

**NEC**

NDA-24081  
ISSUE 2

# **NEAX<sup>®</sup>1400 IMS**

## **Feature Programming Manual**

**NEC America, Inc.**

OCTOBER, 1991



## **LIABILITY DISCLAIMER**

NEC America, Inc. reserves the right to change the specifications, functions, or features, at any time, without notice.

NEC America, Inc. has prepared this document for use by its employees and customers. The information contained herein is the property of NEC America, Inc. and shall not be reproduced without prior written approval from NEC America, Inc.

Copyright 1991

**NEC America, Inc.**

Printed in the U.S.A.





**NEAX1400 IMS**  
**Feature Programming Manual**

**TABLE OF CONTENTS**

	Page		Page
<b>INTRODUCTION</b> .....	1	Trunk Group Busy Display .....	57
<b>1. PURPOSE</b> .....	1	Unsupervised Trunk to Trunk	
<b>2. OUTLINE OF THE MANUAL</b> ....	1	Transfer By Attendant .....	59
<b>DESCRIPTION OF SERVICE FEATURES</b>	2	Attendant Console (SN610 ATTCON) .....	60
<b>1. GENERAL</b> .....	2	Attendant Called/Calling Name	
<b>2. DESCRIPTION OF SERVICE FEATURES</b> .....	2	Display .....	63
<b>3. DESCRIPTION OF INDEX</b> .....	3	Attendant Call Selection .....	66
Account Code .....	4	Attendant Console	
Add-On Module .....	7	Lockout-Password .....	68
Alphanumeric Display .....	11	Attendant Do not Disturb	
Announcement Service .....	17	Setup and Cancel .....	70
Answer Key .....	24	Attendant Interposition	
Attendant Assisted Calling .....	26	Calling/Transfer .....	72
Attendant Camp-On .....	29	Attendant Listed	
Attendant Console (HA-610Z ATTCON) .....	31	Directory Number .....	74
Attendant Busy Lamp Field .....	34	Attendant Loop Release .....	78
Attendant Call Selection .....	36	Attendant Programming .....	79
Attendant Console Lockout .....	38	Call Queuing .....	82
Attendant Do Not Disturb Setup and		Call Splitting .....	83
Cancel .....	39	Call Waiting Display .....	85
Attendant Interposition Transfer .....	40	Common Route Indial .....	86
Attendant Listed Directory Number .....	42	Incoming Call Identification .....	89
Attendant Loop Release .....	46	Individual Trunk Access .....	90
Call Queuing .....	47	Multiple Console Operation .....	91
Call Waiting LED .....	48	Multi-Function Key .....	92
Common Route Indial .....	49	Pushbutton Calling-Attendant	
Incoming Call Identification .....	52	Only .....	94
Individual Trunk Access .....	53	Serial Call .....	95
Multiple Console Operation .....	54	Trunk Group Busy Display .....	96
Pushbutton Calling-Attendant		Unsupervised Trunk-To-Trunk	
Only .....	55	Transfer by Attendant .....	98
Serial Call .....	56	Attendant Delay Announcement .....	99
		Attendant Overflow .....	101
		Attendant Override .....	103
		Authorization Code .....	106
		Automated Attendant .....	113
		Automatic Call Distribution .....	119
		Automatic Call Distribution with MIS .....	127
		Automatic Camp-On .....	128
		Automatic Recall .....	129

## TABLE OF CONTENTS (CONTINUED)

	Page		Page
Background Music .....	131	Direct Outward Dialing (DOD) .....	243
Boss/Secretary Calling .....	135	Direct Station Selection/Busy	
Broker's Call .....	140	Lamp Field (DSS/BLF) Console .....	247
Call Back .....	141	Distinctive Ringing .....	249
Call Forwarding .....	143	Do Not Disturb .....	251
Call Forwarding-All Calls .....	144	Dual Hold .....	255
Call Forwarding-Busy Line .....	147	E&M Tie Line Access .....	256
Call Forwarding-No Answer .....	150	Executive Calling .....	263
Call Forwarding-Destination .....	152	Executive Override .....	264
Multiple Call Forwarding-All Calls .....	154	External Paging with Meet-Me .....	266
Multiple Call Forwarding-Busy Line .....	156	Flexible Line Key Assignment .....	271
Multiple Call Forwarding-		Flexible Numbering Plan .....	272
No Answer .....	158	Flexible Ringing Assignment .....	275
Split Call Forwarding-Busy Line .....	160	Forced Account Code .....	278
Group Diversion .....	163	Group Listening .....	283
Call Park .....	165	Hold .....	284
Call Park-System .....	166	Call Hold .....	285
Call Park-Tenant .....	169	Exclusive Hold .....	287
Call Pickup .....	171	Hotline .....	288
Call Pickup Direct .....	172	Individual Attendant Access .....	293
Call Pickup-Group .....	174	Intercept Announcement .....	294
Call Pickup-Designated Group .....	176	Intercom .....	296
Call Transfer .....	178	Manual Intercom .....	297
Call Transfer-Attendant .....	179	Automatic Intercom .....	300
Camp On .....	180	Dial Intercom .....	303
CCSA Access .....	185	Internal Tone/Voice Signaling .....	306
Centrex Compatibility .....	187	Internal Zone Paging with Meet-Me .....	309
Class of Service .....	189	Last Number Redial .....	312
Code Restriction .....	196	Least Cost Routing-3/6-Digit .....	314
Conference .....	202	Line Lockout .....	335
Consecutive Speed Dialing .....	206	Line Preselection .....	337
Consultation Hold .....	213	Maintenance Administration	
Customer Administration		Terminal (MAT) .....	338
Terminal (CAT) .....	215	Peg Count .....	341
Data Line Security .....	219	Remove and Restore Service .....	342
Delayed Ringing .....	220	Message Reminder .....	343
Diagnostics .....	221	Message Waiting .....	348
Dial Conversion .....	223		
Direct Digital Interface .....	227		
Direct Inward Dialing (DID) .....	230		
Direct Inward System Access (DISA) .....	235		
Direct Inward Termination (DIT) .....	241		

## TABLE OF CONTENTS (CONTINUED)

	Page		Page
Miscellaneous Trunk Access .....	352	Resident System Program .....	423
Code Calling Equipment Access .....	353	Return Message Schedule Display .....	426
Dictation Equipment Access .....	356	Ringing Line Pickup .....	428
Foreign Exchange (FX) Access .....	358	Route Advance .....	430
Radio Paging Equipment Access .....	359		
Wide Area Telephone Service (WATS) Access .....	365	Save and Repeat .....	432
Multiline Terminal Attendant Position .....	366	Security Alarm .....	434
Music On Hold .....	375	Software Line Appearance .....	435
		Station Hunting .....	437
Night Service .....	379	Station Hunting-Circular .....	438
Attendant Night Transfer .....	380	Station Hunting-Terminal .....	440
Call Rerouting .....	382	Station Hunting-Secretarial .....	442
Day/Night Mode Change by Attendant Console .....	383	Station Message Detail Recording (SMDR) .....	444
Day/Night Mode Change by Station Dialing .....	385	Station Speed Dialing .....	446
Night Connection-Fixed .....	387	Step Call .....	453
Night Connection-Flexible .....	389	Supervisory Control of Peripheral Equipment .....	454
Trunk Answer Any Station (TAS) .....	390	System Speed Dialing .....	455
Off-Hook Alarm .....	395	Tenant Service .....	459
Off Premises Extension .....	397	Tie Line Tandem Switching .....	462
		Timed Queue .....	464
Periodic Time Indication Tone .....	398	Timed Reminder .....	466
Pooled Line Access .....	400	Trunk-Direct Appearances .....	474
Priority Call .....	402	Trunk Queuing-Outgoing .....	476
Privacy/Privacy Release .....	404	Trunk-to-Trunk Connection .....	478
Private Lines .....	406		
Proprietary Multiline Terminal .....	407	Uniform Call Distribution (UCD) with Overflow .....	481
Automatic Idle Return .....	408	Uniform Numbering-Voice & Data .....	489
Calling Name and Number Display .....	409		
Multiple Line Operation .....	410	Variable Timing Parameters .....	500
Off-Hook Voice Announcement .....	411	Voice Mail Integration .....	508
Prime Line Pickup .....	415		
Recall Key .....	416		
Relay Control Function Key .....	418		
Ring Frequency Control .....	420		

The following features require no programming. Additional information on these features may be found in the NEAX1400 IMS Features and Specifications.

- *Alarm Indications*
- *Attendant Console (HA-610Z ATTCON)*
  - *Attendant Called/Calling Number*
  - *Attendant Lamp Check*
  - *Attendant Training Jacks*
  - *Audible Indications Control*
  - *Call Processing Indication*
  - *Call Splitting*
  - *Time Display*
- *Attendant Console (SN610 ATTCON)*
  - *Attendant Called/Calling Number*
  - *Attendant Lamp Check*
  - *Attendant Training Jacks*
  - *Audible Indications Control*
  - *Call Processing Indication*
  - *Time Display*
- *Attendant Lockout*
- *Call Forwarding*
  - *Attendant Call Forwarding Setup and Cancel*
  - *Call Forwarding - Override*
- *Call Transfer - All Calls*
- *Elapsed Call Timer*
- *Feature Activation from Secondary Extension*
- *Handsfree Answerback*
- *Handsfree Dialing and Monitoring*
- *Hold - Nonexclusive Hold*
- *Maintenance Administration Terminal (MAT)*
  - *Configuration Report*
  - *Maintenance Printout*
- *Power Failure Transfer*
- *Proprietary Multiline Terminal*
  - *Called Station Status Display*
  - *Handsfree Unit*
  - *I-Hold/I-Use Indication*
  - *Microphone Control*
  - *Volume Control*
- *Remote Maintenance*
- *Reserve Power*

## INTRODUCTION

### 1. PURPOSE

This manual provides the description of the service features provided by the NEAX1400 IMS. In addition to describing the function and service condition, the information necessary for installing and programming each service feature is also contained.

This manual can be used for the following purposes:

- Service feature addition or deletion
- Troubleshooting
- Training for operation and maintenance.

### 2. OUTLINE OF THE MANUAL

This manual provides a description of each service feature containing the outline of the function and procedures for installation and programming. **IF A FEATURE REQUIRES NO PROGRAMMING, IT WILL NOT BE INCLUDED IN THIS MANUAL.** A list of these features is located at the end of the Table of Contents. Please refer to the NEAX1400 Features and Specifications for more information on these features.

This manual covers the service features provided by voice communication system without any Application Processors (AP). For the data communication system and Station Message Detail Recording (SMDR), Hotel System, refer to the individual manuals listed below.

- SMDR System Manual [ND- 43651 (E)] Stock# 140486
- Data Communication Manual [ND- 43652 (E)] Stock# 140483
- Hotel System Manual [ND- 43653 (E)] Stock# 140484

For information related to Common Channel Interoffice Signaling (CCIS), refer to the following:

- CCIS System Manual [ND-44359 (E)], Stock # 140490

## DESCRIPTION OF SERVICE FEATURES

### 1. GENERAL

This section provides a detailed description of each service feature.

### 2. DESCRIPTION OF SERVICE FEATURES

The description of each service feature consists of the following items:

- **GENERAL DESCRIPTION**  
This section outlines the function of each service feature.
- **STATION APPLICATION**  
This section describes the terminal to be used for each service feature.
- **OPERATING PROCEDURE**  
This section provides the operations for the service feature that users can access.
- **SERVICE CONDITION**  
This section provides various conditions pertaining to the provision of the service feature and interaction with other features.
- **PROGRAMMING**  
This section provides the procedures for programming the service feature. If the service feature is functioning in conjunction with other features, refer to the sections containing the information pertaining to those features.

In the programming procedure, the meaning of (1), (2), and the ◀ icons are as follows:

- (1) : 1st Data
- (2) : 2nd Data
- ◀ : Initial Data

With the system data clear command (CM00, CM01), the data with this marking is automatically assigned for each command.

**INITIAL**: System Initialization

After entering the data, system initialization is required (press SW4 on the MP Board).

**Note:** *The data in bold-face refers to the Resident System Program. For details, refer to Chapter 7 of the System Programming Manual.*

- **HARDWARE REQUIRED**

In this section, any hardware required for the feature (such as an interface board or external drive) is listed, with the exception of the following:

- (a) Single-line telephone set and interface card (PK-2LC)
- (b) Central Office Trunk Card (PK-2COT)
- (c) Attendant Console and interface board (PJ-CS00)

### **3. INDEX**

The index is at the back of this manual. It is an alphabetical index of the features, which will help you find a feature's pages quickly. The index covers only those features which require programming.

## ACCOUNT CODE

### GENERAL DESCRIPTION

This feature, when used with Station Message Detail Recording (SMDR), allows station users and Attendants to enter a cost accounting or client billing code (up to 16 digits) into the system.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

To enter an Account Code from a station before accessing an outside line:

1. Lift the handset and receive dial tone.
2. Enter Account Code feature access code or press Account Code feature access key.
3. Enter Account Code.
4. Receive dial tone and dial desired number (including outside line access code).

To enter an Account Code from a Multiline Terminal while connected to an outside line:

1. Press Account Code feature access key; conversation continues.
2. Enter the Account Code.

To enter an Account Code from the Attendant Console:

1. While connected to an outside line, press the START key.
2. Enter the Account Code feature access code.
3. Enter the Account Code.
4. Dial desired station number.

From a Single-Line Telephone:

1. Press the FLASH key (or momentarily press the hookswitch) and receive feature dial tone.
2. Enter the Account Code feature access code.
3. Enter the Account Code and receive feature dial tone again.
4. Return to original outside line by pressing the FLASH key (or momentarily pressing the hookswitch).

OR

Dial a station number to transfer the call.

To enter an Account Code after Authorization Code:

1. Lift handset and receive dial tone.
2. Enter feature access code for Authorization Code.
3. Enter Authorization code.
4. Receive dial tone.
5. Enter number to be called.
6. While connected to an outside line, press the FLASH key and receive feature dial tone and enter the Account Code feature access code.

OR

Press Account Code feature access key.

7. Enter the Account Code.



## ACCOUNT CODE (CONT'D)

### SERVICE CONDITIONS

1. The maximum number of digits in an *Account Code* is 10 when using the NEAX2400 SMDR format; otherwise, the maximum is 16. There is no limitation to the number of *Account Codes* used per system. The feature access code for *Account Code* entry can be one to three digits.
2. A station user can enter an *Account Code* of fewer digits than the maximum length defined and indicate the end of the entry by pressing the # key. Do not use the # key as an *Account Code* digit, it is reserved to designate the end of the *Account Code* entry.
3. *Account Code* entry can be performed with an outside party on *Consultation Hold*. In this case, feature dial tone is received instead of dial tone after entering the *Account Code*.
4. Stations are assigned this feature through *Class of Service*.
5. *Account Codes* can be output in the SMDR record for calls handled by *Trunk Queuing - Outgoing* during connection to the outside line.
6. When multiple *Account Codes* are entered for the same call, only the last code entered will be recorded by SMDR.

## ACCOUNT CODE (CONT'D)

### PROGRAMMING

START	DESCRIPTION	DATA
CM08	Specify the Service Set Tone sent after dialing the access code for Account Code.	(1) 362 (2) 0/1 ◀: No Tone/Service Set Tone (SST)
CM12	Assign the Class of Service for the Account Code to the required stations.	• CM12, YY = 02 (Service Restriction Class (A) (00 – 15 ◀))  • CM15, YY = 30 (1) Service Restriction Class (A) (00 – 15) assigned by CM12, YY=02 (2) 1 ◀ : Allowed
CM15		
CM42	Specify the maximum number of digits for Account Codes.  <b>Note:</b> <i>If the "2400 Format" is assigned as SMDR message format, the maximum number of digits is 10. (See Command D001-82/102 of SMDR System Manual.)</i>	(1) 10: Max.number of digits for Account Codes (2) Max. number of digits (01 – 16 ◀) <b>Note:</b> <i>If no data is entered, the default is 10.</i>
CM20	Assign access code for Account Codes.	• Y=0 – 3 (Numbering Plan Group 0 – 3) (1) X – XXX: Access Code (*#) (2) 085
CM90	Assign Account Code feature access key to a Multiline Terminal.	• YY=00 (1) Primary Extension No. + [ ] + Key No. (2) F0085
END		

### HARDWARE REQUIRED

SMDR (PJ-AP00 Board and cables)

## **ADD-ON MODULE**

### **GENERAL DESCRIPTION**

This feature allows the Add-On Module to be combined with a Multiline Terminal when there are insufficient line or trunk keys provided at the Multiline Terminal. When the EDE-30-2 keys are programmed as line/trunk keys, the additional 25 lines/trunks and the existing lines/trunks set for the Multiline Terminal can be accessed directly. (Max. 41 lines/trunks).

The station speed dialing function can be assigned for all keys of the EDE-30-2 unit. Also, one of the last three keys can be used as a Day/Night change key.

### **STATION APPLICATION**

Not Applicable.

### **OPERATING PROCEDURE**

If the EDE-30-2 unit is used as an Add-On Module, its operating procedure is the same as that of the Multiline Terminal. If any key of the EDE-30-2 is used for station speed dialing function, the operating procedure is the same as the station speed dialing function.

### **SERVICE CONDITIONS**

1. Up to eight EDE-30-2 units, when used as Add-On Modules or DSS/BLF consoles, can be connected to a Port Interface Module (PIM), and up to 32 units in total can be connected to four PIM systems.
2. Only one Add-On Module can be connected to a Multiline Terminal providing a maximum of up to 41 line/trunk keys. (16 lines of Dterm Series II and 25 lines of Add-On Modules).
3. A combination of Multiline Terminal with Add-On Module unit must be done in the same PIM system.
4. The number of Multiline Terminals and EDE-30-2 units used as Add-On modules must not exceed 256.
5. Trunks and lines (other Multiline Terminal's primary line, virtual line, and single line) can be set for Add-On module unit lines and keys.
6. The following can also be set for line/trunk keys other than those mentioned in step 5 above: House phones, hot lines, manual intercoms, automatic intercoms, and dial intercoms.
7. Lamp indication on the Add-On module unit is the same as that of Multiline Terminals.
8. Boss/secretary transfer and override functions set are available for line keys of Add-On module.
9. If a line/trunk in the Add-On module unit is called, the ringer of the connected Multiline Terminal rings. The Multiline Terminal volume is used to control the ringer volume.
10. Neither data line nor pooled line can be set to any line/trunk keys of the Add-On module.
11. If the resident system program is used to set system data, a DSS/BLF console circuit number is set to the EDE-30-2 unit.

## ADD-ON MODULE (CONT'D)

12. For details on keys that can be used for the station speed dialing function, refer to the station speed dialing function. One of the last three keys can be used as day/night key.
13. A 2DLC Card must be provided when using the EDE-30-2.
14. Up to 25 lines/trunks can be assigned for the Add-On Module, but the delayed ringing function is only available for the first 16 lines/trunks.

### PROGRAMMING

START	DESCRIPTION	DATA
<div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">CM10</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">CM98</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">CM12</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">CM90</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">A</div>	<p>Assign the Add-On Module Number to its associated LEN.</p> <p><b>Note:</b> <i>When the data assignment of both DSS Console and Add-On Module are required, the same number (the last two digits of the data) cannot be used.</i></p> <p>Assign the Multiline Terminal which will be associated with the Add-On Module.</p> <p><b>Note:</b> <i>The Multiline Terminal and the Add-On Module must be in the same PIM (Port Interface Module).</i></p> <p>Assign the Class of Service for the accommodation of Single-Line Telephone to Multiline Terminal. (Assignment for Single-Line Telephone only).</p> <p>Assign the station and trunk numbers to the keys on each Add-On Module.</p> <p><b>Note:</b> <i>Single-Line, Virtual Line or Primary Extension can be assigned on Add-On Module.</i></p>	<p>(1) 0000 – 0511 (LEN No.)                  (2) EC00 – EC31: Add-On Module No.                  For PIM0: EC00 – EC07                  For PIM1: EC08 – EC15                  For PIM2: EC16 – EC23                  For PIM3: EC24 – EC31</p> <p style="text-align: right;"><b>Note</b></p> <p>• Y=0                  (1) 00 – 31 (Add-On Module No.: Last two digits of EC00 – EC31 assigned by CM10.)                  (2) X – XXXX (Primary Extension Number) <b>Note</b></p> <p>• YY=05                  (1) X – XXXX: Station No.                  (2) 0: Accommodated</p> <p>• YY=00                  (1) Primary Extension No. + <span style="border: 1px solid black; padding: 0 5px;"> </span> + Add-On Module Key No. (30 – 54)                  (2) <span style="border-left: 1px solid black; border-bottom: 1px solid black; padding-left: 5px;">X – XXXX (Station No.)</span> <b>Note</b>  <span style="border-left: 1px solid black; border-bottom: 1px solid black; padding-left: 5px;">DXXX</span>  <span style="border-left: 1px solid black; padding-left: 5px;">000 – 255 (Trunk No.)</span></p>

**ADD-ON MODULE (CONT'D)**



DESCRIPTION	DATA																																
<p>Assign the Automatic/Manual/Dial Intercom key to each Add-On Module, if required.            For details, refer to INTERCOM.</p>	<ul style="list-style-type: none"> <li>• YY=00</li> <li>(1) Primary Extension No. + <input type="text"/></li> <li style="padding-left: 20px;">+ Add-On Module Key No. (30–54)</li> </ul> <div style="margin-left: 20px;"> <table style="border-collapse: collapse;"> <tr> <td style="border-left: 1px solid black; padding-left: 5px;">A000</td> <td rowspan="3" style="border-left: 1px solid black; padding-left: 5px;">} Automatic Intercom No.</td> </tr> <tr> <td style="padding-left: 5px;">}</td> </tr> <tr> <td style="padding-left: 5px;">A031</td> </tr> <tr> <td style="border-left: 1px solid black; padding-left: 5px;">A100</td> <td rowspan="3" style="border-left: 1px solid black; padding-left: 5px;">} Manual Intercom No.</td> </tr> <tr> <td style="padding-left: 5px;">}</td> </tr> <tr> <td style="padding-left: 5px;">A131</td> </tr> <tr> <td style="border-left: 1px solid black; padding-left: 5px;">A200</td> <td rowspan="3" style="border-left: 1px solid black; padding-left: 5px;">} Dial Intercom No.</td> </tr> <tr> <td style="padding-left: 5px;">}</td> </tr> <tr> <td style="padding-left: 5px;">A700</td> </tr> <tr> <td style="border-left: 1px solid black; padding-left: 5px;">A201</td> <td rowspan="3" style="border-left: 1px solid black; padding-left: 5px;">} Manual Intercom No.</td> </tr> <tr> <td style="padding-left: 5px;">}</td> </tr> <tr> <td style="padding-left: 5px;">A701</td> </tr> <tr> <td style="border-left: 1px solid black; padding-left: 5px;">A224</td> <td rowspan="3" style="border-left: 1px solid black; padding-left: 5px;">} Dial Intercom No.</td> </tr> <tr> <td style="padding-left: 5px;">}</td> </tr> <tr> <td style="padding-left: 5px;">A724</td> </tr> <tr> <td style="border-left: 1px solid black; padding-left: 5px;">B000</td> <td rowspan="3" style="border-left: 1px solid black; padding-left: 5px;">} Dial Intercom No.</td> </tr> <tr> <td style="padding-left: 5px;">}</td> </tr> <tr> <td style="padding-left: 5px;">B900</td> </tr> <tr> <td style="border-left: 1px solid black; padding-left: 5px;">B001</td> <td rowspan="3" style="border-left: 1px solid black; padding-left: 5px;">} Dial Intercom No.</td> </tr> <tr> <td style="padding-left: 5px;">}</td> </tr> <tr> <td style="padding-left: 5px;">B901</td> </tr> <tr> <td style="border-left: 1px solid black; padding-left: 5px;">B024</td> <td rowspan="3" style="border-left: 1px solid black; padding-left: 5px;">} Dial Intercom No.</td> </tr> <tr> <td style="padding-left: 5px;">}</td> </tr> <tr> <td style="padding-left: 5px;">B924</td> </tr> </table></div>	A000	} Automatic Intercom No.	}	A031	A100	} Manual Intercom No.	}	A131	A200	} Dial Intercom No.	}	A700	A201	} Manual Intercom No.	}	A701	A224	} Dial Intercom No.	}	A724	B000	} Dial Intercom No.	}	B900	B001	} Dial Intercom No.	}	B901	B024	} Dial Intercom No.	}	B924
A000	} Automatic Intercom No.																																
}																																	
A031																																	
A100	} Manual Intercom No.																																
}																																	
A131																																	
A200	} Dial Intercom No.																																
}																																	
A700																																	
A201	} Manual Intercom No.																																
}																																	
A701																																	
A224	} Dial Intercom No.																																
}																																	
A724																																	
B000	} Dial Intercom No.																																
}																																	
B900																																	
B001	} Dial Intercom No.																																
}																																	
B901																																	
B024	} Dial Intercom No.																																
}																																	
B924																																	
<p>Assign the Station Speed Dialing to the keys on each Add-On Module, if required.            For details, refer to STATION SPEED DIALING.</p>	<ul style="list-style-type: none"> <li>• YY=00</li> <li>(1) Primary Extension No. + <input type="text"/></li> <li style="padding-left: 20px;">+ Add-On Module Key No. (30–59, 87–89)</li> <li>(2) <b>F11XX</b></li> </ul> <div style="margin-left: 20px;"> <table style="border-collapse: collapse;"> <tr> <td style="border-left: 1px solid black; padding-left: 5px;">00:</td> <td style="padding-left: 5px;">Station Speed Dialing 00</td> </tr> <tr> <td style="border-left: 1px solid black; padding-left: 5px;">}</td> <td style="padding-left: 5px;">}</td> </tr> <tr> <td style="border-left: 1px solid black; padding-left: 5px;">99:</td> <td style="padding-left: 5px;">Station Speed Dialing 99</td> </tr> </table> </div>	00:	Station Speed Dialing 00	}	}	99:	Station Speed Dialing 99																										
00:	Station Speed Dialing 00																																
}	}																																
99:	Station Speed Dialing 99																																

## ADD-ON MODULE (CONT'D)

	DESCRIPTION	DATA
<div style="border: 1px solid black; width: 20px; height: 20px; margin: 0 auto; text-align: center; line-height: 20px;">B</div> <div style="border: 1px solid black; width: 60px; height: 25px; margin: 5px auto; text-align: center;">CM90</div>	<p>Assign the Day/Night Key on each Add-On Module, if required.</p> <p>Specify the tone ringer enabled on call termination to each line/trunk key on each Add-On Module, if required.</p> <p>Assign the Delayed Ringing feature to each line/trunk key on an Add-On Module, if</p> <p><b>Note:</b> <i>Delayed Ringing can be assigned to the first 16 line/trunk keys (Key No. 30-45).</i></p>	<ul style="list-style-type: none"> <li>• YY=00               <ol style="list-style-type: none"> <li>(1) Primary Extension No. + <input style="width: 20px; height: 15px;" type="text"/> + Add-On Module Key No. (87 – 89)</li> <li>(2) F0043: Day/Night Key</li> </ol> </li> <li>• YY=01               <ol style="list-style-type: none"> <li>(1) Primary Extension No. + <input style="width: 20px; height: 15px;" type="text"/> + Add-On Module Key No. (30 – 54)</li> <li>(2) 0/1 ◀ : Disabled/Enabled</li> </ol> </li> <li>• YY=03               <ol style="list-style-type: none"> <li>(1) Primary Extension No. + <input style="width: 20px; height: 15px;" type="text"/> + Add-On Module Key No. (30 – 45) <b>Note</b></li> <li>(2) 0: Delayed Ringing</li> </ol> </li> </ul>
<div style="border: 1px solid black; width: 60px; height: 25px; margin: 5px auto; text-align: center;">CM41</div>	<p>Specify the Delayed Ringing timing.</p>	<ul style="list-style-type: none"> <li>• Y=1               <ol style="list-style-type: none"> <li>(1) 09</li> <li>(2) 01 – 20: Timer Data for 2 sec. – 40 sec. (2 sec increment)</li> </ol> <p style="margin-left: 20px;">If no data is set, the default setting is 10 second.</p> </li> </ul>
<div style="border: 1px solid black; width: 60px; height: 25px; margin: 5px auto; text-align: center;">CM30</div>	<p>Provide Trunk-Direct Appearances to the trunk number.</p>	<ul style="list-style-type: none"> <li>• YY=18               <ol style="list-style-type: none"> <li>(1) Trunk No. (000 – 255)</li> <li>(2) 0: To be provided</li> </ol> </li> </ul>
<div style="text-align: center; margin-top: 10px;"><u>END</u></div>		

### HARDWARE REQUIRED

DSS Console (EDE-30-2)  
 PK-2DLC Card (Two DSS Consoles can be accommodated per card)

## ALPHANUMERIC DISPLAY

### GENERAL DESCRIPTION

The ETE-16D-2 and ETE-6D-2 Multiline Terminals are each equipped with a 2-line, 16-character Liquid Crystal Display (LCD). These displays are used to provide alphanumeric information including clock/calendar and call processing information.

### STATION APPLICATION

All Multiline Terminals with LCD.

### OPERATING PROCEDURE

Displays are automatically provided by the system once programmed; however, a multiline terminal user's name can be changed as required from the associated Multiline Terminal.

To program a name at the station to which the name applies:

1. Press the **SPKR** key and receive internal dial tone.
2. Dial the Name Assignment access code and receive special dial tone.
3. Using the keypad, press the key with the desired letter to display the first letter on the key. The display will indicate the numerical designation. Subsequent presses of the key will advance through the letters on that key. The following table can be used as a guide to indicate the key and the number of presses required to display numbers, letters, spaces, and periods.

		DIAL PAD KEYS											
		1	2	3	4	5	6	7	8	9	0	*	#
D E P R E S S I O N S	1	1	2	3	4	5	6	7	8	9	0	*	#
	2	•	A	D	G	J	M	P	T	W	S P A C E	*	#
	3	•	B	E	H	K	N	Q	U	X		*	#
	4	•	C	F	I	L	O	R	V	Y		*	#
	5	•	SPACE					S	▲	Z		*	#

SPACE —

4. When the desired letter is displayed, pressing the TRF key will change the letter to a lowercase letter (default is uppercase); then press the HOLD key to enter that letter and advance to the next entry.
5. Repeat the previous two steps until the desired name is displayed or the maximum number of eight letters is reached.
6. Press the **SPKR** Key.

### SERVICE CONDITIONS

1. The maximum number of stations that can be provided with a user's name display is 384. The maximum number of characters per name is eight, (including spaces). The *Maintenance Administration Terminal (MAT)* or *Customer Administration Terminal (CAT)* can be used to register or change a name. A Multiline Terminal can register or change the name assignment of that individual Multiline Terminal.
2. User names can be assigned to stations that do not have an LCD display.
3. The trunk route name display is provided on a trunk-route basis. The maximum number of characters in the trunk name display is four. The maximum number of trunk routes assignable is 63. Only the *MAT* or *CAT* can be used to register or change a trunk name display.

### ALPHANUMERIC DISPLAY (CONT'D)

4. The clock/calendar displays the system clock and calendar on the bottom line of the LCD display, and is set using the MAT, CAT or SN610 Attendant Console.
5. There are two ways to change a name that is currently programmed: overwriting with a new name, or inserting a blank space as the first character to cancel the existing name.
6. The *Attendant Console* cannot be assigned a name. This feature applies only to Multiline Terminals and Single-Line Telephones.
7. Station name assignment data is retained when there is a system reset or a power failure.
8. LCD Displays are as follows:

DISPLAY		LOCATION	DESCRIPTION
4:06PM	TUE 14	All stations	Clock/Calendar display
00:02:35	DDD1000	Calling/Called station	CO call duration
DDD 9700		Calling station	Trunk route name and number seized
FDA	3642	Calling station	Station 3621 forwarded all calls to station 3642 FDA = Call Forward - All Calls FDB = Call Forward - Busy FDN = Call Forward - No Answer XFR = Transfer
FDA	3621 3633	Called station	Call from 3633 has been forwarded from station 3621 FDA = Call Forward - All Calls FDB = Call Forward - Busy FDN = Call Forward - No Answer XFR = Transfer
PCK	3622 3615	Station answering via Call Pickup	Station 3615 has called station 3622
PCK	3622 3619	Calling party	Station 3619 has picked up call directed to station 3622
VCL	3630	Called/Calling party	Voice call to/from station
HLD	DDD 9700	Called party	Trunk route name and trunk number on hold
CNF	3000 3001	Station during 3-party conference	3-party conference with station 3000 and 3001
CNF		Station during 4-party conference	4-party conference
TIME		Called party that set wakeup call/timed reminder	Wakeup call/Timed reminder
ICM	3000	Intercom calling party and called party	Call on intercom (Automatic, manual, or dial intercom)
EHD	3000	Originator	Exclusive hold
PROGRAM	1	Originator	Background Music program number



**ALPHANUMERIC DISPLAY (CONT'D)**

DISPLAY		LOCATION	DESCRIPTION
SET	DAY	Originator	Confirmation of day mode set
SET	NIGHT	Originator	Confirmation of night mode set
PAGING		Originator	Internal zone paging
MSG	3000	Originator	Confirmation of message reminder
D DTE	4000	Originator	Originating a data call
D DTE	4001	Receiving station	Receiving a data call
RDY DTE	4000	Originator/receiving station	Data connection starts
RCL	3000	Originator	Recall for transferred call
CB	3000	Originator	Recall for Call Back when station 3000 goes idle
CAT	MODE	Originator	Confirmation of CAT mode
TIMED - Q		Originator	Confirmation of Timed Queue

## ALPHANUMERIC DISPLAY (CONT'D)

### PROGRAMMING

START	DESCRIPTION	DATA
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM08</div>	<p>Provide the system with the Name Display Service.</p> <p>Station number and number display provided when an incoming call terminates to Prime Line and Primary Line (My Line).</p>	<p>(1) 255            (2) 1 ◀: To be provided</p> <p>(1) 335            (2) 1 ◀: To be provided</p>
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM20</div>	<p>Assign the access code for station user name entry used from individual stations.</p>	<ul style="list-style-type: none"> <li>• Y = 0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX: Access Code (62)</li> <li>(2) A10</li> </ul>
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM35</div>	<p>Assign Trunk Name Number to each Trunk Route.</p>	<ul style="list-style-type: none"> <li>• YY = 03</li> <li>(1) 00-63 (Trunk Route No.)               <ul style="list-style-type: none"> <li>00: Trunk Name No. 00</li> <li>} }</li> <li>14: Trunk Name No. 14</li> <li>15 ◀: Kind of Trunk Route assigned by CM35, YY=00 is displayed</li> <li>16: Trunk Name No. 16</li> <li>} }</li> <li>63: Trunk Name No. 63</li> </ul> </li> <li>(2) </li> </ul>
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM77</div>	<p>Assign desired station user's name to each station number by Y=0 or Y=1.</p>	<ul style="list-style-type: none"> <li>• Y=0 (By Character Code)</li> <li>(1) X-XXXX: Station No.</li> <li>(2) Character Code (20-7F: See Character Code Table)            Max. 16 digits</li> <li>• Y=1 (By Character)</li> <li>(1) X-XXXX: Station No.</li> <li>(2) Character (A-Z, 0-9)            Max. 8 characters</li> </ul>
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">A</div>		

## ALPHANUMERIC DISPLAY (CONT'D)

A	DESCRIPTION	DATA
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM77</div> <div style="text-align: center; margin-top: 10px;"> <div style="border: 1px solid black; padding: 2px; width: fit-content;">A</div> </div>	<p>Assign desired trunk name to each trunk route by Y = 2 or Y = 3.</p>	<ul style="list-style-type: none"> <li>• Y = 2 (By Character Code)               <ol style="list-style-type: none"> <li>(1) 00 – 14, 16-63 (Trunk Name No. assigned by CM35, YY = 03.)</li> <li>(2) Character Code (20 – 7F: See Character Code Table) Max. 8 digits</li> </ol> </li>   <li>• Y = 3 (By Character)               <ol style="list-style-type: none"> <li>(1) 00 – 14, 16-63 (Trunk Name No. assigned by CM35, YY = 03.)</li> <li>(2) Character Code (A – Z, 0 – 9) Max. 4 characters</li> </ol> </li> </ul>
<div style="text-align: center; margin-top: 10px;"> <div style="border: 1px solid black; padding: 2px; width: fit-content;">END</div> </div>		

**Note1:** *The maximum number of stations that can be provided with the user's name display is 384. The maximum number of characters per name is eight, including spaces. The Maintenance Administration Terminal (MAT) or Customer Administration Terminal (CAT) can be used to register or change a name. A Multiline Terminal can register or change the name assignment of that individual Multiline Terminal.*

**Note2:** *User names can be assigned to stations that do not have an LCD.*

**Note3:** *The trunk name display is provided on a trunk-route basis. The maximum amount of characters in the trunk name display is four. The maximum number of trunk routes assignable is 16. The MAT or CAT can be used to register or change a trunk name display.*

**Note4:** *There are two ways to change a name that is currently programmed. 1) by overwriting with a new name, or 2) by inserting a blank space as the first character to cancel the the existing name.*

**ALPHANUMERIC DISPLAY (CONT'D)**

Character Code Table

1ST 2ND	2	3	4	5	6	7
0		0	@	P	'	p
1	!	1	A	Q	a	q
2	”	2	B	R	b	r
3	#	3	C	S	c	s
4	\$	4	D	T	d	t
5	%	5	E	U	e	u
6	&	6	F	V	f	v
7	'	7	G	W	g	w
8	(	8	H	X	h	x
9	)	9	I	Y	i	y
A	*	:	J	Z	j	z
B	+	;	K	[	k	{
C	,	<	L	¥	l	
D	-	=	M	]	m	}
E	.	>	N	^	n	→
F	/	?	O	_	o	←

**HARDWARE REQUIRED**

ETE-16D-2TEL/ETE-6D-2TEL  
 PK-2DLC Card

## ANNOUNCEMENT SERVICE

### GENERAL DESCRIPTION

This feature allows station users to record messages on voice recording memory cards. When a station user dials the feature access code for this feature, the user receives the corresponding message from the system.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE:

To access:

1. Lift handset and receive dial tone.
2. Dial applicable *Announcement Service* access code.
3. Receive message.

To erase an Announcement:

1. Lift handset and receive dial tone.
2. Dial *Announcement Service* delete access code.
3. Receive feature dial tone.
4. Dial *Announcement Service* group number.
5. Restore handset.

To record:

1. Lift handset and receive dial tone.
2. Dial *Announcement Service* record access code.
3. Dial *Announcement Service* group number and VRMEM card number.
4. Receive three seconds of service set tone.
5. Record message.
6. Restore handset.

### SERVICE CONDITIONS

1. A maximum of five different access codes can be accessed. There is a limit of 10 announcement cards for each of the five different access codes. When recording an announcement, each announcement card must be recorded individually.
2. This feature is supported by an announcement card(s) (VRMEM-A) installed in the system.
3. Either single or multiple connections to each announcement card can be made on a systemprogramming basis, and in the case of multiple connections only the first can be assured of hearing the message from the beginning.
4. *E&M Tie Lines* can access the *Announcement Service*.
5. Each time a station is connected to an announcement card, the message will be repeated for 60 to 64 seconds (Default: 60-64 seconds). The station will then be disconnected.
6. The duration of an announcement is limited to 30 seconds.
7. The system can be equipped with up to 128 voice recording memory cards for all announcement features.

## ANNOUNCEMENT SERVICE (CONT'D)

8. *Announcement Service* can be used to provide a voice message when an incoming CO line/Tie line call has been transferred by a station and encounters a busy or no answer condition. The busy condition results in disconnect after three repetitions of the message.
  - This application can be programmed on a tenant basis.
  - Only one message of up to 30 seconds can be recorded on each individual voice recording memory card.
  - In this application, a minimum of two Voice Recording Memory Cards are needed: one for a busy condition and one for a no answer condition.
  - More than one Voice Recording Memory Card may be used, depending on traffic conditions.
  - Call Forwarding, if set, has priority over this feature.
  - Voice Recording Memory Cards can be shared among tenants.
  - This feature does not function on attendant transferred calls.
  
9. A voice message in place of *Music-On-Hold* can be provided when a call has been placed on hold.
  - Different messages can be programmed on a tenant basis.
  - Different messages can be programmed depending on the type of line (CO line, Tie line or station) on *Hold*.
  - More than one connection can be made to a Voice Recording Memory Card for this purpose. Only the first can be assured of hearing the message from the beginning.
  - The announcement is repeated until the call is removed from hold.
  
10. A voice message can be sent to incoming CO calls during day or night mode.
  - Different messages can be programmed on each CO line.
  - Different messages can be programmed for day/night.
  - More than one connection can be made to a Voice Recording Memory Card. Only the first can be assured of hearing the message from the beginning.
  - Announcements may be programmed to be repeated after an interval of from 4 to 120 seconds (in four-second increments.)

## ANNOUNCEMENT SERVICE (CONT'D)

### PROGRAMMING

START	DESCRIPTION	DATA
CM08	Specify the Multi-Connection of Voice Recording Memory Card on Announcement Service.	(1) 124 (2) 0/1 ◀ : Available/Not Available (Single Connection)
CM10	Assign the LEN to each Voice Recording Memory Card (PK-ME01).	(1) LEN: Even No. out of 0000 – 0511 (2) EB000 – EB127: Voice Recording Memory Card { For PIM0...EB000 – EB031 For PIM1...EB032 – EB063 For PIM2...EB064 – EB095 For PIM3...EB096 – EB127 }
CM12	Assign the Class of Service for the Announcement Service to the required stations.	<ul style="list-style-type: none"> <li>• YY = 02 [Service Restriction Class (A) (00 – 15◀)]</li> <li>• YY = 34 (Group 0)</li> <li>• YY = 35 (Group 1)</li> <li>• YY = 36 (Group 2)</li> <li>• YY = 37 (Group 3)</li> <li>• YY = 38 (Group 4)</li> <li>• YY = 39 [Recording for Announcement Service (Group 0 – 4)]</li> </ul>
CM15		
CM20	Assign access codes for the Announcement Service.	<ul style="list-style-type: none"> <li>(1) Service Restriction Class (A) (00 – 15) assigned by CM12, YY = 02</li> <li>(2) 1 ◀ : Allowed</li> </ul> <ul style="list-style-type: none"> <li>• Y = 0 – 3 (Numbering Plan Group 0 – 3)</li> </ul>
		<ul style="list-style-type: none"> <li>(1) X – XXX: Access Code           <ul style="list-style-type: none"> <li>A03: Recording message (Group 0 – 4)</li> <li>A04: Receiving message (Group 0)</li> <li>A05: Receiving message (Group 1)</li> </ul> </li> <li>(2) A06: Receiving message (Group 2)</li> <li>A07: Receiving message (Group 3)</li> <li>A08: Receiving message (Group 4)</li> <li>A09: Deleting message (Group 0 – 4)</li> </ul>
A		

## ANNOUNCEMENT SERVICE (CONT'D)

A	DESCRIPTION	DATA
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM41</div>	<p>When the multi-connection is provided (CM08-124=0), specify the duration of message replay for Announcement Service.</p>	<ul style="list-style-type: none"> <li>• Y=0</li> <li>(1) 53</li> <li>(2) 01-99 (0 sec. - 396 sec., in 4-sec increments)</li> </ul> <p>If no data is set, the default setting is 16 (60-64 sec.)</p>
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM49</div>	<p>Assign the function of the Voice Recording Memory Card.</p>	<ul style="list-style-type: none"> <li>• YY=00</li> <li>(1) XXX: Card No. assigned by CM10 (EBXXX)</li> <li>(2) 04XX               <ul style="list-style-type: none"> <li>└─ Message No. (0-9)</li> <li>└─ Group No. (0-4)</li> </ul> </li> </ul>
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM35</div>	<p>To provide Tie Line party with this service, assign the Announcement Service Group 0-4 to the required Trunk Routes.</p>	<ul style="list-style-type: none"> <li>• YY=69 (Group 0)</li> <li>• YY=70 (Group 1)</li> <li>• YY=71 (Group 2)</li> <li>• YY=72 (Group 3)</li> <li>• YY=73 (Group 4)</li> <li>(1) Trunk Route No. (00-63)</li> <li>(2) 1 ◀ : Allowed</li> </ul>
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">END</div>		

**Note1:** A maximum of five different announcements can be accessed. There is a limit of 10 Voice Recording Memory cards for each of the five different announcements. When recording an announcement, each Voice Recording Memory card must be recorded individually.

**Note2:** Each time a station is connected to a Voice Recording Memory card, the message will be repeated three times. The station will then be disconnected.

**Note3:** For the single connection of Voice Recording Memory Card, the duration of an announcement is limited to 30 seconds.

**Note4:** For the multi-connection of Voice Recording Memory Card, the duration of an announcement is programmable from 4 to 396 seconds.



## ANNOUNCEMENT SERVICE (CONT'D)

To provide a voice message when an incoming C.O. line/Tie line call has been transferred and encounters a busy or no answer condition.

START	DESCRIPTION	DATA
CM10	Assign Voice Recording Memory Card (PK-ME01) to required LEN.	(1) LEN (0000 – 0511) (2) EB00 – EB127: Voice Recording Memory Card No.
CM65	Assign the voice message connection to transferred trunk when transferred destination does not answer or transferred destination is busy to required tenant.	<ul style="list-style-type: none"> <li>• YY = 50 (No Answer)</li> <li>(1) XX: Tenant No. 00 – 63</li> <li>(2) 0</li> </ul> <ul style="list-style-type: none"> <li>• YY = 51 (Busy)</li> <li>(1) XX: Tenant No. 00 – 63</li> <li>(2) 0</li> </ul>
CM49	Assign the function of the Voice Recording Memory Card.	<ul style="list-style-type: none"> <li>• YY = 00</li> <li>(1) XXX: Voice Recording Memory Card No. 000 – 127 assigned by CM10 (EBXXX)</li> <li>(2)                             <ul style="list-style-type: none"> <li>06XX: No Answer                                      └─ Message No. (00 – 63)</li> <li>07XX: Busy                                      └─ Message No. (00 – 63)</li> </ul> </li> </ul> <ul style="list-style-type: none"> <li>• YY = 06 (No Answer)</li> <li>• YY = 07 (Busy)</li> <li>(1) XX: Tenant No. of transferring station 00 – 63</li> <li>(2) XX: Message No. (00 – 63) assigned by YY = 00</li> </ul>
CM20	To record, replay, or delete a message, assign the respective Voice Recording Memory Card access code.	<ul style="list-style-type: none"> <li>• Y = 0 – 3 (Number Plan Group 0 – 3)</li> <li>(1) X – XXX: (Access Code)</li> <li>(2)                             <ul style="list-style-type: none"> <li>A00: Record</li> <li>A01: Replay</li> <li>A02: Delete</li> </ul> </li> </ul>
END		

**Note 5:** *Announcement Service can be used to provide a voice message when an incoming C.O. line/Tie line call has been transferred and encounters a busy or no answer condition. After the voice message is given, normal call processing continues.*

- This application can be programmed on a tenant basis.
- Only one (1) message of up to 30 seconds can be recorded on an individual Voice Recording Memory Card.

## ANNOUNCEMENT SERVICE (CONT'D)

- In this application, a minimum of two (2) Voice Recording Memory Cards are needed, one for a busy condition and one for a no answer condition.
- More than one Voice Recording Memory Card may be used, depending on traffic conditions.
- When a busy condition is encountered on the Voice Recording Memory Cards, system programming can be set to either wait until the card(s) become free or immediately follow pre-programmed normal call handling.
- Voice Recording Memory Cards can be shared among tenants.
- This feature does not function on attendant transferred calls.

To provide an Internal Recorded Message from a Voice Recording Memory Card (PK-ME01) in place of Music On Hold.

START	DESCRIPTION	DATA
CM10	Assign the Voice Recording Memory Card No. to the required LEN.	(1) LEN (0000 – 0511) (2) EB000 – EB127: Voice Recording Memory Card No.
CM48	Define the type of call to be provided with Hold Message.	<ul style="list-style-type: none"> <li>• Y=0                             <ul style="list-style-type: none"> <li>(1) { 00: C.O. Line Call 01: Tie Line Call 02: Internal Call</li> <li>(2) 0500: Hold Message</li> </ul> </li> </ul>
CM49	Assign the function of the Voice Recording Memory Card to Hold Message Service.	<ul style="list-style-type: none"> <li>• YY=00                             <ul style="list-style-type: none"> <li>(1) 000 – 127: PK-ME01 Card No. assigned by CM10 (EB000 – EB127)</li> <li>(2) 05XX: For Hold Message Service                                      └─ Message No. (00 – 63)</li> </ul> </li> <li>• YY=05                             <ul style="list-style-type: none"> <li>(1) Tenant No. (00 – 63)</li> <li>(2) Message No. (00 – 63) assigned by YY=00</li> </ul> </li> </ul>
CM20	To record, replay, or delete a message, assign the respective Voice Recording Memory Card access code.	<ul style="list-style-type: none"> <li>• Y = 0 – 3 (Number Plan Group 0 – 3)                             <ul style="list-style-type: none"> <li>(1) X – XXX (Access Code)</li> <li>(2) { A00: Record A01: Replay A02: Delete</li> </ul> </li> </ul>
END		

**Note 6:** A voice message in place of Music-On-Hold can be provided when a call has been placed on hold.

- Different messages can be programmed on a tenant basis.
- Different messages can be programmed, depending on the type of line (CO line, Tie line or station) on Hold.
- More than one connection can be made to a Voice Recording Memory Card. Only the first connection can be assured of hearing the message from the beginning.
- Announcements will be repeated until the call is removed from hold.

## ANNOUNCEMENT SERVICE (CONT'D)

To provide the Night Announcement by Voice Recording Memory Card (PK-ME01)

<u>START</u>	<u>DESCRIPTION</u>	<u>DATA</u>
CM10	Assign the Voice Recording Memory Card (PK-ME01) to the required LEN.	(1) LEN (0000 – 0511) (2) EB000 – EB127 (Voice Recording Memory Card No.)
CM30	Assign the Voice Recording Memory Card to each incoming trunk.	<ul style="list-style-type: none"> <li>• YY = 03               <ul style="list-style-type: none"> <li>(1) Trunk No. (000 – 255)</li> <li>(2) 04: Direct-In Termination</li> </ul> </li> <li>• YY = 05               <ul style="list-style-type: none"> <li>(1) Trunk No. (000 – 255)</li> <li>(2) EB000 – EB127 (Voice Recording Memory Card No. assigned by CM10.)</li> </ul> </li> </ul>
CM49	Assign the function of the Voice Recording Memory Card to Night Announcement.	<ul style="list-style-type: none"> <li>• YY = 00               <ul style="list-style-type: none"> <li>(1) XXX (Voice Recording Memory Card No. 000 – 127 assigned by CM10.)</li> <li>(2) 03000: For Night Announcement Service</li> </ul> </li> </ul>
CM41	Specify the duration of a Night Announcement.	<ul style="list-style-type: none"> <li>• Y = 0               <ul style="list-style-type: none"> <li>(1) 45</li> <li>(2) 01 – 30 (Timer Data for 4 sec – 120 sec.) If no data is set, the default setting is 60 – 64 sec.</li> </ul> </li> </ul>
CM20	To record, replay, or delete a message, assign the respective Voice Recording Memory Card access code.	<ul style="list-style-type: none"> <li>• Y = 0 – 3 (Numbering Plan Group 0 – 3)               <ul style="list-style-type: none"> <li>(1) X – XXX (Access Code)</li> <li>(2) <math>\left\{ \begin{array}{l} \text{A00: Record} \\ \text{A01: Replay} \\ \text{A02: Delete} \end{array} \right.</math></li> </ul> </li> </ul>
<u>END</u>		

**Note 7:** A voice message can be sent to incoming CO lines during night mode.

- Different messages can be programmed on each CO line.
- The voice message can be programmed for day/night.
- More than one connection can be made to a Voice Recording Memory Card. Only the first connection can be assured of hearing the message from the beginning.
- Announcements may be programmed to be repeated from 4 to 120 seconds in four-second increments.

### HARDWARE REQUIRED

Voice Recording Memory Card (PK-ME01).

## ANSWER KEY

### GENERAL DESCRIPTION

An Answer Key is provided on all Multiline Terminals. The Answer Key can be used to answer incoming calls on outside lines, and primary or secondary extensions. When the Answer Key is used to answer an incoming call with a call in progress, the first party is placed on hold and the second party is connected. If the Answer Key is pressed while in a three-party call the user can alternate between each party and a Broker's Call is established.

### STATION APPLICATION

All Multiline Terminals.

### OPERATING PROCEDURE

To answer an incoming ringing call with a call in progress:

1. Receive incoming indication.
2. Press the **ANS** key; the original call is placed on Non-Exclusive Hold.
3. Talk to the connected party.
4. To return to the call on hold after the second call is completed, press the line key associated with the call on hold.

To answer a Camp-On call (with a call in progress):

1. Receive Camp-On tone.
2. Press the **ANS** key; the original call is placed on Hold.
3. Subsequent presses of the **ANS** key alternates the active and holding parties
4. Talk to the party who was camped on.
5. When one conversation is completed, go on-hook.
6. Party on Hold will recall immediately.

### SERVICE CONDITIONS

1. The **ANSWER** key's LED will flash for *Camped-On* calls.
2. The priority of calls answered using the **ANSWER** key is as follows:
  1. Voice Call.
  2. Incoming call to the primary extension.
  3. Incoming external calls to trunk line appearance.
  4. Incoming calls to the secondary extension.
3. When a Multiline Terminal user is initiating a voice call or monitoring tones provided by the system (extension dial tone, call waiting tone, etc.) and uses the **ANSWER** key to answer an incoming call, the first call will not be placed on hold (the tone or voice announcement connection will be terminated).
4. When a *Broker's Call* is in progress, the **ANSWER** key cannot be used to answer incoming calls, but will alternate between the calls when pressed.
5. When a three-party *Conference* is in progress, pressing the **ANSWER** key splits the *Conference* and establishes a *Broker's Call*. The **ANSWER** key has no effect on a four-party conference.

## ANSWER KEY (CONT'D)

### PROGRAMMING

<u>START</u>	<u>DESCRIPTION</u>	<u>DATA</u>
START   CM12   CM15   END	Assign the Class of Service for this feature to the required Multiline Terminals.	<ul style="list-style-type: none"> <li>• CM12, YY = 02</li> <li>(1) X-XXXX: Primary Extension No.</li> <li>(2) XX XX               <ul style="list-style-type: none"> <li>— Service Restriction Class (B) (00-15 ◀ )</li> </ul> </li> </ul> <ul style="list-style-type: none"> <li>• CM15, YY = 72</li> <li>(1) XX: Service Restriction Class (B) assigned by CM12, YY = 02</li> <li>(2) 0: Allowed</li> </ul>

**Note:** An ANSWER key is initially assigned on each Multiline Terminal.

### HARDWARE REQUIRED

ETE-16D-2 TEL/ETE-6D-2 TEL  
 PK-2DLC Card

## ATTENDANT-ASSISTED CALLING

### GENERAL DESCRIPTION

This feature allows a station user to ask an Attendant for assistance in originating a call. Three methods are available; non-delay, delay, and passing dial tone.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

Non-delay operation:

1. Attendant answers system user's call by pressing the **ANSWER** or **ATND** key.
2. Caller provides call request.
3. Attendant dials the trunk access code.
4. Attendant dials desired telephone number.
5. Attendant presses the **RELEASE** (or **START**) key.
6. Parties are connected.

Delay operation:

1. Attendant answers system user's call by pressing the **ANSWER** or **ATND** key.
2. Caller provides call request.
3. Attendant presses the **RELEASE** key.
4. Station user receives reorder tone; station user replaces the handset and waits for recall from Attendant.
5. Attendant presses the **LOOP** key.
6. Attendant dials the trunk access code.
7. Attendant dials the desired telephone number.
8. Attendant presses the **ANSWER** (or **START**) key.
9. Attendant dials the station user's number.
10. Station user answers the call.
11. Attendant presses the **RELEASE** key.
12. Parties are connected.

Passing dial tone:

1. Attendant answers system user's call by pressing the **ANSWER** or **ATND** key.
2. Caller provides call request.
3. Attendant dials the trunk access code.
4. Attendant presses the **RELEASE** key.
5. Dial tone is supplied to the caller.

### SERVICE CONDITIONS

1. During delay operation the Attendant may release the connection either before or after the called station answers.
2. If the call was processed using non-delay or passing dial tone operation, there will not be an *Automatic Recall* for station-to-trunk calls when the called party does not answer.
3. If the call was processed using non-delay or passing dial tone operation, an *Automatic Recall* will be initiated for station-to-tie line and trunk-to-tie line calls when answer supervision is provided on the tie line and the called party does not answer.

## ATTENDANT-ASSISTED CALLING (CONT'D)

4. Fully restricted station users cannot be connected by the Attendant to an outside line using this feature. Attempts are routed to reorder tone.
5. Non-delay operation allows the Attendant to place an outgoing call for a station user who reached the Attendant by dialing 0, without requiring the station user to hang up.
6. When an Attendant attempts to set up a *Trunk-to-Trunk Connection* between trunks that do not provide answer supervision, the connection is denied and the **RELEASE** key has no effect.
7. The Attendant can dial the called number for the station user or, using the passing dial tone method, allow the station user to dial.
8. When *Least Cost Routing* (LCR) is programmed, the Attendant cannot pass dial tone. The call must be completed using delay or non-delay operation.
9. The Attendant cannot pass dial tone to a station whose route restriction class prevents the station from receiving incoming calls on the trunk route selected.

## ATTENDANT-ASSISTED CALLING (CONT'D)

### PROGRAMMING

START	DESCRIPTION	DATA
START		
CM20	Assign the Access code for an operator call.	<ul style="list-style-type: none"> <li>• Y = 0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX: Access Code (0)</li> <li>(2) 800</li> </ul>
CM60	Allocate the ATTCON Group No. to each HA-610Z/SN610 ATTCON.	<ul style="list-style-type: none"> <li>• YY=00</li> <li>(1) ATTCON No. (0-7) assigned by CM06 (HA-610Z) or CM10 (SN610).</li> <li>(2) ATTCON Group No. (0-3)</li> </ul>
	Assign the Master ATTCON within the ATTCON Group. <span style="float: right;">(INITIAL)</span>	<ul style="list-style-type: none"> <li>• YY=01</li> <li>(1) ATTCON No. (0-7)</li> <li>(2) 0/1 ◀ : Master/Sub</li> </ul>
CM62	Specify the tenants to be handled by each ATT Group. <span style="float: right;">(INITIAL)</span>	<ul style="list-style-type: none"> <li>• Y = 0-3 (ATT Group 0-3 assigned by CM60, YY=00)</li> <li>(1) 00-63 (Tenant No.)</li> <li>(2) 0: To be handled</li> </ul>
CM08	Specify the Attendant access (ATTCON No.0) capability provided from the stations belonging to a tenant with no HA-610Z/SN610 ATTCON.	<ul style="list-style-type: none"> <li>(1) 142</li> <li>(2) 0/1 ◀ : Allowed/Restricted</li> </ul>
	Provide the system with Passing Dial Tone.	<ul style="list-style-type: none"> <li>(1) 048</li> <li>(2) 1 ◀ : To be provided</li> </ul>
	Provide the system with Attendant Night Transfer, if required.	<ul style="list-style-type: none"> <li>(1) 018</li> <li>(2) 0/1 ◀ : Not to be provided/Provided</li> </ul>
	Specify the Individual Attendant access capability provided from a station belonging to a different tenant.	<ul style="list-style-type: none"> <li>(1) 143</li> <li>(2) 0/1 ◀ : Restricted/Allowed</li> </ul>
END		



## ATTENDANT CAMP-ON

### GENERAL DESCRIPTION

This feature permits the Attendant to hold an incoming call in a special mode when the desired station for transfer is busy. The Attendant sends a Camp-On tone to the busy station and when that station becomes idle, it is automatically alerted and connected to the waiting party.

### STATION APPLICATION

Attendant Consoles (HA-610Z, SN610 ATTCON).

### OPERATING PROCEDURE

To activate a Camp-On from the Attendant Console:

1. Dial desired station and receive busy tone.
2. Press the **RELEASE** key. Camp-On tone is sent to station and Camp-On is set.

To cancel a Camp-On from the Attendant Console:

1. Press the **LOOP** key corresponding to held call.
2. Press **DEST** key and receive busy tone.
3. Press **CANCL** key and automatically return to the held party.

To answer an Attendant Camp-On:

From a Single Line telephone:

1. Receive Camp-On tone.
2. Hang up. Receive incoming ring.
3. Lift handset and talk.

OR

1. Receive Camp-On tone.
2. Press **FLASH** key (or momentarily press hookswitch). The call in progress is placed on Consultation Hold.
3. Dial Call Hold feature access code. Original call is placed on Call Hold and station user is automatically connected to the Camp-On call.

From a Multiline Terminal,

1. Receive Camp-On tone. The LCD displays: **CMP XXXX** (where XXXX = trunk data).
2. Hang up. Receive incoming ring.
3. Lift handset and talk.

OR

1. Receive Camp-On tone. The LCD displays: **CMP XXXX** (where XXXX = trunk data).
2. Press the **ANS** key. The call in progress is placed on Call Hold and the Camp-On call is connected.

## ATTENDANT CAMP-ON (CONT'D)

### SERVICE CONDITIONS

1. *Attendant Camp-On* can be set when the busy station is connected to another station or trunk in a two-party connection.
2. *Attendant Camp-On* is denied if the busy station is dialing in *Line Lockout*, receiving a system generated tone, is a Data Station protected against any override by DND key, currently has a *Camped On* call, or any of the following features are activated on the busy station:
  - *Attendant Override*
  - *Call Transfer*
  - *Camp-On*
  - *Conference*
  - *Privacy Release*
  - *Voice Call*
  - *Consultation Hold*
  - *Data Line Security*
  - *Executive Right of Way*
  - *Hold*
  - *Paging*

When *Camp-On* is denied, the Attendant will receive reorder tone.

3. The maximum number of simultaneous *Camp-Ons* per Attendant without loop release is six (HA610Z), or the same as the number of loop keys assigned (SN610). When Attendant loop release is provided, the maximum number is 12.
4. The station receiving the *Camp-On* can answer using the *Call Hold* feature.
5. Calls that remain *Camped-On* for longer than a predetermined time will initiate an *Automatic Recall* to the Attendant that set the *Camp-On*.

### PROGRAMMING

START	DESCRIPTION	DATA
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 5px auto;">CM08</div>	Specify the Camp-On Tone sent to busy station.	(1) 068 (2) { <ul style="list-style-type: none"> <li>0: Camp-on Tone is sent out only once.</li> <li>1 ◀: Camp-on Tone is repeated at an interval of 4 seconds.</li> </ul>
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 5px auto;">CM41</div>	Specify the recall timing of Camp-On.	<ul style="list-style-type: none"> <li>● Y=0</li> <li>(1) 00</li> <li>(2) 01 – 24 (Timer Data for 2.4 sec – 124.8 sec)</li> </ul> If no data is set, the default setting is 31.2-33.6 seconds.
<u>END</u>		

## ATTENDANT CONSOLE (HA-610Z ATTCON)

### GENERAL DESCRIPTION

The HA-610Z Attendant Console operates on a switched-loop basis with a maximum of six Attendant loops terminating at each console on the associated Attendant Interface board (ATI-B). The Attendant uses these loops for answering, originating, holding, extending, and re-entering calls. When Attendant loop release is used, the number of loops is effectively increased to a maximum of 12 for each console. The following pages describe the features associated with the *Attendant Console (HA-610Z)*. A third alternate Attendant Position is described under *Multiline Terminal Attendant Position*.

### STATION APPLICATION

Attendant Console HA-610Z ATTCON

### OPERATING PROCEDURE

Detailed operating procedures are provided in the NEAX1400 IMS Attendant Console User Guide.

### SERVICE CONDITIONS

1. Each Port Interface Module (PIM) can accept a single ATI-B board which will support up to 2 *Attendant Consoles (HA-610Z)*. A maximum of 8 *Attendant Consoles* can be supported in a 4-PIM system.
2. Each *Attendant Console (HA-610Z)* requires a separate 25-pair cable which is connected to the PIM backplane. This cable cannot be longer than 1000 feet (with 24 AWG used.)
3. Each *Attendant Console (HA-610Z)* is equipped with dual handset jacks (one on each side). Both jacks can be used simultaneously for training purposes or either jack can be used alone.

## ATTENDANT CONSOLE (HA-610Z ATTCON) (CONT'D)

### PROGRAMMING

START	DESCRIPTION	DATA
START		
CM05	Assign the slot number to each Attendant Interface Board. <div style="text-align: right; margin-top: 10px;"> <span style="border: 1px solid black; border-radius: 15px; padding: 2px 10px;">INITIAL</span> </div>	(1) Slot No. = 04 (PIM0) 05 (PIM1) 06 (PIM2) 07 (PIM3) (2) 01: ATI Board  <b>Note:</b> <i>When ATI (PJ-CS00) Board is mounted on the number 04 (PIM0) and/or 05 (PIM1) slot, this data is assigned by loading of Resident System Program.</i>
CM06	Assign the ATTCON Number to each ATTCON. <div style="text-align: right; margin-top: 10px;"> <span style="border: 1px solid black; border-radius: 15px; padding: 2px 10px;">INITIAL</span> </div>	<ul style="list-style-type: none"> <li>• YY=01</li> <li>(1) 0-7: ATTCON No.</li> <li>(2) XXX</li> </ul> <div style="margin-left: 150px;"> <span style="font-size: 2em;">}</span> <b>Note</b>              0/1 (Circuit No.)              Slot No. assigned by CM05         </div> <p><b>Note:</b> <i>As for the Resident System Program, refer to Chapter 7 of System Programming Manual.</i></p>
A		

## ATTENDANT CONSOLE (HA-610Z ATTCON) (CONT'D)

	DESCRIPTION	DATA
A		
CM30	Set the terminating system for the incoming calls to ATTCON.	<ul style="list-style-type: none"> <li>• YY = 02 (Day mode), YY = 03 (Night mode)</li> <li>(1) Trunk No. (000 – 255)</li> <li>(2) 14: Termination to ATTCON</li> </ul>
CM46	Assign the required Incoming Call Identification (ICI) keys to each ATTCON.	<ul style="list-style-type: none"> <li>(1) 00–11: Key No.</li> <li>(2) 00–74: Type of calls to be assigned</li> </ul>
	(INITIAL)	
CM47	Assign the required function keys to each ATTCON.	<ul style="list-style-type: none"> <li>(1) 00–11: Key No.</li> <li>(2) 00–16: Functions to be assigned</li> </ul>
	(INITIAL)	
CM60	Allocate the ATT Group No. to each ATTCON.	<ul style="list-style-type: none"> <li>• YY = 00</li> <li>(1) ATT No. (0 – 7) assigned by CM06</li> <li>(2) { 0: ATT GROUP 0 ? ? 3: ATT GROUP 3</li> </ul>
	Specify the Master ATTCON within the ATT Group assigned by YY = 00.	<ul style="list-style-type: none"> <li>• Y = 01</li> <li>(1) ATT No. (0 – 7)</li> <li>(2) 0/1 ◀ : Master/Sub</li> </ul>
	(INITIAL)	
CM62	Specify the tenants to be handled by each ATT Group.	<ul style="list-style-type: none"> <li>• Y = 0 – 3</li> <li>(1) Tenant No. (00 – 63)</li> <li>(2) 0/1 ◀ : To be handled/Not to be handled</li> </ul>
	(INITIAL)	
END		

**Note:** Each Port Interface Module (PIM) can accept a single ATI-A board which will support up to two Attendant Consoles. A maximum of eight Attendant Consoles can be supported in a four-PIM system.

## ATTENDANT CONSOLE (HA-610Z); ATTENDANT BUSY LAMP FIELD

### GENERAL DESCRIPTION

This feature provides the Attendant with visual indications of busy, idle, and Line Lockout status of a particular hundreds group of stations via a designated lamp field on the Attendant Console. The hundreds group(s) displayed can be fixed or flexible.

### OPERATING PROCEDURE

Fixed display is dedicated to a particular hundreds group and requires no operation.

Flexible display:

1. Press an idle LOOP key.
2. Dial thousands (where applicable) and/or hundreds digit(s) of desired group.
3. Lamp status indicates busy, idle, or Line Lockout condition.

### SERVICE CONDITIONS

1. Either fixed or flexible *Attendant Busy Lamp Field* is selected on a per-console basis.
2. For three-digit station numbering, the console digit display will show the first digit of the group being monitored (1 for 100's, 2 for 200's, etc.). Lamps 00 - 99 reflect the last two digits of stations within that hundreds group and display the status of the individual stations.
3. For four-digit station numbering, the console digital display shows the first two digits of the group being monitored (10 for 1000's, 11 for 1100's, etc.).
4. Two digits are available on the console digital display for indication of the hundreds group being monitored.
5. Station status is reflected by LED activity:  
LED off - station idle  
LED on - station busy  
LED flashing - station in *Line Lockout*  
The flash rate for *Line Lockout* is 60 pulses per minute.
6. The *Line Lockout* status indication can be enabled or disabled on a system basis in system programming.
7. Different consoles programmed for fixed *Attendant Busy Lamp Field* can be assigned different hundreds groups to monitor.

## ATTENDANT CONSOLE (HA-610Z); ATTENDANT BUSY LAMP FIELD (CONT'D)

### PROGRAMMING

Either fixed or flexible Attendant Busy Lamp Field is selected on a system basis.

For providing Busy Lamp Field-Fixed:

START	DESCRIPTION	DATA
CM08	Provide the system with Busy Lamp Field-Fixed.	(1) 207 (2) 0: Available
CM60	Specify a hundreds group of stations displayed by Busy Lamp Field-Fixed.	<ul style="list-style-type: none"> <li>• YY=26</li> <li>(1) ATTCON No. (0-7) assigned by CM06               <ul style="list-style-type: none"> <li>00: 1/2-digit Station (X/XX)</li> <li>01: 3-digit Station (1XX)</li> <li>  }                  }</li> <li>(2) 09: 3-digit Station (9XX)</li> <li>    10: 4-digit Station (10XX)</li> <li>      }                  }</li> <li>    99: 4-digit Station (99XX)</li> </ul> </li> </ul>
	<b>INITIAL</b>	
	<b>Note:</b> After setting the data, the Busy Lamp Field will be available 2 or 3 minutes later.	
END		

For providing Busy Lamp Field-Flexible:

START	DESCRIPTION	DATA
CM08	Provide the system with Busy Lamp Field-Flexible. Disable Busy Lamp Field-Fixed.	(1) 207 (2) 1 ◀ : BLF-Fixed Not Available
END		

## ATTENDANT CONSOLE (HA-610Z); ATTENDANT CALL SELECTION

### GENERAL DESCRIPTION

This feature allows assignment of keys on the Attendant Console to particular types of trunk routes (such as WATS or FX) and particular types of service calls (such as Priority calls, intercept calls, etc.). LED indications indicate a call waiting (or answered) and pressing the associated key allows the Attendant to answer the calls in any order.

### OPERATING PROCEDURE

1. Attendant presses key with flashing lamp according to priority (this allows override of priorities assigned to use of ANSWER key).
2. Attendant identifies call waiting by trunk route or service type.
3. Normal call handling procedures are used.

### SERVICE CONDITIONS

1. A maximum of 12 keys can be assigned for *Attendant Call Selection*. A flashing LED on these keys indicates a call is waiting to be answered, and a steadily lit LED indicates an existing connection.
2. Trunk routes and services can be assigned for *Attendant Call Selection* as follows:
  - CO Incoming Calls
  - FX Incoming Calls
  - WATS Incoming Calls
  - Tie Line Incoming Calls
  - Operator Calls
  - Intercept Calls
  - CallForward - No Answer Calls
  - Call Forward - Busy Calls
  - Special Operator Calls
  - Priority Calls
  - Emergency Calls
  - Serial Calls
  - Off-Hook Alarm
  - Interposition Calling/Transfer
3. Multiple *Attendant Call Selection* keys can be flashing at the same time. The Attendant can select any incoming call by pressing the associated key, or can answer on a first in, first out (FIFO) basis using the ANSWER key.

### PROGRAMMING

#### START

CM35



#### DESCRIPTION

Specify the ICI key to which each incoming call from each trunk route will terminate.

#### DATA

- YY = 15
- (1) Trunk Route No. (00 - 63)
- (2) ICI Key
  - 00: C.O. Incoming Call 0
  - }                                 }
  - 07: C.O. Incoming Call 7
  - 10: FX Incoming Call 0
  - }                                 }
  - 17: FX Incoming Call 7
  - 20: WATS Incoming Call 0
  - }                                 }
  - 27: WATS Incoming Call 7
  - 30: CCSA Incoming Call 0
  - }                                 }
  - 37: CCSA Incoming Call 7
  - 40: Tie Line Incoming Call 0
  - }                                 }
  - 47: Tie Line Incoming Call 7



## ATTENDANT CONSOLE (HA-610Z); ATTENDANT CALL SELECTION (CONT'D)

A  
 CM46

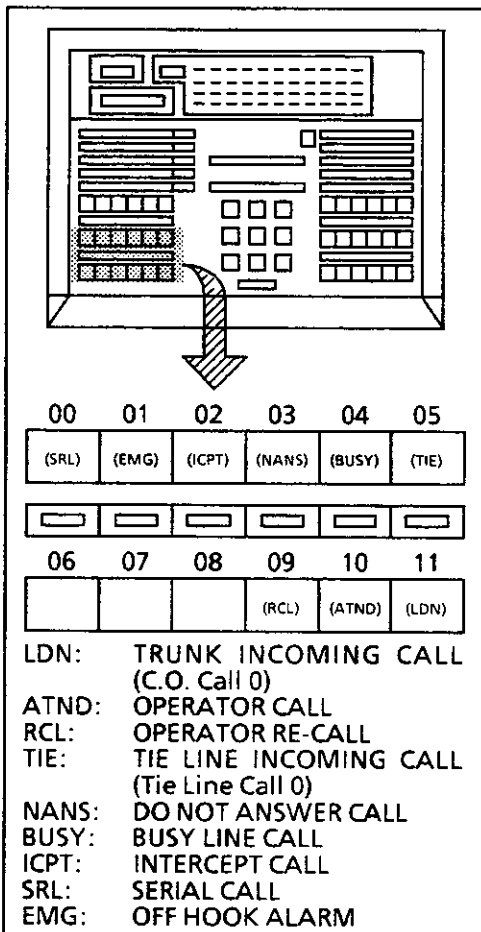
DESCRIPTION	DATA
-------------	------

Assign the Incoming Call Identification (ICI) key required.

- (1) 00-11 (Key No.)
- (2) XX: ICI

INITIAL

The following ICI keys are initially set.



- 00-07 (C.O. Call 0-7)
- 10-17 (FX Call 0-7)
- 20-27 (WATS Call 0-7)
- 30-37 (CCSA Call 0-7)
- 40-47 (Tie Line Call 0-7)
- 50-53 (Special Operator Call 0-3)
- 54 (Priority Call 0)
- 55 (Priority Call 1)
- 56 (Emergency Call)
- 60 (Operator Call)
- 61 (Recall)
- 62 (Serial Call)
- 64 (Call Forwarding Don't Answer)
- 65 (Call Forwarding-Busy Line)
- 66 (Call Forwarding-Intercept)
- 67 (Off Hook Alarm)
- 74 (Inter Position Transfer)

END

## ATTENDANT CONSOLE (HA-610Z); ATTENDANT CONSOLE LOCKOUT

### GENERAL DESCRIPTION

The Attendant Console can be placed into a lockout mode by removing the handset or headset from the handset jack(s). This disables the consoles from originating or receiving calls.

### OPERATING PROCEDURE

Removing all handset plugs from both handset jacks automatically places the Attendant Console in lockout.

### SERVICE CONDITIONS

1. When the console is in lockout condition, one of the following two types of indications can be selected system wide, by system data.
  - A. Audible ringing applied at any time.
  - B. No audible indication except recall is provided.
2. Re-inserting a handset or headset jack returns the console.

### PROGRAMMING

<u>START</u>	<u>DESCRIPTION</u>	<u>DATA</u>
START   <div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM08</div>   END	Specify if a buzzer will sound when terminating an incoming call to an ATTCON in the Attendant Console Lockout mode.	(1) 353 (2) 0/1 ◀ : Not to be provided/To be provided

## ATTENDANT CONSOLE (HA-610Z); ATTENDANT DO NOT DISTURB SETUP AND CANCEL

### GENERAL DESCRIPTION

The Attendant has the ability to enter and remove individual stations from Do Not Disturb (DND). Additionally, the Attendant can set one preassigned group of stations into, or out of, Do Not Disturb.

### OPERATING PROCEDURE

To set an individual station in DND:

1. Dial the station number.
2. Press the **DD** key. The associated LED flashes.
3. Press the **START** key. The DD LED lights steady and service set tone is received.
4. Press the **RELEASE** key.

To cancel an individual station in DND:

1. Dial the station number.
2. Press the **DD** key. The associated LED flashes.
3. Press the **RESET** key. The DD LED goes out.

To set the group of stations in DND:

1. Press the **DD** key. The associated LED flashes.
2. Press the **START** key. The DD LED lights steady.
3. The designated group is now in DND.

To cancel DND set to the group of stations:

1. Press the **DD** key. The associated LED flashes.
2. Press the **RESET** key. The DD LED goes out.
3. The designated group is no longer in DND.

To call a station that set DND:

1. Press an idle **LOOP** key.
2. Dial desired station number. The DD LED flashes and reorder tone is received.
3. Press the **DDOVR** key.
4. Desired station will ring.

