSS/BLF Key Selection).
- 5. Press the SPKR key to go back on-line.
- M Additional Programming

		Data	System Data	
Mode	Sub-Mode	No.	Required	May Be Required

NOTES:

- Voice Tone Signaling can also be switched by dialing the digit 1 from a station.
- If Tone Signaling is programmed in this Memory Block, the called party cannot answer handsfree unless the DSS station switches it to VOICE by dialing the digit 1.

Enter data using the diel ped.

To move cursor:

Press the TMF key to write the data.

• DSS 2 is displayed.

After all data has been entered, pressing the THF key will write the selected data and advance to Memory Block 1-6-03 (DSS Call

Press the SPKR key to go back on-line.

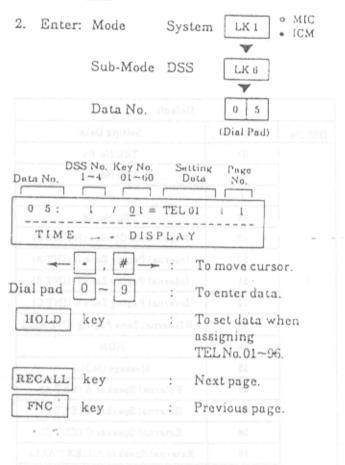
GENERAL INFORMATION - DSS CALL VOICE/TONE SIGNAL SELECTION

This Memory Block is used to specify which is to be used first, Voice or Tone signaling, when calling an extension from a DSS console.

DSS/BLF KEY SELECTION

OPERATION:

1. Go off-line.



 Press the corresponding CO/PBX line key and dial pad keys to change data option.

Example: To change TEL 01 assigned to key 1 on DSS 1 to External Speaker A;

- Press CO/PBX line key 6.
- New data is displayed.
- Press the TRF key.
- No. 02~60 is displayed successively.
- · After entering data for key 60 on DSS 4,
- Press the TRF key to write the selected data and advance to Memory Block 1-7-02 (External Speaker Connection Selection).
- 5. Press the SPKR key to go back on-line.

System	DSS	Data No.
AUI 1 DELLA	6	05

Page 1

LK 1	LK 2	LK 3	LK 4
Non	TEL No. 01~96	Internal Paging Zone A	Internal Paging Zone B
LK 5	LK 6	LK 7	LK 8
Internal Paging Zone C	All Internal Zone Paging	External Zone	External Zone

SPKR = Speaker ICM TEL = Intercom Telephone

Page 2

LK 1	LK 2	LK 3	LK 4	
External Zone C	All External Zone Paging	Мезнаке	Night Mode Change	
LK 5	LK 6	LK 7	LK 8	
Transfer	Attendant Station Lockout (In/Out)	Not Used	Not Used	

CO/PBX line keys

■ Additional Programming

		Data	Systen	a Data
Mode	Sub-Mode	Sub-Mode No.	Required	May Be Required
System (LK 1)	DSS (LK 6)	01		

Continued on next page.

DSS/BLF KEY SELECTION (continued)

5	System	DSS	Data No.
	1017/4	6	05

Functions can be assigned to keys 01~60 on DSS console 1~4.

- · Functions to be programmed
- 1. Station No. 01~56
- 2. Internal Page Group A CALL
- 3. Internal Page Group B CALL
- 4. Internal Page Group C CALL
- 5. Internal Page Group ALL
- 6. External Speaker A CALL
- 7. External Speaker B (2) CALL
- . External Speaker B (2) CAL
- 8. External Speaker C CALL
- 9. External Speaker Paging ALL
- 10. Message
- 11. Night Mode Switching
- 12. External Relay 0~9

DSS Key Number

12345678

110

	00000000	0108	Key Number	
	00000000	09-16	01 = 48two-color	LED (green and red)
	00000000	17→24	143 41.0	red LED only
	00000000	2532		
	00000000	33-40		
	00000000	4148		
i	000000	4954		
l	000000	55-+60		

		Default ON CONC
DSS No.	Key No.	Setting Data
	01	TEL No. 01
	02	TEL No. 02
	1	
	48	TEL No. 48
	49	Night Mode Change (NT MOD)
	50	Internal Paging Zone A (INT A)
1	51	Internal Paging Zone B (INT B)
	52	Internal Paging Zone C (INT C)
	53	All Internal Zone Paging (INT ALL
	54	нои
	55	Mensage (MSG)
	56	External Speaker A (EXT A)
	2 8 57 OV	External Speaker B (EXT B)
	58	External Speaker C (EXT C)
	59	External Speaker All (EXT ALL)
	60	Transfer (TRF)
2		Same as DSS No. 1

NOTES:

- When TEL is assigned to a key with only a red LED, the message function cannot be confirmed.
- When a function (Message, Paging, etc.) that does not require a green LED is assigned to a two-color LED key, the green LED will not function.
- Telephone number setting data for telephone sets is determined by number of installed ESI-F(8)-21 KTUs.

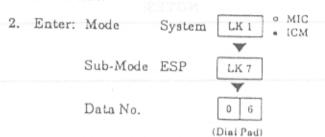
GENERAL INFORMATION - DSS/BLF KEY SELECTION

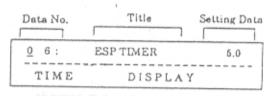
This Memory Block is used to assign functions to the DSS Console(s) keys.

EXTERNAL PAGING TIMEOUT SELECTION

OPERATION:

1. Go off-line.





- Press the corresponding CO/PBX line key to to change the data option.
 - To change 5.0 minutes to 3.0 minutes, press CO/PBX line key 5.

LK 1	LK 2	LK 3	LK 4
0.5 min.	1.0 min.	1.5 min.	2.0 min.
LK 5	LK 6	LK 7	LK8
3.0 min.	5.0 min.	8.0 min.	No Limit

CO/PBX line keys



- Pressing the TRF key will write the selected data and advance to Memory Block 1-7-07 (External Tone Ring Cycle Selection).
- 5. Press the SPKR key to go back on-line.

M Additional Programming

		Data No.	System Data	
Mode	Sub-Mode		Required	May Be Required
System (LK 1)	ESP(LK 7)	02		
System (LK 1)	ICM (LK 2)	00		

System	ESP	Data No.
LONELRING	7.4	06

NOTES:

Press the TRF key write the selected data and advance to the next External Ring Cycle.

After all data has been entered, pressing the TRF key will write the selected data and advance to Memory Block 1-8-01 (SLT or Automated Attendant/DISA to PRH

6. Press the SPERR key to go back on line.

* Additional Pregramming

System

System

GENERAL INFORMATION - EXTERNAL PAGING TIMEOUT SELECTION

This Memory Block is used to specify allowed time for External Page before timeout and release of the paging circuit.

EXTERNAL TONE RING CYCLE SELECTION

OPERATION:

- Go off-line.
- 2. Enter: Mode

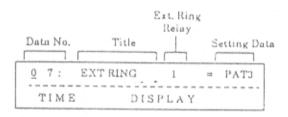
System LK! • MIC

Sub-Mode ESP

Data No.

0 7 (Dial Pad)

LK 7



- Press the corresponding CO/PBX line key to to change the data option.
 - To change Pattern 3 to Pattern 2, press CO/PBX line key 2.

LK 1	LK 2	LK3	LK 4
PATTERN 1	PATTERN 2	PATTERN 3	PATTERN 4
LK 5	LK 6	LK 7	LK 8
Continuous			

CO/PBX line keys

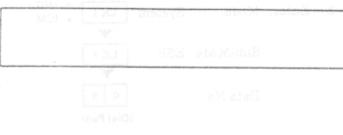
Default

- Press the TRF key write the selected data and advance to the next External Ring Cycle.
- After all data has been entered, pressing the TRF key will write the selected data and advance to Memory Block 1-8-01 (SLT or Automated Attendant/DISA to PBR Selection).
- 6. Press the SPKR key to go back on-line.
- M Additional Programming

	Sub-Mode	Data No.	System Data		
Mode			Required	May Be Required	
System (LK 1)	ESP(LK 7)	02			
System (LK 1)	ICM (LK 2)	00	GINGTE	A9 JIAI	

System	ESP	Data No.
1	7	07

NOTES:



Data No. THIS Setting Data

Q 6 SEPTIME 0.0

PIME DATA

PERSONAL SEPTIME 0.0

Pattern	On	ls.	2.6	Зя	4a	5в	ба
1		П		99 78			
20100	m 0,0			0.0 ni 2	2 10		7
3			ī				ī
4		П			П	Ţ	1.2%
5	Continuo	ous.]		22.2		- 0 Hz

Pressing the TRF key will write the selected data and advance to Memory Bleck 1-7-97 (External Tone Ring Cycle Selection).

Press the SPKR key to go back on-Rue.

GENERAL INFORMATION - EXTERNAL TONE RING CYCLE SELECTION

This Memory Block is used to assign relay circuits one of five distinctive ringing control/intervals.

SLT OR AUTOMATED ATTENDANT/DISA TO PBR SELECTION

System	PBR/Misc.	Data No.
ACCALLE V	8	01

OPERATION:

- 1. Go off-line.
- 2. Enter: Mode System LK1 MIC ICM

 Sub-Mode PBR/Misc. LK8

 Data No. 0 1

Data No.	Title
0 1:	PBR(SLT/AA)
TIME	DISPLAY

- Press the corresponding CO/PBX line key to change the data option.
 - The LED indication changes to indicate the data each time the CO/PBX line key is pressed.

LK 1	LK 2	LK3	LK 4
PBR'I	PBR 2	draw may ye	N-251
LK 5	LK 6	LK 7	LK 8
		OC TREAMENT	v physical Ci-

CO LED OFF ON

Data Single Line Telephone A.A./DISA

- Pressing the TRF key will write the selected data and advance to Memory Block 1-8-02 (PBR Receive Level Assignment for Automated Attendant/DISA).
- Press the SPKR key to go back on-line.

NOTES:

- Specify if PBR 1 (Channel 1 and 2 in the CPU KTU) and 2 (Channel 3 and 4 in the CPU KTU) are to be used for Single Line Telephones.
- If both line key 1 and line key 2 are assigned to the Automated Attendant/DISA feature, the PBR-F(4)-11 KTU must be installed in the system if Single Line Telephones will be used.

PBR 2: 3rd and 4rb channel in the OPU KTU
2. Use the dist pad to change data option.
Setting Data.

15.3 dBm - 15.3 dBm - 17.0 dBm - 17.0 dBm

-39.1 dBm -40.2 dBm -41.5 dBm -42.5 dBm

Additional Programming

	Sub-Mode	Data No.	System Data		
Mode			Required	May Be Required	
System (LK 1)	PBR/Misc.				

GENERAL INFORMATION - SLT OR AUTOMATED ATTENDANT/DISA TO PBR SELECTION

This Memory Block is used to specify whether the PBR circuits in the CPU KTU are to be used for Single Line Telephones or the Automated Attendan/DISA.

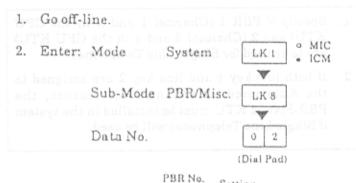
Data No.

TIME

PBR RECEIVE LEVEL ASSIGNMENT FOR AUTOMATED ATTENDANT/DISA

System	PBR/Misc.	Data No.
1	8	02

OPERATION:



NOTES:

1. The DTMF signal level from the calling party when the Automated Attendant answers is reduced for Public Switching Telephone Network (PSTN). This Memory Block specifies the minimum detectable receiving level.

Data: PBR 1: 1st and 2nd channel in the CPU KTU PBR 2: 3rd and 4th channel in the CPU KTU

1,2

DISPLAY

Setting

Data

05

-46.2 dBm

-47.5 dBm

Use the dial pad to change data option.

Title

Setting Data	Receiving Level
00	-32.4 dBm
01	-33.0 dBm
02	-33.8 dBm
03	-34.6 dBm
04	-35.3 dBm
05	-36.1 dBm →
06	-37.0 dBm
07	-38.0 dBm
08	-39.1 dBm
09	-40.2 dBm
10	-41.5 dBm
11	-42.5 dBm
12	-43.8 dBm
13	-45.1 dBm

- 4. Press the TRF key to write the selected data and advance to the next PBR.
- 5. After all data has been entered, pressing the TRF key will write the selected data and advance to Memory Block 1-8-04 [Time Display (12h/24h) Selection).
- Press the SPKR key to go back on-line

33	Mode	Sub-Mode	Data No.	System Required	May Be Required
M	Additional P	rogramming			

GENERAL INFORMATION - PBR RECEIVE LEVEL ASSIGNMENT AUTOMATED ATTENDANT/DISA

This Memory Block is used to specify the receiving level from a PBR at the Automated Attendant/DISA.

14

15

TIME DISPLAY (12h/24h) SELECTION

System PBR/Misc. Data No. 1 8 04

OPERATION:

1. Go off-line.

2. Enter: Mode System LK1 • MIC • ICM

Sub-Mode PBR/Misc. LK8

Data No. 0 4

(Dial Pad)

Data No. Setting
Data Title

Q 4: 12 HOUR DISP

TIME DISPLAY

- Press the corresponding CO/PBX line key to to change the data option.
 - To change 12 HR to 24 HR, press CO/PBX line key 2.

LK 2	LK 3	LK 4
24 HR		
LK 6	LK 7	LK 8
	24 HR	24 HR

CO/PBX line keys Default

- Pressing the TRF key will write the selected data and advance to Memory Block 1-8-07 (Class Of Service (Attendant) Feature Selection 1).
- 5. Press the SPKR key to go back on-line.

M Additional Programming

desarah dandi	Data No.	System Data	
Sub-Mode		Required	May Bo Required
	Sub-Mode	Sub-Mode Data	Sub-Mode Data System

NOTES:

RECALL key Next page.
FRO key Previous page.

Press the carresponding CO/PBX line key to enter the data.

The LED indication changes to indicate

pressed.
To manign Night Mode per tempet as NO, press CO/PBX line key 2 to turn CO/PBX LED off.

ter entering data for Class 15, press TRF y to write the data and advance to Memory ock 1-8-08 (Class Of Service (Station)

GENERAL INFORMATION - TIME DISPLAY (12h/24h) SELECTION

This Memory Block is used to specify either a 12-hour (12:00AM - 11:59 PM) or 24-hour (00:00 - 23:59) time display.

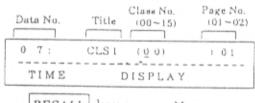
CLASS OF SERVICE (ATTENDANT) FEATURE SELECTION 1

OPERATION:

- 1. Go off-line.
- 2. Enter: Mode System LK1 MIC ICM

 Sub-Mode PBR/Misc. LK8

 Data No. (Dial Pad)



L key	:	Next page.
key	:	Previous pa
	= .	= .

COLED	M OFF	□ ON
Data	NO	YES
Data	(Deny All)	(Allow All)

- Press the corresponding CO/PBX line key to enter the data.
 - The LED indication changes to indicate the data each time a CO/PBX line key is pressed.

ge.

- To assign Night Mode per tenant as NO, press CO/PBX line key 2 to turn CO/PBX LED off.
- Press the TRF key, data of class 01~15 is displayed successively.
- After entering data for Class 15, press TRF key to write the data and advance to Memory Block 1-8-08 (Class Of Service (Station) Feature Selection 2).
- 6. Press the SPKR key to go back on-line.

System	PBR/Misc.	Data No.
MOTTARS	8	07

NOTES:

- Sixteen classes (00~15) of feature restriction
 patterns allow a station user to activate
 particular features while restricting the user
 from other features.
- 2. Page 3 in this Memory Block is not used.
- At default, stations 100 and 101 are in class 00 and all other stations are in class 15.
- Stations are assigned to a Class of Service in Memory Block 4-17 (Station to Class of Service Feature Assignment).

Pove !

G. C.			
LK 1	LK 2	LK 3	SLK4
Night Mode Switching	Night Mode Switching Per Tenant	System Speed Dial Programming	Not Used
LK 5	LK ü	LK 7	LK 8
Not Used	Not Used	Automatic Trunk-To-	Automated Attendant/
1.34.8		Trunk	DISA Set/Reset Mode

Pave S

LK I	LK 2	LK 3	LK 4
Timed Alarm for Single Line Telephone	Call Forward-All Calls from Destination Station	System Reset of Call Forward-All Calls, DND	Password (Outgoing Restriction)
LK 5	LK 6	LK 7	LK8
DISA Password Cancel	DISA Password Confirmation	Weekend Mode Per Tenant	Not Used

CO/PBX line keys

- 1. System reset of Alarm, Call Forward-All Calls, Absence Message, Callback Message.
- *2. Reset the Password Outgoing Restriction of another telephone.

M Additional Programming

Mode	0.1.14	Data	System Data	
Mode	Sub-Mode	No.	Required	May Be Required
Telephone (LK 4)		17		

Continued on next page.

CLASS OF SERVICE (ATTENDANT) FEATURE

(continued)

System PBR/Misc. Data No.
1 8 07

Classes 00~15 programmed i....... Memory Block are programmed as feature restriction classes. In Telephone Mode, Data No. 17, specify any of the classes for each telephone to specify the features that the user can or cannot activate.

C	orresponding CO/PBX Line Key	Function Name	Default Class 00	Default Class 01~15
P	LK to Hollen	Night Mode Switching (System-Wide)	Allow	Deny
	LK 2	Night Mode Switching (Tenant base)	Allow	Deny
п	LK3	System Speed Dial Programming	Allow	Deny
g	- LK 4	Not Used	N/A (0.9)	N/A
e	LK 5	Not Used	N/A Y AJ9210	N/A 3 MIT
1	LK 6	Not Used	N/A	N/A
	Autonica LK.7	Automatic Trunk-to-Trunk Transfer (Set/Reset) and Programming of Outgoing Numbers	Allow	FNC key
-	LK 8	Automated Attendant/DISA Mode Set/Reset	Allow	COPBX
	No. Usel NJ	Timed Alarm (Set/Rest) for Single Line Telephones	Allow	Deny
,	LK 2	Call Forward-All Calls (Set/Reset) from destination station	Allow	Deny
1	· LK3	System-Wide Reset of Call Forward (System-Wide), Call X Prorward, DND, and Callback Request	Deny gathaqes	Press theynor
	bacusoM LK 4 5 Ad asitat2 anicateO	Cancel Telephone Password and Default Password for another Station	adicationwollA	Deny
2	LK 5	DISA Pansword Cancel	Allow	Deny
	ARIO LK G	DISA Password Confirmation XAPADO MULIS	Allow	Deny Basig
	LK 7	Automated Attendant Weekend mode (Set/Reset) Tenant base	Allow	Deny
	LK 8	Not Used 60 eye4	N/A	N/A

GENERAL INFORMATION - CLASS OF SERVICE (ATTENDANT) FEATURE SELECTION 1

This Memory Block is used to assign a particular Class of Service to each station. Each Class of Service allows or disallows the station user specific station features.

2-149

" ...rnmmi....

CLASS OF SERVICE (STATION) FEATURE SELECTION 2

OPERATION:

- 1. Go off-line.
- 2. Enter: Mode

System

LKI • ICM

W

LK8

Sub-Mode PBR/Misc.

Data No. 0 8 | Diel Pud)

RECALL key

Next page.

Previous page.

CO/PBX Line LED OFF ON Data Deny Allow

- Press the corresponding CO/PBX line key to to change the data option.
 - The LED indication changes to indicate the data each time the CO/PBX line key is pressed.
 - To assign CLASS 00, Tone Override, press CO/PBX line key 8 to turn CO/PBX LED off or on.
- Press the TRF key, data of class 01~15 is displayed successively.
- After entering data for Class 15, pressing the TRF key will write the selected data and advance to Memory Block 1-8-09 (Music On Hold Pattern Selection).
- 6. Press the SPKR key to go back on-line.
- M Additional Programming

	BH CHAI	Data	System Data	
Mode	Sub-Mode	No.	Required	May Be Required
Telephone (LK 4)		17		

System	PBR/Misc.	Data No.	
1	8	08	

NOTES:

- Sixteen classes (00~15) of feature restriction
 patterns allows a station user to activate
 particular features while restricting the user
 from other features.
- 2. At default, all stations are in Class 00.
- Stations are assigned to a Class of Service in Memory Block 4-17 (Station to Class of Service Feature Assignment).

Page 01

nge or			
LK I	LK 2	LK 3	LK 4
Call Forward All Call	Trunk Queuing	Automatic Callback	Burge-In (Calling Party)
LK 5	LK 6	LK 7	EK 8
Rejection of Barge-In (Called Party)	Timed Alarm For SLT	Not Used	Tone Override

Page 02 hos Old brawn

LK I	LK 2	LK 3	LK 4
Absence	Callback Message	Station Outgoing Lockout Set	Not Used
LK 5	LK 6	LK 7	LK 8
Cull Forward Busy/No Ans Set	VRS Voice Message	Not Used	DISA Password Set

Page 03

LK 1	LK 2	LK 3	LK 4
Not Used	User Ringing Line Preference Set/Reset	Tone Override (Called Party)	LCR Bypass
LK 5	Ü	LK 7	LK 8
Station Trunk-to- Trunk Transfer	Not Used	Not Used	Not Used

CO/PBX line keys

CLASS OF SERVICE (STATION) FEATURE SELECTION 2 (continued)

System PBR/Misc. Data No.

Classes 00~15 programmed in this Memory Block are programmed as feature restriction classes. In Telephone Mode, Data No. 17, specify any of the classes for each telephone to specify the features that the user can or cannot activate.

С	orresponding,CO/PBX Line Key	Function Name	Default Class 00	Default Class 01~15
	LK I sold Vise	Set Call Forward - All Calls , Do Not Disturb (DND)	Allow	Deny
	LK 2	Trunk Queuing	Allow	Deny
P	LK 3	Automatic Callback	Allow	Deny
a	LK 4	Barge-In Originate on a CO/PBX Line	Deny	Deny
g e	LK 5	Barge-In Receive Allow = Can be Interrupted Deny = Cannot Interrupt	Allow	Deny
1	LK 6	Timed Alarm (Set/Cancel)	Allow	Deny
	LK 7	Not Used	N/A	N/A
	LK 8	Tone Override Originate	Allow	Deny
	LKI	Absence Message	Allow	Deny
	LK 2	Callback Request Originate assum at moutes	e Pattern A to	Deny
P	LKJ	Station Outgoing Lockout (Set/Cancel)	2 (222211	Deny
a g	-, LK 4	Not Used	M. N/A SM.	N/A
e	LK 5	Call Forward Busy, No Answer, Busy/No Answer Set	Allow	Deny
2	LK 6	VRS Voice Message Record/Verify/Erase	Allow	Deny
	LK 7	Not Used	N/A	N/A
	LK 8	DISA Pannword Set	Allow	Deny
	LK 1	Nat Used	N/A	N/A
	LK 2	User Ringing Line Preference Set/Reset	Allow	Deny
a z	LK 3	Tone Override/Camp-On Receive	Allow	Deny
	LK 4	LCR Bypuse (moileaing a	Deny of 1	Deny
	LK 5	Station Trunk-to-Trunk Transfer	Deny Sal	N/A
	LK 6	Not Used	N/A	N/A
	ſ		f grima	a cyeri i quadhuha
	LK 8	Not Uned	AND DE LA	N/A

GENERAL INFORMATION - CLASS OF SERVICE (STATION) FEATURE SELECTION 2

I This Memory Block is used to assign a particular Class of Service to each station. Each Class of Service allows or disallows the station user specific station features.

MUSIC ON HOLD PATTERN SELECTION

System	PBR/Misc.	Data No.	
1	8	09	

OPERATION:

- 1. Go off-line.
- 2. Enter: Mode

System

LKI • MIC

Sub-Mode PBR/Misc.

Allow Allow

(Dial Pad)

LK 8

Data No. Title Setting Data

O 9: MOH _ = A

TIME DISPLAY

Data No.

NOTES:

- Music On Hold can be provided to CO/PBX and intercom calls that are put on hold.
- One of four melodies (A~D) for Music On Hold can be selected in this Memory Block.

A = "Let It Be"

B = "Melody Fair"

C = Chime

D = Chime

- Press the corresponding CO/PBX line key to change data option.
 - To change Pattern A to Pattern B, press CO/PBX line key 2.

LKI	LK 2	LK 3	LK 4
A	В	C	D
LK 5	LK 6	LK 7	LK 8

CO/PBX line keys

Default

- Pressing the TRF key will write the selected data and advance to Memory Block 1-8-10 (PBR Interdigit Release Timer Selection).
- 5. Press the SPKR key to go back on-line.
- M Additional Programming

			System	Data
Mode	Sub-Mode	No.	Required	May Be Required
System (LK 1)	CO Line (LK 1)	34	DISTRICT OF	13230

GENERAL INFORMATION - MUSIC ON HOLD PATTERN SELECTION

This Memory Block is used to specify the Music On Hold pattern selection.

PBR INTERDIGIT RELEASE TIMER SELECTION

OPERATION:

- 1. Go off-line.
- 2. Enter: Mode System LK1 MIC ICM
 Sub-Mode PBR/Misc. LK8

 Data No.

(Dial Pad)

Data No. Title Data

L 0: PBR RELEAS 7s

TIME DISPLAY

- Press the corresponding CO/PBX line key to change data option.
 - To change 7.0 sec. to 5.0 sec., press CO/PBX line key 3.

LK 1	LK 2	LK 3	LK 4
3.0 Aec.	4.0 вес.	5.0 sec.	6.0 нес.
LE 5	LK 6	LK 7	LK 8
7.0 sec.	8.0 sec.	9.0 вес.	10.0 sec.

CO/PBX line keys



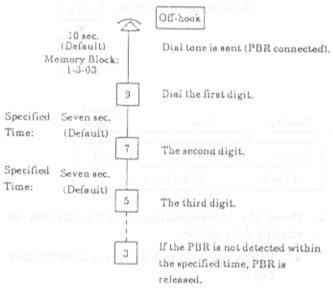
- Pressing the TRF key will write the selected data and advance to Memory Block 1-8-11 (System Refresh Timer Assignment).
- 5. Press the SPKR key to go back on-line.
- M Additional Programming

		Data No.	System Data	
Mode	Sub-Mode		Required	May Be Required
System (LK 1)	SLT(LK 3)	03		
System (LK 1)	PBR/Misc. (LK 8)	01		

System	PBR/Misc.	Data No.	
Mil hpaki	8	10	

NOTES:

 A DTMF Single Line Telephone connected to the Electra Professional Level II System must be supported by PBR that receives DTMF signals.



	rereased.	

Pressing the TRF key will write the selected data and advance to Memory Block 1-8-12 (VRG Message Recording Time Selection)

Modia Sob-Made Date

GENERAL INFORMATION - PBR INTERDIGIT RELEASE TIMER SELECTION

This Memory Block is used to specify the interdigit release time for the PBR.

SYSTEM REFRESH TIMER ASSIGNMENT

OPERATION:

- 1. Go off-line.
- 2. Enter: Mode System LKI MIC

LK 8

(Dial Pad)

Sub-Mode PBR/Misc.

Data No.

Data No.	Title	Setting Data
1 1:	REFRESH	4 H
TIME	DISPLAY	364,09

- Press the corresponding CO/PBX line key to change data option.
 - To change 4 hr. to 8 hr., press CO/PBX line key 3.

LK 1	LK2	LK 3	LK 4
No Refresb	00300 4 hr :00800	ð hr.	12 hr.
LK 5	LK 6	LK 7	LK 8
24 hr.			

CO/PBX line keys



- Pressing the TRF key will write the selected data and advance to Memory Block 1-8-12 (VRS Message Recording Time Selection).
- 5. Press the SPKR key to go back on-line.

■ Additional Programming

		Data	System	Data
Mode	Sub-Mode	No.	Required	May Be Required

System	PBR/Misc.	Data No.
1	8	11

NOTES:

 The system will automatically refresh itself during idle periods based on the time specified in this Memory Block.

GENERAL INFORMATION - SYSTEM REFRESH TIMER ASSIGNMENT

This Memory Block is used to assign the System Refresh Time. (The system will refresh itself during idle periods.)

VRS MESSAGE RECORDING TIME SELECTION

System PBR/Misc. Data No.

OPERATION:

- 1. Go off-line.
- 2. Enter: Mode System LK1 MIC ICM

 Sub-Mode PBR/Misc. LK8

 Data No. 1 2

(Dial Pad)

Data No. Title Channel Setting Data

1 2: VRS 1 15s x 16

TIME DISPLAY

- Press the corresponding CO/PBX line key to change data option.
 - To change 16 messages to 8 messages,
 press CO/PBX line key 2.

LK 1	LK 2	LK 3	LK.4
R.T. (15.0 sec.) *16	R.T. (30.0 sec.) * 8	R.T. (60.0 sec.)	R.T. (120.0 sec.)
LK 5	LK 6	LK 7	LK8
8 InsbeattA	Attendant?	BinshpaliA	C Imabasii

CO/PBX line keys

R.T = Recording Time

* = No. of messages

Use Dial Pad to enter VRS Channel 1~8.

Dial pad 0 ~ 8 : To enter data.

- Press the TRF key to write the selected data and advance to the next VRS Channel.
- After all data has been entered, pressing the TRF key will write the selected data and advance to Memory Block 1-8-13 (VRS Message Function Assignment).
- 7. Press the SPKR key to go back on-line.

NOTES:

- .. VRS (Voice Recording Services) Channel 1 has a maximum of 240 seconds for message recording.
 - The number of messages that can be used in VRS depends on the length of the particular messages (240 sec. + Length of messages = No. of messages).

Example:

Message length 15 sec. : 16 messages
" " 30 sec. : 3 messages
" " 60 sec. : 4 messages
" " 120 sec. : 2 messages

Default Recording Time (15.0 sec.)
16 messages

sfault All Channels of Block: No Message

Additional Programming

Anne and a	old a time. His	Data	System	Data .
Mode	Sub-Mode	No.	Required	May Be Required

GENERAL INFORMATION - VRS MESSAGE RECORDING TIME SELECTION

This Memory Block is used to specify the length and number of messages. (The number of messages is dependent on the length of the messages.)

VRS MESSAGE FUNCTION ASSIGNMENT

System	PBR/Misc.	Data No.
1	8	13

OPERATION:

Go off-line.
 Enter: Mode

System

LK1 • MIC

Sub-Mode PBR/Misc.

LK 8

Data No.

(Dial Pad)

Message

VRS
Channel
No.
Data No.
Title

1 3: VRS 1 / 01 = NON | 1

TIME

DISPLAY

- Press the corresponding CO/PBX line key to change data option.
 - To change No Message to Voice Prompt 1, press CO/PBX line key 2.

Page 1

LK1	LK 2	LK 3	LK 4
No Мавладе	Voice Prompt 1	Voice Prompt 2	lst Delay Announce,
LK 5	LK 6	LK 7	LK 8
2nd Delay Announce.	Not Used	Not Used	Not Used

CO/PBX line keys

Default All Channels of Block: No Mossage

 Use the dial pad to enter VRS Channel 1~8 and Message No. 1~16. (Maximum of 16 characters when Message record time is 15.0 sec.)

Dial pad

0 ~ 9

: To enter data.

- Pressing the TRF key will write the selected data and advance to Memory Block 1-8-14 (Alarm Reminder Repeat Selection).
- Press the SPKR key to go back on-line.

NOTES:

2. Edier: Mode System LKI . ICM
Sub-Mode PBR/Misc. LKs
Data No.

Page 2

	n K			
!	LK 1	LK 2	LK 3	LK 4
	Day Mode Auto Attendant !	Day Mode Auto Attendant 2	Day Mode Auto Attendent 3	Day Mode Auto Attendant 4
ĺ	LK 5	LK 6	LK?	LK 8
			Day Mode Auto Attendant 7	

Pave:

LK 1	LK 2	LK 3	LK 4.
Night Mode Auto Attendant 1	Night Mode Auto Attendant 2	Night Mode Auto Attendent 3	Night Mode Auto Attendent 4
LK 5	LK 6	LK 7	LK 8
Night Mode Auto	Night Mode Auto	Night Mode Auto	Night Mode Auto
Attendant 5	Attendant 6	Attendant 7	Attendant 8

Page 4

LKI	LK 2	LK 3	LK 4
Auto	Auto	Weekend Mode Auto Attendant 3	Auto
LK 5	LK 6	LK 7	LK 8
Weekend Mode Auto Attendant 5	Auto	Weekend Mode Auto Attendant 7	Weekend Mode Auto Attendant 8

M Additional Programming

a	habataalas	Data	Systen	Data
Mode	ode Sub-Mode	No.	Required	May Be Required
System (LK 1)	PBR/Misc. (LK 8)	12	A maga	V

GENERAL INFORMATION - VRS MESSAGE FUNCTION ASSIGNMENT

This Memory Block is used to assign the recorded voice prompt/DID Automated Attendant Message type to the VRS Message Block Division. Refer to Memory Block 1-8-12, VRS Message Recording Time Selection.

ALARM REMINDER REPEAT SELECTION

System	PBR/Misc.	Data No.	
ABSI F INE	8 0 0 8	14	

OPERATION:

- Go off-line.
- 2. Enter: Mode System LKI MIC ICM

 Sub-Mode PBR/Misc. LK8

 Data No. 1 4

 (Dial Pad)

LM REPEAT	NO
	LM REPEAT

- Press the corresponding CO/PBX line key to change data option.
 - To change NO to YES, press CO/PBX line key 2.

			OIC C
LK 5	LK 6	LK 7	LKE
NO	YES		
LK 1	LK 2	LK 3	LK 4

CO/PBX line keys Default

- Pressing the TRF key will write the selected data and advance to Memory Block 1-8-15 (Tone Assignment).
- 5. Press the SPKR key to go back on-line.
- M Additional Programming

Maria		Data	Systen	Data
Mode	Sub-Mode	No.	Required	May Be Required
			galataurapor!	saetilibbA -

NOTES:

- If NO is specified, the system will sound the alarm only once.
- If YES is specified, the system will sound the alarm continuously until it is reset by the station user.

GENERAL INFORMATION - ALARM REMINDER REPEAT SELECTION

This Memory Block is used to specify if the Timed Alarm will repeat.

2-157

P----mming

15

TONE ASSIGNMENT

OPERATION:

(Dial Pad)

1.	Go	off-l	in	e.

2. Enter: Mode System LKI • MIC
• ICM

Sub-Mode PBR/Misc. LKS

Data No.

Data No.	Table No.	Tone	Setting Data	Page No.
<u>1</u> 5:	(00)	DT	= A I	1
TIME	1	TISPL	ΑY	

Press the corresponding CO/PBX line key to change data option.

Page 1

LK1	LK 2	LK 3	LK 4
Tone A	Tone B	Tone C	Tone D
LK 5	LK 6	LK 7	LK 8
Tone E	Tone F	Tone G	Tone II

Page 2 LK 1 LK 2 LK 3 LK 4 Tone I Tone J Tone K Tone L LK 5 LK 6 LK 7 LK 8 Tone M

CO/PBX line keys

- 4. Use the Dial pad to enter Table No. 00~12.
- 5. Setting Data:

Tone A~M

- Press the TRF key to advance to the next Table.
- After all data has been entered, pressing the TRF key will write the selected data and advance to Memory Block 1-8-16 (Voice Prompt to Tone Assignment).
- 8. Press the SPKR key to go back on-line.

System	PBR/Misc.	Data No.
I	8	15

NOTES:

- 1. Tone Burst 1 in Default Table is not used.
- Tone Burst 2 is used for Transfer Inform Tone, Tone Override (calling party), External Speaker Call Notice Tone, etc.

Default Table

Table No.	Tone LCD	Indication	Default
00	ICM Dial Tone	(DT)	A
01	2nd Dial Tone	(2DT)	В
02	Special Dial Tone	(SPDT)	С
03	Busy Tone	(BT)	D
04	Reorder Tone	(ROT)	E
05	Howler Tone	(HWT)	F
06	Service Tone	(SST)	UTVO:G
07	ICM Ringback Tone	(RBT1)	I
08	TIE/DID Ringback To	ne(RBT2)	H
09	Call Waiting Tone	(CWT)	J
10	Suspected Dial Tone	(SDT)	К
11	Tone Burst I	(TB1)	G
12	Tone Burst 2	(TB2)	K

M Additional Programming

		Data	System Data	
Mode	Sub-Mode	No.	Required	May Be Required
Daniel Alberta	adtil Vicea	ol best	ry Black in	This Memo

Continued on next page.

TONE ASSIGNMENT

(continued)

TONE	FREQ.	INTERMIT	CYCLE			
A	350/440	Continuous	5	MUI - 1	NJ. msd	
В	350/440	120 IPM	0.25 0.25		on beildy	
С	440	240 IPM	0.125			
D	480/620	60 IPM	0.5 0.5	200	Diail)	
E	480/620	120 LPM	0.25 0.25		1.89	
F	240 16 Modulation	Continuous				
G	440	Continuous		- 100 (00)		
н	440/480	ON: 2s OFF: 4s	2 нес. 4 вес.			
ı	440/480	ON: 1#	1 вес. 2 вес.	() N.J.		
		OFF: 2a				
J	440	60 IPM	0.5	2 X.		
к	400	Continuous				
L	800	60 IPM	0.5	Г		
м	No Tone	Continuous	- Louis			

			System (LK 1)	

GENERAL INFORMATION TONE ASSIGNMENT

This Memory Block is used to assign each system tone to the flexible tables.

VOICE PROMPT TO TONE ASSIGNMENT

System	PBR/Misc.	Data No.
1	8	16

NOTES:

OPERATION:

 Go off-line. o MIC 2. Enter: Mode System LK I ICM W

LK 8

W Data No. G (Dial Pad)

Sub-Mode PBR/Misc.

Table Tone Setting Data Data No. Name 1 6: PR 1 TIME DISPLAY

- 3. Press the corresponding CO/PBX line key to change data option.
 - To change Voice Prompt 1 to Voice Prompt 2, press CO/PBX line key 2.

LK 1	LK 2	L.K J	LK 4
Voice Prompt 1	Voice Prompt		
LK 5	LK 6	LK 7	LK 8

CO/PBX line keys

Default

Table No. 01: Dial Tone

Table No. 02: Call Waiting Tone

Dial Tone : Voice Prompt 1 Default Call Waiting Tone : Voice Prompt 2

- 4. Press the TRF key to write the selected data and to advance to the next table No.
- 5. After all data has been entered, pressing the TRF key will write the selected data and advance to Memory Block 1-8-17 (PC Programming Password Assignment).
- 6. Press the SPKR key to go back on-line.

Additional Programming

Mode	Sub-Mode	Data No.	System Data	
			Required	May Be Required
System (LK 1)	PBR/Misc. (LK 8)	12		
System (LK 1)	PBR/Misc. (LK 8)	13		
Telephone (LK 4)		36		

GENERAL INFORMATION - VOICE PROMPT TO TONE ASSIGNMENT

This Memory Block is used to assign the voice prompt to each tone. A voice prompt can only be provided during internal dial tone or call waiting tone.

PC PROGRAMMING PASSWORD ASSIGNMENT

OPERATION:

1. Go off-line

2. Enter: Mode System LK1 • MIC • ICM

Sub-Mode PBR/Misc. LK8

Data No. 1 7

Data No. 1.2 Setting Data

1.7: (1) =

TIME DISPLAY

Class No. 1:

Technician Mode

No. 2:

End user Mode

Setting Data:

0~9 (max eight digits)

Dial pad 0 ~ [

: To enter data.

(Dial Pad)

HOLD

key:

: To clear data.

Default Class 1, 2 All Blank

- Press the TRF key to write the selected data and advance to the next Class No.
- After all data has been entered, pressing the TRF key will write the selected data and advance to Memory Block 1-8-18 (Site Name Assignment).
- 5. Press the SPKR key to go back on-line.

System PBR/Misc. Data No.

NOTES:

- A maximum of eight digits can be entered for both classes.
- Only digits can be entered.

Data No. Title Setting Data

[8: SITE =

TIME DISPLAY

HOLD key : Taclear data at curson

characters) using the Character Code Table in Appendix.

Pressing the TRF key will write the selected data and advance to Memory Block 1-8-25 (ACD Group Agent Assignment).

M Additional Programming

"" mmin

W-d-	0.1.14	Data No.	System Data	
Mode	Sub-Mode		Required	May Be Required

GENERAL INFORMATION - PC PROGRAMMING PASSWORD ASSIGNMENT

This Memory Block is used to set a system password that must be entered when using PC programming.

SITE NAME ASSIGNMENT

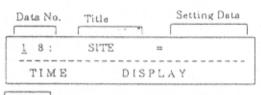
System	PBR/Misc.	Data No.
1	8	18

OPERATION:

Go off-line. o MIC 2. Enter: Mode System LKI · ICM A Sub-Mode PBR/Misc. LK8

A Data No. 8

(Dial Pad)



HOLD

key

To clear data at cursor

position.

Setting Data: Enter character (max eight characters) using the Character Code Table in Appendix.

- 3. Pressing the TRF key will write the selected data and advance to Memory Block 1-8-25 (ACD Group Agent Assignment).
- 4. Press the SPKR key to go back on-line.

NOTES:

Additional Programming

		Data	System	Data
Mode	Sub-Mode	No.	Required	May Be Required

GENERAL INFORMATION - SITE NAME ASSIGNMENT

This Memory Block is used to indicate Electra Professional Level II System name. This system name will be used when using the PC Programming software to program the system.

ACD GROUP AGENT ASSIGNMENT

System	PBR/Misc.	Data No.
I	8	25

NOTES:

OPERATION:

- Go off-line.
- 2. Enter: Mode

System

 MIC LK 1 ICM

Sub-Mode ACD

Group No.

DISPLAY

W LK 8

Data No.

5

Agent No. $(1 \sim 32)$

(Dial Pad)

Data No. Title

Setting Data Ext. No. (1-4) (max. 4 digita)

AG OI GP TIME

Enter data using the dial pad.

Agent No. 1~32

Setting Data: Agent Station Number

ACD Group Number to which the

Agent belongs.

Default Not Specified

- 4. Press the TRF key to advance to the next Agent No.
- 5. After all data has been entered, pressing the TRF key will write the selected data and advance to Memory Block 1-1-00
- Press the SPKR key to go back on-line.

Additional Programming

Mode	Sub-Mode	Data No.	System Data	
			Required	May Be Required
System (LK 1)	CO Line (LKI)	46		
System (LK 1)	CO Line (LKI)	47		
System (LK 1)	CO Line (LKI)	48		
System (LK 1)	ICM (LK 2)	03		
System (LK 1)	ACD(LK 12)	00		

GENERAL INFORMATION - ACD GROUP AGENT ASSIGNMENT

This Memory Block is used to specify the Agent Extension Number and the ACD Group Numbers to which each Agent belongs. Up to 32 Agents can be programmed into the ACD system.

Programmin

DISA ID CODE ASSIGNMENT

OPERATION:

1. Go off-line.

o MIC LK I Enter: Mode System ICM W Sub-Mode DISA LK 9 0 0 Data No. ID Buffer (Dial Pad) No. (01~96) Data No. Title Setting Data

(01-96)Data No. Title Setting Data

0 1: 02 CODE = 100

TIME DISPLAY

3. Enter data using the dial pad.

Setting Data: 2-digit DISA ID Code: 00~99

(00 no data)

3-digit DISA ID Code: 000~999

(000 no data)

4-digit DISA ID Code: 0000~9999

(0000 no data)

· To move cursor.

Dial pad 0 ~ 9 : To enter data.

CNF key : To access next ID
Buffer Number

If DISA ID Code is assigned as 2-digit:
ID Buffer Number 01-89 = DISA ID Code 10-89
Default ID Buffer Number 90-96 = DISA ID Code 00 (no data)
If DISA ID Code is assigned as 3-digit:
ID Buffer Number 01-96 = DISA ID Code 100-195

- Press the TRF key to write the selected data and advance to Memory Block 1-9-02 (DISA Password Effect/Invalid Selection).
- Press the SPKR key to go back on-line.

System	DISA	Data No.
13 01	9	00

NOTES:

- DISA ID Code Assignment is performed in Memory Block 1-5-24 (DISA ID Code Digit Assignment).
- Different DISA ID Codes cannot be assigned to the same ID Buffer Number.
- If Memory Block 1-5-24 (DISA ID Code Digit Assignment) is changed from 3-digit to 4-digit, the default of the ID Code Number is "ID Buffer Number 01~96 = DISA ID Code 1000~1950".
- If 2-digit is changed to 4-digit, the default of the ID Code Number is "ID Buffer Number 01~89 = DISA ID Code 1000~9800 and ID Buffer Number 90~96 = nodata (0000)".

■ Additional Programming

May He	Sub-Mode Dat	Data	System Data	
Mode		No.	Required	May Be Required
System (LK 1)	SMDR (LK 5)	24	V	ye and on a store is

GENERAL INFORMATION - DISA ID CODE ASSIGNMENT

This Memory Block is used to specify the DISA ID Code numbers.

TIME

DISA PASSWORD EFFECT/INVALID SELECTION

System SMDR/LCR Data No. 1 9 02

OPERATION:

NOTES:

1. Go off-l	ine.			
2. Enter:	Mode	System	LKi	• ICM
	Sub-Mode	DISA	LK 9	
	Data No.		0 2	
ID Buffer No. (01~96) Dat	a No. Titl	el Ciras	Setting Data	
Account of the last of the las			100 80	

3.	Press	the	corresponding	CO/PBX	line	key	to
	chang	e da	ta option.				

DISPLAY

 To change DISA Password Invalid to DISA Password Effect, press CO/PBX line key 2.

LK 1	LK 2	LK 3	LK 4
DISA Pasaword Invalid	DISA Password Effect	4-digit	
LK 5	LK 6	LK 7	LKB

CO/PBX line keys Default

- Press the TRF key to write the selected data and advance to Memory Block 1-9-00 (DISA ID Code Assignment).
- 5. Press the SPKR key to go back on-line.

■ Additional Programming

		Data	System	Data
Mode	Sub-Mode	No.	Required	May Be Required
Require	74 74 07 30 1970)			

a Mic	System	S. Enter Mode
-	0 [6]	old child

2-digit DISA ID Code: 000~239 (000 no data) 4-digit DISA ID Code: 0000-395 (0000 no data)

CNF Roy : To access next ID
Buffer Number
IFDISA ID Code is assigned as 3-digno

ICDISA ID Code la assigned as 3-dig ID Buffer Number 91~96 = DISA I

ress the TRF key to write the selected date

Press the SPICE key to go back on-line.

GENERAL INFORMATION - DISA PASSWORD EFFECT/INVALID SELECTION

This Memory Block is used to assign DISA Password as Invalid or Effective. If Invalid is assigned, calling party can use the DISA feature without a DISA Password.

SIGNAL FORMAT SELECTION

OPERATION:

1. Go off-line.

Data No.

0 0:

2. Enter: Mode

System

LK 1 • MIC • ICM

Sub-Mode DTI

Title

₩...

LK 11

Data No.

FRAME

change data option.

(Dial Pad)

Setting Data

3. Press the corresponding CO/PBX Line key to

To change ESF to SF, press CO/PBX line key

1.

SF = Superframe Format (12

Multi-Frame)

ESF = Extended Superframe Format (24

Multi-Frame)

LK I	LK2	LK 3	LK 4
SF	ESF		
LK 5	LK 6	LK 7	LK 8

CO/PBX line keys



- Pressing the TRF key will write the selected data and advance to Memory Block 1-11-01 (Clear Channel Selection).
- 5. Press the SPKR key to go back on-line.

■ Additional Programming

		Data	Systen	Data
Mode	Sub-Mode	No.	Required	May Be Required

GENERAL INFORMATION - SIGNAL FORMAT SELECTION

This Memory Block specifies the signal format of the T1 trunk connected to the system. The Signal Format used (12- or 24-Multi-Frame) depends on the CSU or D mark equipment being used.

System	DTI	Data No.
Add add	TAL 11	00

NOTES:

2. Enter Mode System LET . ICM

VW.1721G 23617

To change BBZS to ZCS, press COPBX l

Pressing the THF key will write the selection and advance to Memory Block 1-1102 (E.

Length Selection).
Press the SPERR key to go back on line.

yalminger monthible

Programming

2 - 167

CLEAR CHANNEL SELECTION

OPERATION:

Go off-line.

2. Enter: Mode

System

o MIC LK 1 ICM W

Sub-Mode DTI

A

LK 11

Data No.

1 (Dial Pad)

Title Setting Data Data No. ZERO BYTES = B8ZS 1 : TIME DISPLAY

- 3. Press the corresponding CO/PBX Line key to change data option.
 - To change B8ZS to ZCS, press CO/PBX line key 2.

CO/PBX	line keve	Def	ault
LK 5	LK 6	LK 7	LK 8
B8ZS	ZCS		
LKI	LK 2	LK 3	LK 4

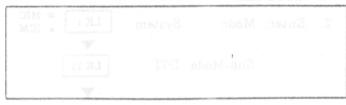
- 4. Pressing the TRF key will write the selected data and advance to Memory Block 1-1102 (Line Length Selection).
- 5. Press the SPKR key to go back on-line.

Additional Programming

	Da Da		System Data	
Mode	Sub-Mode	No.	Required	May Be Required

System	DTI	Data No.
1	11	01

NOTES:



GENERAL INFORMATION - CLEAR CHANNEL SELECTION

This Memory Block specifies the clear channel capability. If the Zero Byte Time channel is available, the [CLK-F-11 Unit cannot extract a clock signal from the T1 trunk. The T1 trunk will modify the Zero Byte Time I channel to extract a clock signal for the CLK-F-11 Unit,

LINE LENGTH SELECTION

OPERATION:

1. Go off-line.

2. Enter: Mode

System

LK 1 . ICM

Sub-Mode DTI

LKII

Data No.

0 2

(Dial Pad)

Data No.		Title		Settir	ng Data
0 2:	ZEI	ROBYTES	200		L
TIME	Ď	ISPLAY			

- Press the corresponding CO/PBX Line key to change data option.
 - To change 0 131 Feet to 132 262 Feet, press
 CO/PBX line key 2.

LK1	LK 2	LK 3	LK 4
0 - 131 Feet	132 - 262 Feet	263 - 393 Feet	394 - 524 Feet
LK 5	LK 6	LK 7	LK 8
525 - 655 Feet			

CO/PBX line keys

Sefault Default

- Pressing the TRF key will write the selected data and advance to Memory Block 1-11-03 (Robbed Bit Signaling Channel Selection).
- 5. Press the SPKR key to go back on-line.

Additional Programming

		Data System	n Data	
Mode	Sub-Mode	No.	Required	May Be Required
		-		requ

GENERAL INFORMATION - LINE LENGTH SELECTION

This Memory Block specifies the line length between the CSU/D mark and the DTI KTU. This specifies the equalization values of the detect signal in the DTI KTU.

System	DTI	Data No.
1	11	02

NOTES:

1. Go off-line.
2. Enter Mode System [IX1] * MIC

YAJSELAY

To change 4-State to 16 State, press CO/PS.

LCD Indication

LK 1 = 1

LK 2 = 2LK 3 = 3

LK4=4

LK5 = 5

Data No.

03

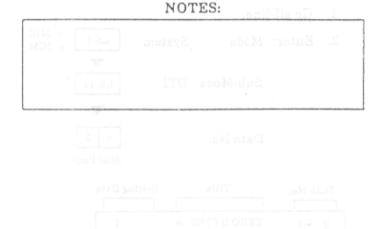
DTI

11

ROBBED BIT SIGNALING CHANNEL SELECTION

OPERATION:





System

1

- Data No. Title Setting Data

 O 3: SIGNAL AB

 TIME DISPLAY
- Press the corresponding CO/PBX Line key to change data option.
 - To change 4-State to 16-State, press CO/PBX line key 2.

LK 1 4-State (A and H)	LK 2 16-State (A, B, C, and D)	LK 3	LK 4
LK 5	LK 6	LK 7	LK 8

- Pressing the TRF key will write the selected data and advance to Memory Block 1-11-04 (DTI Maintenance Selection).
- 5. Press the SPKR key to go back on-line.

M Additional Programming

170

	Mode	2011 12 - 201 (241) 22	Data No.	System	Data
				Required	May Be Required
	System (LK 1)	DIT (LK 11)	00		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \

GENERAL INFORMATION - ROBBED BIT SIGNALING CHANNEL SELECTION

This Memory Block specifies the robbed bit signaling method (4-state or 16-state) if Extended Superframe Format (ESF) is specified in Memory Block 1-11-00.

DTI MAINTENANCE SELECTION

OPERATION:

- 1. Go off-line.
- 2. Enter: Mode

System

LK 1 • MIC

LK 11

Sub-Mode DTI

Data No. 0 4

DIT Data
No. No. Title Setting Data

O1 / 04: LBK = REMOTE

TIME DISPLAY

- Press the corresponding CO/PBX Line key to change data option.
 - To change Remote Loopback to Local Loopback, press CO/PBX line key 2.

LK 1	LK 2	LK 3	LK 4
Remote Loopback	Local Loopback		
LK 5	LK 6	LK 7	LK 8

- Pressing the TRF key will write the selected data and advance to Memory Block 1-11-05 (T1 Channel Selection).
- 5. Press the SPKR key to go back on-line.
- M Additional Programming

Data	System	Data
No.	Required	May Be Required
	No.	Data

System	DTI	Data No.
1	11	04

NOTES:

2. Enter: Mode System LKI 100 ICM

adicate language ITC relice of had belo act as U

(Four channel unit: 04, 03, 12, 16, 20, 24)

Dist pad C - 9 : To enter duta.

Pressing the TRF key will write the a

Press the SPER key to go buck on-line.

GENERAL INFORMATION - DTI MAINTENANCE SELECTION

This Memory Block specifies the maintenance method: Remote Loopback or Local Loopback.

TI CHANNEL SELECTION

OPERATION:

1. Go off-line. o MIC 2. Enter: Mode LK 1 System ICM 7 Sub-Mode DTI LK 11

5

(Dial Pad) DIT Data No. No. Title Setting Data 01 / 05 : CHANNEL 24 DISPLAY TIME

Data No.

3. Use the dial pad to enter DTI channel numbers. (Four channel unit: 04, 08, 12, 16, 20, 24)

: To move cursor. To enter data.

> Default 24 channel.

- 4. Pressing the TRF key will write the selected data and advance to Memory Block 1-11-06 (Signaling Selection).
- 5. Press the SPKR key to go back on-line.

System DTI Data No. 1 11 05

NOTES:

Additional Programming

100

Dial pad

		Data	Data System	Data	
Mode	Sub-Mode	No.	Required	May Be Required	

GENERAL INFORMATION - T1 CHANNEL SELECTION

This Memory Block specifies the DTI channel numbers to be used. DTI Trunk has a maximum of 24 channels.

SIGNALING SELECTION

System DTI Data No. 1 11 06

NOTES:

OPERATION:

- 1. Go off-line.
- 2. Enter: Mode

System

LK1 • ICM

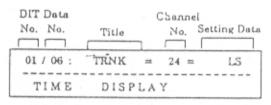
Sub-Mode CO Line

LK 11

Data No.

0 6

(Dial Pad)



- Press the corresponding CO/PBX Line key to change data option.
 - To change Loop Start to Ground Start, press CO/PBX line key 2.

COVERN	Cline keya	Defa	ult
"LK 5	LK 6	LK 7	LK 8
THE RESERVE AND ADDRESS OF THE PERSON NAMED IN			
LK1	LK 2	LK 3	LK 4

- Press the TRF key to advance to the next Channel No.
- After all data has been entered, pressing the TRF key will write the selected data and advance to Memory Block 1-11-00 (Signal Format Selection).
- 6. Press the SPKR key to go back on-line.
- Additional Programming

	Made Cat Made Data	Deta System Da		1 Data
Mode	Sub-Mode	No.	Required	May Be Required

GENERAL INFORMATION - SIGNALING SELECTION

This Memory Block specifies the signaling method: Loop Start Trunk Signaling or Ground Start Trunk Signaling.

ACD GROUP PILOT NUMBER ASSIGNMENT

System	ACD	Data No.
BREIOWE	12	00

NOTES:

OPERATION:

1. Go off-line.

o MIC LK 1 2. Enter: Mode System · ICM V Sub-Mode ACD LK 12

Data No.

0

(Dial Pad)

Setting Data Group No. (Sta. No. max. 4 digits) Title Data No. 0 1 / PILOT = -oo: TIME DISPLAY

Enter data using the dial pad.

To move cursor. To enter data. Dial pad

> Not Specified Default

- 4. Pressing the TRF key will write the selected go An Share about data and advance to Memory Block 1-12-01 (ACD Group Overflow Destination Assignment).
- 5. Press the SPKR key to go back on-line.

Additional Programming

			l D	Data	System	Data
Mode	Sub-Mode	No.	Required	May Be Required		
System (LK 1)	CO Line (LK 1)	46				
System (LK 1)	CO Line (LK 1)	47				
System (LK 1)	CO Line (LK 1)	48				
System (LK 1)	ICM (LK 2)	03				
System (LK 1)	ACD (LK 12)	01	RATVO 9	GROU		

GENERAL INFORMATION - ACD GROUP PILOT NUMBER ASSIGNMENT

This Memory Block is used to specify the Pilot Number of each ACD Group to where incoming calls are terminated.

Programming	2 - 175

ACD GROUP OVERFLOW DESTINATION ASSIGNMENT

System	ACD	Data No.
1	12	01

OPERATION:

- 1. Go off-line.
- 2. Enter: Mode

System

LK1 • MIC

Sub-Mode ACD

LK 12

V

Data No.

0 1

(Dial Pad)

Group No.

(1~4) Data No. Title (Ext. No. max, 4 digits)

0 1 / 01: OVFLW =

TIME DISPLAY

3. Enter data using the dial pad

-[-].[

To move cursor.

Dial pad

0~9

To enter data.

Default Not Specified

- Pressing the TRF key will write the selected data and advance to Memory Block 1-12-02 (ACD Overflow Timer Selection).
- 5. Press the SPKR key to go back on-line.

M Additional Programming

		Duta	System	Data
Mode	Sub-Mode	No.	Required	May Be Required
System (LK 1)	CO Line (LK 1)	46		
System (LK 1)	CO Line (LK 1)	47		
System (LK 1)	CO Line (LK 1)	48		
System (LK I)	ICM (LK 2)	03		

GENERAL INFORMATION - ACD GROUP OVERFLOW DESTINATION ASSIGNMENT

This Memory Block is used to specify the station or Station Hunt Group to where the call of each ACD Group is routed when there is an overflow of incoming calls.

NOTES:

 ACD Group Pilot Numbers cannot be programmed as the overflow destination.

ate No. Title (Ste. No. mar. foligg)

Enter data using the dial pad.

il pad 0 - 9 : To enter data.

Pressing the TRF key will write the

Press the SPHR key to go back on-line.

gainmangord lengtilbha

Mode Sub-Mode

System (LK I) CO Line (LK I)
System (LK I) CO Line (LK I)

ACD OVERFLOW TIMER SELECTION

System	ACD	Data No.
1	12	02

NOTES:

ACD Group Pilot Numbers cannot be

programmed as the overflow destination.

OPERATION:

- Go off-line.
- o MIC LK 1 System Enter: Mode ICM V Sub-Mode ACD LK 12

Setting Data Data No. Title OVFTMR= 0.2:-

Group No. (1-4)0 1 / DISPLAY

Data No.

- Press the corresponding CO/PBX Line key to change data option.
 - To change 0 seconds to 10 seconds, press CO/PBX Line key 2.

LKI	LK 2	LK 3	LK 4
O sec.	10 sec.	20 sec.	30 вес.
LK 5	LK 6	LK 7	LK 8
60 sec.	120 nec.	180 sec.	240 вес.

CO/PBX line keys



2

(Dial Pad)

- 4. Pressing the TRF key will write the selected data and advance to Memory Block 1-12-00 (ACD Group Pilot Number Assignment).
- Press the SPKR key to go back on-line.

Additional Programming

Mode		n .	System Data	
	Sub-Mode	No.	Required	May Be Required
System (LK 1)	ACD (LK 12)	02		

GENERAL INFORMATION - ACD OVERFLOW TIMER SELECTION

This Memory Block is used to specify the maximum length of time a waiting ACD call remains at an ACD Group before overflowing to another ACD Group.

2 - 177

TRUNK TO TENANT ASSIGNMENT

Tenant		Data No.
2	TOT MAUS	01

OPERATION:

- Go off-line.
- Enter: Mode

Tenant

o MIC LK 2 ICM w

(Dial Pad)

Data No.

Tenant No. Page No. Title (00~47) Data No. 01: TRK - TNT 101 TIME DISPLAY

3. Press the corresponding CO/PBX line key to change data option.

: To move cursor.

To enter data. Dial pad

CNF key : Next Tenant No.

RECALL key : Next page.

FNC key

: Previous page.

CO/PBX Line LED	OFF	ПОИ
Data	NO	YES
Data	(Not Assigned)	(Assigned)

- The LED indication changes to indicate the data each time the CO/PBX line key is pressed.
- 4. Pressing the TRF key will write the selected data and advance to Memory Block 2-05 (Line Key Selection).
- 5. Press the SPKR key to go back on-line.
- Additional Programming

Mode		Data No.	System Data	
	Sub-Mode		Required	May Be Required
Tenant (LK 2)	STATE CALLS	05	ENZBUA V	201103
Telephone (LK 4)		09	Justin	nes to ear

NOTES:

If data is changed while a trunk is busy, "Data Entry" is displayed at the programming station until the trunk becomes idle.

Continued on next page.

TRUNK TO TENANT ASSIGNMENT (continued)

Tenant	al ollamo	Data No.
2	-	01

CO/PBX Number (01~56) corresponds to CO/PBX line key.

Paga	1 /	CO/PBX	$\Delta 1 = \Delta 0$
TRKO	11	COLEDY	01-001

LK 1	LK 2	LK 3	LK 4
01	02	03	04
LK 5	LK 6	LK 7	LK 8
05	06	07	08

Page	51	CO/PBX	33-40
Lugo		0011 016	00 10

LK 1	LK 2	LK 3	LK 4
33	34	35	36
LK 5	LK 6	LX 7	LK 8
37	38	39	40

Page 2 (CO/PBX 09~16)

LK 1	LK 2	LK 3	LK 4
09	10	11 -	12
LK 5	LK 6	LK 7	LK 8
13	14	15	16

Page 6 (CO/PBX 41~48)

	,		,	
LK I	LK 2	LK 3	LK 4	
41	42	43	44	1
LK 5	LK 6	LK 7	LK 8	
45	46	47	48	

Page 3 (CO/PBX 17~24)

LK 1	LK 2	LK 3	LK 4
17	18	19	20
LK 5	LK 6	LK 7	LK 8
21	22	23	24

Page 7 (CO/PBX 49~56)

LK 1	LK 2	LK 3	LK 4
49	50	51	52
LK 5	LK 6	LK 7	LK 8
53	54	55	56

Page 4 (CO/PBX 25-32)

1 250	.,	0.6 20	941
LK 1	LK 2	LK 3	LK 4
25	26	27	28
LK 5	LK 6	LK 7	LK 8
29	30	31	32

Page 8 (Not Used)

LK I	LK 2	LK 3	LK 4
LK 5	LK 6	LK 7	LK 8

CO/PBX line keys

Default

Tenant 00: CO/PBX lines 01~08

assigned YES CO/PBX lines 09~56 not assigned (NO)

not assigned to any Tenant

CO/PBX lines 01~56

GENERAL INFORMATION - TRUNK TO TENANT ASSIGNMENT

This Memory Block specifies assignment of CO/PBX lines to each tenant.

LINE KEY SELECTION

OPERATION:

1. Go off-line.

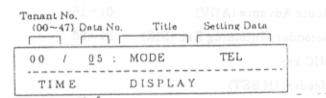
2. Enter: Mode

Tenant

LK 2 • MIC

Data No.

0 5 (Dial Pad)



- Press the corresponding CO/PBX line key to change data option.
 - To change Telephone Mode to Tenant-wide Mode, press CO/PBX line key 1.

Tenant-wide Telephone Mode Mode LK 5 LK 6 LK 7 LK 8	LK 1	LH 2	LK 3	ods LK4
LK5 LK6 LK7 LK8		Telephone Mode	ia beyalgei	PareS-1
	LK 5	LK 6	LK 7	LK 8

CO/PBX line keys



CNF key : Next Tenant No.

- Pressing the TRF key will write the selected data and advance to Memory Block 2-06 (Line Key Selection for Tenant Mode).
- 5. Press the SPKR key to go back on-line.
- M Additional Programming Of -10 sassoc A sassas

		Data	System	m Data	
Mode	Sub-Mode	No.	Required	May Be Required	
		30	conserver Since	w Addition	

TENANT	 Data No.
2	05

NOTES:

- Mixed use of Tenant-wide Mode and Telephone Mode in the system is permitted.
- 2. Tenant-wide Mode:

Memory Block 2-06 permits assignment of any desired feature to each of the CO/PBX line keys. (All the telephones in a tenant are assigned the same features.)

3. Telephone Mode:

Memory Block 4-12 permits assignment of any feature to each of the CO/PBX line keys. (Each telephone can be assigned different features.)

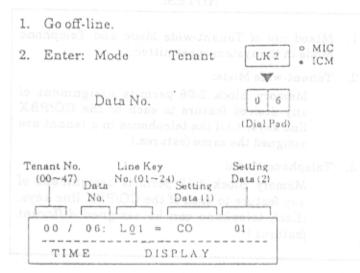
GENERAL INFORMATION - LINE KEY SELECTION

This Memory Block allows each tenant to specify either of the two CO/PBX key assignment modes: Tenant-wide Mode and Telephone Mode.

LINE KEY SELECTION FOR TENANT MODE

TENANT - Data No. 2 - 06

OPERATION:



Press the corresponding CO/PBX line key to change data option.

Page 1

LK.1	LK 2	LK 3	LK 4
Not Specified	CO/PDX: Lipe	Not Used	Not Used
LK 5	LK 6	LK 7	LK 8
Call Park	Feature Ассевя	Trunk Group	Route Advance

Page 2

	LK 2	LK 3	LK 4
2nd Incoming Extension	Not Used	Microphone Key	Headset
LK 5	LK 6	LK 7	LK 8

CO/PBX line keys



To move cursor.

Dial pad



To enter data.

CNF key



Next Tenant No.

Default				
00~47	All LKs:	Not Specified		

CO/PBX Line (CO) : 01~56

Call Park (0 0) (P) : Data 0: 00~47

Data @: 01~24

Fenture Access (FA) : 01~10

Trunk Group (TKGP) : 01~32

Route Advance (ADV) : 01~16

Secondary Incoming Ext. (SIE) : 01-56

MIC key

Headset (H SET)

Example: To assign Trunk Group 05 to CO/PBX line key 1.

- 4. Press CO/PBX line key 7, TKGP is displayed.
- 5. Enter 05 (for RT 05) using the dial pad.
- Press the TRF key, data of CO/PBX line keys 01~24 is displayed successively:
- After entering data for CO/PBX line key 24, pressing the TRF key will write the selected data and advance to Memory Block 2-07 (System Speed Dial Display Assignment).
- 8. Press the SPKR key to go back on-line.

This Memory Block assigns the following functions to each of the CO/PBX line keys on each telephone within a tenant specified as Telephone Mode in Memory Block 2-05 (Line Key Selection).

Functions:

- Not specified.
- CO/PBX Line 01-56
- Call Park 01~24.
- · Feature Access 01~10.
- Trunk Group 01~32.
- Route Advance Block 01~16.

Additional Programming

DEMATIC	RATINE	Data	System	a Data	
Mode	Sub-Mode	No.	Required	May Be Required	
Tenant (LK 2)	.abohi-anone	05	ida Mode ar	Tanania'	

Continued on next page.

LINE KEY SELECTION FOR TENANT MODE (continued)

TENANT		Data No.
Settled 2 I U U.L.	MG MG	06

NOTES:

- Specify "CO/PBX line" for square system and "Call Park" for call park system.
- Specify "Call Park" as "the call park (call park number) of tenant (tenant number)."

Line Key	Setting Data 1	LCD- Indication	Setting Data 2
1	Not Specified	NON	
2	CO	CO	01~56
3	Not Used	(18-08	
4	Not Used	J 2 %	Page 1
5	Call Park Tenant No. (00~47)	P	Park No. 01~24
6	Feature Access	FA	01~10
7	Trunk Group	TKGP	01~32
8	Route Advance	ADV	01~16
9	2nd Incoming Extension	SIE	Telephone Port No. 01~56
10	Not Used	Light B. Ville	
11	Microphone	MIC	
12	Headset	H SET	

Port No. 01~56

Bewell neighbor and lead lead of the l

GENERAL INFORMATION - LINE KEY SELECTION FOR TENANT MODE

This Memory Block allows the assignment of functions to each of the CO/PBX line keys on each telephone within a tenant specified as Telephone Mode in Memory Block 2-05.

SYSTEM SPEED DIAL DISPLAY ASSIGNMENT

TENANT Data No. 2 07

OPERATION:

- Go off-line.
- 2. Enter: Mode

Tenan

LK 2 • MIC

Data No.

0 7

(Dial Pad)

NOTES:

- If "Deny" is specified, no display will be presented even when a System Speed Dial call is originated.
- Divide the Speed Dial numbers into groups and specify, on a per tenant basis, whether confirmation is allowed or disallowed.

When System Speed Dial is 90 buffers.

	LK1	LK 2	LK 3	LK 4
	00-09	10-19	20-29	30~39
Page 1	LK 5	LK 6	LK 7	LK8
	40~49	50-59	60~69	70~79
9-10[[LK 1	LK 2	LK 3	OCLK4
	80~89		Used	a Not
Page 2	LK 5	LK 6	LK 7	LK 8
t0.5pW Jbs	P Po		Park	S Cal

When System Speed Dial is 1000 buffers.

todolo	LK 1	LK 2	LK 3	LK 4
ge 1	000-099	100~199	200~299	300~399
ge I	LK 5	LK 6	LK 7	LK 8
	400~499	500~599	600-699	700~799
ſ	LK 1	LK 2	LK 3	LK 4
	800~899	900~999		
ge 2	LK 5	LK 6	LK 7	LK 8

Tenant No.
(00~47) Data No. Title Page No.

00 / 07 : SPD DSP | 01

TIME DISPLAY

: To move cursor

Dial pad

0 - 2

To enter data

Next Page

RECALL

key

: Previous Page

CNF

key

: Next Tenant No.

CO/PBX Line LED	III OFF	□ 0N
Data	Deny	Allowed

Default All Speed Dial confirmation allowed

- 3 The LED indication changes to indicate the data each time the CO/PBX line key is pressed.
 - · Press RECALL, FNC key to turn pages.
 - After entering data for all pages, pressing the TRF key will write the selected data and advance to Memory Block 2-08 (ECR Relay to Tenant Assignment).
- 4. Press the SPKR key to go back on-line.

Additional Programming

		Data	System Data	
Mode	Sub-Mode	No.	Required	May Be Required
System (LK 1)	CO Line (LK 1)	35		V
System (LK 1)	PBR/Misc.	07	T I A SIST	V

GENERAL INFORMATION - SYSTEM SPEED DIAL DISPLAY ASSIGNMENT

This Memory Block is used to specify if confirmation of the Speed Dial numbers and messages stored in the System Speed Dial memory is allowed.

ECR RELAY TO TENANT ASSIGNMENT

TENANT	-	Data No.
2		08

OPERATION:

1. Go off-line.

2. Enter: Mode

Tenant

LK 2 • ICM

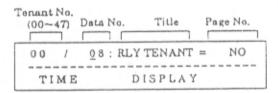
Data No.

0 8

(Dial Pad)

NOTES:

 By assigning Night Chime to a Tenant, incoming calls to the Tenant Group in Night Mode can be answered using the Night Call Pickup Access Code.



 Press the corresponding CO/PBX line key to change data option.

← • , # →

To move cursor

CNF key

: Next Tenant No.

LK I	LK 2	LK 3	LK 4
External Tone Relay 1	External Tone Relay 2	External Tone Relay 3	External Tone Relay
. LK 5	LK 6	LK 7	LK 8
Night Chime	No Assignment		

CO/PBX line keys

Default All Tonant No Assignment

- Pressing the TRF key will write the selected data and advance to Memory Block 2-01 (Trunk-to-Tenant Assignment).
- Press the SPKR key to go back on-line.

M Additional Programming

		Data	System Data	
Mode	Sub-Mode	No.	Required	May Be Required
System (LK 1)	ESP(LK 7)	07		

GENERAL INFORMATION - ECR RELAY TO TENANT ASSIGNMENT

This Memory Block is used to specify Tenant Assignment for External Tone Ring/Night Chime function.

TELEPHONE NUMBER TO TRUNK ASSIGNMENT

CO/PBX	-	Data No.
3	19 20103	00

OPERATION:

1. Go off-line.

2. Enter: Mode

CO/PBX

LK3 • MIC

NOTES:

CO/PBX No.
(01~56) Setting Data (13 digits max.)

0 1/ TIME DISPLAY

3. Enter data using the dial pad.

To program 214-518-4000.

Enter 214-518-4000 using the dial pad.

To move cursor

Dial pad 0 - 9: To enter data (13 digits max.)

LNR/SPD key : "--" (Hyphen)

HOLD key : " "(Space)

CNF key : Next CO/PBX Line No.

Default Not Specified

 Pressing the TRF key will write the selected data and advance to Memory Block 3-02 (Trunk Status Selection).

5. Press the SPKR key to go back on-line.

M Additional Programming

		Data	System Data	
Mode	Sub-Mode	No.	Required	May Be Required
				lay

GENERAL INFORMATION - TELEPHONE NUMBER TO TRUNK ASSIGNMENT

This Memory Block specifies telephone numbers for the CO/PBX lines accommodated so that the telephone number of a seized CO/PBX line will be displayed on the LCD of the telephone when originating or answering a CO/PBX call. (13 digits max.)

TRUNK STATUS SELECTION

OPERATION:

Go off-line.