### SERVICE CONDITIONS

1. Refer to the *Do Not Disturb* feature for more details.
2. Stations are assigned to the DND group in station *Class of Service* either from the *CAT* or *MAT*.
3. The *Attendant Console* is able to verify and change the status of stations with respect to *Do Not Disturb*.
4. *Attendant Override* allows the Attendant to call stations in DND without changing their status.

### PROGRAMMING

Refer to DO NOT DISTURB.

## **ATTENDANT CONSOLE (HA-610Z); ATTENDANT INTERPOSITION TRANSFER**

### **GENERAL DESCRIPTION**

This feature allows Attendants to talk directly with another Attendant and also allows Attendants to transfer calls from their console to another Attendant's console in systems where *Multiple Console Operation* has been provided.

### **OPERATING PROCEDURE**

To call from console A to console B:

1. Attendant A presses an idle loop key.
2. Attendant A dials *Interposition Calling/Transfer* access code and Attendant B's identification number.
3. The call is indicated at console B (on TF key).
4. Attendant B presses **ANSWER** key or TF key.
5. Attendant A converses with Attendant B.
6. Attendant A presses **RELEASE** key.

To transfer from console A to console B, with a call in progress:

1. Attendant A dials *Interposition Calling/Transfer* access code and Attendant B's identification number.
2. The call is indicated at Console B.
3. Attendant B presses **ANSWER** key.
4. Attendant A presses **RELEASE** key to transfer, or may converse before release.

### **SERVICE CONDITIONS**

1. Each console is assigned an identification number to allow interposition transfers.
2. An Attendant can receive one Interposition Calling/Transfer at a time. A dedicated line key (TF key -see *Attendant Call Selection*) must be assigned for receiving these calls.
3. After receiving an interposition transfer, the Attendant has full capabilities for redirecting the call.
4. When *Attendant Console Lockout* (at the called console) and *Night Service* are in effect, interposition Calling/Transfers will result in reorder tone.

## ATTENDANT CONSOLE (HA-610Z); ATTENDANT INTERPOSITION TRANSFER (CONT'D)

### PROGRAMMING

START	DESCRIPTION	DATA
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM06</div>	Assign an Attendant Console Identification Number to each Attendant Console. <span style="float: right; border: 1px solid black; border-radius: 15px; padding: 2px 5px;">INITIAL</span>	<ul style="list-style-type: none"> <li>• YY=01</li> <li>(1) ATTCON Identification No. (0-7)</li> <li>(2) <u>XXX</u> <ul style="list-style-type: none"> <li>└─ Circuit No. (0/1)</li> <li>└─ Slot No. assigned by CM05.</li> </ul> </li> </ul>
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM20</div>	Assign the access code for Inter-Position Transfer.	<ul style="list-style-type: none"> <li>• Y= 0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX (Access Code)</li> <li>(2) 095</li> </ul>
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM46</div>	Assign the Incoming Call Identification (ICI) key for this feature on the Attendant Console. <span style="float: right; border: 1px solid black; border-radius: 15px; padding: 2px 5px;">INITIAL</span>	<ul style="list-style-type: none"> <li>(1) Key No. (00-11)</li> <li>(2) 74: Inter-Position Transfer ICI Key</li> </ul>
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM08</div>	Specify the Inter-Position Transferred call to another tenant's Attendant Console.  If data is set to 1, a call from any station can be transferred to another Attendant Console regardless of Tenant Allocation by CM62.	<ul style="list-style-type: none"> <li>(1) 143</li> <li>(2) 0/1 ◀: Restricted/Allowed</li> </ul>
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">END</div>		

## ATTENDANT CONSOLE (HA-610Z); ATTENDANT LISTED DIRECTORY NUMBER

### GENERAL DESCRIPTION

This feature provides a display of the Listed Directory Number on the Attendant Console when the operator has answered a Listed Directory Number call.

### OPERATING PROCEDURE

The operator at an Attendant Console answers an incoming call.

1. DEST lamp lights.
2. Listed Directory Number is displayed.

The operator presses the SRC key.

1. DEST lamp goes out and SRC lamp lights.
2. Trunk group and trunk number are displayed.

### SERVICE CONDITIONS

1. This service is effective when the operator at an *Attendant Console* has answered a Listed Directory Number call terminated to the *Attendant Console*.
2. If the operator presses the SRC key while the Listed Directory Number is displayed, the display changes to the calling party's trunk group and trunk number. In this case, the Listed Directory Number of the call cannot be displayed again.
3. While the Listed Directory Number is displayed, the operator can transfer the call to a desired station by keying the destination number on the key pad. In this case, the Listed Directory Number of the call cannot be displayed again.
4. While the Listed Directory Number is displayed, the operator can place the present call on *Hold* by pressing the HOLD button. In this case, the Listed Directory Number cannot be displayed again when the operator returns to the call on *Hold*.
5. While the Listed Directory Number is displayed, the operator can set *Call Park*. In this case, the Listed Directory Number of the call placed on *Call Park* cannot be displayed again. If the call recalls from *Call Park*, the trunk route and trunk identification code are displayed.



## ATTENDANT CONSOLE (HA-610Z); ATTENDANT LISTED DIRECTORY NUMBER (CONT'D)

To provide the LDN Diversion feature, following programming is also required.

START	DESCRIPTION	DATA
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM08</div>	Provide the system with LDN Diversion feature.	(1) 205 (2) 0: To be provided
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM58</div>	Assign the data for LDN Diversion to each indialed No. assigned by CM50, YY = 01/02.  Note that a call is diverted to LDN0-7/TIE0-7 keys as specified by CM58, YY = 02-07, even if CM50, YY = 01/02, 1-8 has already been set.	<ul style="list-style-type: none"> <li>• YY = 00 (Tenant No. of the LDN)               <ul style="list-style-type: none"> <li>00: Effective data in CM35, YY = 15</li> <li>01-08: LDN key No. (00-07) assigned by CM46.</li> </ul> </li> <li>(1) 00: Effective data in CM35, YY = 15               <ul style="list-style-type: none"> <li>01-08: Tie Line key No. (00-07) assigned by CM46.</li> </ul> </li> <li>(2) Tenant No. (00-63)</li> <li>• YY = 01 (TAS Group No.)               <ul style="list-style-type: none"> <li>(1) Same as YY = 0</li> <li>(2) TAS Group No. (00-63)</li> </ul> </li> <li>• YY = 02 (Day Mode Destination of the LDN)               <ul style="list-style-type: none"> <li>(1) Same as YY = 00                   <ul style="list-style-type: none"> <li>00: LDN/TIE key 0</li> <li style="padding-left: 40px;">}</li> </ul> </li> <li>(2) 07: LDN/TIE key 7</li> <li style="padding-left: 20px;">08: To TAS</li> <li style="padding-left: 20px;">09: To station assigned by CM58, YY = 08.</li> </ul> </li> <li>• YY = 03 (Night Mode Destination)               <ul style="list-style-type: none"> <li>(1) Same as YY = 00                   <ul style="list-style-type: none"> <li>00: LDN/TIE key 0</li> <li style="padding-left: 40px;">}</li> </ul> </li> <li>(2) 07: LDN/TIE key 7</li> <li style="padding-left: 20px;">08: To TAS</li> <li style="padding-left: 20px;">09: To station assigned by CM58, YY = 09.</li> </ul> </li> <li>• YY = 04 (Day mode diversion for busy destination station)               <ul style="list-style-type: none"> <li>(1) Same as YY = 00                   <ul style="list-style-type: none"> <li>00: To ATTCON (BUSY key)</li> </ul> </li> <li>(2) 08: To TAS</li> <li style="padding-left: 20px;">09: Camped on</li> </ul> </li> </ul>

A



**ATTENDANT CONSOLE (HA-610Z);  
 ATTENDANT LISTED DIRECTORY NUMBER (CONT'D)**

DESCRIPTION	DATA
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin-bottom: 5px;">A</div> <div style="border: 1px solid black; padding: 2px; width: fit-content; margin-bottom: 5px;">CM58</div> <div style="border-left: 1px solid black; border-right: 1px solid black; height: 400px; margin-left: 5px;"></div> <p style="text-align: center;"><u>END</u></p>	<ul style="list-style-type: none"> <li>• YY=05 (Night mode diversion for busy destination station)           <ul style="list-style-type: none"> <li>(1) Same as YY=00</li> <li>(2) Same as YY=04</li> </ul> </li>   <li>• YY=06 (Day mode diversion for non-answering destination station)           <ul style="list-style-type: none"> <li>(1) Same as YY=00</li> <li>(2) { 00: To ATTCON (NANS key) 08: To TAS</li> </ul> </li>   <li>• YY=07 (Night mode diversion for non-answering destination station)           <ul style="list-style-type: none"> <li>(1) Same as YY=00</li> <li>(2) Same as YY=06</li> </ul> </li>   <li>• YY=08 (Day mode destination station)           <ul style="list-style-type: none"> <li>(1) Same as YY=00</li> <li>(2) X-XXXX (Station No.)</li> </ul> </li>   <li>• YY=09 (Night mode destination station)           <ul style="list-style-type: none"> <li>(1) Same as YY=00</li> <li>(2) X-XXXX (Station No.)</li> </ul> </li> </ul> <p>If a station is designated by YY=02, 03, assign the station number where the call will be diverted.</p>

**HARDWARE REQUIRED**

PK-2DIT Card (DID Trunk)  
 PK-2EMT Card (Tie Line Trunk)

## ATTENDANT CONSOLE (HA-610Z); ATTENDANT LOOP RELEASE

### GENERAL DESCRIPTION

This feature allows an Attendant Console loop to become available for a second call as soon as the Attendant has directed the first call to a station, even if that station does not answer.

### OPERATING PROCEDURE

To operate:

1. Attendant Console indicates incoming calls.
2. Press **ANSWER** or appropriate Attendant Call Selection key.
3. Dial the desired station number and receive ringback tone.
4. Before station answers, press **RELEASE** key.
5. Loop is now available for another call.

### SERVICE CONDITIONS

1. Unanswered calls will be routed to the Attendant within the predetermined timing using *Automatic Recall*. Refer to the *Variable Timing Parameters* feature for more information.
2. If all Attendant loop circuits are busy when *Automatic Recall* is activated, unanswered calls will be routed to the Attendant when idle loops become available. The *Call Waiting LED* (CW) lights to indicate a call is waiting to be answered.
3. Once a call has been released from a loop, the Attendant has no further access to it unless recalled.
4. A maximum of six calls (one per loop) may be released simultaneously from any single *Attendant Console*.
5. This feature provides the Attendant with the equivalent of twelve switching loops.
6. In a *Multiple Console Operation*, the attendant who initiated the loop release will be recalled.
7. *Attendant Loop Release* is applicable to trunk and station calls extended to an unanswered station/busy station (*Camp-On*).
8. Calls which are held by the Attendant using the **HOLD** key cannot be released from the console. These calls remain on the switched loop until they are either extended by the Attendant or abandoned by the calling party.
9. Once *Attendant Loop Release* is activated, the Attendant cannot interact with the call until recalled using the *Automatic Recall* feature.
10. When *Attendant Camp-On* is activated, the Attendant can *Camp-On* to a busy called station. Upon *Camp-On*, the Attendant may release the call from the console.
11. Release is denied when the Attendant attempts to transfer a trunk to a fully restricted station or a station which already has a camp-on. In this case, the **RELEASE** key is ineffective.

### PROGRAMMING

<u>START</u>	<u>DESCRIPTION</u>	<u>DATA</u>
START   CM08   END	Provide the system with the Attendant Loop Release.	(1) 014: Attendant Loop Release (2) 0: To be provided

## ATTENDANT CONSOLE (HA-610Z); CALL QUEUING

### GENERAL DESCRIPTION

This feature provides the Attendant with the ability to handle a series of exchange network calls in the order of their arrival (first in, first out), thereby eliminating unnecessary delays.

### OPERATING PROCEDURE

Press Attendant Console **ANSWER** key to receive calls in order of queue.

### SERVICE CONDITIONS

1. Incoming calls arriving at the console will light the *Call Waiting LED*. Additionally, the *Call Waiting LED* will flash when a predetermined number of calls are in queue. This number is programmable from 1 to 48 on a system basis.
2. When an incoming call lights an *Incoming Call Identification* (LDN, ATND, RCL, WATS, FX, CCSA, etc.) LED, the Attendant may answer it out of the queuing sequence by pressing the indicated key.
3. Automatic Call Distribution is not used in *Multiple Console Operation*. All incoming call indications appear at each console within the same tenant group so that the call can be answered by any console. Each console would then share the same queue.
4. An incoming call cannot be answered simultaneously by more than one Attendant. Only the Attendant that pressed the **ANSWER** key first is connected to the call. The other Attendant's **ANSWER** key will pick up the next call or be ineffective (no queue) when pressed.
5. If a power failure occurs, calls in queue which have the power failure transfer feature associated with their trunk will be connected to power failure stations. Other calls in queue will not be connected to power failure stations.
6. When the system is changed from day to night mode, calls already waiting in the queue will remain in the same queue and can be answered by the *Attendant Console*.
7. Calls in queue can overflow to *Night Service*. Refer to *Attendant Overflow* for more information.

### PROGRAMMING

Refer to CALL WAITING LED.

## ATTENDANT CONSOLE (HA-610Z); CALL WAITING LED

### GENERAL DESCRIPTION

This feature provides a visual indication to the Attendant when one or more calls are waiting to be answered.

### OPERATING PROCEDURE

No manual operation is required.

### SERVICE CONDITIONS

1. When there are any incoming calls to the *Attendant Console* that have not yet been answered, the *Call Waiting LED* will light (without flashing). A value of from 1 to 48 calls waiting (the default is 6) can be set to start the *Call Waiting LED* flashing, on a per-system basis.
2. When multiple consoles are installed, the *Call Waiting LED* will light on all consoles which are assigned to the same tenant group. Other tenant group consoles will reflect the call waiting status for their tenant group.
3. The following types of unanswered incoming calls to an *Attendant Console* are counted as calls waiting:
  - LDN (Listed Directory Number Calls)
  - ATND (Attendant Dial 0 Calls)
  - RCL (Attendant Re-call Calls)
  - FX (Foreign Exchange Calls)
  - WATS (Wide Area Telephone Service Calls)
  - TIE (Tie Line Calls)
  - BUSY (Call Forwarding - Busy Calls to Attendant)
  - NANS (Call Forwarding - No Answer Calls to Attendant)
  - TF (Interposition Transfer Calls between Attendants)
  - ICPT (Call Forwarding - Intercept Calls)
  - ALL (Call Forwarding - All Calls to Attendant)
  - CCSA (Common Channel Signaling Arrangement Calls)
4. An audible indication will be provided when the *Call Waiting LED* is lit, unless the Attendant is already on a loop or unless the volume control is used to silence the buzzer.

### PROGRAMMING

START	DESCRIPTION	DATA
<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">CM42</div>	Specify the number of waiting calls which cause the Call Waiting lamp to flash.	(1) 00 (2) No. of Waiting Calls (01 – 48) If no data is set, the default setting is 6.
END		

## ATTENDANT CONSOLE (HA-610Z); COMMON ROUTE INDIAL

### GENERAL DESCRIPTION

This feature allows assignment of incoming DID calls to different *Attendant Call Selection* keys based on the last four digits dialed into the system. Up to eight individual Listed Directory Numbers can be assigned in system programming. When an incoming call to any of these trunks is received, an *Attendant Call Selection* key will flash and the LCD display will indicate the Listed Directory Number associated with that trunk route.

### OPERATING PROCEDURE

Refer to *Attendant Call Selection*.

### SERVICE CONDITIONS

1. A maximum of one Listed Directory Number can be specified for each *Attendant Call Selection* key. Up to eight LDN keys may be assigned.
2. This feature can help identify calls to particular tenants who are sharing Attendant(s). In this case, service conditions for *Tenant Service* would apply to the system.
3. If the system or tenant group is in night mode, the *Common Route Indial* lines would follow the established night rerouting.

### PROGRAMMING

START	DESCRIPTION	DATA
CM08	Provide the system with Diversion Display.	(1) 204 (2) 0: To be provided
CM46	Assign the required number of LDN to ICI keys. <b>INITIAL</b>	(1) Key No. (00 - 11) 00: LDN0 key (2) { } 07: LDN7 key
CM50	Assign the indialed number to each LDN key assigned by CM46. The indialed number should be different from any numbers assigned by CM10 and CM11.	• YY=01 (1) 1-8: LDN key No. (00-07) assigned by CM46. (2) X-XXXX (Indialed No.)
END		

## ATTENDANT CONSOLE (HA-610Z); COMMON ROUTE INDIAL (CONT'D)

To provide the LDN Diversion feature, the following programming is also required.

START	DESCRIPTION	DATA
CM08	Provide the system with LDN Diversion feature.	(1) 205 (2) 0: To be provided
CM58	Assign the data for LDN Diversion to each indial No. assigned by CM50, YY=01.  Note that a call is diverted to LDN0-7 keys as specified by CM58, YY=02-07, even if CM50, YY=01, 1-8 has already been set.	<ul style="list-style-type: none"> <li>• YY=00 (Tenant No. of the LDN)               <ul style="list-style-type: none"> <li>(1) 01-08: LDN0-7 assigned by CM50, YY=01.</li> <li>(2) Tenant No. (00-63)</li> </ul> </li> <li>YY=01 (TAS Group No.)               <ul style="list-style-type: none"> <li>(1) Same as YY=00</li> <li>(2) TAS Group No. (00-63)</li> </ul> </li> <li>• YY=02 (Day Mode Destination of the LDN)               <ul style="list-style-type: none"> <li>(1) Same as YY=00                   <ul style="list-style-type: none"> <li>00: LDN0 key</li> <li>  }        }</li> </ul> </li> <li>(2) 07: LDN7 key</li> <li>      08: To TAS</li> <li>      09: To station assigned by CM58, YY=08.</li> </ul> </li> <li>• YY=03 (Night Mode Destination)               <ul style="list-style-type: none"> <li>(1) Same as YY=00                   <ul style="list-style-type: none"> <li>00: LDN0 key</li> <li>  }        }</li> </ul> </li> <li>(2) 07: LDN7 key</li> <li>      08: To TAS</li> <li>      09: To station assigned by CM58, YY=09.</li> </ul> </li> <li>• YY=04 (Day mode diversion for busy destination station)               <ul style="list-style-type: none"> <li>(1) Same as YY=00</li> <li>(2) 00: To ATTCON (BUSY key)</li> <li>      08: To TAS</li> <li>      09: Camped on</li> </ul> </li> </ul>
A		

## ATTENDANT CONSOLE (HA-610Z); COMMON ROUTE INDIAL (CONT'D)



END

DESCRIPTION	DATA
<p>If a station is designated by YY=02, 03, assign the station number to be diverted.</p>	<ul style="list-style-type: none"> <li>• YY=05 (Night mode diversion for busy destination station)               <ul style="list-style-type: none"> <li>(1) Same as YY=00</li> <li>(2) Same as YY=04</li> </ul> </li>   <li>• YY=06 (Day mode diversion for non-answering destination station)               <ul style="list-style-type: none"> <li>(1) Same as YY=00</li> <li>(2) { 00: To ATTCON (NANS key) 08: To TAS</li> </ul> </li>   <li>• YY=07 (Night mode diversion for non-answering destination station)               <ul style="list-style-type: none"> <li>(1) Same as YY=00</li> <li>(2) Same as YY=06</li> </ul> </li>   <li>• YY=08 (Day mode destination station)               <ul style="list-style-type: none"> <li>(1) Same as YY=00</li> <li>(2) X-XXXX (Station No.)</li> </ul> </li>   <li>• YY=09 (Night mode destination station)               <ul style="list-style-type: none"> <li>(1) Same as YY=00</li> <li>(2) X-XXXX (Station No.)</li> </ul> </li> </ul>

### HARDWARE REQUIRED

PK-2DIT Card (DID Trunk)

## **ATTENDANT CONSOLE (HA-610Z); INCOMING CALL IDENTIFICATION**

### **GENERAL DESCRIPTION**

Incoming calls are identified by various means. Refer to *Attendant Called/Calling Number, Attendant Call Selection, Attendant Source Key, Attendant Listed Directed Number* and *Common Route Indial*.

### **OPERATING PROCEDURE**

Normal operating procedures are applied for each feature.

### **SERVICE CONDITIONS**

Refer to the applicable feature description.

### **PROGRAMMING**

Refer to the applicable feature description.



## ATTENDANT CONSOLE (HA-610Z); INDIVIDUAL TRUNK ACCESS

### GENERAL DESCRIPTION

The *Attendant Console* is provided with the ability to access each individual trunk by dialing an associated identification code. This allows detection of faulty trunks during regular testing or after complaints. The *Customer Administration Terminal (CAT)* or *Maintenance Administration Terminal (MAT)* has the capability to then busy out the trunk until repair is effected.

### OPERATING PROCEDURE

1. Attendant depresses an idle **LOOP** key.
2. Attendant dials Individual Trunk access code.
3. Attendant dials Individual Trunk identification code.
4. If trunk was idle, testing can follow.

### SERVICE CONDITIONS

1. The *Attendant Console* LCD display will show the individual trunk identification code.
2. If the trunk is busy, the attendant receives busy tone.
3. If the trunk has been set to busy out status by the *CAT* or *MAT*, the Attendant can still access the trunk.

### PROGRAMMING

<u>START</u>	<u>DESCRIPTION</u>	<u>DATA</u>
CM20	Assign the access code for Direct Trunk Selection.	<ul style="list-style-type: none"> <li>• Y=0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX (Access Code)</li> <li>(2) 081</li> </ul>
CM30	Assign the Trunk identification code to each trunk.  The Trunk ID code is to be dialed after the access code and displayed on the Attendant Console.	<ul style="list-style-type: none"> <li>• YY=19</li> <li>(1) Trunk No. (000-255) assigned by CM10 (D000-D255)</li> <li>(2) <u>XXXX</u>: Trunk ID code <b>Note</b> <ul style="list-style-type: none"> <li>└ Set any desired number (4 digit).</li> </ul> </li> </ul> <p><b>Note:</b> <i>By loading Resident System Program, Trunk Identification Codes are assigned as follows.</i></p> <p style="text-align: center;"><u>1XXX</u></p> <ul style="list-style-type: none"> <li>└ Trunk Number (000-255)</li> </ul>
<u>END</u>		

## ATTENDANT CONSOLE (HA-610Z); MULTIPLE CONSOLE OPERATION

### GENERAL DESCRIPTION

This feature allows more than one *Attendant Console* to operate within the same system.

### OPERATING PROCEDURE

Normal operating procedures are applied for each console installed.

### SERVICE CONDITIONS

1. The maximum number of consoles per Port Interface Module (PIM) is two.
2. The Attendant Console (HA-610Z) can be used in combination with the Attendant Console (SN610) in any PIM (any combination).
3. The maximum number of consoles allowable per system is eight (HA-610Z + SN610).
4. Each incoming call is displayed on all consoles within a tenant group whether idle or busy. If all Attendants are involved in processing calls when another Central Office call arrives, the *Call Waiting* LED will light on all consoles.
5. A station can be connected to only one Attendant loop at a time. Any attempt at establishing multiple connections will result in reorder tone being sent to the party attempting multiple loop connection.
6. *Attendant Interposition Transfer* is used to transfer calls between both types of *Attendant Consoles* (SN610 and HA-610Z).
7. The NEAX1400 IMS operates only on a switched-loop basis. Fixed-loop operation is not available.
8. To place a multiple console system (or a multiple console tenant group) into *Night Service*, a preprogrammed master console must depress the NITE key. If one of the other consoles enters *Night Service*, all calls addressed to that console will be directed to the other console(s).
9. When a console has entered *Night Service*, all calls already connected to its loop must be processed from that console. Recalls and serial recalls are routed to the night transfer station, if assigned.

### PROGRAMMING

Refer to ATTENDANT CONSOLE (HA-610Z ATTCON) and Attendant Console (SN610 ATTCON).

## ATTENDANT CONSOLE (HA-610Z); PUSHBUTTON CALLING-ATTENDANT ONLY

### GENERAL DESCRIPTION

This feature permits an operator to place all calls over Dual-Tone, Multi-Frequency (DTMF) lines from the pushbutton keypad on the *Attendant Console*.

### OPERATING PROCEDURE

The operator presses pushbutton keypad to dial.

### SERVICE CONDITIONS

1. This feature requires that all central office trunks or tie trunks accept pushbutton signaling (DTMF).
2. *Pushbutton Calling- Attendant Only* may be added to the system without providing pushbutton calling capability to other stations.

### PROGRAMMING

<u>START</u>	<u>DESCRIPTION</u>	<u>DATA</u>
START   CM35   END	Assign the type of signaling (DTMF) to Outgoing and Bothway Trunk Routes.	<ul style="list-style-type: none"> <li>• YY = 01</li> <li>(1) Trunk Route No. (00 - 63)</li> <li>(2) 7</li> </ul>

## ATTENDANT CONSOLE (HA-610Z); SERIAL CALL

### GENERAL DESCRIPTION

This feature is activated by the Attendant when an incoming calling party wishes to speak with more than one internal party. When the internal station subsequently disconnects from the Central Office line call, the Central Office party automatically rings back to the same Attendant.

### OPERATING PROCEDURE

To operate;

1. Attendant answers incoming Central Office call.
2. Attendant extends calls to desired station.
3. Attendant depresses **SERIAL CALL SET (SC)** key.
4. Called station and incoming caller are connected.
5. Called station hangs up. Serial Call Termination (SRL) LED on *Attendant Console* flashes at 60 IPM. If Attendant is available, an audible indication will be provided.
6. Attendant depresses **ANSWER** or **SRL** key to return to the original incoming calling party.

### SERVICE CONDITIONS

1. *Serial Calling* is not provided for station-to-station calling.
2. *Serial Calling* can be enabled or disabled on a per-console basis.
3. This feature is not available for tandem connections.
4. *Serial Calling* is allowed when a station is involved in an Attendant Conference.
5. No features are denied toward a line or trunk involved in a *Serial Call*.

### PROGRAMMING

START	DESCRIPTION	DATA
CM47	Assign the Serial Call set key to the Attendant Console.	(1) Key No. (00 – 11) (2) 05 : Serial Call set
	<b>INITIAL</b>	
CM46	Assign the Serial Call key to the Attendant Console.	(1) Key No. (00 – 11) (2) 62 : Serial Call Termination
	<b>INITIAL</b>	
<u>END</u>		

## **ATTENDANT CONSOLE (HA-610Z); TRUNK GROUP BUSY DISPLAY**

### **GENERAL DESCRIPTION**

A visual indication is supplied to the Attendant when all trunks in a particular trunk group are busy.

### **OPERATING PROCEDURE**

No manual operation is required.

### **SERVICE CONDITIONS**

1. The *Attendant Console* must be programmed to have a designated Trunk Group Busy LED.
2. This feature may be used on trunk groups consisting of either DDD, DID, WATS, Tie, FX, or special trunks.
3. Ten (10) Trunk Group Busy LEDs are available on the *Attendant Console (HA-610Z)*.
4. Besides Trunk Group Busy LEDs on the *Attendant Console (HA-610Z)*, trunk busy status can be displayed on the following LEDs:
  1. Function key LEDs on Multiline Terminals.
  2. External LEDs (PK-DK01 card must be installed.)
  3. Attendant Console's (SN610) trunk Group Busy LEDs.
5. A total of 62 Trunk Group Busy LEDs are available for Attendant Console (SN610), Multiline Terminals or External LEDs.

## ATTENDANT CONSOLE (HA-610Z); TRUNK GROUP BUSY DISPLAY (CONT'D)

### PROGRAMMING

START	DESCRIPTION	DATA
CM30	Assign the Trunk Group No. to each trunk. Several trunks may be assigned to one Trunk Group Number.	<ul style="list-style-type: none"> <li>• YY=09</li> <li>(1) 000 – 255 (Trunk No.)</li> <li>(2) 01 – 62 (Trunk Group No.) Trunk Group Nos. 01 – 10 correspond to Trunk Group Busy Lamps 01 – 10 on the Attendant Console.</li> </ul>
CM90	For providing the Trunk Group Busy Lamps on Multiline Terminal, assign the Trunk Group No. to required key on Multiline Terminal, if required.	<ul style="list-style-type: none"> <li>• YY=00</li> <li>(1) Primary Extensions No. + <input type="text"/> + Key No.</li> <li>(2) F12XX └── 01 – 62 (Trunk Group No assigned by CM30, YY=09)</li> </ul>
CM44	For providing the Trunk Group Busy Lamps externally, assign the Trunk Group No. to required circuit number of PK-DK01 Card.	<ul style="list-style-type: none"> <li>(1) XXX └── 0 – 3 (Circuit No.)     └── 00 – 31 (Card No. of PK-DK01 assigned by CM10.)</li> <li>(2) 11XX └── 01 – 62 (Trunk Group No. assigned by CM30, YY=09)</li> </ul>
END		

### HARDWARE REQUIRED

To provide the Trunk Group Busy Lamps on Multiline Terminal:  
 ETE-16D-2TEL/ETE-6D-2TEL/ETE-16-2TEL/ETE-6-2TEL and PK-2DLC Card

To provide the Trunk Group Busy Lamps externally:  
 PK-DK01 Card and lamp indicator provided by the customer.

## ATTENDANT CONSOLE (HA-610Z); UNSUPERVISED TRUNK-TO-TRUNK TRANSFER BY ATTENDANT

### GENERAL DESCRIPTION

This feature allows an Attendant to transfer an incoming or outgoing call on one trunk to an outgoing trunk and exit the connection before the called party answers.

### OPERATING PROCEDURE

1. An incoming call is received and answered in the normal manner. The trunk number is displayed.
2. The Attendant dials the access code of the outgoing route, then the destination number. The dialed digits are displayed.
3. If the feature is allowed, the display will change to show the selected outgoing trunk number.
4. The call is extended (by operation of the **RELEASE** key). The *Attendant Console* will be recalled. On answer, the Attendant will be connected to the original trunk party. If the call is answered, the trunk-to-trunk connection is maintained.
5. After recall to the *Attendant Console*, the called party may answer which would result in an initial three-way conversation before the call is extended. Alternately, the Attendant can re-extend the call (from above) to the same destination or extend it to another.

### SERVICE CONDITIONS

1. The feature is dependent on trunk supervision and other conditions being met.
2. The trunk associated with at least one side of the call must be programmed for answer and/or release supervision to ensure that the trunks do not lock up or this feature will be disallowed.

### PROGRAMMING

START	DESCRIPTION	DATA
START   <div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM08</div>   END	Provides the system with this feature.	(1) 206 (2) 1 ◀ : Available

**Note:** *The trunk associated with at least one side of the call must be programmed for answer and/or release signal (s) to ensure the trunks are not locked up.  
 As for the data to be assigned to each trunk, refer to TRUNK-TO-TRUNK CONNECTION.*

## ATTENDANT CONSOLE (SN610 ATTCON)

### GENERAL DESCRIPTION

The console operates on a switched-loop basis with a maximum of six Attendant loops terminating at each console on the associated Attendant Interface card (PK-2DLC). The Attendant uses these loops for answering, originating, holding, extending, and re-entering calls. When Attendant loop release is used, the number of loops is effectively increased to a maximum of 12 for each console. The following pages describe the features associated with the *Attendant Console (SN610)*. An alternate Attendant Position is described under *Multiline Terminal Attendant Position*.

### STATION APPLICATION

Attendant Console (SN610)

### OPERATING PROCEDURE

Detailed operating procedures are provided in NEAX1400 IMS Attendant Console User Guide.

### SERVICE CONDITIONS

1. Each Port Interface Module (PIM) can support up to eight *Attendant Consoles*. A maximum of eight *Attendant Consoles* can be supported in a four-PIM system.

The *Attendant Console (HA-610Z)* can also be used in the same system. The total number of *Attendant Consoles (SN610 type + HA-610Z type)* in a system is eight.

2. Each *Attendant Console (SN610)* requires a two-pair cable. This cable cannot be longer than 4000 feet (when PK-2DLCC card used.)



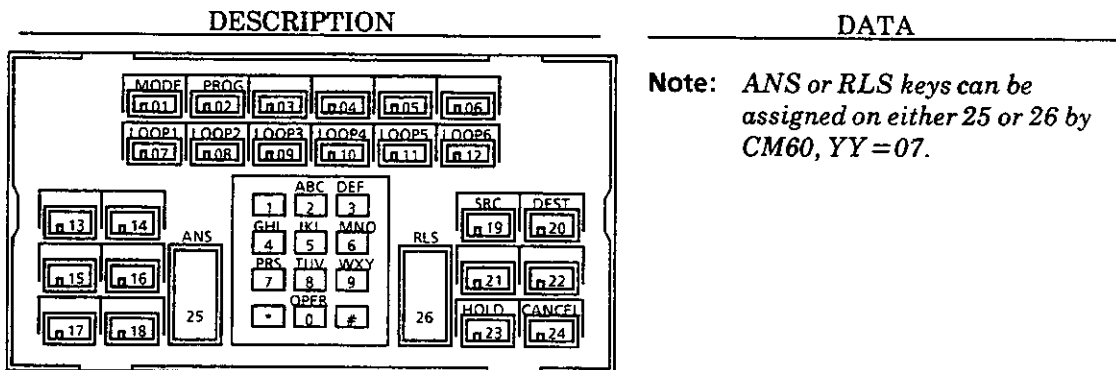
## ATTENDANT CONSOLE (SN610 ATTCON) (CONT'D)

### PROGRAMMING

START	DESCRIPTION	DATA
CM10	Assign the card number of the interface circuit, with SN610 ATTCON, to its associated LEN.	(1) 0000 – 0511 (LEN No.) (2) E000 – E007 (SN610 ATTCON No.)
CM30	Set the terminating system for the incoming calls to SN610 ATTCON.	<ul style="list-style-type: none"> <li>• YY=02 (Day mode), YY=03 (Night mode)</li> <li>(1) Trunk No. (000 – 255)</li> <li>(2) 14: Termination to SN610 ATTCON</li> </ul>
CM90	Assign the required Attendant Call Selection keys and ATTCON Function keys to each SN610 ATTCON. If no data is set, the default setting is as follows (Refer to MULTI-FUNCTION KEY for assignment of Multi-Function Keys):	<ul style="list-style-type: none"> <li>• YY=00</li> <li>(1) ATTCON No. + <span style="border: 1px solid black; padding: 0 2px;"> </span> + Key No.</li> <li>(2) { F6000 – F6067: Type of Calls to be assigned F6100 – F6245: Functions to be assigned</li> </ul>
A		

## ATTENDANT CONSOLE (SN610 ATTCON) (CONT'D)

A



Key No.	Data	Description
01	F6110	Mode (MODE)
02	F6111	Programming (PROG)
07 - 12	F6240 - F6245	Loop 1 - Loop 6
16	F6061	Re-Call (RCL)
17	F6060	Operator Call (ATND)
18	F6000	C.O. Incoming 0 (LDN0)
19	F200	Source (SRC)
20	F201	Destination (DEST)
23	F204	Hold (HOLD)
24	F202	Cancel (CANCEL)
25	} <b>Note</b>	Answer (ANS)
26		Release (RLS)

CM60

Allocate the ATT Group No. to each SN610 ATTCON.

- YY=00
- (1) ATTCON No. (0-7)
- (2) { 0: ATT GROUP 0  
? ?  
3: ATT GROUP 3

Specify the Master SN610 ATTCON within the ATT Group assigned by YY=00.

INITIAL

- YY=01
- (1) ATTCON No. (0-7)
- (2) 0/1 ◀ : Master/Sub

Specify the location of Answer (ANS) and Release (RLS) key.

- YY=15
- (1) ATTCON No. (0-7)
- (2) { 0 : Key No.25 - Release,  
Key No.26 - Answer  
1 ◀ : Key No.25 - Release,  
Key No.26 - Answer

CM62

Specify the tenants to be handled by each ATT Group.

INITIAL

- Y=0-3
- (1) Tenant No. (00-63)
- (2) 0/1 ◀ : To be handled/Not to be handled

END

## **ATTENDANT CONSOLE (SN610); ATTENDANT CALLED/CALLING NAME DISPLAY**

### **GENERAL DESCRIPTION**

This function is used for the display of calling/called party names handled by the new *Attendant Console* on the LCD of the *Attendant Console*.

### **STATION APPLICATION**

Not Applicable.

### **OPERATING PROCEDURE**

Displays are automatically provided by the system once programmed.

### **SERVICE CONDITIONS**

1. The maximum number of stations that can be provided with a user's name display is 384. The maximum number of characters per name is eight (including spaces). The Maintenance Administration Terminal (MAT) or Customer Administration Terminal (CAT) can be used to register or change a name. Multiline terminal users can register or change the name assignment from their own individual multiline terminal.
2. User names can be assigned to stations that do not have an LCD display (including Single-Line Stations).
3. The trunk route name display is provided on a trunk-route basis. The maximum amount of characters in the trunk name display is four. The maximum number of trunk routes assignable is 16. Only the MAT or CAT can be used to register or change a trunk name display.
4. There are two ways to change a name that is currently programmed; overwriting with a new name or inserting a blank space as the first character.
5. The Attendant Console cannot be assigned a name. This feature applies only to multiline terminals and single-line telephone and trunk routes.
6. Station and trunk name assignment data is retained in case of a system reset or a power failure.
7. Refer to Alphanumeric Display Features and Specifications for method of programming names from a multiline terminal.

## ATTENDANT CONSOLE (SN610); ATTENDANT CALLED/CALLING NAME DISPLAY (CONT'D)

### PROGRAMMING

START	DESCRIPTION	DATA
CM08	Provide the system with the Name Display Service.	(1) 255 (2) 1 ◀ : To be provided
CM20	Assign the access code for station user name entry used from individual stations.	<ul style="list-style-type: none"> <li>• Y = 0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX: Access Code (62)</li> <li>(2) A10</li> </ul>
CM35	Assign Trunk Name Number to each Trunk Route.	<ul style="list-style-type: none"> <li>• YY=03</li> <li>(1) 00-63 (Trunk Route No.)               <ul style="list-style-type: none"> <li>00: Trunk Name No. 00</li> <li>} }</li> <li>14: Trunk Name No. 14</li> <li>15 ◀ : Kind of Trunk Route assigned by CM35, YY=00 is displayed</li> <li>16: Trunk Name No. 16</li> <li>} }</li> <li>63: Trunk Name No. 63</li> </ul> </li> <li>(2) </li> </ul>
CM77	Assign desired station user name to each station number by Y=0 or Y=1.	<ul style="list-style-type: none"> <li>• Y=0 (By Character Code)</li> <li>(1) X-XXXX: Station No.</li> <li>(2) Character Code (20-7F: See Character Code Table) Max. 16 digits</li> <li>• Y=1 (By Character)</li> <li>(1) X-XXXX: Station No.</li> <li>(2) Character (A-Z, 0-9) Max. 8 characters</li> </ul>
CM77	Assign desired trunk name to each trunk route by Y=2 or Y=3.	<ul style="list-style-type: none"> <li>• Y=2 (By Character Code)</li> <li>(1) 00-14, 16-63 (Trunk Name No. assigned by CM35, YY=03.)</li> <li>(2) Character Code (20-7F: See Character Code Table) Max. 8 digits</li> <li>• Y=3 (By Character)</li> <li>(1) 00-14, 16-63 (Trunk Name No. assigned by CM35, YY=03.)</li> <li>(2) Character Code (A-Z, 0-9) Max. 4 characters</li> </ul>
END		

### HARDWARE REQUIRED

ETE-16D-2TEL/ETE-6D-2TEL  
 PK-2DLC Card

**ATTENDANT CONSOLE (SN610);  
 ATTENDANT CALLED/CALLING NAME DISPLAY (CONT'D)**

Character Code Table

2ND \ 1ST	2	3	4	5	6	7
0		0	@	P	'	p
1	!	1	A	Q	a	q
2	”	2	B	R	b	r
3	#	3	C	S	c	s
4	\$	4	D	T	d	t
5	%	5	E	U	e	u
6	&	6	F	V	f	v
7	,	7	G	W	g	w
8	(	8	H	X	h	x
9	)	9	I	Y	i	y
A	*	:	J	Z	j	z
B	+	;	K	[	k	{
C	,	<	L	¥	l	
D	-	=	M	]	m	}
E	.	>	N	^	n	→
F	/	?	O	_	o	←

## ATTENDANT CONSOLE (SN610); ATTENDANT CALL SELECTION

### GENERAL DESCRIPTION

This feature allows assignment of keys on the *Attendant Console* to particular types of trunk routes (such as WATS or FX) and particular types of service calls (such as Attendant recalls, intercept calls, etc.). LED indications indicate call waiting (or answered) and pressing the associated key allows the Attendant to answer the calls in any order.

### OPERATING PROCEDURE

1. Attendant presses key with flashing lamp according to priority (this allows override of priorities assigned to use of ANSWER Key).
2. Attendant identifies call waiting by trunk route or service type.
3. Normal call handling procedures are used.

### SERVICE CONDITIONS

1. The six keys located on the left side of the console can be assigned for Attendant Call Selection. In addition, the upper 12 keys can also be assigned for Attendant Call Selection instead of the loop and the functions key. A flashing LED on these keys means a call waiting to be answered and a steadily lit LED indicates an existing connection.
2. Trunk routes and services can be assigned for *Attendant Call Selection* as follows:

● CO Incoming Calls	● Operator Calls	● Priority Calls
● FX Incoming Calls	● Attendant Recalls	● Emergency Calls
● WATS Incoming Calls	● Intercept Calls	● Serial Calls
● Tie Line Incoming Calls	● Call Forward - No Answer Calls	● Off-Hook Alarm
	● Call Forward - Busy Calls	● Interposition Calling/Transfer
	● Special Operator Calls	
3. Multiple *Attendant Call Selection* keys can be flashing at the same time. The Attendant can select any incoming call by pressing the associated key, or can answer on a first in, first out (FIFO) basis using the ANSWER key.

## ATTENDANT CONSOLE (SN610); ATTENDANT CALL SELECTION (CON'TD)

### PROGRAMMING

A

CM35

#### DESCRIPTION

Specify the ATT call Selection key to which incoming calls from each trunk route terminate.

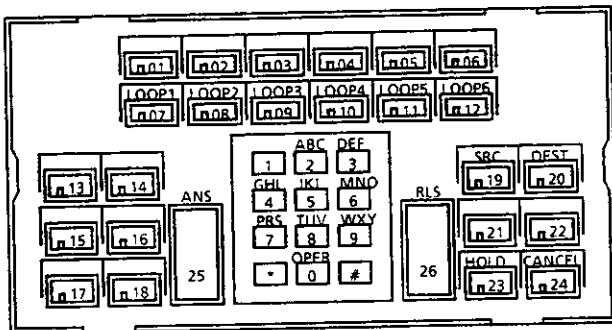
#### DATA

- YY=15
  - (1) Trunk Route No. (00-15)
  - (2) ATT Call Selection Key:
    - 00-07: C.O. Incoming Call 0-7
    - 10-17: FX Incoming Call 0-7
    - 20-27: WATS Incoming Call 0-7
    - 30-37: CCSA Incoming Call 0-7
    - 40-47: Tie Line Incoming Call 0-7

CM90

Assign the ATT Call Selection Keys required. The following ATT Call Selection Keys are initially set.

- YY=00
  - (1) ATTCON No. +   + Key No.
  - (2) F60XX



Key No.	Data	Description
16	F6061	Recall (RCL)
17	F6060	Operator Call (ATND)
18	F6000	C.O. Incoming 0 (LND0)

- 00-07 (C.O. Incoming Call 0-7)
- 10-17 (FX Incoming Call 0-7)
- 20-27 (WATS Incoming Call 0-7)
- 30-37 (CCSA Incoming Call 0-7)
- 40-47 (Tie Line Incoming Call 0-7)
- 50-53 (Special Operator Call 0-3)
- 54 (Priority Call 0)
- 55 (Priority Call 1)
- 56 (Emergency Call)
- 60 (Operator Call)
- 61 (Recall)
- 62 (Serial Call)
- 63 (Call Forwarding-No Answer)
- 64 (Call Forwarding-Busy Line)
- 65 (Call Forwarding-Intercept)
- 66 (Off Hook Alarm)
- 67 (Inter Position Calling/Transfer)

END

## ATTENDANT CONSOLE (SN610); ATTENDANT CONSOLE LOCKOUT-PASSWORD

### GENERAL DESCRIPTION

This feature allows the Attendant Console to be set into a lockout mode. This disables the console from originating or receiving calls and setting or resetting service features. To return the console to its manual operating condition a password is required.

### OPERATING PROCEDURE

To set Attendant Console Lockout:

1. Press an idle **LOOP** key and associated green LED lights.
2. Dial Feature Access Code or press the **MODE** key (Soft key) and the associated red LED lights. The LCD displays "ACTIVE" as normal mode and the green LED of **ACTIVE** key lights.
3. Press **LKOUT** key (soft key) and the associated red LED lights. The LCD display changes from "ACTIVE" to "LKOUT".
4. Press the **ANSWER** key and receive service set tone. The LCD displays "SET LKOUT." The mode of the console is changed from normal to lockout condition.
5. Press the **RELEASE** key.

To cancel Attendant Console Lockout:

1. Press the **MODE** key and the associated red LED lights.
2. Dial a predetermined password number.
3. Press the **ACTIVE** key and the associated green LED lights. The LCD display changes from "LKOUT" to "ACTIVE."
4. Press the **ANSWER** key and receive service set tone. The LCD displays "SET ACTIVE." The mode of the console is now changed from lockout to normal condition.
5. Press the **RELEASE** key.

### SERVICE CONDITIONS

1. The length of password is up to eight digits.
2. The password is assigned by the MAT.
3. When the console is set to lockout condition, one of the following two types of indications can be selected on a system basis by system data:
  - (1) Audible ringing applied at any time.
  - (2) No audible indication except recall is produced.
4. When the console is set to lockout condition, the following operations can be executed:
  - (1) Cancellation of lockout condition
  - (2) Remaining calls on the loop key which can be handled.
  - (3) Unanswered call
  - (4) Camped-on call
  - (5) Automatic Recall
  - (6) Held Call on **LOOP** key.
5. If there is a call park which is set by the ATT, the console cannot be set to lockout condition. In this case the operator hears ROT and the LCD shows "call park."
6. When the console is put into the lockout condition, if there are any uncompleted calls in memory loop with loop release feature they appear on the loop as automatic recall.



## ATTENDANT CONSOLE (SN610); ATTENDANT CONSOLE LOCKOUT-PASSWORD (CONT'D)

### PROGRAMMING

START	DESCRIPTION	DATA
CM90	Assign the Mode key for providing Attendant Console Lockout on SN610 ATTCON.	<ul style="list-style-type: none"> <li>• YY=00</li> <li>(1) ATTCON No. + <span style="border: 1px solid black; padding: 0 5px;"> </span> + Key No.</li> <li>(2) F6110</li> </ul>
CM20	Assign the access code for providing Attendant Console Lockout for SN610 ATTCON, if required.	<ul style="list-style-type: none"> <li>• Y= 0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX (Access Code)</li> <li>(2) A55</li> </ul>
CM08	Specify the buzzer sound when terminating an incoming call to SN610 ATTCON on the Attendant Console Lockout.	<ul style="list-style-type: none"> <li>(1) 353</li> <li>(2) 0/1 ◀ : Not to be provided/To be provided</li> </ul>
CM60	Assign the password code for Attendant Console Lockout. <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">INITIAL</span>	<ul style="list-style-type: none"> <li>• YY= 30</li> <li>(1) 0</li> <li>(2) XX-XX: Password Code (Max. 8 digits)</li> <li style="padding-left: 20px;">X: 0-9, A (*) B (#)</li> </ul> <p>If no data is set, the default setting is NONE. In this case, the password is set to "12345678."</p>
END		

## ATTENDANT CONSOLE (SN610); ATTENDANT DO NOT DISTURB SETUP AND CANCEL

### GENERAL DESCRIPTION

The Attendant has the ability to enter and remove individual stations from *Do Not Disturb* (DND). Additionally, the Attendant can set one preassigned group of stations into, or out of, *Do Not Disturb*.

### OPERATING PROCEDURE

To set an individual station in DND:

1. Dial the station number.
2. Press the **DD** key and the associated LED flashes.
3. Press the **ANS** key (**START** key). The DD LED lights steady and service set tone is received.
4. Press the **RELEASE** key.

To cancel an individual station in DND:

1. Dial the station number.
2. Press the **DD** key and the associated LED flashes.
3. Press the **RESET** key and the DD LED goes out.

To set the group of stations in DND:

1. Press the **DD** key and the associated LED flashes.
2. Press the **ANS** key (**START** key) and the DD LED lights steady.
3. The designated group is now in DND.

To cancel DND set to the group of stations:

1. Press the **DD** key and the associated LED flashes.
2. Press the **RESET** key and the DD LED goes out.
3. The designated group is no longer in DND.

To call a station that set DND:

1. Press an idle **LOOP** key.
2. Dial desired station number. The DD LED flashes and reorder tone is received.
3. Press the **DDOVR** key.
4. The desired station will ring.

### SERVICE CONDITIONS

1. Refer to the *Do Not Disturb* feature for more details.
2. Stations are assigned to the DND group in station *Class of Service* either from the *CAT* or *MAT*.
3. The *Attendant Console* is able to verify and change the status of stations with respect to *Do Not Disturb*.
4. *Attendant Override* allows the Attendant to call stations in DND without changing their status.

**ATTENDANT CONSOLE (SN610);  
 ATTENDANT DO NOT DISTURB SETUP AND CANCEL (CONT'D)**

**PROGRAMMING**

<u>START</u>	<u>DESCRIPTION</u>	<u>DATA</u>
CM13	Assign Do Not Disturb-System to the required stations.	<ul style="list-style-type: none"> <li>• YY=00</li> <li>(1) X-XXXX (Station No.)</li> <li>(2) 0: To be provided</li> </ul>
CM90	Assign DND and DNDOVR function keys to an SN610 ATTCON.	<ul style="list-style-type: none"> <li>• YY=00</li> <li>(1) ATTCON No. + <input type="text"/> + Key No.</li> <li>(2) { F6102: DND F6108: DND Override F6104: RESET</li> </ul>
<u>END</u>		

## ATTENDANT CONSOLE (SN610); ATTENDANT INTERPOSITION CALLING/TRANSFER

### GENERAL DESCRIPTION

This feature allows any Attendant to talk directly with another Attendant and also allows Attendants to transfer calls from their console to another Attendant's console in systems where *Multiple Console Operation* has been provided.

### OPERATING PROCEDURE

To call from console A to console B:

1. Attendant A presses an idle **LOOP** key.
2. Attendant A dials interposition Calling/Transfer access code and Attendant B's identification number.
3. Call is indicated at console B (on **ANS** key or **TF** key).
4. Attendant B presses **ANS** key.
5. Attendant A talks with Attendant B.
6. Attendants A and B press **RLS** key.

To transfer from console A to console B with a call in progress:

1. Attendant A dials Attendant B's identification number.
2. Call is indicated at Console B (on **ANS** key or **TF** key).
3. Attendant B presses **ANS** key.
4. Attendant A presses **RLS** key to transfer, or may consult before release.

### SERVICE CONDITIONS

1. Each console is assigned an identification number to allow interposition calling or transfers.
2. An Attendant can receive one interposition call or transfer at a time.
3. After receiving an interposition transfer, the Attendant has full capabilities for redirecting the call.
4. When *Attendant Console Lockout* (at the called console) and *Night Service* is in effect, interposition calling and transfers will result in reorder tone.

## ATTENDANT CONSOLE (SN610); ATTENDANT INTERPOSITION CALLING/TRANSFER (CONT'D)

### PROGRAMMING

<u>START</u>	<u>DESCRIPTION</u>	<u>DATA</u>
CM20	Assign the access code for Inter-Position Transfer.	<ul style="list-style-type: none"> <li>• Y = 0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX (Access Code)</li> <li>(2) 095</li> </ul>
CM90	Assign the Attendant Call Selection Key for this feature on SN610 ATTCON.	<ul style="list-style-type: none"> <li>• YY = 00</li> <li>(1) ATTCON No. + <input type="text"/> + Key No.</li> <li>(2) F6067</li> </ul>
CM08	Specify the Inter-Position Transferred call to another tenant's SN610 Attendant Console.	<ul style="list-style-type: none"> <li>(1) 143</li> <li>(2) 0/1 ◀ : Restricted/Allowed</li> </ul>
<u>END</u>	<p>If data is set to 1, a call from any station can be transferred to another SN610 Attendant Console regardless of Tenant Allocation by CM62.</p>	

## ATTENDANT CONSOLE (SN610); ATTENDANT LISTED DIRECTORY NUMBER

### GENERAL DESCRIPTION

This feature provides a display of the Listed Directory Number on the *Attendant Console* when the operator has answered a Listed Directory Number call.

### OPERATING PROCEDURE

The operator at an Attendant Console answers an incoming call.

1. SRC lamp lights.
2. Listed Directory Number, Trunk Number, and Trunk Identification Code are displayed.

### SERVICE CONDITIONS

1. This service is effective when the operator at an *Attendant Console* has answered a Listed Directory Number call terminated to the *Attendant Console*.
2. While the Listed Directory Number is displayed, the operator can transfer the call to a desired station by keying the destination number on the key pad. In this case, the Listed Directory Number of the call cannot be displayed again.
3. While the Listed Directory Number is displayed, the operator can place the present call on *Hold* by pressing the **HOLD** button. In this case, the Listed Directory Number cannot be displayed again when the operator returns to the call on *Hold*.
4. While the Listed Directory Number is displayed, the operator can set *Call Park*. In this case, the Listed Directory Number of the call placed on *Call Park* cannot be displayed again. If the call recalls from *Call Park*, the trunk route and trunk identification code are displayed.

## ATTENDANT CONSOLE (SN610); ATTENDANT LISTED DIRECTORY NUMBER (CONT'D)

### PROGRAMMING

START	DESCRIPTION	DATA
CM08	Provide the system with diversion display.	(1) 204 (2) 0: To be provided
CM35	Specify the Incoming Call Identification (ICI) key to which each LDN call or Tie Line call from each trunk route will terminate.	<ul style="list-style-type: none"> <li>• YY = 15</li> <li>(1) Trunk Route No. (00 - 63)               <ul style="list-style-type: none"> <li>00: C.O Incoming Call 0</li> <li style="padding-left: 40px;">}</li> <li>07: C.O Incoming Call 7</li> <li>(2) 40: Tie Line Incoming Call 0</li> <li style="padding-left: 40px;">}</li> <li>47: Tie Line Incoming Call 7</li> </ul> </li> </ul>
CM90	Assign the ICI key required.	<ul style="list-style-type: none"> <li>• YY = 00</li> <li>(1) ATTCON No. + <span style="border: 1px solid black; padding: 0 5px;"> </span> + Key No.</li> <li>(2) F60XX               <ul style="list-style-type: none"> <li>00 - 07 (C.O Incoming Call 0 - 7)</li> <li>40 - 47 (Tie Line Incoming Call 0 - 7)</li> </ul> </li> </ul>
CM50	Assign the indialled number to each LDN key or Tie Line key assigned by CM90. The indialled number should be different from any numbers assigned by CM10 and CM11.	<ul style="list-style-type: none"> <li>• YY = 01 (For DID)               <ul style="list-style-type: none"> <li>0: Effective data in CM35, YY = 15</li> <li>(1) 1 - 8: LDN Key No. (00 - 07) assigned by CM90</li> <li>(2) X - XXXX (Indialled No.)</li> </ul> </li> <li>• YY = 02 (For Tie Line)               <ul style="list-style-type: none"> <li>0: Effective data in CM35, YY = 15</li> <li>(1) 1 - 8: Tie Line Key No. (00 - 07) assigned by CM90</li> <li>(2) X - XXXX (Indialled No.)</li> </ul> </li> </ul>
<u>END</u>		

## ATTENDANT CONSOLE (SN610); ATTENDANT LISTED DIRECTORY NUMBER (CONT'D)

To provide the LDN Diversion feature, the following programming is also required.

<u>START</u>	<u>DESCRIPTION</u>	<u>DATA</u>
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM08</div>	Provide the system with LDN Diversion feature.	(1) 205 (2) 0: To be provided
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM58</div>	Assign the data for LDN Diversion to each indialed No. assigned by CM50, YY=01/02.  Note that a call is diverted to LDN0-7/TIE0-7 keys as specified by CM58, YY=02-07, even if CM50, YY=01/02, 1-8 has already been set.	<ul style="list-style-type: none"> <li>• YY=00 (Tenant No. of the LDN)                             <ul style="list-style-type: none"> <li>(1) { 00: Effective data in CM35, YY=15</li> <li>      01-08: LDN Key No. (00-07) assigned by CM90</li> <li>      00: Effective data in CM35, YY=15</li> <li>      01-08: Tie Line Key No. (00-07) assigned by CM90</li> </ul> </li> <li>(2) Tenant No. (00-63)</li> <li>• YY=01 (TAS Group No.)                             <ul style="list-style-type: none"> <li>(1) Same as YY=00</li> <li>(2) TAS Group No. (00-63)</li> </ul> </li> <li>• YY=02 (Day Mode Destination of the LDN)                             <ul style="list-style-type: none"> <li>(1) Same as YY=00</li> <li>      { 00: LDN/TIE key 0</li> <li>          }            }</li> <li>(2) { 07: LDN/TIE key 7</li> <li>      08: To TAS</li> <li>      09: To station assigned by CM58, YY=08.</li> </ul> </li> <li>• YY=03 (Night Mode Destination)                             <ul style="list-style-type: none"> <li>(1) Same as YY=00</li> <li>      { 00: LDN/TIE key 0</li> <li>          }            }</li> <li>(2) { 07: LDN/TIE key 7</li> <li>      08: To TAS</li> <li>      09: To station assigned by CM58, YY=09.</li> </ul> </li> <li>• YY=04 (Day mode diversion for busy destination station)                             <ul style="list-style-type: none"> <li>(1) Same as YY=00</li> <li>(2) { 00: To ATTCON (BUSY key)</li> <li>      08: To TAS</li> <li>      09: Camped on</li> </ul> </li> </ul>

A



**ATTENDANT CONSOLE (SN610);  
 ATTENDANT LISTED DIRECTORY NUMBER (CONT'D)**

DESCRIPTION	DATA
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin-bottom: 5px;">A</div> <div style="border: 1px solid black; padding: 2px; width: fit-content; margin-bottom: 5px;">CM58</div> <div style="border-left: 1px solid black; border-right: 1px solid black; height: 400px; margin-left: 5px;"></div> <p style="margin-left: 10px;"><u>END</u></p>	<ul style="list-style-type: none"> <li>• YY=05 (Night mode diversion for busy destination station)                             <ul style="list-style-type: none"> <li>(1) Same as YY=00</li> <li>(2) Same as YY=04</li> </ul> </li>   <li>• YY=06 (Day mode diversion for non-answering destination station)                             <ul style="list-style-type: none"> <li>(1) Same as YY=00</li> <li>(2) { 00: To ATTCON (NANS key) 08: To TAS</li> </ul> </li>   <li>• YY=07 (Night mode diversion for non-answering destination station)                             <ul style="list-style-type: none"> <li>(1) Same as YY=00</li> <li>(2) Same as YY=06</li> </ul> </li>   <li>• YY=08 (Day mode destination station)                             <ul style="list-style-type: none"> <li>(1) Same as YY=00</li> <li>(2) X-XXXX (Station No.)</li> </ul> </li>   <li>• YY=09 (Night mode destination station)                             <ul style="list-style-type: none"> <li>(1) Same as YY=00</li> <li>(2) X-XXXX (Station No.)</li> </ul> </li> </ul>

If a station is designated by YY=02, 03, assign the station number to be diverted.

**HARDWARE REQUIRED**

- PK-2DIT Card (DID Trunk)
- PK-2EMT Card (Tie Line Trunk)

## ATTENDANT CONSOLE (SN610); ATTENDANT LOOP RELEASE

### GENERAL DESCRIPTION

This feature allows an *Attendant Console* loop to become available for a second call as soon as the Attendant has directed the first call to a station, even if that station does not answer.

### OPERATING PROCEDURE

To operate:

1. *Attendant Console* indicates incoming calls.
2. Press **ANSWER** key or appropriate *Attendant Call Selection* key.
3. Dial desired station number and receive ringback tone.
4. Before station answers, press **RELEASE** key.
5. Loop is now available for another call.

### SERVICE CONDITIONS

1. Unanswered calls will be routed to the Attendant within the predetermined timing using *Automatic Recall*. Refer to the *Variable Timing Parameters* feature for more information.
2. If all Attendant loop circuits are busy when *Automatic Recall* is activated, unanswered calls will be routed to the Attendant when idle loops become available. "CW" (Call Waiting) shows on the LCD to indicate a call is waiting to be answered.
3. Once a call has been released from a loop, the Attendant has no further access to it unless recalled.
4. A maximum of six calls (one per loop) may be released simultaneously from any single *Attendant Console*.
5. This feature provides the Attendant with the equivalent of twelve switching loops.
6. In a *Multiple Console Operation*, the attendant who initiated the loop release will be recalled.
7. *Attendant Loop Release* is only applicable to trunk calls extended to an unanswered station/busy station (*Camp-On*).
8. Calls which are held by the Attendant, using the **HOLD** key, cannot be released from the console. These calls remain on the switched loop until they are either extended by the Attendant or abandoned by the calling party.
9. Once *Attendant Loop Release* is activated, the Attendant cannot interact with the call until recalled using the *Automatic Recall* feature.
10. When *Attendant Camp-On* is activated, the Attendant can *Camp-On* to a busy called station. Upon *Camp-On*, the Attendant may release the call from the console.
11. Release is denied only when the Attendant attempts to transfer a trunk to a fully restricted station. In this case, the **RELEASE** key is ineffective.

### PROGRAMMING

<u>START</u>	<u>DESCRIPTION</u>	<u>DATA</u>
START   CM08   END	Provide the system with the Attendant Loop Release.	(1) 014: Attendant Loop Release (2) 0: To be provided

## ATTENDANT CONSOLE (SN610); ATTENDANT PROGRAMMING

### GENERAL DESCRIPTION

This function is allowed only for the new attendant console and is used to execute DISA code set up, speed dial programming, and system clock setup operations.

### OPERATING PROCEDURE

The following operations are common for DISA code set up, speed dial programming, and system clock setup operations.

1. Press the idle **LOOP** key.
2. Press the **PROG** key.  
The **PROG** key LED (red) lights.  
The "PASSWORD" prompt is displayed on the LCD.
3. Dial the password (1~8 digits).  
The dialed password is displayed on the LCD.  
When the password dialling is completed, the following message is displayed on the LCD. The **PROG** key LED (red) blinks at this time.

PROGRAM  
DISA SPD CLOCK

If the **RLS** key is pressed in this status, the attendant console can go back to the idle status. At this time, both **CANCEL** and **ANS** keys are invalid.

After the above operation, select DISA code set up, speed dial programming, or system clock setup operations.

To set up the DISA code:

1. Press the **DISA** key. The **DISA** key LED (red) lights.
  2. Dial the block # (00~07).  
The selected block number is displayed as follows on the LCD along with the currently registered DISA code, trunk restriction class, and service class (A/B/C).
- 12345...55  
0511-05/14/13  
DISA
3. Dial the new code.  
If there is no change, skip to step 4.
  4. Press the **ANS** key.
  5. Dial the new trunk restriction class (1 digit) and the new service class (A/B/C: 2/2/2 digits) (00~15).  
If there is no change skip to step 6.
  6. Press the **ANS** key.  
The new code and classes are set up.
  7. Press the **CNCL** key.  
To set up another block number, return to step 2.
  8. Press the **CNCL** key.  
The system goes back to the status assumed after the password was set up.

## ATTENDANT CONSOLE (SN610); ATTENDANT PROGRAMMING (CONT'D)

To program speed dialing:

1. Press the **SPD** key.  
The **SPD** key LED (red) comes on.
2. Dial the block # (five digits).  
The selected block number is displayed as follows along with the currently registered trunk access code and telephone number.

00012 9-  
12345.... 56  
SPD

3. Dial the new Attendant code to register.  
If there is no change skip to step 4.
4. Press the **ANS** key.
5. Dial the new Attendant number.  
If there is no change skip to step 6.
6. Press the **ANS** key.  
The new access code and the telephone number are set up.
7. Press the **CNCL** key.  
To program another block number, return to step 2.
8. Press the **CNCL** key.  
The system goes back to the status assumed after the password was set.

To set up the system clock:

1. Press the **CLOCK** key.  
The **CLOCK** key LED (red) comes on.
2. Dial the new date and time (12 digits).  
Dial the date and time in the following order.

MT DY DW MM SS

MT: Month (01~12)

DY: Day

DW: Day of week (00 - 06: SUN - SAT)

HH: Hour (00 - 23)

MM: Minute (00 - 59)

SS: Second (00 - 59)

012301010203  
CLOCK

3. Press the **ANS** key.  
The new date and time are set up.
4. Press the **CNCL** key.  
The system goes back to the status assumed after the password was set up.

### SERVICE CONDITIONS

1. A feature access code can be assigned and dialed instead of using the **PROG** key.
2. 8 DISA Codes can be set up and changed by Attendant Console.
3. 300 Speed Dial Codes can be set up and changed by the *Attendant Console*.

## ATTENDANT CONSOLE (SN610); ATTENDANT PROGRAMMING (CONT'D)

### PROGRAMMING

START	DESCRIPTION	DATA
CM60	Assign the password code for Attendant Programming. <b>INITIAL</b>	<ul style="list-style-type: none"> <li>• YY=30</li> <li>(1) 1</li> <li>(2) XX-XX: Password Code (Max. 8 digits) X: 0-9, A (*), B (#)</li> </ul> <p>If no data is set, the default setting is <b>NONE</b>. In this case, the password is set to "12345678".</p>
CM90	Assign the programming key for providing Attendant Programming on SN610 ATTCON.	<ul style="list-style-type: none"> <li>• YY=00</li> <li>(1) ATTCON No. + <input type="text"/> + Key No.</li> <li>(2) F6111</li> </ul>
CM20	Assign the access code for providing Attendant Programming for SN610 ATTCON, if required.	<ul style="list-style-type: none"> <li>• Y=0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX (Access Code)</li> <li>(2) A56</li> </ul>
END		

## ATTENDANT CONSOLE (SN610); CALL QUEUING

### GENERAL DESCRIPTION

This feature provides the Attendant the ability to handle a series of exchange network calls in the order of their arrival (first in, first out), thereby eliminating unnecessary delays.

### OPERATING PROCEDURE

Press the *Attendant Console ANSWER* key to receive calls in order of queue.

### SERVICE CONDITIONS

1. Incoming calls arriving at the console will show "CW" on the LCD display. Additionally, the "CW" will flash when a predetermined number of calls are in queue. This number is programmable from 1 to 48 on a system basis.
2. When an incoming call lights an *Incoming Call Identification* (LDN, ATND, RCL, WATS, FX, CCSA, etc.) LED, the Attendant may answer it out of the queuing sequence by pressing the indicated key.
3. Automatic Call Distribution is not used in *Multiple Console Operation*. All incoming call indications appear at each console within the same tenant group so that the call can be answered by any console. Each console would then share the same queue.
4. An incoming call cannot be answered simultaneously by more than one Attendant. Only the Attendant that pressed the **ANSWER** key first is connected to the call. The other Attendant's **ANSWER** key will pick up the next call or be ineffective (no queue) when pressed.
5. If a power failure occurs, calls in queue which have the power failure transfer feature associated with their trunk will be connected to power failure stations. Other calls in queue will not be connected to power failure stations.
6. When the system is changed from day to night mode, calls already waiting in the queue will remain in the same queue and can be answered by the *Attendant Console*.
7. Calls in queue can overflow to *Night Service*. Refer to *Attendant Overflow* for more information.

### PROGRAMMING

Refer to CALL WAITING DISPLAY.

## ATTENDANT CONSOLE (SN610); CALL SPLITTING

### GENERAL DESCRIPTION

This feature allows the Attendant to confer privately with one party on an Attendant-handled connection without the other party overhearing.

### OPERATING PROCEDURE

To speak with called party only:

1. Dial desired station number.
2. Station class/number is displayed.
3. Wait for party to answer.

To speak with calling party only:

1. Press **SRC** key.
2. Trunk kind/number displayed.
3. Proceed with conversation.

To return to called party:

1. Press **DEST** key.
2. Station class/number displayed.

To speak with both parties:

Press **TALK** key.

To release from *Attendant Console*:

Press **RLS** key.

To disconnect all parties involved in a three-way conference:

1. Press **DEST** key.
2. Press **CANCL** key twice.

### SERVICE CONDITIONS

1. The Attendant may alternate between the called and calling station parties, and three-party *Conference*, as desired.
2. The *Call Splitting* feature is a standard Attendant feature.
3. *Call Splitting* is automatic when the Attendant begins call completion or answers a recall.
4. *Call Splitting* is manual when the **SRC**, **DEST**, or **TALK** key is pressed on the *Attendant Console*.

## ATTENDANT CONSOLE (SN610); CALL SPLITTING (CONT'D)

### PROGRAMMING

START

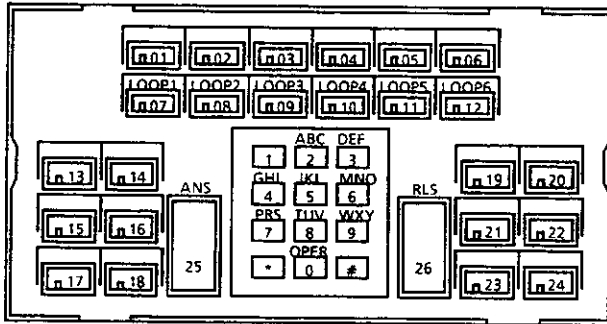
CM90

DESCRIPTION

DATA

Assign the SRC, DEST, TALK, and CANCEL keys on SN610 ATTCON.  
 If no data is set, the default setting is as follows:

- YY=00
- (1) ATTCON No. +   + Key No.
- (2) {
  - F200: SRC
  - F201: DEST
  - F202: CANCEL
  - F203: TALK



<u>Key No.</u>	<u>Data</u>	<u>Description</u>
06	F203	Talk (TALK) <b>Note</b>
19	F200	Source (SRC)
20	F201	Destination (DEST)
24	F202	Cancel (CANCEL)

**Note:** TALK key is assigned as Multi-Function key.

END



## ATTENDANT CONSOLE (SN610); CALL WAITING DISPLAY

### GENERAL DESCRIPTION

This feature provides a visual indication to the Attendant when one or more calls are waiting to be answered.

### OPERATING PROCEDURE

No manual operation is required.

### SERVICE CONDITIONS

1. When there are any incoming calls to the *Attendant Console* that have not yet been answered, "CW" (*Call Waiting*) will show on the LCD display (without flashing), followed by the number of calls waiting. A value of from 1 to 48 (6 as set in default) calls waiting can be set to start the "CW" flashing, on a per-system basis.
2. When multiple consoles are installed, the "CW" will show on all consoles' display which are assigned to the same tenant group. Other tenant group consoles will reflect the call waiting status for their tenant group.
3. The following types of unanswered incoming calls to an *Attendant Console* are counted as calls waiting:
  - LDN (Listed Directory Number Calls)
  - ATND (Attendant Dial 0 Calls)
  - RCL (Attendant Recall Calls)
  - FX (Foreign Exchange Calls)
  - WATS (Wide Area Telephone Service Calls)
  - TIE (Tie Line Calls)
  - BUSY (Call Forwarding - Busy Calls to Attendant)
  - NANS (Call Forwarding - No Answer Calls to Attendant)
  - TF (Interposition Transfer/Calling Calls between Attendants)
  - ICPT (Call Forwarding - Intercept Calls)
  - ALL (Call Forwarding - All Calls to Attendant)
  - CCSA (Common Channel Signaling Arrangement Calls)
4. An audible indication will be provided when "CW" is shown, unless the Attendant is already on a loop or if the volume control is used to silence the buzzer.

### PROGRAMMING

START	DESCRIPTION	DATA
<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">CM42</div>	Specify the number of waiting calls which cause the Call Waiting lamp to flash.	(1) 00 (2) No. of Waiting Calls (01 – 48) If no data is set, the default setting is 6.
END		

## ATTENDANT CONSOLE (SN610); COMMON ROUTE INDIAL

### GENERAL DESCRIPTION

This feature allows assignment of incoming DID calls to different *Attendant Call Selection* keys based on the last four digits dialed into the system. Up to eight individual Listed Directory Numbers can be assigned in system programming. When an incoming call to any of these trunks is received, an *Attendant Call Selection* key will flash and the LCD display will indicate the Listed Directory Number associated with that trunk route.

### OPERATING PROCEDURE

Refer to *Attendant Call Selection*.

### SERVICE CONDITIONS

1. A maximum of eight Listed Directory Numbers can be specified for each *Attendant Call Selection* key.
2. This feature can help identify calls to particular tenants who are sharing Attendant(s). In this case, *Tenant Service* service conditions would apply to the system.
3. If the system or tenant group is in night mode, the *Common Route Indial* lines would follow the established night rerouting.

### PROGRAMMING

START	DESCRIPTION	DATA
CM08	Provide the system with Diversion Display.	(1) 204 (2) 0: To be provided
CM90	Assign the required number of LDN keys on the SN610 ATTCON.	<ul style="list-style-type: none"> <li>• YY = 00</li> <li>(1) SN610 ATTCON No. + <input style="width: 20px; height: 15px;" type="text"/>,</li> <li style="padding-left: 20px;">+ Key No.</li> <li>(2) <math>\left\{ \begin{array}{ll} \text{F6000:} &amp; \text{LDN0} \\ &amp; \text{\} \} \\ \text{F6007:} &amp; \text{LDN7} \end{array} \right.</math></li> </ul>
CM50	Assign the indialed number to each LDN key assigned by CM90. The indialed number should be different from any numbers assigned by CM10 and CM11.	<ul style="list-style-type: none"> <li>• YY = 01</li> <li>(1) 1-8: LDN key No. (00-07) assigned by CM90.</li> <li>(2) X-XXXX (Indialed No.)</li> </ul>
CM51	Assign the destination to which a DID Call is transferred when an unassigned number is dialed.	<ul style="list-style-type: none"> <li>• YY = 06 (On DID Call)</li> <li>(1) Tenant No. (00-63)</li> <li>(2) <math>\left\{ \begin{array}{l} \text{X-XXXX (Station No.)} \\ \text{E000: SN610 ATTCON} \end{array} \right.</math></li> </ul>
END		

## ATTENDANT CONSOLE (SN610); COMMON ROUTE INDIAL (CONT'D)

To provide the LDN Diversion feature, the following programming is also required.

START	DESCRIPTION	DATA
CM08	Provide the system with LDN Diversion feature.	(1) 205 (2) 0 : To be provided
CM58	Assign the data for LDN Diversion to each indial No. assigned by CM50, YY=01.	<ul style="list-style-type: none"> <li>• YY=00 (Tenant No. of the LDN)                             <ul style="list-style-type: none"> <li>(1) 01-08: LDN0-7 assigned by CM50, YY=01.</li> <li>(2) Tenant No. (00-63)</li> </ul> </li> <li>• YY=01 (TAS Group No.)                             <ul style="list-style-type: none"> <li>(1) Same as YY=00</li> <li>(2) TAS Group No. (00-63)</li> </ul> </li> <li>• YY=02 (Day Mode Destination of the LDN)                             <ul style="list-style-type: none"> <li>(1) Same as YY=00                                     <ul style="list-style-type: none"> <li>00: LDN0 key</li> <li>  {</li> <li>  }</li> </ul> </li> <li>(2)                                     <ul style="list-style-type: none"> <li>07: LDN7 key</li> <li>08: To TAS</li> <li>09: To station assigned by CM58, YY=08.</li> </ul> </li> </ul> </li> <li>• YY=03 (Night Mode Destination)                             <ul style="list-style-type: none"> <li>(1) Same as YY=00                                     <ul style="list-style-type: none"> <li>00: LDN0 key</li> <li>  {</li> <li>  }</li> </ul> </li> <li>(2)                                     <ul style="list-style-type: none"> <li>07: LDN7 key</li> <li>08: To TAS</li> <li>09: To station assigned by CM58, YY=09.</li> </ul> </li> </ul> </li> <li>• YY=04 (Day mode diversion for busy destination station)                             <ul style="list-style-type: none"> <li>(1) Same as YY=00                                     <ul style="list-style-type: none"> <li>00: To ATTCN (BUSY key)</li> </ul> </li> <li>(2)                                     <ul style="list-style-type: none"> <li>08: To TAS</li> <li>09: Camped on</li> </ul> </li> </ul> </li> </ul>
	Note that a call is diverted to LDN0-7 keys as specified by CM58, YY=02-07, even if CM50, YY=01, 1-8 has already been set.	
A		



## **ATTENDANT CONSOLE (SN610); INCOMING CALL IDENTIFICATION**

### **GENERAL DESCRIPTION**

Incoming calls are identified by various means. Refer to *Attendant Called/Calling Number, Attendant Call Selection, Attendant Source Key, Attendant Listed Directed Number, and Common Route Indial.*

### **OPERATING PROCEDURE**

Normal operating procedures are applied for each feature.

### **SERVICE CONDITIONS**

Refer to the applicable feature description.

### **PROGRAMMING**

Refer to the applicable feature description.

## ATTENDANT CONSOLE (SN610); INDIVIDUAL TRUNK ACCESS

### GENERAL DESCRIPTION

The *Attendant Console* is provided with the ability to access each individual trunk by dialing an associated identification code. This allows detection of faulty trunks during regular testing or after complaints. The *Customer Administration Terminal (CAT)* or *Maintenance Administration Terminal (MAT)* has the capability to then busy-out the trunk until it is repaired.

### OPERATING PROCEDURE

1. Attendant presses an idle **LOOP** key.
2. Attendant dials the Individual Trunk access code.
3. Attendant dials the individual trunk identification code.
4. If trunk was idle, testing can follow.

### SERVICE CONDITIONS

1. The *Attendant Console* LCD display will show the individual trunk identification code.
2. If the trunk is busy, the attendant receives busy tone.
3. If the trunk has been set into busy-out status by the *CAT* or *MAT*, the Attendant can still access the trunk.

### PROGRAMMING

START	DESCRIPTION	DATA
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM20</div>	Assign the access code for Direct Trunk Selection.	<ul style="list-style-type: none"> <li>• Y=0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX (Access Code)</li> <li>(2) 081</li> </ul>
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM30</div>	Assign the Trunk identification code to each trunk.  The Trunk ID code is to be dialed after the access code, and displayed on SN610 Attendant Console.	<ul style="list-style-type: none"> <li>• YY=19</li> <li>(1) Trunk No. (000-255) assigned by CM10 (D000-D255)</li> <li>(2) <u>XXXX</u>: Trunk ID code <b>Note</b> <ul style="list-style-type: none"> <li>└ Set any desired number (4 digit).</li> </ul> </li> </ul> <p><b>Note:</b> <i>By loading Resident System Program, Trunk Identification Codes are assigned as follows.</i></p> <div style="margin-left: 40px;"> <p style="margin: 0;"><u>1XXX</u></p> <ul style="list-style-type: none"> <li>└ Trunk Number (000-255)</li> </ul> </div>
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">END</div>		

## ATTENDANT CONSOLE (SN610); MULTIPLE CONSOLE OPERATION

### GENERAL DESCRIPTION

This feature allows more than one *Attendant Console* to operate within the same system.

### OPERATING PROCEDURE

Normal operating procedures are applied for each console installed.

### SERVICE CONDITIONS

1. The maximum number of consoles per Port Interface Module (PIM) is eight.
2. The Attendant Console (SN610) can be used in combination with the Attendant Console (HA-610Z) in any PIM (any combination).
3. The maximum number of consoles allowable per system is eight.
4. Each incoming call is displayed on all consoles within a tenant group whether idle or busy. If all Attendants are involved in processing calls when another central office call arrives, the "CW" (*Call Waiting*) will show on all consoles' LCD. This is switched-loop Attendant operation.
5. A station can be connected to only one Attendant loop at a time. Any attempt at establishing multiple connections will result in reorder tone being sent to the party attempting multiple loop connection.
6. *Attendant Interposition Transfer* is used to transfer calls between both types of *Attendant Consoles* (SN610 and HA-610Z).
7. The NEAX1400 IMS operates only on a switched-loop basis. Fixed-loop operation is not available.
8. To place a multiple-console system (or a multiple-console tenant group) into *Night Service*, a preprogrammed master console must press the NITE key and dial a password. If one of the other consoles enters *Night Service*, all calls addressed to that console will be directed to the other console(s).
9. When a console has entered *Night Service*, all calls already connected to its loop must be processed from that console. Recalls and serial recalls are routed to the night transfer station, if assigned.

### PROGRAMMING

Refer to ATTENDANT CONSOLE (SN610 ATTCON).

## ATTENDANT CONSOLE (SN610); MULTI-FUNCTION KEY

### GENERAL DESCRIPTION

The SN610 ATTCON provides six Multi-Function keys directly below the LCD. Each key's function is displayed on the lowest line of the LCD. There are five different modes and each key's function may be different in each mode. The modes are as follows: when the ATTCON is idle, when it is answering or originating a call, when the called station is busy, when the called station is in Do Not Disturb, and when accessing Hotel/Motel features.

### OPERATING PROCEDURE

The operating procedure for each key depends on the function assigned to that key.

### SERVICE CONDITIONS

- 1) The Multi-Function Key can be assigned to the key number 01-66 located below the LCD.
- 2) Up to five functions can be assigned to each Multi-Function Key.
- 3) The LED indications associated with each Multi-Function Key are controlled.
- 4) The Incoming Call Identification (ICI) and LOOP functions should not be assigned to Multi-Function Keys.

### PROGRAMMING

START	DESCRIPTION	DATA
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM60</div> <div style="text-align: center; margin: 10px 0;"> </div> <div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM90</div> <div style="text-align: center; margin: 10px 0;"> </div> <div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">A</div>		<ul style="list-style-type: none"> <li>● YY = 17</li> <li>(1) X: ATTCON No. (0-7)     assigned by CM10</li> <li>(2) 0/1 ◀: Ineffective/Effective</li>   <li>● YY = 00</li> <li>(1) EXXX + [ ] + Multi-Function           key No. (01-06)               <ul style="list-style-type: none"> <li>└─ ATTCON No. (0-7)</li> <li>└─ ATTCON Status No. (00-15)</li> </ul>               00: Idle State                01: When Answering or Originating                02: When the called station is busy                03: When the called station is DND                04: When accessing Hotel/Motel feature                05-15: Not Used             </li>   <li>(2) F6XXX               <ul style="list-style-type: none"> <li>└─ Setting Data (000-255)</li> </ul> </li> </ul>



## ATTENDANT CONSOLE (SN610); MULTI-FUNCTION KEY (CONT'D)

A

DESCRIPTION

DATA

**Note 1:** The following data is assigned as initial data or resident data.

Key # ATTCON Status #	01	02	03	04	05	06
00	F6110 (MODE)	F6111 (PROG)	/	/	/	/
01	F6112 (SPB)	F6113 (LPB)	F6106 (SHF)	/	F6105 (SC)	F6203 (TALK)
02	/	/	/	/	/	F6107 (BV)
03	/	/	/	/	/	F6108 (DDOV)
04	F6100 (RC)	F6101 (MW)	F6102 (DD)	F6109 (WU)	/	F6104 (RESET)

105 (SC)	] ATTCON Status No. 01
106 (SHF)	
112 (SPB)	
113 (LPB)	
203 (TALK)	
107 (BV)	] ATTCON Status No. 02
108 (DDOV)	] ATTCON Status No. 03
100 (RC)	] ATTCON Status No. 04
101 (MN)	
102 (DD)	
109 (WU)	
104 (RESET)	

**Note 2:** When setting or canceling a group of stations in DND/RC, ATTCON Status No. 00 should be used.

END

## ATTENDANT CONSOLE (SN610); PUSHBUTTON CALLING-ATTENDANT ONLY

### GENERAL DESCRIPTION

This feature permits an operator to place all calls over Dual Tone, Multi-Frequency (DTMF) lines from the pushbutton keypad on the *Attendant Console*.

### OPERATING PROCEDURE

The operator presses pushbutton keypad to dial.

### SERVICE CONDITIONS

1. This feature requires that all central office trunks or tie trunks accept pushbutton signaling (DTMF).
2. *Pushbutton Calling- Attendant Only* may be added to the system without providing pushbutton calling capability to other stations.

### PROGRAMMING

<u>START</u>	<u>DESCRIPTION</u>	<u>DATA</u>
START   CM35   END	Assign the type of signaling (DTMF) to Outgoing and Bothway Trunk Routes.	<ul style="list-style-type: none"> <li>• YY=01</li> <li>(1) Trunk Route No. (00 – 63)</li> <li>(2) 7</li> </ul>

## ATTENDANT CONSOLE (SN610); SERIAL CALL

### GENERAL DESCRIPTION

This feature is activated by the Attendant when an incoming calling party wishes to speak with more than one internal party. When the station subsequently disconnects from the central office line call, the central office party automatically rings back to the same Attendant.

### OPERATING PROCEDURE

To operate;

1. Attendant answers incoming central office call.
2. Attendant extends calls to desired station.
3. Attendant presses **SERIAL CALL SET(SC)** key.
4. Called station and incoming caller are connected.
5. Called station hangs up. Serial Call Termination (SRL) LED on *Attendant Console* flashes at 60 IPM. If Attendant is available, an audible indication will be provided.
6. Attendant presses **ANS** or **SRL** key to return to the original incoming calling party.

### SERVICE CONDITIONS

1. *Serial Calling* is not provided for station-to-station calling.
2. *Serial Calls* can be enabled or disabled on a per-console basis.
3. This feature is not available for tandem connections.
4. *Serial Calling* is allowed when a station is involved in an Attendant Conference.
5. No features are denied toward a line or trunk involved in a *Serial Call*.

### PROGRAMMING

<u>START</u>	<u>DESCRIPTION</u>	<u>DATA</u>
<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">CM90</div>	Assign the SERIAL CALL SET and SERIAL CALL Keys on SN610 ATTCON.	<ul style="list-style-type: none"> <li>• YY = 00</li> <li>(1) ATTCON No. + <span style="border: 1px solid black; display: inline-block; width: 15px; height: 15px; vertical-align: middle;"></span> + Key No.</li> <li>(2) { F6062: Serial Call Termination</li> <li style="margin-left: 20px;">F6105: Serial Call Set</li> </ul>
<u>END</u>		

## **ATTENDANT CONSOLE (SN610); TRUNK GROUP BUSY DISPLAY**

### **GENERAL DESCRIPTION**

A visual indication is supplied to the Attendant when all trunks in a particular trunk group are busy.

### **OPERATING PROCEDURE**

No manual operation is required.

### **SERVICE CONDITIONS**

1. The *Attendant Console* must be programmed to have a designated Trunk Group Busy LED function key.
2. This feature may be used on trunk groups consisting of either DDD, DID, WATS, Tie, FX, or special trunks.
3. Besides Trunk Group Busy LEDs on the *Attendant Console (SN610)*, trunk busy status can be displayed by the following LEDs:
  1. Function key LEDs on Multiline Terminals.
  2. External LEDs (PK-DK01 card must be installed.)
  3. Attendant Console's (HA-610Z) trunk Group Busy LEDs.
4. A total of 62 Trunk Group Busy LEDs are available for Attendant Console (SN610), Multiline Terminals, or External LEDs.

## ATTENDANT CONSOLE (SN610); TRUNK GROUP BUSY DISPLAY (CONT'D)

### PROGRAMMING

START	DESCRIPTION	DATA
CM30	Assign the Trunk Group No. to each trunk. Several trunks may be assigned to one Trunk Group Number.  <b>Note:</b> Any six Trunk Group No. out of Trunk Group No. 01 - 62 can be assigned.	<ul style="list-style-type: none"> <li>• YY = 09</li> <li>(1) 000 - 255 (Trunk No.)</li> <li>(2) 01 - 62 (Trunk Group No.)</li> </ul>
CM90	For providing the Trunk Group Busy Lamps on SN610 ATTCON, assign the Trunk Group No. to required key on SN610 ATTCON.  <b>Note:</b> Max. 6 keys per SN610 ATTCON can be assigned. Keys No. 1 - 6 should not be assigned to provide the Trunk Group Busy Lamp.	<ul style="list-style-type: none"> <li>• YY = 00</li> <li>(1) ATTCON No. + <span style="border: 1px solid black; padding: 0 2px;"> </span> + Key No.</li> <li>(2) F12XX               <ul style="list-style-type: none"> <li>└─ 01 - 62 (Trunk Group No assigned by CM30, YY = 09)</li> </ul> </li> </ul>
CM44	For providing the Trunk Group Busy Lamps externally, assign the Trunk Group No. to required circuit number of PK-DK01 Card.	<ul style="list-style-type: none"> <li>(1) XXX               <ul style="list-style-type: none"> <li>└─ 0 - 3 (Circuit No.)</li> <li>└─ 00 - 31 (Card No. of PK-DK01 assigned by CM10.)</li> </ul> </li> <li>(2) 11XX               <ul style="list-style-type: none"> <li>└─ 01 - 62 (Trunk Group No. assigned by CM30, YY = 09)</li> </ul> </li> </ul>
END		

### HARDWARE REQUIRED

To provide the Trunk Group Busy Lamps on Attendant Console:  
 SN610 ATTCON and PK-2DLC Card

To provide the Trunk Group Busy Lamps externally:  
 PK-DK01 Card and lamp indicator provided by the customer.

## ATTENDANT CONSOLE (SN610); UNSUPERVISED TRUNK-TO-TRUNK TRANSFER BY ATTENDANT

### GENERAL DESCRIPTION

This feature allows an Attendant to transfer an incoming or outgoing call on one trunk to an outgoing trunk and exit the connection before the called party answers.

### OPERATING PROCEDURE

1. An incoming call is received and answered in the normal manner. The trunk number is displayed.
2. The Attendant dials the access code of the outgoing route, then the destination number. The dialed digits are displayed.
3. If the feature is allowed, the display will change to show the selected outgoing trunk number.
4. The call is extended (by operation of the **RELEASE** key). The *Attendant Console* will be recalled. On answer, the Attendant will be connected to the original trunk party. If the call is answered, the trunk-to-trunk connection is maintained.
5. After recall to the *Attendant Console*, the called party may answer; this results in an initial three-way conversation before the call is extended. Alternatively, the Attendant can re-extend the call (from above) to the same destination or extend it to another.

### SERVICE CONDITIONS

1. The feature is dependent on strict signaling and other conditions being met.
2. The trunk associated with at least one side of the call must be programmed for answer and/or release signal(s) to ensure the trunks are not locked up.

### PROGRAMMING

<u>START</u>	<u>DESCRIPTION</u>	<u>DATA</u>
START   [ CM08 ]   END	Provide the system with this feature.	(1) 206 (2) 1 ◀ : Available

**Note:** *The trunk associated with at least one side of the call must be programmed for answer and/or release signal (s) to ensure the trunks are not locked up. As for the data to be assigned to each trunk, refer to TRUNK-TO-TRUNK CONNECTION.*

## ATTENDANT DELAY ANNOUNCEMENT

### GENERAL DESCRIPTION

This feature provides an announcement, via Voice Recording Memory Card, to external calls that are not answered by the Attendant within a predetermined time.

### OPERATING PROCEDURE

No manual operation is required.

### SERVICE CONDITIONS

1. Up to eight calls can be connected to a VRM Card at one time.
2. This feature is provided on a trunk-route basis (CO/TIE/DID).
3. A maximum of 64 Voice Recording Memory Cards can be assigned on a tenant/system-basis.
4. The announcement can be supplied to a call once or several times, periodically. (This is selectable).

### PROGRAMMING

START	DESCRIPTION	DATA
CM10	Assign the LEN to each Voice Recording Memory Card (PK-ME01).	(1) LEN out of 000-0511 (2) EB000 - EB127: Voice Recording Memory Card [ For PIM0: EB000-EB031 For PIM1: EB032-EB063 For PIM2: EB064-EB095 For PIM4: EB096-EB127 ]
CM35	Provide the Announcement Service via Voice Recording Memory Card on Attendant Delay Announcement.	● YY = 74 (1) Trunk Route No. (00-63) (2) 0/1 ◀ : Allowed/Restricted
CM49	Assign the function of the Voice Recording Memory Card.	● YY = 00 (1) XXX: Voice Recording Memory Card No. 000-127 assigned by CM10 (2) 0FXX: [ Message No. (00-63) Attendant Delay Announcement ]
		● YY = 0A (1) XX: Tenant No. (2) XX: Message No. (00-63) assigned by CM49 YY = 00
END		

## ATTENDANT DELAY ANNOUNCEMENT (CONT'D)

START	DESCRIPTION	DATA
CM08	Specify the replaying of message recorded in the Voice Recording Memory Card.	(1) 165 (2) <span style="font-size: 2em;">}</span> 0: The message is replayed at an interval assigned by CM41, Y = 0, Function No. 47. 1 ◀ : The message is played only once.
CM20	To record, replay, and delete a message, assign the Voice Recording Memory Card access codes, respectively.	● Y = 0-3 (Numbering Plan Group 0-3) (1) X-XXX : Access Code (2) <span style="font-size: 2em;">}</span> A00: Record A01: Replay A02: Delete
CM41	Specify the unanswered timing of message replay.	● Y = 0 (1) 16 (2) 01-30: 12 sec - 136 sec (4-sec. increments) If no data is set, the default setting is 09 (44 -52 seconds.)
	Specify the interval time of message replay.	● Y = 0 (1) 47 (2) 01-30: 0 sec - 120 sec (4-sec. increments) If no data is set, the default setting is 09 (32 -36 seconds.)
END		



## ATTENDANT OVERFLOW

### GENERAL DESCRIPTION

When an incoming call which has terminated from an external line to an *Attendant Console* remains unanswered after a predetermined time period, this feature provides a change to Night Service for that particular external line.

### STATION APPLICATION

Attendant Consoles (HA-610Z ATTCON, SN610 ATTCON).

### OPERATING PROCEDURE

No manual operation is required.

### SERVICE CONDITIONS

1. The *Night Service* assignment applied to the unanswered call is the same that applies to that external line when the system is placed in night mode.
2. This feature only applies to external incoming calls, and is provided on a per-trunk basis.
3. The activation timing for this feature is, by default, from 32 to 36 seconds after the call status has changed from trunk incoming call to Attendant call, and can be programmed from four seconds to 120 seconds, in increments of four seconds.
4. When the destination of the *Night Service* is specified as a *Direct Inward Termination* (DIT), the incoming call processing is changed to *Trunk Answer Any Station* (TAS) when the called DIT station fails to answer the rerouted call within a predetermined time period.
5. The next incoming external call will ring at the *Attendant Console* as normal.

## ATTENDANT OVERFLOW (CONT'D)

### PROGRAMMING

<u>START</u>	<u>DESCRIPTION</u>	<u>DATA</u>
CM08	Provide the system with ATTENDANT OVERFLOW.	(1) 067 (2) 0: Available
CM30	Assign the data for terminating system in Day Mode of the trunk.	<ul style="list-style-type: none"> <li>• YY = 02 (Day Mode)               <ul style="list-style-type: none"> <li>(1) Trunk No. (000-255)</li> <li>(2) 14: Termination to HA-610Z/SN610 ATTCON</li> </ul> </li> <li>• YY = 03 (Night Mode)               <ul style="list-style-type: none"> <li>(1) Trunk No.</li> <li>(2) 04: DIT</li> </ul> </li> <li>• YY = 05 (Night Station Assignment)               <ul style="list-style-type: none"> <li>(1) Trunk No.</li> <li>(2) X - XXXX (Station No.)</li> </ul> </li> </ul>
CM41	Specify the Timing Interval for ATTENDANT OVERFLOW.	<ul style="list-style-type: none"> <li>• Y = 0               <ul style="list-style-type: none"> <li>(1) 01: (Function No.)</li> <li>(2) 01 - 30: 4 sec - 120 sec (4 sec. increments) ◀</li> </ul> </li> </ul> <p style="margin-left: 40px;">If no data is set, the default setting is 32 - 36 seconds.</p>
<u>END</u>		

## ATTENDANT OVERRIDE

### GENERAL DESCRIPTION

This feature permits an Attendant to enter a busy connection (station or trunk) via the *Attendant Console*. When this feature is activated, a warning tone is sent to the connected parties after which they are connected with the Attendant in a three-way bridge.

### STATION APPLICATION

Attendant Consoles (HA-610Z ATTCON, SN610 ATTCON).

### OPERATING PROCEDURE

To activate Attendant Override:

1. Press an idle **LOOP** key.
2. Dial the desired station number or dial feature access code for individual trunk access and the desired trunk number.
3. Press the **BV** key when busy tone is heard.
4. A double burst tone is sent to the connected parties.
5. The Attendant may now monitor or join the conversation.

OR

Press the **RELEASE** key to disengage.

### SERVICE CONDITIONS

1. This feature may be used to enter trunk-to-trunk, station-to-station, or station-to-trunk connections.
2. Each tone burst is 0.08 seconds in duration, and is provided to both parties connected.
3. *Attendant Override* of a busy station is denied if the busy station is dialing, talking to another Attendant, receiving a system generated tone, protected against any override by **DND** key, or if any of the following features are in progress:
  - *Attendant Camp-On*
  - *Call Forwarding*
  - *Call Transfer*
  - *Conference*
  - *Data Communications*
  - *Data Line Security*
  - *Executive Right of Way*
  - *Hold*
  - *Paging*
  - *Privacy Release*
  - *Station Hunting*
  - *Voice Call*
4. The Attendant can override a station that is part of a *Uniform Call Distribution* group.

## ATTENDANT OVERRIDE (CONT'D)

### PROGRAMMING

START	DESCRIPTION	DATA
CM08	<p>Provide the system with ATTENDANT OVERRIDE.</p> <p>Specify the Warning Tone sent to connected parties.</p> <p>Specify the Warning Tone sent to outside party.</p>	<p>(1) 012</p> <p>(2) 1 ◀ : Available</p> <p>(1) 045</p> <p>(2) { 0: Only Once 1 ◀ : Every 4 sec.</p> <p>(1) 076</p> <p>(2) { 0: To be sent out. 1 ◀ : Not to be sent out.</p>
CM12	<p>Assign Service Restriction Class (A) to each station.</p>	<p>• YY=02</p> <p>(1) X-XXXX (Station No.)</p> <p>(2) <u>XXXX</u></p> <p style="margin-left: 100px;">└── Service Restriction Class (A) (00-15 ◀ )</p>
A		

## ATTENDANT OVERRIDE (CONT'D)

	DESCRIPTION	DATA
A		
CM15	Assign this feature to the Service Restriction Class (A) assigned by CM12, YY = 02.	<ul style="list-style-type: none"> <li>• YY = 09</li> <li>(1) XX: Service Restriction Class (A) assigned by CM12, YY = 02.</li> <li>(2) 1 ◀: Allowed</li> </ul>
CM20	Assign the access code for Individual Trunk Access.	<ul style="list-style-type: none"> <li>• Y = 0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX: Access Code</li> <li>(2) 081 : Individual Trunk Access</li> </ul>
CM30	Assign the Trunk Identification Code to each trunk.  <b>Note 1:</b> <i>By loading the Resident System Program, Trunk Identification Codes are assigned as follows:</i> <u>1XXX</u> └ Trunk Number (000 - 255)	<ul style="list-style-type: none"> <li>• YY = 19</li> <li>(1) Trunk No. (000 - 255)</li> <li>(2) XXXX: Trunk ID Code <b>Note 1</b></li> </ul>
CM47	Assign BV key to HA-610Z Attendant Console.	<ul style="list-style-type: none"> <li>(1) Function key Number (00 - 11)</li> <li>(2) 07: Busy Verification</li> </ul>
	(INITIAL)	
CM90	Assign BV key to SN610 Attendant Console.	<ul style="list-style-type: none"> <li>• YY = 00</li> <li>(1) ATTCON No. + <span style="border: 1px solid black; padding: 0 5px;"> </span> + Key No.</li> <li>(2) F6107 : Busy Verification</li> </ul>
END		

**Note 2:** *This feature cannot be used in conjunction with Attendant Lockout.*

## AUTHORIZATION CODE

### GENERAL DESCRIPTION

An *Authorization Code* is a number code which will temporarily change a station's Class of Service to a Class of Service to one allowing access to trunks, dialing patterns, and/or features which would otherwise be restricted.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

1. Lift handset and receive dial tone.
2. Enter feature access code for *Authorization Code*.
3. Enter *Authorization Code*.
4. Receive dial tone.
5. Enter number to be called or access the desired feature.

### SERVICE CONDITIONS

1. The feature access code for *Authorization Code* can be one to three digits.

2. *Authorization Code* Limitations:

Without Application Processor AP-02 (standard):

Number of digits: up to 8 digits

Number of Codes: up to 100 combined with *Forced Account Codes*.

With Application Processor AP-02 (optional):

Number of digits: up to 10 digits

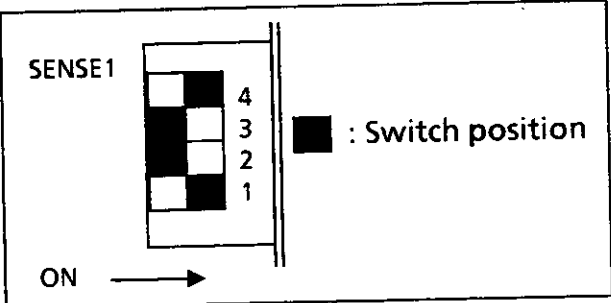
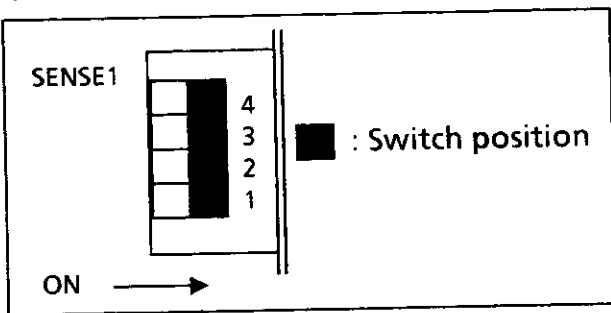
Number of Codes: up to 1000 combined with *Forced Account Codes* and *Direct Inward System Access (DISA) Codes*.

3. *Station Message Detail Recording* will not print an actual *Authorization Code*; however, a special code corresponding to that *Authorization Code* is recorded.
4. *Authorization Codes* are assigned in system data from the *Maintenance Administration Terminal (MAT)* or the *Customer Administration Terminal (CAT)*.
5. *Authorization Code* changes the Class of Service for that call only.
6. If the NEAX 1400 IMS is designated as KF Registration, this feature will not be available.

## AUTHORIZATION CODE (CONT'D)

### PROGRAMMING

(1) In a system with Application Processor (PJ-AP02)

START	DESCRIPTION	DATA
	<p>Set the SENSE1 switch on the PJ-AP02 Board, as shown below.</p> 	
CM05	<p>Assign a slot number to the PJ-AP02 Board according to the location of the board. <b>INITIAL</b></p> <p><b>Note:</b> The slot number is given by the SENSE0 switch on the PJ-AP02 Board.</p>	<p>(1) Slot Number (04-15)                      (2) 07: PJ-AP02 Board</p>
CMD6	<p>Load the initial data into the PJ-AP02 by performing the following:</p> <p><b>ST</b> + D60 + <b>DE</b> + 0000 + <b>DE</b> + CCC + <b>EXE</b></p> <p>After about 30 seconds the AP initialization is completed and the "RUN" lamp on the PJ-AP02 lights.</p> <p>Set the SENSE1 switch on the PJ-AP02 Board, as shown below.</p> 	
A		

### AUTHORIZATION CODE (CONT'D)

	DESCRIPTION	DATA
A		
CM08	Designate the AP Board for this feature	(1) 216: Designates the Processor for the Authorization Code. (2) 1◀ : AP (PJ-AP02)
	Specify the Service Set Tone sent after dialing the access code for the Authorization Code.	(1) 362: Provision of Service Set Tone after dialing the access code. (2) 1◀ : Not to be provided/To be provided.
CM12	Assign the Class of Service for Authorization Code defined.	<ul style="list-style-type: none"> <li>• CM12, YY=02 [Service Restriction Class (A) (00-15◀ )]</li> <li>• CM15, YY=31 (Authorization Code)</li> </ul> (1) Service Restriction Class (A) (00-15) Assigned by CM12, YY=02 (2) 1◀ : Allowed
CM15		
CM20	Assign the access code for each Authorization Code.	<ul style="list-style-type: none"> <li>• Y=0-3 (Numbering Plan Group 0-3)</li> </ul> (1) X-XXX: Access Code (2) 086: Authorization Code
CM42	Specify the maximum number of digits for each Authorization Code.	(1) 11: Authorization Code Max. digits (2) Max. number of digits (01-10◀ ). If Check Code is provided, the maximum number of digits is limited to eight (8).
B		



## AUTHORIZATION CODE (CONT'D)

B

CMD5

DESCRIPTION	DATA
<p>Specify the conditions for adding a Check Code to each Authorization Code.                      Check Code consists of 2 digits:                      1st and 2nd Check Code are generated by the AP according to the conditions specified by Y=0 and Y=1.</p> <p>Authorization Code:  <math>X_1 X_2 X_3 X_4 X_5 X_6 X_7 X_8 C_1 C_2</math>                      ID Code programmed    Check Code</p>	<ul style="list-style-type: none"> <li>• Y=0 (Designation of Significant digit for Check Code)                             <ul style="list-style-type: none"> <li>0: For 1st Check Code</li> <li>1: For 2nd Check Code</li> </ul> </li> <li>(1) { 00XX: Significant digit designation                             <ul style="list-style-type: none"> <li>5th - 8th digit (0 - F)</li> <li>1st - 4th digit (0 - F) (See left column)</li> </ul> </li> </ul>

DIGIT	X <sub>1</sub>	X <sub>2</sub>	X <sub>3</sub>	X <sub>4</sub>
DATA	X <sub>5</sub>	X <sub>6</sub>	X <sub>7</sub>	X <sub>8</sub>
0	No Check Code			
1	X			
2		X		
3	X	X		
4			X	
5	X		X	
6		X	X	
7	X	X	X	
8				X
9	X			X
A		X		X
B	X	X		X
C			X	X
D	X		X	X
E		X	X	X
F	X	X	X	X

X: Significant Digit for Check Code

If no Check Code is required, set data = 0000 for both 1st and 2nd Check Code.

- Y=1 (Setting of Check Sum Data for generating Check Code)
  - 0: For 1st Check Code
  - 1: For 2nd Check Code
- (1) { 0-9: Check Sum Data (Enter desired value)

C

## AUTHORIZATION CODE (CONT'D)

	DESCRIPTION	DATA
<div style="border: 1px solid black; padding: 2px; width: 20px; margin: 0 auto;">C</div> <div style="border: 1px solid black; padding: 2px; width: 60px; margin: 5px auto;">CMD5</div> <div style="border-left: 1px solid black; border-right: 1px solid black; height: 300px; margin: 0 auto;"></div> <div style="text-align: center; margin-top: 10px;"><u>END</u></div>	<p>Set the Authorization Code and its temporary Class of Service.                      By entering the Authorization Code, the Check Code will be displayed on the MAT or CAT.</p> <ul style="list-style-type: none"> <li>• Temporary Class of Service                             <ul style="list-style-type: none"> <li>X<sub>1</sub>: Type of Temporary Class of Service                                     <ul style="list-style-type: none"> <li>0: Unrestricted</li> <li>1: Fully-Restricted</li> <li>2: As per X<sub>2</sub> – X<sub>9</sub></li> <li>9: Delete of the ID Code</li> </ul> </li> <li>X<sub>2</sub> X<sub>3</sub>: Trunk Restriction Class (01 – 08) specified by CM35, YY = 51 – 68.</li> <li>X<sub>4</sub> X<sub>5</sub>: Service Restriction Class (A) (01 – 15)</li> <li>X<sub>6</sub> X<sub>7</sub>: Service Restriction Class (B) (01 – 15)</li> <li>X<sub>8</sub> X<sub>9</sub>: Service Restriction Class (C) (01 – 15)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Y = 3</li> <li>(1) X – X...X: Authorization Code (Max. number of digits specified by CM42-11.)</li> <li>(2) X<sub>1</sub> (Single Digit): In case of X<sub>1</sub> = 0, 1 or 9</li> <li style="padding-left: 40px;">X<sub>1</sub> X<sub>2</sub>...X<sub>9</sub> (9 digits): In case of X<sub>1</sub> = 2</li> <li>(See left column)</li> </ul>

**Note 1:** Up to 1,000 codes combined with Forced Account Codes and Direct Inward System Access (DISA) codes can be defined.

**Note 2:** When deleting all ID codes stored in PJ-AP02 Board at a time, do the following steps:

Step 1: Make the following switch setting on the PJ-AP02 Board.

SENSE1 SWITCH- 1.....ON  
 2.....OFF  
 3.....OFF  
 4.....ON

Step 2: ST + D60 + DE + 0000 + DE + CCC + EXE

**Note 3:** When providing a Mask Data for Authorization Code, assign CMD001-160 – 175 (Refer to SMDR System Manual).

## AUTHORIZATION CODE (CONT'D)

(2) In a system without Application Processor (PJ-AP02)

START	DESCRIPTION	DATA
CM08	Designate the MP Board for this feature.	(1) 216: Designation of Processor for Authorization Code (2) 0: MP (PJ-CP01) Board
	Specify the Service Set Tone after dialing the access code for Authorization Code.	(1) 362: Provision of Service Set Tone after dialing the access code. (2) 0/1 ◀ : Not to be provided/To be provided
CM12	Assign the Class of Service for Authorization Code to required stations.	<ul style="list-style-type: none"> <li>• CM12, YY=02 [Service Restriction Class (A) (00-15 ◀ )]</li> <li>• CM15, YY=31 (Authorization Code)</li> </ul>
CM15		
CM20	Assign the access code for each Authorization Code.	<ul style="list-style-type: none"> <li>• Y=0-3 (Numbering Plan Group 0-3)</li> </ul> (1) X-XXX: Access Code (2) 086: Authorization Code
CM42	Specify the maximum number of digits for all Authorization Codes.	(1) 11 : Authorization Code Max. digits (2) Max. number of digits (01-08 ◀ )
CM2A	Define the Authorization Code.	<ul style="list-style-type: none"> <li>• Y=0</li> </ul> (1) XX: Code Serial No. (00-99) (2) X-X...X: Authorization Code Max. number of digits specified by CM 42-11.
	Define the purpose (Y=1) and the temporary Class of Service (Y=2-4) for each Authorization Code.	<ul style="list-style-type: none"> <li>• Y=1 (Purpose of the Code)</li> </ul> (1) XX: Code Serial No. (00-99) (2) 1: Authorization Code
		<ul style="list-style-type: none"> <li>• Y=2 (Trunk Restriction Class)</li> </ul> (1) XX: Code Serial No. (00-99) (2) X: Trunk Restriction Class (1-8) specified by CM35, YY=51-68.
A		

### AUTHORIZATION CODE (CONT'D)

A

DESCRIPTION

DATA

- Y=3 [Service Restriction Class (A)/(B)]
  - (1) XX: Code Serial No. (00 – 99)
  - (2) XXXX:
    - Service Rest. Class (B)  
00 – 15 ◀
    - Service Rest. Class (A)  
00 – 15 ◀
  
- Y=4 (Service Restriction Class (C))
  - (1) XX: Code Serial No. (00 – 99)
  - (2) XX: Service Rest. Class (C) 00 – 15 ◀

END

Note: Up to 100 codes combined with Forced Account Codes can be defined.

## AUTOMATED ATTENDANT

### GENERAL DESCRIPTION

This feature allows the system to answer an incoming call on standard CO lines. The system will supply a message or dial tone (depending on hardware installed) to the caller, the caller can then dial the desired extension number and be directed to that station.

### STATION APPLICATION

Not applicable.

### OPERATING PROCEDURE

To record a message:

1. Go off-hook and receive internal dial tone.
2. Dial Voice Recording access code and Voice Recording Memory card number. Three seconds of tone will be supplied.
3. Record message (maximum duration-30 seconds).
4. Restore handset.

### SERVICE CONDITIONS

1. If the called station is busy or does not answer, or the number dialed is a feature access code or trunk access code, any one of the following operations can be set:
  - The CO line can be released
  - A second message, music and dial tone, or dial tone can be supplied
  - An alternate call terminating destination (*Attendant, Trunk Answer Any Station, Direct Inward Termination*) can be provided.
2. If Dual-Tone, Multi-Frequency (DTMF) digits have not arrived within a predetermined time interval (15 seconds) after message is supplied, the system will transfer, as per programming, to an alternate call terminating destination (*Attendant Console, Trunk Answer Any Station, Direct Inward Termination*).
3. *Call Forwarding, Station Hunting, Call Pickup, and Uniform Call Distribution* features are all effective after the call has been directed.
4. This feature uses the DTMF receivers of the system. Therefore, the total number of DTMF receivers available in the system is reduced proportionately by Automated Attendant usage. There is a maximum of 16 DTMF receivers per Port Interface Module (PIM), and a maximum of 32 DTMF receivers per system.
5. A DTMF receiver must be available before the *Automated Attendant* can answer. Therefore, when there is an incoming call and all DTMF receivers are busy, the connection to the *Automated Attendant* is attempted every four seconds until an idle DTMF receiver is found. Ringback tone from the CO is supplied to the calling party until the *Automated Attendant* answers.
6. *Automated Attendant* is assigned to trunks on a per-tenant basis.

## AUTOMATED ATTENDANT (CONT'D)

7. When the calling party cannot send DTMF digits, any one of the following operations can be selected in programming:
  - CO line can be released.
  - An alternate call terminating destination (Attendant, *Trunk Answer Any Station*, *Direct In Termination*) can be provided.
  
8. When the called party is busy or does not answer, and all DTMF receivers are busy, then the following operations can be selected in programming:
  - CO line can be released.
  - An alternate call terminating destination (Attendant, *Trunk Answer Any Station*, *Direct In Termination*) can be provided.

## AUTOMATED ATTENDANT (CONT'D)

### PROGRAMMING

START	DESCRIPTION	DATA
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM30</div> <div style="text-align: center; margin-top: 10px;"> <div style="border: 1px solid black; padding: 2px; width: 20px; height: 20px; margin: 0 auto;">A</div> </div>	<p>Assign the data for Automated Attendant to required trunks.</p>	<ul style="list-style-type: none"> <li>• YY= 02 (Terminating System in Day mode)</li> <li>• YY= 03 (Terminating System in Night mode)               <ul style="list-style-type: none"> <li>(1) Trunk No. (000 – 255)</li> <li>(2) 09: Automated Attendant</li> </ul> </li> <li>• YY= 30 (Handling of busy/not available Automated Attendant destination in Day mode)</li> <li>• YY= 31 (Handling of busy/not available Automated Attendant destination in Night mode)               <ul style="list-style-type: none"> <li>(1) Trunk No. (000 – 255)                   <ul style="list-style-type: none"> <li>00: C.O. Line Release</li> <li>01: Forwarded to TAS</li> <li>03: Forwarded to ATTCON</li> <li>04: Forwarded to DIT Station</li> <li>06: DT Connection for redial</li> <li>08: 2nd Answering Message followed by DT Connection for redial</li> <li>15◀: C.O. Line Release</li> </ul> </li> </ul> </li> <li>• YY= 32 (Handling of timed-out Automated Attendant Call)               <ul style="list-style-type: none"> <li>(1) Trunk No. (000 – 255)                   <ul style="list-style-type: none"> <li>00: C.O. Line Release</li> <li>01: Forwarded to TAS</li> <li>03: Forwarded to ATTCON</li> </ul> </li> <li>(2)                   <ul style="list-style-type: none"> <li>04: Forwarded to DIT Station</li> <li>06: DT Connection for redial</li> <li>15◀: C.O. Line Release</li> </ul> </li> </ul> </li> </ul>

## AUTOMATED ATTENDANT (CONT'D)

	DESCRIPTION	DATA
<div style="border: 1px solid black; width: 20px; height: 20px; margin: 0 auto; text-align: center; line-height: 20px;">A</div> <div style="border: 1px solid black; width: 60px; height: 25px; margin: 5px auto; text-align: center;">CM30</div>		<ul style="list-style-type: none"> <li>• YY=33 (In case YY=30, 31 is set to data 08, if all DTMF Receivers are busy.)</li> <li>(1) Trunk No. (000-255)                             <ul style="list-style-type: none"> <li>00: Disconnection</li> <li>01: Forwarded to TAS Indicator</li> <li>03: Forwarded to HA-610Z/SN610 ATTCON</li> <li>15◀: Disconnection</li> </ul> </li> </ul>
<div style="border: 1px solid black; width: 60px; height: 25px; margin: 5px auto; text-align: center;">CM45</div>	Assign the DTMF Receiver for the Automated Attendant.	<ul style="list-style-type: none"> <li>• Y=2</li> <li>(1) <u>XXX</u>: DTMF Receiver No.                             <ul style="list-style-type: none"> <li>— Circuit No. (0-3)</li> <li>— Card No. of PK-4RST (Last two digits of E200-E215 assigned by CM10)</li> </ul> </li> <li>(2) 0: Only for Automated Attendant</li> </ul>
<div style="border: 1px solid black; width: 60px; height: 25px; margin: 5px auto; text-align: center;">CM63</div>	Specify the inter-tenant connection on the Automated Attendant incoming call.	<ul style="list-style-type: none"> <li>• Y=2</li> <li>(1) <u>XXXX</u> <ul style="list-style-type: none"> <li>— Tenant No. (00-63) of trunk</li> <li>— Tenant No. (00-63) of called station</li> </ul> </li> <li>(2) 0/1 ◀ : Restricted/Allowed</li> </ul>
<div style="border: 1px solid black; width: 60px; height: 25px; margin: 5px auto; text-align: center;">CM64</div>	Assign the answering system of the Automated Attendant to the required tenants.	<ul style="list-style-type: none"> <li>• Y=0</li> <li>(1) Tenant No. (00-63)                             <ul style="list-style-type: none"> <li>00: DT Connection</li> </ul> </li> <li>(2)                             <ul style="list-style-type: none"> <li>02: 1st Answering Message followed by DT Connection</li> <li>03◀: DT Connection</li> </ul> </li> </ul>
<div style="border: 1px solid black; width: 60px; height: 25px; margin: 5px auto; text-align: center;">CM48</div> <div style="text-align: center; margin-top: 5px;"> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 0 auto; text-align: center; line-height: 20px;">B</div> </div>	If no Dial tone connection is required for the answering system assigned by CM64, Y=0, set data "0".	<ul style="list-style-type: none"> <li>• Y=2</li> <li>(1) 06</li> <li>(2) 0/1 ◀ : Without DT/With DT</li> </ul>



## AUTOMATED ATTENDANT (CONT'D)

DESCRIPTION	DATA
<div style="text-align: center;">B</div> <div style="border: 1px solid black; padding: 2px; margin: 5px auto; width: 60px;">CM08</div>	<p>(1) 180            (2) 0/1 ◀ : 0.2 sec. ON – 0.2 sec. OFF                              0.2 sec. ON – 0.2 sec. OFF                              0.2 sec. ON – 2 sec. OFF                              /As per CM35, YY = 33</p>
<p>Specify the ringing cadence for an Automated Attendant Call.</p>	
<p>Specify the process when a call is transferred by an Automated Attendant to a predetermined Station and time-out occurs</p>	<p>(1) 359            (2) 0/1 ◀ : Disconnect the call/                              Continue to call</p>
<p>Specify the process when a caller dials while sending message or music for the Automated Attendant call.</p>	<p>(1) 363            (2) 0/1 ◀ : Not allowed (Allowed after sending the message or music.)/Allowed</p>
<div style="border: 1px solid black; padding: 2px; margin: 5px auto; width: 60px;">CM41</div>	
<p>Specify the timing of the unanswered Automated Attendant Call.</p>	<p>• Y = 0            (1) 34            (2) 01 – 30: 0 – 120 sec.            If no data is set, the default setting is <b>32-36</b> seconds.</p>
<p>Specify the timing of unanswered call after forwarding to predetermined station in Automated Attendant.</p>	<p>• Y = 0            (1) 39            (2) 01 – 30: 0 – 120 sec.            If no data is set, the default setting is <b>32-36</b> seconds.</p>
<p>In case the 1st and/or 2nd Answering Message is required: CM30, YY = 30,31 Data = 08/CM64, Y = 0, Data = 02, set the data for Voice Recording Card by CM10, CM20, and CM49.</p>	
<p>Specify the timing of Dial Tone timeout in Automated Attendant.</p>	<p>• Y = 0            (1) 43            (2) 01 – 14: 1 – 14 sec.            If no data is set, the default setting is <b>14</b> seconds.</p>
<div style="text-align: center;">C</div>	

## AUTOMATED ATTENDANT (CONT'D)

	DESCRIPTION	DATA
<div style="border: 1px solid black; width: 20px; height: 20px; margin: 0 auto; text-align: center; line-height: 20px;">C</div> <div style="border: 1px solid black; width: 60px; height: 25px; margin: 5px auto; text-align: center;">CM10</div>	Assign the Voice Recording Memory Card to the required LEN.	(1) LEN (0000 – 0511) (2) EB000 – EB127: Voice Recording Memory Card No. EB000 – EB031: For PIM0 EB032 – EB063: For PIM1 EB064 – EB095: For PIM2 EB096 – EB127: For PIM3
<div style="border: 1px solid black; width: 60px; height: 25px; margin: 5px auto; text-align: center;">CM49</div>	Assign the function of the Voice Recording Memory Card.	<ul style="list-style-type: none"> <li>• YY=00</li> <li>(1) XXX: Voice Recording Card No. (000 – 127) assigned by CM10.</li> <li>(2) <u>XXXX</u> <ul style="list-style-type: none"> <li>Message No. (00 – 63)</li> <li>01: 1st Answering Message</li> <li>02: 2nd Answering Message</li> </ul> </li> </ul>
<div style="border: 1px solid black; width: 60px; height: 25px; margin: 5px auto; text-align: center;">CM20</div>	Assign the Message No. to the required tenants.	<ul style="list-style-type: none"> <li>• YY=01 (For 1st Answering Message)</li> <li>• YY=02 (For 2nd Answering Message)</li> <li>(1) XX: Tenant No. (00 – 63)</li> <li>(2) XX: Message No. (00 – 63) assigned by YY=00.</li> </ul>
<div style="border: 1px solid black; width: 60px; height: 25px; margin: 5px auto; text-align: center;">CM20</div>	To record, replay, or delete a message, assign the respective Voice Recording Memory access codes.	<ul style="list-style-type: none"> <li>• Y= 0 – 3 (Numbering Plan Group 0 – 3)</li> <li>(1) X – XXX: (Access Code)</li> <li>(2) <math>\left\{ \begin{array}{l} \text{A00: Record} \\ \text{A01: Replay} \\ \text{A02: Delete} \end{array} \right.</math></li> </ul>
<div style="border: 1px solid black; width: 60px; height: 25px; margin: 5px auto; text-align: center;">END</div>		

### HARDWARE REQUIRED

For providing the first and/or second Answering Message, Voice Recording Memory Cards (PK-ME01) are required.

## **AUTOMATIC CALL DISTRIBUTION (ACD)**

### **GENERAL DESCRIPTION**

The *Automatic Call Distribution* (ACD) feature permits incoming calls to terminate to a prearranged group of stations. Calls are distributed in the order of arrival to idle terminals within the group, based on which terminal has been idle the longest period of time. Stations may log on/log off from the ACD group. Supervisor stations may monitor conversations of the agents.

### **STATION APPLICATION**

All stations.

### **OPERATING PROCEDURE**

To set busy-out at a ACD station:

1. Lift handset and receive extension dial tone.
2. Dial busy-out-set feature access code.
3. Restore handset.

To cancel busy out at a ACD station:

1. Lift handset and receive extension dial tone.
2. Dial busy-out-cancel feature access code.
3. Restore handset.

(Series 600) To monitor conversation/to cancel monitoring (Supervisor only):

1. Lift handset, or depress SPKR key, and receive extension dial tone.
2. Dial monitor feature access code, or depress MONITOR key.
3. Dial extension number to be monitored.
4. Monitor conversation via handset or speaker.

**Note:** *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 beep-tone(s), 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.*

### **SERVICE CONDITIONS**

1. A maximum of 16 ACD groups may be assigned per system.
2. Up to 60 stations may be programmed into a single ACD group, up to the system limit of 512 single-line stations or 256 multiline.
3. Assignment of ACD groups is performed at the *Maintenance Administration Terminal* (MAT) or *Customer Administration Terminal* (CAT).
4. ACD Hunt groups consist of a phantom pilot station and one or more member stations. Hunting is initiated in a circular fashion, and then based on which member has been idle the longest period of time.

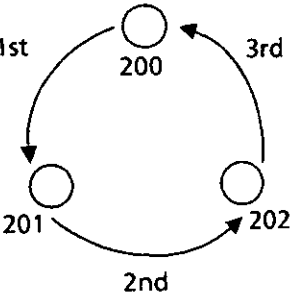
## AUTOMATIC CALL DISTRIBUTION (ACD) (CONT'D)

5. If the all stations within the ACD group are busy, incoming calls may be serviced in the following ways:
  - remain in queue until an agent becomes available (Ringback Tone provided)
  - immediately overflow into another group, to a station, or to the Attendant
  - remain in queue until an agent becomes available (delayed announcement or music on hold provided)
  - remain in queue for a preset time (Ringback Tone, delayed announcement, or music on hold provided) then overflow to another group, to a station, or to the Attendant.
6. Any agent in an ACD group may log on/off. When an agent has activated log off, any call targeted at the ACD group will by-pass that agent. Calls directed to the specific station number will ring at the agent position. The agent may originate a call while in log off mode.
7. The agent can log off their station while idle, or while on an incoming outside call. When that call is completed, the station is logged off.
8. When the phantom pilot station is set to *Call Forwarding - All Calls*, incoming calls to the ACD group will be transferred to the destination of that *Call Forwarding - All Calls* setting.
9. An ACD group number can be used as the destination station of *Direct Inward Termination* (DIT), or as a designated *Night Service* station.
10. An ACD group number can be assigned as the destination station of *Off-Hook Alarms*, *Priority Calls*, and *Attendant Night Transfer*.
11. ACD group pilot numbers should not be placed in *Station Hunting* groups. The *Station Hunting* feature would take priority over the ACD function.
12. When a call has terminated to ACD group A, and all stations in group A are busy, and group B is assigned as the overflow destination (using *Call Forward-Busy*), the call is transferred to group B. When all the stations are busy in group B, the call queues onto ACD group B.
13. One overflow group can be provided for each ACD group. Overflow to another group is accomplished by using *Call Forward-Busy* at the pilot station of the first ACD group.
14. Overflow is performed only once.
15. When an ACD station becomes available, the caller is immediately connected to the station, even if the recorded announcement is in progress.
16. Incoming call billing to the outside party starts when the first recorded announcement begins.
17. A VRMEM board is required to provide the recorded announcement.
18. Delay Announcement service can be provided for DIT, DID or trunk calls transferred by a station user or the attendant to a ACD Group. Internal calls or station-to-station transferred calls to the ACD Group go into the ACD queue but do not receive the Delay Announcement.
19. Incoming calls will hunt past an agent that failed to log off, if *Call Forward - No Answer* (to another ACD number) has been set.

## AUTOMATIC CALL DISTRIBUTION (ACD) (CONT'D)

### PROGRAMMING

To activate ACD:

START	DESCRIPTION	DATA
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM17</div>	<p>Assign ACD group. For one ACD Group, assign station numbers one by one in the order of hunting.</p> <p><b>Note:</b> <i>Up to 60 stations can be assigned into a single ACD group.</i></p> <p><b>Example:</b> <i>For setting Station Numbers 200, 201, 202 into one ACD Group.</i></p> <div style="display: flex; align-items: center; margin: 10px 0;"> <div style="margin-right: 20px;"> <p>1st Operation { (1) 200 (2) 201</p> <p>2nd Operation { (1) 201 (2) 202</p> <p>3rd Operation { (1) 202 (2) 200</p> </div>  </div>	<ul style="list-style-type: none"> <li>• Y=0                             <ul style="list-style-type: none"> <li>(1) X-XXXX (Station No.)</li> <li>(2) X-XXXX (Another Station No. to be linked)</li> </ul> </li> </ul>
	<p>Assign the Pilot Station and Member Station.</p> <p><b>Note:</b> <i>Pilot station must be a non-equipped LEN (CM10) phantom.</i></p>	<ul style="list-style-type: none"> <li>• Y=1                             <ul style="list-style-type: none"> <li>(1) X-XXXX (ACD Station No.)</li> <li>(2) 1/0 ◀ : Pilot Station/Member Station</li> </ul> </li> </ul>
	<p>Assign the ACD Group Number.</p>	<ul style="list-style-type: none"> <li>• Y=2                             <ul style="list-style-type: none"> <li>(1) X-XXXX (ACD Station No.)</li> <li>(2) 00-15 (ACD Group 00-15)</li> </ul> </li> </ul>
	<p>Specify the ACD service for each type of call.</p>	<ul style="list-style-type: none"> <li>• Y=4 (Internal Call: from station/ATTCON)                             <ul style="list-style-type: none"> <li>(1) X-XXXX (Pilot Station No. of the ACD Group)</li> <li>(2) 0/1 ◀ : Not to be provided/To be provided</li> </ul> </li> <li>• Y=5 (C.O. Incoming Call: DDD: FX/WATS)                             <ul style="list-style-type: none"> <li>(1) X-XXXX (Pilot Station No. of the ACD Group)</li> <li>(2) 0/1 ◀ : Not to be provided/To be provided</li> </ul> </li> </ul>
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">A</div>		

## AUTOMATIC CALL DISTRIBUTION (ACD) (CONT'D)

A	DESCRIPTION	DATA
CM41	Specify the basic call answer delay time for use in PEG Count analysis.	<ul style="list-style-type: none"> <li>• Y = 6 (Tie Line Incoming Call)               <ol style="list-style-type: none"> <li>(1) X-XXXX (Pilot Station No. of the ACD Group)</li> <li>(2) 0/1 ◀ : Not to be provided/To be provided</li> </ol> </li> <li>• Y = 7 (DID Call)               <ol style="list-style-type: none"> <li>(1) X-XXXX (Pilot Station No. of the ACD Group)</li> <li>(2) 0/1 ◀ : Not to be provided/To be provided</li> </ol> </li> <li>• Y = 0               <ol style="list-style-type: none"> <li>(1) 16</li> <li>(2) 01 - 30 (4 sec - 120 sec) If no data is set, the default setting is 32 - 36 sec.</li> </ol> </li> </ul>
CM20	Assign the access code for ACD Station Busy-Out Set and Reset.	<ul style="list-style-type: none"> <li>• Y = 0 - 3 (Numbering Plan Group 0 - 3)               <ol style="list-style-type: none"> <li>(1) X-XXX (Access Code)</li> <li>(2) { 044: Busy-Out Set 045: Busy-Out Reset</li> </ol> </li> </ul>
CM90	Assign the ACD Busy-Out key on the Multiline Terminal, if required.	<ul style="list-style-type: none"> <li>• YY = 00               <ol style="list-style-type: none"> <li>(1) Primary Extension No. + <input type="text"/> + Key No.</li> <li>(2) F0044: ACD Busy-Out</li> </ol> </li> </ul>
CM90	Assign the Release key on the Multiline Terminal, if required.	<ul style="list-style-type: none"> <li>• YY = 00               <ol style="list-style-type: none"> <li>(1) Primary Extension No. + <input type="text"/> + Key No.</li> <li>(2) F1020: Release</li> </ol> </li> </ul>
CM08	Specify the processing for an incoming call when all ACD Stations are busy.	<ul style="list-style-type: none"> <li>(1) 212</li> <li>(2) 0/1 ◀ : Busy Tone Connection /Queuing</li> </ul>
CM08	Specify the processing for a held call after setting the ACD Busy-Out.	<ul style="list-style-type: none"> <li>(1) 214 (For the held Call from Tie Line)</li> <li>(2) 0/1 ◀ : Reconnected by Switch Hook Flash/Disconnected</li> <li>(1) 215 (For the held call from C.O. Line)</li> <li>(2) 0/1 ◀ : Reconnected by Switch Hook Flash/Disconnected</li> </ul>
B		

## AUTOMATIC CALL DISTRIBUTION (ACD) (CONT'D)

B	DESCRIPTION	DATA
CM08	Specify that the transferred C.O. call from a station or HA-610Z/SN610 ATTCON is placed into queuing mode when all ACD stations are busy.  <b>Note:</b> <i>This data is only effective when CM08-212 is set to 1.</i>	(1) 227 0: The call is placed into queuing mode. <b>Note</b> 1 ◀: Recall to the transferring station (when the call is transferred from station) or attendant Camp-On is set (when the call is transferred from ATTCON.)
END	Specify a diversion display on a Multi-line terminal or SN610 ATTCON when originating or terminating a ACD call.	(1) 357 (2) 0/1◀: Available/Not Available

To provide the delay announcement for ACD:

START	DESCRIPTION	DATA
CM10	Assign the Voice Recording Memory Card (PK-ME01) to each LEN No.	(1) 0000 - 0511 (LEN No.) (2) EB000 - EB127 (Voice Recording Memory Card No.)
CM17	Specify the pattern of the message sent to each ACD group.	• Y=A (1) X-XXXX: Pilot Station number of the ACD Group (2) 0: To be sent periodically 1 ◀: To be sent only once.
CM41	If the data for CM17, Y=A is "0," set the interval time of ACD Delay Announcement.  Define the maximum waiting time of ACD Call for the ACD PEG Count. This timing is also applied to the duration of Ringback Tone after a call arrives.	• Y=0 (1) FUNCTION No.: 47 (2) 01 - 30 (12 sec. - 134 sec.) If no data is set, the default setting is 44 - 50 sec.  • Y=0 (1) FUNCTION No.: 16 (2) 02 - 30 (8 sec. - 120 sec.) If no data is set, the default setting is 32 - 36 sec.
CM49	Assign the ACD Delay Announcement function to the required Voice Recording Memory Card (s) (PK-ME01).	• YY=00 (1) 000 - 127 (Voice Recording Memory Card No.) (2) 0B0XX ACD Group No. (00-15)
A		

## AUTOMATIC CALL DISTRIBUTION (ACD) (CONT'D)

	DESCRIPTION	DATA
A		
CM51	When transferring the call to an extension or Attendant after the 1st interval time of UCO Delay Announce, assign the destination.	<ul style="list-style-type: none"> <li>• Y=17</li> <li>(1) 00-63 : Tenant No.</li> <li>(2) Destination: X-XXXX: Station No. E000: HA-610Z/SN610 ATTCN</li> </ul>
END	<p><b>Note:</b> <i>This command is effective when CM17=A is set to 0 (to be set periodically).</i></p>	

To monitor a ACD call, with or without Warning Tone:

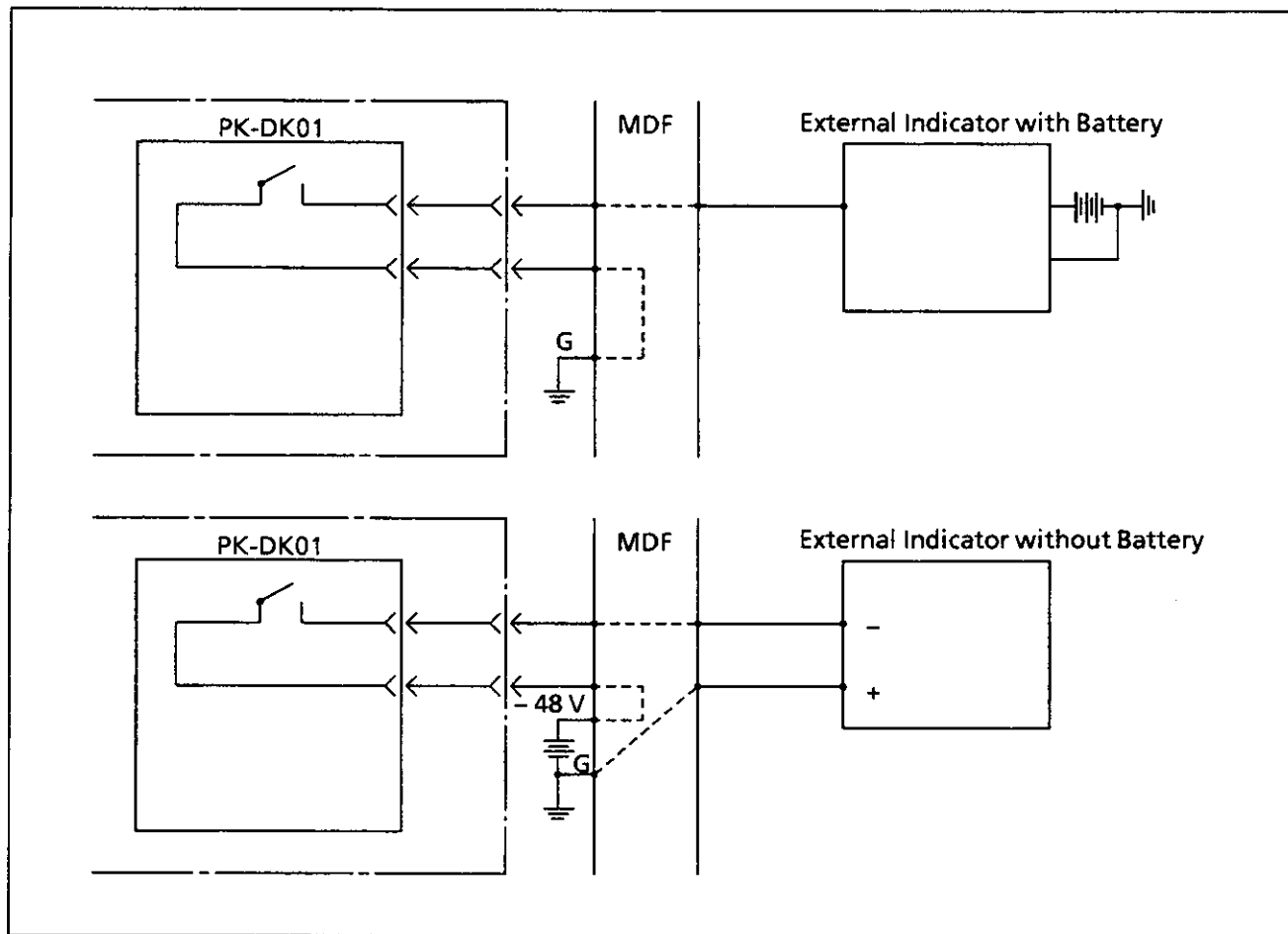
	DESCRIPTION	DATA
START		
CM08	Specify the warning tone sent to connected parties (in two-way calling) when monitoring.	<ul style="list-style-type: none"> <li>(1) 259</li> <li>(2) { 0: No Tone 1 ◀: One Warning Tone</li> </ul>
CM12	Assign the Class of Service for monitoring stations.	<ul style="list-style-type: none"> <li>• CM12, YY = 02</li> <li>(1) X-XXXX: Station number</li> <li>(2) XXXX     └─ Service Restriction Class         (A) (00-15◀)</li> </ul>
CM15		
CM12	Assign the Class of Service for monitored stations.	<ul style="list-style-type: none"> <li>• CM12, YY = 02</li> <li>(1) X-XXXX: Station number</li> <li>(2) XXXX     └─ Service Restriction Class         (A) (00-15◀)</li> </ul>
CM15		
CM15	<p><b>Note:</b> <i>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 beep-tone(s), 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.</i></p>	<ul style="list-style-type: none"> <li>• CM15, YYY = 104</li> <li>(1) XX: [Service Restriction Class (A) 00-15] assigned by CM12, YY = 02</li> <li>(2) 1 ◀: Allowed</li> </ul>
CM20	Assign the access code for monitoring (if required).	<ul style="list-style-type: none"> <li>• Y=0-3 (Number Plan Group 0-3)</li> <li>(1) X-XXX: Access Code</li> <li>(2) 033: Monitor</li> </ul>
CM90	Assign monitoring function key to the required multiline terminals.	<ul style="list-style-type: none"> <li>• YY= 00</li> <li>(1) X-XXX: (Primary Ext. No.)           + [ ] + Key No. (01-16)</li> <li>(2) F0033 : Monitor</li> </ul>
END		





## AUTOMATIC CALL DISTRIBUTION (ACD) (CONT'D)

For connecting the Indicator for ACD Overflow:



### HARDWARE REQUIRED

- To provide the delay announcement for ACD: PK-ME01 card
- To provide the Indicator for Overflowed ACD call: PK-DK01 Card × 1
- External Indicator (visual or audible type) provided by the customer

## **AUTOMATIC CALL DISTRIBUTION (ACD) WITH MANAGEMENT INFORMATION SYSTEM (MIS)**

### **GENERAL DESCRIPTION**

The *Automatic Call Distribution (ACD) with MIS* feature provides a management information system to be used in conjunction with the built-in ACD features of the NEAX1400 600 Series. The MIS incorporates a supervisor's terminal for real-time monitoring of agent activity, amber and red alarms, and hard-copy summary reports.

### **STATION APPLICATION**

None.

### **OPERATING PROCEDURE**

Reference the NEAX1400 IMS ACD/MIS System Manual.

### **SERVICE CONDITIONS**

1. ACD/MIS requires the ACD/MIS software, application processor, personal computer, and a parallel printer. The personal computer and parallel printer are user-provided.
2. Only one supervisor is allowed per ACD system.
3. Reference the ACD Features and Specifications for further SERVICE CONDITIONS.

### **PROGRAMMING**

Additional programming is required for MIS, once ACD has been programmed. Refer to the NEAX1400 IMS ACD/MIS System Manual.

## AUTOMATIC CAMP-ON

### GENERAL DESCRIPTION

An incoming Direct Inward Termination (DIT) call which has been terminated to a busy station can be camped on automatically. When the busy station becomes idle, the station is automatically called and connected to the camped on incoming C.O .line call.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

No manual operation is required.

### SERVICE CONDITIONS

1. Two *Camp-On* tone patterns are available: one to send a repeated tone at intervals of 4 seconds, and the other is to send the tone once at the time the call is Camped-On. Either one of these patterns can be selected on a system basis during initial programming.
2. Only a single *Camp-On* from any source to a station is allowed at one time.
3. When *Direct In Termination* (DIT) calls overflow, they can be preprogrammed on a system basis to be sent to an Attendant, *Trunk Answer any Station* (TAS), or automatically Camped-On to the busy station.
4. *Camp-On* can be set to a station which has set *Call Back*. *Call Back* can be set to a party to which *Camp-On* service has been set. In both of the above cases, *Camp-On* has priority over *Call Back*.
5. *Camp-On* can be set to a station which has set *Trunk Queuing - Outgoing*. In both cases, *Camp-On* has priority over *Trunk Queuing - Outgoing*.
6. *Camp-On* can be set to a station which has placed a call on *Hold*. When the station becomes idle, *Camp-On* takes priority over the *Hold*. *Hold* can be set to a party to which *Camp-On* has been set.
7. *Camp-On* service cannot be set to a data line.

### PROGRAMMING

<u>START</u>	<u>DESCRIPTION</u>	<u>DATA</u>
CM08	Specify the Camp-On Tone pattern.	(1) 068 (2) 0/1 ◀ : Sent out once/Sent out periodically (4-sec. intervals)
CM30	Assign the Automatic Camp-On to the required DIT Trunks.	<ul style="list-style-type: none"> <li>• YY = 13 (In Day mode)</li> <li>• YY = 14 (In Night mode)</li> </ul> (1) Trunk No. (000 -- 255) (2) 06: Automatic Camp-On
<u>END</u>		

## AUTOMATIC RECALL

### GENERAL DESCRIPTION

This feature works as a timed reminder. When a call remains on *Hold*, *Camp-On* or ringing unanswered for a fixed interval after being transferred, the station that initiated the hold, transfer, or *Camp-On* is automatically alerted.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

No manual operation is required.

### SERVICE CONDITIONS

1. *Automatic Recall* timing is flexible in system programming.  
*Automatic Recall* timing is as follows:  
All stations:  
*Nonexclusive Hold* - 4 to 396 seconds (Default: 60-54 seconds)  
*Exclusive Hold* - 4 to 396 seconds (Default: 236-240 seconds)  
*Transfer Recall* - 4 to 120 seconds (Default: 24-28 seconds)  
*Camp-On Recall* - 8 to 128 seconds (Default: 24-32 seconds)  
*Attendant Consoles*:  
Attendant Recall (*Camp-On/No Answer*) - 2.4 to 124.8 seconds (Default: 31.2-33.6 seconds)  
Attendant-Held calls - 2.4-124.8 seconds (Default: 31.2-33.6 seconds)
2. When a Multiline Terminal user reenters a held or transferred call, the timing is reset. If the call is returned to a *Hold* or *Transfer* condition, the timer will restart again.
3. When an Attendant reenters a held or Camped-On trunk, the timing is reset. If the trunk is returned to a *Hold* or *Transfer* condition, the timer will restart again.
4. When a held call recalls to a Multiline Terminal, a continuous ring pattern of 0.5 seconds on and 0.5 seconds off and a LED flash of 240 IPM occur until the call is answered. The signal occurs whether the Multiline Terminal is on-hook or off-hook, and regardless of whether the Multiline Terminal is ring assigned on that line key.
5. Before an unattended transfer recalls to the originating station of the transfer, the called station will ring normally for a programmable period of time of 4 to 120 seconds. When the *Automatic Recall* begins, the LCD of the originating station displays:  
**RCL                    XXXX**  
where XXXX is the transferring station.
6. When a recall occurs to the *Attendant Console*, a buzzer will sound (provided no other calls are being processed) in addition to the visual indication. The called station will continue to ring. If the called party answers after the Attendant reseizes the line, a three-party conference is established.
7. This feature is not activated when a Multiline Terminal holds the call on *Nonexclusive* or *Exclusive Hold* during a three or four-party *Conference*. The conference members do not receive hold music, but can continue talking.
8. *Automatic Recall* will follow any *Call Forwarding* assignment.

## AUTOMATIC RECALL (CONT'D)

### PROGRAMMING

<u>START</u>	<u>DESCRIPTION</u>	<u>DATA</u>
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM41</div>	<p>Specify the timing for AUTOMATIC RECALL.                      If no data is set, the following Automatic Recall timing will be applied:</p> <p>Attendant Recall        -    <b>31.2 – 33.6</b> seconds                      Nonexclusive Hold       -    <b>60 – 64</b> seconds                      Exclusive Hold           -    <b>236 – 240</b> seconds                      Transfer Recall           -    <b>24 – 28</b> seconds                      Attendant Hold Recall   -    <b>31.2 – 33.6</b> seconds                      Camp-On Recall           -    <b>24 – 32</b> seconds</p>	<ul style="list-style-type: none"> <li>● Y=0</li> <li>(1) 00:        Attendant Recall</li> <li>(2) 01–24:    Timer Data (0–124.8 sec. Increments 01-14 are 2.4-sec. increments, and increments 15-24 are 9.6-sec. increments)</li> <li style="padding-left: 20px;">Initial: 14 (31.2-33.6 sec.)</li> <li>(1) 05:        Non exclusive Hold</li> <li>(2) 01–99:    Timer Data (4–396 sec.)</li> <li>(1) 06:        Exclusive Hold</li> <li>(2) 01–99:    Timer Data (4–396 sec.)</li> <li>(1) 07:        Transfer Recall</li> <li>(2) 01–30:    Timer Data (4–120 sec.)</li> <li>● Y=0</li> <li>(1) 00:        Attendant Recall</li> <li>(2) 01–24:    Timer Data (0–124.8 sec., in 2.4-sec. increments)</li> <li style="padding-left: 20px;">Initial: 14 (31.2-33.6 sec.)</li> <li>(1) 11:        Attendant Hold Recall</li> <li>(2) 01–24:    Timer Data (0–124.8 sec. Increments 01-14 are 2.4-sec. increments, and increments 15-24 are 9.6-sec. increments)</li> <li style="padding-left: 20px;">Initial: 14 (31.2-33.6 sec.)</li> <li>(1) 26:        Camp-On Recall</li> <li>(2) 0–15:      Timer Data (16–128 sec.)</li> </ul>
<u>END</u>		

## BACKGROUND MUSIC

### GENERAL DESCRIPTION

*Background Music* can be provided on a dial-up basis over Multiline Terminal speakers. Incoming voice announcements, ringing, and recalls override Background Music. Up to 10 music programs can be offered.

### STATION APPLICATION

All Multiline Terminals.

### OPERATING PROCEDURE

To set Background Music:

1. Press **SPKR** key.
2. Dial Background Music feature access code.
3. Dial Background Music program number (0-9).
4. Press **SPKR** key.

To Cancel:

1. Press **SPKR** key.
2. Dial Background Music feature access code.
3. Press **#** key.
4. Press **SPKR** key.

### SERVICE CONDITIONS

1. Up to 10 music programs can be offered. Only one per station can be selected at a time.
2. This feature is allowed or denied in *Class Of Service*.
3. A COT or TNT circuit is required for each music program.
4. The music source(s) must be locally provided. The input source is -10 to 0 dBm, 600 ohms.
5. When a terminal goes off-hook, the music is automatically stopped. When the terminal goes on-hook, the music starts again until the feature is canceled.

## BACKGROUND MUSIC (CONT'D)

### PROGRAMMING

START	DESCRIPTION	DATA
CM10	Assign BGM Interface Trunks (PK-2COT/PK-TNT) to the required LENs.	(1) XXXX: 0000-0511 (LEN No.) (2) Trunk No. (D000 - D255)
CM12	Assign the Service Restriction Class (A) to the required Multiline Terminals.	<ul style="list-style-type: none"> <li>• YY = 02</li> <li>(1) X-XXXX: Primary Extension No. of the Multiline Terminal</li> <li>(2) <u>XXXX</u>                  └─ Service Restriction Class(A)                     (00-15 ◀)</li> </ul>
CM15	Provide this feature to the Service Restriction Class (A) assigned by CM12.	<ul style="list-style-type: none"> <li>• YY = 32</li> <li>(1) Service Rest. Class (A) (00-15)</li> <li>(2) 1◀ : Allowed</li> </ul>
CM20	Assign the access code for this feature.	<ul style="list-style-type: none"> <li>• YY = 0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX: Access code (66)</li> <li>(2) 039 : BGM</li> </ul>
A		



## BACKGROUND MUSIC (CONT'D)

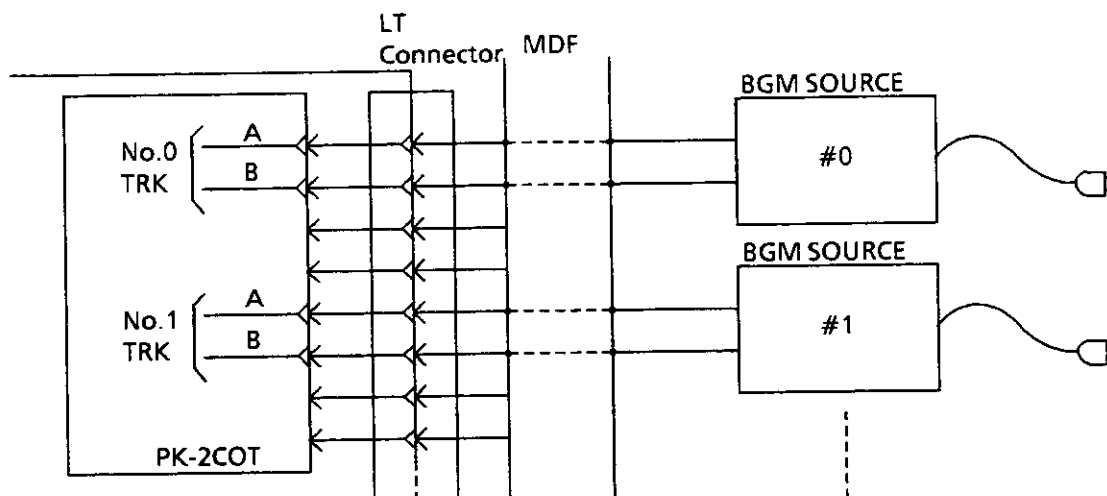
	DESCRIPTION	DATA
<div style="border: 1px solid black; padding: 2px; width: 20px; margin: 0 auto; text-align: center;">A</div> <div style="border: 1px solid black; padding: 2px; width: 50px; margin: 5px auto; text-align: center;">CM30</div> <div style="border: 1px solid black; padding: 2px; width: 50px; margin: 5px auto; text-align: center;">CM35</div> <div style="border: 1px solid black; padding: 2px; width: 50px; margin: 5px auto; text-align: center;">CM48</div> <div style="text-align: center; margin-top: 10px;"><u>END</u></div>	<p>Assign Trunk Route No. to BGM Interface Trunk (PK-2COT/PK-TNT).</p> <p>Assign the BGM interface to each trunk route.</p> <p>Assign the BGM program number to each trunk number connected to the External Tone Source.</p>	<ul style="list-style-type: none"> <li>• YY = 00                             <ul style="list-style-type: none"> <li>(1) Trunk No. (000 – 256)</li> <li>(2) Trunk Route No. (00 – 63)</li> </ul> </li> <li>• YY = 00                             <ul style="list-style-type: none"> <li>(1) XX: Trunk Route No.</li> <li>(2) 05 (Interface with BGM Tone Source)</li> </ul> </li> <li>• Y = 4                             <ul style="list-style-type: none"> <li>(1) 00 – 09 (BGM program No. 0 – 9)</li> <li>(2) DXXX: Trunk number connected to External Tone Source.</li> </ul> </li> </ul>

### HARDWARE REQUIRED

External BGM Source (Up to 10 BGM Sources can be provided)  
 PK-2COT/PK-TNT Card

External BGM Sources (FM, AM Radio, Tape-Deck etc.) should be provided by the customer. Make the following connections between BGM Sources and interface trunks.

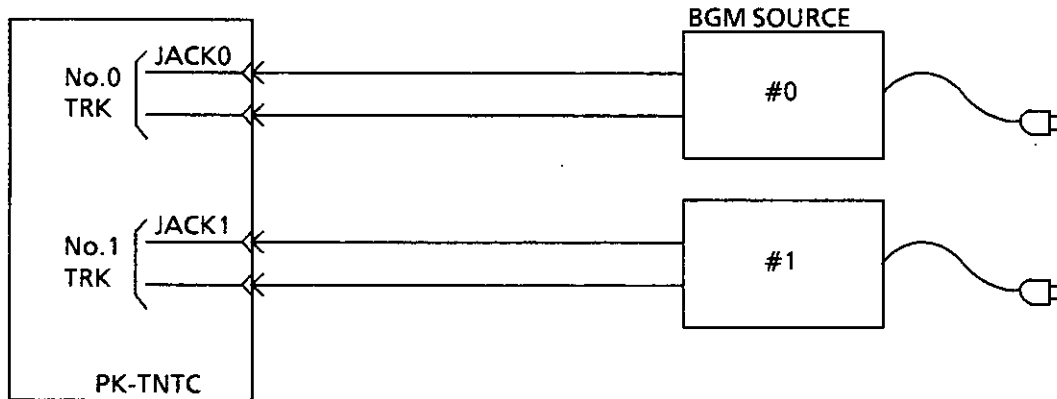
For PK-2COT Card:



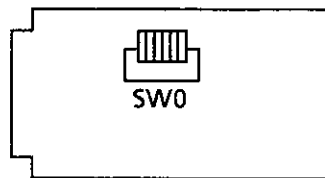
## BACKGROUND MUSIC (CONT'D)

For PK-TNT Card:

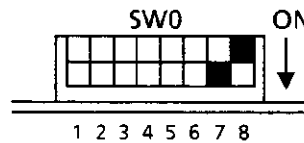
Plug the cable connected to the BGM Sources into JACK0 and JACK1 on PK-TNTC Card.