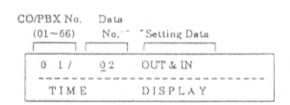
2. Enter: Mode

CO/PBX LK3 • MIC

TRF

Data No.

0 2 (Dial Pad)



- Press the corresponding CO/PBX line key to change data option.
 - To change OUT & IN to IN, press CO/PBX line key 2.

LK 1	LK 2	LK 3	LK 4
OUTAIN	IN		
LK 5	LK 6	LK 7	LK 8

CO/PBX line keys

Default

CNF

kev

Next CO/PBX Line No.

- Pressing the TRF key will write the selected data and advance to Memory Block 3-03 (Trunk-to-Trunk Group Assignment).
- 5. Press the SPKR key to go back on-line.

M Additional Programming

	Data	System Data	
Sub-Mode	No.	Required	May Be Required
	Sub-Mode	Sub-Mode Data No.	Sub-Mode Data

CO/PBX	TINOTH 25	Data No.
3	S.A.	02

NOTES:

2. Enter Mode CO/PBX [CK3] * NC

181-58) Setting DetailS digita max.)
0 17
TIME DISPLAY

CNF key '" (Space)'
CNF key Next CO/PBX Line

data and advance to Mamory Black 3-02
(Trunk Status Selection).

Additional Programming

old od so GENERAL INFORMATION - TRUNK STATUS SELECTION

This Memory Block is used to specify if a CO/PBX line is used for call origination and termination or termination only.

TRUNK-TO-TRUNK GROUP ASSIGNMENT

OPERATION:

1. Go off-line.



O/PBX No: (01~56)	Data No.	Title	Т	Yunk Group No. (01~32
0 1/	03:	TRK GP	=	<u>0</u> 1
TIME		DISPLA	Y	

3. Enter data using the dial pad.

Example: Enter TRK GP 15 at CO 01, using the dial pad.

To move cursor.

Dial pad 0 ~ 9 : To enter data.

CNF key : Next CO/PBX Line No.

Data $\begin{cases} 00 & : \text{ Not Set} \\ 01-32 & : \text{ Trunk Group } 01-32 \end{cases}$

All CO/PBX lines in Trunk Group 01

All Tie Lines in Trunk Group 02

All DID lines in Trunk Group 00

- Pressing the TRF key will write the selected data and advance to Memory Block 3-04 (Trunk-to-Trunk Transfer Yes/No Selection).
- 5. Press the SPKR key to go back on-line.

CO/PBX	-	Data No.
3 11 4	DE LO	03

NOTES:

- There are 32 Trunk Groups available to the system.
- Assign a Trunk Group Number to each CO Line (01~32).
- When a Access Code corresponding to a Trunk Group is dialed, an idle CO line is automatically selected and seized from the same Trunk Group (CO line of either same tenant or another tenant can be seized).
- By specifying the priority order, up to four routes (Trunk Groups) can be selected in Memory Block 1-1-30. Idle CO lines are selected and seized in this sequence.

CNF key Next COFBX Line No. - Enter data using the dral pad.

Key L

SERIES LK2 LK4

SERIES YES

LK4

Processing the TRF key will write the selected data and sevence to Memory Block 3-05.

Additional Programming

DEFENDANCE OF	System Data		Data
Sub-Mode	No.	Required	May Be Required
		Sub-Mode Data	Sub-Mode Data System

GENERAL INFORMATION - TRUNK-TO-TRUNK GROUP ASSIGNMENT

This Memory Block is used to assign trunks to each Trunk Group.

1-189

TRUNK-TO-TRUNK TRANSFER YES/NO SELECTION

CO/PBX	H: N IN TK- 11:0-	Data No.
3	acca.	04

OPERATION:

NOTES:

1. Go off-line.

2. Enter: Mode CO/PBX

LK 3 • MIC

TRF

Data No. 191 om s

(Dial Pad)

CO/PBX No. Data

(01~56) No. Title Setting Data

0 1 / 04 : TRF NO

TIME DISPLAY

- , # ->

To move cursor.

Dial pad 0

~ 9 : To enter data.

CNF

key

Next CO/PBX Line No.

- 3. Enter data using the dial pad.
 - To change NO to YES, press CO/PBX line key 1.

LK1	LK 2	LK 3	LK 4
NO	YES		
LK 5	LK 6	LK 7	LK 8

CO/PBX line keys

Default

- Pressing the TRF key will write the selected data and advance to Memory Block 3-05 (Trunk Incoming Answer Mode Selection).
- 5. Press the SPKR key to go back on-line.

Additional Programming

18:30:312		Data	System	n Data
Mode	Sub-Mode	No.	Required	May Be Required

GENERAL INFORMATION - TRUNK-TO-TRUNK TRANSFER

YES/NO SELECTION

This Memory Block is used to specify YES or NO to allow Trunk-to-Trunk Transfer.

TRUNK INCOMING ANSWER MODE SELECTION

CO/PBX	-	Data No.
TUNI 3 MACIN	ATUITA	05

OPERATION:

NOTES:

Go off-line.

Enter: Mode

TIME

o MIC LK 3 CO/PBX ICM V

> TRF w

Data No.

0 5 (Dial Pad)

CO Port No. Data Setting Data No. (01 - 66)NO ASSIGN 0 1/ 0.5 DISPLAY

- 3. Press the corresponding CO/PBX line key to change data option.
 - To change Normal to Automated Attendant/DISA, press CO/PBX line key 3.

LK1	LK 2	LK 3	LK 4
. Normal	Automatic Trk-to-Trk Transfer	Automated Attendant / DISA	(1 00 (1 00)
LK 5	LK 6	LK 7	LK 8

CO/PBX line keys

Default

CNF

key

Next CO Port No.

- 4. Pressing the TRF key will write the selected data and advance to Memory Block 3-06 (Automatic Tandem Trunk Assignment).
- Press the SPKR key to go back on-line.

Additional Programming

		Data	Systen	Data
Mode	Sub-Mode	No.	Required	May Be Required

GENERAL INFORMATION - TRUNK INCOMING ANSWER MODE SELECTION

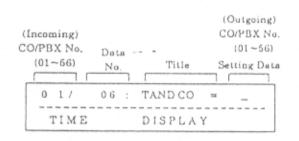
This Memory Block is used to specify the incoming answer mode (Automatic Trunk-to-Trunk Transfer, Automated Attendant, and DISA) on a per outside line basis.

AUTOMATIC TANDEM TRUNK ASSIGNMENT

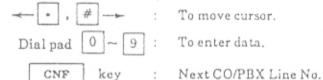
CO/PBX	Data No.
3	06



Data No. 0 6 (Dial Pad)



3. Enter data using the dial pad.



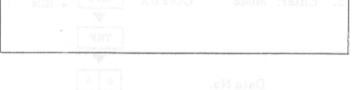
Default Not Specified

- Pressing the TRF key will write the selected data and advance to Memory Block 3-07 (CO/PBX Ringing Variation Selection).
- 5. Press the SPKR key to go back on-line.

M Additional Programming

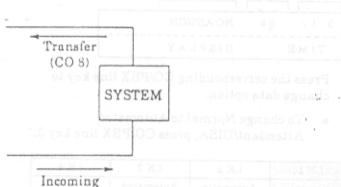
eli salii.	Data	System Data		
Mode	Sub-Mode	No.	Required	May Be Required
	A		W + 11-0 + 100 + 10	

NOTES:



Example of Tandem Trunk Assignment:

Automatic Trunk-to-Trunk Transfer of incoming CO 1 to CO 8.



(CO 1)	

CO/PBX No. = 01 Setting Data = 08

reasing the TRF key will write the selected at a and advance to Memory Block 3-06

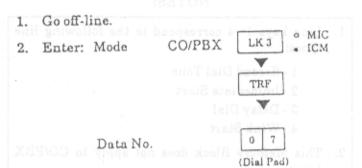
GENERAL INFORMATION - AUTOMATIC TANDEM TRUNK ASSIGNMENT

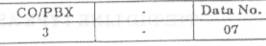
This Memory Block specifies the incoming trunk and transferring trunk for Trunk-to-Trunk Transfer.

CO/PBX RINGING VARIATION SELECTION

CO/PBX	r rumino n	Data No.
3	ACTIVITIES OF THE	07

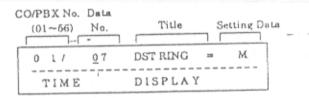
OPERATION:





NOTES:

This Memory Block is not applicable if Telephone is selected in Memory Block 1-1-28.



- 3. Press the corresponding CO/PBX line line key to change data option.
 - To change M to H, press CO/PBX line key 3.

LK1	LK 2	LK 3	LK 4
Medium (M)	Low(L)	High (H)	
LK 5	LK 6	LK 7	LK 8

CO/PBX line keys



CNF

key

Next CO/PBX Line No.

- 4. Pressing the TRF key will write the selected data and advance to Memory Block 3-14 (Tie/DID Line Type Assignment).
- Press the SPKR key to go back on-line.

Additional Programming

		Data No.	System	Data
Mode	Sub-Mode		Required	May Be Required
System (LK 1)	CO Line (LK 1)	28	100 1 100 1 100 1 100 1	

GENERAL INFORMATION - CO/PBX RINGING VARIATION SELECTION

This Memory Block is used to specify a ringing tone (Low, Medium, or High) for each CO/PBX line.

TIE/DID LINE TYPE ASSIGNMENT

(Dial Pad)

CO/PBX	egitav	Data No.
LTO BIRE	-	14

OPERATION:

- 1. Go off-line.
- 2. Enter: Mode CO/PBX LK3 MIC
 TRF

 Data No. 1 4

CO/PBX No. Data
(01~66) No. Setting Data

0 1 / 14 : 2nd dial

TIME DISPLAY

- Press the corresponding CO/PBX line line key to change data option.
 - To change 2nd dial tone to Immediate, press CO/PBX line key 2.

LK 1	LK 2	LK 3	LK 4
2nd dial tone	Immediate	Delayed	Wink Start
LK 5	LK 6	LK 7	LK 8

- Pressing the TRF key will write the selected data and advance to Memory Block 3-15 (Trunk DTMF Duration/Interdigit Selection).
- 5. Press the SPKR key to go back on-line.
- M Additional Programming

101

		Data No.	Data		Data
Mode	Sub-Mode		Required	May Be Required	
CO/PBX (LK 3)		92		1	

NOTES:

- Line keys 1~4 correspond to the following line types:
 - 1 Second Dial Tone
 - 2 Immediate Start
 - 3 Delay Dial
 - 4 Wink Start
- This Memory Block does not apply to CO/PBX Lines.

ssing the TRF key will write the select

data and advance to Memory block services (une Type Assignment).

Da man main m

GENERAL INFORMATION - TIE/DID LINE TYPE ASSIGNMENT

This Memory Block is used to assign the method of loop supervision to be used for each of the Trunk Groups that are associated with Tio Lines.

TRUNK DTMF DURATION/INTERDIGIT SELECTION

CO/PBX	-	Data No.
SUASERIA	ava.	15

OPERATION:

- 1. Go off-line.
- 2. Enter: Mode CO/PBX LK3 MIC ICM

Data No.

(Dial Pad)

NOTES:

- When DTMF is selected for the CO Line in Memory Block 3-92, specify the time duration between sending the DTMF signal and sending the next signal.
- 2. This is also used for Tie Lines.

CO/PBX No. Data
(01-56) No. Title Setting Data
0 1 / 15 : MF 100/70
TIME DISPLAY

- Press the corresponding CO/PBX line key to change data option.
 - To change Digit DTMF Duration 70 ms. and Interdigit Time - 60 ms. to D.T - 100 ms. and I.T. to 70 ms., press CO/PBX line key 2.

	LK 1	LK2	LK 3	LK 4
٠	D.D. I.T. 70 ms. 60 ms.	D.T. 1.T. 100 ms. 70 ms.	D.D. I.T. 400 ms. 100 ms.	D.D. I.T. 600 ms. 100 ms.
	LK 5	LK 6	LK 7	LK 8
	D.D. I.T. 900 ms. 200 ms.			

CO/PBX line keys

Default

CNF

key

Next CO/PBX Line No.

*D.D. = DTMF Digit Duration

I.T. = Interdigit Time

- Pressing the TRF key will write the selected data and advance to Memory Block 3-16 (Tie Line Prepause Time Selection).
- 5. Press the SPKR key to go back on-line.

Additional Programming

V-1-	annand I	Data	System Data	
Mode	Sub-Mode	No.	Required	May Be Required
CO/PBX (LK 3)		92		1

GENERAL INFORMATION - TRUNK DTMF DURATION/INTERDIGIT SELECTION

This Memory Block is used to specify the tone duration and interdigit time of DTMF signals.

2-195

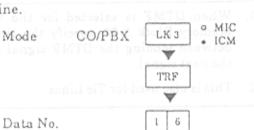
TIE LINE PREPAUSE TIME SELECTION

1	CO/PBX	-	Data No.
	3	-	16

OPERATION:

1. Go off-line.

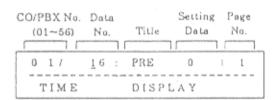
2. Enter: Mode



(Dial Pad)

NOTES:

1. Prepause time differs according to the acknowledgment signaling method.



- 3. Press the corresponding CO/PBX line key to change data option.
 - To change 3.0 sec. to 5.0 sec., press CO/PBX line key 8.

key RECALL

Next page.

FNC

key

Previous page.

CNF

key

Next CO/PBX Line No.

**				
ы	-	54	- 1	

LK1	LK 2	LK 3	LK 4
0 sec.	0.5 нес.	1.0 sec.	1.5 sec.
LK 5	LK 6	LK 7	LK 8
2.0 sec.	3.0 sec.	4.0 нос.	5.0 sec.

4.	Pressing	the TRF	key will	write	the s	selected
	data and	advance	to Memo	ry Blo	ck 3-	17 (Tie
	Line Ans	wer Detec	t Time Se	lection)	netlo -

Press the SPKR key to go back on-line.

2.0 вес.	3.0 вес.	4.0 нос.	5.0 sec.
Page 2			
LK 1	LK 2	LKJ	LK 4
6.0 вес.	7.0 вес.	8.0 нес.	9.0 вес.
	THE RESERVE THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER.		

LK 1	LK 2	LK 3	LK 4
6.0 sec.	7.0 вес.	8.0 нес.	9.0 вес.
LK 5	LK 6	LK 7	LK8
10.0 sec.	11.0 sec.	12.0 sec.	13.0 вес.

CO/PBX line keys	Default

Additional Programming will would Will add galeson

	CA Block 3-16	Data	System	Data
Mode	Sub-Mode	No.	Required	May Be Required
2				

GENERAL INFORMATION - TIE LINE PREPAUSE TIME SELECTION

This Memory Block specifies the time (prepause) when the originating side becomes able to send dial pulse or DTMF to the distant system.

TIE LINE ANSWER DETECT TIME SELECTION

CO/PBX	-	Data No.
3	LU QU	17

OPERATION:

- I. Go off-line.

o MIC 2. Enter: Mode CO/PBX LK 3 · ICM V

TRF y

Data No.

CO/PBX No. Data Setting Page (01-56) No. Title Data 0 1/ 17 : ANS 520 TIME DISPLAY

- 3. Press the corresponding CO/PBX line key to change data option.
 - To change 520 ms. to 910 ms., press CO/PBX line key 8.

RECALL key

Next page.

FNC key Previous page.

CNF key

Next CO/PBX Line No.

Page 1

LKI	LK 2	LK 3	LK 4
0 го.в.	130 ms.	260 ma.	390 ma.
LK 5.	LK 6	LK 7	LK 8
520 ma.	650 ms.	780 ma.	910 me.

Page 2

LK 1	LK 2	LK 3	LK 4
1040 газ.	1170 ms.	1300 ma.	1430 mm.
LK 5	LK 6	LK7	LK 8
1560 ms.	1690 ms.	1820 ms.	1950 ma.

CO/PBX line keys

Default 1705

NOTES:

1. Answering a call may not be possible if the CO answer detect time is too long.

- 4. Pressing the TRF key will write the selected data and advance to Memory Block 3-18 (Tie Line Release Detect Time Selection).
- 5. Press the SPKR key to go back on-line.

Additional Programming

Mada		Data	System	Data
Mode	Sub-Mode	No.	Required	May Be Required
ogniT :	Signal Detect	State	NEBX Inco	Diamid

GENERAL INFORMATION - TIE LINE ANSWER DETECT TIME SELECTION

This Memory Block specifies the duration between the time when the receiving Electra Professional Level II System answers (off-hook) and the time when it is recognized as an answer. When it is recognized as an answer.

TIE LINE RELEASE DETECT TIME SELECTION

CO/PBX	-	Data No.
3		18

OPERATION:

- 1. Go off-line.
- 2. Enter: Mode

CO/PBX

LK3 • MIC

TRF

Data No.

(Dial Pad)

- Press the corresponding CO/PBX line key to change data option.
 - To change 520 ms. to 910 ms., press CO/PBX line key 8.

RECALL

key

Next page.

FNC

key

Previous page.

CNF

key

Next CO/PBX Line No.

Page 1

LK 1	LK 2	LK 3	LK 4
0 ms.	130 ms.	260 ms.	390 тл.
LK5	LK 6	LK 7	LK 8
520 ma.	650 ms.	780 ms.	910 ms.

Page 2

LK 1	LK 2	LK 3	LK 4
1040 гля.	1170 ma.	1300 ms.	1430 ma.
LK 5	LK 6	LK 7	LK 8
1560 ms.	1690 ms.	1820 ms.	1950 ms.

CO/PBX Line Key

Default

- Pressing the TRF key will write the selected data and advance to Memory Block 3-19 (Tie Line/CO/PBX Incoming Signal Detect Time Selection).
- 5. Press the SPKR key to go back on-line.

NOTES:

- Specify distinguishing circuit release from on-hook, noise, and temporary interruption. There are four probable situations for CO release detection.
 - A. Called side hangs up first. The circuit is considered to be released 92 ms. + specified time after the other party disconnects the call.
 - B. Called side hangs up second. The circuit is considered to be released when the specified time has elapsed after the other party hangs up.
 - C. Originating side hangs up first. The circuit is considered to be released 92 ms. + specified time after the other party hangs up.
 - D. Originating side hangs up second. The circuit is considered to be released when the specified time has elapsed after the other party hangs up.

M Additional Programming

	Date	Date System	n Data
Sub-Mode	No.	Required	May Be Required
	Sub-Mode	Sub-Mode Data	Sub-Mode N-

GENERAL INFORMATION - TIE LINE RELEASE DETECT TIME SELECTION

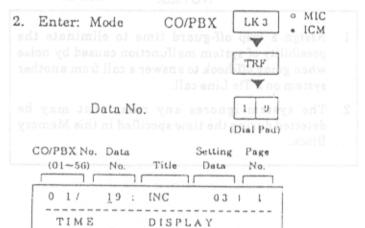
This Memory Block specifies the duration between the time when the circuit disconnection is detected on the Tie line on the distant system side or intra-system side and the time when it is recognized as Tie line release.

TIE LINE/CO/PBX INCOMING SIGNAL DETECT TIME SELECTION

CO/PBX		Data No.
0 4000 130	Marie di	19

OPERATION:

1. Go off-line.



 Press the corresponding CO/PBX line key to change data option.

Example: In Wink Start method.

 To change 390 ms. to 910 ms., press CO/PBX line key 8.

RECALL key

Next page.

FNC

: Previous page.

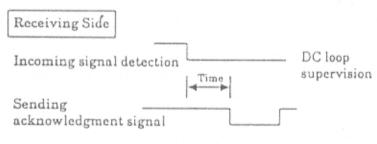
CNF &

key

key

Next CO/PBX Line No.

- Pressing the TRF key will write the selected data and advance to Memory Block 3-20.
- 5. Press the SPKR key to go back on-line.



Additional Programming

Mode		Data	System Data	
	Sub-Mode	No.	Required	May Be Required
CO/PBX (LK 3)	besluctaff	M14	DEMPOSE	0.0000

* In Wink Start method

Page 1

LK I	LK 2	LK 3	LK 4
0 mis. (00)	130 ms. (01)	260 тл. (02)	390 me. (03)
LK 5	LK 6	LK 7	LK 8
520 ms. (04)	650 ms. (05)	780 ma, (06)	910 ms. (07)

Page 2

1	2	3	LK 4
1040 ms. (08)	-1170 ms. (09)	1300 ma, (10)	1430 ms. (11)
LK 5	LK 6	CK 7	LK 8
1560 ma, (12)	1690 ms. (13)	1820 ma. (14)	1950 ms. (15)

* In Delay method

Page 1

LK 1	LK 2	LK 3	LK 4
0 ma. (00)	30 ma. (01)	60 ma. (02)	90 ma. (03)
LK 5	LK 6	LK 7	LK 8
120 ms. (04)	150 ms. (05)	180 ma, (180	210 ms. (07)

Pave 2

LK 1	LK 2	LK 3	LK 4
240 тя. (08)	270 ma. (09)	300 ms. (10)	330 ms. (11)
LK 5	LK 6	LK-7	LK 8
360 ms. (12)	390 ms. (13)	420 ms. (14)	450 ms. (15)

* In COI

Page 1

LK I	LK 2	LK 3	LK 4
50 ms. (00)	100 ms. (01)	150 ms, (02)	200 ma. (03)
LK 5	LK 6	LK 7	LK 8
250 ms, (04)	300 ms. (05)	350 шл. (06)	400 ms. (07)

Page 2

LKI	LK 2	LK 3	LK 4
450 ma, (08)	500 ms. (09)	550 ma. (10)	600 ms. (11)
LK 5	LK 6	LK 7	LK 8
650 ms. (12)	700 ms. (13)	750 ma. (14)	800 ms. (15)

CO/PBX line keys



NOTES:

 For second dial tone method and immediate method, the time is fixed at 30 ms.

GENERAL INFORMATION - TIE LINE/CO/PBX INCOMING SIGNAL DETECT

TIME SELECTION

This Memory Block specifies the duration between the time when the incoming signal from another system is I detected and the time when acknowledgment signal is sent out.

TIE LINE LOOP OFF-GUARD TIME SELECTION

CO/PBX		Data No.
3	-	20

OPERATION:

1. Go off-line.

2. Enter: Mode CO/PBX LK3 • MIC ICM

TRF

Data No. 2 0

CO/PBX No. (01~56)	No.	Title	Setting Data	No.
D. St. 1				
0 1 /	20 :	LOOP	2.0	1 1
TIME		DISP	LAY	

- Press the corresponding CO/PBX line key to change data option.
 - To change 2.0 sec. to 5.0 sec., press CO/PBX line key 8.

RE	CALL	key	:	Next page.	
	FNC	key	:	Previous page.	
	CNF	key	681	Next CO/PBX Lir	ie No.

LK 1	LK 2	LK 3	LK 4
0 sec.	0.5 вес.	1.0 sec.	1.5 вес.
LK 5	LK 6	LK 7	LK 8
2.0 sec.	3.0 нес.	4.0 sec.	5.0 sec.

LK 1	LK 2	LK 3	LK 4
6.0 sec.	7.0 sec.	8.0 вес.	9.0 sec.
LK 5	LK 6	LK 7	LK8
10.0 sec.	11.0 sec.	12.0 sec.	13.0 вес.

CO/PBX	line	keys	 Default

NOTES:

- Assign a loop off-guard time to eliminate the possibility of system malfunction caused by noise when going off-hook to answer a call from another system on a Tie Line call.
- The system ignores any noise that may be detected during the time specified in this Memory Block.

- Pressing the TRF key will write the selected data and advance to Memory Block 3-21 (Tie Line Length of Wink Signal Selection).
- 5. Press the SPKR key to go back on-line.

Additional Programming

	Bertinpo El	Data	System	m Data	
Mode	Sub-Mode	No.	Required	May Be Required	

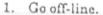
GENERAL INFORMATION - TIE LINE LOOP OFF-GUARD TIME SELECTION

This Memory Block is used to assign loop off-guard protection to prevent noise that may cause the system to be unable to answer an incoming Tie Line.

TIE LINE LENGTH OF WINK SIGNAL SELECTION

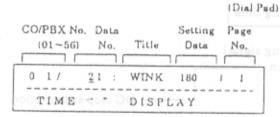
CO/PBX		Data No.
3	ATTITUDE S	21

OPERATION:





Data No.



- Press the corresponding CO/PBX line key to change data option.
 - To change 180 ms. to 240 ms., press CO/PBX line key 8.

RECALL key

Next page.

FNC

Previous page.

CNF key

key

Next CO/PBX Line No.

Page 1

LK I	LK 2	LK 3	LK 4
30 ms.	60 ma.	90 ms.	120 ms.
LK 5	LK 0	LK 7	LK 8
150 ms.	180 ma.	210 ms.	240 ms.

Page 2

LK I	LK 2	LK 3	LK 4
270 ms.	300 ms.	330 ms.	360 ma.
LK 5	LK 6	LK 7	LK 8
390 ma.	420 ms.	450 ms.	480 ma

CO/PBX line keys



- Pressing the TRF key will write the selected data and advance to Memory Block 3-22 (Tie Line Length of Delay Signal Selection).
- 5. Press the SPKR key to go back on-line.

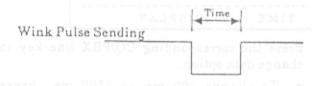
NOTES:

 Specify Wink Start method in Memory Block 3-14.

Receiving Side

Receiving Signal Detection

- DC loop supervision



M Additional Programming

leatester.	da aligo, di	Data	Systen	Data	
Mode	Sub-Mode	No.	Required	May Be Required	
CO/PBX (LK 3)		14	-		

GENERAL INFORMATION - TIE LINE LENGTH OF WINK SIGNAL SELECTION

This Memory Block is used to specify the length of time a wink pulse is sent to another system.

TIE LINE LENGTH OF DELAY SIGNAL SELECTION

CO/PBX	2323 12	Data No.
3		22

OPERATION:

- 1. Go off-line.
- 2. Enter: Mode

CO/PBX

LK 3 • MIC

TRF

Data No.

(Dial Pad)

CO/PBX No. Data Setting Page (01~56) No. Title Data No. O 1 / 22: DELY 300 | 1 TIME DISPLAY

- Press the corresponding CO/PBX line key to change data option.
 - To change 300 ms. to 2100 ms., press CO/PBX line key 8.

RECALL

key

Next page.

FNC

key

Previous page.

CNF

key

Next CO/PBX Line No.

Page 1

LK 1	LK 2	LK 3	LK 4
0 ms.	300 ms.	600 ms.	900 ms.
LK 5	LK 6	LK 7	LK 8
1200 ma.	1500 ms.	1800 ms.	2100 ms.

Page 2

LK 1	LK 2	LK 3	LK4
2400 ms.	2700 ms.	3000 гал.	3300 ms.
LK 5	LK 6	. LK 7	LK8
3600 ms.	3900 ms.	4200 mus.	4500 ms.

CO/PBX line keys

Default

- Pressing the TRF key will write the selected data and advance to Memory Block 3-23 (Tie Line Outgoing Timeout Selection).
- 5. Press the SPKR key to go back on-line.

NOTES:

Specify Delay Method in Memory Block 3-14

Receiving Side

Receiving signal detection

DC loop supervision

Delay Pulse Sending

oligo o

Additional Programming

Mode	Sub-Mode	Data No.	System Data	
			Required	May Be Required
CO/PBX (LK 3)		14		

GENERAL INFORMATION - TIE LINE LENGTH OF DELAY SIGNAL SELECTION

This Memory Block is used to specify the length of time a delay pulse is sent to another system.

TIE LINE OUTGOING TIMEOUT SELECTION

CO/PBX	-	Data No.
MID 3 MOS	MI-3	23

OPERATION:

1. Go off-line.

TIME

- o MIC LK 3 Enter: Mode CO/PBX ICM Y TRF Y Data No. (Dial Pad) Setting CO/PBX No. Data Page (01~56) No. Title Data No. 0 1 / 23 : OGTM 12a
- Press the corresponding CO/PBX line key to change data option.

DISPLAY

- To change 12 sec. to 7 sec., press the RECALL key to turn to Page 1.
- Press CO/PBX line key 8.

RECALL key

Next page.

FNC key

Previous page.

CNF key

Next CO/PBX Line No.

Page 1

LKI	LK 2	LK 3	LK 4
No Limit	1 sec.	2 sec.	З нес.
LK 5	LK 6	LK 7	LK 8
4 sec.	5 sec.	6 sec.	7 sec.

Page 2

LK 1	LK 2	LK 3	LK 4
8 sec.	9 sec.	10 nec.	II nec.
LK 5	LK 6	LK 7	LK 8
12 вес	13 nec.	14 sec.	15 нес.

CO/PBX line keys

Default

NOTES:

- Specify a maximum interval before the Tie Line sender times out.
- 2. A timeout will occur when:
 - The calling station fails to send dial pulses within the time interval specified in this Memory Block after the prepause time.
 - The calling station, after sending dial pulses, fails to send the next dial pulse within the time interval specified.
- Pressing the TRF key will write the selected data and advance to Memory Block 3-24 (Tie Line Incoming Interdigit Timeout Selection).
- Press the SPKR key to go back on-line.

Additional Programming

System Data	
Roquired	May Be Required
-	loquired

GENERAL INFORMATION - TIE LINE OUTGOING TIMEOUT SELECTION

This Memory Block is used to specify the maximum time interval between the origination of an outgoing call and when the call is dropped.

TIE LINE INCOMING INTERDIGIT TIMEOUT SELECTION

CO/PBX	•	Data No.
3		24

OPERATION:

- 1. Go off-line.
- 2. Enter: Mode

CO/PBX LKJ ICM W

> TRF V TRF

Data No.

2 (Dial Pad)

4

CO/PBX No. Data Setting Page (01~56) No: Title Data 0 1 / TIME DISPLAY

- 3. Press the corresponding CO/PBX line key to change data option.
 - To change 6 sec. to 7 sec., press CO/PBX line key 8.

RECALL key

key

Next page.

FNC

Previous page.

CNF

key

Next CO/PBX Line No.

Page 1

LK 1	LK 2	LK 3	LK 4
No Limit	l sec.	2 вес.	Знес.
LK 5	LK 6	LK.7	LK 8
4 sec.	5 вес.	6 pec.	7 sec.

Page 2

LK 1	LK 2	LK3	LK 4
8 вес.	9 вес.	10 sec.	11 sec.
LK 5	LK 6	LK 7	LK 8
12 sec.	13 sec.	14 sec.	15 нес.

CO/PBX line keys

Default

NOTES:

- 1. Specify a maximum effective interval between the gaps of incoming address signals.
- A timeout will occur when:
 - A dial pulse is not received within the time specified by this Memory Block after the receiving side detects the off-hook signal.
 - The next dial pulse is not received within the time specified by this Memory Block after the receiving side detects (receives) a dial pulse.

- 4. Pressing the TRF key will write the selected data and advance to Memory Block 3-25 (Tie Line Wink/Delay Signal Detect Timeout Selection).
- 5. Press the SPKR key to go back on-line.

Additional Programming

	Sub-Mode	Data No.	System Data	
Mode			Required	May Be Required

GENERAL INFORMATION - TIE LINE INCOMING INTERDIGIT

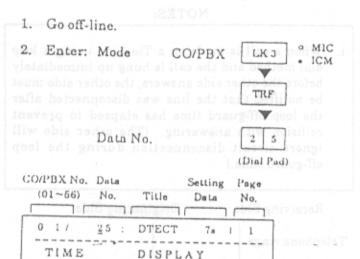
SELECTION

This Memory Block is used to specify a time interval during the incoming call detection process. If an address signal is not received within a specified time, an error tone is returned to the other system.

TIE LINE WINK/DELAY SIGNAL DETECT TIMEOUT SELECTION

CO/PBX	1.00	Data No.
3	CA CALL	25

OPERATION:



- 3. Press the corresponding CO/PBX line key to change data option.
 - To change 7 sec. to 5 sec., press CO/PBX line key 6.

RECALL key Next page. key FNC

Previous page.

CNF key

Next CO/PBX Line No.

Page 1

LK 1	LK 2	LK 3	LK 4
No Limit	l nec.	2 лес.	З нес.
LK 5	LK 6	LK 7	1000 LK 8
4 sec.	5 sec.	биес.	7 soc

Page 2

LK 1	LK 2	LK 3	LK 4
8 нес.	9 sec.	10 sec.	11 Aec.
LK 5	LK 6	LK 7	LK 8
2 вес.	13 sec.	14 sec.	15 sec.

CO/PBX line keys

Default

- 4. Pressing the TRF key will write the selected data and advance to Memory Block 3-26 (Tie Line Outgoing Guard Time Selection).
- Press the SPKR key to go back on-line.

NOTES:

1. If the acknowledgment signal is not received within a predetermined amount of time after an outgoing signal is sent to the other system, a busy tone is sent to the telephone.

Time

Originating Side

Sending an Outgoing signal

Receiving acknowledgment signal

Timeout when the acknowledgment signal is not received.

Additional Programming

origination, IV	Data	System	Data
Sub-Mode	No.	Required	May Be Required
	Sub-Mode	Sub-Mode Data	Sub-Mode N

GENERAL INFORMATION - TIE LINE WINK/DELAY SIGNAL DETECT TIMEOUTSELECTION

This Memory Block is used to specify a maximum time for receiving an acknowledgment signal from a distant system before sending a busy tone.

TIE LINE OUTGOING GUARD TIME SELECTION

CO/PBX	 Data No.
3	26

OPERATION:

- 1. Go off-line.
- 2. Enter: Mode

LK 3 CO/PBX

> TRF W

V

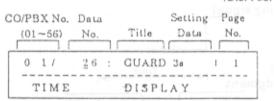
o MIC

· ICM

Data No.

6 (Dial Pad)

2



- 3. Press the corresponding CO/PBX line key to change data option.
 - To change 3 sec. to 7 sec., press CO/PBX line key 8.

RECALL key Next page.

FNC

Previous page.

CNF

key

Next CO/PBX Line No.

Page 1

LK 1	LK 2	LK 3	LK 4
0.02 вес.	1 нес.	2 sec.	3 noc;
LK 5	LK 6	LK 7	LK 8
4 sec.	б вес.	6 sec.	7 sec.

LK 1	LK 2	LK 3	LK 4
8 вес.	9 sec.	10 sec.	11 sec.
LK 5	LK 6	LK 7	LK 8
12 вес.	13 sec.	14 sec.	15 вес.

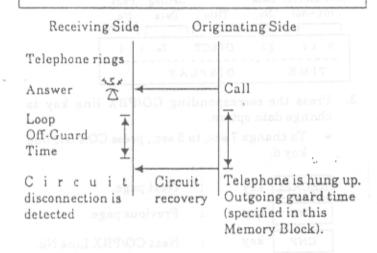
CO/PBX line keys

Default

- 4. Pressing the TRF key will write the selected data and advance to Memory Block 3-27 (Tie Line Dial Tone Selection).
- 5. Press the SPKR key to go back on-line.

NOTES:

1. When a call is made on a Tie Line using a loop dial method and the call is hung up immediately before the other side answers, the other side must be notified that the line was disconnected after the loop off-guard time has elapsed to prevent collision with answering. (The other side will ignore circuit disconnection during the loop off-guard time.)





Additional Programming

	ens slitw ii	Data	System	Data	
Mode	Sub-Mode	No.	Required	May Bo Required	
	(5101909180)	10000	man a garage	rtequire	

Dramamanina

GENERAL INFORMATION - TIE LINE OUTGOING GUARD TIME SELECTION

This Memory Block is used to specify the duration between the time when a Tie Line is released and the time when the other side is notified of circuit disconnection. This occurs when the originated call is hung up before the other side answers. The time specified here must be longer than the loop off-guard time assigned on the distant system.

TIE LINE DIAL TONE SELECTION

CO/PBX	-	Data No.
REO 3 OER	ELVAN.	27

OPERATION:



1. Go off-line.

Enter: Mode

o MIC LK J CO/PBX ICM W TRF

Data No.

2 7 NOTES:

(Dial Pad)

W

CO/PBX No.-Data Setting $(01 \sim 56)$ Title Data YS 0 1/ 27 : SDT DISPLAY TIME

- 3. Press the corresponding CO/PBX line key to change data option.
 - To change YES to NO, press CO/PBX line key 1.

RECALL key

Next page.

key FNC

Previous page.

CNF

key

Next CO/PBX Line No.

LK 1	15 15 LK 2 134 15	LK 3	LK 4
NO	YES		
LK 5	LK 6	LK 7	LK

CO/PBX line keys

Default

4. Pressing the TRF key will write the selected data and advance to Memory Block 3-28 (Tie Line Reorder Tone Selection).

Press the SPKR key to go back on-line.

Additional Programming

		Data	System	a Data
Mode	Sub-Mode	No.	Required	May Be Required
CO/PBX (LK 3)		14		

GENERAL INFORMATION - TIE LINE DIAL TONE SELECTION

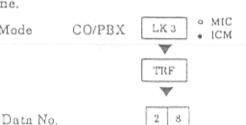
This Memory Block is used to specify whether or not to send a dial tone to the distant system.