Set the switches within PK-TNTC Card according to the following table.



PK-TNTC Card



SW No.	SETTING							
SW0-1	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF
SW0-2	OFF	-10 dB	ON	-7 dB	OFF	-4 dB	OFF	-1 dB
SW0-3	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF
SW0-4	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF
SW0-5	OFF	-10 dB	ON	-7 dB	OFF	-4 dB	OFF	-1 dB
SW0-6	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF
SW0-7	ON							
SW0-8	OFF							

Level Control of BGM Source through JACK0.

Level Control of BGM Source through JACK1.

## BOSS/SECRETARY CALLING

### GENERAL DESCRIPTION

A secretary with a Multiline Terminal can use an appearance of the boss' extension to screen calls for that extension, and announce and/or transfer calls to that extension. Additionally, the secretary can call the boss during a busy condition and can send a *Message Waiting Indication* to the boss' station.

### STATION APPLICATION

Any type of station as boss extension and Multiline Terminal with appearance of boss extension at secretary position.

### OPERATING PROCEDURE

For a Boss/Secretary transfer of an incoming call to the boss' extension when the boss has a Multiline Terminal:

1. Secretary answers the incoming call by depressing boss' line key appearance and lifting the handset. Secretary converses with the calling party. Boss' line key appearance is steady green on secretary's station and steady red at other appearances.
2. Secretary depresses boss' line key appearance again. Incoming call is placed on *Consultation Hold* and receives *Music On Hold*, if provided. Boss' line key appearance is steady green at secretary's station, steady green at boss' Multiline Terminal and steady red elsewhere.
3. At boss' Multiline Terminal a tone burst is heard followed by a voice call from the secretary (using the boss' primary extension) over the speaker. Secretary announces the call.
4. The secretary can now go on-hook. The boss' primary extension rings (incoming ring rate reflects whether the calling party is internal or external), and all line key appearances of the boss' extension provide incoming ring indication.
5. The boss lifts handset and is connected to the calling party.

OR

The boss can lift the handset to answer the voice call and talk to the secretary privately using the handset. Boss' line key appearance is steady green at secretary and boss' Multiline Terminal, and is steady red elsewhere. The secretary then goes on-hook and the calling party is connected to the boss. Boss' line key appearance is steady green at boss' terminal, and steady red elsewhere.

OR

Boss on-hook and call goes back to secretary.

For Boss/Secretary transfer of an incoming call to the boss when the boss has a Single Line Telephone:

1. Secretary answers incoming call by depressing boss' line key appearance and lifting the handset. Secretary converses with calling party. Boss' line key appearance is steady green on secretary's station and steady red elsewhere.
2. Secretary depresses boss' line key appearance again. Incoming call is placed on *Consultation Hold* and receives *Music On Hold*, if provided. Boss' line key appearance is steady green at secretary's station and steady red at other appearances.
3. At boss' Single Line Telephone, internal ringing is heard.
4. The secretary can now go on hook. The boss' Single Line Telephone continues to ring (incoming ring rate reflects whether the calling party is internal or external) and all line key appearances of the boss' extension provide incoming ring indication.
5. The boss lifts the handset and is connected to the calling party.

OR

The boss can lift the handset while receiving internal ring to talk to the secretary. Boss' line key appearance is steady green at the secretary's station and steady red elsewhere.

## BOSS/SECRETARY CALLING (CONT'D)

6. The secretary then goes on-hook, whereby the calling party is connected to the boss. Boss' line key appearance is steady red at all appearances.

OR

Boss on-hook and call goes back to the secretary.

To set/cancel *Message Waiting Indication* to boss from the secretary station:

1. Lift handset and receive dial tone.
2. Dial boss' extension number.
3. Depress *Message Waiting* set/cancel key (Boss' Message Wait Lamp is lit if set, goes off if canceled).

OR

1. Depress *Message Waiting* set/cancel key.
2. Depress boss' extension line key appearance (Boss' Message Wait Lamp is lit if set, goes off if canceled).

With call in progress on boss' line key appearance:

1. Depress boss' line key appearance again to initiate a transfer. Caller is placed on *Consultation Hold* and receives *Music On Hold*, if provided.
2. Depress *Message Reminder* set/cancel key. (Boss' Message Wait Lamp is lit if set, goes off if canceled).
3. Depress **TRF** key to return to held party.

For a Boss/Secretary Override when boss is busy on his primary extension (on a Multiline Terminal) and secretary has a call on the primary extension of the secretary's Multiline Terminal:

1. The secretary depresses boss' line key appearance on the secretary's Multiline Terminal. The party that was connected to the secretary is placed on *Hold* and receives *Music On Hold*, if provided. Additionally, the secretary hears special ringback tone and the boss hears one burst of tone through the handset to indicate a call is waiting. (If the secretary depresses the **TRF** key before the boss answers, the secretary is reconnected to the calling party. The secretary's **ANS** key is ineffective in this situation.)
2. The boss depresses the **ANS** key. The party originally connected to the boss is now placed on *Consultation Hold* and the boss and secretary can converse.
3. The secretary goes on-hook. The boss is connected to the caller originally connected to the secretary. The caller originally connected to the boss is placed on *Call Hold*.
4. If the boss depresses the **TRF** key, the boss receives Special Dial Tone.

For a Boss/Secretary override when the boss is busy on a Single-Line Telephone, and the secretary has a call on the primary extension of the secretary's Multiline Terminal:

1. The secretary depresses the boss' line key appearance on the secretary's Multiline Terminal. The party that was connected to the secretary is placed on *Hold* and receives *Music On Hold*, if provided. Additionally, the secretary hears special ringback tone and the boss hears one burst of tone through the handset to indicate a call is waiting.
2. The boss depresses the **FLASH** key (or momentarily depresses the hookswitch). At this time, the secretary and boss are connected and the other two parties are on Hold.
3. The secretary goes on hook. The boss is connected to the caller originally connected to the secretary. The boss' original party remains on *Call Hold*.
4. The boss may now alternate between callers (*Broker's Call*) using the **FLASH** key.

## BOSS/SECRETARY CALLING (CONT'D)

### SERVICE CONDITIONS

1. During the Boss/Secretary transfer operation, if the secretary hangs up to complete an unsupervised ring transfer and the boss does not answer, the call will recall to the secretary's primary extension after a predetermined timeout (default value is 24-28 seconds).
2. After the boss and secretary converse during a Boss/Secretary transfer operation, the secretary is automatically reconnected to the original caller if the boss hangs up.
3. After the boss and secretary talk during a Boss/Secretary transfer operation, the secretary can use the **ANS** key to alternate conversations between the original caller and the boss (*Broker's Call*) after the boss has answered using the handset.
4. After the boss and secretary talk during a Boss/Secretary transfer operation using the handsets, the secretary can press the **RECALL** key to disconnect the boss and receive feature dial tone, allowing a transfer to another station (the boss receives reorder tone). The secretary can also press either the **TRF** or **ANS** key to return to the original caller.
5. While a secretary is originating a voice call during the Boss/Secretary transfer operation, the secretary can press the **TRF** key to return to the calling party and the voice call is abandoned.
6. During a Boss/Secretary transfer operation, once the boss has answered and is talking to the secretary, *Privacy Release* is not available and use of the **HOLD** button will be disregarded at this time.
7. Setting or canceling of *Message Reminder* can be executed by the secretary, regardless of the boss' extension status (busy or idle).

## BOSS/SECRETARY CALLING (CONT'D)

### PROGRAMMING

To set up the Secretary Station with the Multiline Terminal providing Primary Extension:

START	DESCRIPTION	DATA
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM13</div>	<p>Assign the Secretary Station to the required station number.</p> <p>If the Boss station is a Single-Line Telephone with MW lamp, provide the Message Waiting service to the station.</p>	<ul style="list-style-type: none"> <li>• YY = 12</li> <li>(1) X - XXXX (Primary Extension No. of Secretary)</li> <li>(2) 0: Secretary Station</li>   <li>• YY = 03</li> <li>(1) X - XXXX (Boss Station No.)</li> <li>(2) 0: To be provided</li> </ul>
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM90</div>	<p>Assign Boss line key as Secondary Extension line to the Secretary's Multiline Terminal.</p> <p>Assign the MW SET/MW RESET keys to the Secretary's Multiline Terminal.</p> <p>If the Boss station is a Multiline Terminal, assign the MW Lamp to the Boss' Multiline Terminal.</p>	<ul style="list-style-type: none"> <li>• YY = 00</li> <li>(1) Primary Extension No. of Secretary + [ ] + Key No.</li> <li>(2) X - XXXX (Boss Station No./Boss Primary Extension No.)</li>   <li>• YY = 00</li> <li>(1) Primary Extension No. of Secretary + [ ] + Key No.</li> <li>(2) { F0040: MW Set F0041: MW Reset</li>   <li>• YY = 00</li> <li>(1) Primary Extension No. of Boss + [ ] + Key No.</li> <li>(2) F1005: MW Lamp</li> </ul>
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM20</div>	<p>Assign the access code for MW Set/MW Reset to the secretary's Multiline Terminal, if required.</p>	<ul style="list-style-type: none"> <li>• Y = 0 - 3 (Numbering Plan Group 0 - 3)</li> <li>(1) X - XXX (Access Code)</li> <li>(2) { 040: MW Set 041: MW Reset</li> </ul>
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM08</div>	<p>Specify the MW Lamp indication pattern.</p>	<ul style="list-style-type: none"> <li>(1) 294</li> <li>(2) 0/1 ◀ : Flashing (60 IPM)/ Steady</li> </ul>
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM51</div>	<p>Assign the destination of the call from the Boss' station which has Message Waiting set.</p>	<ul style="list-style-type: none"> <li>• YY = 15</li> <li>(1) 00 - 63 (Tenant No.)</li> <li>(2) X - XXXX (Secretary's Station No.)</li> </ul>
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">A</div>		

## BOSS/SECRETARY CALLING (CONT'D)

A	DESCRIPTION	DATA
CM12 CM15 END	To provide a Boss/Secretary Override, assign the Class of Service for Call Waiting to Secretary and Boss Stations.	For Secretary Station: <ul style="list-style-type: none"> <li>• CM12, YY=02                [Service Restriction Class (A)                (0-15 ◀)]</li> <li>• CM15, YY=43 (Calling Side)</li> <li>(1) 00-15 (Service Rest. Class (A)                assigned by CM12,                YY=02)</li> <li>(2) 1 ◀ : Allowed</li> </ul> For Boss Station: <ul style="list-style-type: none"> <li>• CM12, YY=02                [Service Restriction Class (A)                (00-15 ◀ )]</li> <li>• CM15, YY=44 (Called Side)</li> <li>(1) 00-15 (Service Rest. Class (A)                assigned by CM12,                YY=02)</li> <li>(2) 1 ◀ : Allowed</li> </ul>

To set the Boss Station with a single-line telephone.

START	DESCRIPTION	DATA
CM12 CM13 END	Set the data for accommodating the Boss' line to the Secretary's Sub line.  Specify the ringing signal sent to Boss Station.	<ul style="list-style-type: none"> <li>• YY=05</li> <li>(1) X-XXXX: Boss Station No.</li> <li>(2) 0/1 ◀ : Accomodated</li> </ul> <ul style="list-style-type: none"> <li>• YY=08</li> <li>(1) X-XXXX: Boss Station No.</li> <li>(2) 0/1 ◀ : Ringing Signal not to be sent/To be sent</li> </ul>

### HARDWARE REQUIRED

ETE-16D-2TEL/ETE-6D-2TEL and PK-2DLC card.

## BROKER'S CALL

### GENERAL DESCRIPTION

This feature allows a Multiline Terminal or Single-Line Telephone user to alternate between two parties, talking to one party while the other party remains on Hold on the same line. The Multiline Terminal user utilizes the TRF or ANS key to alternate between the two parties. The Single-Line Telephone user uses the Hold feature to alternate between the two parties.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

To activate from a Multiline Terminal with a call in progress:

1. Press TRF key and receive feature dial tone. The first party is placed on hold.
2. Dial new number, second party answers.
3. Press TRF or ANS key, return to first party. The second party is placed on hold.
4. Repeat as often as needed.

To activate from a Single-Line Telephone with a call in progress:

1. Press FLASH key (or momentarily press hookswitch) and receive feature dial tone. The first party is placed on Consultation Hold.
2. Dial Call Hold feature access code and receive extension dial tone
3. Dial new number. The second party answers.
4. Press FLASH key (or momentarily press the hookswitch). The second party is placed on Consultation Hold.
5. Dial Call Hold feature access code and second party is placed on Call Hold. The first party is reconnected.
6. Repeat the Call Hold procedure as necessary.

### SERVICE CONDITIONS

1. A three-way call may be established any time during a Broker's call by pressing the CNF key on a Multiline Terminal.
2. Once a Single-Line Telephone has set up a *Broker's Call*, a *Conference* cannot be established.
3. The party on hold during a *Broker's Call* will receive *Music on Hold*, if provided.
4. If the RECALL key is pressed with a *Broker's Call* in progress, the currently connected party is dropped. The party on *Consultation Hold* remains on *Consultation Hold* and a new feature dial tone is provided.
5. A Broker's call can also be initiated after receiving a *Camp-On* call. See *Camp-on*.
6. When a Multiline Terminal has a Broker's call in progress, the ANS key alternates between the calls and will not answer additional incoming calls.

### PROGRAMMING

Refer to CALL HOLD feature.



## CALL BACK

### GENERAL DESCRIPTION

This feature allows a calling party to set an automatic *Call Back* when a busy or no answer condition is encountered. When the busy station becomes idle, the station that set the *Call Back* will be called. The *Call Back* to the setting station is initiated immediately after the called station goes on hook from making a call or accessing a feature.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

To set *Call Back* from a Dial Pulse Single-Line Telephone:

1. Dial the desired station number and receive busy tone or ringback tone.
2. Dial "2" and receive service set tone (if single-digit feature access codes are enabled)

OR

Press the **FLASH** key (or momentarily press hookswitch) and receive feature dial tone. Dial *Call Back* feature access code if busy tone; dial 2 if ringback tone (if single feature access codes are enabled), and receive service set tone.

3. Restore the handset.
4. When the busy station becomes idle, or if the station that did not answer first initiates or answers a call or accesses a feature and then becomes idle, the station that set the *Call Back* will ring.
5. Upon answering, the originally called station will ring.

To set *Call Back* from a DTMF Telephone:

1. Dial the desired station number and receive busy tone or ringback tone.
2. Dial "2" and receive service set tone (if single-digit access feature codes are enabled) for busy tone only.

OR

Press the **FLASH** key (or momentarily press the hookswitch) and receive feature dial tone. Dial the *Call Back* feature access code if busy tone; dial "2" if ringback tone and receive service set tone.

3. Restore the handset.
4. When the busy station becomes idle, or the station that did not answer first initiates or answers a call or accesses a feature and then becomes idle, the station that set the *Call Back* will ring.
5. Upon answering, the originally called station will ring.

**Note:** *Multiple Call Backs can be set by repeating above procedure.*

To cancel *Call Back* from a Single-Line Telephone:

1. Lift handset and receive dial tone.
2. Dial *Call Back* cancellation code and receive service set tone.

To cancel *Call Back* from a Multiline Terminal:

1. Lift handset or press **SPKR** key and receive dial tone.
2. Press the **CALL BACK** key and receive service set tone.

### SERVICE CONDITIONS

1. If a *Call Back* is not answered within 30 seconds the *Call Back* is automatically cancelled.
2. A *Call Back* to a station in *Line Lockout* is denied.
3. Dial pulse Single-Line Telephone can omit pressing the **FLASH** key (or momentarily depressing the hookswitch) to set *Call Back* while receiving ringback tone. If the station presses the **FLASH** key while receiving feature dial tone, the station returns to receiving ringback tone. When the called party is an *Attendant Console*, *Call Back* cannot be set.

## CALL BACK (CONT'D)

4. When the setting station is called back, *Station Hunting* and Call Pickup will not apply. When the call is placed in UCD queue, *Call Back* cannot be set.
5. A maximum of 128 stations can access this feature simultaneously.
6. This feature can be allowed or denied in *Class of Service* assignment.

### PROGRAMMING

START	DESCRIPTION	DATA
CM08	Provide the system with the Single-Digit Feature Access Code while calling station hears ringback tone/busy tone.	(1) 156 (Ringback Tone) (2) 0: Allowed (1) 208 (Busy Tone) (2) 0: Allowed
CM12	Assign Service Restriction Class (A) to station.	<ul style="list-style-type: none"> <li>• YY=02</li> <li>(1) X-XXXX: Station No.</li> <li>(2) XXXX</li> </ul> <div style="margin-left: 100px;"> <span style="border-top: 1px solid black; display: inline-block; width: 100px;"></span>                     Service Restriction Class (A) (00-15◀ )                 </div>
CM15	Assign the Call Back feature to the Service Restriction Class (A) assigned by CM12, YY=02.  Assign the Call Back-Multiple Assignment feature to the Service Restriction Class (A) assigned by CM12, YY=02, if required.	<ul style="list-style-type: none"> <li>• YY=03</li> <li>(1) XX: Service Restriction Class (A) assigned by CM12, YY=02.</li> <li>(2) 1◀ : Allowed</li> </ul> <ul style="list-style-type: none"> <li>• YY=46</li> <li>(1) XX: Service Restriction Class (A) assigned by CM12, YY=02.</li> <li>(2) 1◀ : Allowed</li> </ul>
CM20	Assign the access code for Call Back.	<ul style="list-style-type: none"> <li>• Y= 0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX: Access Code (*1, #1)</li> <li>(2) { 002: Call Back Set 003: Call Back Cancel</li> </ul> For setting the same access code as Trunk Queuing-Outgoing: (2) { 004: Set 005: Cancel
CM90	Assign Call Back key to the Multiline Terminal.	<ul style="list-style-type: none"> <li>• YY=00</li> <li>(1) Primary Extension No. + [ ] +key No.</li> <li>(2) F0004: Trunk Queuing-Outgoing/Call Back</li> </ul>
END		

## CALL FORWARDING

### GENERAL DESCRIPTION

Call Forwarding allows calls directed to a station to be routed to another station, an Attendant, an outside number, or voice mail equipment. The types of Call Forwarding provided include:

- Call Forwarding-All Calls
- Call Forwarding-Busy Line
- Call Forwarding-No Answer
- Call Forwarding-Destination
- Multiple Call Forwarding-All Calls
- Multiple Call Forwarding-Busy Line
- Multiple Call Forwarding-No Answer
- Split Call Forwarding-Busy Line

Additional Call Forwarding features include:

- Attendant Call Forwarding Setup and Cancel
- Call Forwarding-Override
- Group Diversion



## CALL FORWARDING-ALL CALLS (CONT'D)

### SERVICE CONDITIONS

1. There is no limit to the number of stations that can set *Call Forwarding - All Calls* at one time.
2. Extensions can be assigned this feature by *Class of Service* in system programming. A separate *Class of Service* Assignment controls access to *Call Forwarding - All Calls* to outside numbers.
3. When *Call Forwarding - All Calls* is rerouted to another destination, one burst of ringing is sent to the forwarded station to indicate that it is call forwarded (a Single-Line Telephone only).
4. When a call is forwarded to a Multiline Terminal with LCD, the display shows the initially called station's number as well as the calling station's number.
5. *Call Forwarding - All Calls* assignments are retained in system memory when the system is re-initialized or when there is a power failure.
6. A maximum of 26 digits (without access code) can be stored for *Call Forwarding - All Calls* to an outside number.
7. When *Call Forwarding - All Calls* to an outside number takes place, the *Station Message Detail Recording* lists the forwarded station as the originator of the call.
8. *Call Forwarding - All Calls* to an outside number can be routed by the *Least Cost Routing* feature and restricted by the *Code Restriction* feature.
9. A maximum of 96 *Call Forwarding - All Calls* to outside number settings is allowed per system.
10. More than one *Call Forward* can occur in the progress of a call. See *Multiple Call Forwarding - All Calls*, *Multiple Call Forwarding - Busy Line*, and *Multiple Call Forwarding - No Answer*.
11. Direct Inward Dial (DID) lines, tie lines, ring transfer and internal incoming calls will follow the *Call Forward* setting.
12. Only the destination station can call the *Call Forward* station.
13. If the *Call Forward* is rerouted to a hunt group and all members of the hunt group are busy, the forwarded caller will receive busy tone.
14. If the *Call Forward* is rerouted to the pilot number of a *Uniform Call Distribution* (UCD) group and that pilot station has set *Call Forward*, the call will be forwarded.

## CALL FORWARDING-ALL CALLS (CONT'D)

### PROGRAMMING

START	DESCRIPTION	DATA
CM12 CM15	Assign the Class of Service for this feature to the required stations.  <b>Note:</b> <i>In case of providing Call Forwarding-All Calls-Outside, set "1" (Allowed) for YY=00, YY=26 of CM15.</i>	<ul style="list-style-type: none"> <li>• CM12, YY = 02 (Service Restriction Class (A) (00 - 15 ◀ ))</li> <li>• CM15</li> <li>• YY = 00 (Call Forwarding-All Calls)</li> <li>• YY = 26 (Call Forwarding-All Calls-Outside)</li> <li>(1) XX: Service Restriction Class A (00 - 15) assigned by CM12, YY = 02.</li> <li>(2) 1◀ : Allowed</li> </ul>
CM20	Assign the access code for Call Forwarding-All Calls Entry and Cancel respectively.	<ul style="list-style-type: none"> <li>• Y = 0 - 3 (Numbering Plan Group 0 - 3)</li> <li>(1) X - XXX: Access Code (*5, #5)</li> <li>(2) { 010: To entry 011: To cancel</li> </ul>
CM35 CM36	To apply this feature to incoming calls, assign the combination of trunk route for Tandem Connection.  <b>Note:</b> <i>For Resident System Programming, refer to Chapter 7 of System Programming Manual.</i>	<ul style="list-style-type: none"> <li>• YY = 05</li> <li>(1) Trunk Route No. (00 - 63)</li> <li>(2) 1◀ : Release Signal arrive } <b>Note</b></li> <li>(1) Incoming Trunk Route No. + Outgoing Trunk Route No. (Assigned by CM35, YY = 05)</li> <li>(2) 0: Allowed</li> </ul>
CM08	Specify the setting method of Call Forwarding-All Calls-Outside set operation.	<ul style="list-style-type: none"> <li>(1) 222</li> <li>(2) { 0: The feature is set when the station goes on hook/when receiving Service Set Tone (ORT time out) 1◀ : The feature is set when receiving Service Set Tone (ORT time out)</li> </ul>
CM90	Assign Call Forwarding-All Calls key to the Multiline Terminal.	<ul style="list-style-type: none"> <li>• YY = 00</li> <li>(1) Primary Extension No. + [ ] + Key No.</li> <li>(2) F0010: Call Forwarding-All Calls Set/Cancel</li> </ul>
END		

## CALL FORWARDING-BUSY LINE

### GENERAL DESCRIPTION

This feature permits a call to a busy extension to be routed to a predesignated station, *Attendant Console*, or voice mail equipment. Call Forwarding-Busy Line can be set or cancelled by an *Attendant Console*, the individual station user, or a Multiline Terminal with a secondary appearance of the station's extension.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

From a Multiline Terminal with LCD:

To set Call Forwarding-Busy Line:

1. Lift handset or press **SPKR** key and receive dial tone.
2. Press Call Forwarding-Busy Line feature access key and receive feature dial tone.
3. Dial the desired target station number and receive service set tone. The LCD displays:  
SET            XXXX (Target Station)
4. The LED of the associated feature button lights.
5. Restore handset or press **SPKR** key.
6. If the target station is the operator, the LCD displays;  
SET            OPR

To cancel Call Forwarding-Busy Line:

1. Lift handset or press **SPKR** key and receive dial tone.
2. Press the Call Forwarding-Busy Line feature access key and receive special dial tone. Press the \* key and receive service set tone. The LCD displays: CNCL and the associated LED goes out.
3. Restore handset or press **SPKR** key.

From a Single-Line Telephone:

To set Call Forwarding-Busy Line:

1. Lift the handset and receive dial tone.
2. Dial the specific Call Forwarding-Busy Line feature access code and receive feature dial tone.
3. Dial the desired target station number and receive service set tone.

To cancel Call Forwarding-Busy Line:

1. Lift the handset and receive dial tone.
2. Dial the specific Call Forwarding-Busy Line cancellation code and receive service set tone.

## CALL FORWARDING-BUSY LINE (CONT'D)

### SERVICE CONDITIONS

1. There is no limit to the number of stations that can set *Call Forwarding - Busy Line* at one time.
2. Extensions can be allowed or disallowed this feature by *Class of Service* in system programming.
3. *Call Forwarding - Busy Line* can be provided on a system or an individual basis.
4. *Call Forwarding - Busy Line* on a system basis allows any incoming *Direct Inward Dial* (DID), *Direct Inward Termination*, (DIT) *E&M Tie line*, *Transfer*, or internal calls which encounter a busy condition to be forwarded to a predetermined location (*Attendant Console*, another station, or voice mail equipment).
5. Individually set *Call Forwarding - Busy Line* settings take precedence over system-basis *Call Forwarding - Busy Line* settings.
6. If the *Call Forwarding - Busy Line* is rerouted to a hunt group and all members of the hunt group are busy, the forwarded caller will receive busy tone.
7. When a call is directed to the pilot number of a UCD group and that pilot station has set *Call Forwarding - Busy Line*, the call will be forwarded if all stations within the UCD group are busy.
8. When a calling station, *Attendant Console*, or trunk receives busy tone after being *Call Forwarded* because of *Call Forwarding - Busy Line*, the caller can activate *Executive Right of Way*, *Camp On*, *Attendant Override*, *Call Back*, *Message Reminder*, or other service features available on busy tone to the initially called station.
9. When a call is forwarded to a Multiline Terminal with LCD, the display shows the initially called station's number as well as the calling station's number.



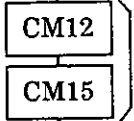
## CALL FORWARDING-BUSY LINE (CONT'D)

### PROGRAMMING

START

### DESCRIPTION

### DATA

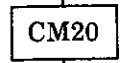


Assign the Class of Service for this feature to the required stations.

- CM12, YY=02  
(Service Restriction Class (A) (00-15 ◀))

**Note:** *In case of providing Call Forwarding-Busy Line-Outside, set "1" (To be provided) for YY=11, YY=28 of CM15.*

- CM15  
 YY=11 (Call Forwarding-Busy Line)  
 YY=28 (Call Forwarding-Busy Line-Outside)
- (1) XX: Service Restriction Class A (00-15) assigned by CM12, YY=02.
- (2) 1 ◀ : Allowed

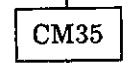


Assign the access code for Call Forwarding-Busy Line.

- Y=0-3 (Numbering Plan Group 0-3)
- (1) X-XXX: Access Code (\*6, #6)
- (2) { 014: To set  
015: To cancel

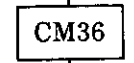
For setting the same access code as Call Forwarding-No Answer

- (2) { 012: To enter  
013: To cancel



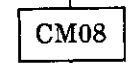
To apply this feature to incoming calls, set the trunk route combinations for Tandem Connection.

- YY=05
- (1) Trunk Route No. (00-63)
- (2) 1 ◀ : Release Signal arrive } **Note**



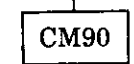
**Note:** *As for the Resident System Program, refer to Chapter 7 of the System Programming Manual.*

- (1) Incoming Trunk Route No. + Outgoing Trunk Route No. (Assigned by CM35, YY=05)
- (2) 0 : Allowed



Specify the setting method of Call Forwarding-Busy Line-Outside set operation.

- (1) 222
- (2) { 0 : The feature is set when the station goes on hook/when receiving Service Set Tone (ORT time out)  
1 ◀ : The feature is set when receiving Service Set Tone (ORT Time out)



Assign Call Forwarding-Busy Line key to the Multiline Terminal.

- YY=00
- (1) Primary Extension No. + [ ] + Key No.
- (2) F0014: Call Forwarding-Busy Line Set/Cancel

END

## CALL FORWARDING-NO ANSWER

### GENERAL DESCRIPTION

This feature reroutes calls to extensions, which do not answer, to another station, an *Attendant Console* or voice mail equipment. *Call Forwarding - No Answer* can be set by the individual station user, an *Attendant Console*, or by a Multiline Terminal with a secondary appearance of the station's extension.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

From Multiline Terminal with LCD

To set *Call Forwarding - No Answer*:

1. Lift handset or depress **SPKR** key and receive dial tone.
2. Depress *Call Forwarding - No Answer* feature access key and receive feature dial tone.
3. Dial the desired target station number and receive service set tone. The LCD displays:  
**SET               XXXX** (Target Station)

To set *Call Forwarding - No Answer - Outside*:

1. Lift the handset or depress the **SPKR** key and receive Dial Tone.
2. Depress *Call Forwarding - No Answer* feature access key and receive feature Dial Tone.
3. Dial the trunk access code and the desired telephone number.
4. Wait until service set tone is received, unless programming CM08-222 = 0.
5. Replace the handset or depress the **SPKR** key.

To cancel *Call Forwarding - No Answer*:

1. Lift handset or depress **SPKR** key and receive dial tone.
2. Depress the *Call Forwarding - No Answer* feature access key and receive special dial tone. Depress the \* key, the associated LED goes out and service set tone is received. The LCD displays: **CNCL**

From a Single Line Telephone

To set *Call Forwarding - No Answer*:

1. Lift handset and receive dial tone.
2. Dial specific *Call Forwarding - No Answer* feature access code and receive feature dial tone.
3. Dial the desired target station number and receive service set tone.

To set *Call Forwarding - No Answer - Outside*:

1. Lift the handset and receive Dial Tone.
2. Dial *Call Forwarding - No Answer* feature access code and receive feature Dial Tone.
3. Dial the trunk access code and the desired telephone number.
4. Wait until service set tone is received, unless programming CM08-222 = 0.
5. Replace the handset.

To cancel *Call Forwarding - No Answer* :

1. Lift handset and receive dial tone.
2. Dial specific *Call Forwarding -No Answer* cancellation code and receive service set tone.

### SERVICE CONDITIONS

1. There is no limit to the number of stations which can set *Call Forwarding - No Answer* at one time.
2. Stations can be allowed or disallowed this feature by *Class Of Service* in system programming.
3. *Call Forwarding - No Answer* can be provided on a system and an individual basis.
4. *Call Forwarding* on a system basis allows *Direct Inward Dial (DID)* calls or *E&M Tie Line* calls which encounter a no-answer condition to be forwarded to a predetermined location (*Attendant Console*, another station, or voice mail equipment).
5. Individually set *Call Forwarding - No Answer* settings take precedence over system *Call Forwarding - No Answer* settings.

## CALL FORWARDING-NO ANSWER (CONT'D)

6. *Call Forwarding - No Answer* timing is flexible in system programming. *Call Forwarding - No Answer* is as follows:  
 For direct incoming calls (DID, DIT, TIE) - 4 to 120 seconds (Default: 32-36 seconds).  
 For internal calls and transferred incoming calls - 4 to 120 seconds (Default: 32-36 seconds).
7. More than one call forward can occur in the progress of a call. See *Multiple Call Forwarding - All Calls*, *Multiple Call Forwarding - Busy Line* and *Multiple Call Forwarding - No Answer*.
8. *Call Forwarding - Busy Line* can be set simultaneously with this feature to result in *Call Forwarding Busy/No Answer*. *Call Forwarding Busy Line* and *Call Forwarding - No Answer* can be set to the same or different extensions.

### PROGRAMMING

START	DESCRIPTION	DATA
CM12	Assign Service Restriction Class (A) to the required stations.	<ul style="list-style-type: none"> <li>• YY=02</li> <li>(1) X-XXXX: Station No.</li> <li>(2) XXXX  <span style="margin-left: 20px;">└── Service Restriction Class (A) (00-15 ◀)</span></li> </ul>
CM15	Assign this feature to Service Restriction Class (A) assigned by CM12, YY=02.	<ul style="list-style-type: none"> <li>• YY=10</li> <li>(1) XX: Service Restriction Class (A) assigned by CM12, YY=02.</li> <li>(2) 1 ◀ :Allowed</li> </ul>
CM20	Assign the access code for Call Forwarding-No Answer Entry and Cancellation respectively.	<ul style="list-style-type: none"> <li>• Y=0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX: Access Code (*6, #6)</li> <li>(2) { 016: Call Forwarding-No Answer Entry 017: Call Forwarding-No Answer Cancel</li> </ul> <p>For setting the same access code as Call Forwarding-Busy Line</p> <ul style="list-style-type: none"> <li>(2) { 012: Entry 013: Cancel</li> </ul>
CM41	Specify the timing for Call Forwarding-No Answer for a trunk incoming call.	<ul style="list-style-type: none"> <li>• Y=0</li> <li>(1) 01</li> <li>(2) 01-30 (Timer Data for 0-120 sec., in 4-sec. increments)</li> </ul> <p>Initial: 09 (32-36 sec.)</p>
	Specify the timing for Call Forwarding-No Answer for an internal call or an assisted call.	<ul style="list-style-type: none"> <li>• Y=0</li> <li>(1) 15</li> <li>(2) 01-30 (Timer Data for 0-120 sec., in 4-sec. increments)</li> </ul> <p>If no data is set the default setting is 09 (32-36 sec.)</p>
CM90	Assign Call Forwarding-No Answer Key to the Multiline Terminal.	<ul style="list-style-type: none"> <li>• YY=00</li> <li>(1) Primary Extension No. + [ ] + Key No.</li> <li>(2) F0016: Call Forwarding - No Answer Set/Cancel</li> </ul>
END		

## CALL FORWARDING-DESTINATION

### GENERAL DESCRIPTION

This feature allows a station user to set Call Forwarding-All Calls from another station within the system to the user's station.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

To set Call Forwarding-Destination from the destination station:

1. Lift handset and receive dial tone.
2. Dial specific Call Forwarding-Destination feature access code and receive feature dial tone.
3. Dial the station number to be forwarded and receive service set tone.

To cancel Call Forwarding-Destination from the destination station:

1. Lift handset and receive dial tone.
2. Dial specific Call Forwarding-Destination cancellation code and receive feature dial tone.
3. Dial the user's station number (forwarded station) and receive service set tone.

To cancel Call Forwarding-Destination from the destination or Call Forwarded station:

1. Lift handset and receive dial tone.
2. Dial Call Forwarding-All Calls cancellation code and receive service set tone.

### SERVICE CONDITIONS

1. There is no limit to the number of stations which can set *Call Forwarding - Destination*.
2. Stations can be allowed or disallowed this feature by *Class Of Service* in system programming.
3. There is no limit to the number of *Call Forwarding - Destinations* which can be set to forward to a station simultaneously.

## CALL FORWARDING-DESTINATION (CONT'D)

### PROGRAMMING PROCEDURE

<u>START</u>	<u>DESCRIPTION</u>	<u>DATA</u>
CM12	Assign Service Restriction Class (A) to each station.	<ul style="list-style-type: none"> <li>• YY=02</li> <li>(1) X-XXXX (Station No.)</li> <li>(2) XXXX               <ul style="list-style-type: none"> <li>└─ Service Restriction Class (A) (00-15 ◀ )</li> </ul> </li> </ul>
CM15	Assign this feature to Service Restriction Class (A) assigned by CM12, YY=02.	<ul style="list-style-type: none"> <li>• YY=15</li> <li>(1) XX: Service Restriction Class (A) assigned by CM12, YY=02.</li> <li>(2) 1 ◀ : Allowed</li> </ul>
CM20	Assign the access code for Call Forwarding-Destination Entry and Cancellation respectively.	<ul style="list-style-type: none"> <li>• Y= 0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX: Access Code (*7, #7)</li> <li>(2) {               <ul style="list-style-type: none"> <li>018: Call Forwarding-Destination Entry</li> <li>019: Call Forwarding-Destination Cancel</li> </ul> </li> </ul>
CM90	Assign Call Forwarding-Destination Set/Cancel key to the Multiline Terminal.	<ul style="list-style-type: none"> <li>• YY=00</li> <li>(1) Primary Extension No. + <input type="text"/> + Key No.</li> <li>(2) {               <ul style="list-style-type: none"> <li>F0018: Set</li> <li>F0019: Cancel</li> </ul> </li> </ul>
<u>END</u>		

## MULTIPLE CALL FORWARDING-ALL CALLS

### GENERAL DESCRIPTION

When a Call Forwarded call is rerouted to a station which has also set a Call Forward, the call can be forwarded to another station. A call can be forwarded a maximum of five times, as specified in system programming.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

The same operating procedures for Call Forwarding-All Calls apply.

### SERVICE CONDITIONS

1. *Multiple Call Forwarding - All Calls* can forward a maximum of five times when the called station sets *Call Forwarding - All Calls* to a station that has set *Call Forwarding - All Calls* or *Call Forwarding - Busy Line*.
2. *Multiple Call Forwarding - All Calls* can only be performed for non-data calls.
3. If a calling station has been set to *Call Forwarding - All Calls* five times and encounters a sixth *Call Forwarding - All Calls*, the calling station will not be forwarded, but will receive busy tone if the destination station is busy, or ringback tone if the destination station is idle.
4. If the destination of *Call Forwarding - All Calls* is *Call Forwarding - Busy Line*, forwarding will occur.
5. When combining *Call Forwarding - All Calls* and *Call Forwarding - Busy Line*, and the fifth destination station is busy, the calling party will hear busy tone.
6. If the destination in a *Multiple Call Forwarding - All Calls* situation is busy, and has not set *Call Forwarding - Busy Line* or *All Calls*, the calling party will receive busy tone.
7. If the destination station is busy, the calling station may then activate *Call Back*, *Camp On*, *Message Reminder*, or *Executive Override* to the destination station.
8. When *Multiple Call Forwarding - All Calls* occurs, the display of the calling party's Multiline Terminal with LCD will show the final forwarded station number. The display of the final forwarded Multiline Terminal with LCD will show the calling party (station or trunk) and the called number.
9. If the destination station in a combined *Multiple Call Forwarding - All Calls* and *Call Forwarding - Busy Line* situation is *Call Forwarding-No Answer*, *Multiple Call Forwarding - No Answer* will be put into effect. If the destination station of *Call Forwarding-No Answer* is set to *Call Forwarding - Busy Line*, *Call Forwarding - All Calls* forwarding will be restricted.
10. If two stations have set *Call Forwarding - All Calls* to each other, an incoming call to either of these stations will not be forwarded, so an infinite loop cannot occur.

## MULTIPLE CALL FORWARDING-ALL CALLS (CONT'D)

11. If the incoming call returns to a station that has already taken part in a *Multiple Call Forwarding (Busy or All Calls)*, *Call Forwarding - All Calls* service from that station will not be performed, and the system will ignore that station's forwarding settings.
12. If an incoming call encounters *Multiple Call Forwarding - All Calls* and the destination is the *Attendant Console*, the incoming call will appear on the ATND key.
13. If a station is set *Call Forwarding- All Calls* to another station in a different tenant and that station is set to *Call Forwarding - Busy Line* or *All Calls* to the *Attendant Console*, the calling station will be connected to the called station's *Attendant Console*.
14. A *Direct In Termination* call to a station which has set *Call Forwarding - All Calls* will be forwarded. The call can be forwarded to another station or to an *Attendant Console*.
15. If the destination station of *Multiple Call Forwarding - All Calls* is in a hunt group and is set to *Call Forwarding - Busy Line* to a station in another hunt group, it can be determined through system data whether the calling party hunts to the called party's hunt group or the terminating party's hunt group when the forwarded-to stations are busy.
16. If the destination of *Multiple Call Forwarding - All Calls* is the pilot of a *Uniform Call Distribution (UCD)* group, UCD is executed.
17. If a member of a UCD group is a member of a *Multiple Call Forwarding - All Calls* sequence, that station is skipped in UCD hunting.

### PROGRAMMING

In addition to the programming for the Call Forwarding-All Calls, the following programming is also required.

<u>START</u>	<u>DESCRIPTION</u>	<u>DATA</u>
START   CM42   END	Specify the number of times a call can be call forwarded.	(1) 14 (2) 01 - 05 [Number of times (One -- five times)] If no data is set, the default setting is 5.

## CALL FORWARDING; MULTIPLE CALL FORWARDING-BUSY LINE

### GENERAL DESCRIPTION

This feature permits a call to a busy station to be forwarded, multiple times, to a predesignated idle station.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

The same operating procedures for *Call Forwarding-All Calls* apply.

### SERVICE CONDITIONS

1. *Multiple Call Forwarding - Busy Line* can not be performed for data calls.
2. *Multiple Call Forwarding - Busy Line* can route a call up to five times when the called station sets *Call Forwarding - Busy* to a station that is busy that has set *Call Forwarding - Busy* and so on.
3. If the calling station is set as the forwarded destination of its own call in a multiple call forwarding scheme, *Call Forwarding - Busy* at that point will not take place.
4. If the incoming call returns to one of the stations that has taken part in the process of multiple call forwarding, the *Call Forwarding - Busy* from that station will not be performed.
5. If all the stations are busy in a multiple call forwarding sequence, a calling internal station may then activate *Call Back*, *Message Reminder*, *Camp On*, or *Executive Override* to the called station.
6. If the station is a *Direct In Termination* call, *Call Forwarding - Busy* is not activated. The calling party may be forwarded to the *Attendant Console*, to *Trunk Answer any Station*, put in *Automatic Camp-On*, or can receive ringback until the station becomes idle.
7. If the called station is set as the forwarded destination in a multiple call forwarding scheme, *Call Forwarding - Busy* at that point will not take place.
8. If the called station is set to *Call Forwarding - Busy Line* to another station in a different tenant and that station is set to *Call Forwarding - Busy* to the *Attendant Console*, the calling station will be connected to the calling station's *Attendant Console*.
9. For *Multiple Call Forwarding - Busy Line*, the display of a Multiline Terminal with LCD will show the called station number and the final forwarded station number for the calling party. For the final forwarded-to station, the display of the Multiline Terminal with LCD will show the called number and the calling party (station or trunk).



## CALL FORWARDING; MULTIPLE CALL FORWARDING-BUSY LINE (CONT'D)

### PROGRAMMING

In addition to the programming for Call Forwarding-Busy Line, the following programming is required for this service.

<u>START</u>	<u>DESCRIPTION</u>	<u>DATA</u>
START   CM42   END	Specify the number of times a call can be call forwarded.	(1) 14 (2) 01-05 [Number of Times (One - five times)]. If no data is set, the default setting is 5.

## CALL FORWARDING; MULTIPLE CALL FORWARDING-NO ANSWER

### GENERAL DESCRIPTION

This feature permits a call to an unanswered station, the ability to be forwarded multiple times to a predesignated station that does not have *Call Forwarding - No Answer* set or to the *Attendant Console*.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE


The same operating procedures for Call Forwarding-All Calls apply.

### SERVICE CONDITIONS

1. *Multiple Call Forwarding - No Answer* can only be performed for non-data calls.
2. *Multiple Call Forwarding - No Answer* can be forwarded as many times as desired. The call will stop forwarding when it terminates to the *Attendant Console* or to a station not assigned with *Call Forwarding - No Answer*.
3. When a station encounters a *Call Forwarding - No Answer* condition and the station it is forwarded to is busy, the system will check the status of the forwarded busy station at intervals pre-assigned in system programming.
4. *Multiple Call Forwarding - No Answer* service can be utilized by the following incoming calls:
  - Intra-office
  - Direct Inward Dialing*
  - Direct In Termination*
  - Night Service*
  - Hot Line*
5. If a station transfers a call to another station that set *Call Forwarding - No Answer* and releases from the connection, recalls will override *Call Forwarding - No Answer* if the call is unanswered after a pre-determined time.
6. *Multiple Call Forwarding - No Answer* will not be activated if the calling party encounters a busy station that has activated *Call Forwarding - Busy Line*.
7. If a station sets *Call Forwarding - No Answer* to another station in a different tenant and that station is set to *Call Forwarding - No Answer* to the Attendant, the calling station will be connected to the calling station's *Attendant Console*.
8. For *Multiple Call Forwarding - No Answer*, the display of a Multiline Terminal with LCD will show the final forwarded-to station number for the calling party. If the final forwarded-to station is a Multiline Terminal with LCD, the forwarded-from station number and the calling party number (station on trunk) will be displayed.

## CALL FORWARDING; MULTIPLE CALL FORWARDING-NO ANSWER (CONT'D)

### PROGRAMMING

<u>START</u>	<u>DESCRIPTION</u>	<u>DATA</u>
	Specify the timing for No Answer after second Call Forwarding.	<ul style="list-style-type: none"><li>• Y=0</li><li>(1) 46</li><li>(2) 01 - 30 [Timer Data (4 sec - 130 sec)]</li></ul> If no data is set, the default setting is <b>32-36</b> seconds.
<u>END</u>		

## CALL FORWARDING; SPLIT CALL FORWARDING-BUSY LINE

### GENERAL DESCRIPTION

This feature allows internal calls to a busy line to receive busy tone and external calls to be rerouted to a different destination. Destinations may be an internal station, *Attendant Console*, or voice mail.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

From a Multiline Terminal with LCD:

To set split *Call Forwarding - Busy Line*:

1. Lift the handset or depress **SPKR** key and receive dial tone.
2. Depress *Call Forwarding - Busy Line* feature access key and receive feature dial tone.
3. Dial the desired target station number and receive service set tone. The LCD displays:  
**SET            XXXX** (Target Station)  
The LED of the associated feature button lights.
4. Restore the handset or depress **SPKR** key.
5. If the target station is the operator, the LCD displays:  
**SET            OPR**

To set Split *Call Forwarding - Busy Line - Outside*:

1. Lift the handset or depress the **SPKR** key and receive dial tone.
2. Depress *Call Forwarding - Busy Line* feature access key and receive feature dial tone.
3. Dial the trunk access code and the desired telephone number.
4. Wait until service set tone is received, unless programming CM08-222=0.
5. Replace the handset or depress **SPKR** key.

To Cancel Split *Call Forwarding - Busy Line*:

1. Lift the handset or depress **SPKR** key and receive dial tone.
2. Depress *Call Forwarding - Busy Line* feature access key and receive special dial tone. Depress the \* key and receive service set tone. The LCD displays: **CNCL** and the associated LED is off.
3. Restore the handset or depress **SPKR** key.

From a Single-Line Telephone and Multiline Terminal without *Call Forwarding - Busy Line* feature key:

To set *Split Call Forwarding - Busy Line*:

1. Lift handset and receive dial tone.
2. Dial *Call Forwarding - Busy Line* feature access code and receive feature dial tone.
3. Dial target number and receive service set tone.

To set *Split Call Forwarding - Busy Line - Outside*:

1. Lift the handset and receive dial tone.
2. Dial *Call Forwarding - Busy Line* feature access code and receive feature dial tone.
3. Dial the trunk access code and the desired telephone number.
4. Wait until service set tone is received, unless programming CM08-222=0.
5. Replace the handset.

## CALL FORWARDING; SPLIT CALL FORWARDING-BUSY LINE (CONT'D)

To Cancel *Split Call Forwarding - Busy Line*:

1. Lift handset and receive dial tone.
2. Dial *Call Forwarding - Busy Line* cancellation code and receive service set tone.

### SERVICE CONDITIONS

1. Stations can be allowed or disallowed this feature using *Class of Service* in system programming.
2. *Split Call Forwarding - Busy Line* can be programmed to provide an internal call with busy tone or be rerouted to another destination on a per-system basis.

### PROGRAMMING

START	DESCRIPTION	DATA
CM12	Assign the Class of Service for this feature to the required stations.	<ul style="list-style-type: none"> <li>• CM12, YY = 02 [Service Restriction Class (A) (00 - 15 )] ◀</li> </ul>
CM15		
	<p><b>Note:</b> <i>To provide this feature, Call Forwarding-Busy Line feature should be denied on each station by the Class of Service assignment.</i></p>	<ul style="list-style-type: none"> <li>• CM15, YY = 11 (Call Forwarding-Busy Line)               <ol style="list-style-type: none"> <li>(1) Service Restriction Class (A) (00 - 15) assigned by CM12, YY = 02.</li> <li>(2) 0: Restricted</li> </ol> </li> <li>• CM15, YY = 28 (Call Forwarding-Busy Line-Outside)               <ol style="list-style-type: none"> <li>(1) Service Restriction Class (A) (00 - 15) assigned by CM12, YY = 02.</li> <li>(2) 1 ◀: Allowed</li> </ol> </li> <li>• CM15, YY = 45 (Split Forwarding-Busy Line)               <ol style="list-style-type: none"> <li>(1) Service Restriction Class (A) (00 - 15) assigned by CM12, YY = 02.</li> <li>(2) 1 ◀: Allowed</li> </ol> </li> </ul>
A		

**CALL FORWARDING; SPLIT CALL FORWARDING-BUSY LINE (CONT'D)**

A	DESCRIPTION	DATA
CM20	Assign the access code for Call Forwarding-Busy Line.	<ul style="list-style-type: none"> <li>• Y=0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX: Access Code (*6, #6)</li> <li>(2) { 014: Call Forwarding-Busy Line Entry 015: Call Forwarding-Busy Line Cancel</li> </ul> <p>For setting the same access code as Call Forwarding-No Answer</p> <ul style="list-style-type: none"> <li>(2) { 012: Entry 013: Cancel</li> </ul>
CM35 CM36	To apply this feature to incoming calls, set the trunk route combinations for Tandem Connection.  <b>Note:</b> For Resident System Programming, refer to Chapter 7 of the System Programming Manual.	<ul style="list-style-type: none"> <li>• YY=05</li> <li>(1) Trunk Route No. (00-63)</li> <li>(2) 1 ◀: Release Signal arrive } <b>Note</b></li> </ul> <ul style="list-style-type: none"> <li>(1) Incoming Trunk Route No. + Outgoing Trunk Route No. (Assigned by CM35, YY=05)</li> <li>(2) 0: Allowed</li> </ul>
CM08	Specify the setting method of Call Forwarding Busy Line-Outside set operation.	<ul style="list-style-type: none"> <li>(1) 222</li> <li>(2) { 0: This feature is set when the station goes on hook/when receiving Service Set Tone (ORT time out) 1 ◀: This feature is set when receiving Service Set Tone (ORT time out)</li> </ul>
CM90	Assign Call Forwarding-Busy Line key to the Multiline Terminal.	<ul style="list-style-type: none"> <li>• YY=00</li> <li>(1) Primary Extension No. + <span style="border: 1px solid black; display: inline-block; width: 1em; height: 1em; vertical-align: middle;"></span> + Key No.</li> <li>(2) F0014: Call Forwarding-Busy Line Set/Cancel</li> </ul>
END		

## CALL FORWARDING; GROUP DIVERSION

### GENERAL DESCRIPTION

This feature allows all calls terminated to an extension that are not answered within a predetermined time to be forwarded to a predesignated station.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

No manual operation is required.

### SERVICE CONDITIONS

1. The NEAX1400 IMS provides three methods of *Call Forwarding - No Answer*:

	Call Forwarding No-Answer (Individual)	Call Forwarding No-Answer (System)	Group Basis
	Individual Station Basis	Tenant Basis	Group Diversion
Set/Cancel	From STA/ATT	From MAT/CAT	From MAT/CAT
Applicable for	STA call TRK call ATT call	TRK call (DID/Tie only)	STA call TRK call (DID, DIT, Tie Line) ATT call ATT Transfer Recalls
Priority	(1)	(3)	(2)

2. The maximum number of *Group Diversion* groups per system is 31.
3. The number of stations that can be included in the same group is unlimited.
4. The *Group Diversion* group has no relation with *Call Pick Up Group*, *Station Hunting Group*, or any other group.
5. No-Answer timing for *Group Diversion* is the same timing as for *Call Forwarding - No Answer*.
6. The destination of this service must be assigned for each group separately.
7. An *Attendant Console* cannot be assigned as the destination of this feature.
8. Incoming *Direct Trunk Appearance* will not follow *Group Diversion* programming.

## CALL FORWARDING; GROUP DIVERSION (CONT'D)

### PROGRAMMING

<u>START</u>	<u>DESCRIPTION</u>	<u>DATA</u>
CM08	Provide the system with Group Diversion.	(1) 026 (Group Diversion) (2) 0: To be provided
CM16	Set up the members to be included in each Group Diversion Group.	• Y=2 (Group Diversion Group) (1) X-XXXX (Station No. to be included in Group Diversion) (2) 00-30 (Group Diversion Group No.)
CM19	Assign the destination for each Group Diversion Group to required stations.	• Y=6 (1) 00-30 (Group Diversion Group No.) (2) X-XXXX (Destination Station No.)
CM41	Set the timing for transferring a call using this feature.	• Y=0 (1) 01 (2) 01-30 (4 sec-120 sec) If no data is set, the default setting is <b>32-36</b> seconds.
<u>END</u>		

**Note:** *The number of Stations that can be included in the same group is unlimited.*



## CALL PARK

### GENERAL DESCRIPTION

This feature enables a station user to place a call into predesignated Call Park locations. The station user is then free to process other calls. This feature is available system-wide and for individual tenants: Call Park-System and Call Park-Tenant.

## CALL PARK-SYSTEM

### GENERAL DESCRIPTION

When a call is parked using Call Park-System, the call can be retrieved from Call Park by any station in the system.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

To place a call into *Call Park-System*

From a Single Line Telephone:

1. Depress **FLASH** key (or momentarily depress the hookswitch) and receive feature dial tone.
2. Call in progress is placed on *Consultation Hold*.
3. Dial *Call Park-System* feature access code.
4. Dial *Call Park-System* location number (00-19) and receive service set tone. (If *Call Park* number is busy, dial another location number using the *Step Call* feature until idle park location is accessed).
5. Restore handset.

From a Multiline Terminal with LCD:

1. Depress the **TRF** key and receive feature dial tone.
2. Call in progress is placed on *Consultation Hold*.
3. Dial *Call Park-System* feature access code. The first available *Call Park* location is selected by the system and displayed in the LCD. Receive service set tone.
4. Restore handset.

OR

1. Depress *Call Park - System* feature key and receive service set tone.
2. Restore handset.

From a Multiline Terminal without LCD:

1. Depress the **TRF** key and receive feature dial tone.
2. Call in progress is placed on *Consultation Hold*.
3. Dial *Call Park-System* feature access code, or depress *Call Park-System* feature key.
4. Dial *Call Park* location number (00-19) and receive service set tone. (If *Call Park-System* number is busy, dial another location number using the *Step Call* feature until idle park location is accessed.)
5. Restore handset.

To retrieve a call from *Call Park-System*

From a Single-Line Telephone:

1. From any station, go off hook and receive internal dial tone.
2. Dial *Call Park-System* retrieval access code.
3. Dial *Call Park-System* location number (00-19).
4. Converse.

From a Multiline Terminal with *Call Park - System* feature key:

1. Go off hook and receive dial tone.
2. Depress *Call Park - System* feature key flashing.
3. Converse.

From a Multiline Terminal with *Trunk - Direct Appearances*:

1. Go off hook and receive dial tone.
2. Depress the *Trunk - Direct Appearance* key flashing.

## CALL PARK-SYSTEM (CONT'D)

From a Multiline Terminal with *Trunk - Direct Appearances*:

1. Go off hook and receive dial tone.
2. Depress the *Trunk - Direct Appearance* key flashing.

### SERVICE CONDITIONS

1. A station user can originate and receive calls while having a call in *Call Park-System*.
2. A maximum of 20 simultaneous calls can be parked within a system. A station user can place multiple calls into *Call Park-System* provided the maximum number is not exceeded.
3. Any internal or external call can be placed into *Call Park-System*.
4. Any call left on *Call Park-System* for more than a preprogrammed time interval will recall to the primary extension of the station which originally parked the call. Once this recall has started, the *Call Park-System* location becomes idle.
5. If the trunk which was placed in *Call Park* is assigned to any Multiline Terminal as *Trunk-Direct Appearances*, the system can select by system data basis whether or not the Multiline Terminal can retrieve the parked call by depressing the Trunk key.  
The LED of the Trunk key indicates:  
Possible to retrieve: flashing as hold (Green/Red)  
Impossible to retrieve: steady as busy (Red)
6. When a *Call Park-System* recalls to a station, any other station can pick it up using *Call Pickup Directed*, *Call Pickup Group* or *Call Pickup- Designated Group*.
7. When attempting to set *Call Park-System* to a busy *Call Park-System* location, *Step Call* can be used to access an idle location.
8. A call can be retrieved from *Call Park-System* while receiving feature dial tone.
9. If a station other than the station that originally parked the call retrieves the call, *Station Message Detail Recording* (SMDR) will record a transfer.
10. Parked calls can receive *Music On Hold*. When *Call Park-System* recalls, the parked party will hear ringback tone.

## CALL PARK-SYSTEM (CONT'D)

### PROGRAMMING

START	DESCRIPTION	DATA
CM12	Assign Service Restriction Class (C) to each station.	<ul style="list-style-type: none"> <li>• YY=07</li> <li>(1) X-XXXX: Station No.</li> <li>(2) XX: Service Restriction Class (C) (00-15 ◀)</li> </ul>
CM15	Assign type of Multiline Terminal to Service Restriction Class (C) assigned by CM12, YY=07.	<ul style="list-style-type: none"> <li>• YY=96</li> <li>(1) XX: Service Feature Restriction Class (C) assigned by CM12, YY=07.</li> <li>(2) <math>\left\{ \begin{array}{l} 0: \text{ Without LCD} \\ 1 \text{ ◀}: \text{ With LCD} \end{array} \right.</math></li> </ul>
CM20	Assign the access code for Call Park-System set/retrieve.	<ul style="list-style-type: none"> <li>• YY=0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX: Access Code (6*, 6#)</li> <li>(2) <math>\left\{ \begin{array}{l} 008: \text{ Call Park-System Set} \\ 009: \text{ Call Park-System retrieve} \end{array} \right.</math></li> </ul>
CM41	Specify the recall timing for Call Park-System.	<ul style="list-style-type: none"> <li>• Y=0</li> <li>(1) 05</li> <li>(2) 01-99 [Timer Data (4-396 sec.)] If no data is set, the default setting is 60-64 seconds.</li> </ul>
CM90	Assign Call Park-System function key to the Multiline Terminals with LCD, if required.	<ul style="list-style-type: none"> <li>• YY=00</li> <li>(1) Primary Extension No. + <span style="border: 1px solid black; padding: 0 5px;"> </span> + Key No.</li> <li>(2) F5000</li> </ul>
CM08	Specify that call answer for a trunk placed on consultation hold by Call Park-System can be retrieved by pressing a trunk line appearances key on a Multiline Terminal.	<ul style="list-style-type: none"> <li>(1) 133</li> <li>(2) 0/1 ◀ : Not Available/ Available</li> </ul>
END		

## CALL PARK-TENANT

### GENERAL DESCRIPTION

When a call is parked using Call Park-Tenant, the call can be retrieved from Call Park-Tenant by any station within the tenant from which the call was originally parked.

### OPERATING PROCEDURE

To place a call into *Call Park-Tenant*

From a Single-Line Telephone:

1. Depress **FLASH** key (or momentarily depress the hookswitch) and receive feature dial tone.
2. Call in progress is placed on *Consultation Hold*.
3. Dial *Call Park-Tenant* feature access code.
4. Dial *Call Park-Tenant* location number (1-8) and receive service set tone. (If *Call Park* number is busy, dial another location number using the *Step Call* feature until idle *Call Park* location is accessed).
5. Receive service set tone.
6. Restore handset.

From a Multiline Terminal:

1. Depress the **TRF** key and receive feature dial tone.
2. Call in progress is placed on *Consultation Hold*.
3. Dial *Call Park-Tenant* feature access code.
4. Dial *Call Park-Tenant* location number (1-8) and receive service set tone. (If *Call Park* number is busy, dial another location number using the *Step Call* feature until idle *Call Park* location is accessed).
5. Receive service set tone.
6. Restore handset.

OR

1. Depress **HOLD** key if *Call Park - Tenant* feature key is provided on the Multiline Terminal.
2. Restore handset.

To retrieve a call from *Call Park-Tenant*

From a Single-Line Telephone:

1. Go off hook and receive internal dial tone.
2. Dial *Call Park-Tenant* retrieval access code.
3. Dial *Call Park-Tenant* location number (1-8).
4. Converse.

From a Multiline Terminal with *Call Park - Tenant* feature key:

1. Go off hook and receive dial tone.
2. Depress *Call Park - Tenant* feature key (flashing).
3. Dial *Call Park - Tenant* location number (1-8).
4. Converse.

From a Multiline Terminal with *Trunk - Direct Appearances*:

1. Go off hook and receive dial tone.
2. Depress the *Trunk - Direct Appearances* key flashing.

### SERVICE CONDITIONS

1. A maximum of eight simultaneous calls can be parked within a tenant. A station user can place multiple calls into *Call Park-Tenant* provided the maximum number is not exceeded.
2. A station user can originate and receive calls while having a call in *Call Park-Tenant*.

## CALL PARK-TENANT (CONT'D)

3. Any internal or external call can be placed into *Call Park-Tenant*.
4. Any call left on *Call Park-Tenant* for more than a preprogrammed time interval will recall to the primary extension of the station which originally parked the call. If the call was parked using a *Call Park-Tenant* key, the call will recall to that key.
5. If the trunk which was placed in *Call Park* is assigned to any Multiline Terminal as Trunk-Direct Appearances, the system can select by system programming whether or not the Multiline Terminal can retrieve the parked call by depressing the Trunk key.  
 The LED of Trunk key indicated:  
     Possible to retrieve:     Flashing as hold (Green/Red)  
     Impossible to retrieve:   Steady as busy (Red)
6. When attempting to set *Call Park-Tenant* to a busy *Call Park-Tenant* location, *Step Call* can be used to access an idle location.
7. A call can not be retrieved from feature dial tone.
8. If a station other than the station that originally parked the call retrieves the call, *Station Message Detail Recording* (SMDR) will record a Transfer.
9. Parked calls can receive *Music On Hold*. When *Call Park-Tenant* recalls, the parked party will hear ringback tone.

### PROGRAMMING

START	DESCRIPTION	DATA
CM20	Assign the access code for Call Park-Tenant set/retrieve.	<ul style="list-style-type: none"> <li>• Y=0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX: Access Code</li> <li>(2) 062: Call Park-Tenant Set/Retrieve</li> </ul>
CM08	Specify that the call answer for a trunk placed on consultation hold by Call Park-Tenant can be retrieved by pressing a trunk-line appearance key on a Multiline Terminal.	<ul style="list-style-type: none"> <li>(1) 133</li> <li>(2) 0/1 ◀ : Not Available/ Available</li> </ul>
CM41	Specify the recall timing for Call Park - Tenant	<ul style="list-style-type: none"> <li>• Y=0</li> <li>(1) 05</li> <li>(2) 01-99 [Timer Data (4-396 sec.)]</li> </ul> If no data is set, the default setting is 60-64 seconds.
CM90	Assign Call Park-Tenant Retrieve key to the Multiline Terminals.	<ul style="list-style-type: none"> <li>• YY=00</li> <li>(1) Primary Extension No. + <span style="border: 1px solid black; padding: 0 5px;"> </span> + Key No.</li> <li>(2) F3XXX                             <ul style="list-style-type: none"> <li>└─ Serial Key No. (1-8)</li> <li>└─ Group No. (00-63)</li> </ul> </li> </ul>
END		

## CALL PICKUP

### GENERAL DESCRIPTION

This feature enables station users to answer any call directed to another station, to a station within their own Call Pickup Group, or to a station within a different Call Pickup Group. Three Call Pickup methods are available: *Call Pickup-Direct*, *Call Pickup-Group*, and *Call Pickup-Designated Group*.

## CALL PICKUP-DIRECT

### GENERAL DESCRIPTION

This method permits a station user to pickup a call to any other station in the system by dialing a specific *Call Pickup* feature access code and the called extension's number.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

From a Single-Line Telephone:

1. Go off-hook on an extension line and receive internal dial tone.
2. Dial *Call Pickup-Direct* feature access code and receive special dial tone.
3. Dial extension number of ringing station.
4. Converse.

From a Multiline Terminal with LCD:

1. Go off-hook or press **SPKR** key and receive internal dial tone.
2. Press Call Pickup-Direct key and receive special dial tone.
3. Dial extension number of ringing station.
4. The call is connected to your station.

LCD display is: 

PCK	XXXX	XXXX
-----	------	------

  
  Called Calling

From a Multiline Terminal without LCD:

1. Go off-hook or press **SPKR** Key and receive internal dial tone.
2. Press Call Pickup-Direct key and receive special dial tone.
3. Dial extension number of ringing station.
4. The call is connected to your station.

### SERVICE CONDITIONS

1. All ringing calls, including voice calls, can be picked up by this feature, except for *Trunk Queuing - Outgoing* and *Call Back*.
2. This feature can be activated from feature dial tone.
3. This feature may be allowed or denied based on station *Class of Service*.
4. A fully-restricted station cannot pickup an incoming Central Office call.



## CALL PICKUP-DIRECT (CONT'D)

### PROGRAMMING

<u>START</u>	<u>DESCRIPTION</u>	<u>DATA</u>
CM12	Assign Service Restriction Class (A) to each station.	<ul style="list-style-type: none"> <li>• YY=02</li> <li>(1) X-XXXX: Station Number</li> <li>(2) XXXX               <ul style="list-style-type: none"> <li>Service Restriction Class (A) (00-15 ◀)</li> </ul> </li> </ul>
CM15	Assign this feature to Service Restriction Class (A) assigned by CM12, YY=02.	<ul style="list-style-type: none"> <li>• YY=14</li> <li>(1) XX: Service Rest. Class (A) assigned by CM12, YY=02.</li> <li>(2) 1◀ : Allowed</li> </ul>
CM20	Assign the access code for Call Pickup-Direct.	<ul style="list-style-type: none"> <li>• YY=0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX: Access Code</li> <li>(2) 021: Call Pickup-Direct</li> </ul>
CM90	Assign Call Pickup-Direct key to Multiline Terminal, if required.	<ul style="list-style-type: none"> <li>• YY= 00</li> <li>(1) Primary Extension No. + [ ] + Key No.</li> <li>(2) F0021: Call Pickup-Direct</li> </ul>
<u>END</u>		

## CALL PICKUP-GROUP

### GENERAL DESCRIPTION

This method permits station users to answer any calls directed to other lines in their preset pickup group by dialing a Call Pickup-Group feature access code.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

Ringling telephone in your Call Pickup Group:

1. Go off-hook on an extension line and receive internal dial tone.
2. Dial Call Pickup-Group feature access code.
3. Converse.

### SERVICE CONDITIONS

1. All ringing calls can be picked up by this feature, except for *Trunk Queuing - Outgoing* and *Call Back*.
2. This feature can be activated from feature dial tone.
3. There is no limit to the number of *Call Pickup Groups*.
4. A fully restricted station cannot pickup an incoming Central Office call.
5. An individual station may be assigned to only one *Call Pickup Group*.
6. The maximum number of telephones within a group is 60.
7. If more than one station within the group is ringing, the system will connect the calls in the order of the System Data that is stored.

## CALL PICKUP-GROUP (CONT'D)

### PROGRAMMING

START	DESCRIPTION	DATA
CM16	<p>Assign each Call Pickup Group.            For one Call Pickup Group, assign station numbers within a group one by one with the following operation:</p> <p><b>Example:</b> <i>For assigning Stations 300, 301 and 302 to the same Call Pickup Group:</i></p> <p>1st Operation [ (1) 300                              (2) 301</p> <p>2nd Operation [ (1) 301                              (2) 302</p> <p>3rd Operation [ (1) 302                              (2) 300</p>	<ul style="list-style-type: none"> <li>• Y=0</li> <li>(1) X-XXXX: Station No. to be included in the Call Pickup Group.</li> <li>(2) X-XXXX: Another Station No. to be included in the same group.</li> </ul>
CM20	Assign the access code for Call Pickup-Group.	<ul style="list-style-type: none"> <li>• Y= 0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX: Access Code</li> <li>(2) 020: Call Pickup-Group</li> </ul>
CM90	Assign Call Pickup-Group key to the Multiline Terminal.	<ul style="list-style-type: none"> <li>• YY=00</li> <li>(1) Primary Extension No.                  + [ ] + Key No.</li> <li>(2) F0020</li> </ul>
END		

**Note 1:** *There is no limit to the amount of Call Pickup Groups.*

**Note 2:** *The maximum number of stations within a group is 60.  
 Individual stations can be assigned to only one Call Pickup Group.*

## CALL PICKUP-DESIGNATED GROUP

This method permits a station user to answer an incoming call directed to another group by dialing the Call Pickup-Designated Group feature access code and any station within the group to which the ringing station belongs.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

Ringling telephone in another Call Pickup Group:

1. Go off-hook on an extension line and receive internal dial tone.
2. Dial Call Pickup-Designated Group feature access code.
3. Dial any station number within the Call Pickup Group to which the ringing station belongs.
4. Converse.

### SERVICE CONDITIONS

1. All ringing calls can be picked up by this feature, except for *Trunk Queuing - Outgoing* and *Call Back*.
2. This feature can not be activated from feature dial tone.
3. A fully restricted station cannot pickup an incoming Central Office call.
4. If more than one station within the group is ringing, the system will connect the calls in the order of the System Data that is stored.

## CALL PICKUP-DESIGNATED GROUP (CONT'D)

### PROGRAMMING

START	DESCRIPTION	DATA
CM16	<p>Set up each Call Pickup Group.            To set up one Call Pickup Group, assign station numbers within a group one by one with the following operation:</p> <p><b>Example:</b> <i>For assigning Stations 300, 301 and 302 to the same Call Pickup Group:</i></p> <p>1st Operation [ (1) 300            (2) 301</p> <p>2nd Operation [ (1) 301            (2) 302</p> <p>3rd Operation [ (1) 302            (2) 300</p>	<ul style="list-style-type: none"> <li>• Y=0</li> <li>(1) X-XXXX: Station No. to be included in the Call Pickup Group.</li> <li>(2) X-XXXX: Another Station No. to be included in the same group.</li> </ul>
CM12	<p>Assign the Service Restriction Class (A) to each station.</p>	<ul style="list-style-type: none"> <li>• YY=02</li> <li>(1) X-XXXX: Station Number</li> <li>(2) XXXX            └── Service Restriction Class (A) (00-15 ◀)</li> </ul>
CM15	<p>Assign Call Pickup-Direct feature to Service Restriction Class (A) assigned by CM12, YY=02.</p>	<ul style="list-style-type: none"> <li>• YY=14</li> <li>(1) XX: Service Rest. Class (A) assigned by CM12, YY=02.</li> <li>(2) 1 ◀: Allowed</li> </ul>
CM20	<p>Assign the access code for Call Pickup-Designated Group.</p>	<ul style="list-style-type: none"> <li>• Y=0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX: Access Code (75)</li> <li>(2) 037: Call Pickup-Designated Group</li> </ul>
A		

**Note 1:** *There is no limit to the amount of Call Pickup Groups.*

**Note 2:** *The maximum number of stations within a group is 60.  
 Individual stations can be assigned to only one Call Pickup Group.*

## CALL TRANSFER

### GENERAL DESCRIPTION

This feature permits a station user to transfer a call to another station in the system directly or with assistance from the Attendant. Two Call Transfer methods are available: Call Transfer-All Calls and Call Transfer-Attendant.

## CALL TRANSFER-ATTENDANT

### GENERAL DESCRIPTION

This feature permits a station user, while connected to an internal or outside call, to signal the Attendant and have the Attendant transfer the call to another station within the system or to an outside connection.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

Calling the Attendant:

1. While engaged in a call, press the **FLASH** key on a Single-Line Telephone or the **TRF** key on a Multiline Terminal and receive feature dial tone.
2. Dial operator access code. Attendant Console RCL lamp flashes and buzzer sounds. Station receives ringback tone.
3. After Attendant answers, request transfer and restore handset.

### SERVICE CONDITIONS

1. This feature is available for incoming and outgoing Central Office calls and station-to-station calls.
2. When the *Attendant Console* is in *Night Service*, the transferring station receives reorder tone.
3. The *Call Transfer-Attendant* feature allows a station user, while participating in a two-party connection, to call the Attendant so that the Attendant may transfer the call or provide other assistance as required. A two-party connection is comprised of two stations, or a station and a trunk.
4. If the station user provides a hookflash, the hookflash is ignored by the system and the parties remain connected if all pushbutton registers are busy.
5. The *Call Transfer - Attendant* feature can be used by a fully restricted station. The Attendant can transfer a fully restricted station to another station only.
6. Any station, including *Housephones* without a dial, can transfer a call to the Attendant. Some additional system programming may be necessary.

### PROGRAMMING

START	DESCRIPTION	DATA
CM20	Assign the Access code for operator calls.	<ul style="list-style-type: none"> <li>• Y=0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX: Access Code (0)</li> <li>(2) 800</li> </ul>
CM62	Specify the tenants to be handled by each ATT (HA-610Z/SN610 ATTCON) Group. <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">INITIAL</span>	<ul style="list-style-type: none"> <li>• Y=0-3 (ATT Group 0-3 assigned by CM60, YY=00)</li> <li>(1) 00-63 (Tenant No.)</li> <li>(2) 0: To be handled</li> </ul>
CM08	Specify Call Transfer from a station before called HA-610Z/SN610 ATTCON answers.	<ul style="list-style-type: none"> <li>(1) 063</li> <li>(2) 0/1 ◀: Available/Not Available</li> </ul>
END		

## CAMP-ON

### GENERAL DESCRIPTION

This feature provides selected stations with *Camp-On* capability to a busy internal station. Two *Camp-On* methods are provided; the call waiting method allows a station to camp itself on to a busy station, and the transfer method allows a transferred call to *Camp-On* to a busy station.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

To set *Camp-On* (call waiting method):

From a Single-Line Telephone:

1. Dial desired station number and receive busy tone.
2. Press the **FLASH** key (or momentarily press the hookswitch). The call in progress is placed on *Consultation Hold* and feature dial tone is received.
3. Dial the *Camp-On* (call waiting) feature access code and receive special ringback tone. *Camp-On* tone (one tone burst) is sent to busy station.

From a Multiline Terminal:

1. Dial desired station number and receive busy tone.
2. Press the **TRF** key. The call in progress is placed on *Consultation Hold* and feature dial tone is received.
3. Dial the *Camp-On* (call waiting) feature access code and receive special ring back tone. *Camp-On* tone (one tone burst) is sent to busy station.

OR

1. Dial desired station number and receive busy tone.
2. Dial 5 and receive special ring back tone, *Camp-On* tone (one tone burst) is sent to busy station.

To set *Camp-On* with a call in progress (transfer method):

From a Single Line Telephone:

1. Dial desired station and receive busy tone.
2. Press the **FLASH** key (or momentarily press the hookswitch). The call in progress is placed on *Consultation Hold* and feature dial tone is received.
3. Dial the *Camp-On* (transfer) feature access code and receive service set tone. *Camp-On* tone (two tone bursts) is sent to busy station.
4. Restore handset.

From a Multiline Terminal:

1. Dial desired station number and receive busy tone.
2. Press the **TRF** key. The call in progress is placed on *Consultation Hold* and feature dial tone is received.
3. Dial the *Camp-On* (transfer) feature access code and receive service set tone. *Camp-On* tone (two tone bursts) is sent to the busy station.

OR

1. Press the **TRF** key; the call in progress is placed on *Consultation Hold* and feature dial tone is received.
2. Dial desired station number and receive busy tone.
3. Dial 4 or go on hook and receive service set tone. *Camp-On* tone (two tone bursts) is sent to the busy station.



## CAMP-ON (CONT'D)

To answer a *Camp-On* from any station:

1. Receive *Camp-On* tone.
2. From a Single-Line Telephone, press the **FLASH** key (or momentarily press the hookswitch) and dial *Call Hold* feature access code. From a Multiline Terminal, press the **ANS** key. The existing call is placed on *Consultation Hold* and the *Camp-On* call is automatically answered.

### SERVICE CONDITIONS

1. *Camp-On* tone for call waiting **METHOD** (internal calls) is one tone burst. *Camp-On* tone for transfer **METHOD** is two tone bursts.
2. When *Camp-On* is activated to a station, any other *Camp-On* attempts to that station are denied and reorder tone is provided (transfer method) or busy tone is provided (call waiting method). Once the *Camp-On* recalls to the originator or is answered (and the first call abandoned, or the camped on party abandons), another *Camp-On* can be activated.
3. A *Camp-On* of an internal station will not recall. The station which sets camp-on must remain off-hook.
4. After a transfer *Camp-On* has remained Camped-On for a programmable period of time (8 to 128 seconds, 30 seconds as set in default), the station that set the *Camp-On* will be recalled.
5. The ability to activate this feature can be allowed or denied in the Station's *Class of Service*.
6. A maximum of 32 stations can set call waiting *Camp-On* simultaneously. A maximum of 128 stations can set transfer *Camp-On* simultaneously.
7. A party camped on for a transfer will hear *Music On Hold* (when provided) while on *Consultation Hold*.
8. Periodic *Camp-On* tone can be provided every four seconds (transfer method only). This can be allowed or denied in system programming on a per-system basis. When denied, a single *Camp-On* signal is received.
9. *Camp-On* can only be set if the called station is on a two-party call. *Camp-On* is denied if the busy station is dialing or in *Line Lockout*, is receiving a system generated tone, is protected against any override by **DND** key, is a Data Station currently with a Camped-On call, or if any of the following features are activated on the busy station:
  - *Attendant Override*
  - *Call Back*
  - *Hold*
  - *Call Transfer*
  - *Conference*
  - *Consultation Hold*
  - *Data Line Security*
  - *Executive Override*
  - *Paging*
  - *Privacy Release*
  - *Trunk Queuing - Outgoing*
  - *Voice Call*
10. When *Camp-On* is denied, the caller will receive reorder tone and can return to the party to which the *Camp-On* (in the case of a *Camp-On* transfer) was attempted.