TIE LINE REORDER TONE SELECTION

CO/PBX	I SOL ELI	Data No.
3	-	28

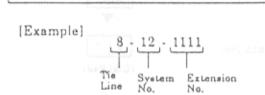
OPERATION:

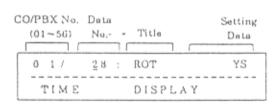
- Go off-line.
- 2. Enter: Mode



(Dial Pad)







- Press the corresponding CO/PBX line key to change data option.
 - To change YES to NO, press CO/PBX line key 1.

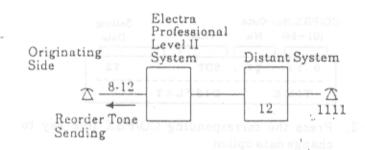


key

Next CO/PBX Line No.

LK 1 Not Sending (NO)	LK 2 Sending (YES)	LK 3	LK 4
LK 5	LK 6	LK 7	LK 8
LK 5	LK 6	LK 7	LK8

- Pressing the TRF key will write the selected data and advance to Memory Block 3-29 (Tie Line Internal Transmit PAD Selection).
- 5. Press the SPKR key to go back on-line.





M. Additional Programming

01T) 8Z-C		Data	System Data	
Mode	Sub-Mode	No.	Required	May Be Required
CO/PBX (LK 3)		14	000 0000 0000	W 8001 1

GENERAL INFORMATION - TIE LINE REORDER TONE SELECTION

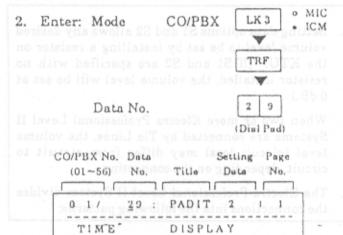
This Memory Block is used to specify whether or not to send a reorder tone to the originating station when the number of a distant system is used to originate a call over a Tie Line.

TIE LINE INTERNAL TRANSMIT PAD SELECTION

CO/PBX		Data No.
3 /1 3	MIJ 3	29

OPERATION:

1. Go off-line.



- Press the corresponding CO/PBX line key to change data option.
 - To change 2 dB to 6 dB sec., press CO/PBX line key 3.

RECALL key : Next page.

FNC key : Previous page.

CNF key : Next CO/PBX Line No.

Page 1

t tike t			
LK 1	LK 2	LK 3	LK 4
2 dB	4 dB	6 dB	8 dB
LK 5	LK 6	LK 7	LK 8
12 dB	16 dB	S1	S2

Page 2

LK 1	LK 2	LK 3	LK 4
0 dB		leva	Lggjylse
LK 5	LK 6	LK 7	LK 8

CO/PBX line keys

Default

- Pressing the TRF key will write the selected data and advance to Memory Block 3-30 (Tie Line Internal Receive PAD Selection).
- 5. Press the SPKR key to go back on-line.

NOTES:

- Setting data options S1 and S2 allows any desired level to be set by installing a resistor on the KTU.
 (If S1 and S2 are specified with no resistor installed, the level will be set at 0 dB.)
- When two or more Electra Professional Level II
 Systems are connected by Tie Lines, the volume
 level (circuit loss) may differ from circuit to
 circuit, depending on the connection.
- The Electra Professional Level II System divides the connections into the following patterns:

(Specify the sending and receiving levels of each pattern for each of the Tie Lines.)

Pattern A (Intercom Mode) Connections established

Connections established between the intercom stations of the local system and another system.

- Sending level (to be specified in this Memory Block)

- Receiving level

Pattern B (Tandem Mode)

Connections established between two systems, with the local system as a tandem system.

- Sending level

Receiving level

Additional Programming

		Data No.	System Data	
Models	Sub-Mode		Required	May Be Required
	AU Selection	Limit	ari teeradz	d eard

GENERAL INFORMATION - TIE LINE INTERNAL TRANSMIT PAD SELECTION

This Memory Block is used to specify a volume level for calls originated from the extensions of a local system to a distant system.

TIE LINE INTERNAL RECEIVE PAD SELECTION

CO/PBX	******	Data No.
3	-	30

OPERATION:

- 1. Go off-line.
- 2. Enter: Mode

o MIC LKO · ICM W

TRF

Data No.

0

(Dial Pad)

CO/PBX No. Data Setting Page (01 - 56)No. Title PADIR TIME DISPLAY

- 3. Press the corresponding CO/PBX line key to change data option.
 - To change 2 dB to 6 dB sec., press CO/PBX line key 3.

RECALL key

Next page.

FNC

key

Previous page.

CNF

key

Next CO/PBX Line No.

Page 1

LK 1	LK 2	LK 3	LK 4
2 dB	4 dB	6 dB	8 dB
LK 5	LK 6	LK 7	LK 8
12 dB	16 dB	S1	S2

LK 1	LK 2	LK 3	LK 4
0 dB			
LK 5	LK 6	LK 7	LK 8

CO/PBX line keys

Default

- 4. Pressing the TRF key will write the selected data and advance to Memory Block 3-31 (Tie Line External Transmit PAD Selection).
- 5. Press the SPKR key to go back on-line.

NOTES:

- 1. Setting data options S1 and S2 allows any desired volume level to be set by installing a resistor on the KTU. (If S1 and S2 are specified with no resistor installed, the volume level will be set at 0 dB 1
- 2. When two or more Electra Professional Level II Systems are connected by Tie Lines, the volume level (circuit loss) may differ from circuit to circuit, depending on the connection.
- 3. The Electra Professional Level II System divides the connections into the following patterns:

(Specify the sending and receiving levels of each pattern for each of the Tie Lines.)

Pattern A (Intercom Mode)

Connections established between the intercom stations of the local system and another system.

- Sending level

Receiving level (to be specified in this Memory Block)

Pattern B (Tandem Mode)

Connections established between two systems. with the local system as a tandem system.

Sending level

Receiving level

Additional Programming

10170 00	A Jan 187 Same	Data Sys	System	em Data	
Mode	Sub-Mode	No.	Required	May Be Required	
	bail-eo doad	vis of v	SPKRE	Denner I	

GENERAL INFORMATION - TIE LINE INTERNAL RECEIVE PAD SELECTION

This Memory Block is used to specify a volume level for calls coming in to extensions of a local system from a distant system (extension mode).

TIE LINE EXTERNAL TRANSMIT PAD SELECTION

CO/PBX		Data No.
MAH3 XH H	Mid	31

OPERATION:

- 1. Go off-line.
- 2. Enter: Mode CO/PBX

LKJ • MIC • ICM

Data No.

3 (Dial Pad)

CO/PBX No. Data Setting Puge
(01~56) No. Title Data No.

0 1 / 31 : PADET 2 1 1

TIME DISPLAY

- Press the corresponding CO/PBX line key to change data option.
 - To change 2 dB to 6 dB, press CO/PBX line key 3.

RECALL key

key

Next page.

FNC

Previous page.

CNF key

Next CO/PBX Line No.

Page 1

LK 1	LK 2	(ab LK 3 aba	LK4
2 dB	4 dB	6 dB	8 dB
LK 5	LK 6	LK 7	LK 8
12 dB	16 dB	Sı	S2

Page 2

LK I	LK 2	LK 3	LK 4
0 dB	ni palinada	pd 01) 15%	guivino:
LK 5	LK 6	LK 7	LK 8

CO/PBX line keys

Default

- Pressing the TRF key will write the selected data and advance to Memory Block 3-32 (Tie Line External Receive PAD Selection).
- 5. Press the SPKR key to go back on-line.

NOTES:

- Setting data options S1 and S2 allows any desired volume level to be set by installing a resistor on the KTU. (If S1 and S2 are specified with no resistor installed, the level will be set at 0 dB.)
- When two or more Electra Professional Level II
 Systems are connected by Tie Lines, the volume
 level (circuit loss) may differ from circuit to
 circuit, depending on the connection.
- The Electra Professional Level II System divides the connections into the following patterns:

(Specify the sending and receiving levels of each pattern for each of the Tie Lines.)

Pattern A (Intercom Mode) Connections established

Connections established between the intercom stations of the local system and another system.

_ Sending level

Receiving level

Pattern B (Tandem Mode)

Connections established between two systems, with the local system as a tandem system.

Sending level (To be specified in this Memory Block.)

Receiving level

M Additional Programming

betsale	a lade alone II	Data System Da		Data
Mode	Sub-Mode	No.	Required	May Be Required
	Januara Salaerian	-	ages a Compa	Require

GENERAL INFORMATION - TIE LINE EXTERNAL TRANSMIT PAD SELECTION

This Memory Block is used to specify a volume level for the outgoing calls of the local system to a distant system (tandem mode).

2-211

TIE LINE EXTERNAL RECEIVE PAD SELECTION

CO/PBX		Data No.
3	-	32

OPERATION:

- 1. Go off-line.
- 2. Enter: Mode

CO/PBX LK3 • MIC

TRF

Data No.

Dial Pad)

CO/PBX No. Data Setting Page (01~56) No. Title Data No.

0 1 / 32 : PADER 2 1 1

TIME DISPLAY

- 3. Press the corresponding CO/PBX line key to change data option.
 - To change 2 dB to 6 dB, press CO/PBX line key 3.

RECALL key

Next page.

FNC key

Previous page.

CNF ke

Next CO/PBX Line No.

Page 1

LK I	LK 2	LK 3	LK 4
2 dB	4 dB	6 dB	8 dB
LK 5	LK 6	LK 7	V LK 8
12 dB	16 dB	SI	S2

Page 2

LK 1	LK 2	LK 3	LK 4
0 dB			
LK 5	LK 6	LK 7	LK 8

CO/PBX line keys

Default

- Pressing the TRF key will write the selected data and advance to Memory Block 3-33 (Disconnect Recognition Time Selection).
- 5. Press the SPKR key to go back on-line.

NOTES:

- Setting data options S1 and S2 allows any desired volume level to be set by installing the corresponding resistor on the unit. (If S1 and S2 are specified with no resistor installed, the volume level will be set at 0 dB.)
- When two or more Electra Professional Level II
 Systems are connected by tie lines, the volume
 level (circuit loss) may differ from circuit to
 circuit, depending on the connection.
- The system divides the connections into the following patterns:

(Specify the sending and receiving levels of each pattern for each of the Tie Lines.)

Pattern A (Intercom Mode) Connections established

Connections established between the intercom stations of the local system and another system.

Sending level

Receiving level

Pattern B (Tandem Mode)

Connections established between two systems, with the local system as a tandem system.

Sending level

Receiving level (To be specified in this Memory Block.)

M Additional Programming

		Data	Systen	m Data	
Mode	Sub-Mode	No.	Required	May Be Required	

GENERAL INFORMATION - TIE LINE EXTERNAL RECEIVE PAD SELECTION

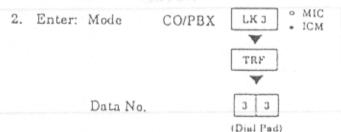
This Memory Block is used to specify a volume level for incoming calls from a distant system (tandem mode).

DISCONNECT RECOGNITION TIME SELECTION

CO/PBX		Data No.	
TT/3 CET	7.W.O	33	

OPERATION:

Go off-line.



CO/PBX No. Data Setting Page No. (01 - 56)Title Data No. 0 1/ 33 : DISTM TIMÉ DISPLAY

- 3. Press the corresponding CO/PBX line key to change data option.
 - To change 0.3 sec. to 0.5 sec., press CO/PBX line key 6.

RECALL key

key

Next page.

FNC

Previous page.

key CNF

Next CO/PBX Line No.

Page 1

LK 1	LK 2	LK 3	LK 4	
0 вес.	.1 sec.	.2 sec.	3 sec.	
LK 5	LK 5 LK 6		LK 8	
.4 sec.	.5 нес.	.6 sec.	.7 sec.	

Page 2

LK I	LK 2	LK 3	LK 4	
.8 sec.	.9 sec.	1.0 sec.	1.1 sec.	
LK 5	LK 6 LK 7		LK 8	
1.2 sec.	1.3 sec.	1.4 sec.	1.5 sec.	

CO/PBX line keys

2852 Default

- 4. Pressing the TRF key will write the selected data and advance to Memory Block 3-38 (Automated Attendant Message to Trunk Selection).
- 5. Press the SPKR key to go back on-line.

NOTES:

When a call origination on a CO/PBX line or Tie Line is interrupted or dropped while in progress, and an attempt is made to reseize the line, the seized line must be disconnected and cleared before it can be accessed again.

Additional Programming

	Data	System Data		
Sub-Mode	No.	Required	May Be Required	
	Sub-Mode	Sub-Mode Data	Sub-Mode Data	

GENERAL INFORMATION - DISCONNECT RECOGNITION TIME SELECTION

This Memory Block is used to specify the minimum time for a circuit that has been disconnected to be accessed

Co off-line.

AUTOMATED ATTENDANT MESSAGE TO TRUNK SELECTION

CO/PBX	-	Data No.	
3	-	38	

NOTES:

OPERATION:

- 1. Go off-line.
- 2. Enter: Mode

LK 3 CO/PBX ICM W TRF W

Data No.

8 (Dial Pad)

CO/PBX No. Data Setting (01 - 56)No. Title Data 0 1 / 38 AA MSG TIME DISPLAY

Enter data using the dial pad.

Setting Data : 1~8

Automated Attendant

Message 1~8

CNF

014

key

Next CO/PBX Line No.

Default Message 1

- 4. Pressing the TRF key will write the selected data and advance to Memory Block 3-40 (Automatic Release Signal Detection Time Selection).
- 5. Press the SPKR key to go back on-line.

Additional Programming

Mode	136.1	Data No.	System Data		
	Sub-Mode		Required	May Be Required	
System (LK 1)	Trans./A.A. (LK 4)	11	rvad and X'03	100	
System (LK 1)	Trans./A.A. (LK 4)	12	THT and pu		
System (LK 1)	Trans./A.A. (LK 4)	13	onavbs bs: nated Atter	- data -: (Autor	
System (LK 1)	Trans./A.A. (LK 4)	14	J(so	Selecti	

GENERAL INFORMATION - AUTOMATED ATTENDANT

MESSAGE TO TRUNK SELECTION

This Memory Block is used to assign the Automated Attendant Message on a per CO/PBX Trunk basis. When [Automated Attendant Message is assigned to each CO/PBX Trunk, the system will automatically answer the [incoming call and send an Automated Attendant Message to the calling party.

AUTOMATIC RELEASE SIGNAL DETECTION TIME SELECTION

CO/PBX		Data No.
anu3 nuv	BY B	40

OPERATION:

- 1. Go off-line.
- o MIC 2. Enter: Mode LK J CO/PBX ICM W TRF Y 0 Data No. 4 (Dial Pad) CO/PBX No. Data Setting (01 - 56)No. Data 40 RLST 350 YS11

- NOTES:
- 1. Good-line
 2. Enter: Mode CO/PBX LKE CICM

- Press the corresponding CO/PBX line key to change data option.
 - To change 200 ms. to 250 ms., press CO/PBX line key 6 while in Page 1.

DISPLAY

- Pressing the TRF key will write the selected data and advance to Memory Block 3-41 (Delay Announcement Assignment).
- 5. Press the SPKR key to go back on-line.

RECALL key

TIME

Next page.

FNC

key

Previous page.

CNF

key

Next CO/PBX Line No.

Page 1

LK 1	LK 1 LK 2		LK 4	
0 ma	50 ms	100 ms	150 ms	
LK 5	LK 5 LK 6 200 ms 250 ms		EWALK 8	
200 ms			360 ma	

Additional Programming

		Data	System Data		
Mode	Sub-Mode	No.	Required	May Be Required	
battoole	a mela estrew Ili	w vost	THE SERVE	Lazeri .	

Page 2

rage 2			
LK 1	LK 2	LK 3	LK 4
400 ms	500 ma	700 ma	1000 ma
LK 5	LK 6	LK 7	LK 8
1500 ms	2000 tns	3000 ms	5000 ms

GENERAL INFORMATION - AUTOMATIC RELEASE SIGNAL DETECTION

TIME SELECTION

This Memory Block is used to specify the signal detection time for release of a CO or PBX line, when a disconnect signal is received from the distant Central Office or PBX.

DELAY ANNOUNCEMENT ASSIGNMENT

CO/PBX	-	Data No.
3		41

OPERATION:

- 1. Go off-line.
- 2. Enter: Mode

CO/PBX LKJ • MIC

Data No.

TRF
4 1
(Dial Pad)

O/PBX No. (01~56)	No.		Title			Setting Data
				2 (2) (2)		
0 1 /	41		MSG	D/N	=	NO
TIME	amgias	A	DISI	PLA	Y	iay Ar

- Press the corresponding CO/PBX line key to change data option.
 - To change NO to YES, press CO/PBX line key 2.

NO = Do not send Delay Announcement

YES = Send Delay Announcement

CNF ke

Next CO/PBX Line No.

LK 1	LK 2	LK 3	LK 4
NN	YN	NY	NY
LK 5	LK 6	LK 7	LK 8

CO/PBX line keys

Default

- Pressing the TRF key will write the selected data and advance to Memory Block 3-42 (DIT Assignment).
- 5. Press the SPKR key to go back on-line.

NOTES:

1. The following defines the Setting Data.

LK1 = NN	DELAY ANNOUNCEMENT	DAY NIGHT	NO
LK2 = YN	DELAY ANNOUNCEMENT	DAY	YES
LK3 = NY	DELAY ANNOUNCEMENT	DAY NIGHT	NO YES
LK4 = YY	DELAY	DAY	YES YES

M Additional Programming

	The state of the s	Data No.	System Data	
Mode	Sub-Mode		Required	May Be Required
0.170	3000 1 1/27 00		time 0005	am 00-0)

GENERAL INFORMATION - DELAY ANNOUNCEMENT ASSIGNMENT

This Memory Block is used to specify if Delay Announcement is sent to the calling party (on a per CO Port basis) for Dand and/or Night Mode.

DIT ASSIGNMENT

CO/PBX		Data No.
ANACASSI	-	42

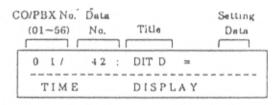
OPERATION:





NOTES:

 A trunk can terminate at only one station, but any number of trunks can terminate at the same station.



- 3. Use the dial pad to enter data.
 - Station No. (2-, 3-, or 4-digits 00~9999)
 - COPort No. (01~56)

Dial pad 0 ~ 9 : To enter data.

CNF

key

: Next CO Port No.

Default No Assignment

- Pressing the TRF key will write the selected data and advance to Memory Block 3-43 (ANA Assignment).
- 5. Press the SPKR key to go back on-line.

M Additional Programming

Data	System Data			
May Be Required	Required	No.	Sub-Mode	Mode
		-		Marie and the second second

(Telephone Number to Truck Assignment).

GENERAL INFORMATION - DIT ASSIGNMENT

This Memory Block is used to independently assign Day Mode station terminations to incoming trunk calls.

ANA ASSIGNMENT

CO/PBX	Data No.
3	43

OPERATION:

(Dial Pad)

NOTES:

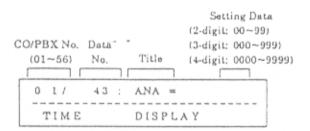
1. Go off-line.

2. Enter: Mode CO/PBX LK3 • MIC ICM

TRF

Data No. 4 3

 A trunk can terminate at only one station, but any number of trunks can terminate at the same station.



- Use the dial pad to enter data.
 - Station No. (2-, 3-, or 4-digits 00~9999)
 - CO Port No. (01~56)

Dial pad 0 ~ 9 : To enter data.

CNF key : Next CO Port No.

Default No Assignment

- Pressing the TRF key will write the selected data and advance to Memory Block 3-00 (Telephone Number to Trunk Assignment).
- 5. Press the SPKR key to go back on-line.

M Additional Programming

	No. 1 Date		System Data	
Mode	Sub-Mode	No.	Required	May Be Required

GENERAL INFORMATION - ANA ASSIGNMENT

This Memory Block is used to assign Night Answer Mode (ANA) station terminations for incoming CO/PBX calls.

TRUNK	TYPE	SELECTION
-------	------	-----------

CO/PBX	-	Data No.
L, C.H. J. LATE	MU Z	91

OPERATION:

- 1. Go off-line.
- 2. Enter: Mode

CO/PBX LKJ • MIC

Data No.

9 1 (Dial Pad)

CO/PBX No. Data Setting Page (01-66) No. Title Data No. O 1 / 91 : CO

- Press the corresponding CO/PBX line key to change data option.
 - To change CO to Tie/DID, press CO/PBX line key 3.

CNF key

LK1	LK 2	LKJ	LK 4
CO	PBX/CTX	Tie/DID	
LK 5	LK 6	LK 7	LK 8

CO/PBX line keys



Next CO/PBX Line No.

- Pressing the TRF key will write the selected data and advance to Memory Block 3-92 (Trunk (Installed, DP/DTMF) Selection).
- 5. Press the SPKR key to go back on-line.

Additional Programming

Mode	0.11	Data	Systen	n Data
моче	Sub-Mode	No.	Required	May Be Required

NOTES:

Entar Mode CO/PBX LK3 . ICM
THE
Data No. 9 2

TIME DISPLAY
Press the corresponding CO/PBX line ke

To change MF to DP 10 pps, press CO/PBX, line key 2.

Pressing the THF key will write the selected date and advance to Memory Block 3-21 (Trunk Type Selection).

Press the SPKE key to go back Additional Programming

GENERAL INFORMATION - TRUNK TYPE SELECTION

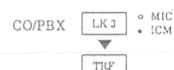
This Memory Block is used to specify each external line as CO Line, PBX/CTX line, or Tic line.

TRUNK (INSTALLED, DP/DTMF) SELECTION

CO/PBX	-	Data No.
. 3		92

OPERATION:

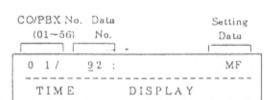
- 1. Go off-line.
- Enter: Mode



Data No.

9 2 (Dial Pad)

 Ψ



- Press the corresponding CO/PBX line key to change data option.
 - To change MF to DP 10 pps, press CO/PBX line key 2.

CNF

key

Next CO/PBX Line No.

LK I	LK 2	LK 3	LK 4
NIL	DP 10 pps	DP 20 pps	M.F
LK 5	LK 6	LK 7	LK 8

CO/PBX line keys

Default

- Pressing the TRF key will write the selected data and advance to Memory Block 3-91 (Trunk Type Selection).
- 5. Press the SPKR key to go back on-line.
- M Additional Programming

Mode	Sub-Mode	Data	System Data	
		No.	Required	May Be Required
CO/PBX (LK 3)		14		
Telephone (LK 4)		12		

NOTES:

(01-06) No. Title Data No. 0. 1/ 21 CO

Press the corresponding CO/PBX line key to change data option.

line key 3.

ESSECTION OF LK 2 LK 3 LK 4
SECTION OF THE CONTROL LK 5 LK 6 LK 7 LK 8
LK 6 LK 7 LK 8

Pressing the TRF key will write the selected data and advance to Memory Block 3-32 (Trunk (lastalled, DP/DTMF) Selection).

galosmergor3 lazoitibbA = #

Mode Sub-Mode No. Required May B

GENERAL INFORMATION - TRUNK (INSTALLED, DP/DTMF) SELECTION

This Memory Block is used to specify each external line as a DP(10 pps or 20 pps) or DTMF line, or not connected (NIL).

CO/PBX RING ASSIGNMENT (DAY MODE)

Telephone	-	Data No.
10184A 97	Di.X	01

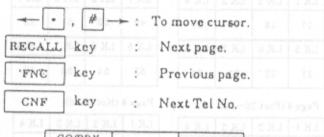
OPERATION:

1. Go off-line.

TIME

- MIC 2. Enter: Mode Telephone LK 4 Data No. (Dial Pad) Tel Port No. Data (01 - 56)Title 0 1/ 0.1 RNG DY 1 0 1
- 3. Press the CO/PBX line key corresponding to each CO/PBX number.
 - The LED indication changes to indicate the data each time a CO/PBX line key is pressed.

DISPLAY



CO/PBX Line LED	OFF	□ ON
Data	NO (No Ring)	YES (Ring)

- 4. After entering all data for all pages; pressing the TRF key will write the selected data and advance to Memory Block 4-02 [CO/PBX Ring Assignment (Night Mode)].
- 5. Press the SPKR key to go back on-line.
- Additional Programming

		Data	System Data	
Mode	Sub-Mode	No.		May Be Required

CO/PBX Number (01~56) correspond to CO/PBX line key.

Page 1 (Port 01-08)

LK I	LK 2	LKJ	LK 4
01	02	03	04
I,K 5	LK 6	LK 7	LK 8
0.5	06	07	08

Page 6 (Port 33-40)

LK 1	LK 2	LK3	LK 4
33	34	35	36
LK 5	LK 6	LK 7	LK 8
37	38	39	40

CO/PUX line keys

Page 2 (Port 09-16)

LK 1	LK 2	LK 3	LK 4
09	10	11	12
LK 5	LK 6	LK 7	LK 8
13	14	15	16
-	the same of the same of	-	

Page 6 (Port 41~48)

LK 1	LK 2	LK 3	LK 4
41	42	43	44
LK 5	LK 6	LK7	LK 8
45	46	47	48

Page 3 (Port 17-24) Page 7 (Port 49-56)

LK 1	LK 2	LK 3	LK 4	
17	18	19	20	
LK 5	LK 6	LK 7	LK 8	
21	- 22	23	24	

LK 1	LK 2	LK3	LK 4
49	50	51	52
LK 5	LK 6	LK 7	LK 8
50	54	-55	56

Page 4 (Port 25~32)

LK I	LK 2	LK 3	LK 4	
25	26	27	28	
LK 5	LK 6	LK 7	LK 8	
29	30	31	32	

Page 8 (Not Used)

LK I	LK 2	K2 LK3	
57	58	59	60
LK 5	LK 6	LK7	LK 8
61	62	63	64

Default

Telephones connected to port numbers 01 and 02 ring on all incoming CO/PBX calls. Telephones connected to port numbers 03~66 do not ring on any incoming CO/PBX

GENERAL INFORMATION - CO/PBX RING ASSIGNMENT (DAY MODE)

This Memory Block is used to assign Multiline Terminals to ring on incoming CO/PBX calls in the Day Mode.

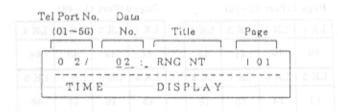
CO/PBX RING ASSIGNMENT (NIGHT MODE)

Telephone	-	Data No.
4		02

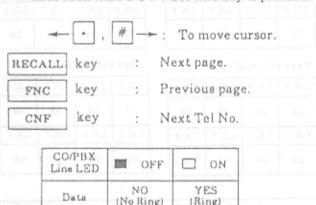
- 1. Go off-line.
- 2. Enter: Mode Telephone LK4 MIC

 Data No. 0 2

 (Dial Pad)



- Press the CO/PBX line key corresponding to each CO/PBX number.
 - The LED indication changes to indicate the data each time a CO/PBX line key is pressed.



- After entering all data for all pages; pressing the TRF key will write the selected data and advance to Memory Block 4-07 [Code Restriction Class Assignment (Day Mode)].
- 5. Press the SPKR key to go back on-line.
- M Additional Programming

		Data	System	Data	
Mode	Sub-Mode	No.	Required	May Be Required	
7310	MYATT	TRIVE	WWD1227	DWIN	

CO/PBX Number (01~56) correspond to CO/PBX line key.

Page 1 (Port 01 ~08) LK 1 LK 2 LK 3 LK 4 01 02 03 04 LK 5 LK 6 LK 7 LK 8 05 06 07 08

LK I	LK 2	LK3	LK 4	
33	34	35	36	
LK 5	LK 6	LK 7	LK 8	
37	38	39	40	

Page 5 / Page 32 - 40)

CO/PBX line keys

LK 1	LK 2	K2 LK3	
09	10	-11	12
LK 5	LK 6	LK 7	LK8
13	14	15	16

LK 1	LK 2	LK 2 LK 3 LK	LK 4
41	42	43	44
LK 5	LK 6	LK 7	LK 8
45	46	47	48

Page 3	(Port 1	7-24)		
LK I	LK 2 LK 3			
17	18	19	20	
LK 5	LK 6	LK 7	LK 8	
21	22	23	24	

LK 1	LK 2	LK 3	LK 4
49	50	51	52
LK 5	LK 6	LK 7	LK 8
53	54	55	56

Page -	(Port 2	(5-32)	
LK I	LK1 LK2 LK3		
25	26	27	28
LK 5	LK 6	LK 7	LK 8
29	30	31	32

LK 1	LK 2	LK 2 LK 3 LK	LK 4
57	58	59	60
LK 5	LK 6	LK 7	LK 8
61	62	63	64

Telephones connected to port numbers 01 and 02 ring on all incoming CO/PBX calls.

Telephones connected to port numbers 03-56 do not ring on any incoming CO/PBX calls.

GENERAL INFORMATION - CO/PBX RING ASSIGNMENT (NIGHT MODE)

This Memory Block is used to assign Multiline Terminals to ring on incoming CO/PBX calls in the Night Mode.

CODE RESTRICTION CLASS ASSIGNMENT (DAY MODE)

Telephone - Data No.

OPERATION:

1. Go off-line.

2. Enter: Mode

Telephone LK4 • MIC

Data No.

0 7 (Dial Pad) NOTES:

Restriction Class 00~15.

Enter data using the dial pad.

→ , # → : To move cursor.

Dial pad 0 ~ 9 : To enter setting data.

CNF key : Ne

Next Tel No.

Default All Stations Class 00

- Pressing the TRF key will write the selected data and advance to Memory Block 4-08 [Code Restriction Class Assignment (Night Mode)].
- 5. Press the SPKR key to go back on-line.

M Additional Programming

		Data No.	System Data	
Modo	Sub-Mode		Required	May Be Required
System (LK 1)	CO,Line (LK 1)	60		
System (LK 1)	CO Line (LK 1)	61		

GENERAL INFORMATION - CODE RESTRICTION CLASS ASSIGNMENT

(DAY MODE)

This Memory Block is used to specify Code Restriction Class in Day Mode on a per station basis.

2-223

CODE RESTRICTION CLASS ASSIGNMENT (NIGHT MODE)

Telephone		Data No.
4	-	08

3. Hitter data using the dial and.

OPERATION:

1.	Go off-line.				NOTES:	
2.	Enter: Mode	Telephone	LK 4 • ICM	7.		
			—	1 0		
	Data No.		0 8	Dink Paris		
			(Dial Pad)			

Tel Port No. (01~66)	Data No.	Title	Data (00~15)
0 1/	08.1	CLS NT =	0 0
TIME		DISPLAY	

Restriction Class 00~15.

3. Enter data using the dial pad.

→ · · · To move cursor.

Dial pad 0 ~ 9 : To enter setting data.

CNF key : Next Tel No.

Default All Stations Class 00

- Pressing the TRF key will write the selected data and advance to Memory Block 4-09 (Telephone to Tenant Assignment).
- 5. Press the SPKR key to go back on-line.

Additional Programming

		Data	System	Data			
Mode	Sub-Mode	No.	Required	May Be Required	System Fran		
System (LK 1)	CO Line (LK1)	60			Required May		
System (LK 1)	CO Line (LK 1)	61			Lift from 15		
	-						

GENERAL INFORMATION - CODE RESTRICTION CLASS ASSIGNMENT (NIGHT MODE)

This Memory Block is used to specify Code Restriction Class in Night Mode on a per station basis.

TELEPHONE TO TENANT ASSIGNMENT

Telephone	-	Data No.
ESMU4M MO.	TAT	09

OPERATION:

1. Go off-line.

2. Enter: Mode Telephone LK 4 • MIC

Data No. 0 9

(Dial Pad)

Tei Port No. Data Setting Data
(01~56) No. Title (00~47)

0 1 / 09 : TENANT = 00

TIME DISPLAY

3. Enter data using the dial pad.

Example: To enter TENANT 08 for TEL 01, enter 08 using the dial pad.

→ · · · To move cursor.

Dial pad 0 ~ 9 : To enter setting data.

CNF key : Next Tel No.

Default All Telephones Tenant 00

- Pressing the TRF key will write the selected data and advance to Memory Block 4-10 (Station Number Assignment).
- 5. Press the SPKR key to go back on-line.
- Additional Programming

		Data	Systen	Data
Mode	Sub-Mode	No.	Required	May Be Required
Tenant (LK 2)		01		
Tenant (LK 2)		05		
Tenant (LK 2)		06		
Tenant (LK 2)		07		
Tenant (LK 2)		08		

NOTES:

 Stations can be assigned to 48 possible Tenant Numbers (00~47).

Mode Sub-Mode Data May Bush System (LK 1) CO Line (LK 2) 47
System (LK 2) 4CM (LK 2) 03

GENERAL INFORMATION - TELEPHONE TO TENANT ASSIGNMENT

This Memory Block is used to specify Tenant Assignment on a per station basis.

STATION NUMBER ASSIGNMENT

Tele	phone	Data No.
	4	10

OPERATION:

1. Go off-line.

2. Enter: Mode Telephone LK 4 • MIC • ICM

Data No. 1 0 (Dial Pad)

Tel Port No. (01~56)	Data No.	Title	(2-digi (3-digi	tting Dat t: 00~99 t: 000~9 t: 0000~) 99)
0 1/	10 :	STA	111	100	7
TIME		DISPL	ΑY		

 Enter data using the dial pad.
 Example: To change Tel 01 to Station No. 11, enter 11 using the dial pad.

 \leftarrow , # \rightarrow : To move cursor.

Dial pad 0 ~ 9 : To enter setting data.

CNF key : Next Tel No.

- 4. Pressing the TRF key will write the selected data and advance to Memory Block 4-11 (Ringing Line Preference Selection).
- 5. Press the SPKR key to go back on-line.

M Additional Programming

		Data	Systen	Data
Mode	Sub-Mode	No.	Required	May Be Required
System (LK 1)	CO Line (LK 1)	47		
System (LK 1)	ICM (LK 2)	03		

NOTES:

 Station Number Assignment is on a per station basis. (A telephone cannot have two station numbers and a station number cannot be assigned to more than one telephone.)

Enter data using the dial pad.

Example: To enter TENANT 08 for TEL.

enter 08 using the dial pad.

Pressing the TRF key will write the sideta and advance to Memory Block 4-10 (Number Assistance)

GENERAL INFORMATION - STATION NUMBER ASSIGNMENT

This Memory Block is used to assign a station number to each telephone.

RINGING LINE PREFERENCE SELECTION

Telephone	Data No.
andrios.	11

OPERATION:

- 1. Go off-line.
- 2. Enter: Mode

Telephone

LK 4 ° MIC

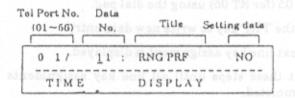
Data No.

1

(Dial Pad)

NOTES:

- This Memory Block programming applies to Ring Assigned telephones only.
- An intercom call cannot be originated when a ring assigned CO/PBX line call has terminated on the telephone.



- Press the corresponding CO/PBX line key to change the data option.
 - To change NO to YES, press CO/PBX line key 2.

CNF key : Next Tel No.

LK1	LK 2	LK 3	LK 4
NO	YES		
LK 5	LK 6	LK 7	LK 8
		88-18 6	ill abiet

CO/PBX line keys

Default

- Pressing the TRF key will write the selected data and advance to Memory Block 4-12 (Line Key Selection for Telephone Mode).
- 5. Press the SPKR key to go back on-line.
- M Additional Programming

		Data	System	Data
Mode	Sub-Mode	No.	Required	May Be Required
Telephone (LK 4)		01		1
Telephone (LK 4)		02		

| LK | LK 2 | LK 3 | LK 4 | LK 5 | LK 6 | LK 8 | LK

GENERAL INFORMATION - RINGING LINE PREFERENCE SELECTION

This Memory Block is used to specify if each station user can answer incoming CO/PBX calls on ring assigned CO/PBX lines by only lifting the handset.

LINE KEY SELECTION FOR TELEPHONE MODE

Telephone	4 drud	Data No.
4		12

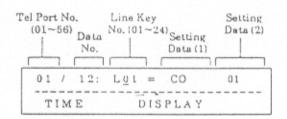
OPERATION:

- Go off-line.
- Enter: Mode Telephone

Data No.

LK 4 ICM W 2 (Dial Pad)

o MIC



3. Press the corresponding CO/PBX line key to change data option.

Example: To assign Trunk Group 05 to CO/PBX line

- Press CO/PBX line key 7, TKGP is displayed.
- Enter 05 (for RT 05) using the dial pad.
- 6. Press the TRF key to write new data entry.
- 7. The next line key assignment is displayed.
- Repeat these steps until all line key assignments are completed.
- 9. Press the TRF key to advance to Memory Block 4-13 (CO/PBX Busy Forward Station Assignment).
- 10. Press the SPKR key to go back on-line.

Page I LK I LKZ LK 3 LK 4 Not Specified CO/PBX: Not Used Not Used Line LK 5 LK 6 LK 7 LK 8 Call Park Route Feature Trunk Ассеви Group Advance

Page 2

LK 1	LK 2	LK 3	LK 4
2nd Incoming Extension	Not Used	Microphone Key	Headset
LK 5	LK 6	LK 7	LK 8

CO/PBX line keys

To move cursor.