## CAMP ON (CONT'D)

### PROGRAMMING

Camp-On (Transfer Method):

START	DESCRIPTION	DATA
CM08	Provide the system with the Camp-On by Station feature.	(1) 146: Automatic Camp-On (2) 0: Available (1) 147: Manual Camp-On (Result of Switch Hook-Flash while hearing Busy Tone.) (2) 0: Special Dial Tone allowing use of the Camp-On by Station access code.
CM12	Assign the Class of Service for Camp-On by station feature to the required stations.	<ul style="list-style-type: none"> <li>• CM12, YY = 02 [Service Rest. Class A] (00 - 15 ◀ )</li> <li>• CM15 YY = 16 (Transfer Method)</li> </ul>
CM15		
CM08	Specify the Camp-On Tone sent to a busy station by Camp-On Transfer Method.	(1) 068 (2) 0/1 ◀ : Only once/Every 4 sec.
CM41	Specify the timing for the Recall Timer.	<ul style="list-style-type: none"> <li>• Y = 0</li> <li>(1) 26</li> <li>(2) 01-15 (8sec. - 128 sec., in 8 second increments.</li> </ul> If no data is set, the default setting is 03 (24sec. - 32 sec.)
CM20	Assign the access code for Camp-On by Station (Transfer method).	<ul style="list-style-type: none"> <li>• Y = 0 - 3 (Numbering Plan Group 0 - 3)</li> <li>(1) X - XXX: Access Code (*2)</li> <li>(2) 007: Camp-On by Station (Transfer method)</li> </ul>
END		

## CAMP ON (CONT'D)

Camp - On (Call Waiting Method):

START	DESCRIPTION	DATA
CM08	Provide the system with the Camp-On by Station feature.	(1) 146: Automatic Camp-On (2) 0: Available (1) 147: Manual Camp-On (Result of Switch Hook Flash while hearing Busy Tone.) (2) 0: Special Dial Tone allowing use of the Camp-On by Station access code.
CM12 CM15	Assign the Class of Service for Camp-On by station feature to the required stations.	<ul style="list-style-type: none"> <li>• CM12, YY = 02 [Service Rest. Class A] (00 - 15 ◀ )</li> <li>• CM15 YY = 43 (Call Waiting Method - Set from calling side) YY = 44 (Call Waiting Method - Answer from called side)</li> </ul>
CM20	Assign the access code for Camp-On by Station (Call Waiting Method).	<ul style="list-style-type: none"> <li>• Y = 0 - 3 (Numbering Plan Group 0 - 3)</li> </ul> (1) X - XXX: Access Code (#2) (2) A25: Camp-On by Station (Call Waiting Method)
END		

Note: As for the data assignment of ANS key to answer a Camp-On call from a Multiline Terminal, refer to the ANSWER Key.

### CAMP ON (CONT'D)

In case of using Single-Digit Feature-Access Code for Camp-On, add the following system data.

START	DESCRIPTION	DATA		
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM08</div>	To activate the Single Digit Feature Access Code, set the data for 050, 051, 069 and 148 to "1."	(1) 050: * Button as Switch Hook Flash (2) 1 ◀ : Ineffective (1) 051 : # Button as Switch Hook Flash (2) 1 ◀ : Ineffective (1) 069 : Single Digit Dialing on BT Connection (2) 1 ◀ : Step Call (1) 148: Same Last Digit Redialing on BT Connection (2) 1 ◀ : Ineffective		
		Provide the System with the Single Digit Feature Access Code on BT Connection.	(1) 208 (2) 0: Available	
		<u>END</u>		

## CCSA ACCESS

### GENERAL DESCRIPTION

This feature allows connection to or from a CCSA (Common Control Switching Arrangement) network. A CCSA network is a special, privately-leased network constructed for one customer's exclusive use which replaces or augments the public switched network services.

The outgoing connections via CCSA lines are accomplished in the same manner as a normal outgoing call. Incoming calls are received from the CCSA network as a series of digits from the network instead of a ringing signal, and the connection is established in the same manner as a Direct Inward Dial (DID) or tie line connection.

For tie line applications, the customers can construct a network with their own numbering plan. In a CCSA application, the numbers are issued by the Central Office following the CCSA network numbering plan.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

To place an outgoing CCSA call from station:

1. Lift handset and receive dial tone.
2. Dial CCSA feature access code and receive second dial tone from CCSA switch.
3. Dial desired telephone number.
4. Converse when called party answers.

To answer an incoming CCSA call:

With Attendant assistance:

1. DID lamp flashes and audible indication is received.
2. Attendant presses either DID or ANSWER key.
3. Attendant extends call to desired station.

Without Attendant assistance:

Lift handset and converse

### SERVICE CONDITIONS

1. An access code must be assigned for CCSA Access.
2. Four-Wire Tie Line circuits (ODT board) must be provided for the interface with CCSA network.
3. The maximum number of ODT boards are 64 per PIM.
4. Immediate, second dial tone, wink start, or delay dial operation is available by system data on a trunk-route basis.
5. When the called station is busy, busy tone is returned to the calling party.

## CCSA ACCESS (CONT'D)

### PROGRAMMING

In addition to the programming of E&M Tie Line Access, assign CCSA line to the required routes, shown below.

START	DESCRIPTION	DATA
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM35</div>	Assign CCSA line to required routes.  Specify the ICI key of HA-610Z/SN610 ATTCON to which CCSA incoming call from the CCSA network will terminate.	<ul style="list-style-type: none"> <li>• YY=00</li> <li>(1) 00-63 (Trunk Route No.) (06)</li> <li>(2) 03: CCSA line</li>   <li>• YY=15</li> <li>(1) Trunk Route No. (00-63)</li> <li>(2) ICI key                             <ul style="list-style-type: none"> <li>30: CCSA Incoming Call 0</li> <li style="text-align: center;">}</li> <li>37: CCSA Incoming Call 7</li> </ul> </li> </ul>
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM46</div>	Assign the ICI key to which CCSA incoming call will terminate to HA-610Z ATTCON. <div style="border: 1px solid black; border-radius: 15px; padding: 2px 10px; display: inline-block; margin-left: 20px;">INITIAL</div>	<ul style="list-style-type: none"> <li>(1) 00-11 (ICI key No. on ATTCON)</li> <li>(2) XX: 30-37 (CCSA Line 0-7)</li> </ul>
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM90</div>	Assign the ICI key of SN610 ATTCON to which CCSA incoming call will terminate.	<ul style="list-style-type: none"> <li>• YY=00</li> <li>(1) ATTCON No. + <span style="border: 1px solid black; padding: 0 5px;"> </span> + key No.</li> <li>(2) ICI key                             <ul style="list-style-type: none"> <li>F6030: Call Termination from CCSA Line 0</li> <li style="text-align: center;">}</li> <li>F6037: Call Termination from CCSA Line 7</li> </ul> </li> </ul>
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM20</div>	Assign the CCSA access code.	<ul style="list-style-type: none"> <li>• YY= 0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX: Access Code (85)</li> <li>(2) 100-163: Trunk Route 00-63 (06)</li> </ul>
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">END</div>		

### HARDWARE REQUIRED

PK-ODTC Card × n

## CENTREX COMPATIBILITY

### GENERAL DESCRIPTION

A combination of features allow full integration of the NEAX1400 IMS with Centrex service.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

Refer to associated features.

### SERVICE CONDITIONS

1. Flexible Configuration:
  - Universal Ports to meet high trunk-to-station ratio.
  - Building block approach for modular growth.
  - *Flexible Line Assignment*.
  - Wide variety of terminals.
2. Terminal Flexibility:
  - Choice of terminals to meet multiple applications.
  - Answering Positions:
    - 16-line Multiline Terminal with *Direct Station Selection/Busy Lamp Field Console (DSS/BLF)*
    - OR
    - Attendant Console (HA-610Z,SN610)*
  - Standard Positions:
    - 6-Line Multiline Terminal.
    - 6-Line Multiline Terminal with LCD.
    - 16-Line Multiline Terminal with LCD.
    - 16-Line Multiline Terminal.
    - Single-Line Telephones
3. High trunk-to-station ratio (256 trunks).
4. Ground/Loop Start Centrex line compatibility.
5. Centrex line *Direct In Termination (DIT)* to individual Single-Line Telephones with secondary answering at any Multiline Terminal.
6. *Delayed Ringing* for backup answer of Centrex incoming calls.
7. Hookflash to Centrex line from Multiline Terminal/Single-Line Telephone.
8. Automatic seizure of individual Centrex line using outgoing restriction control.
9. *Code Restriction* allows for inspection to follow the Centrex access code for *Direct Outward Dialing*.
10. Flexible extension numbering to match Centrex numbering pattern.
11. KF registration (FCC Part 68).

## CENTREX COMPATIBILITY (CONT'D)

- 12. *Direct Trunk Appearance* for Centrex lines.
- 13. Soft keys at Multiline Terminals for easy access to Centrex features.
- 14. Automatic pause after Centrex access code.
- 15. Listed directory numbers display at *Attendant Console*.
- 16. *Uniform Call Distribution (UCD)* for quick and efficient handling of incoming calls.
- 17. Recall key provides timed hookflash to Centrex for feature access.
- 18. Prime line Assignment to Centrex line.

### PROGRAMMING

In addition to the programming of DIRECT OUTWARD DIALING (DOD), add the following programming.

START	DESCRIPTION	DATA
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM35</div>	<p>Assign the Centrex Trunk to the required trunk routes.</p> <p>Provide the capability for sending hooking signal to Centrex.</p>	<ul style="list-style-type: none"> <li>• YY = 86               <ul style="list-style-type: none"> <li>(1) Trunk Route No. (00 – 63)</li> <li>(2) 0: Centrex Trunk</li> </ul> </li> <li>• YY = 16               <ul style="list-style-type: none"> <li>(1) Trunk Route No. (00 – 63)</li> <li>(2) 1 ◀: Sending</li> </ul> </li> </ul>
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM20</div>	<p>Assign the access code for sending hooking signal to Centrex Line from PB Single-Line Telephone.</p>	<ul style="list-style-type: none"> <li>• Y = 0 – 3 (Numbering Plan Group 0 – 3)               <ul style="list-style-type: none"> <li>(1) X – XXX: Access Code</li> <li>(2) A58</li> </ul> </li> </ul>
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM93</div>	<p>Assign the Centrex Trunk to the desired Multiline Terminal extension.</p>	<ul style="list-style-type: none"> <li>(1) X – XXXX (Primary Extension No.)</li> <li>(2) DXXX (Trunk No.)               <ul style="list-style-type: none"> <li>└ 000 – 255</li> </ul> </li> </ul>
<p><u>END</u></p>		



## CLASS OF SERVICE

### GENERAL DESCRIPTION

This feature permits all stations to be assigned a *Class of Service* in accordance with the degree of system use desired. The *Class of Service* is used to assign restrictions for trunk access and feature access.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

Normal operating procedures apply. Restrictions are automatically applied by the system based on the *Class of Service* assignments in system data for each station.

### SERVICE CONDITIONS

1. Every extension is assigned for one of the following by *Class of Service*:
  1. *House phone*
  2. *Hotline*
  3. *Automatic Intercom*
  4. *Multiline Terminal*
  5. *Single-Line Telephone*
2. A trunk route restriction class (from 1 to 8) is assigned for each station. This assignment is used to determine whether a station is allowed or denied outgoing or incoming access to trunk routes. All eight route restriction classes are assigned to allow or deny each trunk route. This allows the system to compare the station assignment with the trunk route assignment and determine whether access is denied or allowed. The default setting allows all stations access to all trunk routes.
3. The trunk restriction class is also used to provide flexibility in *Code Restriction*. Refer to the *Code Restriction* feature for details.
4. Sixteen combinations, for each of three service classes (A, B, C) are available for assignment to stations. Based on the service feature class, the station is allowed or denied access to specific features. Each service feature class can be assigned to allow or deny each feature shown below.

#### Service Class A

*Call Forwarding - All Calls*  
*Call Forwarding - Busy*  
*Call Forwarding - No Answer*  
*Call Forwarding -Destination*  
*Call Hold*  
*Trunk Queuing - Outgoing*  
*Call Back*  
*Executive Override - Originate*  
*Executive Override - Receive*  
*Speed Calling - System*  
*Speed Calling - Station*  
*External Paging*  
*Automatic Wake Up/Timed Reminder - self*  
*Automatic Wake Up/Timed Reminder - for others*  
*Call Pickup Direct*

## CLASS OF SERVICE (CONT'D)

*Camp-On (Transfer)*  
*Camp-On (Call Waiting) - Originate/Receive*  
*Do Not Disturb from Station*  
*Priority Call*  
*Trunk to Trunk Transfer*  
*Message Wait- Set/Reset*  
*Timed Queue*  
*Account Code Entry*  
*Authorization Code/Forced Account Code*  
*Background Music (on Multiline Terminals)*  
*Voice Recording Card Access (Record/Reply/Delete)*  
*Announcement Service Replay (By Group Number)*  
*Split Call Forwarding - Busy Line*  
*Call Back - Multiple Assignment*  
*Message Reminder - Originate*  
*Message Reminder - Receive*  
*Internal Zone Paging Access*

### Service Class B

*Trunk Answer Any Station (TAS) Service*  
*Individual Trunk Access from Station*  
*Customer Administration Terminal (CAT) Access*  
*Day/Night Mode Change by Station Dialing*  
*Periodic Time Indication Tone*  
*Hotel/Motel Front Desk Instrument (Multiline Terminal)*  
*Privacy Release*  
*Dual Hold*

### Service Class C

*Ringling Line Pickup*  
*Tone Ring Selection (on Multiline Terminal)*  
*Hookswitch Flash during internal call*  
*Hookswitch Flash during outside (CO) call*  
*Multiline Terminal type (with or without LCD)*  
*Off-Hook Alarm overflow service (in case of busy terminating station)*

1. *Uniform Call Distribution queuing with Camp-On (Call Waiting)*
2. *Uniform Call Distribution queuing*
3. *Camp-On (Call Waiting)*
4. *Hunting*

*Group Listening*

5. Separately from the above, each station can be assigned to have the following options:

<u>Feature</u>	<u>Option</u>
<i>Do Not Disturb - Group</i>	Provided/Not Provided
<i>Room Cut Off - Group</i>	Provided/Not Provided
<i>Message Waiting Service</i>	Provided/Not Provided
<i>Howler Tone</i>	Provided/Not Provided
<i>Station Message Detail Recording</i>	Provided/Not Provided
<i>Data Line Security</i>	Provided/Not Provided

## CLASS OF SERVICE (CONT'D)

Ringling to Single-Line Telephone  
 when the extension also appears  
 on a Multiline Terminal

Provided/Not Provided

Feature

Option

Secretary Station  
 Automatic Message Waiting Cancel  
 upon answering call (from Message  
 Waiting-Set Station)  
*Station Hunting* for Non-DIT Calls  
*Station Hunting* for DIT calls  
 VIP Class

Secretary Station/Ordinary (Boss Station)  
  
 Automatic Cancel/No Automatic Cancel  
 Provided/Not Provided  
 Provided/Not Provided  
 Provided/Not Provided

6. *Authorization Codes* can be used to temporarily change the trunk route restriction class (incoming, outgoing, and code restrictions) and the feature service class (A, B, C) when a station is used. Refer to the *Authorization Code* feature.
7. Two assignments, one for day mode and one for night mode are provided for trunk route restriction (incoming, outgoing, and code restrictions) for each station. When the system is placed in night mode, the trunk route restriction classes assigned for night mode are used for incoming and outgoing calls for all stations.
8. Non-restricted stations can transfer outgoing calls after dialing to stations that are outgoing restricted.
9. Only the *Attendant Console* can permit restricted stations to place outgoing calls by the *Attendant Assisted Calling* feature.
10. If a restricted station is connected to an unrestricted station, the unrestricted station cannot add-on an outside party using a trunk route to which the restricted station is denied dial access. Attempts to do so result in immediate ringback to the station attempting the add-on. The outside call must be made first before attempting to add-on the restricted station.

## CLASS OF SERVICE (CONT'D)

### PROGRAMMING

To assign the Telephone Class

<u>START</u>	<u>DESCRIPTION</u>	<u>DATA</u>
START   <div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM12</div>   END	Assign the Telephone Class to each station.	<ul style="list-style-type: none"> <li>• YY = 00 (Type of Telephone)               <ul style="list-style-type: none"> <li>(1) Station Number (X - XXXX)</li> <li>(2) { 1: DP (Rotary Dial Telephone)</li> <li style="margin-left: 20px;">3 ◀ : DTMF (Push Button Telephone)/DP</li> </ul> </li>   <li>• YY = 03 (Telephone Class)               <ul style="list-style-type: none"> <li>(1) Station Number (X - XXXX)                   <ul style="list-style-type: none"> <li>00: House Phone 0</li> <li>01: House Phone 1</li> <li>02: House Phone 2</li> <li>03: House Phone 3</li> <li>04: Hot Line</li> </ul> </li> <li>(2) 05: Automatic Intercom</li> <li>06: Manual Intercom</li> <li>07: Dial Intercom</li> <li>08: Attendant Position Loop Line</li> <li>15 ◀ : Ordinary Station</li> </ul> </li> </ul>

## CLASS OF SERVICE (CONT'D)

To assign the Trunk Restriction Class

START	DESCRIPTION	DATA
CM12	Assign the Trunk Restriction Class to each station.	<ul style="list-style-type: none"> <li>• YY = 01 (Trunk Restriction Class)</li> <li>(1) Station Number (X - XXXX)</li> <li>(2) XX                             <ul style="list-style-type: none"> <li>— Trunk Rest. Class in Night mode. (1 ◀ - 8)</li> <li>— Trunk Rest. Class in Day mode. (1 ◀ - 8)</li> </ul> </li> <li>1: Unrestricted (RCA)</li> <li>2: Non-Restricted 1 (RCB)</li> <li>3: Non-Restricted 2 (RCC)</li> <li>4: Semi-Restricted 1 (RCD)</li> <li>5: Semi-Restricted 2 (RCE)</li> <li>6: Restricted 1 (RCF)</li> <li>7: Restricted 2 (RCG)</li> <li>8: Fully-Restricted (RCH)</li> </ul>
CM35	Set the Outgoing/Incoming Trunk Route Restriction Data by Trunk Restriction Classes (RCA-RCH).	<ul style="list-style-type: none"> <li>• YY = 51 - 58 (Outgoing Trunk Rest. Data)</li> <li>• YY = 61 - 68 (Incoming Trunk Rest. Data)</li> <li>(1) Trunk Route No. (00 - 63)</li> <li>(2) 0/1 ◀ : Restricted/Allowed.</li> </ul>
END		

## CLASS OF SERVICE (CONT'D)

To assign the Service Feature Class

<u>START</u>	<u>DESCRIPTION</u>	<u>DATA</u>
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM12</div>	<p>Assign the required Service Feature Class to each station.</p> <p>Service Feature categories for each class are specified by CM15.</p>	<ul style="list-style-type: none"> <li>• YY=02 (Service Rest. Class- A/B))               <ol style="list-style-type: none"> <li>(1) Station Number (X – XXXX)</li> <li>(2) <u>XXXX</u> <ul style="list-style-type: none"> <li>Service Restriction Class B (00 – 15 ◀ )</li> <li>Service Restriction Class A (00 – 15 ◀ )</li> </ul> </li> </ol> </li> <li>• YY=07 Service Restriction Class C (00 – 15)               <ol style="list-style-type: none"> <li>(1) Station Number (X – XXXX)</li> <li>(2) <u>XX</u> <ul style="list-style-type: none"> <li>Service Restriction Class C (00 – 15 ◀ )</li> </ul> </li> </ol> </li> </ul>
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM15</div>	<p>Specify the service features in each Service Class A, B, and C.</p>	<ul style="list-style-type: none"> <li>• Service Class A (YY = 00 – 49)</li> <li>• Service Class B (YY = 53 – 73)               <ol style="list-style-type: none"> <li>(1) XX (Service Restriction Class (A), (B) 00 – 15)</li> <li>(2) 0/1 ◀ : Restricted/Allowed</li> </ol> </li> <li>• Service Class C               <ul style="list-style-type: none"> <li>YY = 80                   <ol style="list-style-type: none"> <li>(1) XX: 00 – 15</li> <li>(2) 0/1 ◀ : Restricted/Allowed</li> </ol> </li> <li>YY = 82                   <ol style="list-style-type: none"> <li>(1) XX: 00 – 15</li> <li>(2) 0/1 ◀ : Allowed/Restricted</li> </ol> </li> <li>YY = 83, 84                   <ol style="list-style-type: none"> <li>(1) XX: 00 – 15</li> <li>(2) 0/1 ◀ : <b>Note 1</b></li> </ol> </li> <li>YY = 88, 89                   <ol style="list-style-type: none"> <li>(1) XX: 00 – 15</li> <li>(2) 0/1 ◀ : <b>Note 2</b></li> </ol> </li> <li>YY = 90, 91                   <ol style="list-style-type: none"> <li>(1) XX: 00 – 15</li> <li>(2) 0/1 ◀ : <b>Note 3</b></li> </ol> </li> <li>YY = 96                   <ol style="list-style-type: none"> <li>(1) XX: 00 – 15</li> <li>(2) 0/1 ◀ : Without LCD/With LCD</li> </ol> </li> <li>YY = 97, 98                   <ol style="list-style-type: none"> <li>(1) XX: 00 – 15</li> <li>(2) 0/1 ◀ : <b>Note 4</b></li> </ol> </li> </ul> </li> </ul>
<u>END</u>		

## CLASS OF SERVICE (CONT'D)

**Note 1:** *Tone indication pattern is assigned by combination of data of YY=83, 84.*

◀ :Initial Data

YY	83	84	MEANING OF DATA
Setting Data	0	0	600 + 700 [Hz]
	1	0	1024 + 1285 [Hz] × 16 [Hz] Modulating Signal
	0	1	480 + 606 [Hz] × 8 [Hz] Modulating Signal
	1	1	480 + 606 [Hz] × 16 [Hz] Modulating Signal

BCD-42897-0051-04

**Note 2:** *Result of Switch Hook Flash during station-to-station call is specified by the combination of data for YY=88, 89.*

◀ :Initial Data

88	89	MEANING OF DATA
1	1	Effective (Special Dial Tone Connection)
0	1	Ineffective
0	0	Attendant Recall

BCD-42897-0151-01

**Note 3:** *Result of Switch Hook Flash during C.O. line Connection specified by the combination of data for YY=90, 91.*

◀ :Initial Data

90	91	MEANING OF DATA
1	1	Effective (Special Dial Tone Connection)
0	1	Ineffective
0	0	Attendant Recall

BCD-42897-0152-01

**Note 4:** *Service for a Off Hook Alarm call which encounters the terminating station busy is specified by the combination of data for YY=97, 98.*

◀ :Initial Data

97	98	MEANING OF DATA
0	0	Call Waiting (In case of UCD Pilot Station and CM08-212 = 0)
0	1	UCD (In case of UCD Pilot Station and CM08-212 = 1)
1	0	Call Waiting (In case of Ordinary Station)
1	1	Hunting (In case of Ordinary Station)

BCD-42897-0212-01

## CODE RESTRICTION

### GENERAL DESCRIPTION

This feature allows the NEAX1400 IMS to be programmed to restrict outgoing calls according to specific area and/or central office codes. This restriction is controlled on the basis of a three-digit area code or six-digit area and office code numbering plan.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

No manual operation is required.

### SERVICE CONDITIONS

1. The programmed restriction pattern may consist of either those codes to be allowed, or those codes which are to be denied.
2. The *Code Restriction* feature is assigned on a per-station basis in *Class Of Service*.
3. The system may be programmed to ignore the digit 1 prefixing an area code pattern so that true 3/6 restriction can be applied.
4. Trunk Queuing - Outgoing provides queuing on selected outgoing trunk groups which are busy when dialed. The station user goes on-hook and is called back when an idle trunk is available. After answering the ringback, the station-user dials the CO number. The number dialed must be allowed to the toll-restricted station user's line; otherwise, the trunk is immediately released and reorder tone is returned to the station user.
5. On a system-wide basis, *System Speed Dialing* can be allowed to override or not override code restriction. The default is not to override code restriction.
6. Direct trunk line appearances on Multiline Terminals can be code restricted.
7. Code restriction is implemented as follows:
  1. The system determines the need for code restriction by checking the assignment of code restriction (Yes or No) and the assignment of a digit code table for the selected trunk route.
  2. The system compares the digits dialed with the digit code table assigned to the trunk route. If a match is found, the system is provided with an assigned code restriction class. If no match is found, the call is allowed to progress normally.
  3. An intersection table is provided in system programming which relates the station's restriction class to the code restriction classes. There are 16 code restriction classes and five route restriction classes. Once a code restriction class is obtained from the digit code table, the intersection table is used by the system to decide whether the call is allowed or denied.



## CODE RESTRICTION (CONT'D)

8. When a toll call is denied, Reorder Tone will be returned to the calling party (Toll Denial). If desired, the calling party can be routed to the Attendant Console ICPT key (Toll Diversion). Either toll denial or toll diversion is set on a per-system basis.
9. Six-digit code restriction is assigned by using *Least Cost Routing* (LCR) pattern tables and programming the system to check the 50 office code tables for allow or deny assignment based on the office code after the area code is matched by the system.

### PROGRAMMING

START	DESCRIPTION	DATA
CM08	Provide the system with Toll Restriction feature for an outgoing call by System Speed Dialing/Station Speed Dialing, if desired.	(1) 035 (Station Speed Dialing) (2) 0/1 ◀ : Not to be provided/To be provided
		(1) 044 (System Speed Dialing) (2) 0/1 ◀ : Not to be provided/To be provided
	Provide the system with Toll Diversion or Toll Denial.	(1) 119 (2) 0/1 ◀ : Toll Diversion (Routed to "ICPT" key on ATTCON)/Toll Denial (Routed to Reorder Tone)
CM12	Assign the Trunk Restriction Class to each station.	• YY=01 (1) X-XXXX (Station No.) (2) XX (Trunk Restriction Class) <ul style="list-style-type: none"> <li>└─ 1-8 (In Night Mode)</li> <li>└─ 1-8 (In Day Mode)</li> <li>1 ◀ : Unrestricted (RCA)</li> <li>2: Non-Restricted 1 (RCB)</li> <li>3: Non-Restricted 2 (RCC)</li> <li>4: Semi-Restricted 1 (RCD)</li> <li>5: Semi-Restricted 2 (RCE)</li> </ul>
CM35	Assign the data for Dial Pulse sending to the Route No. assigned.	• YY=08 (Dial Pulse Sending) (1) Trunk Route No. (00-63) (2) 3◀ : To be sent.
A		

### CODE RESTRICTION (CONT'D)

A

CM35

DESCRIPTION	DATA
Provide the Toll Restriction feature to the required trunk routes.	<ul style="list-style-type: none"> <li>• YY=11                             <ol style="list-style-type: none"> <li>(1) Trunk Route No. (00-63) (00)</li> <li>(2) 0: To be provided</li> </ol> </li> </ul>
Specify the route access capability of each restriction class.	<ul style="list-style-type: none"> <li>• YY=51-55                             <ol style="list-style-type: none"> <li>(1) Trunk Route No. (00-63)</li> <li>(2) 0/1 ◀ : Restricted/Allowed</li> </ol> </li> </ul>
Assign the Area Code Development Pattern No. for Toll Restriction Analysis to each trunk route.	<ul style="list-style-type: none"> <li>• YY=76                             <ol style="list-style-type: none"> <li>(1) Trunk Route No. (00-63)</li> <li>(2) 00-04 [Area Code Development Pattern (No. 0-4)]</li> </ol> </li> </ul>

CM81

Assign the Toll Restriction Patterns with five kinds of Trunk Restriction Classes assigned by CM12, YY=01. Toll Restriction Pattern 00-15 has already programmed as shown below. If a new Restriction Pattern is required, change the data for Restriction Patterns 01-13 (00 and 15 are fixed).	<ul style="list-style-type: none"> <li>• YY= 01-13 (Toll Restriction Pattern No. 01-13)                             <ol style="list-style-type: none"> <li>(1) Trunk Restriction Class (1-5)                                     <ul style="list-style-type: none"> <li>0: Restricted</li> <li>1: Restricted (Same as data "0")</li> <li>3: Allowed</li> </ul> </li> </ol> </li> </ul>
--	--

TRUNK RESTRICTION CLASS		YY														
		01	02	03	04	05	06	07	08	09	10	11	12	13	15	00
		TOLL RESTRICTION PATTERN NUMBER ON EACH TRUNK RESTRICTION CLASS														
		01	02	03	04	05	06	07	08	09	10	11	12	13	15	0
1	RCA	3	0	3	3	3	1	1	1	3	3	3	3	3	3	0
2	RCB	3	0	3	3	0	1	1	0	3	3	1	1	1	3	0
3	RCC	3	0	3	0	0	1	0	0	3	1	1	1	0	3	0
4	RCD	3	0	0	0	0	0	0	0	1	1	1	0	0	3	0
5	RCE	3	0	0	0	0	0	0	0	1	1	1	0	0	3	0

0, 1: Restricted  
 3: Allowed

CM80

Provide the system with the 3/6 digits Toll Restriction feature.	<ol style="list-style-type: none"> <li>(1) 0</li> <li>(2) 2 ◀ : 3/6 digits Toll Restriction</li> </ol>
--	--

B

## CODE RESTRICTION (CONT'D)

B	DESCRIPTION	DATA
CM85	Specify the maximum number of digits dialed by calling party. The maximum number of digits including the area codes should be assigned to each area code.	<ul style="list-style-type: none"> <li>• Y=0-4 (Area Code Development Pattern No.0-4 assigned by CM8A, YYY=A00)</li> <li>(1) X-X...X (Area Code dialed, Max 8 digits)                             <ul style="list-style-type: none"> <li>01: 1 digit</li> <li>} }</li> <li>(2) 24◀: 24 digits</li> <li>} }</li> <li>79: 79 digits</li> </ul> </li> </ul>
CM8A	Assign the area code to be restricted and the Trunk Restriction Pattern No. assigned by CM81 to the Area Code Development Pattern No. assigned by CM35, YY=76. For example, to provide the Trunk Restriction Class "RCB, RCC, RCD, and RCE with the Toll Restriction for Area Code "00": <ul style="list-style-type: none"> <li>• Area Code=00</li> <li>• Trunk Restriction Pattern =05</li> <li>(See Toll Restriction Pattern Table on CM81.)</li> </ul>	<ul style="list-style-type: none"> <li>• YYY= 400-404 (Area Code Development No.0-4)</li> <li>(1) Area Code (Max.8 digits)</li> <li>(2) 900-915 (Trunk Restriction Pattern 00-15)</li> </ul> <p><b>Note:</b> As for the details of Resident System Program, refer to Chapter 7 of System Programming Manual.</p>

If the Toll Restriction Pattern for the same area code is changed according to the Tenant, Date, and Time, add the required patterns (Tenant, Date, and Time) to the area code.

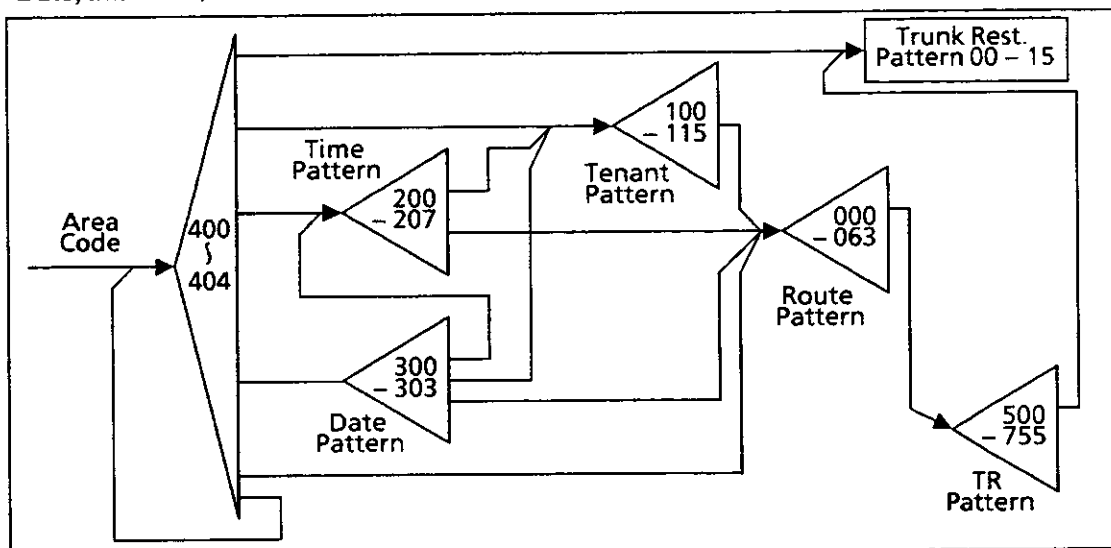


Figure Area Code Development Sequence

## CODE RESTRICTION (CONT'D)

C

CM8A

DESCRIPTION	DATA
<b>To add the Tenant Pattern:</b>	
<p><b><u>STEP 1</u></b> Assign the area code to be restricted and the Tenant Pattern No. to the Area Code Development Pattern No. assigned by CM35, YY = 76.</p>	<ul style="list-style-type: none"> <li>• <b>YYY = 400 – 404</b> (Area Code Development Pattern No.)</li> <li>(1) Area Code (Max.8 digits)</li> <li>(2) 100 – 115 (Tenant Pattern No. 00 – 15)</li> </ul>
<p><b><u>STEP 2</u></b> Assign the Tenant No. and the Route Pattern No. to Tenant Pattern No. assigned by Step 1.</p>	<ul style="list-style-type: none"> <li>• <b>YYY = 100 – 115</b> (Tenant Pattern No. 00 – 15)</li> <li>(1) 00 – 63 (Tenant No.00 – 63)</li> <li>(2) 00 – 63 (Route Pattern No. 00 – 63)</li> </ul>
<p><b><u>STEP 3</u></b> Assign the TR Pattern No. to Route Pattern No. assigned by Step 2.</p>	<ul style="list-style-type: none"> <li>• <b>YYY = 000 – 063</b> (Route PatternNo. 00 – 63)</li> <li>(1) 1</li> <li>(2) <u>XXX</u>00 (TR Pattern No.)  <div style="margin-left: 20px;">└─ TR Pattern No.000 – 255</div> </li> </ul>
<p><b><u>STEP 4</u></b> Assign the Trunk Restriction Pattern No. assigned by CM81 to TR Pattern No. assigned by Step 3.</p>	<ul style="list-style-type: none"> <li>• <b>YYY = 500 – 755</b> (TR Pattern No.)</li> <li>(1) 000</li> <li>(2) 00 – 15 (Trunk Restriction Pattern No.00 – 15)</li> </ul>
<b>To add the Time and Date Pattern:</b>	
<p><b><u>STEP 1</u></b> Assign the area code to be restricted and the Date Pattern No. to the Area Code Development Pattern No. assigned by CM35, YY = 76.</p>	<ul style="list-style-type: none"> <li>• <b>YYY = 400 – 404</b></li> <li>(1) Area Code (Max.8 digits)</li> <li>(2) 300 – 303 (Date Pattern No.00 – 03)</li> </ul>
<p><b><u>STEP 2</u></b> Assign date to be applied Toll Restriction and Time Pattern No. 00 – 07 to the Date Pattern No. assigned by Step 1.</p> <p style="margin-left: 20px;">Set the data for all dates, one by one, to be applied for Toll Restriction.</p>	<ul style="list-style-type: none"> <li>• <b>YYY = 300 – 303</b> (Date PatternNo.00 – 03)</li> <li>(1) 0 – 6 (Date)                      0: Sunday                      1: Monday                      2: Tuesday                      3: Wednesday                      4: Thursday                      5: Friday                      6: Saturday</li> <li>(2) 200 – 207 (Time Pattern No. 00 – 07)</li> </ul>

D

## CODE RESTRICTION (CONT'D)

D

DESCRIPTION	DATA
<p><b>STEP 3</b> Assign the starting time for the Toll Restriction and Route Pattern No. to the Time Pattern No. assigned by above Step 2.            Set the Starting Time as shown below.</p> <p><b>Example:</b> <i>To set the 7:00 AM to 9:00 PM for the Toll Restriction, enter the following starting times one by one.</i></p> <p style="margin-left: 40px;">0700 (7:00 AM – 7:30 AM)            0730 (7:30 AM – 8:00 AM)            0800 (8:00 AM – 8:30 AM)            .            2030 (8:30 PM – 9:00 PM)</p>	<ul style="list-style-type: none"> <li>• YYY = 200 – 207                (Time Pattern No. 00 – 07)</li> <li>(1) XXXX (Starting Time)                XXXX                ┌── Minutes (00/30)                └── Hours (00 – 23)</li> <li>(2) 000 – 063                (Route Pattern No. 00 – 63)                If Tenant Pattern is required, set 100 – 115 (Tenant Pattern No. 00 – 15)</li> </ul>
<p><b>STEP 4</b> Assign the TR Pattern No. to the Route Pattern No. assigned by Step 3.</p>	<ul style="list-style-type: none"> <li>• YYY = 000 – 063                (Route Pattern No. 00 – 63)</li> <li>(1) 1</li> <li>(2) XXX00 (TR Pattern No.)                └── TR Pattern No. 000 – 255</li> </ul>
<p><b>STEP 5</b> Assign the Trunk Restriction Pattern No. assigned by CM81 to TR Pattern No. assigned by Step 4.</p>	<ul style="list-style-type: none"> <li>• YYY = 500 – 755                (TR Pattern No. 000 – 255)</li> <li>(1) 000</li> <li>(2) 00 – 15 (Trunk Restriction Pattern No. 00 – 15)</li> </ul>

END

## CONFERENCE

### GENERAL DESCRIPTION

This feature provides a station user the ability to add another party (trunk or station) to a call already in progress. Single-Line Telephone users can add one additional party and Multiline Terminal users can add up to two additional parties.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

To add a third party:

From a Single-Line Telephone with a call in progress:

1. Press **FLASH** key (or momentarily press hookswitch). First party is placed on hold and feature dial tone is received.
2. Dial second party (either another station number or trunk access code plus outside number).
3. Wait for second party to answer.
4. Press **FLASH** key (or momentarily press hookswitch). A three-party conference is established.

From a Multiline Terminal, with a call in progress:

1. Press **TRF** key. First party is placed on hold and feature dial tone is received.
2. Dial second party (either another station or trunk access code plus outside number).
3. Wait for second party to answer.
4. Press **CNF** key. A three-party conference is established. Display shows CNF plus the type and number of the trunks or station.

To add a fourth party with a three-party conference in progress:

1. Press **TRF** key; the two parties are placed on hold and feature dial tone is received.
2. Dial third party (another station).
3. Wait for third party to answer.
4. Press **CNF** key; a four-party conference is established. CNF is shown in the LCD display.

### SERVICE CONDITIONS

1. A maximum of two trunks can be used in a *Conference*.
2. Single-Line Telephones can only add one additional party (three-party *Conference*).
3. Multiline Terminals can add two additional parties (four-party *Conference*).
4. A Single-Line Telephone will disconnect the last party added to a *Conference* (after the *Conference* (1 station, 2 trunk) is established) by providing a hookflash. This allows breaking up the *Conference* and returning to a two-party connection with the first party.
5. Multiline Terminals may allow other Multiline Terminals with the same line button appearance to enter the conversation (and therefore establish a *Conference*) by using the *Privacy Release* feature. Refer to the *Privacy Release* feature for more information.
6. Once the second party answers, and prior to pressing the **CNF** key, Multiline Terminals may use the **TRF** or **ANS** key to alternate between the two parties. Refer to the *Broker's Call* feature for more information.

## CONFERENCE (CONT'D)

7. During a three-party *Conference*, use of the **ANS** key on the Multiline Terminal will split the *Conference* into a *Broker's Call*.
8. A maximum of eight simultaneous *Conferences* can be established without additional hardware. With additional hardware installed (two 8CFT ICs), up to 16 simultaneous *Conferences* can be established.
9. The **HOLD** key on Multiline Terminals can be used during a *Conference* to place the other parties on *Hold (Exclusive or Nonexclusive)*. The other parties can continue to talk.
10. Retrieval of the first party on Multiline Terminals (after pressing the **TRF** key, dialing another party, and receiving ringback with no answer or busy tone) is accomplished by pressing the **TRF** key. Use of the **RECALL** key instead will provide feature dial tone and allows calling another party.
11. *Attendant Override* and *Executive Override* cannot be used on stations currently in a four-party *Conference*.
12. When attempting to call a second internal party after a hookflash, and the Single-Line Telephone user encounters internal busy tone or internal ringback with no answer, the user can return to the first party by hook-flashing again.
13. When a call is made to a second external party after a hookflash, the next hookflash will result in a *Conference*. By hookflashing again, the last connection is released, returning the Single Line Telephone user to the original party.
14. *Call Back* and *Message Waiting* can be set to stations involved in a three- or four-party *Conference*.
15. Amplification is not provided for *Conferences*.
16. When a Single-Line Telephone or Multiline Terminal user goes on-hook during a three-party *Conference* with two outside parties, a tandem connection will be established if one of the trunks provides a release signal. If neither trunk provides a release signal, the trunks will be dropped. Reentry into this tandem connection is not possible.
17. When a Multiline Terminal user presses the **CNF** key prior to going on-hook during a three-party *Conference* with two outside parties, a tandem connection will be established (Hold indication is provided). Reentry into this tandem connection is accomplished by pressing the held-line button.
18. Only conferences which include an incoming trunk call and an outgoing trunk call can be provided a tandem connection, with the exception of Tie Line trunks.

## CONFERENCE (CONT'D)

### PROGRAMMING

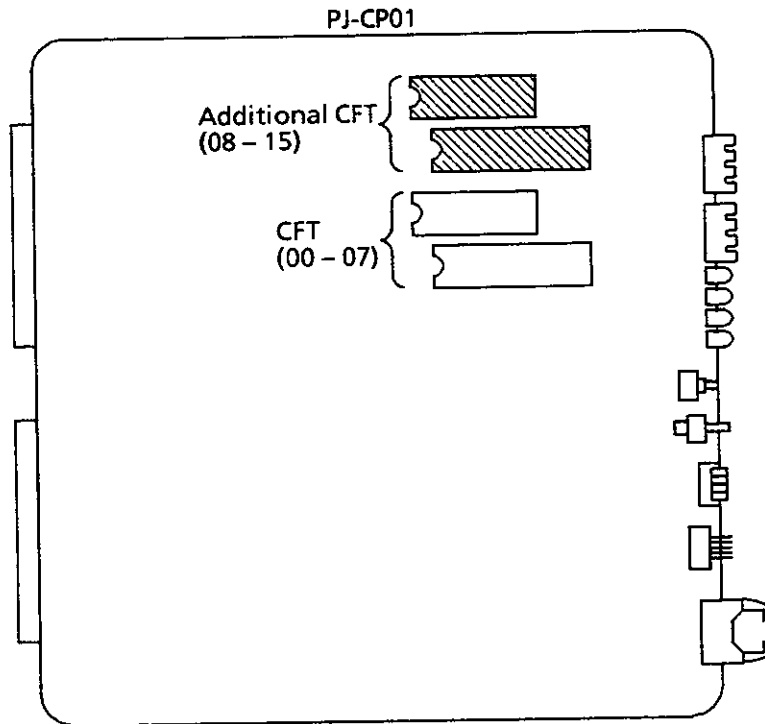
START	DESCRIPTION	DATA
CM08	Provide the system with a three-party conference.	(1) 101 (2) 1 ◀ : Three Party Conference among stations.  (1) 102 (2) 0: As per 101  (1) 103 (2) 0: As per 104  (1) 104 (2) 1 ◀ : Three Party Conference among stations and Trunk Call.
	Provide the system with a four-party conference.  <b>Note:</b> <i>This feature can be activated from only a Multiline Terminal.</i>	(1) 246 (2) 1 ◀ : Four Party Conference
CM45	Provide the system with additional CFT (8CFT IC), if required.	<ul style="list-style-type: none"> <li>• Y=6 (Make Busy)</li> <li>(1) 08-15 (Additional CFT Circuit No.)</li> <li>(2) 1: Make Busy Off</li> <li>• Y=7 (Purpose of the CFT)</li> <li>(1) 08-15 (Additional CFT Circuit No.)</li> <li>(2) 1: For both ATTCON and stations</li> </ul>
END		



## CONFERENCE (CONT'D)

### HARDWARE REQUIRED

For providing the 16 CFTs, additional CFT (NEAX SDS 8CFT-B) consisting of two ICs is required. The ICs are mounted onto the MP (PJ-CP01), as shown below.

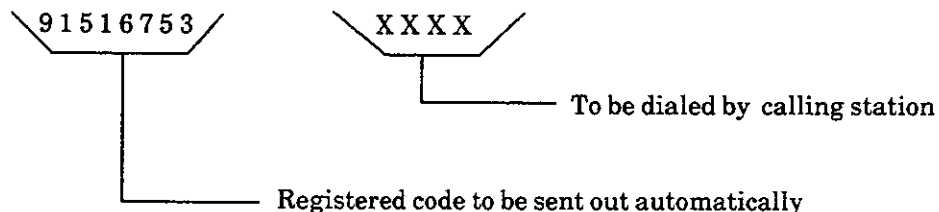


## CONSECUTIVE SPEED DIALING

### GENERAL DESCRIPTION

For Speed Dialing, all digits are registered as a Speed Dialing Code. For *Consecutive Speed Dialing*, the common portion of the number is registered as a speed calling code, and the remaining digits of each number are dialed by each calling station or by using a Station Speed Dial key on a Multiline Terminal.

Example:



### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

1. Go off-hook and receive dial tone.
2. Dial the Speed Dialing feature access code.
3. Dial the abbreviated code.
4. Dial the remaining digits of the number or use a DSS key to dial a stored Station Speed Dial number.

### SERVICE CONDITIONS

1. This feature is available with *System Speed Dialing* and *Station Speed Dialing*.
2. This feature can be used when the calling station has a call on *Consultation Hold* or *Call Hold*.
3. The *Attendant Console* can also manually dial after accessing a *System Speed Dialing* number.
4. After any type of dialing, *System Speed Dialing* is not available for the duration of the call.
5. After any type of dialing, *Station Speed Dialing* accessed by dialing a code is not available for the duration of the call.

## CONSECUTIVE SPEED DIALING (CONT'D)

### PROGRAMMING

To provide Single-Line Telephones or Multiline Terminals with Station Speed Dialing.

START	DESCRIPTION	DATA
CM12	Assign Service Restriction Class (A) to each station.	<ul style="list-style-type: none"> <li>• YY=02</li> <li>(1) X-XXXX (Station No.)</li> <li>(2) XXXX                             <ul style="list-style-type: none"> <li>└ Service Restriction Class (A)</li> <li>00-15 ◀</li> </ul> </li> </ul>
CM15	Assign this service to Service Restriction Class (A) assigned by CM12, YY=02.	<ul style="list-style-type: none"> <li>• YY=07</li> <li>(1) XX (Service Restriction Class (A) assigned by CM12, YY=02)</li> <li>(2) 1 ◀ : Allowed</li> </ul>
CM20	Assign the access codes for Station Speed Dialing Origination, Entry, Cancel respectively.	<ul style="list-style-type: none"> <li>• Y=0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX: Access Code (*, 7*, 7#)</li> <li>(2)                             <ul style="list-style-type: none"> <li>064: Origination</li> <li>065: Entry</li> <li>066: Cancel</li> </ul> </li> </ul>
CM08	Specify the Toll Restriction for an outgoing call by Station Speed Dialing.	(1) 035 (2) 0/1 ◀ : Not to be provided/To be provided
	Specify "*" dialing is set as pause data (1.5 sec.) or called number to C.O line when the DTMF station or Multiline Terminal dials "*" in the setting of the Speed Dialing feature.	(1) 168 (2) 0/1 ◀ : Paused data (1.5 sec.) /Called number to C.O line.
	Specify "*" dialing is set as programmable pause by CM41-38 or dialed digit when the DTMF station or Multiline Terminal dials "*" in the setting of the Station Speed Dialing feature.	(1) 171 (2) 0/1 ◀ : Programmable pause by CM41-38/Dialed digit



For Single Line Telephone or Multiline Terminal  
 (ETE-16-2/ETE-6-2  
 ETE-16D-2/ETE 6D-2)

For Multiline Terminal  
 (ETE-6D-2/ETE-16D-2)

## CONSECUTIVE SPEED DIALING (CONT'D)

	DESCRIPTION	DATA																								
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">A</div> <div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 5px auto;">CM73</div>	<p>Allocate the memory area for Station Speed Dialing to each station. The memory area for storing one called number of Station Speed Dialing is called "Memory Parcel". An assembly of ten Memory Parcels is called "10-Slot Memory Block," and one hundred 10-Slot Memory Blocks is called a "1000-Slot Memory Block."</p>	<p>(1) X-XXXX (Station No.)            (2) <u>XXXXXX</u></p>																								
	<table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: center;">Memory Parcel</th> <th style="text-align: center;">10-Slot Memory Block</th> <th style="text-align: center;">1000-Slot Memory Block</th> <th></th> </tr> <tr> <td style="text-align: center;">0</td> <td style="text-align: center;">00</td> <td style="text-align: center;">0</td> <td rowspan="5" style="border-left: 1px dashed black; padding-left: 5px;">1,000 Memory Parcels</td> </tr> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">01</td> <td style="text-align: center;">1</td> </tr> <tr> <td style="text-align: center;">}</td> <td style="text-align: center;">}</td> <td style="text-align: center;">2</td> </tr> <tr> <td style="text-align: center;">}</td> <td style="text-align: center;">}</td> <td style="text-align: center;">3</td> </tr> <tr> <td style="text-align: center;">9</td> <td style="text-align: center;">99</td> <td style="text-align: center;">4</td> </tr> <tr> <td></td> <td></td> <td></td> <td style="border-left: 1px dashed black; padding-left: 5px;">500 Memory Parcels</td> </tr> </table>	Memory Parcel	10-Slot Memory Block	1000-Slot Memory Block		0	00	0	1,000 Memory Parcels	1	01	1	}	}	2	}	}	3	9	99	4				500 Memory Parcels	<p>Number of 10-Slot Memory blocks (01-10)</p> <p>Facility for programming the dialed number from the Station (0/1: Effective/Ineffective)</p> <p>Memory Start Block No. (00-99): 10 Slot Memory Block <b>Note</b></p> <p>1000-Slot Memory area Number (0-4)</p>
Memory Parcel	10-Slot Memory Block	1000-Slot Memory Block																								
0	00	0	1,000 Memory Parcels																							
1	01	1																								
}	}	2																								
}	}	3																								
9	99	4																								
			500 Memory Parcels																							

The number of Memory Parcels for a station is specified by the Number of blocks in Memory Parcel (01-10) shown below.

**Note:** *In case the 1000-slot Memory area Specifier is 4, Memory Start Block No. should be set to 00-49.*

DATA	Number of Memory Parcels for a station
XXXX01	10
}	}
XXXX10	100

Abbreviated Codes required for accessing this feature are automatically given to each station, depending on the number of Memory Parcels specified.

B

## CONSECUTIVE SPEED DIALING (CONT'D)

B

DESCRIPTION	DATA
<p>Less than 100 Memory Parcels for a station:</p>	
<p>In excess of 100 Memory Parcels for a station:</p>	

CM74

Set the stored number to each Memory Slot Number, if required. The stored numbers are usually set from individual stations.

- (1) XXXX (Memory Slot No.)
  - 000 - 999
  - 1000-Slot Memory area Number (0 - 4)
- (2) Stored No. (Max. 16 digits)  
 Setting Method:  
 Outgoing Call Access Code  
 (Max. 2 digits) +   + Stored No. (Max. 16 digits)

To set a pause into the Stored No. enter "C" (Fixed Pause = 1.5 sec) or "D" (Programmable Pause specified by CM41-38) after desired digits.

C

## CONSECUTIVE SPEED DIALING (CONT'D)

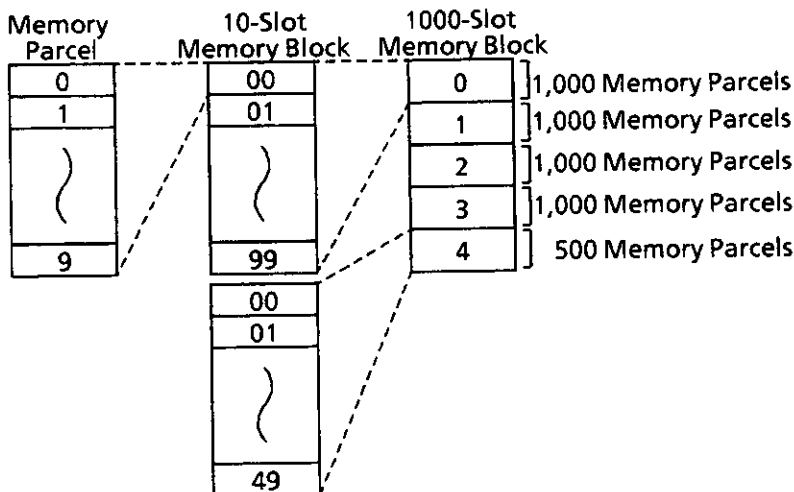
C	DESCRIPTION	DATA
CM90	Assign the Station Speed Dialing keys on each Multiline Terminal, if required.	<ul style="list-style-type: none"><li>• YY=00</li><li>(1) Primary Extension No. + <input type="text"/></li><li>+key No. (01-16)</li><li>(2) F11XX<ul style="list-style-type: none"><li>00: Station Speed Dialing 00</li><li>99: Station Speed Dialing 99</li></ul></li></ul>
	Assign the Station Speed Dialing keys on each Add-on Module, if required.	<ul style="list-style-type: none"><li>• YY=00</li><li>(1) Primary Extension No. + <input type="text"/></li><li>+key No. (30-59, 87-89)</li><li>(2) F11XX<ul style="list-style-type: none"><li>00: Station Speed Dialing 00</li><li>99: Station Speed Dialing 99</li></ul></li></ul>

END

## CONSECUTIVE SPEED DIALING (CONT'D)

D  
 CM94

DESCRIPTION	DATA
Allocate the memory area for feature keys on each Multiline Terminal.	(1) X-XXXX (Primary Extension No.)
The memory area for storing one called number is called "Memory Parcel." An assembly of 10 Memory Parcels is called a "10-Slot Memory Block," and one hundred 10-Slot Memory Blocks are called a "1000-Slot memory Block."	(2) X XX0 XX Number of blocks in the memory parcel 01: For ETE-6D-2 02: For ETE-16D-2
The ETE-6-2 and ETE-6D-2 require one 10-Slot Memory Block (10 numbers) and the ETE-16D-2 requires two 10-Slot Memory Blocks (20 numbers).	Start of 10-Slot Memory Block No. } 000 1000-Slot Memory Number } 449



END

To provide System Speed Dialing

START

CM12

DESCRIPTION	DATA
Assign Service Restriction Class (A) to each station.	• YY=02 (1) X-XXXX (Station No.) (2) XXXX Service Restriction Class (A) 00-15 ◀

CM15

Assign this service to Service Restriction Class (A) assigned by CM12, YY=02.	• YY=06 (System Speed Dialing) (1) XX (Service Rest. Class (A) assigned by CM12, YY=02) (2) 1 ◀ : Allowed
---	---

CM20

Assign the Access Code for System Speed Dialing.	• Y=0-3 (Numbering Plan Group 0-3) (1) X-XXX: Access Code (##) (2) 067 (System Speed Dialing)
--	---

A

## CONSECUTIVE SPEED DIALING (CONT'D)

	DESCRIPTION	DATA											
<div style="border: 1px solid black; padding: 2px; width: 20px; margin: 0 auto;">A</div> <div style="border: 1px solid black; padding: 2px; width: 50px; margin: 10px auto;">CM71</div>	<p>Assign the memory area for the System Speed Dialing. 300 memory slots are available per system. The number of slots available for each Tenant is also 300.</p> <p>Note that the memory areas for Hot Line-Outside and Route Advance from Tie Line to C.O. Line are included in 300 memory slots.</p> <p>Abbreviated Call Codes required for accessing this feature are automatically given to each Tenant shown below.  <b>Example:</b></p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <p>Tenant 00</p> <table border="1" style="border-collapse: collapse;"> <tr><td style="padding: 2px;">Slot 000</td><td style="padding: 2px;">→ 00</td></tr> <tr><td style="text-align: center; padding: 2px;">}</td><td style="padding: 2px;">}</td></tr> <tr><td style="padding: 2px;">Slot 019</td><td style="padding: 2px;">→ 19</td></tr> </table> <p>20 memory slots</p> </div> <div style="text-align: center;"> <p>Abbreviated Codes</p> </div> <div style="text-align: center;"> <p>Tenant 01</p> <table border="1" style="border-collapse: collapse;"> <tr><td style="padding: 2px;">Slot 020</td><td style="padding: 2px;">→ 00</td></tr> <tr><td style="text-align: center; padding: 2px;">}</td><td style="padding: 2px;">}</td></tr> <tr><td style="padding: 2px;">Slot 034</td><td style="padding: 2px;">→ 14</td></tr> </table> <p>15 memory slots</p> </div> <div style="text-align: center;"> <p>Abbreviated Codes</p> </div> </div>	Slot 000	→ 00	}	}	Slot 019	→ 19	Slot 020	→ 00	}	}	Slot 034	→ 14
Slot 000	→ 00												
}	}												
Slot 019	→ 19												
Slot 020	→ 00												
}	}												
Slot 034	→ 14												



## CONSULTATION HOLD

### GENERAL DESCRIPTION

This feature permits a station user to hold any incoming or outgoing CO call, tie line call, or any intraoffice call while originating a call to another station user within the system.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

From a Multiline Terminal:

To hold original call and place a second call:

1. Press the **TRF** key and receive feature dial tone.
2. Original call is placed on hold and receives Music On Hold when provided.
3. Dial internal station number and receive ringback tone.
4. Second station answers. Original call is now on Consultation Hold.

To return to original call:

1. In any of the following cases, the calling station can return to the original call by pressing the **TRF** key:
  - If second station called is busy.
  - If calling station cannot gain access to second station due to restriction or no answer.
2. If the second station hangs up, the calling station will automatically be returned to the original call.
3. If the second station remains connected, pressing the **TRF** key returns the original call to the Multiline Terminal while the second call enters Consultation Hold.
4. By pressing the **CONF** key, a three-party Conference will be initiated.

From a Single-Line Telephone:

To hold original call and place a second call:

1. Press the **FLASH** key (or momentarily press the hookswitch).
2. Original call is placed on hold and receives Music On Hold when provided.
3. Dial internal station number and receive ringback tone.
4. Second station answers. Original call is now on Consultation Hold.

To return to original call:

1. In any of the following cases, the calling station can return to the original call by pressing the **FLASH** key (or momentarily pressing the hookswitch).
  - If second station called is busy.
  - If calling station cannot gain access to second station due to restriction.
  - If second station does not answer.
2. If the second party hangs up, the calling station will automatically be returned to the original call.
3. If the originating station presses the **FLASH** key (or momentarily presses the hookswitch), a three-party Conference will be initiated.

## CONSULTATION HOLD (CONT'D)

### SERVICE CONDITIONS

1. An outgoing exchange network or tie line call can also be made by the station user with a call on *Consultation Hold*. Refer to *Trunk- to-Trunk Connection* and *Conference* feature descriptions.
2. A station is only allowed to place one call on *Consultation Hold* at a time.

### PROGRAMMING

<u>START</u>	<u>DESCRIPTION</u>	<u>DATA</u>
START   CM12   CM15   END	<p>Assign the Service Restriction Class (C) to each station.</p> <p>Assign the Switch Hook Flash capability to Service Restriction Class (C) assigned by CM12, YY=07.</p>	<ul style="list-style-type: none"> <li>• YY=07               <ol style="list-style-type: none"> <li>(1) X-XXXX (Station No.)</li> <li>(2) <u>XX</u> <ul style="list-style-type: none"> <li>Service Rest. Class (C) (00-15 ◀ )</li> </ul> </li> </ol> </li> <li>• YY=88, 89 (Switch Hook Flash on Internal Call)</li> <li>• YY=90, 91 (Switch Hook Flash on External Call)               <ol style="list-style-type: none"> <li>(1) XX [Service Restriction Class (C) 00-15]</li> <li>(2) 1 ◀ : Effective (Special Dial Tone Connection)</li> </ol> </li> </ul>

## CUSTOMER ADMINISTRATION TERMINAL (CAT)

### GENERAL DESCRIPTION

In addition to the Maintenance Administration Terminal (MAT), programming the NEAX1400 IMS can be done via selected ETE-16D-2 or ETE-6D-2 Multiline Terminals. The designated Multiline Terminals can be placed in program mode, and system data can then be changed. To prevent unauthorized changes, password levels are assigned, providing authorization for access to certain areas of programming and denying access to others.

### STATION APPLICATION

ETE-16D-2 or ETE-6D-2 Multiline Terminals.

### OPERATING PROCEDURE

Refer to of the NEAX1400 IMS System Programming Manual for programming instructions.

### SERVICE CONDITIONS

1. Programming from a *Customer Administration Terminal* can only be accomplished when the system is on-line.
2. The system must be initialized with default data before system data can be changed from the *CAT*.
3. The first two ETE-16D-2 or ETE-6D-2 Multiline Terminals scanned during initialization will be *Customer Administration Terminals*.
4. The commands CM00 (Office Data All Clear) and CM01 (Office Data Partial Clear) cannot be accessed from the *CAT*. The *CAT* cannot delete itself from the system program.
5. Only two *Customer Administration Terminals* can be in program mode at the same time.
6. The data that can be changed from the *CAT* can be limited by the password level assigned. There are eight levels of passwords that can be assigned in system programming. The relation between password level and access to available commands is also assigned in system programming.
7. A password can consist of a maximum of any eight digits with the following limitation: The password cannot be CCCCCCCC or FFFFFFFF.
8. Caution should be exercised when assigning passwords to command authorization levels. If a password is forgotten, access to system programming will be limited and a system initialization with subsequent programming may be required.
9. Refer also to the *Maintenance Administration Terminal (MAT)* feature for information on *Peg Count* and *Remove and Restore Service*
10. When the *Customer Administration Terminal* is off-line for programming, it cannot access normal terminal functions.

## CUSTOMER ADMINISTRATION TERMINAL (CAT) (CONT'D)

### PROGRAMMING

<u>START</u>	<u>DESCRIPTION</u>	<u>DATA</u>
<div style="display: flex; flex-direction: column; align-items: center;"> <div style="display: flex; flex-direction: column; align-items: center;"> <div style="border: 1px solid black; padding: 2px 5px; margin-bottom: 2px;">CM12</div> <div style="border: 1px solid black; padding: 2px 5px; margin-bottom: 2px;">CM15</div> </div> <div style="margin-top: 20px; border: 1px solid black; padding: 2px 5px;">A</div> </div>	<p>Assign the class of service for CAT to required Multiline Terminals.</p>	<ul style="list-style-type: none"> <li>• CM12, YY = 02           <ol style="list-style-type: none"> <li>(1) X - XXXX (Primary Extension No.)</li> <li>(2) <u>XXXX</u> └ Service Restriction Class (B) (00 - 15 ◀)</li> </ol> </li>   <li>• CM15, YY = 56           <ol style="list-style-type: none"> <li>(1) XX: [Service Restriction Class (B) (00 - 15)] assigned by CM12, YY = 02.</li> <li>(2) 1 ◀: Allowed</li> </ol> </li> </ul>

## CUSTOMER ADMINISTRATION TERMINAL (CAT) (CONT'D)

A	DESCRIPTION	DATA
CME7	Specify the command codes accessible to each Password Level.	<ul style="list-style-type: none"> <li>•YY = 00: Password Level 0-6</li> <li>•YY = 01: Password Level 1-6</li> <li>•YY = 02: Password Level 2-6</li> <li>•YY = 03: Password Level 3-6</li> <li>•YY = 04: Password Level 4-6</li> <li>•YY = 05: Password Level 5-6</li> <li>•YY = 06: Password Level 6</li> <li>•YY = 10: Password Level 0</li> <li>•YY = 11: Password Level 1</li> <li>•YY = 12: Password Level 2</li> <li>•YY = 13: Password Level 3</li> <li>•YY = 14: Password Level 4</li> <li>•YY = 15: Password Level 5</li> <li>•YY = 16: Password Level 6</li> </ul> <p>(1) <u>XX</u>            └ 00-FF (Command Codes exclusive of 03, E7, E9)</p>
CME9	Enable the system to change the password.	<p>(1) 8</p> <p>(2) 0 ◀: Allowed</p>
	Assign a password to each Password Level.	<p>(1) 0-7 (Password Level 0-7)</p> <p>(2) X-X...X (Max. 8 digits Password Code)</p> <p>A password code for Password Level 7 should be assigned in advance because of providing the password service by Function No.9 of CME9.</p> <p>The following passwords are not available.</p> <p>“CCCCCCCC”        “FFFFFFFF”</p>
B		

## CUSTOMER ADMINISTRATION TERMINAL (CAT) (CONT'D)

B	DESCRIPTION	DATA
CME9	Provide the system with Password service. After setting this data, access to system programming will be available with password entry.	(1) 9 (2) 0: Provided
END		

**Note 1:** *If the system-data all-clear or system-data partial-clear is required before programming from a CAT, perform the following operations:*

1. Plug the PK-2DLC Card into LT00 Card Slot of PIM0
2. Connect the CAT to LEN0000 at the MDF
3. Set SW3 on the MP Board to "B"
4. Press the RESET Switch on the MP Board (System Data All Clear/Partial Clear)
5. Set SW3 to "0" and press the RESET Switch.
6. Set the Multiline Terminal to CAT mode (Station Number 300 is automatically assigned to the Multiline Terminal).

**Note 2:** *If the Password Service is provided, enter the predetermined password by Command 03 before programming from a CAT.*

- +03+  +Password Level No. (0-7) +  +Password +
- "OK" will be displayed, if accepted.
  - "DATA ERROR" will be displayed if the password is incorrect.

## DATA LINE SECURITY

### GENERAL DESCRIPTION

This feature allows line circuits which are used for data transmission to be protected from interruptions such as Attendant Camp-On, Executive Override, and Attendant Override.

### STATION APPLICATION

Not applicable.

### OPERATING PROCEDURE

No manual operation is required.

### SERVICE CONDITIONS

1. This feature is assigned in system programming on a per-station basis.
2. *Data Line Security* functions on all calls.
3. *Data Line Security* cannot prevent disruptions from interfering with data transmission when the disruption occurs outside the system.
4. The following connections are restricted when *Data Line Security* is allowed since transmitted tones are involved in their operation. All interrupt attempts directed towards stations with a *Data Line Security* call in progress result in reorder tone:

- *Attendant Camp-On*
- *Attendant Override*
- *Boss-Secretary Override*
- *Executive Override*
- *Camp-On*

### PROGRAMMING

START	DESCRIPTION	DATA
START   <div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM13</div>   END	Assign the Analog Data Station (Single-Line Station with FAX or MODEM) to the required stations.	<ul style="list-style-type: none"> <li>• YY = 07</li> <li>(1) X - XXXX (Station No.)</li> <li>(2) 0: Data Station</li> </ul>

## DELAYED RINGING

### GENERAL DESCRIPTION

This feature enables a C.O. line to ring immediately at the terminating station, and after a programmable period of time has elapsed, to ring at secondary Multiline Terminals with that line appearance.

### STATION APPLICATION

All Multiline Terminals.

### OPERATING PROCEDURE

No manual operation is required.

### SERVICE CONDITIONS

1. *Delayed Ringing* is assigned in system programming on a per-line-key basis.
2. The timing of call termination to the start of *Delayed Ringing* is programmable in system data in increments of two seconds to a maximum of 40 seconds (default value = 10 seconds).
3. When *Delayed Ringing* and *Call Forwarding - No Answer* are applied to the same call, the feature which times out first will take priority.

### PROGRAMMING

START	DESCRIPTION	DATA
CM90	Assign the Delayed Ringing feature to each line key on a Multiline Terminal.  <i>Note: The Delayed Ringing feature can be assigned to the first 16 line/trunk keys (Key 01-16).</i>  Assign the Delayed Ringing feature to each line key on Add-On Module, if required.  <i>Note: The Delayed Ringing feature can be assigned to the first 16 line/trunk keys (Key 30-45).</i>	<ul style="list-style-type: none"> <li>• YY = 03</li> <li>(1) Primary Extension No. + <input type="text"/> + Key No. (01-16) <b>Note</b></li> <li>(2) 0: Delayed Ringing</li> </ul> <ul style="list-style-type: none"> <li>• YY = 03</li> <li>(1) Primary Extension No. + <input type="text"/> + Key No. (30-45) <b>Note</b></li> <li>(2) 0: Delayed Ringing</li> </ul>
CM41	Specify the Delayed Ringing timing.	<ul style="list-style-type: none"> <li>• Y = 1</li> <li>(1) 09</li> <li>(2) 01-20: Timer Data for 2 sec - 40 sec. (2 sec increment)</li> </ul> <p>If no data is set, 10 seconds will be applied.</p>
END		



## DIAGNOSTICS

### GENERAL DESCRIPTION

To assist maintenance personnel, the NEAX1400 IMS provides diagnostic capabilities such as fault code generation, device status information and alarm information recording, which can be accessed from the Maintenance Administration Terminal (MAT) or Customer Administration Terminal (CAT).

### STATION APPLICATION

Not applicable.

### OPERATING PROCEDURE

Refer to the NEAX1400 IMS Installation/Service Manual for operating procedures.

### SERVICE CONDITIONS

1. The following station status information can be displayed on the *MAT* or *CAT* by direct command:
  - Idle
  - *Line Lockout*
  - Dialing
  - Tone Trunk Connection (reorder tone, busy tone, service set tone, etc.)
  - Types of Connection, (station-to-station, three-way calling, voice calling, holding, etc.)
  - Destination number (trunk number, register number)
2. The following trunk status information can be displayed on the *MAT* or *CAT* by direct command:
  - Idle
  - Ringing in
  - Incoming queue to Attendant Console
  - Holding
  - In a tandem connection
  - Incoming queue to UCD
  - Dialing
  - Receiving dialed digits
3. The following information is stored and can be displayed on the *MAT* or *CAT* using a memory dump command in hexadecimal format:
  - Program address where an endless loop has occurred
  - Last initialization time for main program
  - Last initialization time for firmware program
  - The reason for initialization (power-on, **RESET** key, endless loop, sense switch, command from *MAT* or *CAT*)
4. The NEAX1400 IMS has a built-in patrol program that monitors the status of all connected devices. Additionally, when no response or an invalid response from a device is received, this program stores in memory the slot number of that device. From the *MAT* or *CAT* a maintenance person can read the slot number of any device which does not respond to the main processor or provides an illegal status to the main processor.

## DIAGNOSTICS (CONT'D)

### PROGRAMMING

START	DESCRIPTION	DATA
CMF5	<p>To display the station/trunk status information on the CAT or MAT, enter the required station number or trunk number.</p> <p>Operation:</p> <div style="border: 1px solid black; padding: 2px; display: inline-block;">             ST + F5Y + DE + Station/Trunk No. + DE           </div> <p>Status information associated with the station or trunk will be displayed in hexadecimal format. For the meaning of the status information being displayed, refer to the Troubleshooting Guide.</p>	<ul style="list-style-type: none"> <li>• Y = 0 (Status of Station/Trunk)               <ul style="list-style-type: none"> <li>(1) X - XXXX (Single-Line Station No./Virtual Line Station No.)</li> <li>FX - FXXXX (Primary Extension No.)</li> <li>DXXX (Trunk No.)</li> </ul> </li> </ul>
END	<p>To display the stored information on the MP fault processing, enter the required memory dump command.</p> <p>Operation:</p> <div style="border: 1px solid black; padding: 2px; display: inline-block;">             ST + F5Y + DE + Memory Dump Command Code + DE           </div>	<ul style="list-style-type: none"> <li>• Y = 3 (Memory Dump)               <ul style="list-style-type: none"> <li>(1) 000: Reason for initialization</li> <li>001: Program Address where an endless loop has occurred.</li> <li>003: MP Initialization Time.</li> <li>004: FP Initialization Time.</li> <li>007: Reason for ROT Connection</li> </ul> </li> </ul>

## DIAL CONVERSION

### GENERAL DESCRIPTION

The system can be assigned to use rotary Dial Pulse (DP) or Dual-Tone Multifrequency (DTMF) trunks and stations. This feature provides for the repeating of digits dialed by the station user onto the C.O. trunks.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE:

Normal call handling procedures apply.

### SERVICE CONDITIONS

1. Trunks are assigned for DP and/or DTMF on a trunk-route basis.
2. Single-Line Telephone (SLT) circuits are assigned for DP and/or DTMF through station *Class of Service* for the station number assigned to the circuit. The Single-Line Telephone circuits can accept 10 or 20 PPS.
3. The system will automatically provide *Dial Conversion* when the station is a DTMF SLT and dialing is being done on a DP trunk.
4. The system can be assigned to provide DTMF dialing on trunks for *Attendants Consoles* only, while generating rotary dial pulsing for station dialing.
5. For an outgoing call on a trunk once the outgoing register times out (six seconds after the last digit is dialed), further digits dialed out by a Multiline Terminal will be DTMF and the duration of the tones will be the same as the length of time the dial-pad key is pressed. This feature allows Multiline Terminals to send DTMF signals to external equipment such as computers and other dial up services.
6. The dial pulse make ratio is programmable for 33% or 39% (default is 39%). The dial pulse interdigit pause can be set from 300 ms to 900 ms (in increments of 100 ms) or 1100 ms (default is 800 ms).
7. The DTMF signal width is programmable for 64ms or 128ms (default is 64ms). The DTMF interdigit pause can be set for 32, 64, 80, 96, 160, 192, or 240 ms (default is 96 ms).

## DIAL CONVERSION (CONT'D)

### PROGRAMMING

START	DESCRIPTION	DATA
START CM10	Assign the Card Number of PK-4RSTA to the required LENS. <div style="text-align: center; border: 1px solid black; border-radius: 15px; padding: 2px; width: fit-content; margin: 10px auto;">INITIAL</div>	(1) LEN (0000 – 0511) (2) E200 – E215 (Card No. of PK-4RSTA) E200 – E203: For PIM0 E204 – E207: For PIM1 E208 – E211: For PIM2 E212 – E215: For PIM3
CM12	Assign the type of telephone set (DTMF) to DTMF Stations. This data assignment is not required for Multiline Terminal stations.	• YY = 00 (1) X – XXXX (Station No.) (2) 3 ◀ : DTMF Telephone set
CM45	Assign the DTMF Receivers for DTMF Station.	• Y = 0 (Make Busy) (1) XXX ├── Circuit No. 0 – 3 └── Card No. 00 – 15 assigned by CM10 (E200 – E215) (2) 1 ◀ : Make Busy Cancel  • Y = 1 (PBR for incoming call from Tie Line/DID) (1) XXX (Ditto to Y = 0) (2) 1 ◀ : For both DTMF station and Tie Line/DID
A		

## DIAL CONVERSION (CONT'D)

A	DESCRIPTION	DATA
CM35	For a DP trunk, assign the type of signaling of Outgoing and Bothway trunk routes to DP.	<ul style="list-style-type: none"> <li>• YY=01</li> <li>(1) Trunk Route No. (00-63)</li> <li>(2) 2</li> </ul>
	Specify the DP Sender characteristics according to the condition of the distant office.	<ul style="list-style-type: none"> <li>• YY=23 (DP Sender Inter Digital Pause)</li> <li>(1) Trunk Route No. (00-63)</li> <li>(2)               <ul style="list-style-type: none"> <li>0: 300 ms</li> <li>1: 400 ms</li> <li>2: 500 ms</li> <li>3: 600 ms</li> <li>4: 700 ms</li> <li>5: 900 ms</li> <li>6: 1100 ms</li> <li>7 ◀ : 800 ms</li> </ul> </li> <li>• YY=25 (DP Sender Make Ratio)</li> <li>(1) Trunk Route No. (00-63)</li> <li>(2) 0/1 ◀ : 33%/39%</li> <li>• YY= 45 (DP Sender Release Timing)</li> <li>(1) Trunk Route No. (00-63)</li> <li>(2)               <ul style="list-style-type: none"> <li>0: 2 sec.</li> <li>1: 4 sec.</li> <li>2: 6 sec.</li> <li>3: 8 sec.</li> <li>4: 12 sec.</li> <li>5: 14 sec.</li> <li>6: 16 sec.</li> <li>7 ◀ : 10 sec.</li> </ul> </li> </ul>
	For a DTMF trunk, assign the type of signaling (DTMF) to Outgoing and Bothway Trunk Routes.	<ul style="list-style-type: none"> <li>• YY=01</li> <li>(1) Trunk Route No. (00-63)</li> <li>(2) 7 ◀</li> </ul>
B		

## DIAL CONVERSION (CONT'D)

B

DESCRIPTION	DATA
Specify the DTMF Sender characteristics according to the condition of the distant office.	<ul style="list-style-type: none"> <li>• YY= 24 (DTMF Inter Digital Pause)               <ul style="list-style-type: none"> <li>(1) Trunk Route No. (00-63)                   <ul style="list-style-type: none"> <li>0: 32 ms</li> <li>1: 64 ms</li> <li>2: 80 ms</li> <li>3: 96 ms</li> <li>4: 160 ms</li> <li>5: 192 ms</li> <li>6: 240 ms</li> <li>7 ◀ : 128 ms</li> </ul> </li> <li>(2)                   <ul style="list-style-type: none"> <li>0: 32 ms</li> <li>1: 64 ms</li> <li>2: 80 ms</li> <li>3: 96 ms</li> <li>4: 160 ms</li> <li>5: 192 ms</li> <li>6: 240 ms</li> <li>7 ◀ : 128 ms</li> </ul> </li> </ul> </li> <li>• YY=26 (DTMF Sender Signal Width)               <ul style="list-style-type: none"> <li>(1) Trunk Route No. (00-63)</li> <li>(2) 0/1 ◀ : 64 ms/128 ms</li> </ul> </li> <li>• YY=46 (DTMF Sender Release Timing)               <ul style="list-style-type: none"> <li>(1) Trunk Route No. (00-63)                   <ul style="list-style-type: none"> <li>0: 2 sec.</li> <li>1: 4 sec.</li> <li>2: 6 sec.</li> <li>3: 8 sec.</li> <li>4: 12 sec.</li> <li>5: 14 sec.</li> <li>6: 16 sec.</li> <li>7 ◀ : 10 sec.</li> </ul> </li> <li>(2)                   <ul style="list-style-type: none"> <li>0: 2 sec.</li> <li>1: 4 sec.</li> <li>2: 6 sec.</li> <li>3: 8 sec.</li> <li>4: 12 sec.</li> <li>5: 14 sec.</li> <li>6: 16 sec.</li> <li>7 ◀ : 10 sec.</li> </ul> </li> </ul> </li> </ul>
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin-bottom: 5px;">CM08</div> If "*" or "#" of DTMF Telephone is used as Switch Hook Flash while hearing Busy Tone, set data to 0.	<ul style="list-style-type: none"> <li>(1) 050 (* is used as Switch Hook Flash)</li> <li>(2) 0: Effective</li> <li>(1) 051 (# is used as Switch Hook Flash)</li> <li>(2) 0: Effective</li> </ul>

END

### HARDWARE REQUIRED

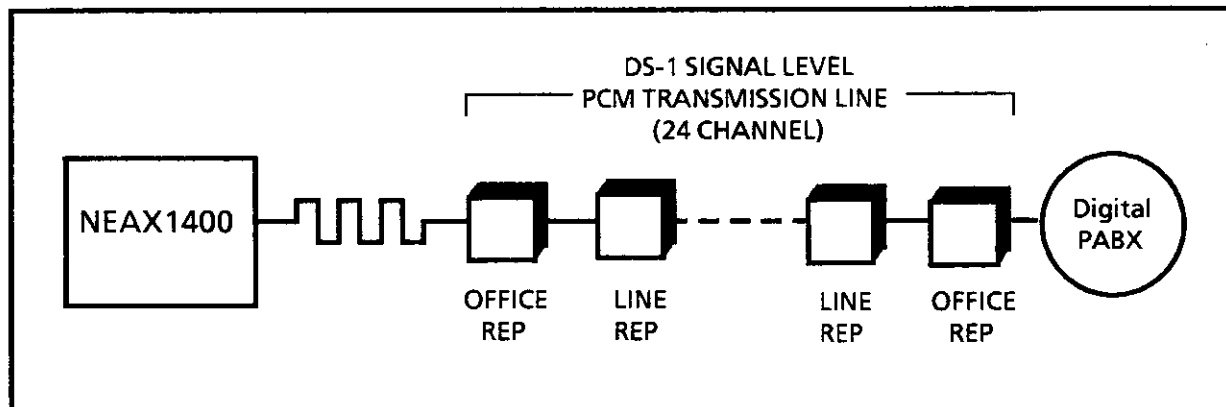
DTMF Receiver (PK-4RSTA) × n

n: Depends on the number of DTMF stations and the traffic condition of the system.

## DIRECT DIGITAL INTERFACE

### GENERAL DESCRIPTION

This feature allows the NEAX1400 IMS to be connected to Tie Lines or directly to "T1" carrier links using either a private or public network. The DTI board (PJ-24DTB) can provide the CO interface (Ring Down and Loop Start/Ring Down and Ground Start) with T1 carrier links via the system data programming. The system controls the DTI assigned as CO trunk with the same call processing as the analog CO interface trunks (COT cards). Therefore, there is no difference between DTI and COT in the operation and system data programming (trunk data).



### OPERATING PROCEDURE:

No manual operation is required.

### SERVICE CONDITIONS

1. Each Office Hierarchy is defined as follows:

- a.) MASTER OFFICE

One center will operate as the Master Office. This location has two highly-stabilized master oscillators, and distributes the Master Clock to all the systems through the Digital Interface lines.

- b.) SUB-MASTER OFFICE

This office operates using a Phase Lock Oscillator (PLO) to synchronize with the clock at the Master Office. If the Master Clock fails, the Sub-Master Office can operate using its own backup oscillator.

- c.) SLAVE OFFICE

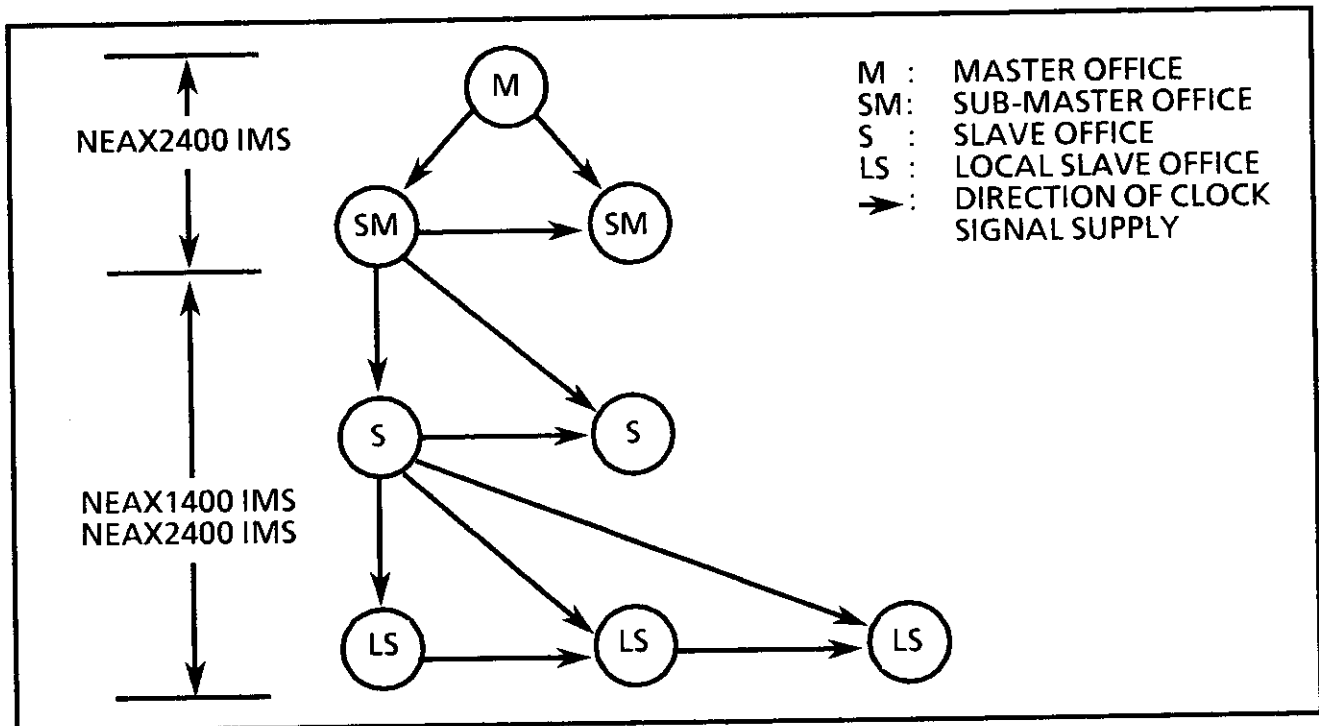
This office is arranged so it will have at least two clock routes, one for Master and the other for standby. Synchronization Clock is derived from incoming PCM bit stream from higher hierarchy offices.

- d.) LOCAL SLAVE OFFICE

This is the end office in a digital network arrangement. This office will not be provided with a backup route for the PLO because this office is the only one influenced in the event of trouble occurrence.

### DIRECT DIGITAL INTERFACE (CONT'D)

2. When a digital network is implemented using the NEAX1400 IMS, the NEAX2400 can function as a Master Office or Sub-Master Office while the NEAX1400 functions as a Slave and/or Local Slave Office.
3. Each digital office is equipped with a Phase Lock Oscillator used for network synchronization. Each PLO in the NEAX1400 IMS has inputs to which clocks from the Master Oscillator or Digital Interface Module should be connected.
4. "D3" Channel Banks are not required since the switch can be equipped with a Digital Trunk Interface (DTI) compatible with DS-1 signal level.
5. The DTI provides signalling interface, bipolar/unipolar conversion, frame synchronization, insertion/extraction and alarm detection.
6. The DTI can be provided with circuit cards to interface with "T1" carrier and/or CCITT standard networks.
7. The DTI and PLO boards are mounted in the AP board slots of the Port Interface Module (PIM). PIM 3 - slots AP0, 1, and 2 cannot be used for DTI and PLO.
8. The following two methods may be used for network synchronization (see Figure 2 below):
  1. Master - Slave System (Master)
  2. Master - Slave System (Slave)



9. Maximum number of trunks for DTI is 120 ports (24 ports/DTI board).
10. DTI board can be assigned as Ring Down Interface (Loop Start, Ground Start) in addition to Tie Line Interface.
11. Both the CO interface and Tie Line interface may exist within the same DTI board.
12. Both the analog CO interface and digital CO interface may exist within the same trunk route.



## DIRECT DIGITAL INTERFACE (CONT'D)

13. A maximum of 120 DTI trunks per system can be assigned as the CO interface.
14. Digital data transmission through the T1 interface is available with dial up (switched) operation and nailed-down connections. CCIS is required for switched data operations without modems.
15. Tandem connections between T1 interfaces are available for both voice and data calls

### PROGRAMMING

Refer to the NEAX 1400 IMS DDI System Manual [ND-44083 (E)].

### HARDWARE REQUIRED

PJ-24DTB Board  
PJ-CK01 Board

## DIRECT INWARD DIALING (DID)

### GENERAL DESCRIPTION

This feature allows incoming calls from the exchange network (except FX or WATS) to reach any station within the system without Attendant assistance.

### STATION APPLICATION

Not applicable.

### OPERATING PROCEDURE

The calling party outside the system dials the appropriate telephone number. The call will ring directly at a predetermined station, bypassing the Attendant.

### SERVICE CONDITIONS

1. If the Central Office numbering plan differs from the user's station numbering plan, addition and deletion of digits can be implemented to coincide with the existing numbering plan.
2. This feature is normally used when direct in service is desired on an extension or system-wide basis.
3. DID must be provided by the serving Central Office; however, not all telephone company Central Offices are capable of providing this service.
4. One of the following control signaling methods can be used on incoming DID trunks: immediate start, delay start and wink start.
5. Dual-Tone, Multi-Frequency (DTMF) or rotary dial signaling is available. This is assigned on a trunk-route basis.
6. Calls to invalid numbers can be routed to an Attendant, a predesignated station, or to a recorded announcement.
7. When a station has activated *Call Forwarding* (all types), the DID call will be forwarded to the designated station rather than to the specific station dialed.
8. If the called station is assigned *Station Hunting* and is busy, the call follows the preset hunting pattern.
9. On an incoming call to a busy station, the *Call Forwarding* feature takes precedence over the *Station Hunting* feature. If the *Call Forwarding* feature and the *Station Hunting* feature are not activated, the caller will receive busy tone or will reroute to the *Attendant Console*, predesignated station, or recorded announcement depending on the assignment.
10. Stations in *Do Not Disturb* will be provided with visual indication but no audible indication. Secondary appearances will ring when assigned. The calling party will receive ring back tone until answered.
11. DID calls can be directly connected to a Voice Recording Memory Card, or transferred to the card.

## DIRECT INWARD DIALING (DID) (CONT'D)

### PROGRAMMING

START	DESCRIPTION	DATA
START   CM08   CM10   CM30   A	Assign the ringing cadence on DID call.  Assign the Trunk Numbers to the required LENSs.  Assign the data for DID to the Trunk Numbers assigned by CM10.	(1) 180 (2) 0/1 ◀ : 0.2 sec. ON, 0.2 sec. OFF, 0.2 sec. ON, 0.2 sec. OFF, 0.2 sec. ON, 0.2 sec. OFF/As per the data of Command 35, YY=33  (1) LEN (0000-0511) (2) Trunk No. (D000-D255)  • YY=00 (Trunk Route Allocation) (1) Trunk No. (000-255) (2) Trunk Route No. (00-63) (03)  • YY=01 (Tenant Allocation) (1) Trunk No. (000-255) (2) Tenant No. (00-63) (00)  • YY=02 (Terminating System in Day Mode) • YY=03 (Terminating System in Night Mode) (1) Trunk No. (000-255) (2) 31 ◀

## DIRECT INWARD DIALING (DID) (CONT'D)

A	DESCRIPTION	DATA
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM35</div>	<p>Assign the data for DID to the Trunk Routes assigned by CM30.</p>	<ul style="list-style-type: none"> <li>• YY=00 (Kind of Trunk)               <ul style="list-style-type: none"> <li>(1) Trunk Route No. (00 – 63) (03)</li> <li>(2) 00: DID</li> </ul> </li>   <li>• YY=02 (OG/IC)               <ul style="list-style-type: none"> <li>(1) Trunk Route No. (00 – 63) (03)</li> <li>(2) 1: Incoming</li> </ul> </li>   <li>• YY=05 (Release Signal Condition)               <ul style="list-style-type: none"> <li>(1) Trunk Route No. (00 – 63)</li> <li>(2) 0: No Release Signal</li> </ul> </li>   <li>• YY=12 (Number of digit to be received)               <ul style="list-style-type: none"> <li>(1) Trunk Route No. (00 – 63)</li> <li>(2) Number of Digits                   <ul style="list-style-type: none"> <li>0: 1 digit</li> <li>1: 2 digits</li> <li>2: 3 digits</li> <li>3 ◀ : 4 digits</li> </ul> </li> </ul> </li>   <li>• YY=18 (Received Digit Conversion)               <ul style="list-style-type: none"> <li>(1) Trunk Route No. (00 – 63)</li> <li>(2) 0/1 ◀ : To be provided/Not to be provided.</li> </ul> </li> </ul>
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM45</div>	<p>Provide the dedicated DTMF Receivers for DID Call, if required.</p>	<ul style="list-style-type: none"> <li>• Y=1               <ul style="list-style-type: none"> <li>(1) XXX: DTMF Receiver No.                   <ul style="list-style-type: none"> <li>└─ Circuit No. (0 – 3)</li> <li>└─ Card No. (00 – 15) assigned by CM10. (E200 – E215)</li> </ul> </li> <li>(2) 0/1 ◀ : Only for DID/For both DTMF station and Tie Line/DID</li> </ul> </li> </ul>
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">B</div>		

**DIRECT INWARD DIALING (DID) (CONT'D)**

B  
 CM49

DESCRIPTION	DATA
Function of Voice Recording Memory Card	<ul style="list-style-type: none"> <li>• YY = 00</li> <li>(1) X-XXX: Voice Recording Memory Card No.</li> <li>(2) { 0DD0: Announcement Service when the called station does not answer the DID/Tie Line call 0800: Announcement Service when the DID/Tie Line call terminates to the Busy station.</li> </ul>

Automatic Transfer Destinations:

CM51

For the DID line, destination of the incoming call transfers when the station does not answer the call within a predetermined time.	<ul style="list-style-type: none"> <li>• YY = 00</li> <li>(1) XX: Group No.</li> <li>(2) EB000-EB127: VRC No.</li> </ul>
For the Tie line, destination of the incoming call transfers when the station does not answer the call within the predetermined time.	<ul style="list-style-type: none"> <li>• YY = 01</li> <li>(1) XX: Group No.</li> <li>(2) EB000-EB127: VRC No.</li> </ul>
For the DID line, destination of the incoming call transfers when the station is busy.	<ul style="list-style-type: none"> <li>• YY = 03</li> <li>(1) XX: Group No.</li> <li>(2) EB000-EB127: VRC No.</li> </ul>
For the Tie line, destination of the incoming call transfers when the station is busy.	<ul style="list-style-type: none"> <li>• YY = 04</li> <li>(1) XX: Group No.</li> <li>(2) EB000-EB127: VRC No.</li> </ul>
Assign the destination of DID call transferred when the station is busy/unassigned/no answer. (If provided, see ANNOUNCEMENT SERVICE.)	<ul style="list-style-type: none"> <li>• YY = 00 (No Answer)</li> <li>• YY = 03 (Busy)</li> <li>• YY = 06 (Unassigned)</li> <li>(1) 00-63: Tenant Number</li> <li>(2) Destination: X-XXXX (Station No.) E000 (H A - 6 1 0 Z / S N 6 1 0 ATTCON) EBXXX (Announcement Service: Voice Recording Memory Card No.)</li> </ul>

C

## DIRECT INWARD DIALING (DID) (CONT'D)

	DESCRIPTION	DATA
<div style="border: 1px solid black; width: 20px; height: 20px; margin: 0 auto; display: flex; align-items: center; justify-content: center;">C</div> <div style="border: 1px solid black; width: 60px; height: 20px; margin: 5px auto; display: flex; align-items: center; justify-content: center;">CM76</div> <div style="border-bottom: 1px solid black; width: 100%; height: 200px; margin-top: 5px;"></div> <div style="text-align: center; margin-top: 5px;"><u>END</u></div>	<p>In case data for CM35, YY=18 is set to "0" (Received Digits Conversion is to be provided), assign the data for interpreting the digits received.</p>	<ul style="list-style-type: none"> <li>• Y=0 (Day Mode)</li> <li>• Y=1 (Night Mode)</li> </ul> <p>(1) X-XXXX: Station Number received.</p> <p>(2) X-XXXX: Station/Data Station Number to be terminated.</p> <p style="margin-left: 20px;">DXX: Change Terminating System to:</p> <ul style="list-style-type: none"> <li>D01:</li> <li>D13: TAS</li> <li>D04: DIT</li> <li>D14: HA-610Z/ SN610 ATTCON</li> <li>D16: DISA</li> </ul>

### HARDWARE REQUIRED

PK-2DITD Card × n

## DIRECT INWARD SYSTEM ACCESS (DISA)

### GENERAL DESCRIPTION

This feature allows an outside caller to access the system using an exchange network connection without Attendant or station assistance. The outside user may originate calls over any or all of the system's facilities such as WATS, FX, Tie Line or CCSA. The outside user can also directly call stations and access miscellaneous trunks for such features as dictation access.

### STATION APPLICATION

Not Applicable

### OPERATING PROCEDURE

1. Dial number to connect to the system.
2. After ringback tone, service set tone is received.
3. Dial DISA identification code. If accepted, system dial tone will be heard. If denied, busy tone will be heard.
4. Dial desired number (trunk access code, station number, Voice Recording Memory Card access/record code, and then card number).

### SERVICE CONDITIONS

1. *Direct Inward System Access* code limitations:

Without Application Processor AP-02 (standard):

Number of digits: up to 10 digits  
Number of Codes: up to 8.

With Application Processor AP-02 (optional):

Number of digits: up to 10 digits  
Number of Codes: up to 1000 combined with *Forced Account Codes* and *Authorization Codes*.

2. Dual-Tone, Multi-Frequency (DTMF) instruments are required for DISA. A portable tone generator may be utilized in circumstances where such instruments are not available.
3. A DISA identification code must be programmed into the system to identify the user accessing this service.
4. The DISA identification code may be assigned a *Class Of Service* limiting access to NEAX1400 IMS capabilities by an outside caller.
5. DISA identification codes can be entered from the *Maintenance Administration Terminal* (MAT), the *Customer Administration Terminal* (CAT) and *Attendant Console* (SN610). From Attendant Consoles (SN610), eight DISA Codes (Standard) can be entered or changed.
6. A dedicated trunk is used for DISA access. The outside user dials a dedicated number to access this capability.
7. DISA Code can be printed out in the SMDR record for Tandem Connection.

## DIRECT INWARD SYSTEM ACCESS (DISA) (CONT'D)

8. If the called station is busy or does not answer, or the number dialed is a feature access code, any one of the following operations can be set:
- The CO line can be released
  - Dial tone can be supplied
  - An alternate call terminating destination (Attendant, Trunk Answer Any Station, Direct Inward Termination) can be provided.
9. The outside user can access Voice Message Recording Card via DISA, if programmed.

### PROGRAMMING

For providing the DISA without Application Processor (PJ-AP02):

START	DESCRIPTION	DATA						
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM08</div>	Designate the processor checking the ID code on DISA.  Assign the ringing cadence on DISA call.	(1) 217 (2) 0: MP (PJ-CP01)  (1) 180 (2) 0/1 ◀ : 0.2 sec. ON, 0.2 sec. OFF, 0.2 sec. ON, 0.2 sec. OFF, 0.2 sec. ON, 0.2 sec. OFF/As per the data of Command 35, YY=33						
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM30</div>	Assign the data for DISA to the required trunks when providing DISA to the C.O. call.	<ul style="list-style-type: none"> <li>• YY=02 (Terminating System in Day Mode)</li> <li>• YY=03 (Terminating System in Night Mode)</li> </ul> (1) Trunk No. (000-255) (2) 16: DISA  <ul style="list-style-type: none"> <li>• YY=30 (Handling of DISA destination in Day mode)</li> <li>• YY=31 (Handling of busy/not available DISA destination in Night mode)</li> </ul> (1) Trunk No. (000-255) <table style="border-left: 1px solid black; border-right: 1px solid black; border-collapse: collapse; margin-left: 20px;"> <tr><td style="padding: 2px;">00:</td><td style="padding: 2px;">C.O. Line Release</td></tr> <tr><td style="padding: 2px;">01:</td><td style="padding: 2px;">Forwarded to TAS</td></tr> <tr><td style="padding: 2px;">03:</td><td style="padding: 2px;">Forwarded to ATTCON</td></tr> </table> (2) 04: Forwarded to DIT Station assigned by CM30, YY=04, 05. 06: DT Connection for redial 08: C.O. Line Release 15◀ : C.O. Line Release	00:	C.O. Line Release	01:	Forwarded to TAS	03:	Forwarded to ATTCON
00:	C.O. Line Release							
01:	Forwarded to TAS							
03:	Forwarded to ATTCON							
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">A</div>								



## DIRECT INWARD SYSTEM ACCESS (DISA) (CONT'D)

A	DESCRIPTION	DATA
CM35	Assign the data for digit conversion on DID call to the Route No. assigned by CM30, YY=00 when providing DISA to the DID call.	<ul style="list-style-type: none"> <li>• YY=18</li> <li>(1) Trunk Route No. (00-63)</li> <li>(2) 0/1 ◀ : To be provided/Not to be provided</li> </ul>
CM76	In the case that data for CM35, YY=18 is set to 0, assign the data for converting the received digit to DISA.	<ul style="list-style-type: none"> <li>• Y=0 (Day Mode)</li> <li>• Y=1 (Night Mode)</li> <li>(1) X-XXXX: Station No. received</li> <li>(2) D16: DISA</li> </ul>
CM2A	Assign the ID code for DISA. The number of digits for ID code is specified by CM42-13.	<ul style="list-style-type: none"> <li>• Y=5</li> <li>(1) XX: 00-07 (ID code serial number)</li> <li>(2) X-X...X: ID code (Max.16 digits)</li> </ul>
	Assign required Trunk Restriction Class to each ID code.	<ul style="list-style-type: none"> <li>• Y=6</li> <li>(1) XX: 00-07 (ID code serial number)</li> <li>(2) <ul style="list-style-type: none"> <li>1 ◀ : Unrestricted (RCA)</li> <li>2: Non-Restricted-1 (RCB)</li> <li>3: Non-Restricted-2 (RCC)</li> <li>4: Semi-Restricted-1 (RCD)</li> <li>5: Semi-Restricted-2 (RCE)</li> <li>6: Restricted-1 (RCF)</li> <li>7: Restricted-2 (RCG)</li> <li>8: Fully-Restricted (RCH)</li> </ul> </li> </ul>
	Assign the required Service Class A/B to each ID code. The features available in each class are assigned by CM15.	<ul style="list-style-type: none"> <li>• Y=7</li> <li>(1) XX: 00-07 (ID code serial number)</li> <li>(2) XXXX <ul style="list-style-type: none"> <li>Service Feature Class (B) (00-15 ◀)</li> <li>Service Feature Class (A) (00-15 ◀)</li> </ul> </li> </ul>
	Assign required Service Class C to each ID code. The features available in each class are assigned by CM15.	<ul style="list-style-type: none"> <li>• Y=8</li> <li>(1) XX: 00-07 (ID code serial number)</li> <li>(2) XX: 00-15 ◀ (Service Restriction Class (C))</li> </ul>
CM42	Specify the number of digits for ID Code on DISA.	<ul style="list-style-type: none"> <li>(1) 13</li> <li>(2) 01-16 (Number of digits) If no data is set, 10 digits of ID Code is available.</li> </ul>
END		

Note: Up to 8 DISA ID Codes can be set per system.

## DIRECT INWARD SYSTEM ACCESS (DISA) (CONT'D)

For providing the DISA with AP (PJ-AP02):

START	DESCRIPTION	DATA														
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM05</div>	Assign the slot number to the PJ-AP02 Board. SENSE0 Switch on the PJ-AP02 Board should be set to the slot number assigned by this command.	(1) Slot No. (04 – 15) (2) 07														
<div style="border: 1px solid black; border-radius: 15px; padding: 2px 10px; display: inline-block;">INITIAL</div>																
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM08</div>	Designate the processor checking the ID Code on the DISA.  Assign the ringing cadence on DISA call.	(1) 217 (2) 1 ◀ : AP (PJ-AP02)  (1) 180 (2) 0/1 ◀ : 0.2 sec. ON, 0.2 sec. OFF, 0.2 sec. ON, 0.2 sec. OFF, 0.2 sec. ON, 0.2 sec. OFF/As per the data of Command 35, YY=33														
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CMD5</div>	For the programming procedure of this command, refer to AUTHORIZATION CODE.															
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM30</div>	Assign the data for DISA to the required trunks when providing DISA to the C.O. call.	<ul style="list-style-type: none"> <li>• YY=02 (Terminating System in Day Mode)</li> <li>• YY=03 (Terminating System in Night Mode)</li> </ul> (1) Trunk No. (000-255) (2) 16: DISA  <ul style="list-style-type: none"> <li>• YY=30 (Handling of busy/not available DISA destination in Day mode)</li> <li>• YY=31 (Handling of busy/not available DISA destination in Night mode)</li> </ul> (1) Trunk No. (000-255) <table style="margin-left: 20px; border-left: 1px solid black; border-right: 1px solid black; border-collapse: collapse;"> <tr><td style="padding: 2px 5px;">00:</td><td style="padding: 2px 5px;">C.O. Line Release</td></tr> <tr><td style="padding: 2px 5px;">01:</td><td style="padding: 2px 5px;">Forwarded to TAS</td></tr> <tr><td style="padding: 2px 5px;">03:</td><td style="padding: 2px 5px;">Forwarded to ATTCON</td></tr> <tr><td style="padding: 2px 5px;">(2) 04:</td><td style="padding: 2px 5px;">Forwarded to DIT Station assigned by CM30, YY=0.</td></tr> <tr><td style="padding: 2px 5px;">06:</td><td style="padding: 2px 5px;">DT Connection for redial</td></tr> <tr><td style="padding: 2px 5px;">08:</td><td style="padding: 2px 5px;">C.O. Line Release</td></tr> <tr><td style="padding: 2px 5px;">15:</td><td style="padding: 2px 5px;">C.O. Line Release</td></tr> </table>	00:	C.O. Line Release	01:	Forwarded to TAS	03:	Forwarded to ATTCON	(2) 04:	Forwarded to DIT Station assigned by CM30, YY=0.	06:	DT Connection for redial	08:	C.O. Line Release	15:	C.O. Line Release
00:	C.O. Line Release															
01:	Forwarded to TAS															
03:	Forwarded to ATTCON															
(2) 04:	Forwarded to DIT Station assigned by CM30, YY=0.															
06:	DT Connection for redial															
08:	C.O. Line Release															
15:	C.O. Line Release															
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">A</div>																

## DIRECT INWARD SYSTEM ACCESS (DISA) (CONT'D)

A	DESCRIPTION	DATA
CM35	Assign the data for digit conversion on DID calls to the Route No. assigned by CM30, YY=00 when providing DISA to the DID call.	<ul style="list-style-type: none"> <li>• YY=18</li> <li>(1) Trunk Route No. (00-63)</li> <li>(2) 0/1 ◀ : To be provided/Not to be provided</li> </ul>
CM76	In the case that data for CM35, YY=18 is set to 0, assign the data for converting the received digit to DISA.	<ul style="list-style-type: none"> <li>• Y=0 (Day Mode)</li> <li>• Y=1 (Night Mode)</li> <li>(1) X-XXXX: Station No. received</li> <li>(2) D16: DISA</li> </ul>
CM42	Specify the number of digits for ID Code on DISA.	<ul style="list-style-type: none"> <li>(1) 13</li> <li>(2) 01-10 (Maximum Number of Digits). If Check Code is provided, the maximum number of digits is limited to eight (8). If no data is set, 10 digits will be applied.</li> </ul>
<u>END</u>		

**Note:** Up to 1,000 DISA ID Codes combined with Authorization Code and Forced Account Code can be set per system.

## DIRECT INWARD SYSTEM ACCESS (DISA) (CONT'D)

For accessing the Voice Recording Memory Card via DISA, add the following programming.

START	DESCRIPTION	DATA
START		
CM10	Assign the LEN to each Voice Recording Memory Card.	(1) LEN: Even No. out of 0000 – 0511 (2) EB000 – EB127: Voice Recording Memory Card ( For PIM0...EB000 – EB031 ) ( For PIM1...EB032 – EB063 ) ( For PIM2...EB064 – EB095 ) ( For PIM3...EB096 – EB127 )
CM2A	Assign the Class of Service for Voice Recording Memory Card access to the required ID Code Serial No., when providing the DISA without Application Processor (PJ-AP02).	• CM2A, Y=7 (1) XX: ID Code Serial No. (00-07) assigned by CM2A, Y=5 (2) XXXX └─ Service Rest. Class (B) (00-15) └─ Service Rest. Class (A) (00-15)
CM15		• CM15, YY=33 (1) Service Rest. Class (A) (00-15) assigned by CM2A, Y=7 (2) 1 ◀ : Allowed
CMD5	Assign the Class of Service for Voice Recording Memory Card access to the required ID Code Serial No., when providing the DISA with Application Processor (PJ-AP02).	• CMD5, Y=3 (1) X-X--X: ID Code (Max Number of digits specified by CM42-13) (2) 201XX0000 └─ Service Rest. Class (A) (00-15)
CM15		• CM15, YY=33 (1) Service Rest. Class (A) (00-15) assigned by CMD5, Y=3 (2) 1 ◀ : Allowed
CM20	To record and replay a message from outside user, assign the Voice Recording Memory Card access code respectively.	• Y=03 (Numbering Plan Group 0-3) (1) X-XXX: Access Code └─ A00: Record (2) └─ A01: Replay
A		

### HARDWARE REQUIRED

PJ-AP02 Board x 1 (If 1,000 codes and/or Check Code is provided.)  
 PK-ME01 Card x n (n=1-128) (If Voice Recording Memory Card is required for the DISA.)

## DIRECT INWARD TERMINATION (DIT)

### GENERAL DESCRIPTION

This feature automatically routes incoming network exchange calls directly to a preselected station without Attendant assistance. The call can then be processed by the called party. Three-party Conference, Call Transfer, etc., are handled in the same manner as any normal trunk call.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

No manual operation is required.

### SERVICE CONDITIONS

1. Bothway trunks can be used for *Direct Inward Termination*, but incoming only trunks are recommended. This minimizes DIT calls meeting busy conditions.
2. If there is no answer at a station, the calling party will continuously receive ringback tone. *Call Forwarding-No Answer* will occur if set or the calling party will be transferred to the Attendant or *Trunk Answer any Station* by system programming if enabled.
3. Once a call is answered, it can be processed by the called station in the same way as any normal trunk call.
4. If the DIT is assigned to a pilot number of a *Station Hunting* group or *Uniform Call Distribution (UCD)* group, the incoming call will follow the hunt group station assignment. If the station is *Call Forwarded*, the incoming call is connected to the *Call Forward* target station according to the types of *Call Forwarding* set and the condition of the DIT station.
5. This feature is normally utilized where direct-in service is required on a limited basis. The number of stations thus serviced is limited to the number of trunks available for *Direct Inward Termination*.
6. Only one trunk can be arranged for *Direct Inward Termination* to a particular station. However, a single trunk can be arranged to go to multiple stations.
7. When the *Direct Inward Termination* station is busy, the call can be preprogrammed to either go to the Attendant, *Trunk Answer any Station*, or *Camp-On*. During night mode, the call can be preprogrammed to *Camp-On* or go directly to *Trunk Answer any Station*.

## DIRECT INWARD TERMINATION (DIT) (CONT'D)

### PROGRAMMING

<u>START</u>	<u>DESCRIPTION</u>	<u>DATA</u>
START		
CM30	Assign the data for terminating system in Day Mode and Night Mode of the trunk respectively.	<ul style="list-style-type: none"> <li>• YY=02 (Day Mode)/YY = 03 (Night Mode)</li> <li>(1) Trunk No. (000 - 255)</li> <li>(2) 04: Direct-In Termination</li> </ul>
	Assign the station number to be terminated by DIT in Day Mode and Night Mode respectively.	<ul style="list-style-type: none"> <li>• YY=04 (Day Mode)/YY = 05 (Night Mode)</li> <li>(1) Trunk No. (000 - 255)</li> <li>(2) X-XXXX: Station No.</li> </ul>
	Assign the destination to be rerouted when the DIT Station is busy/not available in Day Mode and Night Mode respectively.	<ul style="list-style-type: none"> <li>• YY=13 (Day Mode)/YY=14 (Night Mode)</li> <li>(1) Trunk No. (000 - 255)</li> <li>(2)               <ul style="list-style-type: none"> <li>01: TAS BUZZER</li> <li>04: HA-610Z/SN610 ATTCON</li> <li>06: Automatic Camp-On</li> <li>15 ◀: Waiting until the DIT Station becomes idle.</li> </ul> </li> </ul>
	Assign the destination to be rerouted for unanswered DIT call in Day Mode and Night Mode respectively.	<ul style="list-style-type: none"> <li>• YY=15 (Day)/YY=16 (Night)</li> <li>(1) Trunk No. (000 - 255)</li> <li>(2)               <ul style="list-style-type: none"> <li>01: HA-610Z/SN610 ATTCON</li> <li>03: TAS</li> <li>15: To be continued DIT</li> </ul> </li> </ul>
CM41	Specify the timing for unanswered call to DIT destination.	<ul style="list-style-type: none"> <li>• Y=0</li> <li>(1) 01</li> <li>(2) 01 - 30 (Timer Data for 4 - 120 seconds)</li> </ul> <p>If no data is set, the default setting is 32 - 36 seconds.</p>
CM08	Set the ringing cadence on DIT call.	<ul style="list-style-type: none"> <li>(1) 179</li> <li>(2) 0/1 ◀ : As per the data assigned by Command 35, YY=33 /0.4 sec. ON, 0.2 sec. OFF, 0.4 sec. ON, 2 sec. OFF.</li> </ul>
END		

## DIRECT OUTWARD DIALING (DOD)

### GENERAL DESCRIPTION

This feature permits any station to gain access to the exchange network by dialing an access code and receiving new dial tone. The user may then proceed to dial an exchange network number.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

To place an outside call:

From any station:

1. Go off-hook and receive extension dial tone.
2. Dial trunk access code.
3. Receive outside dial tone.
4. Dial desired outside number.

From a Multiline Terminal:

1. Press **SPKR** key and receive extension dial tone.
2. Press trunk appearance line key.
3. Receive outside dial tone.
4. Dial desired outside number.

### SERVICE CONDITIONS

1. Outgoing restriction can be assigned on an individual station basis. Refer to *Class Of Service*.
2. *Code Restriction* may be applied to *Direct Outward Dialing* (DOD).
3. Various types of trunks (FX, WATS, Tie, DID, etc.) can be accessed by stations using this feature.
4. The trunk group access code can be one to three digits.
5. Use of the DOD feature can be denied on a per-trunk group basis when one of the following restrictions is active on the originating station line.
  - Fully restricted stations: *Direct Outward Dialing* attempts are routed to reorder tone when the station is fully restricted.
  - Restriction from outgoing calls: A station assigned this feature is denied the ability to access preselected trunk groups. Attempts are routed to reorder tone.
  - *Code Restriction*: Levels of this feature restrict unauthorized stations the ability to complete outgoing Central Office or foreign exchange (FX) calls to specified areas or office codes within an area. Refer to the *Least Cost Routing* feature. A station with Toll Denial is routed to reorder tone when a restricted number is dialed after the trunk access code has been dialed.

## DIRECT OUTWARD DIALING (DOD) (CONT'D)

6. Exchange network call completion using the *Hotline Outside* feature is permitted. The originating station is automatically routed to the assigned trunk and the digits are dialed automatically when the station goes off-hook.

### PROGRAMMING

START	DESCRIPTION	DATA
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM10</div>	Assign the Trunk Numbers to the required LENSs.	(1) LEN (0000–0511) (2) Trunk No. (D000–D255)
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM30</div>	Assign the data for Direct Outward Dialing to the Trunk No. assigned by CM10.  <b>Note:</b> <i>As for the Resident System Program, refer to Chapter 7 of System Programming Manual.</i>	<ul style="list-style-type: none"> <li>• YY=00 (Trunk Route Allocation)                             <ul style="list-style-type: none"> <li>(1) Trunk No. (000–255)</li> <li>(2) Route No. (00–63) <b>Note</b></li> </ul> </li> <li>• YY=01 (Tenant Allocation)                             <ul style="list-style-type: none"> <li>(1) Trunk No. (000–255)</li> <li>(2) Tenant No. (00–63) <b>(00)</b></li> </ul> </li> <li>• YY=08 (Restriction on Night Mode)                             <ul style="list-style-type: none"> <li>(1) Trunk No. (000–255)</li> <li>(2) 0/1 ◀ : Restricted/Allowed</li> </ul> </li> </ul>
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">A</div>		



## DIRECT OUTWARD DIALING (DOD) (CONT'D)

A	DESCRIPTION	DATA
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM35</div>	<p>Assign the data for Direct Outward Dialing to the Route No. assigned by CM30, YY = 00.</p> <p><b>Note:</b> <i>As for the Resident System Program, refer to Chapter 7 of System Programming Manual.</i></p>	<ul style="list-style-type: none"> <li>• YY = 00 (Kind of Route)               <ul style="list-style-type: none"> <li>(1) Trunk Route No. (00 – 63)</li> <li>(2) {                   <ul style="list-style-type: none"> <li>00: DDD</li> <li>01: FX</li> <li>02: WATS</li> <li>03: CCSA</li> </ul> </li> </ul> </li>   <li>• YY = 01 (Type of Signal)               <ul style="list-style-type: none"> <li>(1) Trunk Route No. (00 – 63)</li> <li>(2) {                   <ul style="list-style-type: none"> <li>2: DP</li> <li>4: DTMF</li> </ul> </li> </ul> </li>   <li>• YY = 02 (OG/IC)               <ul style="list-style-type: none"> <li>(1) Trunk Route No. (00 – 63)</li> <li>(2) {                   <ul style="list-style-type: none"> <li>2: Outgoing</li> <li>3 ◀ : Bothway</li> </ul> </li> </ul> </li>   <li>• YY = 04 (Answer Signal Condition)               <ul style="list-style-type: none"> <li>(1) Trunk Route No. (00 – 63)</li> <li>(2) {                   <ul style="list-style-type: none"> <li>1: Answer Signal by</li> <li>2: Polarity Reversal</li> <li>7 ◀ : No Answer Signal</li> </ul> </li> </ul> <p>In case of no Answer Signal, system recognizes the answer in timing set by CM 41-03.</p> </li>   <li>• YY = 05 (Release Signal Condition)               <ul style="list-style-type: none"> <li>(1) Trunk Route No. (00 – 63)</li> <li>(2) {                   <ul style="list-style-type: none"> <li>0: No Release Signal from C.O.</li> <li>1 ◀ : Release Signal from C.O.</li> </ul> </li> </ul> </li>   <li>• YY = 08 (Dial Pulse Sending)               <ul style="list-style-type: none"> <li>(1) Trunk Route No. (00 – 63)</li> <li>(2) 3 ◀ : To be sent</li> </ul> </li>   <li>• YY = 09 (Incoming Connection Signalling)               <ul style="list-style-type: none"> <li>(1) Trunk Route No. (00 – 63)</li> <li>(2) {                   <ul style="list-style-type: none"> <li>01: Ring Down/Ground Start</li> <li>15 ◀ : Ring Down/Loop Start</li> </ul> </li> </ul> </li> </ul>
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">B</div>		

## DIRECT OUTWARD DIALING (DOD) (CONT'D)

	DESCRIPTION	DATA
<div style="border: 1px solid black; width: 20px; height: 20px; margin: 0 auto; text-align: center; line-height: 20px;">B</div> <div style="border: 1px solid black; width: 60px; height: 25px; margin: 5px auto; text-align: center;">CM35</div>	<p>According to the characteristics of each C.O. line, assign the data for DP/DTMF Sender to each route.</p> <p>For the details of the command, refer to Data Programming Manual.</p> <p><b>Note:</b> <i>As for the Resident System Program, refer to Chapter 7 of System Programming Manual.</i></p>	<ul style="list-style-type: none"> <li>• YY = 20 (Sender Start Condition)</li> <li>• YY = 21 (Sender Prepause Timing)</li> <li>• YY = 23 (DP-Inter Digital Pause)</li> <li>• YY = 24 (DTMF-Inter Digital Pause)</li> <li>• YY = 25 (DP-Make Ratio)</li> <li>• YY = 26 (DTMF Signal Width)</li> <li>• YY = 45 (DP Sender Release Timing)</li> <li>• YY = 46 (DTMF Sender Release Timing)</li> </ul>
<div style="border: 1px solid black; width: 60px; height: 25px; margin: 5px auto; text-align: center;">CM41</div>	<p>Specify the timing for Interdigital Pause on outgoing C.O. call.</p>	<ul style="list-style-type: none"> <li>• Y = 0               <ul style="list-style-type: none"> <li>(1) 27</li> <li>(2) 03-14 (Timer Data for 3-14 seconds)</li> </ul> <p style="margin-left: 40px;">If no data is set, 7 seconds is applied.</p> </li> </ul>
<div style="border: 1px solid black; width: 60px; height: 25px; margin: 5px auto; text-align: center;">CM20</div>	<p>Assign the access code to each route.</p>	<ul style="list-style-type: none"> <li>• Y = 0-3 (Numbering Plan Group 0-3)               <ul style="list-style-type: none"> <li>(1) X-XXX: Access Code</li> <li>(2) 100-163: Route No. (00-63)</li> </ul> </li> </ul>
<div style="border: 1px solid black; width: 60px; height: 25px; margin: 5px auto; text-align: center;">CM90</div>	<p>Assign the trunk appearance line key on a Multiline Terminal, if provided.</p>	<ul style="list-style-type: none"> <li>• YY = 00               <ul style="list-style-type: none"> <li>(1) Primary Extension No. + <span style="border: 1px solid black; display: inline-block; width: 15px; height: 15px; vertical-align: middle;"></span> + Key No.</li> <li>(2) DXXX (Trunk No. 000-255)</li> </ul> </li> </ul> <p><b>Note:</b> <i>As for the Resident System Program, refer to Chapter 7 of System Programming Manual.</i></p>
<div style="text-align: center; margin-top: 10px;"><u>END</u></div>		

**Note:** *For the Trunk Restriction Class, refer to Class of Service Individual.*

## DIRECT STATION SELECTION/BUSY LAMP FIELD (DSS/BLF) CONSOLE

### GENERAL DESCRIPTION

This feature allows an EDE-30-2 unit associated with a Multiline Terminal to be used as a *Direct Station Selection/Busy Lamp Field (DSS/BLF) Console*. When the buttons on the EDE-30-2 unit are programmed for Direct Station Selection (DSS) buttons, up to thirty (30) stations can be directly accessed in addition to those already appearing on the Multiline Terminal. Busy status for each station is indicated by a red LED associated with each button.

### OPERATING PROCEDURE

To initiate a call:

1. Press the desired **DSS** key,
  2. Lift handset and converse when party answers.
- or
1. Lift handset and receive dial tone.
  2. Press the desired **DSS** key.
  3. Converse when party answers.

To set and cancel Message Waiting (MW) or Do Not Disturb (DND):

1. Press **MW** or **DND** key. When stations are currently in MW or DND their associated LED will light green.
2. Press desired **DSS** key(s) to set or cancel. Lit LED indicates MW or DND has been set.
3. Press **MW** or **DND** key again.

### SERVICE CONDITIONS

1. A Multiline Terminal can be equipped with as many DSS/BLF Console units as necessary.
2. The amount of EDE-30-2 units is limited to eight units per Port Interface Module (PIM) for a system total of 32 units.
3. A maximum of 30 *Direct Station Selection* keys can be assigned on each *DSS/BLF Console*.
4. When a call is made via the *DSS/BLF Console*, the associated Multiline Terminal's LCD displays the same indication that is provided for internal calls made via the line keys of the Multiline Terminal.
5. Feature Access keys cannot appear on the *DSS/BLF Console*.
6. When the EDE-30-2 unit is assigned as a *DSS/BLF Console*, the console can be provided with a Message Wait (MW) key, a Do Not Disturb (DND) key, and a Night Transfer (NT) key. Using the **MW** key converts the *DSS/BLF Console* into a Message Wait Console. Using the **DND** key converts the *DSS/BLF Console* into Do Not Disturb Console. Using the **NT** key places the associated tenant into night mode.
7. A 2DLC board is required when an EDE-30-2 unit is installed.

## DIRECT STATION SELECTION/BUSY LAMP FIELD (DSS/BLF) CONSOLE (CONT'D)

### PROGRAMMING

START	DESCRIPTION	DATA
CM10	Assign the DSS Console Number to its associated LEN.	(1) 0000-0511 (LEN) (2) E100-E131 For PIM0: E100-E107 For PIM1: E108-E115 For PIM2: E116-E123 For PIM3: E124-E131
CM96	Assign single-line station, Multiline Terminal, or HA-610Z/SN610 ATTCON working in conjunction with the DSS Console.	(1) 00-31 (DSS Console Number: Last two digits of E100-E131 assigned by CM10) (2) X-XXXX (Station Number/Primary Extension No. of Multiline Terminal) E000-E007 (HA-610Z/SN610 ATTCON No.)
CM97	Assign the station and trunk numbers to the keys on each DSS Console.	(1) 00-31 (DSS Console Number) + [ ] + 00-29 (DSS Key Number) (2) X-XXXX (Station/Data Station Number) DXXX └─ 000-255 (Trunk Number)
	Assign Do Not Disturb and Message waiting function key on each DSS Console.	(1) 00-31 (DSS Console Number) + [ ] + Function key No. (57-59) (2) F1049: Message Waiting Set/Reset F1053: Do Not Disturb Set/Reset
CM08	Specify the busy indication on the BLF of the DSSCON by Station Base or Extension Base.	(1) 269 (2) 0/1 ◀ : Station Base /Extension Base
END		

### HARDWARE REQUIRED

DSS Console (EDE-30-2)  
 PK-2DLCA Card (Two DSS Consoles can be accommodated per card.)

## DISTINCTIVE RINGING

### GENERAL DESCRIPTION

This feature provides Distinctive Ringing patterns to the station so that the station user can distinguish between internal and external incoming calls.

### OPERATING PROCEDURE

No manual operation is required.

### SERVICE CONDITIONS

1. Ringing pattern for incoming internal calls: 1 second on, 2 seconds off  
or  
2 seconds on, 4 seconds off.
2. Ringing pattern for incoming external calls: 1 second on, 2 seconds off  
or  
2 seconds on, 4 seconds off.  
or  
0.4 seconds on, 0.4 seconds off  
0.4 seconds on, 2.0 seconds off
3. Ringing pattern for *Call Back, Trunk Queuing - Outgoing, and Executive Calling*: 0.5 seconds on, 0.5 seconds off  
0.5 seconds on, 1.5 seconds off.
4. All recalls (to Multiline Terminals): 0.5 seconds on, 0.5 seconds off  
0.5 seconds on, 0.5 seconds off.
5. When calling a third station (three-party *Conference, Consultation Hold, etc.*), the ringing signal sent to the called station is dependent upon the type of call placed on Hold. If the call is a trunk call, external ringing is provided, if the call is an extension call, internal ringing is provided.
6. There is a ring selector switch located on the bottom of Multiline Terminals used to select any one of three different ring frequencies. This switch can be enabled (as set in default) or disabled in programming on a system basis. Ring frequencies can be assigned in programming through station *Class of Service* when the ring selector switch is disabled.
7. The ringing pattern for incoming internal calls is programmable on a system basis.
8. The ringing pattern for incoming external calls is programmable on per-trunk-route basis.
9. The ringing pattern of recalls to Single-Line Telephones is the same pattern as that of the original call.

## DISTINCTIVE RINGING (CONT'D)

### PROGRAMMING

<u>START</u>	<u>DESCRIPTION</u>	<u>DATA</u>																		
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM08</div>	Select the ringing pattern on internal and Direct-In Termination Call, Direct Inward Dialing, DISA, and Automated Attendant.	(1) 138 (For Internal) (2) 0/1 ◀ : 2 sec. ON, 4 sec. OFF/1 sec. ON, 2 sec. OFF.  (1) 179 (For DIT Call) (2) 0/1 ◀ : As per CM35, YY = 33 /0.4 sec ON, 0.2 sec OFF, 0.4 sec ON, 2 sec OFF.  (1) 180 (For DID, DISA and Automated Attendant) (2) 0/1 ◀ : 0.2 sec. ON, 0.2 sec. OFF, 0.2 sec. ON, 0.2 sec. OFF/As per the data CM35, YY = 33																		
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM35</div>	Select the ringing pattern on external call.  <b>Note:</b> <i>For incoming calls to a Trunk Direct Appearance key on Multiline Terminal, the special ringing, 0.2 sec. ON, 0.2 sec. OFF, 0.2 sec. ON, 0.2 sec. OFF, will be applied.</i>	<ul style="list-style-type: none"> <li>• YY = 33</li> <li>(1) Trunk Route No. (00 – 63)</li> <li>(2) {                             <table style="display: inline-table; vertical-align: middle; border-left: 1px solid black; border-right: 1px solid black; border-collapse: collapse;"> <tr> <td style="padding: 0 5px;">0:</td> <td style="padding: 0 5px;">0.4 sec. ON, 0.2 sec. OFF</td> <td rowspan="4" style="font-size: 2em; vertical-align: middle; padding: 0 5px;">}</td> <td rowspan="4" style="vertical-align: middle;">Note</td> </tr> <tr> <td></td> <td style="padding: 0 5px;">0.4 sec. ON, 2.0 sec. OFF</td> </tr> <tr> <td>1:</td> <td style="padding: 0 5px;">0.4 sec. ON, 0.2 sec. OFF</td> </tr> <tr> <td></td> <td style="padding: 0 5px;">0.4 sec. ON, 2.0 sec. OFF</td> </tr> <tr> <td>2:</td> <td style="padding: 0 5px;">1 sec. ON, 2 sec. OFF</td> <td></td> <td></td> </tr> <tr> <td>3 ◀:</td> <td style="padding: 0 5px;">2 sec. ON, 4 sec. OFF</td> <td></td> <td></td> </tr> </table> </li> </ul>	0:	0.4 sec. ON, 0.2 sec. OFF	}	Note		0.4 sec. ON, 2.0 sec. OFF	1:	0.4 sec. ON, 0.2 sec. OFF		0.4 sec. ON, 2.0 sec. OFF	2:	1 sec. ON, 2 sec. OFF			3 ◀:	2 sec. ON, 4 sec. OFF		
0:	0.4 sec. ON, 0.2 sec. OFF	}	Note																	
	0.4 sec. ON, 2.0 sec. OFF																			
1:	0.4 sec. ON, 0.2 sec. OFF																			
	0.4 sec. ON, 2.0 sec. OFF																			
2:	1 sec. ON, 2 sec. OFF																			
3 ◀:	2 sec. ON, 4 sec. OFF																			
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM08</div>	Select the ringing pattern on station calls with a trunk line placed in Consultation Hold.	(1) 137 (2) { <table style="display: inline-table; vertical-align: middle; border-left: 1px solid black; border-right: 1px solid black; border-collapse: collapse;"> <tr> <td style="padding: 0 5px;">0:</td> <td style="padding: 0 5px;">Change from Internal Ringing (CM08-138) to External Ringing (CM35, YY = 33) when transferring a call</td> </tr> <tr> <td>1 ◀:</td> <td style="padding: 0 5px;">External Ringing (CM35, YY = 33)</td> </tr> </table>	0:	Change from Internal Ringing (CM08-138) to External Ringing (CM35, YY = 33) when transferring a call	1 ◀:	External Ringing (CM35, YY = 33)														
0:	Change from Internal Ringing (CM08-138) to External Ringing (CM35, YY = 33) when transferring a call																			
1 ◀:	External Ringing (CM35, YY = 33)																			
<u>END</u>																				

## DO NOT DISTURB

### GENERAL DESCRIPTION

This feature restricts incoming calls to a station and can be set by an individual station or from the *Attendant Console*. Placing a station in *Do Not Disturb (DND)* does not prevent a station from originating a voice or data call or from receiving a data call. This feature also allows a station to ensure privacy from telephone interruptions while on an outgoing call. Additionally, the *Attendant Console* can place a group of stations in the *Do Not Disturb* condition.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

From a Single-Line Telephone or a Multiline Terminal:

To set:

1. Lift handset and receive dial tone.
2. Dial *Do Not Disturb* feature access code and receive service set tone.
3. Restore handset.

To cancel:

1. Lift handset and receive dial tone.
2. Dial *Do Not Disturb* cancel code and receive service set tone.
3. Restore handset.

From a Multiline Terminal:

To set:

1. Press **SPKR** key and receive dial tone.
2. Press the **DND** function key and the associated LED lights. If equipped with an LCD the display will indicate SET.
3. Press **SPKR** key.

To cancel:

1. Press **SPKR** key and receive dial tone.
2. Press the **DND** function key and the associated LED goes out. If equipped with an LCD the display will indicate CNCL.
3. Press **SPKR** key.

From the Attendant Console:

To set an individual station in DND:

1. Dial the desired station number.
2. Press the **DD** key and the associated LED flashes.
3. Press the **START** key. The DD LED lights steady and service set tone is received.
4. Press the **RELEASE** key.

To cancel an individual station in DND:

1. Dial the desired station number.
2. Press the **DD** key and the associated LED flashes.
3. Press the **RESET** key and the DD LED goes out.

## DO NOT DISTURB (CONT'D)

To set a group of stations in DND:

1. Press the **DD** key and the associated LED flashes.
2. Press the **START** key and the DD LED lights steady.
3. The designated group is now in DND.

To cancel a group of stations in DND:

1. Press the **DD** key and the associated LED flashes.
2. Press the **RESET** key and the DD LED goes out.
3. The designated group is no longer in DND.

To call a station that set DND (Attendant Only):

1. Press an idle **LOOP** key.
2. Dial station number and the DDOVR LED flashes and reorder tone is received.
3. Press the **DDOVR** key.
4. Station will ring.

### SERVICE CONDITIONS

1. Calls to stations that are in *Do Not Disturb* will receive reorder tone or, on a tenant basis, can be assigned to transfer to the Attendant or a pre-designated station.
2. The station in *Do Not Disturb* can originate calls in the normal manner.
3. *Call Forwarding* can be set to a station in *Do Not Disturb*.
4. A *Do Not Disturb* station will be omitted from the *Station Hunting* chain.
5. The *Do Not Disturb* station can cancel DND even though the condition was set by the Attendant.
6. Verification of stations in *Do Not Disturb* is only possible from the *Attendant Console*. Multiline Terminals with LCD and a DND key assigned can verify their own DND setting.
7. The ability to set DND can be controlled on a per-station or a per-system basis.
8. This feature can only be set or canceled while the station is receiving internal dial tone.
9. When a Multiline Terminal is set in DND, calls to the primary extension and secondary extensions will not ring. Trunks programmed to ring will not do so while DND is set, but flashing LED indications are still provided. DND will not deny an *Executive Override*.
10. Only the Attendant has the ability to place a group of stations in *Do Not Disturb*. There is only one group available and the stations within the group are programmed in system data. There is no limitation on the number of stations in the group.
11. A station included in a DND group, retains the ability to place their particular station in DND.
12. When the Attendant places a group in DND, an individual station within the group can cancel the DND setting to their station.
13. A feature access line key can be assigned on Multiline Terminals for DND set and cancel.
14. If the DND key is pressed while connected to a trunk or station, the following interruptions are denied until that called is completed:
  - *Attendant Camp-On*
  - *Attendant Override*
  - *Boss Secretary Override*
  - *Camp-On*
  - *Executive Override*
15. Refer also to the *Data Do Not Disturb* feature, and the *Hotel/Motel Do Not Disturb* feature.



## DO NOT DISTURB (CONT'D)

### PROGRAMMING

START	DESCRIPTION	DATA
START CM12 CM15	Assign the Class of Service for Do Not Disturb to the required stations.	<ul style="list-style-type: none"> <li>• CM12, YY = 02: Service Rest. Class (A) (00 - 15 ◀ )</li> <li>• CM15, YY = 19               <ol style="list-style-type: none"> <li>(1) Service Rest. Class (A) (00 - 15) assigned by CM12, YY = 02</li> <li>(2) 1 ◀ : Allowed</li> </ol> </li> </ul>
CM13	Assign the group of stations in Do Not Disturb. Do Not Disturb is set to these stations assigned by this command simultaneously by operation from Attendant Console.	<ul style="list-style-type: none"> <li>• YY = 00               <ol style="list-style-type: none"> <li>(1) X - XXXX (Station No.)</li> <li>(2) 0: To be provided</li> </ol> </li> </ul>
CM20	Assign the access code for Do Not Disturb Set/Cancel	<ul style="list-style-type: none"> <li>• Y = 0 - 3 (Numbering Plan Group 0 - 3)               <ol style="list-style-type: none"> <li>(1) X - XXX: Access Code (*8, #8)</li> <li>(2) { 022: Set 023: Cancel</li> </ol> </li> </ul>
CM51	Assign the destination of call transfer when the called station is set to Do Not Disturb.	<ul style="list-style-type: none"> <li>• YY = 10               <ol style="list-style-type: none"> <li>(1) 00 - 63 (Tenant No.)</li> <li>(2) { X - XXXX (Station No.) E000 (HA-610Z/SN610 ATTCON)</li> </ol> </li> </ul>
CM46	If the Attendant Console is assigned as destination by CM51, assign Call Forwarding - Intercept (ICPT) key to the console.	<ol style="list-style-type: none"> <li>(1) Key No. (00 - 11)</li> <li>(2) 66: Call Forwarding - Intercept Key</li> </ol>
CM90	Assign DND function key to a Multiline Terminal, if provided.	<ul style="list-style-type: none"> <li>• YY = 00               <ol style="list-style-type: none"> <li>(1) Primary Extension No. + <span style="border: 1px solid black; display: inline-block; width: 15px; height: 15px; vertical-align: middle;"></span> + Key No.</li> <li>(2) F0022: Do Not Disturb Set/Reset</li> </ol> </li> </ul>
CM47	Assign DND and DNDOVR function keys to HA-610Z Attendant Console. <div style="text-align: center; margin-top: 5px;"> <span style="border: 1px solid black; border-radius: 15px; padding: 2px 10px;">INITIAL</span> </div>	<ol style="list-style-type: none"> <li>(1) Key No. (00 - 11)</li> <li>(2) { 02: DND 03: DND Override 04: RESET</li> </ol>
CM90	Assign DND and DNDOVR function keys to SN610 ATTCON.	<ul style="list-style-type: none"> <li>• YY = 00               <ol style="list-style-type: none"> <li>(1) ATTCON No. + <span style="border: 1px solid black; display: inline-block; width: 15px; height: 15px; vertical-align: middle;"></span> + Key No.</li> <li>(2) { F6102: DND F6103: DND Override F6104: RESET</li> </ol> </li> </ul>
A		

**DO NOT DISTURB (CONT'D)**

DESCRIPTION	DATA
-------------	------

A

CM12

Specify the Call Forwarding - Busy Line/Station Hunting for a station set for Do Not Disturb.

(1) 240  
 (2) { 0: Available  
 1: Not Available

For the system with Multiple-Tenant feature, specify the destination of a call transferred in CM51, YY=10 for the tenant of the calling or called station.

(1) 241  
 (2) { 0: Tenant or called station  
 1: Tenant of calling station

END

## DUAL HOLD

### GENERAL DESCRIPTION

This feature permits a station user who is placed on Hold by another station to place that station on Hold also.

### OPERATING PROCEDURE

Internal party connection from a Multiline Terminal:

1. Station A presses the **HOLD** key and Station B is placed on hold.
2. Station B presses the **HOLD** key and Station A is placed on hold.
3. Dual Hold is now in progress.

### SERVICE CONDITIONS

1. The party who placed the other party on *Hold* first will not receive a recall until the other party releases the *Dual Hold*.
2. This feature is available for extension calls including *Intercom* calls.
3. When two Multiline Terminals activate this feature, the recall timer begins when the second station goes on Hold (the first hold is no longer timed). When the timer expires, the second station is recalled and upon answering initiates a recall to the first station.

### PROGRAMMING

<u>START</u>	<u>DESCRIPTION</u>	<u>DATA</u>
<div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">CM12</div> <div style="border: 1px solid black; padding: 2px;">CM15</div>	Assign the Class of Service for this feature to the required station.	<ul style="list-style-type: none"> <li>• CM12, YY = 02               <ul style="list-style-type: none"> <li>(1) X-XXXX: Station Number</li> <li>(2) XXXX                   <ul style="list-style-type: none"> <li>Service Restriction Class B (00 - 15 ◀)</li> </ul> </li> </ul> </li> <li>• CM15, YY = 64               <ul style="list-style-type: none"> <li>(1) XX: Service Restriction Class B (00 - 15) assigned by CM12, YY = 02.</li> <li>(2) 1 ◀: Allowed</li> </ul> </li> </ul>
<u>END</u>		

## E&M TIE LINE ACCESS

### GENERAL DESCRIPTION

This feature allows any station user dial access or direct access to an E&M Tie Line.

### OPERATING PROCEDURE

To dial access an E&M Tie Line:

1. Lift handset and receive dial tone.
2. Dial E&M Tie Line access code.
3. Dial desired number.

To directly access an E&M Tie Line:

1. Lift handset or press SPKR key and receive dial tone.
2. Press line key assigned E&M Tie Line.
3. Dial desired number.

### SERVICE CONDITIONS

1. *E&M Tie Line Access* may be denied to individual stations through *Class of Service*.
2. When a power failure occurs (without reserve power backup), all existing *E&M Tie Line* connections and access to *E&M Tie Lines* are lost.
3. Each tie line group can be programmed for both rotary and pushbutton address signaling (incoming and/or outgoing).
4. The NEAX1400 IMS can only be equipped with dial repeating tie lines. Immediate start, delay dial, or wink-start signaling is available.
5. When a trunk route access code is dialed by a station user, the tie line route is used to index a trunk route restriction table to determine if the call attempt is allowed. If access is restricted, reorder tone is provided.
6. The system can be programmed to supply second dial tone on incoming *E&M Tie Line Access*.
7. Both two- and four-wire, Type I and Type V *E&M Tie Lines* can be connected.
8. When four-wire *E&M Tie Lines* are connected, the following pad control can be assigned:  
Station to Tie Line - 0 to -12 db.  
CO to Tie Line - 0 to -4 db.  
Tie Line to Tie Line - 0 to -4 db.
9. An ODT board is required for 4-wire *E&M Tie Line* interface. A 2EMTB board is required for two-wire *E&M Tie Line* interface.

## E&M TIE LINE ACCESS (CONT'D)

### PROGRAMMING

START	DESCRIPTION	DATA
CM10	Assign Trunk Number to the required LENS. For PK-2EMTB/the PK-ODTC Card, a Trunk Number should be assigned to even LENS of each slot.	(1) LEN (0000 – 0511) (2) D000 – D255 (Trunk No.)
CM20	Assign Trunk Route access code to each Tie Line Trunk route.	<ul style="list-style-type: none"> <li>• Y = 0 – 3 (Numbering Plan Group 0 – 3)</li> <li>(1) X – XXX: Access Code (81/82)</li> <li>(2) 100 – 163: Trunk Route 00 – 63 (01/02)</li> </ul>
CM30	Assign Trunk Route and Tenant number to each Trunk.	<ul style="list-style-type: none"> <li>• YY = 00</li> <li>(1) Trunk No. (000 – 255)</li> <li>(2) Trunk Route No. (00 – 63) (01/02)</li> <li>• YY = 01</li> <li>(1) Trunk No. (000 – 255)</li> <li>(2) Tenant No. (00 – 63) (00/00)</li> </ul>
A		

## E&M TIE LINE ACCESS (CONT'D)

	DESCRIPTION	DATA
<div style="border: 1px solid black; width: 20px; height: 20px; margin: 0 auto; text-align: center; line-height: 20px;">A</div> <div style="border: 1px solid black; width: 60px; height: 25px; margin: 5px auto; text-align: center; line-height: 25px;">CM35</div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 0 auto; text-align: center; line-height: 20px;">B</div>	<p>Assign Trunk Route data to the Trunk Route Number.</p>	<ul style="list-style-type: none"> <li>• YY=00 (Kind of Trunk Route)           <ul style="list-style-type: none"> <li>(1) Trunk Route No. (00-63) (01/02)</li> <li>(2) 04 (Tie Line)</li> </ul> </li>   <li>• YY=01           <ul style="list-style-type: none"> <li>(1) Trunk Route No. (00-63) (01/02)</li> <li style="padding-left: 40px;">&lt; Incoming &gt; &lt; Outgoing &gt;</li> <li>(2) {               <ul style="list-style-type: none"> <li>2 :DP-10PPS DP 10PPS</li> <li>4 :DTMF DTMF</li> <li>7 ◀ :DTMF/DP DTMF</li> </ul> </li> </ul> </li>   <li>• YY=02 (IC/OG)           <ul style="list-style-type: none"> <li>(1) Trunk Route No. (00-63) (01/02)</li> <li>(2) {               <ul style="list-style-type: none"> <li>1 : Incoming Trunk</li> <li>2 : Outgoing Trunk</li> <li>3 ◀ : Bothway Trunk</li> </ul> </li> </ul> </li>   <li>• YY=04 (Answer Signal from Distant Office)           <ul style="list-style-type: none"> <li>(1) Trunk Route No. (00-63) (01/02)</li> <li>(2) 2/7 ◀ : Arrive/Not Arrive</li> </ul> </li>   <li>• YY= 05 (Release Signal from Distant Office)           <ul style="list-style-type: none"> <li>(1) Trunk Route No. (00-63) (01/02)</li> <li>(2) 1 ◀ : Arrive</li> </ul> </li>   <li>• YY= 08 (Sending of Dial Pulse)           <ul style="list-style-type: none"> <li>(1) Trunk Route No. (00-63) (01/02)</li> <li>(2) 3 ◀ : Send</li> </ul> </li>   <li>• YY=09 (Incoming Connection Signalling)           <ul style="list-style-type: none"> <li>(1) Trunk Route No. (00-63) (01/02)</li> <li>(2) {               <ul style="list-style-type: none"> <li>03: Wink Start</li> <li>04: Delay Dial</li> <li>05: Immediate Start</li> <li>06: 2nd Dial Tone/ Timing Start</li> </ul> </li> </ul> </li>   <li>• YY=10 (In case YY=09 is 06)           <ul style="list-style-type: none"> <li>(1) Trunk Route No. (00-63) (01/02)</li> <li>(2) 0/1 ◀ : No Tone/2 nd Dial Tone</li> </ul> </li> </ul>

## E&M TIE LINE ACCESS (CONT'D)



DESCRIPTION	DATA																																																							
<p>Assign the appropriate data for the characteristic of the distant PBX.</p>	<ul style="list-style-type: none"> <li>• YY=13 (Maximum Number of Sending Digits)                             <ul style="list-style-type: none"> <li>(1) Trunk Route No. (00-63)</li> <li>(2) 001-031: 1 digit-31 digits</li> </ul> </li> </ul> <p>If no data is set, sender is released when time out occurs or the called station answers.</p> <ul style="list-style-type: none"> <li>• YY=20 (Sender Start Condition)                             <ul style="list-style-type: none"> <li>(1) Trunk Route No. (00-63) (01/02)</li> <li>(2) {                                     <ul style="list-style-type: none"> <li>00: Wink Start</li> <li>01: Delay Dial</li> <li>15: Timing Start (As per YY=21)</li> </ul> </li> </ul> </li> </ul> <p>The above data should be set to each route according to the data for YY=09, as shown below.</p> <table style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; border-bottom: 1px solid black;">Data for YY=09</th> <th style="text-align: center; border-bottom: 1px solid black;">→</th> <th style="text-align: right; border-bottom: 1px solid black;">Data for YY=20</th> </tr> </thead> <tbody> <tr><td style="text-align: left;">03</td><td style="text-align: center;">→</td><td style="text-align: right;">00</td></tr> <tr><td style="text-align: left;">04</td><td style="text-align: center;">→</td><td style="text-align: right;">01</td></tr> <tr><td style="text-align: left;">05</td><td style="text-align: center;">→</td><td style="text-align: right;">15</td></tr> <tr><td style="text-align: left;">06</td><td style="text-align: center;">→</td><td style="text-align: right;">15</td></tr> </tbody> </table> <ul style="list-style-type: none"> <li>• YY=21 (Sender Start Timing)                             <ul style="list-style-type: none"> <li>(1) Trunk Route No. (00-63)                                     <table style="margin-left: 20px; border-collapse: collapse;"> <tbody> <tr><td style="padding-right: 10px;">00: 0 sec</td><td style="padding-right: 10px;">08: 6.0 sec</td></tr> <tr><td style="padding-right: 10px;">01: 0.5 sec</td><td style="padding-right: 10px;">09: 7.0 sec</td></tr> <tr><td style="padding-right: 10px;">02: 1.0 sec</td><td style="padding-right: 10px;">10: 8.0 sec</td></tr> <tr><td style="padding-right: 10px;">03: 1.5 sec</td><td style="padding-right: 10px;">11: 9.0 sec</td></tr> <tr><td style="padding-right: 10px;">04: 2.0 sec</td><td style="padding-right: 10px;">12: 10.0 sec</td></tr> <tr><td style="padding-right: 10px;">05: 2.5 sec</td><td style="padding-right: 10px;">13: 11.0 sec</td></tr> <tr><td style="padding-right: 10px;">06: 4.0 sec</td><td style="padding-right: 10px;">14: 12.0 sec</td></tr> <tr><td style="padding-right: 10px;">07: 5.0 sec</td><td style="padding-right: 10px;">15◀: 3.0 sec</td></tr> </tbody> </table> </li> <li>(2) {                                     <table style="margin-left: 20px; border-collapse: collapse;"> <tbody> <tr><td style="padding-right: 10px;">00: 0 sec</td><td style="padding-right: 10px;">08: 6.0 sec</td></tr> <tr><td style="padding-right: 10px;">01: 0.5 sec</td><td style="padding-right: 10px;">09: 7.0 sec</td></tr> <tr><td style="padding-right: 10px;">02: 1.0 sec</td><td style="padding-right: 10px;">10: 8.0 sec</td></tr> <tr><td style="padding-right: 10px;">03: 1.5 sec</td><td style="padding-right: 10px;">11: 9.0 sec</td></tr> <tr><td style="padding-right: 10px;">04: 2.0 sec</td><td style="padding-right: 10px;">12: 10.0 sec</td></tr> <tr><td style="padding-right: 10px;">05: 2.5 sec</td><td style="padding-right: 10px;">13: 11.0 sec</td></tr> <tr><td style="padding-right: 10px;">06: 4.0 sec</td><td style="padding-right: 10px;">14: 12.0 sec</td></tr> <tr><td style="padding-right: 10px;">07: 5.0 sec</td><td style="padding-right: 10px;">15◀: 3.0 sec</td></tr> </tbody> </table> </li> </ul> </li> </ul> <p>In case YY=01 is 2, assign data for the DP Sender Characteristics.</p> <ul style="list-style-type: none"> <li>• YY= 23 (DP Sender Inter Digital Pause)                             <ul style="list-style-type: none"> <li>(1) Trunk Route No. (00-63)                                     <table style="margin-left: 20px; border-collapse: collapse;"> <tbody> <tr><td style="padding-right: 10px;">0: 300 ms</td></tr> <tr><td style="padding-right: 10px;">1: 400 ms</td></tr> <tr><td style="padding-right: 10px;">2: 500 ms</td></tr> <tr><td style="padding-right: 10px;">3: 600 ms</td></tr> <tr><td style="padding-right: 10px;">4: 700 ms</td></tr> <tr><td style="padding-right: 10px;">5: 900 ms</td></tr> <tr><td style="padding-right: 10px;">6: 1100 ms</td></tr> <tr><td style="padding-right: 10px;">7◀: 800 ms</td></tr> </tbody> </table> </li> </ul> </li> </ul>	Data for YY=09	→	Data for YY=20	03	→	00	04	→	01	05	→	15	06	→	15	00: 0 sec	08: 6.0 sec	01: 0.5 sec	09: 7.0 sec	02: 1.0 sec	10: 8.0 sec	03: 1.5 sec	11: 9.0 sec	04: 2.0 sec	12: 10.0 sec	05: 2.5 sec	13: 11.0 sec	06: 4.0 sec	14: 12.0 sec	07: 5.0 sec	15◀: 3.0 sec	00: 0 sec	08: 6.0 sec	01: 0.5 sec	09: 7.0 sec	02: 1.0 sec	10: 8.0 sec	03: 1.5 sec	11: 9.0 sec	04: 2.0 sec	12: 10.0 sec	05: 2.5 sec	13: 11.0 sec	06: 4.0 sec	14: 12.0 sec	07: 5.0 sec	15◀: 3.0 sec	0: 300 ms	1: 400 ms	2: 500 ms	3: 600 ms	4: 700 ms	5: 900 ms	6: 1100 ms	7◀: 800 ms
Data for YY=09	→	Data for YY=20																																																						
03	→	00																																																						
04	→	01																																																						
05	→	15																																																						
06	→	15																																																						
00: 0 sec	08: 6.0 sec																																																							
01: 0.5 sec	09: 7.0 sec																																																							
02: 1.0 sec	10: 8.0 sec																																																							
03: 1.5 sec	11: 9.0 sec																																																							
04: 2.0 sec	12: 10.0 sec																																																							
05: 2.5 sec	13: 11.0 sec																																																							
06: 4.0 sec	14: 12.0 sec																																																							
07: 5.0 sec	15◀: 3.0 sec																																																							
00: 0 sec	08: 6.0 sec																																																							
01: 0.5 sec	09: 7.0 sec																																																							
02: 1.0 sec	10: 8.0 sec																																																							
03: 1.5 sec	11: 9.0 sec																																																							
04: 2.0 sec	12: 10.0 sec																																																							
05: 2.5 sec	13: 11.0 sec																																																							
06: 4.0 sec	14: 12.0 sec																																																							
07: 5.0 sec	15◀: 3.0 sec																																																							
0: 300 ms																																																								
1: 400 ms																																																								
2: 500 ms																																																								
3: 600 ms																																																								
4: 700 ms																																																								
5: 900 ms																																																								
6: 1100 ms																																																								
7◀: 800 ms																																																								

**E&M TIE LINE ACCESS (CONT'D)**

C  
 CM35

DESCRIPTION	DATA
-------------	------

- YY = 25(DP Sender Make Ratio)
  - (1) Trunk Route No. (00 – 63)
  - (2) 0/1 ◀ : 33 % Make Ratio/39 % Make Ratio

- YY = 45 (DP Sender Release Timing)
  - (1) Trunk Route No. (00 – 63)
    - 0: 2 sec
    - 1: 4 sec
    - 2: 6 sec
  - (2)
    - 3: 8 sec
    - 4: 12 sec
    - 5: 14 sec
    - 6: 16 sec
    - 7◀ : 10 sec

In case YY = 01 is 4, assign data for the DTMF Sender Characteristics.