Dial pad

0 9

To enter data.

CNF

key

Next Tel No.

This Memory Block assigns the following functions to each of the CO/PBX line keys on each telephone within a tenant specified as Telephone Mode in Memory Block 2-05 (Line Key Selection).

Functions:

- Not specified
- Outside Line 01~56
- Tenant 00-47
- Call Park 01-24
- Feature Access 01~10
- Trunk Groups 01~32
- Route Advance Blocks 01~16
- Secondary Incoming Extensions (Tel. ports 01~56)
- MIC key
- Handset key

Additional Programming

dining a	THE OTHER A N	Data	System Data	
Mode	Sub-Mode	No.	Required	May Be Required
	Anning		No. of Contract of	an week

Continued on next page.

LINE KEY SELECTION FOR TENANT MODE (continued)

Telephone		Data No.
	v or A d	12

	Def	ault	
CO/PBX LK No.	Data	CO/PBX LK No.	Data
01	CO/PBX 01	07	CO/PBX
02	CO/PBX 02	08	CO/PBX 02
03	CO/PBX 03	09~24	CO/PBX
04	CO/PBX 04		
05	CO/PBX 05		
06	CO/PBX 06		
	Not Sp	ecified	

Telephone		Data No.
4	ya ya 1	12

NOTES:

- 1. If the Electra Professional Level II System is installed as a KF system, all COs must be assigned to the line keys.
 - Trunk Groups and Route Advance may not be assigned if the Electra Professional Level II is installed as a KF system.
- 2. If the Electra Professional Level II System is installed as a MF system, at least one Call Park must be assigned.
 - Call Park must be assigned on a per tenant basis.
- 3. Repetitive assignments cannot be copied to a Multiline Terminal (Secondary Incoming Extension) port.
- 4. An ADA (1)-W (BK) Unit is required to use a hendset.
- 5. The headset key switch can only be assigned to line key 12.

Line Key	Setting Data 1	LCD Indication	Setting Data 2
1	Not Specified	NON	
2	CO	CO	01~56
3	Not Used		
4	Not Used		
5	Call Park Tenant No. (00~47)	P	Park No. 01-24
6	Feature Access	FA	01~10
7	Trunk Group	TKGP	01-32
8	Route Advance	ADV	01~16
9	Secondary Incoming Extension	SIE	Telephone Port No. 01~56
10	Not Used	Cl shakda	Mode 5
11	Microphone	MIC	
12	Headset	H SET	

GENERAL INFORMATION - LINE KEY SELECTION FOR TELEPHONE MODE

This Memory Block allows the assignment of functions to each of the CO/PBX line keys on each telephone within a tenant specified as Telephone Mode in Memory Block 2-05 (Line Key Selection).

CO/PBX BUSY FORWARD STATION ASSIGNMENT

Telephone	and an	Data No.
4		13

OPERATION:

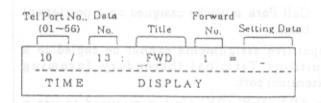
- 1. Go off-line.
- Enter: Mode

Telephone

o MIC LK 4 ICM

Data No.

Display indication for telephone:



3. Use the dial pad to change data.

To move cursor.

Dial pad To enter data.

CNF kev

Next Tel. No.

01~56

Default Not Specified

Telephone Port No.:

Forward No .: 1.2

Setting Data:

Port No. 01~56

- 4. Press the TRF key to write the data for the first transfer to station.
- 5. Enter the second transfer to station.
- 6. Pressing the TRF key will write the selected data and advance to Memory Block 4-14 (Intercom Master Hunt Number Selection).
- 7. Press the SPKR key to go back on-line.

4	7.0
4	13

NOTES:

1. If the Multiline Terminal, where the forward is initially set (Forward 1) is busy, the call is forwarded to a second specified station (Forward 2).

Additional Progr	SIE	Secondary Incoming	
			-

Data

No.

Sub-Mode

System Data

Required

May Be

Required

GENERAL INFORMATION - CO/PBX BUSY FORWARD STATION ASSIGNMENT

Mode

This Memory Block is used to specify up to two telephones to ring on a CO/PBX call terminating at a busy station.

INTERCOM MASTER HUNT NUMBER SELECTION

	Telephone		Data No.
HUNT	M MASTER	RCO	14

OPERATION:

- 1. Go off-line.
- 2. Enter: Mode Telephone LK 4 MIC

 Data No. 1 4

 (Dial Pad)

(01~56)	No.	Title	Setting Data
0 1/	14:	MSTER	ИО
TIME	nory B	DISPLA	rn the follow

- Press the corresponding CO/PBX line key to change data option.
 - To change NO to YES, press CO/PBX line key 2.

COVPBX	Of - 50	Defi	ult
	01 10	ta Part No.	Pelepha
LK.5	LK 6	ELK 7	LK 8
NO.	YES		
LK 1	LK 2	LK 3	LK 4

CNF key

Next Tel No. nessale

- Pressing the TRF key will write the selected data and advance to Memory Block 4-15 (Intercom Master Hunt Number Forward Assignment).
- 5. Press the SPKR key to go back on-line.

Additional Programming

	10	Sub-Mode Data No.	Systen	Data
Mode	Sub-Mode		Required	May Be Required
Tel (LK4)		15		

NOTES:

 If assigned YES, incoming internal calls from another station, Automated Attendant transferred call, or a DID/Tie line designated call, will be forwarded to a specified station when busy. (Memory Block 4-15)

Example: To set station number 30 to forward

Dial pad 0 - 9 : To enter data.

[HOLD] key : To clear all data the cursor is setting data positi

Default [All Telephones Not Specified]
Pressing the TRF key will write the sedata and advance to Memory Block 4-17 (S

data and advance to Memory Block 4-17 (Stat to Class of Service Feature Assignment).

Present the SERTP has to achieve and feet

Mode Sub-Mode No. Required

GENERAL INFORMATION - INTERCOM MASTER HUNT NUMBER SELECTION

This Memory Block is used to specify the assignment of a master intercom number to each telephone.

INTERCOM MASTER HUNT NUMBER FORWARD ASSIGNMENT

Telephone		Data No.
4	-	15

OPERATION:

- 1. Go off-line.
- 2. Enter: Mode

Telephone

LK4 • ICM

Data No.

1 5 (Dial Pad)

Setting Duta Station No.

Tel Port No. Data (2-digit: 000-99)

(01~66) No. Title (3-digit: 000-999)

0 1 / 16 : ICMFWD

TIME DISPLAY

3. Enter data using the dial pad.

Example: To set station number 30 to forward to Tel 01, enter 30 using the dial pad.

← · , # → : To move cursor.

Dial pad 0 ~ 9 :

: To enter data.

HOLD key

To clear all data when the cursor is at the

setting data position.

CNF k

key

Next Tel. No.

Default All Telephones Not Specified

- Pressing the TRF key will write the selected data and advance to Memory Block 4-17 (Station to Class of Service Feature Assignment).
- 5. Press the SPKR key to go back on-line.
- Additional Programming

		Data No.	System Data	
Mode	Sub-Mode		Required	May Be Required
Telephone (LK 4)		14		

Example:

To assign the following by Memory Block:

NOTES:

- Memory Block 4-14
 Telephone Port No. 01 → YES
 Another Port No. → NO
- 2. Memory Block 4-10

Telephone Port No. 01 → 100 02 → 101 03 → 102 04 → 103

3. This Memory Block

Telephone Port No. $01 \rightarrow 101$ $02 \rightarrow 102$ $03 \rightarrow 103$

Incoming to station, etc.

Incoming to station

100 101 STOP (No FWD)

(Busy) FWD (Busy)

(Busy) 102

FWD

GENERAL INFORMATION - INTERCOM MASTER HUNT NUMBER FORWARD

ASSIGNMENT

This Memory Block is used to specify a telephone to ring when a telephone Master Hunt Number was specified as a master number station in Memory Block 4-14 (Intercom Master Hunt Number Selection), is busy.

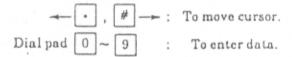
STATION TO CLASS OF SERVICE FEATURE ASSIGNMENT

Telephone		Data No.
MAN4NOIT	ALC	17

OPERATION:

- 1. Go off-line.
- o MIC 2. Enter: Mode LK 4 Telephone 1CM 7 Data No. (Dial Pad) Setting Tel Port No. Data Service Table No. (01 - 56)No. : 2) Clams (00-15) CLS (1) 0.0 DISPLAY TIME -
- 3. Enter data using the Dial pad.

Example: To enter CLASS 02 to Table 1, enter 02 using the Dial pad.



- 4. Press the TRF key, data of Table 2 is displayed.
- 5. After all data is entered into Table 2;
- Pressing the TRF key will write the selected data and advance to Memory Block 4-18 (Station Name Assignment).
- 7. Press the SPKR key to go back on-line.
- M Additional Programming

		Data	System Data	
Mode	Sub-Mode	No.	Required	May Be Required
System (LK 1)	PBR/Misc. (LK 8)	07	nummari Program	boltibla .
System (LK 1)	PBR/Misc. (LK 8)	80		

NOTES:

- Refer to Memory Blocks 1-8-07 and 1-8-08 Class of Service Feature Selection 1 and 2.
- Enable/Disable patterns are specified in the above for individual classes.
 - Table 1 = The features that normally telephones Port Numbers 01 and 02 are allowed to activate.

Specify any of the classes (00~15) whose patterns have been specified in Memory Block 1-8-07.

 Table 2 = The features that normally all the telephones are allowed to activate.

Specify any of the classes (00~15) whose patterns have been specified in Memory Block 1-8-08.

Default				
	Table No.			
	1 Jeny	Service Class 00		
or	2	Service Class 00		
02	ater by Characte	Service Class 00		
	2	Service Class 00		
	1	Service Class 15		
03 .108	2 2 2 2	Service Class 00		
ſ	h rama of	To La bea		
	L	Service Class 15		
56	389 5 82	Service Class 00		

GENERAL INFORMATION - STATION TO CLASS OF SERVICE FEATURE ASSIGNMENT

This Memory Block is used to specify a class for each Table (1 and 2) to enable or disable features on a per station basis.

STATION NAME ASSIGNMENT

Telephone - Data No. 4 - 18

OPERATION:

Go off-line.
 Enter: Mode

Telephone

LK4 • MIC

Data No.

1 8 (Dial Pad)

Tel Port No. Data Setting Data
(01~56) No. (Up to mix digita/charucters)

0 1 / 18 : < _ >

TIME DISPLAY

3. Enter data using the dial pad.

Example: To assign "DANE" to Tel 01, enter characters (refer to Character Code Table Pg. 2 - 280).

After entering the 3-Digit code, the characters are automatically displayed.

Setting Data: Enter by Character Code.

· , # - : To move cursor.

Dial pad 0 ~ 9 : To enter data.

HOLD key : To clear all data when the cursor is at the setting data position.

CNF key : Next Tel No.

Default Not Specified

- Pressing the TRF key will write the selected data and advance to Memory Block 4-19 (Trunk Outgoing Restriction).
- 5. Press the SPKR key to go back on-line.

NOTES:

- While ringing or talking on an internal line, the station number as well as the name of the other party is displayed.
- The name is not displayed when Tone Override, Automatic Callback, or Callback Request is displayed.
- A maximum of six characters can be used for each name.

Additional Programming

	Mode Sub-Mode Data	Data	System Data	
Mode			Required	May Be Required
Carrie and	32037013			2000

GENERAL INFORMATION - STATION NAME ASSIGNMENT

This Memory Block is used to assign names corresponding to the telephones.

TRUNK OUTGOING RESTRICTION

OPERATION:

1. Go off-line.

2. Enter: Mode Telephone LK4 • MIC

Data No. 1 9

(Dial Pad)

Tei Port No. Data
(01~56) No. Title Page
0 1 / 19 : TRK RST | 1 0 t
TIME DISPLAY

- Press the CO/PBX key corresponding to each CO/PBX line.
 - The LED indication changes to indicate the data each time a CO/PBX line key is pressed.
 - Press RECALL or FNC key to turn pages.

· , # -- : To move cursor.

RECALL key : Next page.

FNC key : Previous page.

CNF key : Next Tel Port No.

CO/PBX
Line LED OPF ON

Data (Not Restricted) (Restricted)

Default

- After entering all data for all pages; pressing the TRF key will write the selected data and advance to Memory Block 4-20 (Off-Hook Voice Announcement Terminal Assignment).
- 5. Press the SPKR key to go back on-line.
- Additional Programming

		Data No.	System Data	
Mode	Sub-Mode		Required	May Be Required

Telephone		Data No.
MOLD A NO	Uni-	19

CO/PBX Number (01~56) corresponding to CO/PBX key;

1.62 1	LiC 2	LK3	LX 4
33	34	35	36
LK 5	LK 6	LK7	LK 8
37	38	39	40

CO/PBX line keys

Page 2	Port	9-16)	
LK-1	LK 2	LK 3	LK 4
09	10	11	12
LX 5	LK 6	LK 7	LKS
13	14	15	16

LK I	LK 2	LK 3	LK 4
41	42	43	44
LK 5	LK 6	LK 7	LK 8
45	46	47	48

Page J (Port 17~24)						
LK I	LK 2	LK 3	LK 4			
17	18	19	20			
LK 5	LK 6	LK 7	LK 8			
21	22	23	24			

Page	(Port 4	19~56)	
LK I	LK 2	LK 3	LK 4
49	50	51	52
LK 5	LK 6	LK 7	LK 8
53	54	55	56

LK 1	LK 2	LK 3	LK 4
25	26	27	28
LK 5	LK 6	LK 7	LK 8
29	30	31	32

LK1	LK 2	LK3	LK 4
57	58	59	60
LK 5	LK 6	LK7	LK 8
61	62	63	64

NOTES:

- A "restricted" CO/PBX line allows the station user to answer an incoming call or access a held call, but does not allow the user to originate a CO/PBX call.
- If "restricted" is specified in this section, the following data, even if specified, will be treated as invalid.
- · Memory Block 1-1-31

Manual selection = Yes

Memory Blocks 4-05 and 4-06
 Manual selection = Yes

GENERAL INFORMATION - TRUNK OUTGOING RESTRICTION

This Memory Block is used to specify for each CO/PBX line whether or not seizure for an outgoing call is restricted.

OFF-HOOK VOICE ANNOUNCEMENT TERMINAL ASSIGNMENT

Telephone	EVI OU	Data No.
PERSONAL PERSONAL		20

OPERATION:

- 1. Go off-line.
- 2. Enter: Mode Telephone LK 4 MIC ICM

 Data No. 2 0

 (Diel Ped)

,	(01	~56)	No.	X	Title	Setting Dat	a
	0	1/	2.0	+	DPATH	NO	

- Press the corresponding CO/PBX line key to change data option.
 - To change NO to YES, press CO/PBX line key 2.

YES = Off-hook Voice Allow

NO = Off-hook Voice Deny

LK1	LK 2	LK 3	LK 4
NO	YES	(50)	. 710 117 5
LK 5	LK 6	LK 7	LK 8
59 50	57 58	le per le repe	

CO/PBX line keys



- 4. Press the CNF key to advance to the next Telephone Port No.
- Pressing the TRF key will write the selected data and advance to Memory Block 4-23 (Prime Line/Hot Line Assignment).
- 6. Press the SPKR key to go back on-line.
- M Additional Programming

	Date	System	Data
Sub-Mode	No.	Required	May Be Required
The second second second	Sub-Mode	Sub-Mode Data	Sub-Mode Data

NOTES:

- If Off-Hook Voice Announcement is assigned as allow, the maximum telephone port numbers is reduced by one, corresponding to the number of Off-Hook Voice channels.
- Multiline Terminals assigned for Off-Hook Voice Announcement must be installed in the first four ESI-F(8)-21 KTU ports.
- The following lists the port relations on an ESI-F(8)-21 KTU if Off-Hook Voice Announcement is assigned:

ESI-F(8)-21 KTU Port			
1		5	
t steelbal of segmeds a			
OFBX line gey is presse		mil dage 71mb	
FNC key tolture pagett.	-	- PreSaRECA	

GENERAL INFORMATION - OFF-HOOK VOICE ANNOUNCEMENT

This Memory Block is used to specify Allow/Deny of Off-Hook Voice Announcement function for ETW-24DS-1 (BK) Terminals.

TERMINAL ASSIGNMENT

PRIME LINE/HOT LINE ASSIGNMENT

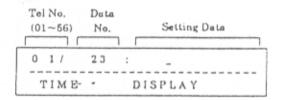
Telephone		Data No.
ELAS A KEL	800	23

OPERATION:

- 1. Go off-line.
- 2. Enter: Mode Telephone LK4 MIC ICM

 Data No. 2 3

 (Dial Pad)



3. Use the dial pad to enter data.

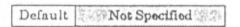


Dial pad 0 ~ 9 : To enter data.

LNR/SPD key + * : *input

LNR/SPD key + # : #input

Setting Data: 0~9,* #



- Pressing the TRF key will write the selected data and advance to Memory Block 4-24 (SLT Hookflash Assignment).
- 5. Press the SPKR key to go back on-line.
- Additional Programming

		Data	Systen	Data
Mode	Sub-Mode	No.	Required	May Bo Required

NOTES:

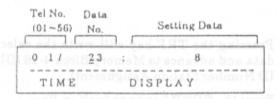
- Prime Line function enables the user to seize a specified trunk when the Multiline Terminal goes off-hook.
- 2. To call a specified station number or 30 Line while on Hot Line, go off-hook.
- When using Prime Line, an Access Code must be entered to seize the trunk for Setting Data.
- To use the Hot Line function, one of the following must be entered:
 - A. Station Number
 - B. Access Code + Dial Number
 - C. Speed Dial Access Code + Speed Dial Buffer Number
- 5. Up to 10 digits can be assigned.

Example:

1. Hot Line

Tel No.	No.	7 (Setting Data
0 1/	23	:	92149074000
TIME			ISPLAY

2. Prime Line



8 = Tie Line Access Code

GENERAL INFORMATION - PRIME LINE/HOT LINE ASSIGNMENT

This Memory Block is used to enable the user to access various features when going off-hook.

SLT HOOKFLASH RELEASE ASSIGNMENT

Telephone	-	Data No.
4		24

OPERATION:

- 1. Go off-line.
- 2. Enter: Mode

Telephone

LK 4 ° MIC

Data No.

2 4 (Dial Pad)

Tel No. Data
(01-5G) No. Title Setting Data
0 1 / 24 : SLT HK HOLD
TIME DISPLAY

- Press the corresponding CO/PBX line key to change data option.
 - To change HOLD to DISC (Disconnect), press CO/PBX line key 2.

LK 1	LK 2	LK3	LK .
HOLD	DISC		
LK 5	LK 6	LK 7	LK
	V s repre	9.01	Out of the

CO/PBX line keys

- Default
- Pressing the TRF key will write the selected data and advance to Memory Block 4-26 (DISA ID Number Station Assignment).
- 5. Press the SPKR key to go back on-line.
- M Additional Programming

		Data	System	Data
Mode	Sub-Mode	N.	Required	May Be Required
System (LK 1)	SLT(LK 3)	02		

NOTES:

Date No. [1] 3 -

Use the dial ped to enter data.

Dist ped 0 - 9 : To enter data

LKIUSPD key +*: *: aput

Setting Data: 0-9, *

Pressing the TRF key will write the selected date and advance to Memory Block 4-24 (SLT Hockflech Assignment)

Press the SPER key to go hack on-line.

GENERAL INFORMATION - SLT HOOKFLASH RELEASE ASSIGNMENT

This Memory Block specifies the Single Line Telephone hooking operation to either HOLD or disconnect the trunk.

DISA ID NUMBER STATION ASSIGNMENT

Telephone	-	Data No.
CONT (4 DOT OF	10:0	26

OPERATION:

1. Go off-line.

o MIC Enter: Mode Telephone LK 4 ICM Data No. 2 6 (Dial Pad) Station Port No. Data (01 - 56)No. Title Setting Data 0 1 / 26: 10

DISPLAY

NOTES:

3. Use the dial pad to enter data.

TIME

Assign DISA ID Buffer Number (01~96)

← → · To move cursor.

Dial pad 0 ~ 9 : To enter data.

. CNF key : Next Station Port No.

4. Pressing the TRF key will write the selected data and advance to Memory Block 4-28 (Bilingual LCD Indication Selection).

5. Press the SPKR key to go back on-line.

Default

Station Port Number	DISA ID Buffer Number
01	and THITOLAN gai
02	02
go back ob-ilbe.	the SPER key to
56	57 ~ 96

Not Assigned

Additional Programming

	Data	System Data	
Sub-Mode	No.	Required	May Be Required
	Sub-Mode	Sub-Mode Data	Sub-Mode Data

GENERAL INFORMATION - DISA ID NUMBER STATION ASSIGNMENT

This Memory Block is used to assign the DISA ID Buffer Number corresponding to the station port number.

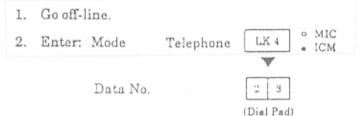
The SMDR printout of the station number corresponds to the calling party who dialed the DISA ID number.

1-139

BILINGUAL LCD INDICATION SELECTION

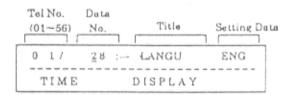
Telephone	-	Data No.
4		28

OPERATION:



NOTES:

 English or Japanese can be displayed on the LCD of a Multiline Terminal.



- Press the corresponding CO/PBX line key to change data option.
 - To change ENG (English) to JAPA (Japanese), press CO/PBX line key 1.

JAPA	LK 2 ENG	LK 3	LK 4
LK 5	LK 6	LK 7	LK 8
	thrale	0	

- Pressing the TRF key will write the selected data and advance to Memory Block 4-29 (HFU Selection).
- 5. Press the SPKR key to go back on-line.
- M Additional Programming

Mode		Data	System Data	
	Sub-Mode	No.	Required	May Be Required

	Dielpad 0 - 9

Press the SPKR key to go back on line.

GENERAL INFORMATION - BILINGUAL LCD INDICATION SELECTION

This Memory Block is used to specify which language (Japanese/English) is displayed on the Multiline Terminal LCD.

HFUSELECTION

OPERATION:

Go off-line.

2. Enter: Mode Telephone LK4 • MIC ICM

Luca No. [2] 5

(Dial Pad)

Tel Port No. Data
(01~66) No. Title Setting Data
0 1 / 20 : HFU NO
TIME DISPLAY

- Press the corresponding CO/PBX line key to change data option.
 - To change NO to YES, press CO/PBX line key 2.

CO/PBX		Defi	ault
LK 5	LK 6	LK 7	LK 8
NO 11	YES		
EK I	LK 2	LK 3	LK 4

NO = Handsfree Unit not operational YES = Handsfree Unit operational

- Pressing the TRF key will write the selected data and advance to Memory Block 4-30 (Hold/Transfer Recall Display Selection).
- 5. Press the SPKR key to go back on-line.

M Additional Programming

		Data	System Data	
Mode	Sub-Mode	No.	Required	May Bo Required

Telephone	urring	Data No.
4		29

NOTES:

			1
MOI -			
		Data No.	

Press the corresponding CO/PBX line key to change data option."

TES = LCD indication available

40 = LCD indication is not available

Pressing the TRE key will write the select data and advance to Memory Block 4-(Receiving Internal/All Call Page Sciention).

Additional Programming Sy Made Sub-Mode Net Require

GENERAL INFORMATION - HFU SELECTION

This Memory Block is used to enable the built-in Handsfree Unit on a per station basis.

HOLD/TRANSFER RECALL DISPLAY SELECTION

Telephone		Data No.
4	-	30

OPERATION:

- 1. Go off-line.
- 2. Enter: Mode

Telephone

LK 4 • ICM

Data No.

(Dial Pad)

Tel No. Data
(01~56) No. Title Setting Data
0 1 / 30 : HLD DSP YS

TIME ____ DISPLAY

- Press the corresponding CO/PBX line key to change data option.
 - To change YS to NO, press CO/PBX line key 2.

LK1	LK 2	LK 3	LK 4
YS	NO		
LK 5	LK 6	LK 7	LK 8

YES = LCD indication available NO = LCD indication is not available

- Pressing the TRF key will write the selected data and advance to Memory Block 4-31 (Receiving Internal/All Call Page Selection).
- 5. Press the SPKR key to go back on-line.

.

■ Additions	Programming
-------------	-------------

		Calara Data	System Data	
Mode	Sub-Mode	No.	Required	May Be Required

NOTES:

- The Hold Recall display appears on the bottom line of the display if this Memory Block is assigned for YES.
- An LCD indication of the CO line number will appear on the upper line of the display when a Recall occurs regardless of this Memory Block assignment.

LKS LKS LKS LKS LKS LKS LKS

lasolisas Unit not operational

Pressing the THE key will write the selected data and advance to Memory Block 1-30

(Rold/Pausier Recall Display Selection).
Press the SPMR key to go back an-line.

GENERAL INFORMATION - HOLD/TRANSFER RECALL DISPLAY SELECTION

This Memory Block allows enabling of the Hold Recall indication on the LCD.

RECEIVING INTERNALIALL CALL PAGE SELECTION

Telephone	OSC TO	Data No.
4		31

Un Bala TTOITE

- 1. Go off-line.
- 2. Enter: Mode

Telephone

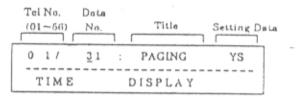
LK 4 • ICM

Data No.

(Dial Pad) Restriction must be assigned

NOTES:

 Emergency Internal All Page overrides this Memory Block.



- 3. Press the corresponding CO/PBX line key to change data option.
 - To change YES to NO, press CO/PBX line key 2.

- LK1.73	LK 2	LK 3	LK 4
YB	ИО		
LK 5	LK 6	LK 7	LK 8
	t		

CO/PBX line keys

Default

- Pressing the TRF key will write the selected data and advance to Memory Block 4-32 (Trunk Digit Restriction)
- 5. Press the SPKR key to go back on-line.
- M Additional Programming

		Data	System Data	
Mode	Sub-Mode	No.	Required	May Be Required

GENERAL INFORMATION - RECEIVING INTERNAL/ALL CALL PAGE SELECTION

This Memory Block is used to assign capability to receive an Internal Zone or an Internal All Zone Page on a per station basis.

TRUNK DIGIT RESTRICTION

Telephone	EIVE	Data No.
4	-	32

OPERATION:

- Go off-line.
- 2. Enter: Mode

Telephone

LK 4 ° MIC

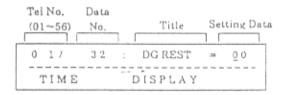
Data No.

3 2

(Dial Pad)

NOTES:

- Enter the digit that enables the call to be dropped.
- 2. Code Restriction must be assigned before this feature is used.
- 3. Tie Line Code Restriction must be assigned before this feature works on Tie Lines.



Enter data using the dial pad.

Setting Data

00,01~99 digits

(00: No Limit)

CNF key

Next Tel. No.

Default 00 (No Limit)

- Pressing the TRF key will write the selected data and advance to Memory Block 4-33 (Fax Indication Station Assignment).
- 5. Press the SPKR key to go back on-line.
- Additional Programming

Mode	Sub-Mode	Data No.	System Data	
			Required	May Be Required
System (LK 1)	CO Line (LK 1)	69		
Telephone (LK 4)	-	07		
Telephone (LK 4)		08		

COSTANTIAL Law will write the salected

deta and advance to Manary Bisch 4-32 (Trunk Digit Restriction)

Additional Evogenments
System Bets
Made Sub-State No. System Bets
No. System Bets

GENERAL INFORMATION - TRUNK DIGIT RESTRICTION

This Memory Block is used to specify, on a per station basis, the number of digits that can be dialed while on any outside line.

FAX INDICATION STATION ASSIGNMENT

(Dial Pad)

Telephone	-	Data No.	
A MORUNA	IMI X	33	

OPERATION:

1. Go off-line.

2. Enter: Mode Telephone LK4 • ICM

Data No. 3 3

NOTES:

2. Enter: Mode Telephona [LK+] a Mac

Fax Port No. Data Tel Port No. (01-56) No. Title (01-66)

0 1 / 23 FAX TEL 00

TIME DISPLAY

3. Enter the data using the dial pad.

→ · · · To move cursor.

Dial pad 0 ~ 9 : To enter data.

Telephone Port No.: 00 (Not Assigned)

Fax Port No.: 01 ~ 56

Default 00 for all ports

- Pressing the TRF key will write the selected data and advance to Memory Block 4-34 (Fax Indication Networking Assignment).
- 5. Press the SPKR key to go back on-line.

M Additional Programming

		Data	System Data	
Mode	Sub-Mode	No.	Required	May Be Required

GENERAL INFORMATION - FAX INDICATION STATION ASSIGNMENT

This Memory Block is used to specify which Multiline Terminal will display the Fax indication.

FAX INDICATION NETWORKING ASSIGNMENT

Telephone	Data No.
4	34

OPERATION:

1. Go off-line.

2. Enter: Mode Telephone LK4 • MIC

Data No. 3 4

NOTES: end-Bood

Note: Mode Telephone Exter Mode

Tel Port No. Data Fax Port No. (01~66) No. Title (01~56)

0 1 / 34 : FAX NET = 00

TIME DISPLAY

3. Use the dial pad to enter the data.

Setting Data:

00 (Not Assigned) 01~56(FaxPortNo.)

(Dial Pad)

← • , # →

: To move cursor.

Dial pad

0~9

To enter data.

CNF

key

Next Tel. Port No.

Default 00 for all ports

- Pressing the TRF key will write the selected data and advance to Memory Block 4-35 (Voice Mail/SLT Selection)
- 5. Press the SPKR key to go back on-line.

Additional Programming

		Data	System Data	
Mode	Sub-Mode	No.	Required	May Be Required

Pressing the THP key will write the selected hats and advance to Memory Block 4-34 (Fox Indication Networking Assignment).

Mode Sub-Mede No. Required May B

GENERAL INFORMATION - FAX INDICATION NETWORKING ASSIGNMENT

This Memory Block is used to specify the station port that will receive a Fax message over a Tie Line network or when using the Automated Attendant feature with CO/PBX lines.

VOICE MAIL/SLT SELECTION

Telephone	-	Data No.
THM CARRY	DIUV	35

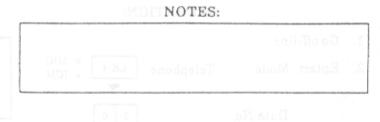
OPERATION:

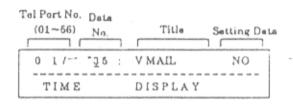
Go off-line.

2. Enter: Mode Telephone LK4 • MIC

Data No. 3 5

)ata No. 3 5 (Dial Pad)





- Press the corresponding CO/PBX line key to change data option.
 - To change NO to YES, press CO/PBX line key 2.

CO/PBX	line keys	Def	nult
LK 5	LK 6	LK 7	LK 8
NO	YES	1 1 2 2	1 1/ 0
LK1 ***	LK 2	LK 3	LK 4

- Pressing the TRF key will write the selected data and advance to Memory Block 4-36 (Voice Prompt Selection).
- 5. Press the SPKR key to go back on-line.
- Additional Programming

		Data No.	System Data	
Mode	Sub-Mode		Required	May Be Required

Aparitions Programming

GENERAL INFORMATION - VOICE MAIL/SLT SELECTION

This Memory Block specifies if a Voice Mail system is to be interfaced with the system for SLT ports.

chartes data option.

VOICE PROMPT SELECTION

Telephone	-	Data No.
- 4		36

OPERATION:

- 1. Go off-line.
- Enter: Mode

Telephone LK4 • MIC

Data No.

3 6 (Dial Pad)

Toi Port No. Data

(01~66) No. Title Setting Data

0 1 / 26 : PROMPT NO

TIME DISPLAY

- Press the corresponding CO/PBX line key to change data option.
 - To change NO to YES, press CO/PBX line key 2.

LK 1	LK 2	LK 3	LK 4
МО	YES		
LK 5	LK 6	LK 7	LK 8

CO/PBX line keys

Default

YES = Allow

NO = Deny

- Pressing the TRF key will write the selected data and advance to Memory Block 4-37 (Extension Line Key Ring Assignment (Day Mode)).
- 5. Press the SPKR key to go back on-line.

M Additional Programming

37. 1		Data	System Data	
Mode	Sub-Mode	No.		May Be Required

NOTES:

Buter Mode Telephone LK4 - ICM Data No. 3 5				
Data No. 3 6		Telephone	Bater Mode	

Key 2.

EX LX 6 LX 6 LX 6

Pressing the TRF key will write the selected data and advance to Memory Block 4-36 (Vaice Frampt Selection).

Press the SPKR key to go back ou-line.

Required

GENERAL INFORMATION - VOICE PROMPT SELECTION

This Memory Block is used to specify the Voice Prompt feature Allow (Yes) or Deny (No) on a per station basis.

EXTENSION LINE KEY RING ASSIGNMENT (DAY MODE)

Telephone	roter	Data No.
4		37

OPERATION:

Go off-line.
 Enter: Mode

Telephone LK4 • MIC

Data No.

(Dial Pad)

Tel Port No. Data

(01~56) No. Title Setting Data

0 1 / 17 : EXT DAY | 01

TIME DISPLAY

3. Use the dial-pad to enter data.

RECALL key

key : Next page.

FNC

key Previous page.

CNF key

Next Tel. No.

Page I (Line Keys 1-8)

LK 1	LK 2	LK 3	LK 4
1	2	3	1
LK 5	LK 6	LK 7	LK 8
5'	6	7	8

Page 2 (Line Keys 9-16)

LK 1	LK 2	LK 3	LK 4
9	10	11	12
LK 5	LK 6	LK 7	LK 8
13	14	15	16

Page 3 (Line Keys 17-24)

LK 1	LK 2	LK 3	LK 4
17	18	19	20
LK 5	LK 6	LK 7	LK 8
21	22	23	24

CO/PBX Line LED	OFF	□ 0N
Data	NO (No Ring)	YES (Ring)

Default All telephones: No Ring

NOTES:

- When Ring is set, the LED will light green.
- This Memory Block applies only when a Secondary Incoming Extension is programmed for line key appearance.

- Pressing the TRF key will write the selected data and advance to Memory Block 4-38 [Extension Line Key Ring Assignment (Night Mode).
- 5. Press the SPKR key to go back on-line.

0	
	EK 8 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6

Additional Programming

Mode	0 1 14 1	Data	System Data		
	Sub-Mode	No.	Required	May Be Required	

GENERAL INFORMATION - EXTENSION LINE KEY RING ASSIGNMENT (DAY MODE)

This Memory Block specifies the ringing assignment on an incoming call to a Secondary Incoming Extension.

EXTENSION LINE KEY RING ASSIGNMENT (NIGHT MODE)

Telephone - Data No.

OPERATION:

- 1. Go off-line.
- 2. Enter: Mode

Teiepnone

LK: • MIC

Data No.

(Dial Pad)

Tel Port No. Data (01~66) No.

01-66) No. Title Setting Data
01/ 38: EXT NT | 01

TIME DISPLAY

3. Use the dial pad to enter data.

RECALL key

Next page.

FNC

key

Previous page.

CNF

key

Next Tel No.

Page 1 (Line Key 1-8)

LK 1	LK 2	LK 3	LK 4
1	2	3	4
LK 5	LK 6	LK 7	LK8
5	6	7	8

Page 2 (Line Key 9-18)

LK 1	LK 2	LK 3	LK 4
9	10	11	12
LK 5	LK 6	LK 7	LK 8
13	14	15	16

Page 3 (Line Key 17~24)

LK 1	LK 2	LK 3	LK 4
17	18	19	20
LK 5	LK 6	LK 7	LK 8
21	22	23	24

CO/PBX
Line LED OFF ON

Data NO YES
(No Ring) (Ring)

Default All telephones: No Ring

1 100

NOTES:

- 1. When Ring is set, the LED will light green.
- This Memory Block applies only when a Secondary Incoming Extension is programmed for line key appearance.

- Pressing the TRF key will write the selected data and advance to Memory Block 4-39 (ADA (2) Ring Mode Assignment).
- 5. Press the SPKR key to go back on-line.

		1911
	1-1	

Additional Programming

	2214	Data Data		Data Data
Mode	Sub-Mode	No.	Required	May Be Required
	Stream atomic	arduda.	Berling Control	Andrew Mark

GENERAL INFORMATION - EXTENSION LINE KEY RING ASSIGNMENT (NIGHT MODE)

This Memory Block specifies the ringing assignment on an incoming call to a Secondary Incoming Extension.

ADA (2) RING MODE ASSIGNMENT

Telephone	7 -	Data No.
4		39

OPERATION:

- 1. Go off-line.
- 2. Enter: Mode Telephone LK4 MIC ICM

 Data No. 3 9

 (Dial Pad)

(01~		No.		Title	Set	ting Date
	1.1		_	1	1	. 1
0 1	/	<u> 3</u> 9	;	ADA 2		STA
TI	ME			DISPLA	Y	

- Press the corresponding CO/PBX line key to change data option.
 - To change Station No. Ring to All Ring, press CO/PBX line key 3.