- YY = 24 (DTMF Sender Inter Digital Pause)
  - (1) Trunk Route No. (00 – 63)
    - 0: 32 ms
    - 1: 64 ms
    - 2: 80 ms
  - (2)
    - 3: 96 ms
    - 4: 160 ms
    - 5: 192 ms
    - 6: 240 ms
    - 7◀ : 96 ms

- YY = 26 (DTMF Sender Signal Width)
  - (1) Trunk Route No. (00 – 63)
  - (2) 0/1 ◀ : 64 ms/128 ms

- YY = 46 (DTMF Sender Release Timing)
  - (1) Trunk Route No. (00 – 63)
    - 0: 2 sec
    - 1: 4 sec
    - 2: 6 sec
  - (2)
    - 3: 8 sec
    - 4: 12 sec
    - 5: 14 sec
    - 6: 16 sec
    - 7◀ : 10 sec

D



### E&M TIE LINE ACCESS (CONT'D)

D	DESCRIPTION	DATA
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM35</div>	<p>Specify the desired Station Ringing Cadence and Multiline Terminal Tone Ringer.</p>	<ul style="list-style-type: none"> <li>• YY = 33 (Ringing Cadence)               <ol style="list-style-type: none"> <li>(1) Trunk Route No. (00 - 63)</li> <li>(2) { 2: 1 sec ON, 2 sec OFF 3◀: 2 sec ON, 4 sec OFF</li> </ol> </li> </ul> <p>To make effective this data assignment, enter the data "1" for CM08-180</p> <ul style="list-style-type: none"> <li>• YY = 34 (Multiline Terminal Tone Ringer)               <ol style="list-style-type: none"> <li>(1) Trunk Route No. (00 - 63)</li> <li>(2) { 0: 1024 + 1285 × 16 (Hz) 1: 480 + 606 × 8 (Hz) 2: 600 + 700 (Hz) 3◀ : 480 + 606 × 16 (Hz)</li> </ol> </li> </ul>
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM63</div>	<p>Specify the restriction of incoming call termination to different Tenants.</p>	<ul style="list-style-type: none"> <li>• Y = 2               <ol style="list-style-type: none"> <li>(1) <u>XXXX</u> <ul style="list-style-type: none"> <li>└── Tenant No. of Trunk Route</li> <li>└── Tenant No. of called station</li> </ul> </li> <li>(2) 0/1 ◀ : Restricted/Allowed</li> </ol> </li> </ul>
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM45</div>	<p>Provide the DTMF Receivers for Tie Line incoming calls, if required.</p>	<ul style="list-style-type: none"> <li>• Y = 1               <ol style="list-style-type: none"> <li>(1) <u>XXX</u> <ul style="list-style-type: none"> <li>└── Circuit No. (0 - 3)</li> <li>└── Card No. (00 - 15) assigned by CM10 (E200 - E215)</li> </ul> </li> <li>(2) 0◀ : Only for Tie Line</li> </ol> </li> </ul>
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">END</div>		

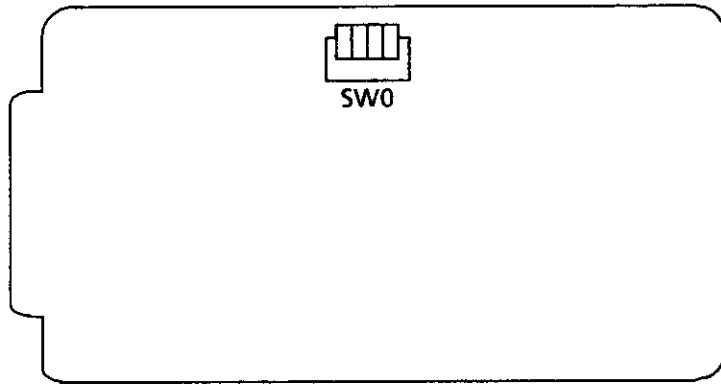
## E&M TIE LINE ACCESS (CONT'D)

### HARDWARE REQUIRED

PK-ODTC Card: For four-wire E&M Tie Line interface.

PK-2EMTB Card: For two-wire E&M Tie Line interface.

**Note:** Before mounting the card, set SW0 according to the condition of the M-lead.



SWITCH	POSITION			FUNCTION
	PK-ODTC	PK-2EMTB		
		No.0 CKT	No.0 CKT	
SW0	Up: SW0-1 - 4	Up: SW0-1, 2	Up: SW0-3, 4	Signaling Condition on M-lead Busy Condition → Ground Idle Condition → Open
	Down: SW0-1, 2 UP: SW0-3, 4	Down: SW0-1, 2	Down: SW0-3, 4	Signaling Condition on M-lead Busy Condition → - 48 V Idle Condition → Ground

## EXECUTIVE CALLING

### GENERAL DESCRIPTION

This feature allows a station to be assigned a VIP class. This provides special ringing to a called station when that station is idle, and automatic sending of three tone bursts to a called station when that station is busy, provided the call was originated from a station assigned as VIP class.

### OPERATING PROCEDURE

To initiate an Executive Call:

1. Station assigned as VIP class goes off-hook.
2. Dials another extension.
3. If the called station is busy, three tone bursts will be sent to the called party to indicate there is a call waiting. The called party can now hang up and answer the Executive Call.
4. If the called station is idle, a distinctive ring will be sent to the called party to indicate an Executive Call is ringing in.

### SERVICE CONDITIONS

1. *Executive Calling* (VIP class) is assigned in *Class of Service*.
2. This feature is station-based. This feature applies only when a station assigned for VIP class is used.
3. When a Single-Line Telephone's extension is assigned as VIP class, all internal calls originated from that station are *Executive Calls*.

### PROGRAMMING

<u>START</u>	<u>DESCRIPTION</u>	<u>DATA</u>
START   CM13   END	Assign VIP class to the required station.	<ul style="list-style-type: none"> <li>• YY = 21</li> <li>(1) X-XXXX: Station Number</li> <li>(2) 0: To be provided</li> </ul>

## EXECUTIVE OVERRIDE

### GENERAL DESCRIPTION

When a busy station is called, this feature allows selected users the ability to override that busy condition. A warning tone is transmitted to the call in progress prior to entry, and the overriding party then establishes a three-party conference.

### OPERATING PROCEDURE

From a Multiline Terminal:

1. When busy tone is heard, press the key assigned for *Executive Override*. The associated LED lights and a warning tone is transmitted to both parties.
2. The Multiline Terminal is now bridged into a three-party conference.

From a Single-Line Telephone:

1. When busy tone is heard, press the **FLASH** key (or momentarily press the hookswitch) and receive feature dial tone.
2. Dial the *Executive Override* feature access code. A warning tone is transmitted to both parties.
3. Station is now bridged into a three-party conference.

### SERVICE CONDITIONS

1. Two burst tones of 0.8 seconds each are transmitted upon activation to alert the connected parties that an *Executive Override* will occur.
2. When a three-party *Conference* is established and one party hangs up, the remaining two parties are still connected.
3. The *Executive Override* access code is flexible and can be assigned in system programming.
4. The maximum number of simultaneous *Executive Overrides* per system is eight or sixteen, depending upon hardware installed.
5. If the called station has set the *Call Forwarding - Busy/All Calls* feature, and the target station is also busy, the *Executive Override* will interrupt the originally-dialed station. If the target station is not busy, the call will be forwarded.
6. *Executive Override* can be set when the busy station is connected to another station or a trunk in a two-party connection.
7. *Executive Override* is denied if the busy station is dialing, in *Line Lockout* mode, receiving a system-generated tone, protected against *Executive Override* in *Class of Service*, protected against any override by DND key, or when any of the following features are in progress:
  - *Attendant Override*
  - *Call Back*
  - *Hold*
  - *Call Transfer*
  - *Camp-On*
  - *Conference*
  - *Consultation Hold*
  - *Data Line Security*
  - *Paging*
  - *Privacy Release*
  - *Trunk Queuing - Outgoing*
  - *Voice Call*
8. When *Executive Override* is denied, the caller will receive reorder tone.

## EXECUTIVE OVERRIDE (CONT'D)

### PROGRAMMING

START	DESCRIPTION	DATA
CM12	Assign Service Restriction Class (A) to each station.	<ul style="list-style-type: none"> <li>• YY=02</li> <li>(1) X-XXXX (Station No.)</li> <li>(2) XXXX            └── Service Restriction Class (A) (00-15 ◀)</li> </ul>
CM15	Assign this feature to the Service Restriction Class (A) assigned by CM12, YY=02. The setting of data for both called side and calling side of Executive Override (YY=05 and YY=09) are required.	<ul style="list-style-type: none"> <li>• YY=05 and YY=09</li> <li>(1) XX: Service Restriction Class (A) assigned by CM12, YY=02.</li> <li>(2) 1 ◀ : Allowed</li> </ul>
CM20	Assign the access code for Executive Override.	<ul style="list-style-type: none"> <li>• Y=0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX: Access Code (*4)</li> <li>(2) 006: Executive Override</li> </ul>
CM45	Assign the data for Conference Trunk (CFT). When providing the additional CFT, set the data for canceling of Make Busy to CFT Circuits No.08 through 15.	<ul style="list-style-type: none"> <li>• Y=6</li> <li>(1) 00-07: CFT Circuit No. (Basic)</li> <li>(2) 1 ◀ : Make-Busy Cancel</li> <li>(1) 08-15: CFT Circuit No. (Additional)</li> <li>(2) 1 ◀ : Make-Busy Cancel</li> </ul>
CM90	Assign Executive Override key to the Multiline Terminal.	<ul style="list-style-type: none"> <li>• YY=00</li> <li>(1) Primary Extension No. + <input type="text"/> + key No.</li> <li>(2) F0006: Executive Override</li> </ul>
CM08	Specify the Waiting Tone sent to connected parties during Executive Override.	<ul style="list-style-type: none"> <li>(1) 045</li> <li>(2) <math>\left\{ \begin{array}{l} 0: \text{ Only once} \\ 1 \text{ ◀} : \text{ Every 4 sec.} \end{array} \right.</math></li> </ul>
END		

## EXTERNAL PAGING WITH MEET-ME

### GENERAL DESCRIPTION

This feature allows a station user dial access to locally provided voice paging equipment and connects both parties automatically after the paged party has answered the page by dialing an access code.

### OPERATING PROCEDURE

To page from any station:

1. Calling station dials *External Paging* feature access code and receives continuous ringback tone for one second.
2. Calling station pages desired party.
3. Calling station remains off-hook or hangs up.

To page from an Attendant Console:

1. Place incoming call on hold by pressing **HOLD** key.
2. Seize an idle **LOOP** key.
3. Dial External Paging feature access code and receive continuous ringback tone for one second.
4. Page desired party.
5. Press **RELEASE** key.

To answer from any station:

Non-delay operation:

1. Paged party dials *Meet-Me* access code.
2. Party paged is immediately connected to the calling party.

or

Delay operation:

1. Paged party dials *Meet-Me* access code.
2. Party paged receives ringback tone.
3. Calling station rings.
4. Calling station goes off-hook and is immediately connected to paged party.

### SERVICE CONDITIONS

1. Amplifiers and speakers must be provided locally.
2. One trunk circuit from a COT board is required for each zone of external paging.
3. One PK-DK01 board is required for every four zones of external paging in order to share a common amplifier and background music source.
4. The maximum length of paging access codes is three digits. Paging access codes and Meet-Me codes must be preprogrammed.
5. A maximum of ten zones of external paging can be set up.
6. *Meet-Me* service is programmable. When *Meet-Me* service is not provided there is no system timeout on paging. When *Meet-Me* service is provided, a system timeout is applied to the delay *Meet-Me* operation. In the case of delay operation, both the paging period and the period of waiting for the *Meet-Me* call are combined. After this timeout expires, *Meet-Me* attempts will be denied and the paging circuits become available again. (Refer to the *Variable Timing Parameters* feature for timeout information).
7. If additional dialing is required after seizing paging trunk, *Radio Paging Equipment Access* feature may be used.

## EXTERNAL PAGING WITH MEET-ME (CONT'D)

### PROGRAMMING

START	DESCRIPTION	DATA
CM10	Assign Paging Trunk (PK-2COT and PK-DK01) to the required LEN.	(1) LEN (0000 - 0511) (2) { D000 - D255: PK-2COT E800 - E831: PK-DK01
CM12	Assign the Class of Service for Paging Access to the required stations.	<ul style="list-style-type: none"> <li>• CM12, YY=02 [Service Rest. Class (A) (00 - 15 ◀ )]</li> <li>• CM15, YY=08</li> </ul>
CM15		
CM44	Assign the paging function to PK-DK01 Card.	(1) XXX ├── Circuit No. of PK-DK01 (0 - 3) └── Card No. (00 - 31) assigned by CM10 (E800 - E831) (2) 02XX: Zone assigned by CM30, YY=28 ├── 00: Speaker Paging Zone 0 ├── } └── 09: Speaker Paging Zone 9
CM08	Specify the conditions for Paging access.	(1) 094 (Paging Access Tone) (2) 0/1 ◀ : To be sent out/Not to be sent out (1) 096 (Hooking Signal to Paging Equipment) (2) 0/1 ◀ : To be sent out/Not to be sent out (1) 149 (Automatic Call Back when paging station is busy through non delay operation.) (2) 0/1 ◀ : To be sent/Not to be sent (1) 157 (Access code for Paging Access and Answer) (2) 0/1 ◀ : Same/Different
A	CM08 - 157 = 1 (Different)	
B	CM08 - 157 = 0 (Same)	

## EXTERNAL PAGING WITH MEET-ME (CONT'D)

	DESCRIPTION	DATA
<div style="border: 1px solid black; width: 20px; height: 20px; margin: 0 auto; text-align: center; line-height: 20px;">A</div> <div style="border: 1px solid black; width: 60px; height: 25px; margin: 5px auto; text-align: center;">CM20</div>	Assign the access code for Paging Access and answer.	<ul style="list-style-type: none"> <li>• Y=0-3 (Numbering Plan Group 0-3)               <ol style="list-style-type: none"> <li>(1) X-XXX: Access Code (86)                   <ul style="list-style-type: none"> <li>100-163: For Paging Access (Route 00-63) (07)</li> <li>070-079: For Paging Access/Paging Answer (Paging Answer Zone 0-9)</li> </ul> </li> <li>(2) 080: Canceling of Paging (Delay Operation)</li> </ol> </li> </ul>
<div style="border: 1px solid black; width: 60px; height: 25px; margin: 5px auto; text-align: center;">CM30</div>	Assign the data for Paging Trunk to the trunk number assigned by CM10.	<ul style="list-style-type: none"> <li>• YY=00 (Trunk Route Allocation)               <ol style="list-style-type: none"> <li>(1) Trunk No.</li> <li>(2) Trunk Route No. (00-63)</li> </ol> </li> <li>• YY=28 (Zone/Kind of Paging)               <ol style="list-style-type: none"> <li>(1) Trunk No.</li> <li>(2) XX                   <ul style="list-style-type: none"> <li>└ Kind of Paging</li> <li>0: No answer</li> <li>2: Non-delay answer</li> <li>4: Non-delay and delay answer</li> <li>└ Paging Answer Zone</li> <li>0: Paging Answer Zone 0</li> <li>{ }</li> <li>9: Paging Answer Zone 9</li> </ul> </li> </ol> </li> </ul>
<div style="border: 1px solid black; width: 60px; height: 25px; margin: 5px auto; text-align: center;">CM35</div>	Assign the Paging Trunk to the trunk route number assigned by CM30, YY=00.	<ul style="list-style-type: none"> <li>• YY=00               <ol style="list-style-type: none"> <li>(1) Trunk Route No. (00-63) (07)</li> <li>(2) 05</li> </ol> </li> <li>• YY= 08 (Dial Pulse Sending Capability)               <ol style="list-style-type: none"> <li>(1) Trunk Route No. (00-63)</li> <li>(2) 1: No Dial Pulse is sent out.</li> </ol> </li> </ul>
END		



## EXTERNAL PAGING WITH MEET-ME (CONT'D)

	DESCRIPTION	DATA
<div style="border: 1px solid black; width: 20px; height: 20px; margin: 0 auto; text-align: center; line-height: 20px;">B</div> <div style="border: 1px solid black; padding: 2px; margin: 5px auto; width: 50px; text-align: center;">CM20</div>	Assign the access code for Paging Answer.	<ul style="list-style-type: none"> <li>• Y=0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX: Access Code                             <ul style="list-style-type: none"> <li>070-079: For Paging Access/ (Paging Answer) Paging Answer</li> </ul> </li> <li>(2) Zone 0-9                             <ul style="list-style-type: none"> <li>080: Canceling of Paging (Delay Operation)</li> </ul> </li> </ul>
<div style="border: 1px solid black; padding: 2px; margin: 5px auto; width: 50px; text-align: center;">CM30</div>	Assign the data for Paging Trunk to the trunk number assigned by CM10 as follows.	<ul style="list-style-type: none"> <li>• YY=00 (Trunk Route Allocation)</li> <li>(1) Trunk No.</li> <li>(2) Trunk Route No. (50-59)</li>   <li>• YY=28 (Zone/Kind of Paging)</li> <li>(1) Trunk No.</li> <li>(2) XX                             <ul style="list-style-type: none"> <li>Kind of Paging                                     <ul style="list-style-type: none"> <li>0: No answer</li> <li>2: Non-delay answer</li> <li>4: Non-delay and delay answer</li> </ul> </li> <li>Paging Answer Zone                                     <ul style="list-style-type: none"> <li>0: Paging Answer Zone 0</li> <li>        }</li> <li>        }</li> <li>        }</li> <li>9: Paging Answer Zone 9</li> </ul> </li> </ul> </li> </ul>
<div style="border: 1px solid black; padding: 2px; margin: 5px auto; width: 50px; text-align: center;">CM35</div>	Assign the Paging Trunk to the trunk route number assigned by CM30, YY=00.	<ul style="list-style-type: none"> <li>• YY=00</li> <li>(1) Trunk Route No. (50-59)</li> <li>(2) 05</li> <li>• YY=08 (Dial Pulse Sending Capability)</li> <li>(1) Trunk Route No. (50-59)</li> <li>(2) 1: No dial Pulses are sent Out.</li> </ul>
<div style="border: 1px solid black; padding: 2px; margin: 5px auto; width: 50px; text-align: center;">END</div>		

Paging Answer Zone	Trunk Route
0 -----	50
}	}
9 -----	59

## EXTERNAL PAGING WITH MEET-ME (CONT'D)

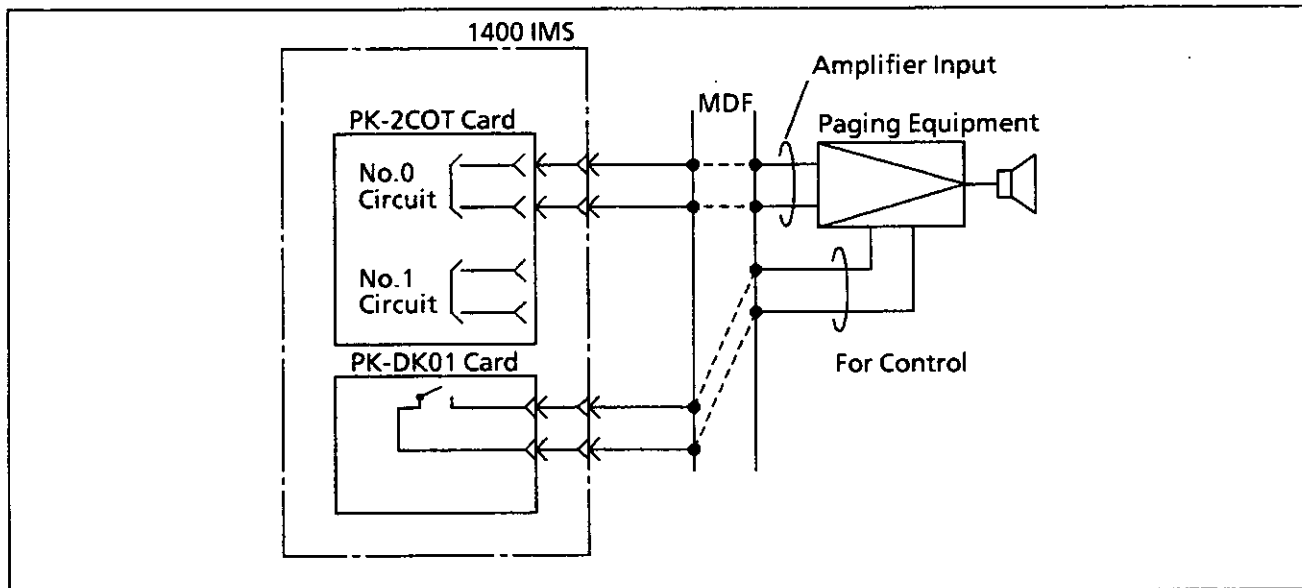
### HARDWARE REQUIRED

Paging Trunk (PK-2COT)  $\times n/2$  (n: Number of Zones of external paging)

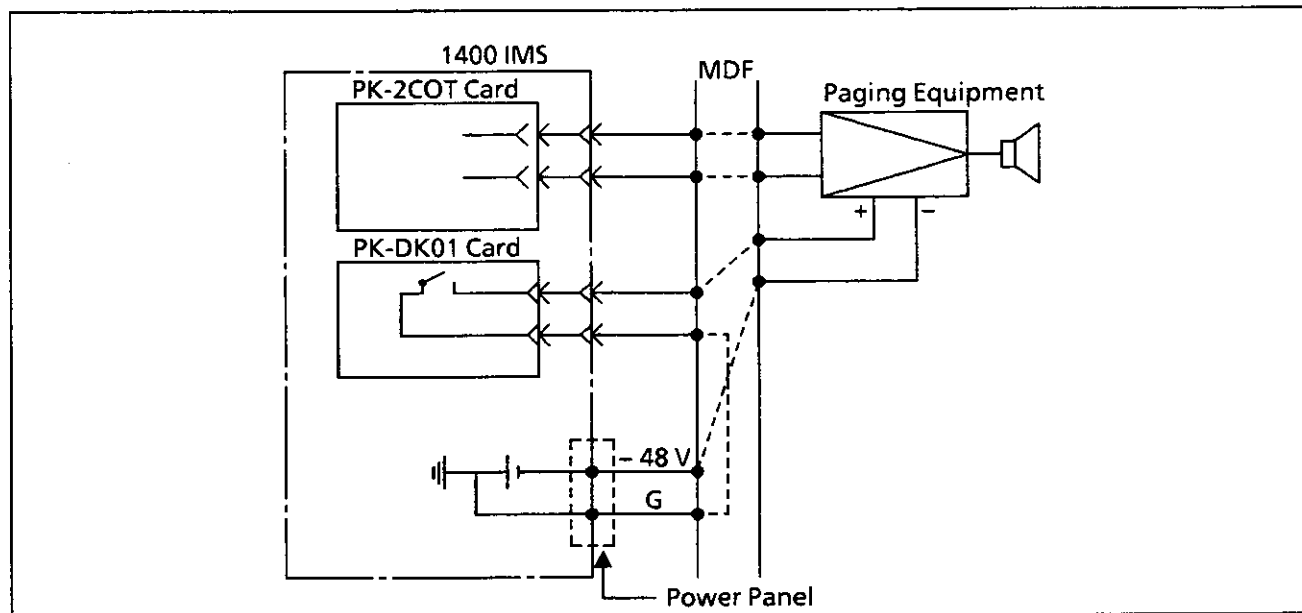
PK-DK01 Card  $\times n/4$

Paging Equipment provided locally.

To accommodate the Paging Equipment, make the following connections at the MDF.



If the Paging Equipment requires the DC (-48 V) power supply, make the following connections at the MDF.



## FLEXIBLE LINE KEY ASSIGNMENT

### GENERAL DESCRIPTION

With the exception of its own (primary) extension line appearance, each Multiline Terminal can be assigned to have any desired line key assignment. This feature permits assignments to be tailored to each individual's needs.

### OPERATING PROCEDURE

No manual operation is required.

### SERVICE CONDITIONS

1. Each line key can be assigned as one of the following:
  1. *Trunk Access*
  2. *Extension*
  3. *Save and Repeat*
  4. *Do Not Disturb*
  5. *Data*
  6. *Intercom*
  7. *Hot Line*
  8. *Feature Access.*

Refer to the applicable feature for more information on that feature.

2. Line key assignment is made in system programming using the *Maintenance Administration Terminal (MAT)* or *Customer Administration Terminal (CAT)*.
3. The ETE-16D-2 and the ETE-16-2 have 15 programmable line keys. One line key is reserved for that station's primary extension.
4. ETE-6D-2 and ETE-6-2 each have five programmable line keys. One line key is reserved for that station's primary extension.
5. A maximum of one *Do Not Disturb (DND)* key and three *Save and Repeat* keys can be assigned per Multiline Terminal.
6. Stations desiring dial tone from a specific line can press that line key before lifting the handset.

### PROGRAMMING

Refer to the applicable feature for more information on that feature.

## FLEXIBLE NUMBERING PLAN

### GENERAL DESCRIPTION

The NEAX1400 IMS has a *Flexible Numbering Plan* whereby all access codes and station numbers can be assigned in system programming. Refer also to the Single-Digit Dialing feature which further increases the flexibility of the system.

### OPERATING PROCEDURE

Normal call handling procedures apply.

### SERVICE CONDITIONS

1. The system is provided with a *Resident System Program*; however, the flexibility of the NEAX1400 IMS allows all access codes and station numbers to be changed to any desired number (from one to three digits for access codes, and one to four digits for station numbers), provided access codes and station numbers do not conflict with each other.
2. Up to four different numbering plans may be assigned in the same system. When there are multiple tenants, any one of the four numbering plans can be assigned to each tenant.
3. Any combination of one to four digits can be assigned as station numbers within the same numbering plan. When assigning different amounts of digits to stations, the leading digits of the shorter extension numbers cannot be the same as the leading digits of the longer extension numbers. For example: extensions 60 and 607 cannot be assigned in the same numbering plan.
4. The system can also be programmed to provide a group of fixed single-digit feature access codes. These codes allow a station user to dial a single digit to activate specific features. These codes can only be applied while the station user is receiving ringback or busy tone. The following feature access codes can be dialed while receiving busy tone:

<u>Access code</u>	<u>Feature</u>
2	<i>Call Back, Trunk Queuing Outgoing</i>
3	<i>Executive Override</i>
4	<i>Camp-On (transfer)</i>
5	<i>Camp-On (call waiting)</i>
6	<i>Message Reminder</i>
*	<i>Step Call</i>

The following feature access codes can be dialed while receiving ringback tone:

<u>Access code</u>	<u>Feature</u>
1	<i>Internal Voice/Tone Signaling</i>
2	<i>Call Back</i>
6	<i>Message Reminder</i>

5. The single-digit feature access codes used while receiving ringback tone can be used, after pressing the **FLASH** key, by Single-Line Telephones with a DTMF dialpad.

## FLEXIBLE NUMBERING PLAN (CONT'D)

### PROGRAMMING

START	DESCRIPTION	DATA
START		
CM29	Assign the Numbering Plan Group to each Tenant.	(1) Tenant No. (00-63) (2) <u>XXX</u> : Numbering Plan Group 0-3 ┌ 710 (Numbering │ } Plan Group 0) └ 713 (Numbering Plan Group 3)
CM20	Specify the number of digits for station numbers.  Example: For setting Station No. "2XXX" (1) 804 (2) 2	• Y = 0-3 (Numbering Plan Group 0-3) (1) { 801: 1 digit 802: 2 digits 803: 3 digits 804: 4 digits (2) X: 1st digit of Station No. (2, 3, 4)
CM10	Assign Station Numbers to the required LENs according to the Numbering Plan specified by CM20. For feature and trunk access codes, refer to the programming of individual features.	(1) LEN (0000-0511) (2) X-XXXX (Station No.)
END		

## FLEXIBLE NUMBERING PLAN (CONT'D)

To provide Single-Digit Feature Access Code

START	DESCRIPTION	DATA
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM08</div>	<p>To activate this feature, set the data for 050, 051, 069 and 148 to "1."</p>	<ul style="list-style-type: none"> <li>(1) 050: *Button as Switch Hook Flash.</li> <li>(2) 1 ◀ : Ineffective</li> </ul>
		<ul style="list-style-type: none"> <li>(1) 051: *Button as Switch Hook Flash.</li> <li>(2) 1 ◀ : Ineffective</li> </ul>
		<ul style="list-style-type: none"> <li>(1) 069: Single-Digit Dialing on BT Connection</li> <li>(2) 1 ◀ : Step Call</li> </ul>
		<ul style="list-style-type: none"> <li>(1) 148: Same Last-Digit Redialing on BT Connection</li> <li>(2) 1 ◀ : Ineffective</li> </ul>
	<p>Provide the System with the Single-Digit Feature Access Code on RBT or Voice Call Connection.</p>	<ul style="list-style-type: none"> <li>(1) 156</li> <li>(2) 0: Available</li> </ul>
	<p>Provide the System with the Single-Digit Feature Access Code on RBT Connection.</p>	<ul style="list-style-type: none"> <li>(1) 208</li> <li>(2) 0: Available</li> </ul>
<u>END</u>		

## FLEXIBLE RINGING ASSIGNMENT

### GENERAL DESCRIPTION

This feature enables lines appearing on Multiline Terminals to be individually programmed for ringing or not ringing.

### OPERATING PROCEDURE

No manual operation is required.

### SERVICE CONDITIONS

1. The following priority applies to ringing of multiple incoming calls:
  1. Voice call (station-to-station on extension, *Automatic* or *Dial Intercom*)
  2. Recalls
  3. Incoming External Calls
  4. Incoming Internal Calls, Dial Intercom ringing calls, Manual Intercom.
2. Day/Night ring assignment is available on a per-trunk basis. Each trunk can be assigned to ring at a Multiline Terminal as well as *Attendant Console(s)* and *Trunk Answer any Station*.
3. *Delayed Ringing* is available. Refer to the *Delayed Ringing* feature for more information.
4. *Flexible Ringing Assignment* is assignable in system programming.

## FLEXIBLE RINGING ASSIGNMENT (CONT'D)

### PROGRAMMING

START	DESCRIPTION	DATA																	
START ↓ CM08	Specify the method of tone ringer selection.	(1) 390 (2) 1 ◀ : By system data																	
CM12 ↓ CM15	Specify the ring tone of each Multiline Terminal for internal calls.	<ul style="list-style-type: none"> <li>• CM12, YY = 07 (Service Restriction Class C (00-15 ◀))</li> <li>• CM15, YY = 83, 84</li> </ul>																	
	<table border="1" style="margin: auto; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: center;">YY</th> <th rowspan="2" style="text-align: center;">RING TONE</th> </tr> <tr> <th style="text-align: center;">83</th> <th style="text-align: center;">84</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">0</td> <td style="text-align: center;">0</td> <td style="text-align: center;">600 + 700 [Hz]</td> </tr> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">0</td> <td style="text-align: center;">1024 + 1285 [Hz] × 16 [Hz]</td> </tr> <tr> <td style="text-align: center;">0</td> <td style="text-align: center;">1</td> <td style="text-align: center;">480 + 606 [Hz] × 8 [Hz]</td> </tr> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">1</td> <td style="text-align: center;">480 + 606 [Hz] × 16 [Hz]</td> </tr> </tbody> </table>	YY		RING TONE	83	84	0	0	600 + 700 [Hz]	1	0	1024 + 1285 [Hz] × 16 [Hz]	0	1	480 + 606 [Hz] × 8 [Hz]	1	1	480 + 606 [Hz] × 16 [Hz]	(1) 00-15 (Service Restriction class C assigned by CM12, YY = 07) (2) 0/1 ◀ : See left column.
YY		RING TONE																	
83	84																		
0	0	600 + 700 [Hz]																	
1	0	1024 + 1285 [Hz] × 16 [Hz]																	
0	1	480 + 606 [Hz] × 8 [Hz]																	
1	1	480 + 606 [Hz] × 16 [Hz]																	
CM35	Specify the ring tone for incoming calls to each trunk route.	<ul style="list-style-type: none"> <li>• YY = 34</li> </ul> (1) 00-63 (Trunk Route No.) (2) { <table style="display: inline-table; vertical-align: middle; margin-left: 10px;"> <tr> <td style="padding-right: 5px;">0:</td> <td style="padding-right: 5px;">1024 + 1285 [Hz] × 16 [Hz]</td> </tr> <tr> <td style="padding-right: 5px;">1:</td> <td style="padding-right: 5px;">480 + 606 [Hz] × 8 [Hz]</td> </tr> <tr> <td style="padding-right: 5px;">2:</td> <td style="padding-right: 5px;">600 + 700 [Hz]</td> </tr> <tr> <td style="padding-right: 5px;">3 ◀:</td> <td style="padding-right: 5px;">480 + 606 [Hz] × 16 [Hz]</td> </tr> </table>	0:	1024 + 1285 [Hz] × 16 [Hz]	1:	480 + 606 [Hz] × 8 [Hz]	2:	600 + 700 [Hz]	3 ◀:	480 + 606 [Hz] × 16 [Hz]									
0:	1024 + 1285 [Hz] × 16 [Hz]																		
1:	480 + 606 [Hz] × 8 [Hz]																		
2:	600 + 700 [Hz]																		
3 ◀:	480 + 606 [Hz] × 16 [Hz]																		
CM90	Disable the ringing on each line/extension key of a Multiline Terminal, if required.  Refer to DELAYED RINGING when providing Delayed Ringing to each line/extension key.	<ul style="list-style-type: none"> <li>• YY = 01</li> </ul> (1) Primary Extension No. + [ ] + Key No. (2) 0: Disabled																	
↓ A																			



## FLEXIBLE RINGING ASSIGNMENT (CONT'D)

	DESCRIPTION	DATA
<div style="text-align: center;"> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 0 auto; display: flex; align-items: center; justify-content: center;">A</div> <div style="margin: 5px 0;"> </div> <div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto; display: flex; align-items: center; justify-content: center;">CM12</div> <div style="margin: 5px 0;"> </div> <div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto; display: flex; align-items: center; justify-content: center;">CM15</div> <div style="margin: 5px 0;"> </div> <div style="text-align: center; margin-top: 10px;"><u>END</u></div> </div>	<p>Specify the Off-Hook Ringing for incoming call to each Line/Trunk Key on Multiline Terminal.</p> <p><b>Note:</b> <i>This data is effective in the following status.</i></p> <ul style="list-style-type: none"> <li>• <i>Hook Switch-OFF HOOK</i></li> <li>• <i>SPEAKER Lamp-OFF</i></li> </ul>	<ul style="list-style-type: none"> <li>• CM12, YY=02[Service Restriction Class (B) (00-15 ◀ )]</li> <li>• CM15, YY=68             <ol style="list-style-type: none"> <li>(1) Service Restriction Class (B) (00-15) assigned by CM12, YY=02.</li> <li>(2) 0/1 ◀ : Restricted/Allowed</li> </ol> </li> </ul>

### HARDWARE REQUIRED

ETE-16D-2TEL, ETE-6D-2TEL, ETE-16-2TEL, or ETE-6-2TEL, and a PK-2DLC card.

## FORCED ACCOUNT CODE

### GENERAL DESCRIPTION

This feature makes it mandatory to enter an *Account Code* (up to eight or ten digits) for all outgoing calls. The *Account Code* must be dialed before dialing the outgoing number. Calls are processed only when the dialed *Account Codes* are valid.

### OPERATING PROCEDURE

When dialing an outgoing call:

1. Lift handset and receive dial tone.
2. Enter access code and receive service set tone.
3. Enter the *Forced Account Code* (up to eight or ten digits) and receive dial tone.
4. Dial desired number.

### SERVICE CONDITIONS

1. The maximum number of digits in the *Forced Account Code* is programmable (for the entire system), from one to eight (or ten) digits.
2. *Forced Account Code* access code can be one to three digits.
3. If both *Forced Account Code* and *Authorization Code* are provided in the system, the maximum number of codes are limited as follows:

Without Application Processor AP-02 (standard):

- Number of digits: up to eight digits
- Number of Codes: up to 100 combined with *Authorization Codes*.

With Application Processor AP-02 (optional):

- Number of digits: up to ten digits
- Number of Codes: up to 1000 combined with *Authorization Codes* and *Direct Inward System Access (DISA) Codes*.

4. Both *Authorization Code* and *Forced Account Code* can be provided for the same system.
5. Stations are assigned this feature according to *Class of Service* programming in system data.
6. *Forced Account Codes* are recorded in the *System Message Detail Records*.
7. Existing restriction assignments will be applied even after a *Forced Account Code* is entered.
8. If the NEAX1400 IMS is designated as KF registration, this feature will not be available.

## FORCED ACCOUNT CODE (CONT'D)

### PROGRAMMING

In case the PJ-AP02 is not equipped.

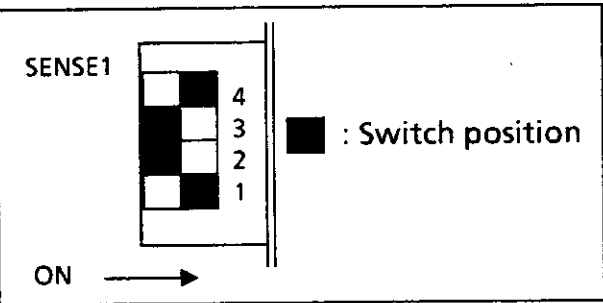
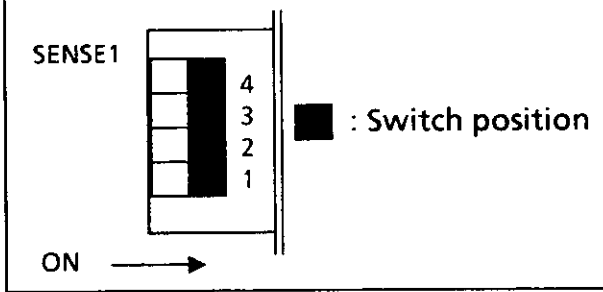
START	DESCRIPTION	DATA
CM08	Designate the processor (MP or AP) for this feature.	(1) 216 (2) 0: MP (PJ-CP01)
	Specify the Confirmation Tone after dialing the Forced Account Code.	(1) 362 (2) 0/1 ◀ : No Tone/Service Set Tone
CM12	Assign the Class of Service for Forced Account Code to the required stations.	<ul style="list-style-type: none"> <li>• CM12, YY=02 (Service Restriction Class (A) 00-15 ◀)</li> <li>• CM15, YY=31 (1) XX (Service Rest. Class A assigned by CM12, YY=02.) (2) 1 ◀ : Allowed.</li> </ul>
CM15		
CM42	Specify the maximum number of digits for Forced Account Codes.	(1) 12 (2) Max. number of digits (01-08) If no data is set, the default setting is 8 digits
CM2A	Set the ID Code used for Forced Account Codes.	<ul style="list-style-type: none"> <li>• Y=0 (ID Code Set)</li> <li>(1) Code No. (00-99)</li> <li>(2) X-X...X (Max. number of digits is specified by CM42.)</li> </ul>
	<b>Note:</b> <i>Up to 100 codes combined with Authorization Code can be set.</i>	
A		

## FORCED ACCOUNT CODE (CONT'D)

	DESCRIPTION	DATA
<div style="border: 1px solid black; width: 20px; height: 20px; margin: 0 auto; text-align: center; line-height: 20px;">A</div> <div style="border: 1px solid black; width: 60px; height: 25px; margin: 5px auto; text-align: center;">CM2A</div> <div style="border-left: 1px solid black; border-right: 1px solid black; height: 300px; margin: 0 auto;"></div> <div style="border: 1px solid black; width: 60px; height: 25px; margin: 5px auto; text-align: center;">CM20</div> <div style="text-align: center; margin-top: 5px;">END</div>	<p>Define the purpose (Y=1) and the temporary Class of Service (Y=2-4) for each Forced Account Code.</p>	<ul style="list-style-type: none"> <li>• Y=1 (Purpose of the Code)           <ul style="list-style-type: none"> <li>(1) XX: Code Serial No. (00-99)</li> <li>(2) 2: Forced Account</li> </ul> </li> <li>• Y=2 (Trunk Restriction Class)           <ul style="list-style-type: none"> <li>(1) XX: Code Serial No. (00-99)</li> <li>(2) X: Trunk Restriction Class (1-8) specified by CM35, YY=51-68.</li> </ul> </li> <li>• Y=3 [Service Restriction Class (A)/(B)]           <ul style="list-style-type: none"> <li>(1) XX : Code Serial No. (00-99)</li> <li>(2) XXXX :               <ul style="list-style-type: none"> <li>┌ Service Rest. Class (B) (00-15)</li> <li>└ Service Rest. Class (A) (00-15)</li> </ul> </li> </ul> </li> <li>• Y=4 (Service Restriction Class (C))           <ul style="list-style-type: none"> <li>(1) XX: Code Serial No. (00-99)</li> <li>(2) XX: Service Rest. Class (C) 00-15 ◀</li> </ul> </li> <li>• Y=0-3 (Numbering Plan Group 0-3)           <ul style="list-style-type: none"> <li>(1) X-XXX (Access Code)</li> <li>(2) 087</li> </ul> </li> </ul>

## FORCED ACCOUNT CODE (CONT'D)

If the PJ-AP02 is used:

START	DESCRIPTION	DATA
	<p>Set the SENSE1 switch on the PJ-AP02 Board, as shown below.</p> 	
<p>CMD5</p>	<p>Assign a slot number to the PJ-AP02 Board according to the location of the board. <b>INITIAL</b></p>	<p>(1) Slot Number (04-15)                  (2) 07: PJ-AP02 Board</p>
	<p><b>Note:</b> <i>The slot number is given by the SENSE0 switch on the PJ-AP02 Board.</i></p>	
<p>CMD6</p>	<p>Load the initial data into the PJ-AP02 by performing the following:</p>	
	<p><b>ST</b> + D60 + <b>DE</b> + 0000 + <b>DE</b> + CCC + <b>EXE</b></p> <p>After about 30 seconds the AP initialization is completed and the "RUN" lamp on the PJ-AP02 lights.</p> <p>Set the SENSE1 switch on the PJ-AP02 Board, as shown below.</p>	
<p>A</p>		

## FORCED ACCOUNT CODE (CONT'D)

A	DESCRIPTION	DATA
CM08	Designate the AP processor for this feature.	(1) 216 (2) 1 ◀ : AP (PJ-AP02)
	Specify the Confirmation Tone after dialing the access code for Forced Account Code.	(1) 362 (2) 0/1 ◀ : No Tone/Service Set Tone
CM12	Assign the Class of Service for Forced Account Code to the required stations.	<ul style="list-style-type: none"> <li>• CM12, YY=02 [Service Restriction Class (A) (00-15 ◀ )]</li> <li>• CM15, YY=31 (1) XX (Service Rest. Class A assigned by CM12, YY=02) (2) 1 ◀ : Allowed</li> </ul>
CM15		
CM42	Specify the maximum number of digits for Forced Account Codes.	(1) 12 (2) Max. number of digits (01-10) If Check Code is provided, the maximum of digits is limited to 8. If no data is set, the default setting is 10 digits.
	Specify the maximum number of digits for Authorization Codes. <b>Note:</b> <i>The same number of digits must be assigned by this command (CM 42-11/12)</i>	(1) 11 (2) Max. number of digits (01-10) If no data is set, the default setting is 10 digits.
CMD5	Set the ID Code and temporary Class of Service used for Forced Account Codes. For the details of the programming, refer to the programming of AUTHORIZATION CODE. <b>Note:</b> <i>Up to 1,000 codes combined with Authorization Code and Direct Inward System Access (DISA) can be set.</i>	
CM20	Assign the access code for Forced Account Code.	<ul style="list-style-type: none"> <li>• Y= 0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX (Access Code)</li> <li>(2) 087</li> </ul>
END		

### HARDWARE REQUIRED

In the following cases, the PJ-AP02 card is required.

1. Maximum 10 digit of ID code is provided.
2. Maximum 1000 code is provided.
3. Check Code is to be added.

## GROUP LISTENING

### GENERAL DESCRIPTION

When a Multiline Terminal user engaged in a call on the handset presses the **SPKR** key, this feature allows the others in the area to monitor the distant party through the built-in speaker of the Multiline Terminal while the user continues talking on the handset.

### STATION APPLICATION

All Multiline Terminals.

### OPERATING PROCEDURE

To monitor a call:

1. Talk with a station/trunk by handset.
2. Press **SPKR** key and the associated LED lights.
3. Continue conversation on handset.
4. To return to private conversation, press the **SPKR** key again.

**Note:** *To prevent feedback from a Multiline Terminal, keep handset away from the built-in speaker while this service is in progress, and press the **SPKR** key to turn the speaker off before restoring the handset.*

### SERVICE CONDITIONS

1. This feature applies to both internal and external calls.
2. Volume may be adjusted using the Multiline Terminal's volume control.
3. *Group Listening* is assigned in *Class of Service* on a per-station basis.

### PROGRAMMING

<u>START</u>	<u>DESCRIPTION</u>	<u>DATA</u>
<div style="border: 1px solid black; padding: 2px; width: fit-content;">CM12</div> <div style="border: 1px solid black; padding: 2px; width: fit-content; margin-top: 5px;">CM15</div>	Assign the Class of Service for Group Listening to the required Multiline Terminals.	<ul style="list-style-type: none"> <li>• CM12, YY=02                          [Service Restriction Class B                          (00-15 ◀)]</li> <li>• CM15, YY=70                         <ol style="list-style-type: none"> <li>(1) Service Rest. class (B) assigned by CM12, YY=02                                  (00-15)</li> <li>(2) 0: Allowed</li> </ol> </li> </ul>
<u>END</u>		

## HOLD

### GENERAL DESCRIPTION

This feature permits any station user to *Hold* a call in progress. After *Hold* has been set, the station user can make or answer new calls. Three *Hold* methods are available: *Call Hold*, *Exclusive Hold*, and *Nonexclusive Hold*.



## HOLD; CALL HOLD

### GENERAL DESCRIPTION

This feature permits any station user to *Hold* a call in progress by sending a hookflash and dialing the *Call Hold* feature access code, or by using the **Call Hold** key. This line can then be used to originate another call or return to a previously held call.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

To Hold a call in progress:

From a Single-Line Telephone:

1. Press **FLASH** key (or momentarily press the hookswitch) and receive special dial tone.
2. Dial *Call Hold* feature access code and receive dial tone.
3. Call in progress is held and the station may initiate a new call.

From a Multiline Terminal with a **Call Hold** key assigned:

1. Press **CALL HOLD** key and receive dial tone.
2. Call in progress is held and the user may initiate a new call.

From a Multiline Terminal (without **Call Hold** key):

1. Press **TRF** key and receive special dial tone.
2. Dial *Call Hold* feature access code and receive dial tone.
3. Call in progress is held and the user may initiate a new call.

To release a call and return to original call:

From a Single-Line Telephone:

1. Hang up to release the call in progress.
2. Original call rings back to station.
3. Lift handset and continue with original call.

From a Multiline Terminal:

1. Go on-hook, release the call in progress.  
OR
1. Original call rings back to Multiline Terminal.
2. Press the **RECALL** key.

To Hold a call and return to original call:

From a Single-Line Telephone:

1. Press **FLASH** key (or momentarily press the hookswitch) and receive special dial tone.
2. Dial *Call Hold* feature access code. The call is now on *Hold*.
3. Original call is automatically returned.

From a Multiline Terminal:

1. Press **TRF** key and receive special dial tone.
2. Dial *Call Hold* feature access code. The new call is now held and the original call is automatically returned.

**Note:** *By repeating the above steps, Multiline Terminal users may alternately converse with two parties (Broker's Call).*

## HOLD; CALL HOLD (CONT'D)

From a Multiline Terminal with a call in *Call Hold* and a call in progress on an extension line key:

1. Restoring the handset will release the call in progress and initiate an immediate recall of the Call Hold call.
2. Pressing the **RECALL** key will cause release of the call in progress and immediate connection to the call that was on Call Hold (unless the call in progress on the extension line key is via a trunk programmed as Centrex, in which case the **RECALL** key will generate a hookflash to the distant exchange for feature access there).

### SERVICE CONDITIONS

1. Lines freed through use of this feature may also be used for answering incoming calls using the *Call Pickup Group* or *Trunk Answer any Station* features.
2. If the controlling station user does not dial any further digits after the *Hold* feature access code, the station will enter the *Line Lockout* mode after a preset time-out period.
3. Calls will remain on *Hold* until the controlling station user either replaces the handset, causing the held call to ring back, or provides a hookflash and redials the *Hold* feature access code to return to the original call.
4. Only one call at a time may be held per station line, and the held call cannot be added to another call as in three-party *Conference*.
5. Stations may be allowed or denied this feature in *Class Of Service* programming in station data.
6. A maximum of 128 stations per system may simultaneously use this feature.
7. When a station has a *Camp-On* call, providing a hookflash and dialing the *Call Hold* feature access code results in the station immediately connecting to the Camped-On party.

### PROGRAMMING

START	DESCRIPTION	DATA
CM12	Assign Service Restriction Class A to the required stations.	<ul style="list-style-type: none"> <li>• YY = 02</li> <li>(1) X-XXXX: Station No.</li> <li>(2) XXXX                └── Service Restriction Class A (00-15 ◀)</li> </ul>
CM15	Assign this feature to Service Restriction Class A assigned by CM12, YY = 02.	<ul style="list-style-type: none"> <li>• YY = 01</li> <li>(1) XX: Service Restriction Class A assigned by CM12, YY = 02.</li> <li>(2) 1 ◀ : Allowed</li> </ul>
CM20	Assign the access code for Call HOLD.	<ul style="list-style-type: none"> <li>• Y = 0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX: Access Code (11)</li> <li>(2) 046: Call Hold</li> </ul>
CM90	Assign a CALL HOLD key to the Multiline Terminal.	<ul style="list-style-type: none"> <li>• YY = 00</li> <li>(1) Primary Extension No. + [ ] + key No.</li> <li>(2) F0046</li> </ul>
END		

## HOLD; EXCLUSIVE HOLD

### GENERAL DESCRIPTION

This feature allows a Multiline Terminal user to place a call on *Hold* and to exclude all other station users from retrieving the held call.

### STATION APPLICATION

All Multiline Terminals.

### OPERATING PROCEDURE

While a call is in progress:

1. Press **TRF** key and then press **HOLD** key. The LCD displays: EHD  
OR
2. Press **HOLD** key twice. The LCD displays: EHD
3. To return to the held call, press the held line key. The conversation is re-established.

### SERVICE CONDITIONS

1. *Exclusive Hold* may be activated from any line appearing on a Multiline Terminal.
2. After *Exclusive Hold* has been set, the user can make or answer calls from any other line appearing on the Multiline Terminal.
3. Only the Multiline Terminal that set *Exclusive Hold* may retrieve the held call.
4. The station initiating the *Exclusive Hold* will receive a distinctive *I-Hold* indication.
5. After a programmable period of time, the held call will automatically recall regardless of the status of the Multiline Terminal. Ringing, however, is disabled while *Do Not Disturb* is activated.
6. The LEDs of other Multiline Terminals on which the held line appears will give a steady display while the *Exclusive Hold* exists and during recall.
7. An internal station on *Exclusive Hold* cannot receive the following:
  - *Camp-On*
  - *Attendant Override*
  - *Executive Override*.

### PROGRAMMING

<u>START</u>	<u>DESCRIPTION</u>	<u>DATA</u>
CM08	Provide the system with Exclusive Hold.	(1) 130 (2) 1 ◀ : Available
CM41	Specify the Recall timing on Exclusive Hold.	• Y = 0 (1) 06 (2) 01 – 99 (Timer Data for 4 sec – 396 sec) If no data is set, the default setting is 236-240 seconds.
<u>END</u>		

## HOTLINE

### GENERAL DESCRIPTION

This feature permits a station user to place a call to another station or to an outside party automatically by seizing the extension assigned as *Hotline*.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

To place a *Hotline* call from a Single-Line Telephone:

1. Lift handset and receive ringback tone. Other party receives ringing indication.
2. Converse when other party answers.

To place a *Hotline* call from a Multiline Terminal:

1. Lift handset.
2. Press *Hotline* extension button (if not Prime Line). Receive ringback tone; the other party receives ringing indication.
3. Converse when other party answers.

### SERVICE CONDITIONS

1. There is a maximum of 100 assignments for *Hotline* destination. If internal bidirectional *Hotline* calling is required, two assignments (one for each direction) must be made. A maximum of 50 pairs of bidirectional *Hotlines* can be assigned.
2. *Hotline* assignments are programmed into system data using the *Maintenance Administration Terminal (MAT)* or *Customer Administration Terminal (CAT)*.
3. A *Hotline* call can be transferred to another station using the *Call Transfer* feature.
4. On an internal *Hotline* call, the calling party hears reorder tone when the called station is in one of the following conditions:
  - Busy
  - In *Line Lockout*
  - In make-busy through software programming.
5. *Call Forwarding* is applied whenever the destination station of the *Hotline* call has set *Call Forwarding (All Calls, Busy, and No Answer)*.
6. *Hotline* calls can be directed to the outside exchange network by assignment of the destination as a system speed dial memory location. When this *Hotline* is used, the system will access a trunk in the trunk route associated with the trunk access code assigned in the system speed dial memory location, and then will dial out the assigned outside number. See *System Speed Dialing* for the methods to reprogram the outside number.
7. On *Hotline - Outside* calls, when all trunks in the trunk route are busy, reorder tone is heard by the calling party.

## HOTLINE (CONT'D)

8. On *Hotline - Outside* calls, *Station Message Detail Recording (SMDR)* will register the primary extension of the station that used the *Hotline* and the system speed dial memory location code.
9. For Brokerage applications, more than one *Hotline* can be assigned to a Multiline Terminal. This allows another *Hotline* call to be made from the same Multiline Terminal without having to restore the handset. The user can simply press the next *Hotline* button, which causes the call in progress to be dropped, and immediately initiates the next *Hotline* call.
10. Any extension of software line appearance (requiring no hardware) can be assigned as a *Hotline*.
11. When the destination of a *Hotline* call is an *Attendant Console*, the *Hotline* call is indicated at the console by an incoming flash on the *ATND* key.
12. *Class of Service* can be assigned to the *Hotline* extension. The *Class of Service* and *Least Cost Routing* or automatic route selection assignment will affect the trunk routes available to the *Hotline* extension and its access to features.
13. On *Hotline - Outside* calls, the calling party will hear dial tone from the Central Office (CO) when the trunk is seized, and the digits are dialed by the system.
14. The *Hotline - Outside* has access to *Trunk Queuing - Outgoing* (and will dial the outside number after the queued call recalls) and to *Timed Queue* features.
15. The *Hotline* station has access to *Exclusive* or *Non-exclusive Hold*, *Call Hold*, *Transfer*, and *Conference* features.
16. The *Hotline - Internal* is subject to the *Attendant* setting or canceling *Call Forward*, and to *Call Forwarding - Destination* set or cancel. To perform these functions, the extension number of the *Hotline* must be used.

## HOTLINE (CONT'D)

### PROGRAMMING

For internal Hotline:

<u>START</u>	<u>DESCRIPTION</u>	<u>DATA</u>									
CM12	Assign the Hotline Station to the required stations.	<ul style="list-style-type: none"> <li>• YY=03</li> <li>(1) X-XXXX (Station No.)</li> <li>(2) 04: Hotline Station</li> </ul>									
CM52	Set up the Hotline pair. Bidirectional Hotlines should be assigned as follows: <table style="margin-left: 20px; margin-top: 10px;"> <thead> <tr> <th style="text-align: left;"><u>Hotline Pair No.</u></th> <th style="text-align: left;"><u>Calling Side</u></th> <th style="text-align: left;"><u>Called Side</u></th> </tr> </thead> <tbody> <tr> <td>00</td> <td>Station A</td> <td>Station B</td> </tr> <tr> <td>01</td> <td>Station B</td> <td>Station A</td> </tr> </tbody> </table> <p><b>Note:</b> <i>There is a maximum of 100 assignments for Hotline destination. If internal bidirectional Hotline calling is required, two assignments (one for each direction) must be made. A maximum of 50 bidirectional Hotlines can be assigned.</i></p>	<u>Hotline Pair No.</u>	<u>Calling Side</u>	<u>Called Side</u>	00	Station A	Station B	01	Station B	Station A	<ul style="list-style-type: none"> <li>• YY = 00 – 99 (Hotline Pair No.)</li> <li>(1) 0: Calling Side</li> <li>(2) X-XXXX (Station No./Data Station No. assigned by CM12, YY=03)</li> <li>(1) 1: Called Side</li> <li>(2) { X-XXXX (Station No./Data Station No.)</li> <li style="margin-left: 20px;">E00X</li> <li style="margin-left: 40px;">└ HA-610Z/SN610 ATTCON No.</li> </ul>
<u>Hotline Pair No.</u>	<u>Calling Side</u>	<u>Called Side</u>									
00	Station A	Station B									
01	Station B	Station A									
CM08	Specify the result of a Switch Hook Flash on each Hotline Station.  To allow Hotline Stations to transfer a call or access a feature, set the data to "0."	<ul style="list-style-type: none"> <li>(1) 057</li> <li>(2) { 0: Special Dial Tone Connection</li> <li style="margin-left: 20px;">1 ◀ : Attendant Recall</li> </ul>									
<u>END</u>											

## HOTLINE (CONT'D)

For *Hotline-Outside*:

START	DESCRIPTION	DATA								
CM12	Assign a <i>Hotline</i> to the required stations.	<ul style="list-style-type: none"> <li>• YY=03</li> <li>(1) X-XXXX (Station No.)</li> <li>(2) 04: Hotline</li> </ul>								
CM71	Allocate the memory area for the <i>Hotline-Outside</i> call. For example, to assign the 10 <i>Hotline-Outside</i> calls into No.100 through No.109 Memory Slots, 2nd data is "100010." Abbreviated Nos. are automatically assigned as shown below: <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th></th> <th>Abbrev. No.</th> </tr> </thead> <tbody> <tr> <td>Memory Slot 100</td> <td>00</td> </tr> <tr> <td style="text-align: center;">§</td> <td style="text-align: center;">§</td> </tr> <tr> <td>Memory Slot No.109</td> <td>09</td> </tr> </tbody> </table>		Abbrev. No.	Memory Slot 100	00	§	§	Memory Slot No.109	09	<ul style="list-style-type: none"> <li>(1) 65: For <i>Hotline-Outside</i></li> <li>(2) XXXXXX: See left column.               <ul style="list-style-type: none"> <li>Number of Memory Slots to be assigned in blocks (001 - 100)</li> <li>Starting Memory Slot No. in blocks (000 - 299)</li> </ul> </li> </ul>
	Abbrev. No.									
Memory Slot 100	00									
§	§									
Memory Slot No.109	09									
CM72	Set the outside party's number to each Memory Slot No.	<ul style="list-style-type: none"> <li>(1) XXX: Memory Slot No. (000 - 299)</li> <li>(2) X...X: Outside Party's No. (Max. 28 digits)</li> </ul>								
CM52	Define the <i>Hotline</i> pairs.	<ul style="list-style-type: none"> <li>• YY=00 - 99 (Hotline pair No.)</li> <li>(1) 0: Calling Station 1: Called Outside party</li> <li>(2) { Station No. (For Calling Station) 01XX (For Called Outside party)               <ul style="list-style-type: none"> <li>Abbreviated No. given by CM71.</li> </ul> </li> </ul>								
END										

## HOTLINE (CONT'D)

*For Brokerage Hotline*

START	DESCRIPTION	DATA
CM11	Assign the Virtual Station numbers to the required virtual LENS.	(1) Virtual LEN (0000-0255) (2) X-XXXX (Virtual Station Number)
CM12	Assign the <i>Hotline</i> to the Virtual Station No. assigned by CM11.	• YY=03 (1) Virtual Station No. (2) 04: <i>Hotline</i>
CM52	Define the <i>Hotline</i> pairs.	• YY=00-99 (Hotline Pair No.) (1) 0: Calling party (2) Virtual Station No.  (1) 1: Called party (2) Station No./ 01XX (For Outside party) └ Abbreviated No. given by CM71 (See <i>Hotline-Outside</i> )
CM90	Assign the Virtual Line Station and RELEASE keys on the Multiline Terminal.	• YY=00 (1) Primary Extension No. + [ ] + Key No. (2) X-XXXX (Virtual Station No.) F1020 (Release key)
END		



## INDIVIDUAL ATTENDANT ACCESS

### GENERAL DESCRIPTION

This feature permits a station user to access a specific Attendant by dialing a designated Attendant call code.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

To originate a call to the Attendant:

1. Go off-hook and dial the Individual Attendant Access code.
2. Dial the individual Attendant number (0-7).
3. Directed Attendant receives Incoming Call Identification and answers using normal call handling procedures.

### SERVICE CONDITIONS

1. All stations, including fully restricted stations, can call an Attendant.
2. If *Tenant Service* is provided, each tenant can call his own Attendant via the same code. When this feature is assigned, Attendant night transfers will not function for these calls.
3. *Interposition Transfer* uses the same Attendant call codes as *Individual Attendant Access*.

### PROGRAMMING

START	DESCRIPTION	DATA
CM06	Assign an Attendant Console Number to each HA-610Z Attendant Console. <span style="float: right; border: 1px solid black; border-radius: 15px; padding: 2px;">INITIAL</span>	<ul style="list-style-type: none"> <li>• YY = 01</li> <li>(1) ATTCON No. (0-7)</li> <li>(2) <u>XXX</u>: ATI Board Circuit No. connected to the Console  <div style="margin-left: 20px;">Circuit No. (0/1)</div> <div style="margin-left: 20px;">Slot No. 04-07 of ATI Board assigned by CM05.</div> </li> </ul>
CM10	Assign an Attendant Console Number to each SN610 Attendant Console.	<ul style="list-style-type: none"> <li>(1) 0000-0511 (LEN)</li> <li>(2) E000-E007 (SN610 ATTCON No.)</li> </ul>
CM20	Assign the access code for Individual Attendant Access.	<ul style="list-style-type: none"> <li>• Y = 0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX (Access Code)</li> <li>(2) 095</li> </ul>
CM08	Specify the Individual Attendant Access capability provided from a station belonging to a different tenant.	<ul style="list-style-type: none"> <li>(1) 143</li> <li>(2) 0/1 ◀: Restricted/Allowed</li> </ul>
<u>END</u>		

## INTERCEPT ANNOUNCEMENT

### GENERAL DESCRIPTION

This feature provides for interception of *Direct Inward Dialing (DID)* and *E&M Tie Line* calls which cannot be completed due to unassigned station or level. These calls are automatically routed to a recorded *Intercept Announcement* which can be used to inform the caller that an inoperative number was reached, and supply the listed directory number for information.

### STATION APPLICATION

Not applicable.

### OPERATING PROCEDURE

To record a message:

1. Go off-hook and receive internal dial tone.
2. Dial voice recording feature access code and voice recording memory card number. Three seconds of tone will be supplied.
3. Record message (maximum duration-30 seconds).
4. Restore handset.

### SERVICE CONDITIONS

1. This feature requires a voice recording board (VRMEM) be installed and programmed for *Intercept Announcement*.
2. Multiple calls may be connected to the *Intercept Announcement* board at the same time. If a second call arrives while the first is being processed, the second caller may not hear the announcement from the beginning.
3. If the caller does not hang up, the system will repeat the message.
4. This feature is only available on DID and tie line calls where answer supervision is provided.
5. The following call conditions which cannot be completed, can be routed to an *Intercept Announcement*:
  - vacant level
  - unassigned station number.
6. Calls to restricted access codes or feature access codes will always receive the *Intercept Announcement*.
7. Only one common message can be provided for the different intercept conditions.
8. There is no method to exempt individual DID or tie lines from *Intercept Announcement*.

## INTERCEPT ANNOUNCEMENT (CONT'D)

### PROGRAMMING

START	DESCRIPTION	DATA
CM10	Assign the Voice Recording Memory Card (PK-ME01) to the required LEN.	(1) 0000 – 0511 (LEN) (2) EB000 – EB127 (Voice Recording Memory Card No.)
CM12	Assign Service Restriction Class (A) to the required stations.	• YY=02 (1) X – XXX: Station No. (2) XXXX └── Service Restriction Class (A)
CM15	Assign Voice Recording Memory Card access to Service Restriction Class (A) assigned by CM12, YY=02.	• YY=33 (1) XX: Service Restriction Class (A) assigned by CM12, YY=02. (2) 1 ◀: Allowed
CM49	Set the function to each Voice Recording Memory Card (PK-ME01) accommodated into the system.	• YY=00 (1) 000 – 127 [Voice Recording Memory Card No. assigned by CM10 (EB000 – EB127)] (2) 0A00: Call Forwarding-Intercept Announcement
CM51	Assign the Voice Recording Memory Card as the destination of the call intercepted on each Tenant.	• YY=07 (1) 00 – 63 (Tenant No.) (2) EB000 – EB127 (Voice Recording Memory Card No.)
CM20	To record, replay, or delete a message, assign the appropriate Voice Recording access codes.	• Y=0 – 3 (Numbering Plan Group 0 – 3) (1) X – XXX (Access Code) ┌── A00: Voice Recording access (Record) (2) ┌── A01: Voice Recording access (Replay) └── A02: Voice Recording access (Delete)
END		

## INTERCOM

### GENERAL DESCRIPTION

Three types of *Intercoms* are available; *Manual Intercom*, *Automatic Intercom*, and *Dial Intercom*. Each type of *Intercom* provides access to a small group of Multiline Terminals with simplified calling methods.

## INTERCOM; MANUAL INTERCOM

### GENERAL DESCRIPTION

The *Manual Intercom* allows a Multiline Terminal to be one of a group of up to six Multiline Terminals that share a common speech and signal path. The Multiline Terminal user can signal other members of the *Manual Intercom* group by pressing a dedicated **Manual Intercom** key; each press causes a tone burst over the other members' built-in Multiline Terminal speaker. When another member answers the Manual Intercom call, a single speech path is activated.

### STATION APPLICATION

All Multiline Terminals.

### OPERATING PROCEDURE

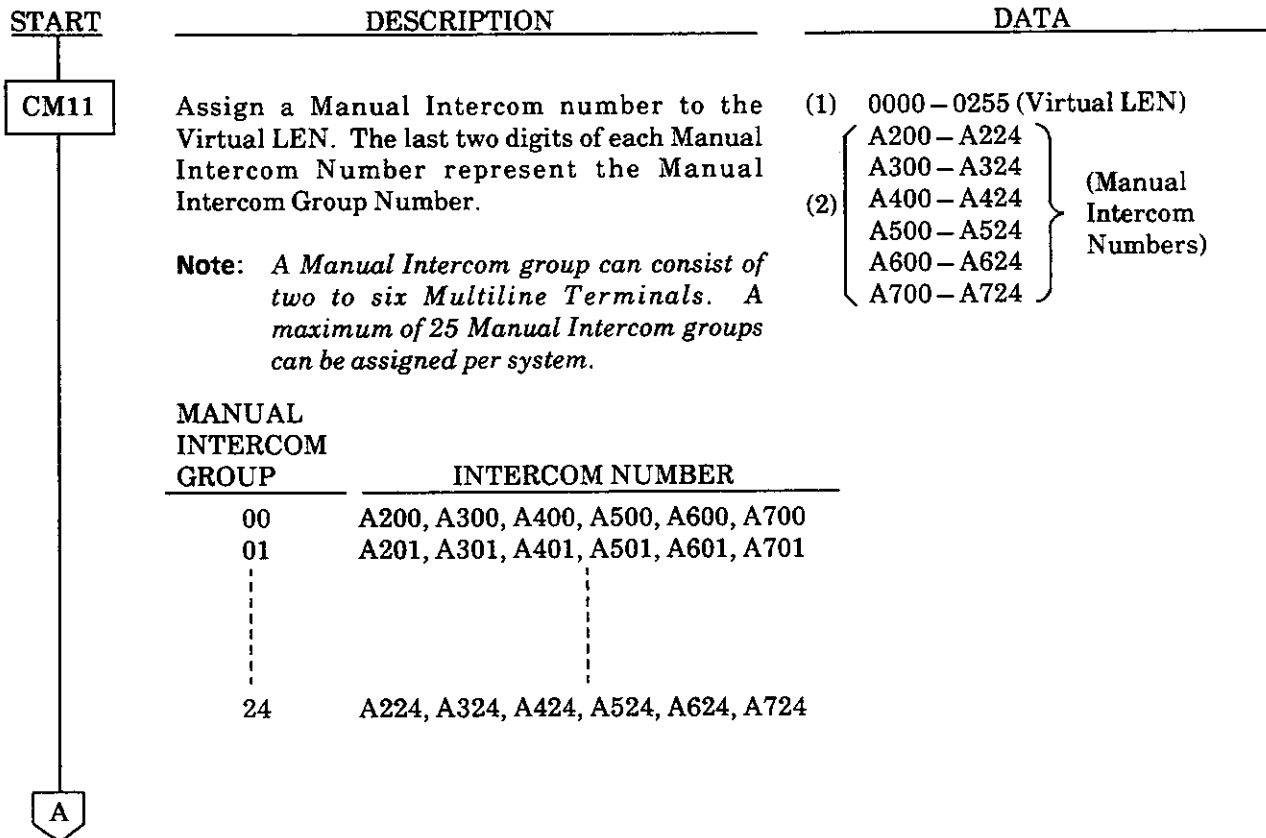
1. Calling Multiline Terminal user lifts handset and presses **Manual Intercom** key. The other members of the *Manual Intercom* group receive a tone burst.
2. Each subsequent press causes a tone burst to be generated.
3. Another Multiline Terminal presses the same *Manual Intercom* appearance and establishes a station-to-station call by lifting the handset.

### SERVICE CONDITIONS

1. A *Manual Intercom* group can consist of two to six Multiline Terminals.
2. A maximum of 25 *Manual Intercom* groups can be assigned per system.
3. On a system basis, all *Manual Intercoms* can be assigned as private or non-private. When a *Manual Intercom* is non-private, up to four members of the group can enter an *Intercom* call.
4. Incoming call indications are given to all members of the *Manual Intercom* group except the originator of the call.
5. Each *Manual Intercom* (from two to six appearances) uses a single extension which can be a software extension (no supporting hardware is required).
6. *Transfer*, *Call Park*, and other extension line features are not available on *Manual Intercom*. *Dual Hold* and *Hold Recall* are available on *Manual Intercom*.
7. More than one *Manual Intercom* can appear on a Multiline Terminal.

## INTERCOM; MANUAL INTERCOM (CONT'D)

### PROGRAMMING



## INTERCOM; MANUAL INTERCOM (CONT'D)

A	DESCRIPTION	DATA
CM12	Assign the Manual Intercom Station.	<ul style="list-style-type: none"> <li>• YY = 03</li> <li>(1) Manual Intercom No. assigned by CM11.</li> <li>(2) 06: Manual Intercom</li> </ul>
CM56	Assign the Primary Extension No. of each Multiline Terminal to each Manual Intercom Number.	<ul style="list-style-type: none"> <li>• YY = 11</li> <li>(1) Manual Intercom No. assigned by CM11.</li> <li>(2) Primary Extension No.</li> </ul>
CM90	Assign the MANUAL INTERCOM key to each Multiline Terminal.	<ul style="list-style-type: none"> <li>• YY = 00</li> <li>(1) Primary Extension No. + [ ] + Key No. (01-16)</li> <li>(2) Manual Intercom No. of each Multiline Terminal.</li> </ul>
	Assign the MANUAL INTERCOM key to each Add-On Module, if required.	<ul style="list-style-type: none"> <li>• YY = 00</li> <li>(1) Primary Extension No. + [ ] + Key No. (30-54)</li> <li>(2) Manual Intercom No. of each Add-On Module.</li> </ul>
CM08	Specify the Manual Intercom access capability when a called intercom station has set Do Not Disturb.	<ul style="list-style-type: none"> <li>(1) 238</li> <li>(2) 0/1 ◀ : No Ring on/Ring on (Allowed)</li> </ul>
END		

## INTERCOM; AUTOMATIC INTERCOM

### GENERAL DESCRIPTION

*Automatic Intercom* provides a path for voice announcement calls with *Handsfree Answerback* between two Multiline Terminals using a dedicated line key. Private conversations can be held by using the Multiline Terminal handsets.

### STATION APPLICATION

All Multiline Terminals.

### OPERATING PROCEDURE

1. Calling Multiline Terminal user lifts handset and presses **Automatic Intercom** key.
2. Called Multiline Terminal receives tone burst and can *Answerback Handsfree*.  
OR
3. Calling Multiline Terminal can change calls to ringing call by dialing 1.
4. Called Multiline Terminal must press **Automatic Intercom** key and lift handset to answer ringing call.

### SERVICE CONDITIONS

1. Only two Multiline Terminals can share an *Automatic Intercom* path.
2. The maximum number of *Automatic Intercom* paired stations per system is 32.
3. More than one *Automatic Intercom* can appear on a Multiline Terminal.
4. *Automatic Intercoms* are private.
5. Each *Automatic Intercom* pair uses two extensions which can be software extensions (no supporting hardware is required).
6. *Dual Hold* with hold recall is available on *Automatic Intercom*. Other extension features such as *Call Transfer*, *Call Park*, etc. are not available.
7. When the called terminal is busy, the caller will receive busy tone.



## INTERCOM; AUTOMATIC INTERCOM (CONT'D)

### PROGRAMMING

START	DESCRIPTION	DATA										
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM11</div>	<p>Assign an Automatic Intercom number to the Virtual LEN. The Automatic Intercom Stations are paired as shown below.</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="text-align: center;">GROUP No.</th> <th style="text-align: center;">INTERCOM NUMBER</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">00</td> <td style="text-align: center;">A000, A100</td> </tr> <tr> <td style="text-align: center;">01</td> <td style="text-align: center;">A001, A101</td> </tr> <tr> <td style="text-align: center;">}</td> <td style="text-align: center;">}</td> </tr> <tr> <td style="text-align: center;">31</td> <td style="text-align: center;">A031, A131</td> </tr> </tbody> </table> <p><b>Note:</b> <i>The maximum number of Automatic Intercom paired stations per system is 32 (16 Automatic Intercoms).</i></p>	GROUP No.	INTERCOM NUMBER	00	A000, A100	01	A001, A101	}	}	31	A031, A131	<p>(1) 0000 – 0255 (Virtual LEN)</p> <p>(2) {                  A000 – A031                  A100 – A131                  (Automatic Intercom Number)                  AXXX                  Automatic Intercom Group No. (00 – 31)                  0/1 to be made one pair.</p>
GROUP No.	INTERCOM NUMBER											
00	A000, A100											
01	A001, A101											
}	}											
31	A031, A131											
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM12</div>	<p>Assign each Automatic Intercom Station.</p>	<ul style="list-style-type: none"> <li>• YY=03</li> <li>(1) Automatic Intercom No. assigned by CM11.</li> <li>(2) 05: Automatic Intercom</li> </ul>										
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM56</div>	<p>Assign the Primary Extension number to each Automatic Intercom Number.</p>	<ul style="list-style-type: none"> <li>• YY=10</li> <li>(1) A000 – A031                      A100 – A131                      (Automatic Intercom No. assigned by CM11)</li> <li>(2) X – XXXX (Primary Extension No.)</li> </ul>										
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM90</div>	<p>Assign the AUTOMATIC INTERCOM Key to each Multiline Terminal.</p>	<ul style="list-style-type: none"> <li>• YY=00</li> <li>(1) Primary Extension No.                      + [ ] + Key No. (01 – 16)</li> <li>(2) {                      A000 – A031                      A100 – A131                      (Automatic Intercom No. of each Multiline Terminal)</li> </ul>										
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">A</div>												

**Note:** *To activate the Voice Announcement call, refer to INTERNAL TONE/VOICE SIGNALING.*

## INTERCOM; AUTOMATIC INTERCOM (CONT'D)

	DESCRIPTION	DATA
<div style="border: 1px solid black; width: 20px; height: 20px; margin: 0 auto; text-align: center; line-height: 20px;">A</div> <div style="border: 1px solid black; width: 60px; height: 25px; margin: 5px auto; text-align: center;">CM90</div>	<p>Assign the AUTOMATIC INTERCOM key to each Add-On Module, if required.</p>	<ul style="list-style-type: none"> <li>• YY=00</li> <li>(1) Primary Extension No. + <span style="border: 1px solid black; padding: 0 5px;"> </span> + Key No. (30-54)</li> <li>(2) { A000-A031 A100-A131 (Automatic Intercom No. of each Add-On Module)</li> </ul>
<div style="border: 1px solid black; width: 60px; height: 25px; margin: 5px auto; text-align: center;">CM08</div>	<p>Specify the Automatic Intercom access capability when a called intercom station has set Do Not Disturb.</p>	<ul style="list-style-type: none"> <li>(1) 237</li> <li>(2) 0/1 ◀ : Restricted/Allowed</li> </ul>
<div style="border: 1px solid black; width: 60px; height: 25px; margin: 5px auto; text-align: center;">CM13</div>	<p>Specify the busy indication on the Automatic Intercom LED when a Multiline Terminal of the same Automatic Intercom Group is busy.</p>	<ul style="list-style-type: none"> <li>• YY=11</li> <li>(1) X-XXXX: Primary Extension Number</li> <li>(2) { 0: Allowed 1 ◀ : Restricted</li> </ul>
<div style="text-align: center; margin-top: 10px;"><u>END</u></div>		

## INTERCOM; DIAL INTERCOM

### GENERAL DESCRIPTION

The *Dial Intercom* allows a Multiline Terminal to be one of a group of up to ten Multiline Terminals which can call using a dedicated *Dial Intercom line* key with abbreviated dialing. *Dial Intercom* calls can be voice announce with *Handsfree Answerback* or ringing calls.

### STATION APPLICATION

All Multiline Terminals.