LK 1	* LK2	LK 3	LK 4
No Ring	Station Number (only)	All Ring	
LK 5	LK 6	LK 7	LK 8

CO/PBX line keys

Default

CNF key

: Next Tel. Port No.

- Pressing the TRF key will write the selected data and advance to Memory Block 4-40 (LCR Class Selection).
- 5. Press the SPKR key to go back on-line.
- M Additional Programming

Mode	Sub-Mode	Data No.	System Data	
			Required	May Be Required

NOTES:

- No Ring: No calls ring at the Single Line Telephone.
- Station Number Ring: Only calls directed to the Multiline Terminal Station Number will ring at the Single Line Telephone.
- All Ring: All calls that ring at the Multiline Terminal will also ring at the Single Line Telephone.

| LK 2 | LK 4 | LK 4 | LK 5 | LK 4 | LK 5 | LK 4 | LK 5 | LK 6 | LK 7 | LK 6 | LK 6 | LK 7 | LK 7 | LK 8 | LK 7 | LK 8 |

Pressing the TRF key will write the selected late and advance to Mamory Black 1.01. COPBX Ring Assignment (Day Mede)].

Additional Programming

GENERAL INFORMATION

GENERAL INFORMATION - ADA (2) RING MODE ASSIGNMENT

This Memory Block is used to specify the SLT to be connected to the ADA (2)-W (BK) Unit ringing mode.

LCR CLASS SELECTION

Telephone - Data No.

OPERATION:



2. Enter: Mode

Telephone

LK4 • MIC

Data No.

4 0

(Dial Pad)

Tel Port No. Data
(01~56) No. Title Setting Data
0 1 / 40 : LCRCLS = 0

TIME DISPLAY

- Press the corresponding CO/PBX line key to change data option.
 - To change Class 0 to Class 1, press CO/PBX line key 2.

LK 1	LK 2	LK 3	LK 4
Class 0	Сівня 1	Class 2	СІлвя З
LK 5	LK 6	LK 7	LK 8
Class 4			

CO/PBX line keys

Default

- Pressing the TRF key will write the selected data and advance to Memory Block 4-01 [CO/PBX Ring Assignment (Day Mode)].
- 5. Press the SPKR key to go back on-line.

■ Additional Programming

Mode Sub-Mode Data	System Data		
Sub-Mode	No.	Required	May Be Required
	Sub-Mode	Sub-Mode Data	Sub-Mode Data

NOTES:

 LCR Class Selection corresponds to Area Code Tables as follows:

Class 0 No LCR

Class 1 Use Area Code Table 1

Class 2 Use Area Code Table 2

Class 3 Use Area Code Table 3

Class 4 Use Area Code Table 4

Stations cannot be assigned to multiple LCR classes.

GENERAL INFORMATION - LCR CLASS SELECTION

This Memory Block is used to specify the LCR Class on a per station basis. The Electra Professional Level II System has four Area Code Tables. Each LCR Class can be allowed different Trunk Group access, allowing priority levels for the station user.

SLT DATA LINE SECURITY ASSIGNMENT

Telephone	n to	Data No.
4	-	90

OPERATION:

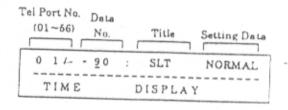
- Go off-line.
- 2. Enter: Mode Telephone LK4 MIC

 Data No. 9 0

 (Dial Pad)

NOTES:

- If connecting SLT/VM, then assign SLT NORM; connect FAX/Modem, then assign SLT DATA.
- If a Multiline Terminal is assigned for data line security, the Tone Override will not be heard from the handset, however, the tone is still sent and heard from the speaker when off-hook.



- Press the corresponding CO/PBX line key to change data option.
 - To change SLT NORM to SLT DATA, press CO/PBX line key 2.

LK 5	LK 6	LK 7	LK 8
SLINORM	SLT DATA		
K1	LK 2	LK 3	LK 4

CO/PBX line keys

Default

CNF key

: Next Tel. Port No.

- Pressing the TRF key will write the selected data and advance to Memory Block 4-91 (Telephone Ringing Variation Selection).
- 5. Press the SPKR key to go back on-line.
- M Additional Programming

Mode	S. J. W. J	Data	System Data	
	Sub-Mode	No.	Required	May Be Required
Telephone (LK 4)		96		

COVERX Energy Corrected

CMF key : Next Tel No.

Pressing the TEF key will write the selected

Mode Sub-Mode No Required May be System Late

GENERAL INFORMATION - SLT DATA LINE SECURITY ASSIGNMENT

This Memory Block is used to specify the Normal/Data position for Single Line Telephones.

TELEPHONE RINGING VARIATION SELECTION

Telephone	-	Data No.
4		91

OPERATION:

1. Go off-line.

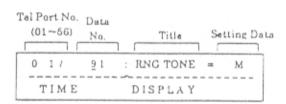
2. Enter: Mode Telephone

o MIC LK 4 · ICM V

Data No.

(Dial Pad)

NOTES:



- 3. Press the corresponding CO/PBX line key to change data option.
 - To change M to H, press CO/PBX line key 3.

LK 1	LK 2	LK 3	LK 4
Medium (M)	Low(L)	High (H)	
LK 5	LK 6	LK 7	LK 8

CNF

: Next Tel. No.

- 4. Pressing the TRF key will write the selected data and advance to Memory Block 4-92 (Receiving Volume Selection).
- 5. Press the SPIR key to go back on-line.

Additional Programming

		Data	System	m Data	
Mode	Sub-Mode	No.	Required	May Be Required	
System (LK 1)	CO Line (LK 1)	28			

GENERAL INFORMATION - TELEPHONE RINGING VARIATION SELECTION

Refer to Memory Block 1-1-28. If "Telephone" was specified in that Memory Block, then each telephone in the system can be assigned a ringing tone frequency (Low, Medium, or High).

RECEIVING VOLUME SELECTION

Telephone	Laučer.	Data No.
4	-	92

OPERATION:

- 1. Go off-line.
- 2. Enter: Mode Telephone LK4 MIC

 Data No. 9 2

 (Dial Pad)

Tel Port No. Data

(01~56) No. Title Setting Data

0 1/ 22 : RCV DOWN

TIME DISPLAY

- Press the corresponding CO/PBX line key to change data option.
 - To change DOWN to UP, press CO/PBX line key 2.

CO/PBX	line keys	Def	ault
LK 5	LK 6	LK 7	LK 8
DOWN	UP		I
LKI	LK 2	LK 3	LK 4

CNF key

: Next Tel No.

- Pressing the TRF key will write the selected data and advance to Memory Block 4.93 (Internal Zone Paging Selection).
- 5. Press the SPKR key to go back on-line.
- Additional Programming

Mode		Data	System Data	
	Sub-Mode	No.	Required	May Be Required
System (LK 1)	CO Line (LK 1)	28		1

NOTES:

Receiving Volume Down

Multiline Terminal:

The volume (increased by

FNC + 2) is reset when

you hang up.

Single Line Telephone: Normal

2. Receiving Volume Up

Multiline Terminal:

The volume (increased by

FNC + 2) is not reset

when you hang up.

Single Line Telephone: The volume is up by 6 dB.

This Memory Block specifies one of the above two modes.

This feature only applies to internal calls.

ressing the TRF key will write the select

o-minute Marm baretien).

ress the SPKR key to go back on-line.

Mode Sub-Mode Data System Data

GENERAL INFORMATION - RECEIVING VOLUME SELECTION

This Memory Block is used to specify if the receiving volume is returned to normal (down) or kept as is (up) on a call after hanging up.

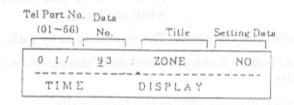
INTERNAL ZONE PAGING SELECTION

Telephone	1,010	Data No.
4		93

OPERATION:

- 1. Go off-line.
- 2. Enter: Mode Telephone LK4 MIC ICM

 Data No. 9 3



- Press the corresponding CO/PBX line key to change data option.
 - To change NIL to 1, press CO/PBX line key 2.

LK 2	LK 3	LK 4
Zone A	Zone B	Zone C
LK 6	LK 7	LK 8
line keys	o Deí	uult
	: Next	
	Zone A	Zone A Zone B

- Pressing the TRF key will write the selected data and advance to Memory Block 4-94 (3-Minute Alarm Selection).
- 5. Press the SPKR key to go back on-line.
 - M Additional Programming

Waste	0.1.1.	Data No.	System Data	
Mode	Sub-Mode		Required	May Be Required
System (LK 1)	CO Line (LK 1)	28	ATT TOUT	Service

NOTES:

1. Any of the following three zones can be specified.

All Internal Zones: Paged by Dialing 51

Zone A: Paged by Dialing 52.

Zone B: Paged by Dialing 53.

Zone C: Paged by Dialing 54.

- Telephones can be assigned to No Zone. An All Internal Zone (51) will page the telephone unless assignment of No Page Receive is assigned Memory Block 4-31.
- Emergency All Internal Page (50) will page all idle Multiline Terminals.

Pressing the TRF key will write the selected

Press the SPKR key to go back on-line

GENERAL INFORMATION - INTERNAL ZONE PAGING SELECTION

This Memory Block is used to place stations into Internal Page Zones.

3-MINUTE ALARM SELECTION

Telephone		Data No.
T418 90	DAR	94

OPERATION:

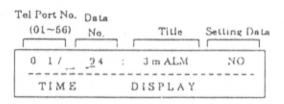
- 1. Go off-line.
- 2. Enter: Mode Telephone LK4 MIC

 Data No. 2 4

 (Dial Pad)

NOTES:

 A warning signal (approximately one second in length) will sound every three minutes during CO/PBX calls.



- Press the corresponding CO/PBX line key to change data option.
 - To change NO to YES, press CO/PBX line key 2.

COPB	Kline keys		Tel. No.
LK 5	LK 6	LK 7	LK 8
NÓ	YES	1 1/ 7	1.15.0
LK1.	LK 2	LK 3	LK 4

 Pressing the TRF key will write the selected data and advance to Memory Block 4-95 (DTMF/DP SLT Type Selection).

- 5. Press the SPKR key to go back on-line.
- M Additional Programming

	Data	System	Data
Sub-Mode	No.	Required	May Be Required
	Sub-Mode	Sub-Mode Data No.	Sub-Mode N

GENERAL INFORMATION - 3-MINUTE ALARM SELECTION

This Memory Block is used to specify if a warning signal tone is generated at 3-minute intervals during an outgoing or incoming call on a per station basis.

DTMF/DP SLT TYPE SELECTION

Telephone		Data No.
4	-	95

OPERATION:

1. Go off-line.

2. Enter: Mode

Telephone

LK4 • MIC

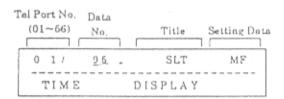
Data No.

(Dial Pad)

9 5

NOTES:

 Both 10pps or 20pps are supported under the DP selection.



- Press the corresponding CO/PBX line key to change data option.
 - To change Tel. No. 09 to DP, press CO/PBX line key 1.

LK 1	LK 2	LK 3	LK 4
DP	DTMF		
LK 5	LK 6	LK 7	LK 8

CO/PBX line keys

Default

CNF

key

: Next Tel. No.

- Pressing the TRF key will write the selected data and advance to Memory Block 4-96 (SLT Connected Selection).
- 5. Press the SPKR key to go back on-line.

M Additional Programming

Mode		Data No.	System Data	
	Sub-Mode		Required	May Be Required
Telephone (LK 4)		96		

reasing the TRF key will write the selectro

Press the SPKR key to go back on-fine.

GENERAL INFORMATION - DTMF/DP SLT TYPE SELECTION

This Memory Block is used to specify the type of Single Line Telephone that is connected to the system (DP or DTMF) on a per port basis..

SLT CONNECTED SELECTION

Telephone	-	Data No.
4	-	96

OPERATION:

- 1. Go off-line.
- 2. Enter: Mode

Telephone

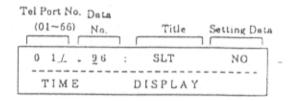
LK 4 • ICM

Data No.

9 6 (Dial Pad)

NOTES:

- Specify "YES" if the port number displayed is a Single Line Telephone.
- Specify "NO" if the port number in the display is a Multiline Terminal.
- Do not specify "YES" for telephones in Ports 01 and 02.



- Press the corresponding CO/PBX line key to change data option.
 - To change Tel. No. 09, NO to YES, press CO/PBX line key 2.

CO/PBX line keys

Default

CNF

key.

: Next Tel. No.

- Pressing the TRF key will write the selected data and advance to Memory Block 4-90 (SLT Data Line Security Assignment).
- 5. Press the SPKR key to go back on-line.
- M Additional Programming

		Data	System Data	
Mode	Sub-Mode	No.	Roquired	May Be Required

GENERAL INFORMATION - SLT CONNECTED SELECTION

This Memory Block is used to specify if a Single Line Telephone is connected to the system.

DIGIT ADD/DEL FOR TIE LINE NETWORKING

Trunk Group	-	Data No.
7 9 0 V 5 T 9 V 9	MEL	00

OPERATION:

- 1. Go off-line.
- 2. Enter: Mode Trunk Group LK 5 MIC 1CM

 Data No. 0 0

 (Dial Pad)

Trunk Group
No. Data
(01-32) No. Title Setting Data
0 1 / 00 : ADD/DEL 000
TIME DISPLAY

3. Enter data using the dial pad.

Dial pad 0 ~ 9 : To move cursor.

CNF key : Next Trunk Group No.

Setting Data

000 : No Addition or Deletion

001~009 : [1]~[9] Addition

010 : [0] Digit Addition

100~199 : [00]~[99] Addition

201 : 1 Digit Deletion

202 : 2 Digit Deletion

- 4. Pressing the TRF key will write the selected data and advance to Memory Block 5-01 (Tie Line Networking Tandem Connection Assignment).
- 5. Press the SPKR key to go back on-line.
- Additional Programming

will world		Data	System Data	
Mode	Sub-Mode	No.	Required	May Be Required
System (LK 1)	CO Line (LK 1)	46		nnorteals
CO/PBX (LK 3)		03		(4.20.1)

NOTES:

- This Memory Block applies only when two or more systems are connected by Tie Lines and when the systems are connected by a DID line.
- When two or more systems are connected by Tie Lines, each system must be assigned a system number.
- If the call is directed to the local system, it will be connected to an intercom line that is served by the system.
- If the call is intended for another system, the Tie Line will be directed to resend the number.
- At default, DID lines are not assigned to a Trunk Group.

Default No Addition and Delete = 000

301~309 1 digit Delete and "1" ~ "9" Add 310 1 digit Delete and "0" Add 400~499 1 digit Delete and "00" ~ "99" Add 501~509 2 digit Delete and "1" ~ "9" Add 510 2 digit Delete and "0" Add 600~699 2 digit Delete and "00" ~ "99" Add

GENERAL'INFORMATION - DIGIT ADD/DEL FOR TIE LINE NETWORKING

This Memory Block is used to specify the number of digits to be added to and/or deleted from the telephone number sent to a distant system over Tie lines or from DID lines. The digits enable the system to determine whether a call is directed to itself (local) or another system (distant). Refer to the Notes above.

TIE LINE NETWORKING TANDEM CONNECTION ASSIGNMENT

Trunk Group - Data No. 5 - 01

OPERATION:

- 1. Go off-line.
- 2. Enter: Mode Trunk Group

LK 5 • MIC

Data No.

0 1 (Dial Pud)

(Outgoing)
(Incoming)
Trunk Group
No.
(01-32)
(01-32)
No.
Title
Page No.

0 1 / 01: TANDEM | 01

TIME
DISPLAY

- Press the corresponding CO/PBX line key to enter the data.
 - · Press RECALL or FNC key to change page.

← , # → :

To move cursor.

RECALL key

Next page.

FNC key

Previous page.

CNF

key

Next Trunk Group No.

CO/PBX
Line LED OFF ON

Data NO YES
(Enabled)

Default

- After entering all data for all pages; pressing the TRF key will write the selected data and advance to Memory Block 5-02 (8-Digit Matching Table to Trunk Group Assignment).
- 5. Press the SPKR key to go back on-line.

NOTES:

 Tandem connection of Trunk Group to Trunk Group must be specified separately.

Trunk Group Number (01~32) corresponding to CO/PBX line key

Page 1 (01)

LK 1	LK 2	LK 3	LK 4
01	02	03	04
LK 5	LK 6	LK 7	LK 8
0.5	06	07	08

Page 3 (17)

LK 1	LK 2	LK3	LK 4
17	18	19	20
LK 5	LK 6	LK 7	LK 8
21	22	23	24

CO/PBX line keys

Page 2 (09)

(05)		
LK 2	LK 3	LK 4
10	11	12
LK 6	LK 7	LK 8
14	15	16
	LK 2 10 LK 6	LK 2 LK 3 10 11 LK 6 LK 7

Page 4 (25)

LK 1	LK 2	LK 3	LK 4
25	26	27	28
LK 5	LK 6	LK 7	LK 8
29	30	31	32

Default All Trunk Groups

Additional Programming

	Sub-Mode	Data	System	System Data	
Mode		Mode Sub-Mode No.		Required	May Be Required
CO/PBX (LK 3)		03			
Telephone (LK 4)		09	21102200	DE MAD MESS	

GENERAL INFORMATION - TIE LINE NETWORKING TANDEM CONNECTION

ASSIGNMENT

This Memory Block is used to specify if Trunk Groups, connected to the system, allow incoming Trunk Groups to be connected to outgoing Trunk Groups for tandem connections.

8-DIGIT MATCHING TABLE TO TRUNK GROUP ASSIGNMENT

Trunk Group	-	Data No.
MAIL 5 TOT	IJ:81	02

OPERATION:

- 1. Go off-line.
- 2. Enter: Mode Trunk Group LK5 MIC

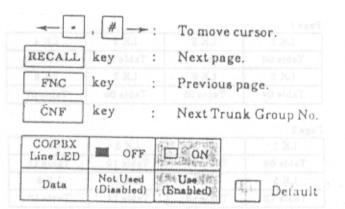
 Data No.

Trunk Group
No. Data
(01~32) No. Title Page No.

0 1 / 02: 8DG = TRKG | 1

TIME DISPLAY

- Press the corresponding CO/PBX line key to enter the data option.
 - Press the RECALL or FNC key to turn pages.



- After entering all data for all pages; pressing the TRF key will write the selected data and advance to Memory Block 5-03 (OCC Table to Trunk Group Assignment).
- 5. Press the SPKR key to go back on-line.
- M Additional Programming

		Data	System Data		
Mode	Sub-Mode	No.	Required	May Be Required	
System (LK 1)	CO Line (LK 1)	60			
CO/PBX (LK 3)		03			

NOTES:

gal			
LKI	LK 2	LK 3	LK 4
Table 00	Table 01	Table 02	Table 03
LK 5	LK 6	LK 7	LK 8
Table 04	Table 05	Table 06	Table 07

LK 1	LK 2	nockK J	LK 4
Table 08	Table 09	Table 10	Table 11
LK 5	LK 6	LK 7	LK 8
Table 12	Table 13	Table 14	Table 15

CO/PBX line keys

Default	Use all tables
-	

After entering all data for all pu

GENERAL INFORMATION - 8-DIGIT MATCHING TABLE TO TRUNK GROUP

ASSIGNMENT

This Memory Block is used to assign each Trunk Group to the 8-Digit Matching Tables.

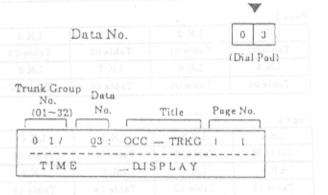
OCC TABLE TO TRUNK GROUP ASSIGNMENT

Trunk Group	-	Data No.
5		03

OPERATION:

- Go off-line.
- 2. Enter: Mode Trunk Group

LK 5 • MIC



- Press the corresponding CO/PBX line key to enter the data option.
 - Press the RECALL or FNC key to change pages.



RECALL key

Next page.

FNC

key

Previous page.

CNF

key

Next Trunk Group No.

CO/PBX Line LED	OFF	□ on		
Data	Not Used (Disabled)	(Enabled)	74.7	Default

- After entering all data for all pages; pressing the TRF key will write the selected data and advance to Memory Block 5-00 (Digit Add/Del for Tie Line Networking).
- 5. Press the SPKR key to go back on-line.
- M Additional Programming

		Data	System Data		
Mode	Sub-Mode	No.	Required	May Be Required	
DELLOCATION	h municari	OTB	BRAT DI	HEIDT	

NOTES:

0 2	
Card Cards	Trusk Group No. Deta

Page 1

LK 1 LK 2 LK 3 LK 4

Table 00 Table 01 Table 02 Table 02

Litt L	LIL 2	LIK 3	1977 4
Table 00	Table 01	Table 02	Table 03
LK 5	LK 6	LK 7	LK 8
Table 04	Table 05	Table 06	Table 07

Page 2

LK 1	LK 2	LK 3	LK 4
Table 08	Table 09	Table 10	Table II
LK 5	LK 6	LK 7	LK 8
Table 12	Table 13	Table 14	Table 15

CO/PBX line keys

Default	Use all tables

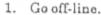
GENERAL INFORMATION - OCC TABLE TO TRUNK GROUP ASSIGNMENT

This Memory Block is used to assign each of the 16 OCC Tables to each Trunk Group.

TENANT MODE COPY ASSIGNMENT

Сору	Tenant	Data No.
(6) H (2	00.

OPERATION:





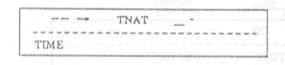


EXAMPLE:

 Enter the original Tenant No. From the dial pad press 0 0.



2. Press the TRF key.



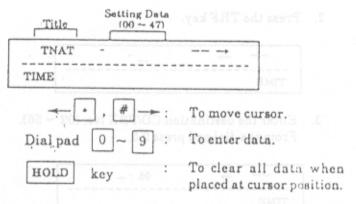
3. Enter the destination TEL No. (01 \sim 56). From the dial pad press 0 5.

-	 TNAT	05	
TIME			

4. From the dial pad press 0 7.

an the own I	TNAT	05 - 07
TIME	מתרדומרים	naangiandai

5. Press the TRF key. MOO"



For example, to copy data of Tenant 00 to Tenant 05~07.

- Enter original Tenant No. 00 using the dial pad; press the TRF key.
- Enter the Destination Tenant No. (05~07) and press the TRF key.
- The upper line in the display returns to the setting above to copy another Tenant.

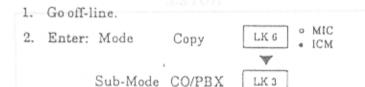
GENERAL INFORMATION - TENANT COPY MODE ASSIGNMENT

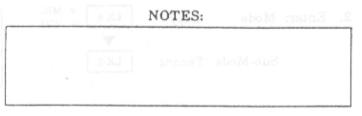
This Memory Block is used to enable copying data from one tenant to another tenant or multiple (consecutive) tenants.

CO LINE MODE COPY ASSIGNMENT

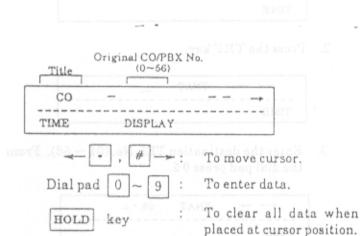
Copy CO/PBX Data No.

OPERATION:





Enter the original Tennat No. From the dial and press 0.0.



For example, to copy data of CO/PBX line 01 to CO/PBX line $03 \sim 05$

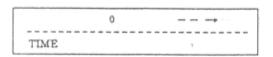
 Enter original CO/PBX Line 01 using the dial pad; press the TRF key.

Original
CO No. *CO No. *A TAT adv sam? 3.6
(01~56) (01~56)

- Enter the Destination CO/PBX No. and press the TRF key.
 - Entry is not needed when copying to a single CO/PBX number only.
- The upper line in the display disappears, leaving only the time display in the lower line.

EXAMPLE:

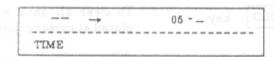
 Enter the original CO/PBX No. From the dial pad press 0.



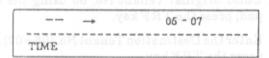
2. Press the TRF key.



Enter the destination CO/PBX No. (02 ~ 56).
 From the dial pad press 0 5.



From the dial pad press 0 7.



5. Press the TRF key.

GENERAL INFORMATION - CO LINE MODE COPY ASSIGNMENT

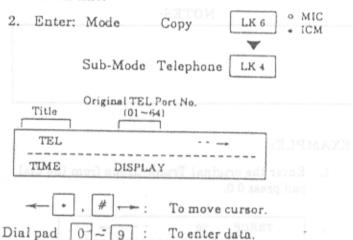
This Memory Block is used to enable copying data from one CO/PBX line to another CO/PBX line or multiple (consecutive) CO/PBX lines.

Data No.

TELEPHONE COPY MODE ASSIGNMENT

OPERATION:

4	~	Color I	
1.	1.0	011-	line.



For example, to copy data of telephone port 10 to telephone ports 20~30.

 Enter original telephone port number 01 using the dial pad, press the TRF key.

To clear all data when

placed at cursor position.

Original

HOLD

-Port No. *Port No. (01~64) (01~64)

- Enter the Destination Tel. No. and press the TRF key.
 - Entry is not needed when copying to a single Tel. No. only.
- The upper line in the display disappears, leaving only the time display in the lower line.

EXAMPLE:

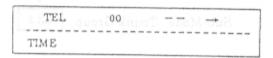
1. Enter the original Tel No. From the dial pad press 0 0.

Telephone

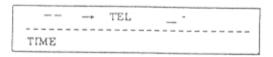
4

Copy

6



2. Press the TRF key.



 Enter the destination Tel No. (01 ~ 56). From the dial pad press 0 5.

***	 	7	rel		05	-		
TIME								

4. From the dial pad press 0 7.

-		TEL	05 - 07	
TIME	nein	o oT	0 - 0	bag

5. Press the TRF key.

galat 10 redomin que NOTES: langito resalle				
	seemy bud win out			
	Lagrano			
	-			
	(01-32)			
	the State the Section			

GENERAL INFORMATION - TELEPHONE MODE COPY ASSIGNMENT

This Memory Block is used to enable copying data from one telephone port to another telephone port or multiple (consecutive) telephone ports.

TRUNK GROUP MODE COPY ASSIGNMENT

Copy Trunk Group Data No. 6 5 -

OPERATION:

1. Go off-line.

2. Enter: Mode

Copy

LK 6 O MIC

W'

LK 5

Sub-Mode Trunk Group

NOTES:

EXAMPLE:

 Enter the original Trunk Group from the dial pad press 0 0.

TRKGP 00 -- →
TIME

2. Press the TRF key.

-- → TRKGP _-

Enter the destination Tenant No. (05 ~ 07).
 From the dial pad press 0 5.

-- → TRKGP() 05 -- (88 -10

4. From the dial pad press 0 7.

TIME → TRKGP 05 - 07

5. Press the TRF key.

	Original Trunk Group No.
Title	(00-32)
TRK GP	
TIME	DISPLAY



To move cursor.

Dial pad 0 ~ 9

To enter data.

HOLD key

To clear all data when placed at cursor position.

For example, to copy data of Trunk Group 01 to Trunk Groups 10~14.

 Enter original Trunk Group number 01 using the dial pad, press the TRF key.

Original

Trunk Group No. * Trunk Group No.

(01 - 32)

 $(01 \sim 32)$

- Enter the destination Trunk Group No. and press the TRF key.
 - Entry is not needed when copying to a single Trunk Group number only.
- The upper line in the display disappears, leaving only the time display in the lower line.

GENERAL INFORMATION - TRUNK GROUP MODE COPY ASSIGNMENT

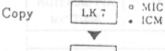
This Memory Block is used to enable copying data from one Trunk Group to another Trunk Group or multiple (consecutive) Trunk Groups.

CARD INTERFACE SLOT ASSIGNMENT

KTU

OPERATION:

- Go off-line.
- 2. Enter: Mode



LK 1

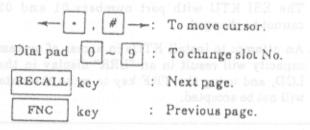
Page Upper Slot No. Unit
No. 09-16 (A) Name Slot No.

1 09:

1 = 01:

Frame Unit Port No.
No. Lower Slot No. Name
01-08 (B)

3. Enter data using the dial pad.



Enter Slot No. A using dial pad (9)

Enter Slot No. B using dial pad (0)

- Pressing the TRF key will write the selected data and advance to the next lower Slot No.
- 5. Press the SPKR key to go back on-line.
- Additional Programming

W		Data No.	System Data	
Mode	Sub-Mode		Required	May Be Required
System (LK 1)	CO Line (LK 1)	46	-	
CO/PBX (LK 3)		03		3037

Page 1

Line Key	Setting Data	LCD Indication
1	NON	75,700,700
2	COI-F(4)-20	COI 4-20
3	CO(-F(8)-20	COI 8-20
4	NON	
5	NON	1777-10
6	ESI-F(8)-21	ESI 8-21
7	NON	2349400
8	SLI-F(8G)-21	SLI 8G-21

Page 2

Line Key	Setting Data	LCD Indication	
1	LLT-F(2G)-10	V7-(X)3-E	
2	TLI-F(2)-10	TLI 2-10	
3	DID-F(4)-10	DID 4-10	
4	NON	717.07	
5 5	NON	udata; : 1	
6	PBR-F(4)-11	PBR 4-11	
7 years	NON Service	S estaV : V	
8	ECR-F-11	ECR-11	

Page :

Line Key Setting Data		LCD Indication	
ı	NON	o reso esta	
8 10 2 0 0	VRS-F(4)-11	VRS 4-11	
ni Jingi nadi	D'IT-F()-10	DT1-11	
4	MTF	MIF	
5	NON	O: Enabled	
6	иои	ce : Disabled	
7	NON		
8	NON		

(Continued on next page.)

CARD INTERFACE SLOT ASSIGNMENT (continued)

KTU		
OPE T RATES	1	

KTU UNIT	PORT NO. *1	UPPER *2	SLOT *3	
COI-F(4)-20	C	0	U	
COI-F(8)-20	C	X	0	11 000
ESI-F(8)-21	Total mainted	world X start	0	-
SLI-F(8G)-21	т ион	Х	0	
LLT-F(2G)-10 KTU	T negration	0	0	
TLI-F(2)-11	C	0	0	
DID-F(4)-10	C	0	0	
ESP-F-11		0	0	
PBR-F(4)-11	7- 11-83-18	Х	0	
ECR-F-11	· 101	Х	0	
VRS-F(4)-11	V	X	0	
DTI-F()-10	C	X	0	
MIF-F(S)-10	-: *	X	0	0
MIF-F(L)-10	to all all similarity of	Ve X es	0	0
MIF-F(A)-10	· 03.65618.41.	X	0	0

- *1 C: Port Number of CO/PBX Line
 - T: Telephone Port Number (smallest number is displayed)
 - V: Voice Recording Service Package
 - : No Display
- *2 O: When the KTU is assigned to a lower slot, it can also be assigned to an upper slot in the same manner.
 - X: When the KTU is assigned to a lower slot, it cannot be assigned to another unit in an upper slot.
- *3 O: Enabled
- Space: Disabled

NOTES:

- KTU interface cards are automatically assigned during initial power up.
- 2. KTUs must be installed before assignment in System Programming.
- 3. The ESI KTU with port numbers 01 and 02 cannot be changed.
- An attempt to install KTUs in excess of system capacity will result in an "ERR" display in the LCD, and using the TRF key to write the data will not be accepted.

GENERAL INFORMATION - CARD INTERFACE SLOT ASSIGNMENT

This Memory Block is used to specify the type of installed KTUs.

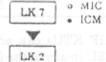
TELEPHONE TYPE ASSIGNMENT

KTU 7 2

OPERATION:

- 1. Go off-line.
- 2. Enter: Mode

LK 7



Telephone Port No. Title Setting Data (01 - 64)01 TEL TIME DISPLAY

- 3. To change data, press the corresponding CO/PBX line key.
 - To change Telephone to DSS Console, press CO/PBX line key 3.

CNF

key

: Next Tel Port No.

LK 1	SELK2	LK 3	LK 4
Non".	" Talephone	DSS Console	SLT Adaptor
LK 5	LK 6	LK 7	LK 8

- 4. Pressing the TRF key will write the selected data and advance to the next Telephone Port No.
- Press the SPKR key to go back on-line.
- Additional Programming

		Data	System Data	
Mode	Sub-Mode	No.	Required	May Be Required
KTU (LK 7)				

NOTES:

- 1. Only Multiline Terminals can be assigned to Ports 01 and 02.
- 2. A maximum of four DSS Consoles can be installed in the system.
- 3. A maximum of four SLT Adaptors can be installed in the system.

GENERAL INFORMATION - TELEPHONE TYPE ASSIGNMENT

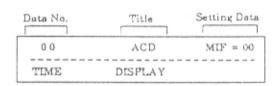
This Memory Block is used to specify the type of device that is connected to an ESI port.

MIF (ACD) ASSIGNMENT

OPERATION:







- Enter data using the dial pad.
 - Enter the slot number of installed MIF-F(A)-10 KTU.



Default No Function (00)

- Pressing the TRF key will write the selected data and advance to Memory Block 7-3-01 (MIF (LCR) Assignment).
- 5. Press the SPKR key to go back on-line.

KTU	The state of	
MOITA TERES	3	00

NOTES:

 MIF KTUs can only be installed in the Basic KSU in any of the following Interface Slots:

AP, AP/IF 1, AP/IF 2, AP/IF 3, AP/IF 4

This Memory Block allows assignment of the MIF KTU(s) in order sequence.

Example: Beginning with slot AP/IF 1, the first installed MIF KTU is assigned 01 (regardless of which slot it is installed in). The second MIF KTU is assigned 02 (regardless of which slot it is installed in).

COAPENCHER key 3.

Prossing the TRE key will write the sciented late and advance to the next Telephone Port No.

	SubsMode	

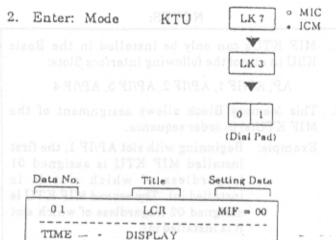
GENERAL INFORMATION - MIF (ACD) ASSIGNMENT

This Memory Block enables the ACD function and allows the assignment of KTU order for an MIF-F(A)-10 KTU.

MIF (LCR) ASSIGNMENT

OPERATION:

Go off-line.



KTU		
7	3	01

NOTES:

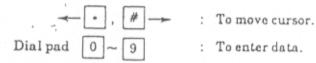
1. MIF KTUs can only be installed in the Basic KSU in any of the following Interface Slots:

AP, AP/IF 1, AP/IF 2, AP/IF 3, AP/IF 4

This Memory Block allows assignment of the MIF KTU(s) in order sequence.

Example: Beginning with slot AP/IF 1, the first installed MIF KTU is assigned 01 (regardless of which slot it is installed in). The second MIF KTU is assigned 02 (regardless of which slot it is installed in).

- - Enter the slot number of installed MIF-F(L)-10 KTU.



Default No Function (00)

- 4. Pressing the TRF key will write the selected data and advance to Memory Block 7-3-02 (MIF (SMDR) Assignment).
- 5. Press the SPKR key to go back on-line.

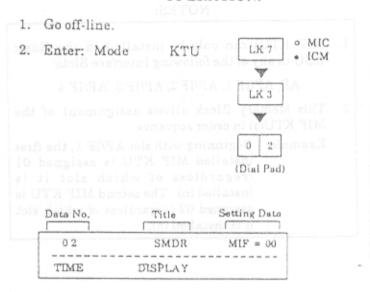
3. Enter data using the dial pad.

GENERAL INFORMATION - MIF (LCR) ASSIGNMENT

This Memory Block enables the LCR function and allows the assignment of KTU order for an MIF-F(L)-10

MIF (SMDR) ASSIGNMENT

OPERATION:



KTU		
TARRIO	3	02

NOTES:

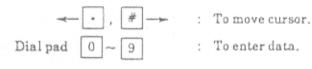
 MIF KTUs can only be installed in the Basic KSU in any of the following Interface Slots:

AP, AP/IF 1, AP/IF 2, AP/IF 3, AP/IF 4

This Memory Block allows assignment of the MIF KTU(s) in order sequence.

Example: Beginning with slot AP/IF 1, the first installed MIF KTU, is assigned 01 (regardless of which slot it is installed in). The second MIF KTU is assigned 02 (regardless of which slot it is installed in).

- 3. Enter data using the dial pad.
 - Enter the slot number of installed MIF-F(S)-10 KTU.



Default No Function (00)

- Pressing the TRF key will write the selected data and advance to Memory Block 7-3-00 (MIF (ACD) Assignment).
- 5. Press the SPKR key to go back on-line.

Eater data using the diel pad.

. Enter the slot number of installed MIF-F(L)-10 KTU.

Dafault No Function (00)

Pressing the TRF key will write the selected date and advance to Memory Block 7-3-02 (Milf (SMDR) Assignment).

GENERAL INFORMATION - MIF (SMDR) ASSIGNMENT

This Memory Block enables the SMDR function and allows the assignment of KTU order for an MIF-F(S)-10 KTU.

ROM VERSION CONFIRMATION

OPERATION:

1. Go off-line.

2. Enter: Mode Special LK 8 • MIC • ICM

Sub-Mode ROM LK 1

CO	CO	CO	CO	CO
Green	Red	Red	Red	
CO	CO	CO	CO	
Creen	Creen	Red	Red	

Software Package Name ROM Version

SP171 : MMC = 01

1 - 0C : CPU = 1 . 0

Frame Slot No. Unit Name ROM Version of CPU

A, B

To move cursi

Dial pad

O - 9

: To move cursor.

To change frame No. and slot No.

Enter 1 ~ 8 : Frame No. 1~3.\
Slot No. 1~8

9 : Slot Number A

0 : Slot number B

RECALL : Slot number C

Type of unit, in the order of slot number and ROM version, is displayed each time a CO/PBX line key is pressed.

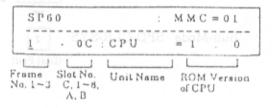
09: 1 - 01: COI (4) = 01

Special	ROM	Data No.
BM 8 ME	0.33112	ABIT RYE

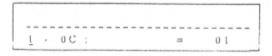
Frame number, slot number, interface name, and ROM Version are shown on the display.

There are three display patterns.

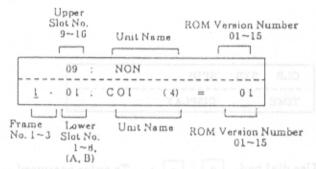
1 For basic frame (frame 1 or slot C) CPU:



D For slot C of expansion frame:



Tor another slot type:



 When both upper and lower slots are occupied by COI, ESI, and SLI cards, an 8-channel unit {COI (8)} is displayed in lower slot.

Display of the order is as follows:

- Frame 3
 Slot C→1→2→8
 - After the input of slot 8 of frame 3, press TRF key, slot C of frame 1 is displayed.
 - The upper line in the display disappears, leaving only the time display in the lower line.

GENERAL INFORMATION - ROM VERSION CONFIRMATION

This Memory Block is used to confirm the program version without removing the card from the KSU.

Enter Password

SYSTEM SPEED DIAL MEMORY CLEAR

Special SPD-CLR-SYS Data No. 8 2

OPERATION:



2. Enter: Mode Special series

Sub-Mode SPD-CLR-SYS

LK 8 · ICM W

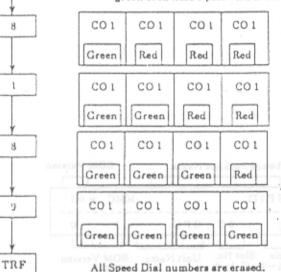
2

(Dial Pad)

CO/PBX lines

COI COI COI CO₁ Red Red Red Red

- Enter the password using the dial pad.
- CO/PBX line LEDs change from red to green each time a password is entered.



CLR SYS

TIME DISPLAY

Use dial pad

SPD?

To enter password

The upper line in the display disappears, leaving only the time display in the lower line.

WARNING

Before performing this procedure, understand completely the meaning and implications of erasing all System Speed Dial buffers in the system.

NOTES:

Areas to be erased:

SPKR

- In 100 code mode; Speed Dial numbers 00~89.
- In 1000 code mode; Speed Dial numbers $000 \sim 999$.

GENERAL INFORMATION - SYSTEM SPEED DIAL MEMORY CLEAR

This Memory Block is used to clear all System Speed Dial programming in the system.

Enter Password

STATION SPEED DIAL MEMORY CLEAR

Special	SPD-CLR-STA	Data No.
8	MI CIMCODES	-

OPERATION:

- Go off-line.
- 2. Enter: Mode

Special

LK 8 • ICM

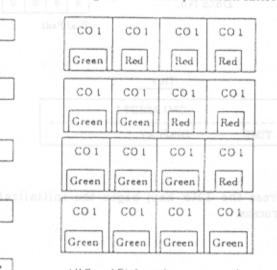
Sub-Mode SPD-CLR-STA

3 (Dial Pad) CO/PBX Lines

CO1 CO1 CO1 CO1

Red Red Red Red

- 7 Z. L. L. L. Ling the dial pad.
- CO/PBX line LEDs change from red to green each time a password is entered.



TRF

SPKR

9

CLR TEL SPD7
TIME DISPLAY

Dial pad

0 - 9

To enter password

All Speed Dial numbers are erased.

 The upper line in the display disappears, leaving only the time display in the lower line.

WARNING

Before performing this procedure, understand completely the meaning and implications of erasing all Station Speed Dial buffers in the system.

NOTES:

GENERAL INFORMATION - STATION SPEED DIAL MEMORY CLEAR

This Memory Block is used to clear the Station Speed Dial memories of all programmed Speed Dial numbers.

SECOND INITIALIZATION

SYSTEM	COLINE	Data No.
8 MOIT	8 PERA	8800

OPERATION:

1.	Go off-	line.				
2.	Enter:	Mode	System	LK 8	•	ICM
		Sub-Mode	CO Line	LK 8		

Data No. 8 8 0

(Dial Pad)

Title

CPU RESET 7

TIME DISPLAY

 Press the TRF key; begin the initialization process.

process. 00 100 100 100

Additional Programming

		Data	System	Data
Mode	Sub-Mode	No.	Required	May Be Required

NOTES:

		'stro

WARNING

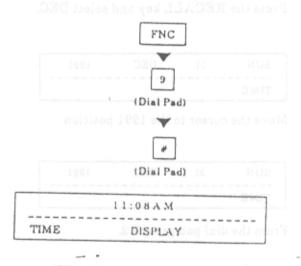
Before performing this procedure, understand completely the meaning and implications of crasing all Station Speed Dial buffers in the system.

GENERAL INFORMATION - SECOND INITIALIZATION

This Memory Block is used to reinitialize all the system hardware. All system software and user programming is retained after the Second Initialization.

CLOCK/CALENDAR SETTING

OPERATION:



To move cursor.

Dial pad 0 ~ 9 : To enter Time., Date, Month, Year

RECALL key : To switch a.m./p.m.
To switch month and
weekdays

- Pressing the RECALL key while the cursor is at the Day or Month allows the user to scroll through the selections.
- All other items can be changed by moving the cursor to the desired position and entering the data using the dial pad.

(Refer to the example on the next page.)

-	CLOCK/CALENDAR SETTING	Data No.
		-

NOTES:

 This is a station operation performed by the Attendant station.

PENERAL INFORMATION - CLOCKCALENDAR SETTING

Continued on next page.

EXAMPLE:

To change the time and date to 12:00 p.m. Sunday, December 31, 1992:

Lica performe	11:08 A M
TIME	tendantstatjon.

From the dial pad press 1 2 0 0.

	12:00	MAG	
TIME	 		

2. Press the RECALL key.

	12:00 P M	
TIME		

3. Press the HOLD key.

MON	01	JAN	1991
TIME			

Press the RECALL key and select SUN.

SUN	01	JAN	1991
TIME			

5. Move the cursor to the 01 position.

SUN	01	JAN	1991
TIME		 	

6. From the dial pad press 3 1.

SUN	31	JAN	1991
TIME			

7. Press the RECALL key and select DEC.

SUN	31	DEC	1991
TIME			

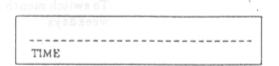
8. Move the cursor to the 1991 position

SUN	31	DEC	1991
TIME			

9. From the dial pad press 9 2.

SUN	vom 3f	DEC	1992
TIME			0 becla

10. Press the FNC key.



at the Day or Month allows the user to scroll through the selections.

All other items can be changed by moving the cursor to the desired position and entering the data using the dial pad

GENERAL INFORMATION - CLOCK/CALENDAR SETTING

This Memory Block is used to program the year, month, day, hour, and minute, and a.m. or p.m.

SECTION 5 FUNCTION TIMER CHART

Function Timer Chart

Timer	Memory	D. G. iti.		Timing Value	
Timer	Block	Definition nobland	Min.	Default	Max.
Pause Time Selection	1-1-00	Duration when no signal is being sent to a CO/PBX line.	1 sec.	3 sec.	3 sec.
DP Interdigit Time Selection	1-1-01	Minimum interval between dialing signals in DP dialing.	650/500 ms.	650/500 ms.	800/800 ms.
Hookflash Time Selection	1-1-02	Timing of a CO/PBX hookflash from the RECALL key of a Multiline Terminal or a Single Line Telephone to the CO/PBX line.	20 ms.	600 ms.	5000 ms.
Hold Recall Timer Selection (Non-Exclusive Hold)	1-1-03	Amount of time before a heid CO/PBX line recalls the station that put that line on hold.	min.	1 min.	No Limit
Elapsed Call Start Timer Selection	1-1-05	Specify the time interval for after dialing and the start of call duration display.	10 sec.	20 sec.	80 sec.
CO/PBX Incoming Ringing Alarm Time Selection	1-1-06	Specify the time interval from receiving an incoming CO/PBX call until the ringing tone changes to a different ringing tone level if the call is not answered.	10 sec.	No Limit	No Limit
Tie/DID Line Delay (1) Ringing Timer Selection	01-1-07	Specify the delay interval between the time a telephone rings (accessed by a ringing call in the Tie/DID) line and the time other telephones start ringing.	10 sec.	No Limit	No Limit
Station Transfer/Camp-On Recall Timer Selection	1-1-12	The amount of time before a ring transferred call will recall to the station that transferred the call.	30 sec.	60 sec.	240 sec.
Trunk Queuing Timeout Selection	1-1-37 TZH 0	Specify the length of time queuing for a CO/PBX line will recall before being automatically canceled.	10 sec.	10 sec.	60 sec.
CO/PBX Ringing Pattern Selection	1-1-56	Specify the ringing pattern for incoming calls on a CO/PBX line.	order to L) .ono:		
CO/PBX Prepause Timer Selection	1-1-57	Specify the pause time before dialed digits will be sent over a CO/PBX line.	None	None	15 sec.
Hold Recall Time Selection (Exclusive)	1-1-63	Specify the time for Exclusive Hold Recall.	30 sec.	1 min.	No Limit
DSS/BLF Console Transfer/Camp-On Recall Timer Selection	1-1-64	Specify the time for a ring transfer from DSS Console until recall alarm is sent.	30 sec.	1 min.	10 min.

Function Timer Chart (Continued)

m:	Memory		Definition		Timing Valu	eomiT
XalTimer Hast	Block	14.2%	Definition	Min.	Default	Max.
First Delay	1-1-71		the time between	0 sec.	20 sec.	60 sec.
Announcement Start Time Selection	0 ms. 650	receiving an incoming CO call and sending the First Delay Announcement to the caller.			-l-1 emi	P laterdigit I sizetion
First to Second Delay Announcement Interval Time	1-1-73	Specify the time between the First and Second Delay Announcement.		0 sec.	20 sec.	No Limit
Second Delay Announcement Repeat Time Selection	1-1-75	repeat	the time between ed Second Delay ncement.	0 sec.	20 sec.	No Limit
Internal Paging Timeout Selection	1-2-00	Specify for pag	the length of time allowed ing.	90 sec.	90 sec.	No Limit
Automatic Callback Release Timer Selection	1-2-02	Callba	Time duration before Automatic Callback is automatically canceled.		3 min.	3 min.
Call Forward No Answer Timer Selection	1-2-22	Specify time before ICM or Trunk calls are forwarded.		10 sec.	10 sec.	240 sec.
System Call Park Recall Time Selection	1-2-23	Time before a parked call will recall to the station that parked the call.		30 sec.	1 min.	10 min.
Bounce Protect Time Selection	1-3-01	Specify the length of time before a valid hookflash is detected from a Single Line Telephone or Voice Mail System.		ons. Vo	300 ms.	1500 ms.
First Digit PBR Release Timer Selection	1-3-03	which a	Specify the time interval during which a receiver is connected when a DTMF Single Line Telephone user is dialing.		10 sec.	60 sec.
Hookflash Start Time Selection	1-3-05	duratio Teleph	Specify a minimum hookflash duration for a Single Line Telephone in order to receive a second dial tone.		300 ms.	850 ms.
Hookflash End Time Selection	1-3-06	from a order to	Specify a maximum duration from a Single Line Telephone in order to receive a second dial tone. (HST = Hookflash Start		HST + 700 ms.	HST + 1500 ms.
Voice Mail DTMF Delay Timer Selection	1-3-08		Specify the delay time before DTMF tones are sent to the VMI		1 sec.	8 sec.
Voice Mail Disconnect Time Selection	1-3-09	disconn	the sending time of a sect signal that is sent to nected equipment.	6 sec.	1.5 sec. or (oviza	5 sec. ble
Voice Mail DTMF Duration/Interdigit Time Selection	1-3-10		specify the DTMF n/interdigit time for voice	70/60 ms.	100/70 ms.	900/200 ms.

onin's govern	1	Function Timer Chart (Con	tinued)		
REM Timeriante	Memo	Definition	lock	Timing Va	lue
Tanden To 6		y the duration between the 1 m	Min.	Default	Max.
Tandem Transfer Automatic Disconnec Timer Selection		Used to specify a maximum time before automatic disconnect of a Trunk-to-Trunk transfer occurs.	LT BUTT	l hr.	3 hr.
Automated Attendan PBR Release Timer Selection	520		10 sec.	20 sec. q	incoming big
Automated Attendant Transfer Delayed Ringing Time Selection			1-28 Uselo	No Limit	No Limi
Automated Attendant No Answer Disconnect Time Selection	1-4-03	Used to determine how long the Automated Attendant will ring a station before dropping the call.	local min.	2 min.	4 min.
Automated Attendant Answer Delay Time Assignment	1-4-13	Assign the number of seconds before the Automated Attendant answers an incoming CO/PBX call, when there is no answer.	Jon O sec.	0 sec.	99 sec.
SMDR Valid Call Time Assignment	1-5-25	Minimum duration of an outside call before the system provides an SMDR report.	10 sec.	40 sec.	990 sec.
External Paging Timeout Selection	1-7-06	Length of time before an external paging is automatically disconnected.	30 sec.	5 min. 103	No Limit
PBR Interdigit Release Timer Selection	1-8-10	Specify the interdigit release time for the PBR.	3 sec.	7 sec.	10 sec.
System Refresh Fimer Assignment	1-8-11	Assign the system refresh time.	No Refresh	4 hr.	24 hrs.
ACD Group Overflow Destination Assignment	1-12-01	Assign the overflow station.	Angel Albega Muser		
Frunk DTMF Duration/Interdigit election	3-15	Specify the tone duration and interdigit time of DTMF signals. (Expressed as duration/interdigit time.)	70/60 ms.	70/60 ms.	900/200 ms
ie Line Prepause ime Selection		becomes capable of sending dial pulse or DTMF to a distant	A 0 sec.	3 вес.	13 sec.
ie Line Answer		bessendensalb need and had	direuit	me	
etect Time Selection		Specify the duration between the time when the receiving system answers and the time when it is recognized as an answer.	O ms.	520 ms.	1950 ms.

Function Timer Chart (Continued)

Timer	Memory	Definition		Timing Valu	е
rmar Value	Block	Definition	Min.	Default	Max.
Tie Line Reiense	3-18	Specify the duration between the	0 ms.	520 ms.	1950 ms.
Detect Time Selection	0 min.	circuit disconnection detection on the Tie Line on the distant system side and the time it is recognized as Tie Line Release.	saU 00-4-11 orod usT	Naconnect Misconnect Misconnect	Automatic Sizematical Sizematical
Tie Line/CO/PBX Incoming Signal Detect Time Selection	3-19	Specify the time between the detection of an incoming signal from another Electra Professional Level II System and the time when acknowledgement signal is sent. (Expressed as Wink Start/Delay/COI ms.)	0/0/50	520/120/200	1950/450/800
Tie Line Loop	3-20	Use to assign loop off-guard	0 sec.	20 sec.	13 sec.
Off-Guard Time Selection	min	protection to prevent noise that may cause the system to be unable to answer an incoming Tie Line.	4-03 Used	l inspasii	Selection Automated A No Answer
Tie Line Length of	3-21	Specify the time between the	30 ms.	180 ms.	480 ms.
Wink Signal Selection	.508	incoming signal detection from another Electra Professional Level II System and when the acknowledgement signal is sent out.	4-13 Assig before answ call,	Time !	Automated A Answer Delo Assignment
Tie Line Length of Delay Signal Selection	3-22	Specify the length of time a delay pulse is sent to another system.	0 ms.	300 ms.	4500 ms.
Tie Line Outgoing Timeout Selection	3-23 ::= 8	Specify the maximum time interval between the origination of an outgoing call and, if dialing	l sec.	12 sec.	No Limit
7 sec. 10 sec.		is delayed, when the call is dropped.	lipoge Ul-	0-1	delease Times
Tie Line Incoming Interdigit Timeout Selection	3-24 deorle	Specify the maximum time interval during the incoming call detection process. If an address signal is to received within a	l sec.	6 sec.	No Limit
		specified time, an error tone is returned to the other system.	erginaA 10-		noisanisee
Tie Line Wink/Delay Signal Detect Timeout Selection	3-25	Specify the maximum time for receiving an acknowledgement signal from a distant system before sending a busy tone.	l sec.	7 sec.	No Limit
Tie Line Outgoing Guard Time Selection	3-26	Specify the duration between the time a Tie Line is released and the time the other side is notified of circuit disconnection.	.02 sec.	3 sec.	15 sec.
Disconnect Recognition Time Selection	3-33	Specify a minimum time for a circuit that has been disconnected before it can be accessed again.	.5 sec.	1.5 sec.	8 sec.
Automatic Release Signal Detection Time Selection	3-40	Specify Allow or Deny of Automatic Release for each CO/PBX line.	answers answers surgoust	noite	

SECTION 6 CODE RESTRICTION

6.1General

The Electra Professional Level II System provides an advanced method of restricting outgoing calls based on the first eight digits dialed. Code Restriction denies placement of outside calls based on Trunk Groups and accommodates equal access to other Common Carriers (OCC). This eliminates unauthorized calls and configures system cailing functions to provide cost control.

There are 16 Code Restriction Classes in System Programming. Class 00 is fixed and allows free dialing. Class 15 is fixed and denies all outside calls. Classes 01~14 are programmable in system software. Stations are assigned to Code Restriction Class on a per station basis. A separate Day Mode and Night Mode station to Code Restriction Class assignment is available.

6.2 Default Assignments

At default, all stations are assigned to Code Restriction Class 00 for both Day and Night Mode which allows free dialing.

At default, the Code Restriction Classes have been setup with the following restrictions to provide the most common Code Restriction requirements and simplify Code Restriction programming.

Class 01:

Deny: 0 and 1 + calls

Class 02:

Deny: 0 and 1 + calls

Allow: 1-800 calls

Class 03:

Deny: 0,1+, and 976 calls Allow: 1-800 calls

Class 04:

Deny: 1 + calls only

Allow: 1-800 calls

Class 05-14:

Allow: 911 calls only

At default, all OCC calls are denied for Code Restriction Classes 01-14.

At default, System Speed Dial buffers will override Code Restriction Classes 01~14.

At default, Code Restriction is not applied to Tie Lines.

At default, when Station Lockout is set at a station, the station is outgoing restricted.

At default, Digit Restriction is not assigned.

Refer to Section 6.5 for Code Restriction Tables and default values.

6.3 Memory Blocks

The following is a list of related Memory Blocks used when assigning Code Restriction.

TITLE an bookevha as selivors melay I level languasolot M	EMORY BLOCK
Trunk to Tenant Assignment	0.01
Trunk-to-Trunk Group Assignment	
Trunk Type Selection	3-91
PBX/CTX Access Code Assignment I season noiselesses about a	1-1-24
PBX/CTX Access Code Assignment II	1 1 25
OCC Table Assignment	1-1-67
OCC Table to Trunk Group Assignment	5-03
8-Digit Matching Table to OCC Table Assignment	1-1-68
8-Digit Matching Table to Normal Dial Assignment	1-1-66
8-Digit Matching Table to Trunk Group Assignment	5-02
8-Digit Matching Table Assignment and Commission about add	1-1-60
8-Digit Matching Table to Class Assignment	1-1-61
Class Allow/Deny Assignment	1-1-65
System Speed Dial Restriction by Tenant Assignment	1-1-18
System Speed Dial Restriction by Class Assignment	1-1-62
Tie Line Code Restriction Assignment	1-1-69
Code Restriction Class Assignment when Lockout is Set	1-1-70
Trunk digit Restriction Assignment	4-32
Code Restriction Class Assignment (Day Mode)	4-07
Code Restriction Class Assignment (Night Mode)	4-08
Telephone to Tenant Assignment and the situation and all seds	4-09

6.4 Memory Block Description

6.4.1 General

This section describes the function of the Memory Blocks that are directly related to Code Restriction. Some Memory Blocks from the previous list are not described here but are included because of their effect on Code Restriction (e.g., Trunk to Tenant Assignment. Code Restriction is based on a Trunk Group basis and consideration should be given to this Memory Block because stations are assigned to a tenant, and trunks are assigned to a Trunk Group.)

6.4.2 OCC Assignment/Operation

A. OCC Table Assignment (Memory Block 1-1-67)

This Memory Block allows an OCC Access Code (maximum of eight digits to be assigned. There are 16 OCC Tables (01~16) in System Programming. Each Table can have one OCC Access Code assigned.

ed on Deny, the call is

ied of the dialing party

taids line and the system is

B. OCC Table to Trunk Group Assignment (Memory Block 5-03)

This Memory Block is used to assign Trunk Groups to the OCC Tables. Any combination of Trunk Groups can be assigned to the OCC Tables.

C. 8-Digit Matching Table to OCC Table Assignment (Memory Block 1-1-68)

This Memory Block is used to assign the 8-Digit Matching Table to the OCC Tables. Any combination of 8-Digit Matching Tables can be assigned to the OCC Tables.

D. OCC Operation

When a restricted station user dials an OCC Access Code, the system searches the OCC Tables for a match. If no match is found, the user is allowed free dialing. If a match is found, the system monitors the next eight digits dialed and searches the 8-Digit Matching Tables assigned to the OCC Table. the system searches only the 8-Digit Matching Tables assigned to the Code Restriction Class the station is assigned to and has the Trunk Group assigned to it for the in-use trunk the station is on. While the station user is dialing on an outside line, and the system is searching the assigned tables, if the interdigit time duration of the dialing party exceeds 10 seconds, the system automatically drops the call.

- 6.4.3 8-Digit Matching Table Assignment/Operation
 - A. 8-Digit Matching Table to Normal Dial Assignment (Memory Block 1-1-66)

This Memory Block is used to assign the 8-Digit Matching Table to be Used or Unused for non OCC calls. If an 8-Digit Matching Table is assigned as Unused, the table will only be used for OCC calls. There are 16 8-Digit Matching Tables (00~15) in System Programming. Each table is independently assigned to be Used or Unused.

B. 8-Digit Matching Table to Trunk Group Assignment (Memory Block 5-02)

This Memory Block is used to assign Trunk Groups to the 8-Digit Matching Tables. Any combination of Trunk Groups can be assigned to the 8-Digit Matching Tables.

C. 8-Digit Matching Table Assignment (Memory Block 1-1-60)

This Memory Block is used to assign the 8-Digit Matching Tables. Each 8-Digit Matching Table can have 16 8-digit entries. In order to cover the many possible combinations (without listing each individual number), code restriction letters can be used in place of digits. The code restriction letters used and their numerical values are as follows:

- X represents numbers 0~9, * and #
- P represents numbers 0 and 1
- N represents numbers 2~9

When 1X is entered in a table, and the table is assigned as a day table in the 8-Digit Matching Table to Class Assignment, any 1 + any digit call will be denied if the table is used. Using X, P, and N accommodates several combinations when just one entry.

Note: The Trunk Access Code should not be placed in the 8-Digit Matching Table. Code Restriction starts after a trunk is seized.

D. 8-Digit Matching Table to Class Assignment (Memory Block 1-1-61)

This Memory Block is used to assign the 8-Digit Matching Tables to the Code Restriction Classes. The 8-Digit Matching Tables are also assigned as Allow/Deny Tables in this Memory Block. Any combination of 8-Digit Matching Tables (Allow, Deny, or Not Used) can be assigned to Code Restriction Classes 01~14. Classes 00 and 15 are fixed and are nonprogrammable.

- E. Class Allow/Deny Assignment (Memory Block 1-1-65)
 This Memory Block is used to assign the Code Restriction Classes (01~14) as Allow or Deny. This assignment is used when there is no match or when there is an overlap (duplicate numbers in tables with opposite Allow/Deny assignments) of numbers in the 8-Digit Matching Tables.
- F. 8-Digit Matching Table Operations

The 8-Digit Matching Tables are used to restrict or allow OCC calls and non OCC calls. To understand the relationship of the 8-Digit Matching Tables with OCC calls, refer to paragraph 6.4.2 (OCC Operations).

When a restricted station user makes a non OCC call, the system monitors the next six digits dialed and searches the 8-Digit Matching Tables assigned for "Used" in Memory Block 1-1:66. The system searches only the 8-Digit Matching Tables assigned to the Code Restriction Class the station is assigned to and has the Trunk Group assigned to it for the in-use trunk the station is on.

If a match is found, the system looks at the 8-Digit Matching Table to Class Assignment for the Allow or Deny Assignment. If the table is assigned as Allow, the call is allowed. If the table is assigned as Deny, the call is denied.

If no match is found or a duplicate match is made with opposite Allow/Deny assignments, the system looks at the class Allow/Deny Assignment. If the class is assigned as Allow, the call is allowed. If the Class is assigned as Deny, the call is denied. While the station user is dialing on an outside line and the system is searching the assigned tables, if the interdigit time duration of the dialing party exceeds 10 seconds, the system automatically drops the call.

6.4.4 System Speed Dial Restriction by Class Assignment (Memory Block 1-1-62)

This Memory Block is used to allow System Speed Dial buffers to override or not override Code Restriction. Each Code Restriction Class (01~14) is assigned as Allow or Deny.

6.4.5 Tie Line Code Restriction Assignment (Memory Block 1-1-69)

This Memory Block assigns Code Restriction to be used or not used for calls made on Tie Line on a system-wide basis.

- 6.4.6 Code Restriction Class Assignment when lockout is Set (Memory Block 1-1-70)

 This Memory Block assigns the Code Restriction Class to be used when Station Lockout (Outgoing) is set at a station. Station Lockout can be set by the Attendant or from any station if allowed in System Programming.
- 6.4.7 Trunk Digit Restriction Assignment(Memory Block 4-32)

 This Memory Block is used to specify, on a per station basis, the maximum number of digits that can be dialed while on any outside line.
- 6.4.8 Code Restriction Class Assignment/Day Mode (Memory Block 4-07)

 This Memory Block is used to specify, on a per station basis, the Code Restriction Class to be used when the system or stations assigned tenant is in the Day Mode.
 - 6.4.9 Code Restriction Class Assignment/Night Mode (Memory Block 4-08)
 This Memory Block is used to specify, on a per station basis, the Code Restriction Class to be used when the system or stations assigned tenant is in the Night Mode.

6.5 Code Restriction Tables (Default Values)

6.5.1 OCC Tables with default values:

The following Memory Blocks are displayed:

OCC Table Assignment (1-1-67)

OCC Table to Trunk Group Assignment (5-03)

8-Digit Matching Table to OCC Table Assignment (1-1-68)

		TABLE 01	TABLE 02	TABLE 03	TABLE 04
	Memory Block (1-1-67) Memory Block (5-03)	minn	Se Teller L	THE PARTY OF THE P	Manyele
		T.G. 01~32	T.G. 01~32	T.G. 01-32	T.G. 01~32
	Memory Block (1-1-68)				1 10 00
_	- 40 10				
		TABLE 05	TABLE 06	TABLE 07	TABLE 08
	Memory Block (1-1-67)			2011	
	Memory Block (5-03)	7.6.01.20	7000	7000	T C 21 22
	إستنبا والماسانية الماري والسوار	T.G. 01~32	T.G. 01~32	T.G. 01~32	T.G. 01~32
	Memory Block (1-1-68)			04	
		TABLE 09	TABLE 10	TABLE 11	TABLE 12
	Memory Block (1-1-67)			15011111	
LLLLLL	Memory Block (5-03)	T.G. 01~32	T.G. 01~32	T.G. 01~32	T.G. 01~32
	Memory Block (1-1-68)		80	180	1.0.01 02
			69	180	
			01		
		TABLE 13	TABLE 14	TABLE 15	TABLE 16
	Memory Block (1-1-67)		Turrent		10×××
	Memory Block (5-03)	T.G. 01~32	T.G. 01~32	T.G. 01~32	T.G. 01~32
	Memory Block (1-1-68)				
	13				
		أخيا المراجل المتاجلين			
		Note: $X = 0 \sim$ P = 0, 1			
		N = 0, 1			

6.5.2 8-Digit Matching Tables with default values:

The following Memory Blocks are displayed:

- 8-Digit Matching Table to Normal Dial Assignment (1-1-66)
- 8-Digit Matching Table to Trunk Group Assignment (5-02)
- 8-Digit Matching Table Assignment (1-1-60)

		AT	TABLE 00		TABLE 01	,	TABLE 02		TABLE 03	
Memory Block (1	Memory Block (1-1-66) Use Table				Use Table	(8)	Use Table	Mom	Use Table	
Memory Block (5	-02)	1.7	T.G. 01~32		T.G. 01~32		T.G. 01~32	T.G. 01~32		
Memory Block (1	-1-60)	00	911	00	111111	00		00		
		01		01	Label of the Lab	01		01		
TABLE 08	- 10 3 11	02		02	111111	02	and the factors	02	111111	
		03	1111111111	03	FITEIT	03	(y Bitock (5-03)	03	111111	
		04		04	111111	04	ay Block (1-1-6	04		
		05		05		05	111111	05		
		06	013344	06	TABLEOS	06		06	1111111	
		07	1 1 1 6 1 1 6	07	LI IIII	07	8-3-1) 2001 B V	07	111111	
		08		08		08	Birth policy	08		
		09		0,9		09		09	111111	
		10	11111111	10	11433947	10		10		
		11		11		11	ry Block (I-1-6)	11		
		12	0.01-32	12	T G. 01-32	12	ry Block (5-03)	12		
		13		13		13		13		
		14		14		14		14		
		15		15	/olc: X ≈ 0- 	15		15		

Note: $X = 0 \sim 9$, *, # P = 0, 1 $N = 2 \sim 9$

The following Memory Blocks are displayed:

- 8-Digit Matching Table to Normal Dial Assignment (1-1-66)
- 8-Digit Matching Table to Trunk Group Assignment (5-02)
- 8-Digit Matching Table Assignment (1-1-60)

	TABLE 04	TABLE 05	TABLE 06	TABLE 07 Use Table T.G. 01~32		
Memory Block (1-1-66)	Use Table	Use Table	Use Table			
Memory Block (5-02)	T.G. 01~3	32 T.G. 01~32	T.G. 01~32			
Memory Block (1-1-60)	00	00	00	00		
	01	01	01	01		
-10	02	02				
	1111		02	02		
	03	03	03	03		
	04	04	04	04		
	05	05	05	05		
	06	06	06	06		
80						
	07	07	07	07		
	08	08	08	08		
	09	09	09	09		
	10	10	10	10		
	11	11	11	11		
	12	12	12	12		
	13	13	13	13		
	14	14	14	14		
	15	15	15	15		
		سيسالا لي				

Note: $X = 0 \sim 9$, *, # P = 0, 1 $N = 2 \sim 9$

The following Memory Blocks are displayed:

- 8-Digit Matching Table to Normal Dial Assignment (1-1-66)
- 8-Digit Matching Table to Trunk Group Assignment (5-02)
- 8-Digit Matching Table Assignment (1-1-60)

	TABLE 08	TABLE 09	TABLE 10	TABLE 11
Memory Block (1-1-66)	Use Table	Use Table	Jse Table	Use Table
Memory Block (5-02)	T.G. 01~32	T.G. 01~32	T.G. 01~32	
Memory Block (1-1-60)	00	00	00	00 0
	01	01	01	01
S0	02	02	02	02
	03	03	03	03
	04	04	04	04
	05	0.5	05	05
	06	06	06	06
	07	07	07	07
	08	08	08	08
	09	09	09	09
	10	10	10	10
	11	11	11	11
	12	12	12	12
	13	13	13	13
	14	14	14	14
	15	15	15	15

Note: $X = 0 \sim 9$, *, # P = 0, 1 $N = 2 \sim 9$

The following Memory Blocks are displayed:

- 8-Digit Matching Table to Normal Dial Assignment (1-1-66)
- 8-Digit Matching Table to Trunk Group Assignment (5-02).
- 8-Digit Matching Table Assignment (1-1-60)

			TABLE 12		TABLE 13		TABLE 14		TABLE 15		
Memory Bl	ock (1-1-66)		Use Table		Use Table	Use Table		Use Table Unused Tal			
Memory Bl	ock (5-02)		T.G. 01~32		T.G. 01~32		T.G. 01~32		T.G. 01~32		
Memory Bl	ock (1-1-60)	00	976	00	1800	00	1×	00	×		
WOJJA	. 0 0	01		01		01		01			
		-	1111111	-					111111		
		02	1111111	02	1111111	02		02	111111		
		03		03		03		03	and the same		
		-	111111			-	111111				
		04		04		04		04			
		05		05		05		05			
		00	111111	00		03		05			
		06		06		06		06	24.01.7		
УИЗО.		07		07		07		100			
YM20		01		0,		07		07	111111		
		08		08		08		08	NASIO		
		-				-		1	шш		
		09	1111111	09	1111111	09	1111111	09	111111		
		10		10		10		10	*****		
		_							111111		
		11	1111111	11		11		11			
		12		12		12		12			
		12		1~		14		12			
		13		13		13	wellA	13	Note		
		14		14		14		11			
		14		14		14	pagn sow as 340	14			
		15		15		15		15			

Note: $X = 0 \sim 9$, *, # P = 0, 1

 $N = 2 \sim 9$

The following Memory Blocks are displayed:

8-Digit Matching Table to Class Assignment (1-1-61)

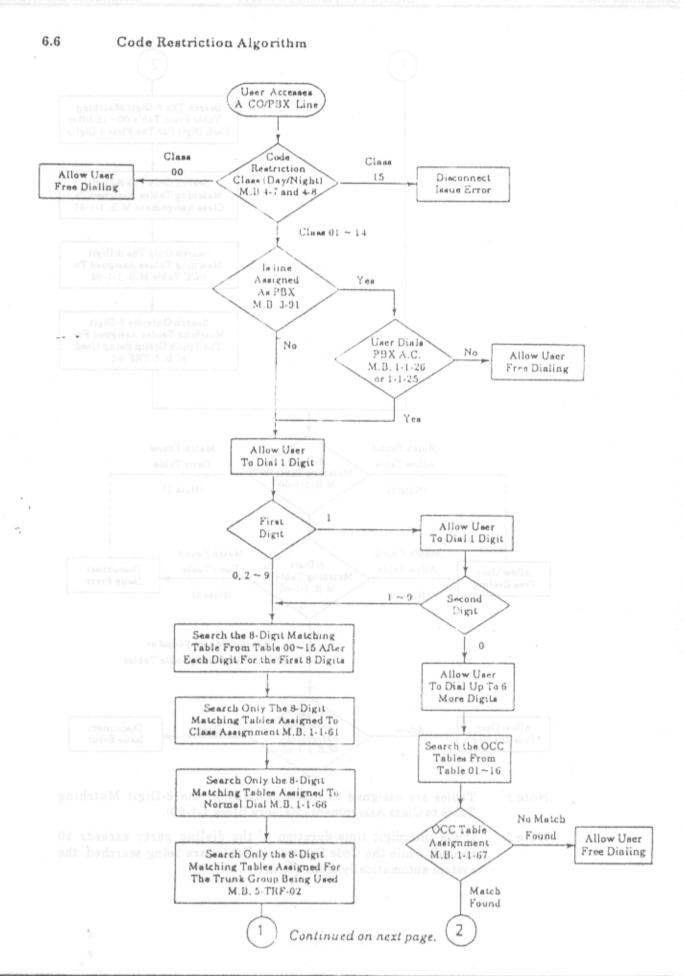
Class Allow/Deny Assignment (1-1-65)

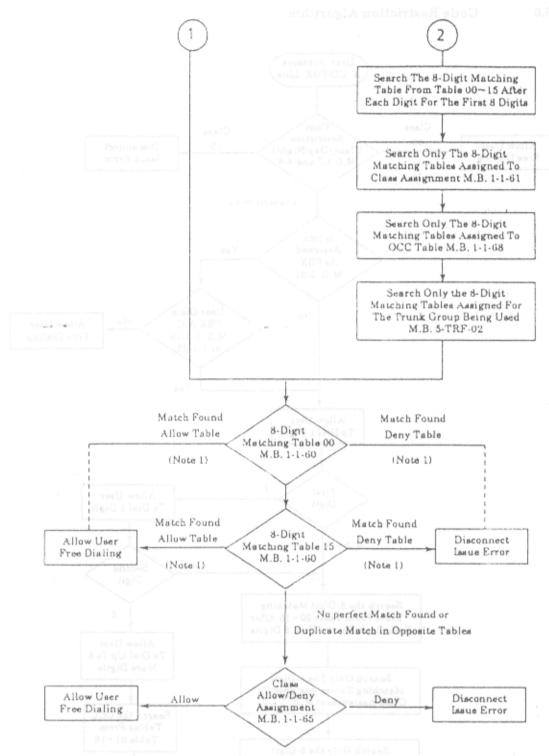
	8-Digit Matching Table									Class Allow/Deny Assignment Memory Block								
		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	(1-1-65)
mory	Class 01	Α	0	GET.				0100	093	i. 1885-pm. rep		91-	D	812		D	D	ALLOW
1-61)	Class 02	A				00		0	0.8	Lon			D	0	A	D	D	ALLOW
	Class 03	A											D	D	A	D	D	ALLOW
	Class 04	-A		I.I.		en		LL		0.0				1	Α	D	D	ALLOW
	Class 05	A		LL.		10		il.l.		Iro			ĹIJ		0.0			DENY
	Class 06	A				10				100								DENY
	Class 07	A	LL			70		41		20		LLL	1,1,1	L.	20			DENY
	Class 08	A				and l		L.L.		an	-		11		20			DENY
	Class 09	A				50			2.1	1 10				1	rn.			DENY
	Class 10	A	LL			80		14	Ш	I RO			للنا		80			DENY
	Class 11	Α				20	-			100					on			DENY
	Class 12	A	11			0.5				101								DENY
	Class 13	A	LL.									LLI	0. L					DENY
	Class 14	A	LL		i.,,			11.	LLL			111.1	1.1.					DENY

Note: A = Allow

D = Deny

Blank = Not used





Note I: Tables are assigned as Allow or Deny in the 8-Digit Matching Table to Class Assignment (Memory Block 1-1-60).

Note 2: If the interdigit time duration of the dialing party exceeds 10 seconds while the Code Restriction Tables are being searched, the system automatically drops the call.

SECTION 7 CHARACTER CODE TABLES

These tables are used for Setting Data for some of the functions available to the Electra Professional Level II System.

NOTE: Codes 166~221 and 250~252 are used for Japanese characters only.

haracter	Code
Blank	032
Jel:	033
all l	034
#	035
\$	036
%	037
&c	038
230	039
(040
)	041
*	042
+	043
236	044
8226	045
765	046
. 1	047
0	048
1	049
2	050
3	051
4	052
5	053
6	054
7	055
8	056
9	057
eine -	- 653
il.o	059
<	060
=	061
>	062
?	063

Character	Code		
@	064		
A	065		
В	066		
C	067		
D	068		
e E	069		
er F	070		
G	071		
Н	072		
I A	073		
J	074		
K	075		
C L	076		
M	077		
N	078		
0	079		
P	080		
Q	081		
R	082		
S	083		
Т	084		
U	085		
V	086		
W	087		
X	088		
Y	089		
Z	090		
	091		
¥	092		
	093		
	094		
	095		

Character	Code
eter / Code	096
	097
b	098
2 162	099
631 d	100
201е	101
1166	102
331 g	103
Talh	104
881;	105
681j	106
OT k	107
TEI1	108
m	109
n	110
0	111
р	112
q	113
r	114
8	115
er1t	116
06/u	117
A	118
w	119
У	120
у	121
Z	122
1	123
ani	124
}	125
087*	126
TD+	127

CHARACTER CODE TABLES

(continued)

Character	Code
Blank	£ 160
800 •	161
660 L	162
0011	163
101	164
201.	165
E013	166
8017	167-
8011.	168
0017	169
COLE	170
8017	171
0017	172
01112	173
Е	174
9	175
EII -	176
7"	177
7115	178
ליוו	179
TIL	180
8 7	181
カ	182
*	183
7	184
ケ	185
	186
+	187
シ	188
ス	189
te	190
'/	191

Character	Code
3 3 A	192
300 F B	193
7 9 9	194
800 7	195
880 1 8	196
000 + 3	197
470 <u>=</u> 0	198
Z	199
aro # 1	200
10 / L	201
aro /1 28	202
800 E	203
7	204
870 A M	205
TO # 0	206
00 7 9	207
180 E 0	208
80 L	209
80 × 8	210
80 E	211
180 + 1	212
٦ .	213
80 B V	214
ラ	215
lan U	216
JL ,	217
L	218
	219
7	220
2	221
" ,	222
160	223

Character	Code	
a	224	
ä	225	
acp	226	
0 E	227	
T p	228	
σ	229	
р	230	
্র	231	
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SECTION 8 DISPLAY ABBREVIATIONS and A value Co.

Abbreviations in the display have the following meanings:

ADD/DEL	: addition/deletion	IMDT	: immediate ysler: YJE
AL	: all sandgels:	IN	: incoming and unique : MOTOMS
ALM	: alarm	INC	: incoming signal detection time assignment
ANS	: answer	INDV	: individual old asonyba aspor : VOATS
ANSWR	: answer	INTRPT	: interruption Bersyn : 2VS
ASSGN	: assignment	LWST	: low-marina tone assignmewol:
AUT	: automatic	LCD	: liquid crystal display
AUTANS	: autoanswer	LN	: line noticellas : 132
BLANK	: service class	LOOP	: loop off-guard assignment
BNCE	: bounce	LNRVSPD	: Last Number/Speed Dial
BTN	: button	M	: medium
CAL	: call	MAN	: manual
CANCLD	: canceled	MF	: dual tone multi (requency (DTMF)
CKT	: circuit	MIN	: minimum
CNF	: confirmation	MOH	: music on hold
CL	: class	MSTER	: master
CLD	: CO line display	NBR	: number
CLR	: clear	NT	: night mode
CLS	: class	OUT	: outgoing
CONN	: connection	OGTM	: Outgoing Time Out Assignment
DESG	: designation	OV	: Over
DGT	: digit	PADAT	: PAD Pattern A Transmission Assignment
DISP	: display	PADAR	: PAD Pattern A Receiving Assignment
DISTM	: disconnection recognition time	PAD BT	: PAD Pattern B Transmission Assignment
DIVERT	: diversion	PADBR	: PAD Pattern B Receiving Assignment
DLY	: delay signal time	PRE	: prepause time selection
DP	: dial pulse	PBR	: push button signal receiver
DSS	: direct station selection	PBX	: private branch exchange
DY	: day mode	PRNT	: print
ESP	: external speaker	PTRN	: pattern
FWDG	: forwarding	PV	: Tie line
FLSH	: flash	PVT	: Tie line
GUARD	: Outgoing Guard Time	PWRFAIL	: power failure
H	: high	RCV	: receiving
HR	; hour	RCVR	: receiver
ICM	: Intercom (Extension)	RES	: restriction

Display Abbreviations Vanagada (continued)

	(continued)		
RINGTONE : ringing tone RLY : relay RNGTONE : ringing tone RT : route RT ADV : route advance block RVS : reversal SDT : second dial tone assignment SEND : transmission SEL : selection SLT : Single Line Telephone	SPD ST TEL TERM TMR TMD TRNS TRK TRK GP	: Speed Dial : start : telephone : terminating : timer : timed : transfer : trunk : Trunk Group	ADDIDEL ALM ANS ANS ASSON AUT AUT AUTANS
SLT : Single Line Telephone	WDSD	: wink/delay signal detection tin	ne out
mutbern 1	* W		
			CKT
			ANO
			, TO:

AD BR : PAD Pattern B Receiving Assignment
E. E. D. D. Pattern B. Receiving Assignment
E. E. : prepause time selection

FBX private branch exchange FBX private branch exchange

PV Tieline
PVT Tieline

RCV: receiving

rcom (Extension)

: Intercom (Extension)

CHAPTER 3 SYSTEM MAINTENANCE

CHAPTER 3

	OMULT TOTAL	
	SYSTEM MAINTENANCE	
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CHAPTER 3 SYSTEM MAINTENANCE JAKGITAGEGO

SECTION 1

INTRODUCTION

This chapter is to be used as a guide to diagnose and troubleshoot problems during and after system installation. The troubleshooting flow charts and general test procedures will help the technician to identify the possible cause of a problem by defining the problem area and isolating the valid symptoms.

In addition, with the System Data Upr Down Load feature, all System Programming and Speed Dial Data can be stored on diskette. (Refer to Chapter 2 - Programming in this manual.) After all System Programming has been completed, it should be down loaded onto a diskette for a backup copy of the System Programming. In case of system memory failure, the system can be up loaded from the backup diskette.

SECTION 2

OPERATIONAL CURRENT AND VOLTAGE CHECKS

- - 2.1 Power Requirements -

The effectiveness of this portion of the maintenance section depends upon the technician's ability to answer correctly all questions posed as accurately as possible. Due to external factors, it is important that no answer be assumed. For example, it cannot be assumed that a power supply is working properly because it has been replaced with another power supply. It is necessary to test the output of the power supply with a volt meter.

In the Basic KSU, this can be done by measuring +5V and -5V from the CPU-F(10)-20 KTU. The ESI-F(8)-21 KTU allows the measurement of +5V and -24V. This KTU can be used in the expansion KSU for power output measurements. (Refer to Table 3-1 - Voltage Measurement.) Before a technician can attempt any troubleshooting, the correct tools should be available.

- A. Digital or Analog Multimeter, capable of reading:
 - 1. DC current and voltage
 - 2. AC current and voltage
 - 3. DC Resistance
- B. Test Set (lineman) being capable of:
 - 1. Termination and Monitor Modes
 - 2. DTMF and Dial Pulse dialing
- C. Hand tools:
- OO to spin 917 Aliw series 1. Set of screwdrivers (flat blade and Phillips head)
 - 2. Set of pliers, long nose and diagonals
 - 3. Punch down tool
 - D. The current issue of the this manual, as well as the completed Job Specifications Worksheets. (The Electra Professional Level II Job Specifications Manual - Stock No. 722024 is included with the CPU KTU.)

SECTION 3 OPERATIONAL TEST PROCEDURES MATERY?

3.1 General

When the Electra Professional Level II System is first powered up, it performs an initialization process. During this process, the CPU-F(10)-20 KTU, in the basic KSU, scans each of the interface slots to determine the hardware configuration used. This information is stored in the Resident System Program memory with the system default values. This section provides test procedures to be used before, during, and after the initialization process.

3.2 Before Initialization

It is important that the following steps be taken by the installation technician:

A. Cable Connections

All wiring for power supplies, flat cable connectors, etc., should be checked for solid connections. (Refer to Chapter 1 - Hardware Specifications and Installation in this manual for connection instructions.)

- B. AC/DC Power

Check all power with an AC/DC multimeter. (Refer to Table 3-1 Voltage Measurement). It is recommended that this test be run with only the CPU-F(10)-20 KTU and one ESI-F(8)-21 KTU installed.

Table 3-1 Voltage Measurement

Voltages	Tolerance	Measuring Points		
<u>CPU-F(10)-20 KTU</u> + 5V - 5V	+5 ± 0.25V -5 ± 0.25V	CPU-F() TP1 GND TP2 +5V TP3 -5V		
ESI-F(8)-21KTU lo olde + 5V - 24V	+ 5 ± 0.25V - 24 ± 0.25V	ESI-F() TP1 +5V TP2 GND TP3 -24V		
AC Voltage (117 Vac) Line to Neutral Line to Conduit Ground Neutral to Conduit Ground	117 ± 15% Vac 117 ± 15% Vac .05 Vac (max.)	AC TERMINAL STRIP Line L to N Line L to G N to G		
Ring Generator (SLT)	70~120 Vac @ 20 Hz (Refer to Note below.)	Across TIP & RING of ringing SLT		
CO Line Off-hook line current	25 to 50 mA	In series with TIP side of CO line at MDF		

Note: Measurement of ring voltage may be lower if the meter is designed for measuring 60 Hz signals only.

C. Initialization Check

To determine if the system is initializing correctly, it is suggested that only the basic KSU be powered up with the CPU-F(10)-20 KTU and one ESI-F(8)-21 KTU with terminals installed. After initialization, all the terminals assigned to the ESI-F(8)-21 KTU should be able to be used for internal calls to each other. (These stations, by default, will be assigned station numbers 100~107.)

3.3 System Initialization

After the three steps in Section 3.2 (Before Installation) are completed and verified, the entire system should be initialized.

With the power off, all the interface and option cards can be installed in the basic KSU as indicated on the Job Specifications Worksheet. It is important to ensure that the battery switch (BTS) on the CPU-F(10)-20 KTU is turned off and all interface and optional KTU switches are on. At this point the technician can power up the system. This performs a First Initialization of the system. After the initialization process, each station display will show default time and date indication.

Example: 12:00 A.M. WED 01.

3.4 After Initialization

Before any programming is attempted, the battery switch (BTS) on the CPU-F(10)-20 KTU should be turned ON. This will prevent all completed programming from being lost if the system loses power.

All KTU slots should be checked in software to ensure the initialization process scanned all hardware correctly. This can be done by displaying the contents of Memory Block KTU (LK 7) - 01 (Card Interface Slot Assignment) from the System Programming terminal. (Refer to Chapter 2 - Programming for an explanation of Memory Blocks.)

A general system operation check should be performed using default values prior to System Programming.

After all previous steps have been performed and any problems corrected, the System Programming can be completed. Using the Job Specifications Worksheets from the Electra Professional Level II Job Specifications Manual (supplied with the CPU KTU) helps to simplify the programming process.

CAUTION

Ensure the battery switch (BTS) on the CPU-F(10)-20 KTU is turned ON.

After System Programming is complete, the technician should perform a Second Initialization. Performing a First Initialization a second time will cause all programming memory to be lost, whereas the Second Initialization "cleans out" or "refreshes" the system RAM without any loss of memory.

This completes the installation procedure for the Electra Professional Level II System. The technician should check the operation of each Multiline Terminal to ensure the system is working properly.

SECTION 4 TROUBLESHOOTING FLOWCHARTS

4.1 Problem Solving

To find the cause of a problem, first consider all the symptoms carefully. As each aspect of the problem is considered, the technician is guided to a probable solution. It is imperative the problem be defined as accurately as possible, so the most efficient steps to a solution can be taken. The troubleshooting flow charts in this section will help define problems and direct the technician through the troubleshooting steps.

A. System Down

Although this term is used to describe many conditions, it will only be used in this section to describe one of the following situations:

 No access to internal dial tone on any Multiline Terminal or Single Line Telephone installed.

- 2. No LED indications or no display indications on any Multiline Terminal installed.
- 3. No system tones are generated.
- B. Partial Operation

 This term will refer to any situation which cannot be completely described under the conditions of a SYSTEM DOWN. (Refer to Table 3-2 Index Table of Flowcharts listing these conditions.)
 - C. Reset Definition
 In the troubleshooting flow charts, the technician is at times directed to reset the station and/or KTU.
 - Terminal Reset Is accomplished by unplugging the station line cord from the station and then plugging it back in.
 - KTU Reset The KTUs are reset by turning the MB switch on the KTU to the OFF position and then turning it back ON. To give capacitors in the KTU time to discharge, allow approximately five seconds before turning the switch back to the ON position.
 - Before reinstalling the following KTUs, the battery ON/OFF switches should be left off for at least two minutes.

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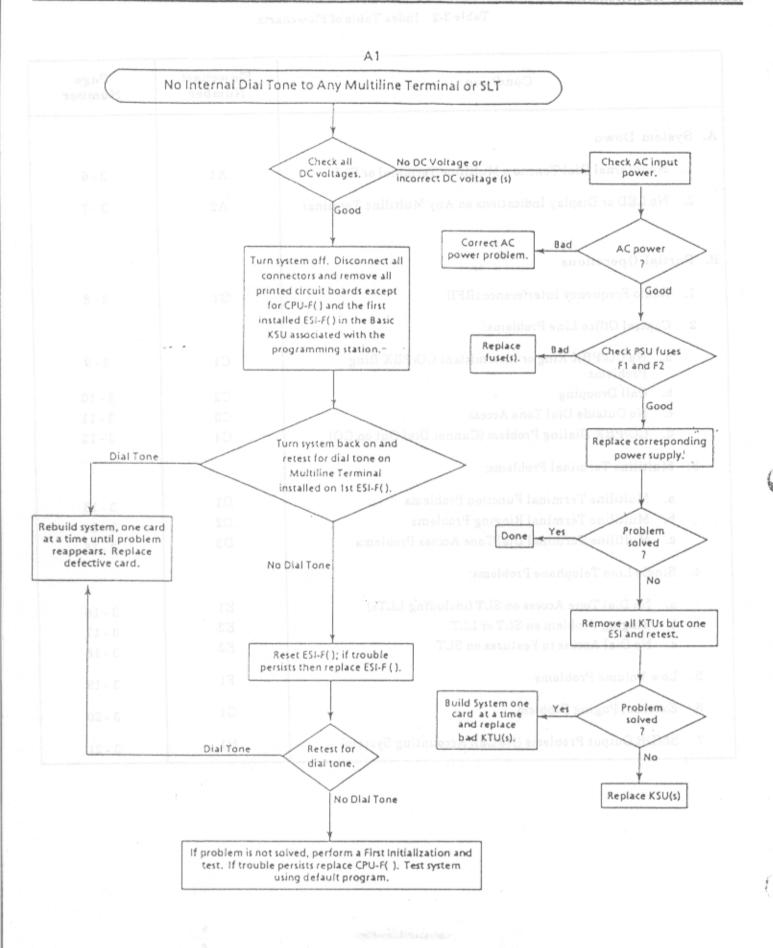
Electra Professional Level II Job Specifications Manual (supplied with the CPU KTU)

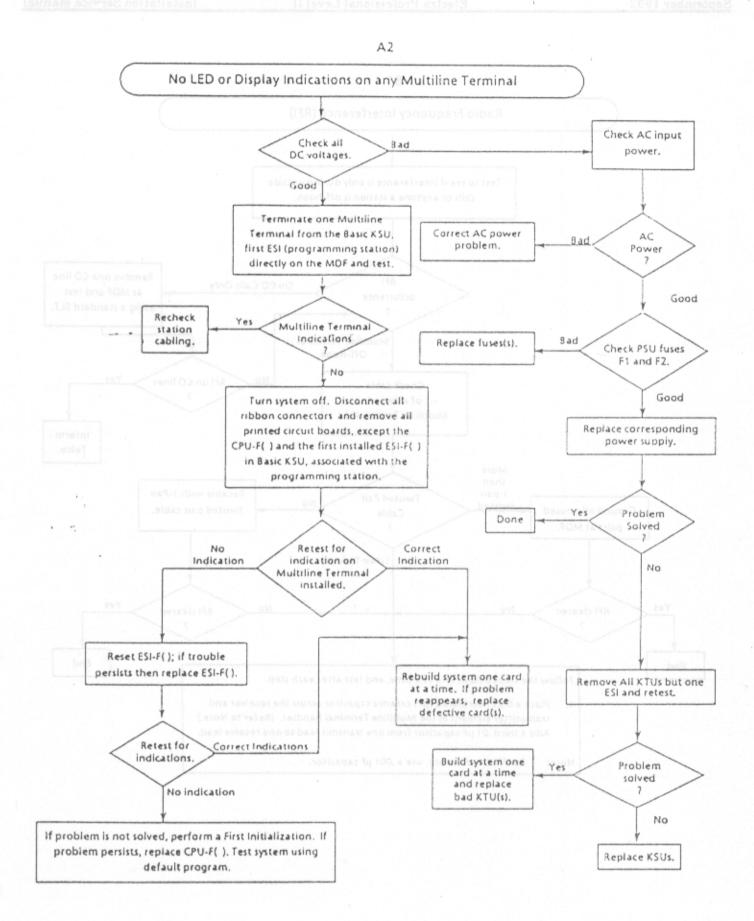
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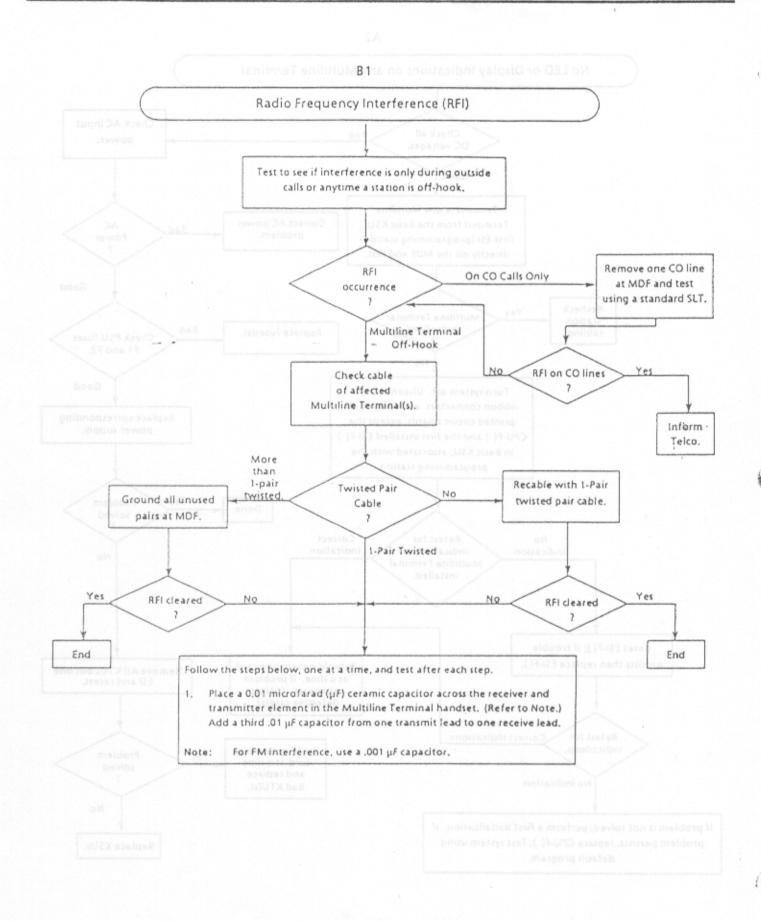
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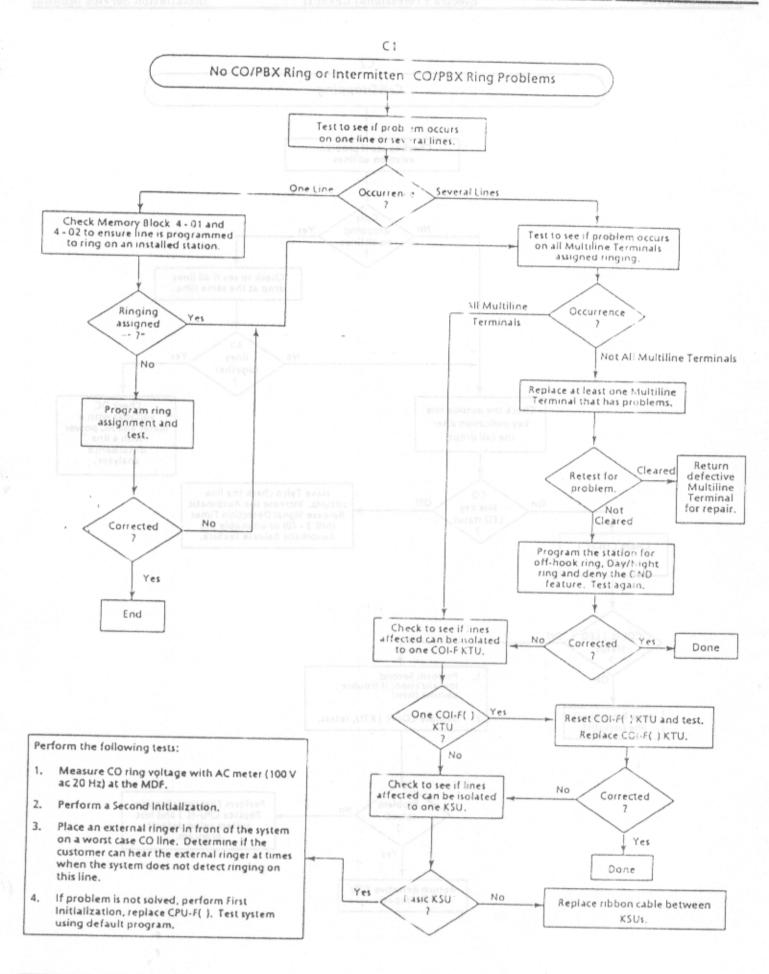
Table 3-2 Index Table of Flowcharts

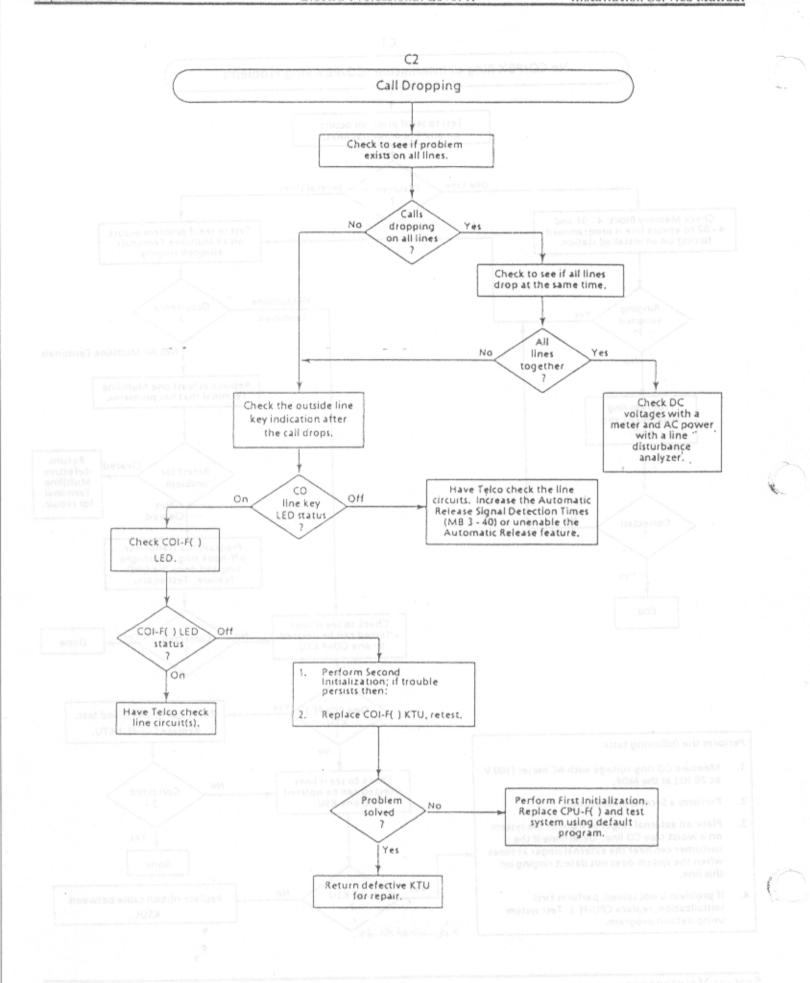
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A. System Down		
1. No Internal Dial Tone to a Multiline Terminal or SLT	Al	3 - 6
2. No LED or Display Indications on Any Multiline Terminal	A2	3 - 7
3. Partial Operations		
1. Radio Frequency Interference (RFI)	B1	3 - 8
2. Central Office Line Problems:		
a. No CO/PBX Ring or Intermittent CO/PBX Ring Problems	Cı	3 - 9
b. Call Dropping	C2	3 - 10
c. No Outside Dial Tone Access	C3	3 - 11
d. CO/PBX Dialing Problem (Cannot Dial Out on CO)	C4	3 - 12
3. Multiline Terminal Problems:		anoT laiG
a. Multiline Terminal Function Problems	D.	
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2. Single Sine Telephone Problems:		
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b. Ringing Problem on SLT or LLT	E2	3 - 17
c. No Dial Access to Features on SLT	E3	3 - 18
5. Low Volume Problems	F1	3 - 19
6. External Paging Problem	GI	3 - 20
7. SMDR Output Problems (No Call Accounting System)	H1	3 - 21

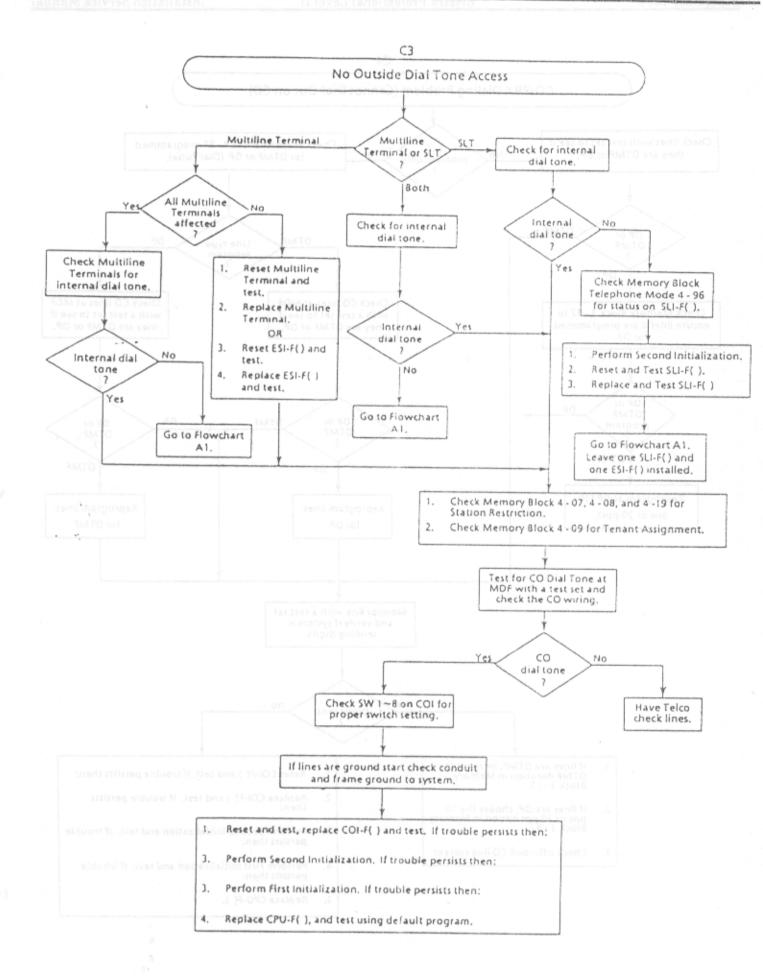


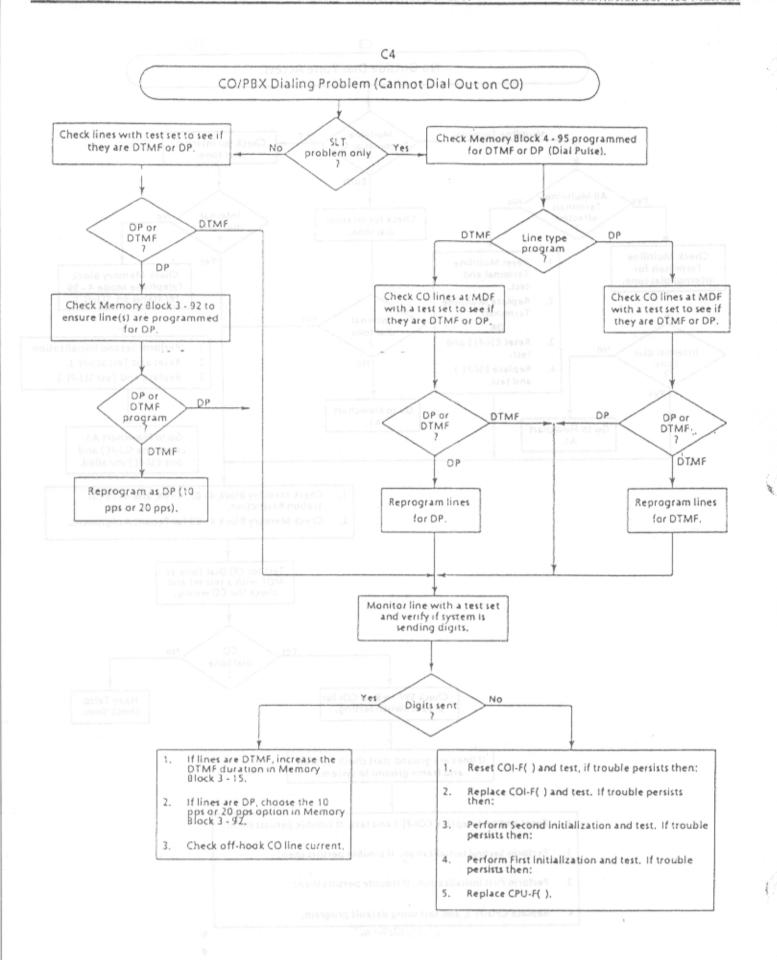


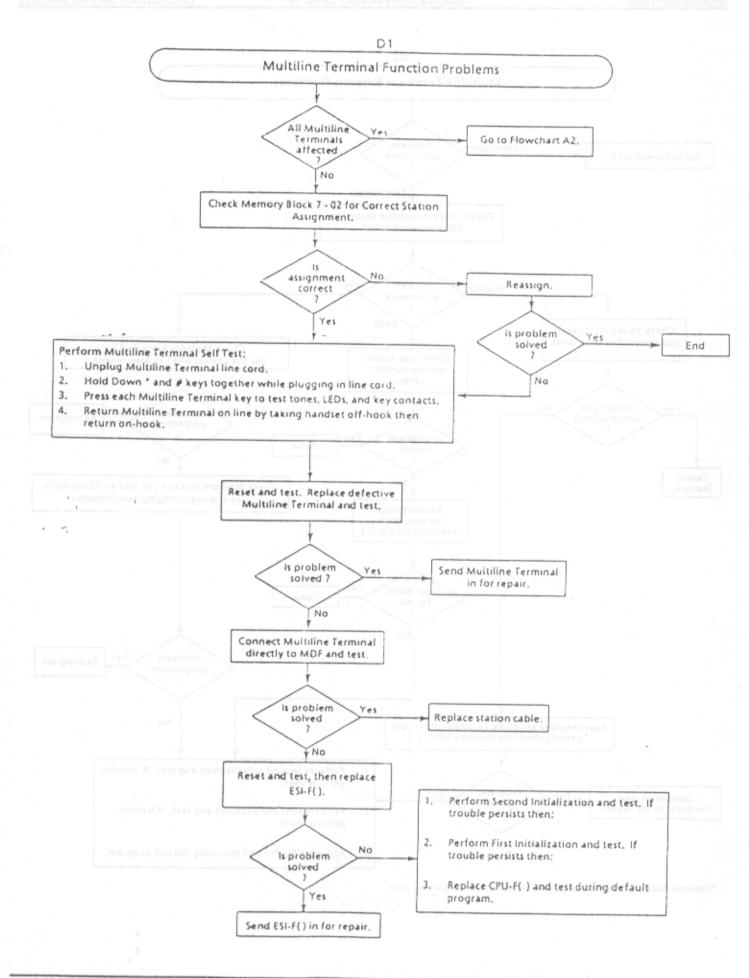


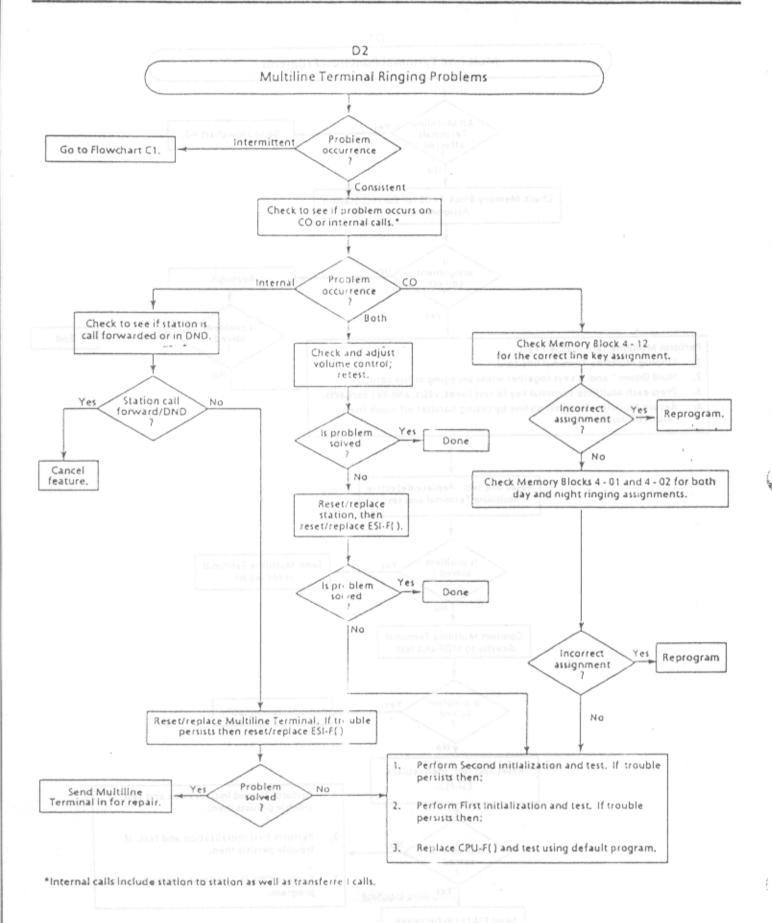












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