### OPERATING PROCEDURE

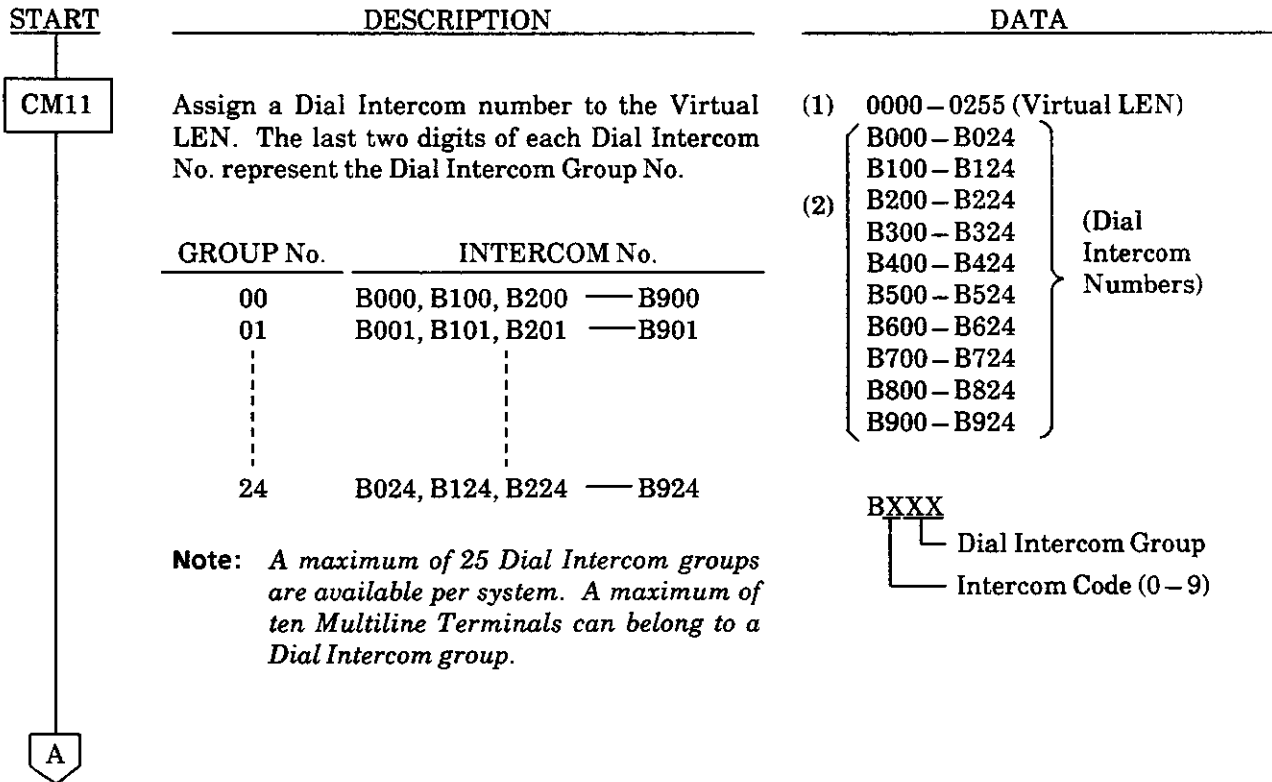
1. Calling Multiline Terminal user lifts handset and presses the **Dial Intercom** key and receives dial tone.
  2. Caller dials the one-digit Intercom code (0 – 9) of the called Multiline Terminal.
  3. Called Multiline Terminal user receives a tone burst followed by voice announcement and can answer using *Handsfree Answerback*.
- OR
1. Calling Multiline Terminal user can dial "1" to change the call to a ringing call. (Each "1" dialed changes the mode from ringing to voice announce or vice versa).
  2. For ringing call the called Multiline Terminal user must lift handset and press flashing **Dial Intercom** key.

### SERVICE CONDITIONS

1. A maximum of 25 *Dial Intercom* groups are available per system. A maximum of ten Multiline Terminals per *Dial Intercom* group are allowed.
2. A Multiline Terminal can have more than one *Dial Intercom* appearance.
3. Each *Dial Intercom* provides a single voice path.
4. *Intercom* number assignments are one digit (0-9).
5. On an extension basis, a *Dial Intercom* can be private or non-private. When a *Dial Intercom* is non-private, up to three members of the group can enter an *Intercom* call.
6. Incoming call indication is only given to the called party within the *Dial Intercom* group.
7. Each *Dial Intercom* (from two to ten appearances) uses a single extension, which can be a software extension (no supporting hardware is required).
8. *Dual Hold*, *Call Transfer*, and *Hold Recall* are available on *Dial Intercom*. Other extension features, such as *Call Park*, etc., are not available.

## INTERCOM; DIAL INTERCOM (CONT'D)

### PROGRAMMING



## INTERCOM; DIAL INTERCOM (CONT'D)

A	DESCRIPTION	DATA
CM12	Assign the Dial Intercom Station.	<ul style="list-style-type: none"> <li>• YY=03</li> <li>(1) Dial Intercom No. assigned by CM11.</li> <li>(2) 07: Dial Intercom</li> </ul>
CM56	Assign the Primary Extension number to each Dial Intercom Number.	<ul style="list-style-type: none"> <li>• YY=12</li> <li>(1) Dial Intercom Number (B000-B924)</li> <li>(2) Primary Extension No.</li> </ul>
CM90	Assign the DIAL INTERCOM key to each Multiline Terminal.	<ul style="list-style-type: none"> <li>• YY=00</li> <li>(1) Primary Extension No. + <input type="text"/> + key No. (01-16)</li> <li>(2) Dial Intercom No. of each Multiline Terminal.</li> </ul>
	Assign the DIAL INTERCOM key to each Add-On Module, if required.	<ul style="list-style-type: none"> <li>• YY=00</li> <li>(1) Primary Extension No. + <input type="text"/> + key No. (30-54)</li> <li>(2) Dial Intercom No. of each Add-On Module.</li> </ul>
CM12	If the Private Dial Intercom is provided, assign the data to disable Executive Override to each Dial Intercom.	<ul style="list-style-type: none"> <li>• CM12, YY=00</li> <li>(1) BXXX: Dial Intercom No. assigned by CM11.</li> <li>(2) XXXX  <ul style="list-style-type: none"> <li>└ Service Restriction Class (A) (00-15◀)</li> </ul> </li> </ul>
CM15		
CM08	Specify the Dial Intercom access capability when a called intercom station has set Do Not Disturb.	<ul style="list-style-type: none"> <li>• CM15, YY=09</li> <li>(1) Service Restriction Class (A) (00-15) assigned by CM12, YY=02</li> <li>(2) 0: Restricted</li> </ul>
END		<ul style="list-style-type: none"> <li>(1) 239</li> <li>(2) 0/1 ◀ : Restricted/Allowed</li> </ul>

**Note:** To activate the Voice Announcement call, refer to INTERNAL TONE/VOICE SIGNALING.

## INTERNAL TONE/VOICE SIGNALING

### GENERAL DESCRIPTION

Multiline Terminals can signal incoming internal calls by voice announcement or by ringing according to the programmed mode (Voice first or Ring first) of the terminal. The caller can dial "1" to change from voice announcement to Ring Tone or vice versa.

### STATION APPLICATION

All Multiline Terminals.

### OPERATING PROCEDURE

When a called Multiline Terminal has been set to "Ring First":

1. Press the **extension line** key and lift the handset.
2. Dial extension number. The called party's extension will ring.
3. The handset must be used for reply.

OR

3. Dial "1".
4. Wait for voice page alert tone.
5. Voice announce call.
6. The called party can reply handsfree.

When a called Multiline Terminal has been set to "Voice First":

1. Press the **extension line** key and lift the handset.
2. Dial extension number. Wait for voice page alert tone.
3. Voice announce call.
4. The called party can reply hands-free.

OR

4. Dial 1.
5. The called party's extension will ring.
6. The handset must be used to reply.

The Multiline Terminal assigned this feature can program the following two modes:

Voice Mode: allows an incoming call to terminate with Voice Announcement.

Tone Mode: allows an incoming call to terminate with ringing.

To set Voice/Tone mode:

1. Press **SPKR** key.
2. Dial Voice/Tone Programming access code and receive feature dial tone. The LCD will show the current mode of the Multiline Terminal.
3. Dial any single digit (0-9, \*, #). Voice mode is switched to Tone mode or vice versa and Service Set tone is received.
4. Press **SPKR** key.

### SERVICE CONDITIONS

1. When a Multiline Terminal is receiving a Voice Announcement, it cannot receive any other audible signal.
2. Single-digit feature access codes must be allowed in system programming.
3. Voice Announce service on extension lines can be allowed or denied on a system basis.
4. Microphone control **MIC** key must be lit for *Handsfree Answerback* response.
5. Refer also to the *Intercom* feature.
6. Voice announcement is available only to the primary extension of the dialed station.

## INTERNAL TONE/VOICE SIGNALING (CONT'D)

### PROGRAMMING

START

CM08

A

DESCRIPTION	DATA
To activate the Single-Digit Feature Access Code feature, set the data for 050, 051, 069 and 148 to "1".	(1) 050: * Button as Switch Hook Flash.
	(2) 1 ◀ : Ineffective
	(1) 051: # Button as Switch Hook Flash.
	(2) 1 ◀ : Ineffective
	(1) 069: Single Digit Dialing on BT Connection
	(2) 1 ◀ : Step Call
	(1) 148: Same Last Digit Redialing on BT Connection
	(2) 1 ◀ : Ineffective
Provide the System with the Single-Digit Feature Access Code on RBT or Voice Call Connection.	(1) 156
	(2) 0: Available
Specify if Voice Call is provided when calling a Multiline Terminal set to Voice First from a Single-Line Telephone or a Multiline Terminal without an LCD.	(1) 270:
	(2) { 0: Not to be provided (Ring Tone) 1 ◀ : To be provided
Specify if Voice Call is provided when calling a Multiline Terminal set to Voice First from a HA-610Z ATTCON.	(1) 271:
	(2) { 0: Not to be provided (Ring Tone) 1 ◀ : To be provided

## INTERNAL TONE/VOICE SIGNALING (CONT'D)

	DESCRIPTION	DATA
<div style="text-align: center;">A</div> <div style="margin-top: 10px;"> <div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM12</div> <div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM15</div> </div>	<p>Assign the Class of Service of Voice Call (called side) to the required Multiline Terminal.</p>	<ul style="list-style-type: none"> <li>• CM12, YY=02                             <ul style="list-style-type: none"> <li>(1) X-XXXX: Primary Extension No.</li> <li>(2) XXXX                                     <ul style="list-style-type: none"> <li>Service Restriction Class (B) (00-15◀ )</li> </ul> </li> </ul> </li> <li>• CM15, YY=67                             <ul style="list-style-type: none"> <li>(1) 00-15: Service Restriction Class (B) assigned by CM12, YY=02</li> <li>(2) <span style="font-size: 2em;">{</span> <ul style="list-style-type: none"> <li>0: Restricted</li> <li>1◀ : Allowed</li> </ul> </li> </ul> </li> </ul>
<div style="margin-top: 10px;"> <div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM12</div> <div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM15</div> </div>	<p>Assign the Class of Service of Voice Call Mike Off (called side) to the required Multiline Terminal.</p>	<ul style="list-style-type: none"> <li>• CM12, YY=07                             <ul style="list-style-type: none"> <li>(1) X-XXX: Primary Extension No.</li> <li>(2) XXX: Service Restriction Class (C) (00-15◀ )</li> </ul> </li> <li>• CM15, YY=99                             <ul style="list-style-type: none"> <li>(1) XX: Service Restriction Class (C) assigned by CM12, YY=07</li> <li>(2) 0: Available</li> </ul> </li> </ul>
<div style="margin-top: 10px; text-align: center;"> <div style="border: 1px solid black; padding: 2px; width: fit-content;">CM20</div> </div>	<p>Assign the Voice Call/Ring Tone Programming access code.</p>	<ul style="list-style-type: none"> <li>• Y=0-3 (Numbering Plan Group 0-3)                             <ul style="list-style-type: none"> <li>(1) X-XXX: Access Code</li> <li>(2) A63: Voice Call/Ring Tone Programming</li> </ul> </li> </ul>
<div style="text-align: center; margin-top: 10px;"> <div style="border: 1px solid black; padding: 2px; width: fit-content;">END</div> </div>		



## INTERNAL ZONE PAGING WITH MEET-ME

### GENERAL DESCRIPTION

This feature allows *Attendant Consoles* and system users to page over the built-in speakers of the Multiline Terminals within a single assigned zone, or within a maximum of six zones simultaneously.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

To page from a Multiline Terminal or a Single-Line Telephone:

1. Lift the handset and receive extension dial tone.
2. Dial the *Internal Zone Paging* feature access code for the desired zone or for a maximum of six simultaneous zones or press the assigned line key for the desired zone or for a maximum of six simultaneous zones.
3. Page the desired party.

To page from an *Attendant Console*:

1. Press an idle **LOOP** key.
2. Dial the *Internal Zone Paging* feature access code for the desired zone or for a maximum of six simultaneous zones.
3. Page the desired party.

To answer (*Meet-Me*) from a Multiline Terminal or a Single-Line Telephone:

1. Lift the handset and receive extension dial tone.
2. Dial the *Meet-Me Answer* feature access code.
3. Converse.

### SERVICE CONDITIONS

1. The maximum number of internal paging zones is eight, Zone 0 through Zone 7. Up to eight internal zones can be accessed simultaneously by different stations.
2. The paging *Attendant Console/system user, wishing to simultaneously page six zones, can page Zone 0 through Zone 5. If less than six simultaneous zones are desired, they would be Zone 0 through Zone x, numbered consecutively.*
3. The maximum number of Multiline Terminals within one zone is 16.
4. A busy Multiline Terminal will not be paged during an Internal Zone Page.
5. Multiline Terminals can be assigned to more than one zone.
6. *Meet-Me Answer* cannot be done after making consultation hold.
7. Any station can page any zone.
8. The paging station will not receive busy tone when all the stations in the paged zone are busy.
9. For the following paging, a paged station must dial a paging station number or Attendant access code to answer without *Meet-Me Answer*.
  - Zone Paging by *Attendant Console*
  - All Zone Paging by any station or attendant

## INTERNAL ZONE PAGING WITH MEET-ME (CONT'D)

### PROGRAMMING

- To provide Internal Zone Paging with Meet-Me.

START	DESCRIPTION	DATA
CM12 CM15	Assign the Class of Service for Internal Zone Paging to the required stations.	<ul style="list-style-type: none"> <li>• CM12, YY=02 (Service Rest. Class (A) (00-15◀))</li> <li>• CM15, YY=49               <ol style="list-style-type: none"> <li>(1) Service Restriction Class (A) assigned by CM12, YY=02, (00-15)</li> <li>(2) 1◀: Allowed</li> </ol> </li> </ul>
CM20	Assign Internal Zone Paging access code and Meet-Me answer code.	<ul style="list-style-type: none"> <li>• Y= 0-3 (Numbering Plan Group 0-3)               <ol style="list-style-type: none"> <li>(1) X-XXX : Access code (50-54, 55-59) (Access Code)</li> <li>(2) A30-A37 (A30-A34) (Group 0-7: Paging Access) A38-A45 (A38-A42) (Group 0-7: Meet-Me Answer)</li> </ol> </li> </ul>
CM56	Assign Group for Internal Zone Paging to the required Multiline Terminals.  <b>Note:</b> A maximum of 8 internal zone paging is available. Up to 16 Multiline Terminals can be grouped per zone.	<ul style="list-style-type: none"> <li>• YY= 00-07 (Paging Group Number)               <ol style="list-style-type: none"> <li>(1) 00-15 (Serial number in a Paging Group)</li> <li>(2) X-XXXX (Primary Extension Number)</li> </ol> </li> </ul>
CM90	Assign Internal Zone Paging to each button on the Multiline Terminal.	<ul style="list-style-type: none"> <li>• YY=00               <ol style="list-style-type: none"> <li>(1) X-XXXX (Primary Extension No.) + [ ] + Key No.</li> <li>(2) F1270-F1277 (Group 0-7)</li> </ol> </li> </ul>
END		

## INTERNAL ZONE PAGING WITH MEET-ME (CONT'D)

• To provide All Zone Internal Paging:

START	DESCRIPTION	DATA
CM08	Provide the system with All Zone Internal Paging.	(1) 158 (2) 1 ◀ : Available
CM12	Assign the Class of Service for All Zone Internal Paging to the required stations.	<ul style="list-style-type: none"> <li>• CM12, YY=02</li> <li>(1) X-XXXX: Station No.</li> <li>(2) XXXX</li> </ul>
CM15		
CM20	Assign All Zone Internal Paging access code.	<ul style="list-style-type: none"> <li>• CM15, YY=49</li> <li>(1) 00-15 Service Restriction Class (A) assigned by CM12, YY=02 (00-15 ◀)</li> <li>(2) 1 ◀ : Allowed</li> </ul>
CM56	Assign Group for Internal Zone Paging to the required Multiline Terminals.  <b>Note:</b> A maximum of 6 zones (0-5) internal paging groups are available. Up to 16 Multiline Terminals can be grouped per zone.	<ul style="list-style-type: none"> <li>• Y=0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX: Access code (1-3 digits)</li> <li>(2) A64: All Zone Internal Paging Access</li> </ul>
CM90	Assign All Zone Internal Paging function key to each button on the Multiline Terminal.	<ul style="list-style-type: none"> <li>• YY=05 (Paging Group Number)</li> <li>(1) 00-15 (Serial number in a Paging Group)</li> <li>(2) X-XXXX (Primary Extension Number)</li> </ul>
END		<ul style="list-style-type: none"> <li>• YY=00</li> <li>(1) X-XXXX (Primary Extension No.) + [ ] + Key No. (01-16)</li> <li>(2) F1278: All Zone Internal Paging</li> </ul>

## LAST NUMBER REDIAL

### GENERAL DESCRIPTION

This feature allows station users to redial the last station-to-station or outside number they dialed, using a programmable feature access key or a feature access code. This is useful when a busy station is encountered or there is no answer.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

From a Multiline Terminal:

1. Go off-hook and receive dial tone.
2. Press *Last Number Redial* feature access key or dial Last Number Redial feature access code.
3. System will redial the last number dialed from that station.

From a Single-Line Telephone:

1. Go off-hook and receive dial tone.
2. Dial the *Last Number Redial* feature access code.
3. System will redial the last number dialed from that station.

### SERVICE CONDITIONS

1. The maximum number of digits that can be stored for *Last Number Redial* is 26.
2. Dialing digits after going off-hook replaces previously stored digits with the new digits.
3. When the *Step Call* feature is used, the final destination number is stored in memory.
4. Pressing the *Last Number Redial* feature access key when the Multiline Terminal is idle displays the stored number on the LCD.
5. This feature stores numbers dialed on the Multiline Terminal's primary or secondary extension, or direct trunk appearances. This feature does not store *Dial Intercom* or data calls.
6. If the NEAX1400 IMS is designated as KF registration, this feature is not available.

## LAST NUMBER REDIAL (CONT'D)

### PROGRAMMING

<u>START</u>	<u>DESCRIPTION</u>	<u>DATA</u>
CM08	Provide the system with Last Number Redial.	(1) 177 (2) 0: Available
	Specify the capability for each station call with this feature. If the data for CM08-178 is set to "0," this feature will only be applied to outgoing calls.	(1) 178 (2) 0/1 ◀: Not available/Available
CM20	Assign the access code for Last Number Redial.	<ul style="list-style-type: none"> <li>• Y=0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX: Access Code (**)</li> <li>(2) 069</li> </ul>
CM90	Assign the Last Number Redial feature access key onto each Multiline Terminal.	<ul style="list-style-type: none"> <li>• YY=00</li> <li>(1) Primary Extension No. + [ ] + Key No.</li> <li>(2) F0069: Last Number Redial</li> </ul>
<u>END</u>		

## LEAST COST ROUTING-3/6-DIGIT

### GENERAL DESCRIPTION

This service feature allows the NEAX1400 IMS to be programmed to route outgoing calls over the most economical facility (WATS, FX, DDD). Based on the first three or six digits of the outside number, the system examines the programming tables and uses the trunk facilities in the order specified.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

To operate:

1. Lift handset and receive dial tone.
2. Dial trunk access code and receive dial tone again.
3. Dial area code, office code, and telephone number.
4. System automatically completes the call using the most economical route.

### SERVICE CONDITIONS

1. *Least Cost Routing* can be programmed to choose a route based on the following criteria:
  1. Digits dialed (first three or six digits of the outside number).
  2. Day of Week
  3. Time of Day
  4. Tenant number
  5. *Route Advance*
2. In addition to selecting the route, the system can be programmed to:
  1. Add the prefix digit "1", for use with FX lines requiring "1+" dialing.
  2. Add up to 32 digits in front of the number dialed by the station user to allow for equal access accommodation, or for secondary common carrier access or Central Offices which do not provide equal access.
  3. Delete the area code (when using FX trunks).
  4. Delete all digits, or up to eight digits from the number dialed.
  5. Allow or deny access to a specific trunk route based on the office code dialed.
3. All trunk routes in the system can be accessed using LCR (including DDD, Tie, FX, WATS, etc). Restriction on outgoing calls and *Code Restriction* assignments are applied.
4. The following programmable tables are available:
  1. Digit Code Table - Up to eight tables of area codes are used to determine the route to be selected. Although area codes are normally three-digit codes, this table can be assigned one- to eight-digit codes. These codes can be assigned to select any other LCR table.
  2. Route Pattern Table - Up to 64 *Route Advance* tables are available, with four entries each. If more than four entries are required, up to seven entries can be provided by combining two route-pattern tables.
  3. LCR Pattern Table - Up to 256 tables are available for assignment of digits to be added or deleted. Also, the office code dialed can be checked to determine whether service is available for a specific office code, and whether a prefix "1" should be added. This table can be used in conjunction with toll restriction assignment for combined LCR/toll restriction capability. Refer to the *Code Restriction* feature.

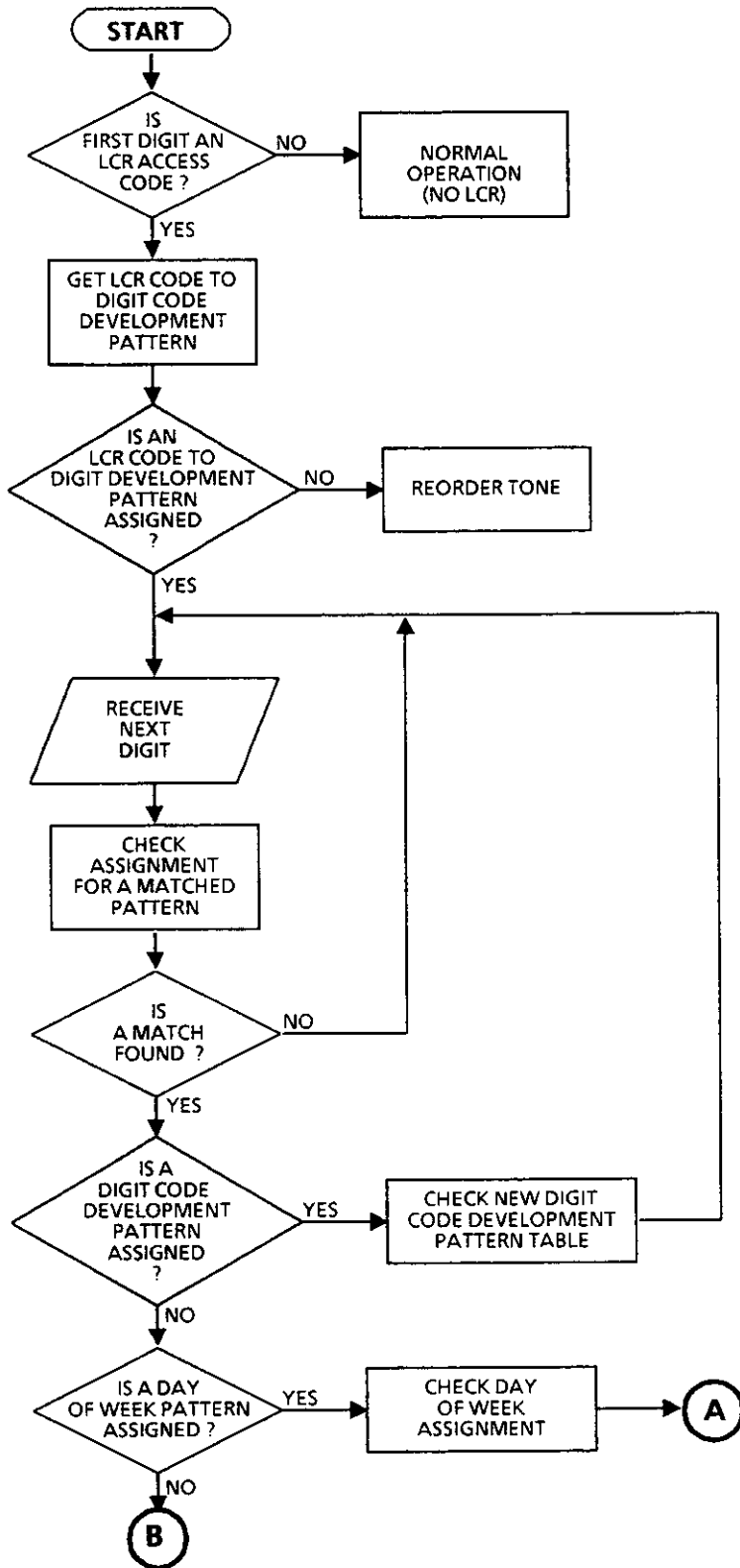
## LEAST COST ROUTING-3/6-DIGIT (CONT'D)

4. Tenant Pattern Table - Up to 16 tables are used to select a route pattern table. The programmer can make the system select a route pattern table based on which tenant the caller is associated with. This allows sharing of LCR and toll restriction capability among multiple tenants, while providing for the individual needs of each tenant. Each of the 64 tables can be assigned a route pattern table for each of up to 64 tenants.

In addition, a special Digit Code Table is used to interpret the one, two, or three leading digits of the area code: e.g. 00XX...X: International Call; 0: Operator Call; 0XXX: Toll Operator Call. The system examines the Digit Code Table when an ORT timeout has occurred after dialing leading digits.

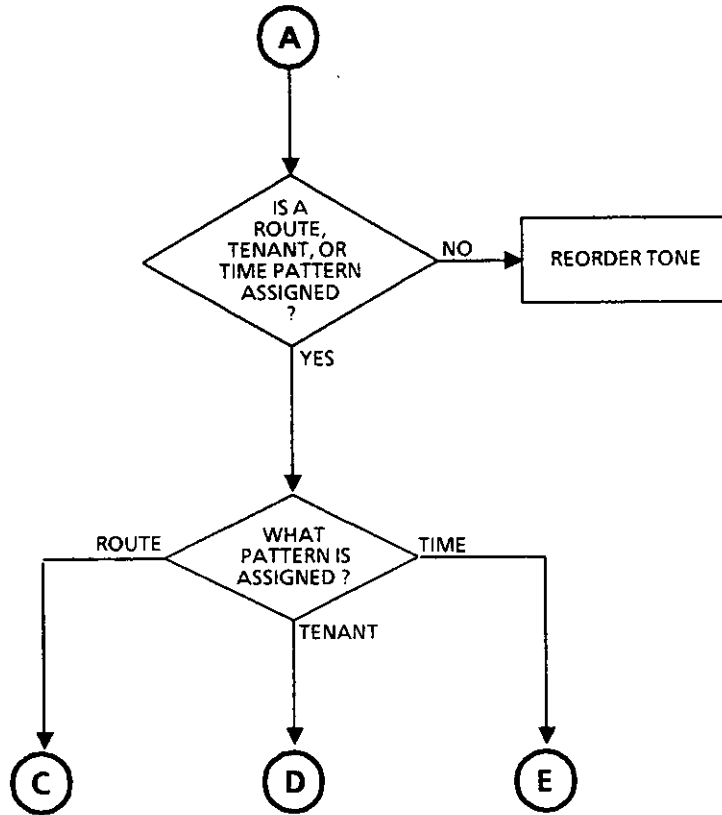
5. Date Pattern Table - Up to four day-of-week tables determine whether a route pattern table, tenant pattern table, or a time pattern table is used next in the routing procedure.
  6. Time Pattern Table - Up to eight time-of-day tables determine whether a route pattern or tenant pattern table is used next in the routing procedure. The time is military time and can be input in half hour increments (00:00 - 2330).
  7. Office Code Pattern Tables - Up to 50 tables contain office codes to be checked to see if a prefix digit 1 must be added, and to see if the office code dialed is allowed or denied for a specific trunk route (Service area check).
  8. Digit Addition Pattern Table - up to 50 tables are available for assigning digit addition pattern. Up to 32 digits, including pauses, can be added.
5. Assignment of LCR is on an access code basis. All trunk access codes can be assigned for LCR. Up to three different LCR access codes can be assigned, per numbering plan, providing flexibility in choosing routes by access code. When LCR is implemented, all stations within the system are subject to the LCR process.
  6. To provide a group of stations access to trunks that are not subject to LCR, the associated trunk routes should be given different access codes (not assigned to LCR). Other stations can be restricted from access to these trunk routes.
  7. Direct trunk appearances on Multiline Terminals are not subject to the LCR process.
  8. If the NEAX1400 IMS is designated as KF registration, this feature is not available.
  9. Even if 9-0XXXX is restricted by the LCR/Toll Restriction feature, other types of C.O. operator calls may be allowed, such as 9-0 (Operator), 9-00XXX...X (International calls), 9-0XXX (Toll Operator calls).
  9. The following flow charts describe LCR system operation.

LEAST COST ROUTING-3/6-DIGIT (CONT'D)

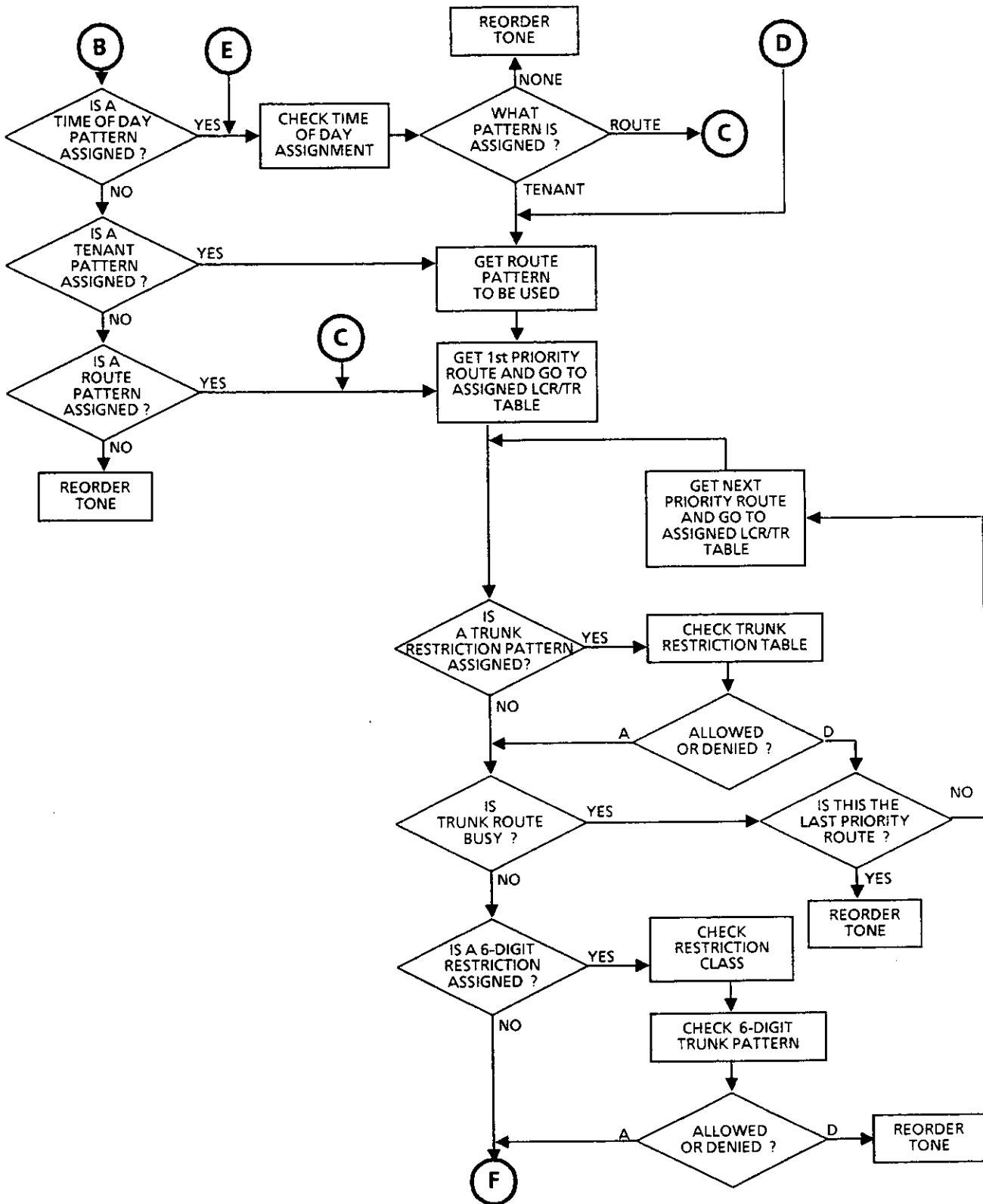




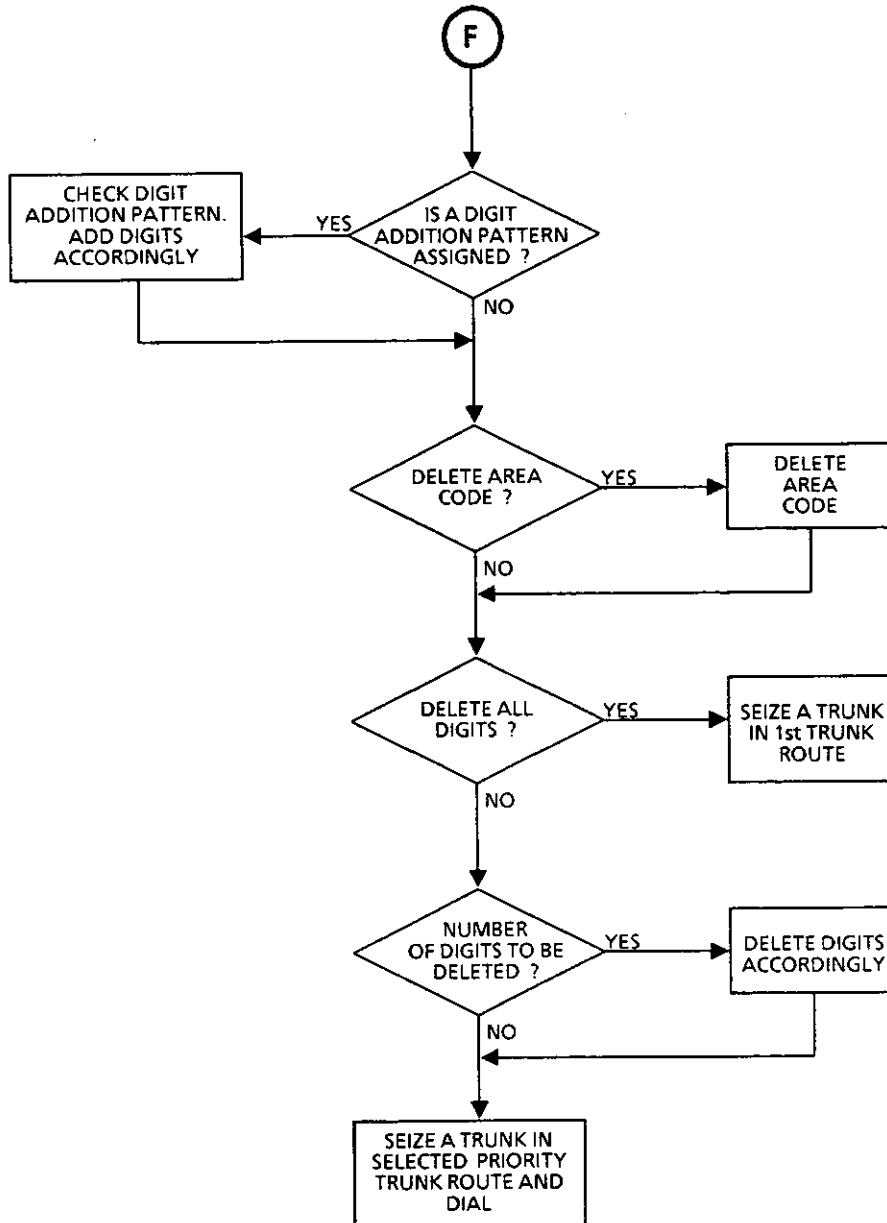
### LEAST COST ROUTING-3/6-DIGIT (CONT'D)



LEAST COST ROUTING-3/6-DIGIT (CONT'D)



### LEAST COST ROUTING-3/6-DIGIT (CONT'D)



## LEAST COST ROUTING-3/6-DIGIT (CONT'D)

### PROGRAMMING

START	DESCRIPTION	DATA
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM80</div>	Provide the system with the LCR feature.	(1) 0 (2) 2 ◀ : LCR
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM20</div>	Assign the access code for LCR Group 0-2.	<ul style="list-style-type: none"> <li>• Y=0-3 (Number Plan Group 0-3)</li> <li>(1) X-XXX (Access Code)</li> <li>(2) {                             <ul style="list-style-type: none"> <li>A26: LCR Group 0</li> <li>A27: LCR Group 1</li> <li>A28: LCR Group 2</li> </ul> </li> </ul>
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM81</div>	Assign the Toll Restriction Patterns with five kinds of Trunk Restriction Classes assigned by CM12, YY=01. Toll Restriction Patterns 00-15 has already been programmed as shown below. If a new Restriction Pattern is required, change the data of the Restriction Patterns 01-13 (00 and 15 are fixed).	<ul style="list-style-type: none"> <li>• YY=01-13 (Toll Restriction Pattern No.01-13)</li> <li>(1) Trunk Restriction Class (1-5)</li> <li>(2) {                             <ul style="list-style-type: none"> <li>0: Restricted</li> <li>1: Restricted (Same as data "0").</li> <li>3: Allowed</li> </ul> </li> </ul>

TRUNK RESTRICTION CLASS		YY														
		01	02	03	04	05	06	07	08	09	10	11	12	13	15	00
		TOLL RESTRICTION PATTERN NUMBER ON EACH TRUNK RESTRICTION CLASS														
		01	02	03	04	05	06	07	08	09	10	11	12	13	15	0
1	RCA	3	0	3	3	3	1	1	1	3	3	3	3	3	3	0
2	RCB	3	0	3	3	0	1	1	0	3	3	1	1	1	3	0
3	RCC	3	0	3	0	0	1	0	0	3	1	1	1	0	3	0
4	RCD	3	0	0	0	0	0	0	0	1	1	1	0	0	3	0
5	RCE	3	0	0	0	0	0	0	0	1	1	1	0	0	3	0

0, 1: Restricted  
3: Allowed

<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM8A</div>	Assign the Area Code Development Pattern No. to each LCR Group.   Assign the Route Pattern No. to each area code for the Area Code Development Pattern No. assigned by YYY=A00.	<ul style="list-style-type: none"> <li>• YYY = A00</li> <li>(1) 0-2: (LCR Group 0-2)</li> <li>(2) 5-7: Area Code Development Pattern No.5-7</li> </ul> <ul style="list-style-type: none"> <li>• YYY = 405-407 (Area Code Development Pattern No.5-7)</li> <li>(1) NXX/INXX (Area Code, Max.8 digits)</li> <li>(2) 000-063 (Route Pattern No. 00-63)</li> </ul>
--	--	---



## LEAST COST ROUTING-3/6-DIGIT (CONT'D)

A	DESCRIPTION	DATA										
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM8A</div>	<p>Specify the order of LCR selection for the Route Pattern No. assigned by YYY = 405 – 407.</p> <p>For area code deletion, designate the digits to be deleted.</p>	<ul style="list-style-type: none"> <li>• YYY = 000 – 063 (Route Pattern No. 00 – 63)</li> <li>(1) 1 – 4 : Order of LCR Selection                             <ul style="list-style-type: none"> <li>1: 1st</li> <li>2: 2nd</li> <li>3: 3rd</li> <li>4: 4th</li> </ul> </li> <li>(2) <u>XXX XX</u> <ul style="list-style-type: none"> <li>00 – 63 (Trunk Route No.00 – 63)</li> <li>000 – 255 (LCR Pattern No.000 – 255)</li> </ul> </li> </ul> <ul style="list-style-type: none"> <li>• YYY = 500 – 755 (LCR Pattern No.000 – 255)</li> </ul> <p>To delete all digits of area code:</p> <ul style="list-style-type: none"> <li>(1) 151 [Deletion of all digits of area code (NXX, 1NXX)] assigned by YYY = 405 – 407</li> <li>(2) 0: To be deleted</li> </ul> <p>To delete the designated digit of an area code:</p> <ul style="list-style-type: none"> <li>• YYY = 500 – 755</li> <li>(1) 153 (Designation of digit to be deleted)</li> <li>(2)                             <table style="border-left: 1px solid black; border-right: 1px solid black; padding-left: 10px; margin-left: 20px;"> <tr> <td style="padding-right: 10px;">00:</td> <td>No digits deleted</td> </tr> <tr> <td style="padding-right: 10px;">01:</td> <td>First digit deleted</td> </tr> <tr> <td style="padding-right: 10px;">}</td> <td>}</td> </tr> <tr> <td style="padding-right: 10px;">10:</td> <td>First 10 digits deleted</td> </tr> <tr> <td style="padding-right: 10px;">CCC:</td> <td>No digits deleted</td> </tr> </table> </li> </ul>	00:	No digits deleted	01:	First digit deleted	}	}	10:	First 10 digits deleted	CCC:	No digits deleted
00:	No digits deleted											
01:	First digit deleted											
}	}											
10:	First 10 digits deleted											
CCC:	No digits deleted											
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">B</div>												

## LEAST COST ROUTING-3/6-DIGIT (CONT'D)

B  
 CM8A

DESCRIPTION	DATA
<p>For area code addition, designate the digits to be added.</p> <p>If the three-digit Toll Restriction is provided, assign the Toll Restriction Pattern No. to the LCR Pattern No.</p> <p>If the six-digit Toll Restriction is provided, assign the following data to the LCR Pattern No. and set up the six-digit Toll Restriction Pattern Tables.</p> <p>(1) Specify the Trunk Restriction Classes to be applied to the 6-digit Toll Restriction.</p> <p style="margin-left: 40px;">Example:    412-211                                        └─┬─┘                                        Area Office                                        Code Code</p> <p>RCA: No restrictions            (three-digit TR)                      RDB: 412-211 is allowed       (six-digit TR)                      RCC: 412-211 is allowed       (six-digit TR)                      RCD: 412 is restricted          (three-digit TR)                      RCE: 412 is restricted          (three-digit TR)</p>	<ul style="list-style-type: none"> <li>• YYY = 500-755                             <ul style="list-style-type: none"> <li>(1) 100 (Designation of digit Addition Pattern No.)</li> <li>(2) { 00-49 (Digit Addition Pattern No.00-49)                                      CCC: No digit addition</li> </ul> </li> <li>• YYY = 900-949 (Digit Addition Pattern No.00-49)                             <ul style="list-style-type: none"> <li>(1) 0</li> <li>(2) X-X...X [Digits to be added (Max.32 digits.)]                                      X= 0-9, A(*), B(#), C(Fixed Pause)</li> </ul> </li> <li>• YYY = 500-755 (LCR Pattern No.000-255)                             <ul style="list-style-type: none"> <li>(1) 000</li> <li>(2) 00-15 (Toll Restriction Pattern No. specified by CM81)</li> </ul> </li> </ul>

- YYY = 500-755 (LCR Pattern No.000-255)
  - (1) 021-028 (Trunk Restriction Class)
    - 021: Unrestricted (RCA)
    - 022: Non-Restricted 1 (RCB)
    - 023: Non-Restricted 2 (RCC)
    - 024: Semi-Restricted 1 (RCD)
    - 025: Semi-Restricted 2 (RCE)
    - 026: Restricted 1 (RCF)
    - 027: Restricted 2 (RCG)
    - 028: Fully-Restricted 2 (RCH)

- (2) { 0: 6-digit Toll Restriction Pattern  
 1 ◀ : 3-digit Toll Restriction Pattern as per 1st Data=000

CM8A		
YYY	TRUNK REST CLASS	DATA
500	021	1
	022	0
	023	0
	024	1
	025	1

C

## LEAST COST ROUTING-3/6-DIGIT (CONT'D)

C	DESCRIPTION	DATA
CM8A	<p>(2) Assign the six-digit Toll Restriction Pattern No. to the LCR Pattern No.</p> <p>(3) Assign the Office code (three-digits) and the availability to access the office code to the six-digit Toll Restriction Pattern No. assigned by (2), and set up the six-digit Prefix Pattern Tables.</p> <p>If the Prefix is to be added, assign the following data to the LCR Pattern No.</p> <p>(1) Assign the 6-digit Prefix Pattern No. to the LCR Pattern No.</p>	<ul style="list-style-type: none"> <li>• <math>YYY = 500 - 755</math> <ul style="list-style-type: none"> <li>(1) 020</li> <li>(2) 00 - 49 (6-digit Toll Restriction Pattern No.00 - 49)</li> </ul> </li> <li>• <math>YYY = 800 - 849</math> (6-digit Toll Restriction Pattern No.00 - 49)           <ul style="list-style-type: none"> <li>(1) XXX (3 digits of Office Code)</li> <li>(2) 0/1 ◀: Restricted/Allowed</li> </ul> </li> <li>• <math>YYY = 500 - 755</math> (LCR Pattern No.000 - 255)           <ul style="list-style-type: none"> <li>(1) 150               <ul style="list-style-type: none"> <li>00: 6-digit Prefix Pattern</li> <li>  ? Pattern No.00</li> <li>  ?</li> </ul> </li> <li>(2) 49: 6-digit Prefix Pattern No.49</li> <li>  50: Prefix is to be added regardless of Office Code.</li> <li>  CCC: No Prefix</li> </ul> </li> </ul>
CM85	<p>(2) Assign the office code (three digits) requiring the Prefix to the six-digit Prefix Pattern No.</p> <p>Specify the maximum number of digits dialed by calling party.</p> <p>The maximum number of digits including the area codes should be assigned to each area code.</p>	<ul style="list-style-type: none"> <li>• <math>YYY = 800 - 849</math> <ul style="list-style-type: none"> <li>(1) XXX (3-digit of Office Code)</li> <li>(2) 1 ◀: Allowed</li> </ul> </li> <li>• <math>Y = 5 - 7</math> (Area Code Development Pattern No.5 - 7 assigned by CM8A, <math>YYY = A00</math>)           <ul style="list-style-type: none"> <li>(1) X - X...X (Area Code dialed, Max 8 digits)               <ul style="list-style-type: none"> <li>01: 1 digit</li> <li>  ?</li> <li>  ?</li> </ul> </li> <li>(2) 24 ◀: 24 digits               <ul style="list-style-type: none"> <li>  ?</li> <li>  ?</li> <li>79: 79 digits</li> </ul> </li> </ul> </li> </ul>
D		



## LEAST COST ROUTING-3/6-DIGIT (CONT'D)

D	DESCRIPTION	DATA
CM35	Provide the Toll Restriction feature to the required trunk routes.	<ul style="list-style-type: none"><li>• YY=11</li><li>(1) Trunk Route No. (00-63) (00)</li><li>(2) 0: To be provided</li></ul>
	Specify the route access capability of each restriction class.	<ul style="list-style-type: none"><li>• YY=51-55</li><li>(1) Trunk Route No. (00-63)</li><li>(2) 0/1 ◀ : Restricted/Allowed</li></ul>
	Assign the Area Code Development Pattern No. for Toll Restriction Analysis to each trunk route.	<ul style="list-style-type: none"><li>• YY=76</li><li>(1) Trunk Route No. (00-63)</li><li>(2) 05-07 [Area Code Development Pattern (No.5-7)]</li></ul>
<u>END</u>		



## LEAST COST ROUTING-3/6-DIGIT (CONT'D)

To provide the L.C.R. with Time of Day Routing, add the following system data programming.

START	DESCRIPTION	DATA
CM8A 	Assign the Date Pattern No. to each area code for the Area Code Development Pattern No. assigned by $YYY = A00$ .	<ul style="list-style-type: none"> <li>• <math>YYY = 405 - 407</math>                (Area Code Development Pattern No.5-7)</li> <li>(1) X-X...X (Area Code Max. 8 digits)</li> <li>(2) 300-303 (Date Pattern No.0-3)</li> </ul>
	Assign the Time Pattern No. to each day of the week for the Data Pattern No. assigned by $YYY = 405 - 407$ .	<ul style="list-style-type: none"> <li>• <math>YYY = 300 - 303</math>                (Date Pattern No.0-3)</li> <li>(1)               <ul style="list-style-type: none"> <li>0: SUN</li> <li>1: MON</li> <li>2: TUE</li> <li>3: WED</li> <li>4: THU</li> <li>5: FRI</li> <li>6: SAT</li> </ul> </li> <li>(2) 200-207 (Time Pattern No.00-07)</li> </ul>
 A		

### LEAST COST ROUTING-3/6-DIGIT (CONT'D)

A  
 CM8A

DESCRIPTION	DATA
Assign the Route Pattern No. to the required time of day for the Time Pattern No. assigned by YYY = 300 – 303.	<ul style="list-style-type: none"> <li>• YYY = 200 – 207                              (Time Pattern No. 00 – 07)</li> <li>(1) <u>XX XX</u> (Time)                                     <ul style="list-style-type: none"> <li>Minutes (00/30)</li> <li>Hours (00 – 23)</li> </ul> </li> <li>(2) 000 – 063 (Route Pattern                              No. 00 – 63)</li> </ul> If Tenant Pattern is required, set 100 – 115 (Tenant Pattern No. 00 – 15)
To define the following Time Pattern:	
0:00          8:00                          20:00          23:30 ┌──────────┬──────────┬──────────┬──────────┐ │←Route→│←Route→│←Route→│ Pattern 00    Pattern 01    Pattern 00	

YYY	TIME (1)	ROUTE PATTERN (2)
200 (Time Pattern 00)	0000 } 0030 } 0100 } 0130 } 12:00 PM – 8:00 AM 0200 } ) 0730 }  2000 } 2030 } 8:00 PM – 12:00 PM ) 2330 }	000 (Route Pattern 00)
200 (Time Pattern No. 00)	0800 } 0830 } 8:00 PM – 8:00 PM ) 1930 }	001 (Route Pattern 01)

If the Tenant Pattern No. is assigned by  
 YYY = 200 – 207, assign the Route Pattern No.  
 to the required Tenant No. for the Tenant  
 Pattern No.

- YYY = 100 – 115 (Tenant Pattern  
 No. 00 – 15)
- (1) 00 – 63 (Tenant No. 00 – 63)
- (2) 000 – 063 (Route Pattern  
 No. 00 – 63)

END

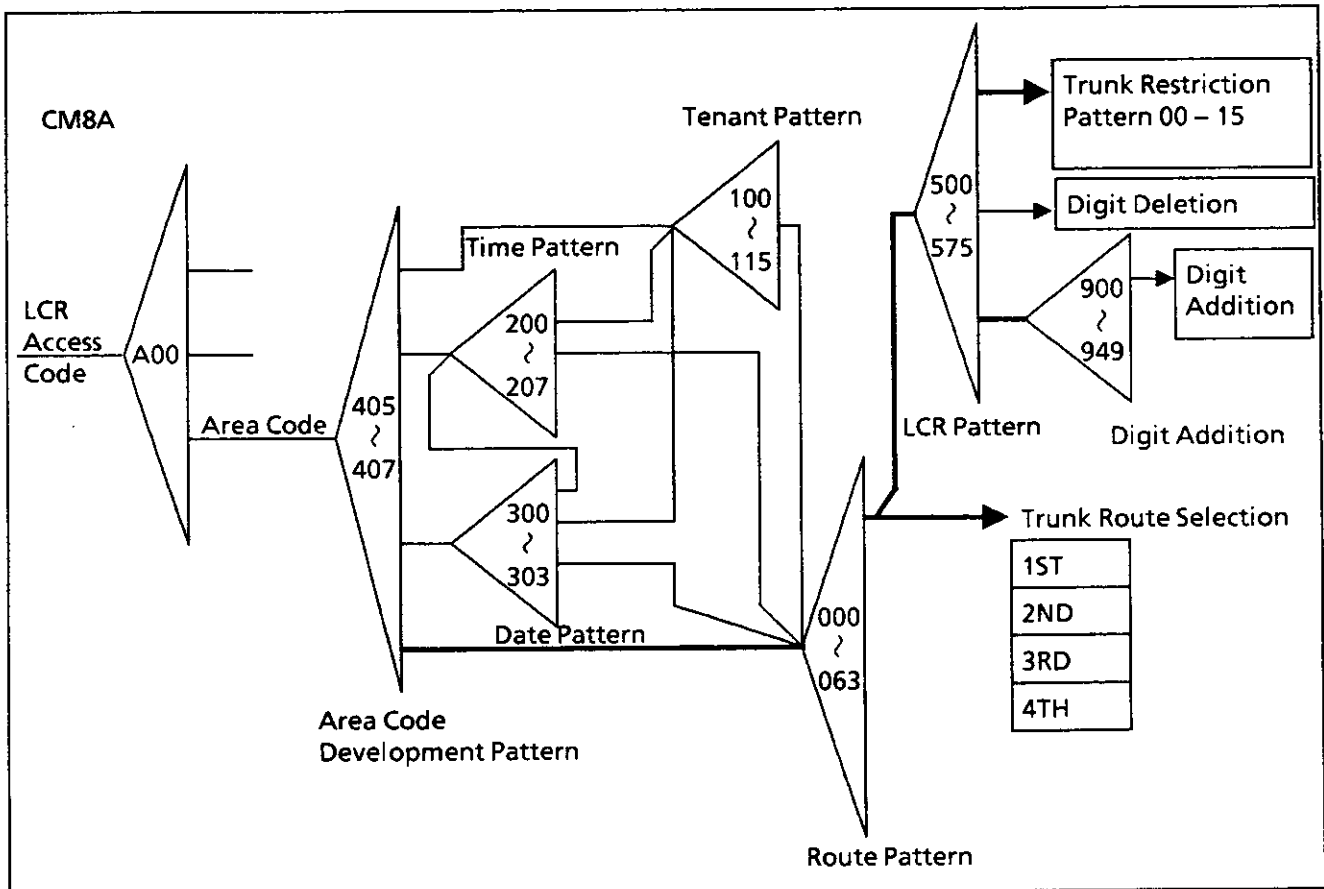
## LEAST COST ROUTING-3/6-DIGIT (CONT'D)

To provide C.O. operator call with LCR, assign the following system data.

START	DESCRIPTION	DATA																																																																																																																																																					
CM80	Provide the system with the LCR feature.	(1) 0 (2) 2 ◀ : LCR																																																																																																																																																					
CM20	Assign the access code for LCR Group 0.	• Y=0-3 (Number Plan Group 0-3) (1) X-XXX (Access Code) (2) A26: LCR Group 0																																																																																																																																																					
CM81	Assign the Toll Restriction Patterns with five kinds of Trunk Restriction Classes assigned by CM12, YY=01. Toll Restriction Pattern 00-15 is already programmed as shown below. If a new Restriction Pattern is required, change the data of the Restriction Pattern 01-13 (00 and 15 are fixed).	• YY=01-13 (Toll Restriction Pattern No.01-13) (1) Trunk Restriction Class (1-5) (2) $\left\{ \begin{array}{l} 0: \text{Restricted} \\ 1: \text{Restricted (Same as data "0")} \\ 3: \text{Allowed} \end{array} \right.$																																																																																																																																																					
<table border="1"> <thead> <tr> <th rowspan="3">TRUNK RESTRICTION CLASS</th> <th rowspan="3"></th> <th colspan="15">YY</th> </tr> <tr> <th>01</th><th>02</th><th>03</th><th>04</th><th>05</th><th>06</th><th>07</th><th>08</th><th>09</th><th>10</th><th>11</th><th>12</th><th>13</th><th>15</th><th>00</th> </tr> <tr> <th colspan="15">TOLL RESTRICTION PATTERN NUMBER ON EACH TRUNK RESTRICTION CLASS</th> </tr> <tr> <th></th> <th></th> <th>01</th><th>02</th><th>03</th><th>04</th><th>05</th><th>06</th><th>07</th><th>08</th><th>09</th><th>10</th><th>11</th><th>12</th><th>13</th><th>15</th><th>0</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>RCA</td> <td>3</td><td>0</td><td>3</td><td>3</td><td>3</td><td>1</td><td>1</td><td>1</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>0</td> </tr> <tr> <td>2</td> <td>RCB</td> <td>3</td><td>0</td><td>3</td><td>3</td><td>0</td><td>1</td><td>1</td><td>0</td><td>3</td><td>3</td><td>1</td><td>1</td><td>1</td><td>3</td><td>0</td> </tr> <tr> <td>3</td> <td>RCC</td> <td>3</td><td>0</td><td>3</td><td>0</td><td>0</td><td>1</td><td>0</td><td>0</td><td>3</td><td>1</td><td>1</td><td>1</td><td>0</td><td>3</td><td>0</td> </tr> <tr> <td>4</td> <td>RCD</td> <td>3</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>1</td><td>1</td><td>1</td><td>0</td><td>0</td><td>3</td><td>0</td> </tr> <tr> <td>5</td> <td>RCE</td> <td>3</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>1</td><td>1</td><td>1</td><td>0</td><td>0</td><td>3</td><td>0</td> </tr> </tbody> </table> <p style="text-align: right;">0, 1 : Restricted 3 : Allowed</p>			TRUNK RESTRICTION CLASS		YY															01	02	03	04	05	06	07	08	09	10	11	12	13	15	00	TOLL RESTRICTION PATTERN NUMBER ON EACH TRUNK RESTRICTION CLASS																	01	02	03	04	05	06	07	08	09	10	11	12	13	15	0	1	RCA	3	0	3	3	3	1	1	1	3	3	3	3	3	3	0	2	RCB	3	0	3	3	0	1	1	0	3	3	1	1	1	3	0	3	RCC	3	0	3	0	0	1	0	0	3	1	1	1	0	3	0	4	RCD	3	0	0	0	0	0	0	0	1	1	1	0	0	3	0	5	RCE	3	0	0	0	0	0	0	0	1	1	1	0	0	3	0
TRUNK RESTRICTION CLASS		YY																																																																																																																																																					
		01			02	03	04	05	06	07	08	09	10	11	12	13	15	00																																																																																																																																					
		TOLL RESTRICTION PATTERN NUMBER ON EACH TRUNK RESTRICTION CLASS																																																																																																																																																					
		01	02	03	04	05	06	07	08	09	10	11	12	13	15	0																																																																																																																																							
1	RCA	3	0	3	3	3	1	1	1	3	3	3	3	3	3	0																																																																																																																																							
2	RCB	3	0	3	3	0	1	1	0	3	3	1	1	1	3	0																																																																																																																																							
3	RCC	3	0	3	0	0	1	0	0	3	1	1	1	0	3	0																																																																																																																																							
4	RCD	3	0	0	0	0	0	0	0	1	1	1	0	0	3	0																																																																																																																																							
5	RCE	3	0	0	0	0	0	0	0	1	1	1	0	0	3	0																																																																																																																																							
CM8A	Assign the Route Pattern No. to each area code for the Area Code Development Pattern No. assigned by YYY = A00.	• YYY = 410 (Area Code for C.O. Operator) (1) X-XXX (Area Code for C.O. Operator). This data is only effective for an access code assigned by CM20, A28 (2) 000-063 (Route Pattern No. 00-63)																																																																																																																																																					
A																																																																																																																																																							

### LEAST COST ROUTING-3/6-DIGIT (CONT'D)

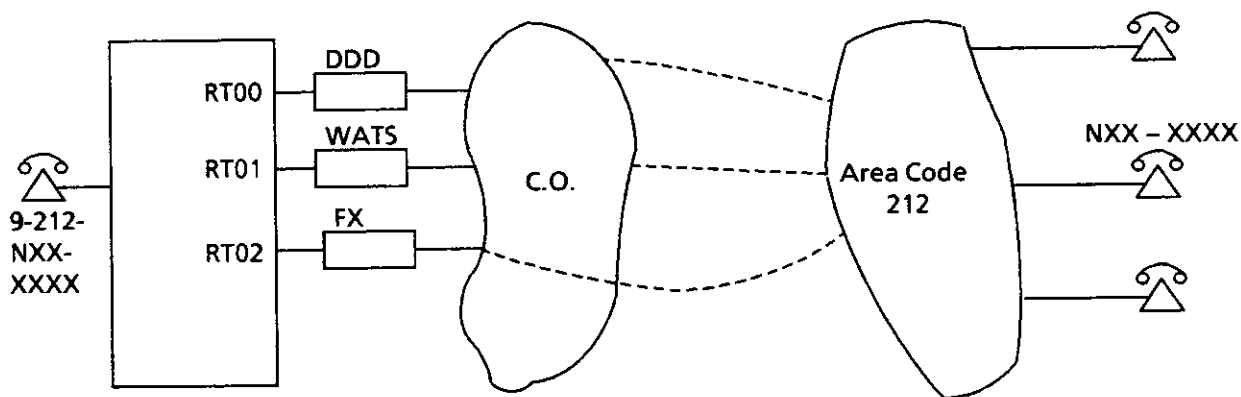
A	DESCRIPTION	DATA
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM8A</div>	<p>Assign the 1st order of LCR selection for the Route Pattern No. assigned by YYY = 410.</p>	<ul style="list-style-type: none"> <li>• YYY=000-063 (Route Pattern No. 00-63)</li> <li>(1) 1: 1st order of LCR selection</li> <li>(2) <u>XXXXX</u> <ul style="list-style-type: none"> <li>00-63 (Trunk Route No. 00-63)</li> <li>000-255 (LCR Pattern No. 000-255)</li> </ul> </li> </ul>
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">END</div>	<p>Assign the Toll Restriction Pattern No. to the LCR Pattern No. assigned by YYY = 410.</p>	<ul style="list-style-type: none"> <li>• YYY= 500-755 (LCR Pattern No. 000-255)</li> <li>(1) 000</li> <li>(2) 00-13,15 (Toll Restriction Pattern No. specified by CM81)</li> </ul>



LCR Development Sequence

## LEAST COST ROUTING - 3/6-DIGIT (CONT'D)

### Example 1

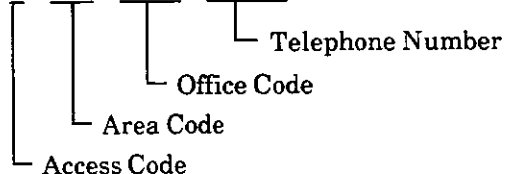


#### Conditions:

- (1) Order of LCR Selection:  
 1st ... Route 02 (FX)  
 2nd ... Route 01 (WATS)  
 3rd ... Route 00 (DDD)

- (2) Dialed Number:

9-212-NXX-XXXX



- (3) Toll Restriction Pattern:

-: Allowed  
 ×: Restricted

ROUTE \ CLASS	RCA	RCB	RCC	RCD	RCE
00	-	-	-	-	-
01	-	-	-	×	×
02	-	-	×	×	×

## LEAST COST ROUTING - 3/6-DIGIT (CONT'D)

Programming for **Example 1**:

**Step 1:** To provide the LCR feature:

ST + 80 + DE + 0 + DE + 2 + EXE

**Step 2:** Assign "9" to the access code of LCR Group 0 in Numbering Plan Group 0.

ST + 200 + DE + 9 + DE + A26 + EXE

**Step 3:** Assign Area Code Development Pattern No.5 to LCR Group 0.

ST + 8AA00 + DE + 0 + DE + 5 + EXE

**Step 4:** Assign Route Pattern No.00 to area code (212) for Area Code Development Pattern No.5.

ST + 8A405 + DE + 212 + DE + 000 + EXE

**Step 5:** In Route Pattern No.00, specify the order of LCR selection as shown below.

1st: Route 02 (FX)

ST + 8A000 + DE + 1 + DE + 000 02 + EXE  
└─ LCR Pattern No.000

2nd: Route 01 (WATS)

ST + 8A000 + DE + 2 + DE + 001 01 + EXE  
└─ LCR Pattern No.001

3rd: Route 00 (DDD)

ST + 8A000 + DE + 3 + DE + 002 00 + EXE  
└─ LCR Pattern No.002

**Step 6:** In LCR Pattern No.000 (for FX), delete the area code dialed.

ST + 8A500 + DE + 151 + DE + 0 + EXE  
└─ LCR Pattern No.000 └─ To be deleted

**Step 7:** Assign the Toll restriction Pattern to each Route (LCR Pattern No.)

For LCR Pattern No. 000 (Route 02):

ST + 8A500 + DE + 000 + DE + 10 + EXE  
└─ Toll Restriction Pattern No. specified by CM81.

For LCR Pattern No. 001 (Route 01):

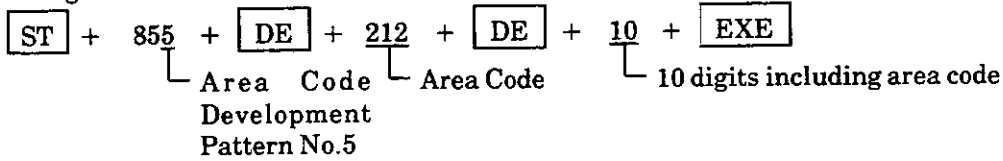
ST + 8A501 + DE + 000 + DE + 09 + EXE

For LCR Pattern No. 002 (Route 00):

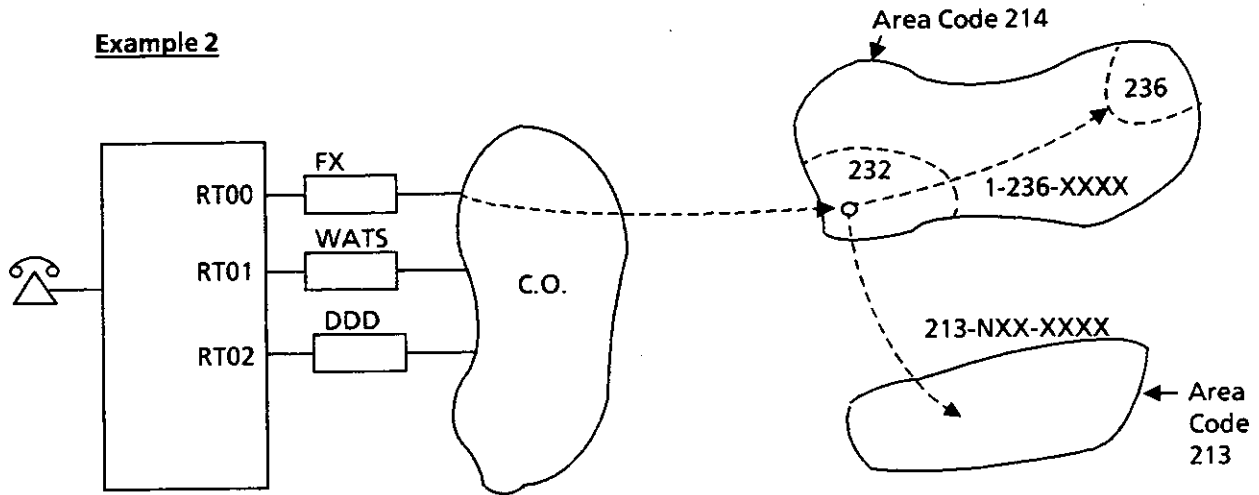
ST + 8A502 + DE + 000 + DE + 01 + EXE

## LEAST COST ROUTING - 3/6-DIGIT (CONT'D)

**Step 8:** Assign the maximum number of digits dialed.



### Example 2



Conditions:

- (1) Order of LCR Selection:
  - 1st ... Route 02 (FX)
  - 2nd ... Route 01 (WATS)
  - 3rd ... Route 00 (DDD)
- (2) Dialed Number:
  - 9-214-232/236-XXXX
  - Note:** 236 is Toll Office
  - 9-213-NXX-XXXX
- (3) Toll Restriction Pattern: - : Allowed  
 × : Restricted

ROUTE \ CLASS	RCA	RCB	RCC	RCD	RCE
00	-	-	-	-	-
01	-	-	- Note	×	×
02	-	- Note	×	×	×

**Note:** Area Code 213 is restricted.

## LEAST COST ROUTING - 3/6-DIGIT (CONT'D)

Programming for Example 2:

**Step 1:** To provide the LCR feature:

ST + 80 + DE + 0 + DE + 2 + EXE

**Step 2:** Assign "9" to the access code of LCR Group 0 in Numbering Plan Group 0.

ST + 200 + DE + 9 + DE + A26 + EXE

**Step 3:** Assign Area Code Development Pattern No. 5 to LCR Group 0.

ST + 8AA00 + DE + 0 + DE + 5 + EXE

**Step 4:** Assign Route Pattern Nos.00 and 01 to area codes 214 and 213 respectively.

ST + 8A405 + DE + 214 + DE + 000 + EXE  
└─ Route Pattern No.00

ST + 8A405 + DE + 213 + DE + 001 + EXE  
└─ Route Pattern No.01

**Step 5:** Specify the order of LCR selection to each Route Pattern.

For Route Pattern 00

1st: Route 00 (FX)

ST + 8A000 + DE + 1 + DE + 000 00 + EXE  
└─ LCR Pattern No.000

2nd: Route 01 (WATS)

ST + 8A000 + DE + 2 + DE + 001 01 + EXE  
└─ LCR Pattern No.001

3rd: Route 02 (DDD)

ST + 8A000 + DE + 3 + DE + 002 02 + EXE  
└─ LCR Pattern No.002

For Route Pattern 01:

1st: Route 00 (FX)

ST + 8A001 + DE + 1 + DE + 003 00 + EXE  
└─ LCR Pattern No.003

2nd: Route 01 (WATS)

ST + 8A001 + DE + 2 + DE + 004 01 + EXE  
└─ LCR Pattern No.004

3rd: Route 02 (DDD)

ST + 8A001 + DE + 3 + DE + 005 02 + EXE  
└─ LCR Pattern No.005



### LEAST COST ROUTING - 3/6-DIGIT (CONT'D)

AREA CODE	ROUTE PATTERN No.	ORDER OF LCR	ROUTE	LCR PATTERN No.	TOLL RESTRICTION				
					RCA	RCB	RCC	RCD	RCE
214	00	1st	00	000	-	-	-	-	-
		2nd	01	001	-	-	-	×	×
		3rd	02	002	-	-	×	×	×
213	01	1st	00	003	-	-	-	-	-
		2nd	01	004	-	-	×	×	×
		3rd	02	005	-	×	×	×	×

-: Allowed  
 ×: Restricted

**Step 6:** In LCR Pattern Nos. 000 and 003, delete the area code dialed.

ST	+	8A500	+	DE	+	151	+	DE	+	0	+	EXE
				└ LCR Pattern No.000								
											└ To be deleted	

ST	+	8A503	+	DE	+	151	+	DE	+	0	+	EXE
				└ LCR Pattern No.003								
											└ To be deleted	

**Step 7:** Assign the Toll Restriction Pattern to each LCR Pattern No.

For LCR Pattern No.000:

ST	+	8A500	+	DE	+	000	+	DE	+	01	+	EXE
				└ LCR Pattern No. 000								
											└ Toll Restriction Pattern No. specified CM81.	

For LCR Pattern No.001:

ST	+	8A501	+	DE	+	000	+	DE	+	03	+	EXE
----	---	-------	---	----	---	-----	---	----	---	----	---	-----

For LCR Pattern No.002:

ST	+	8A502	+	DE	+	000	+	DE	+	04	+	EXE
----	---	-------	---	----	---	-----	---	----	---	----	---	-----

For LCR Pattern No.003:

ST	+	8A503	+	DE	+	000	+	DE	+	01	+	EXE
----	---	-------	---	----	---	-----	---	----	---	----	---	-----

For LCR Pattern No.004:

ST	+	8A504	+	DE	+	000	+	DE	+	04	+	EXE
----	---	-------	---	----	---	-----	---	----	---	----	---	-----

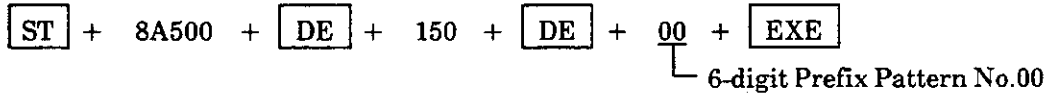
For LCR Pattern No.005:

ST	+	8A505	+	DE	+	000	+	DE	+	05	+	EXE
----	---	-------	---	----	---	-----	---	----	---	----	---	-----

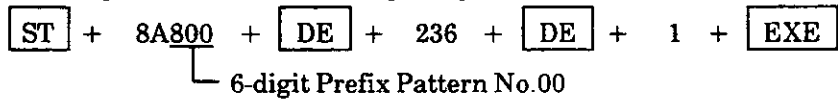
**LEAST COST ROUTING - 3/6-DIGIT (CONT'D)**

Step 8: In LCR Pattern No.000, designate the prefix "1", in addition to the office code 236, by the six-digit Prefix Pattern.

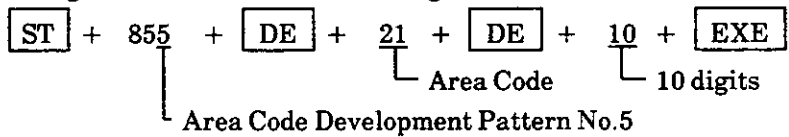
- Designation of 6-digit Prefix Pattern No.



- Designation of office code requiring Prefix Pattern.



Step 9: Assign the maximum number of digits dialed.



## LINE LOCKOUT

### GENERAL DESCRIPTION

This feature provides for the automatic release of a station from the common equipment when it has remained off-hook for longer than a preprogrammed interval before dialing. Howler tone may be programmed to be sent to the station in *Line Lockout*.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

For *Line Lockout*:

1. Station user goes off-hook and receives dial tone.
2. If, after approximately 12 seconds, the station user has not initiated dialing, he receives reorder tone.
3. After 30 seconds (as set in default) of reorder tone, the station is automatically placed into the *Line Lockout* condition and continues to receive reorder tone.
4. Upon replacing the handset, the station is released from the *Line Lockout* condition.

For *Line Lockout* with howler tone assigned:

1. Station user goes off-hook and receives dial tone.
2. If, after approximately 12 seconds, the station user has not initiated dialing, he receives reorder tone.
3. After 30 seconds (as set in default) of reorder tone, howler tone (30 seconds on, 30 seconds off) is sent to the station.
4. Upon replacing the handset, the station is released from the *Line Lockout* condition.

### SERVICE CONDITIONS

1. A station in *Line Lockout* condition cannot receive or originate calls.
2. The Attendant cannot activate any feature to a station in a *Line Lockout* condition.
3. Howler tone can be allowed or denied on a per-station basis.
4. This feature will also be activated if 12 seconds elapse between dialing digits.

## LINE LOCKOUT (CONT'D)

### PROGRAMMING

<u>START</u>	<u>DESCRIPTION</u>	<u>DATA</u>
CM08	Provide the system with Howler Tone sent to locked-out stations, if required.	(1) 153 (2) 0/1 ◀ : Not provide/Provide
CM13	If Howler Tone is provided (CM08 – 153 = 1), set this feature to the required stations.	• YY = 04 (1) X – XXXX (Station No.) (2) 1 ◀ : Provide
CM41	Specify the timing for Line Lockout.	• Y = 0 (1) 22 (2) 01 – 08 (Timer Data for 4 sec. – 32 sec.) If no data is set, the default setting is 28-32 seconds.
CM42	Specify the number of stations in Line Lockout to give MN alarm.	(1) 01 (2) 01-99 : Number of Lockout Stations  If no data is set, no Lockout Alarm Display functions.
<u>END</u>		

## LINE PRESELECTION

### GENERAL DESCRIPTION

This feature provides the station user with two ways to select an idle, held, recalling, or ringing line before going off-hook.

### STATION APPLICATION

All Multiline Terminals.

### OPERATING PROCEDURE

To operate :

1. Press desired line key.
  2. Lift handset or press the **SPKR** key and receive dial tone or answer incoming call.
- OR
1. Press desired line key and receive dial tone or answer incoming call. (This procedure is programmable in system programming on a system basis.)

### SERVICE CONDITIONS

1. A line key whose associated LED is lit steady cannot be seized by pressing that key.
2. When the desired line key is pressed, line preselection will remain in effect for six seconds. After six seconds, line selection returns to the prime line, if assigned.
3. *Line Preselection* has priority over *Ringing Line Pickup* and prime line assignment.

### PROGRAMMING

<u>START</u>	<u>DESCRIPTION</u>	<u>DATA</u>
START   <div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM08</div>   END	Specify the operation of Line Preselection on a Multiline Terminal.	(1) 199 (2) { 0: Only desired line key. 1 ◀ : SPKR key is required after pressing the desired line key.

## MAINTENANCE ADMINISTRATION TERMINAL (MAT)

### GENERAL DESCRIPTION

The *Maintenance Administration Terminal (MAT)* is a Personal Computer (PC) used for programming and maintenance of the NEAX1400 IMS. The *MAT* can provide a Maintenance Printout, Peg Count information, and fault condition output. Additionally, the *MAT* can be used to Remove and Restore Service to any station in the system and can read and/or save system data from disks.

### STATION APPLICATION

Not applicable.

### OPERATING PROCEDURE

Refer to the NEAX1400 IMS MAT Operation Guide (ND-43654(E)) or (ND-44248(E)) for programming instruction.

### SERVICE CONDITIONS

1. The NEC multispeed, which is IBM® compatible, or any other IBM® PC-XT compatible PC can be used as a *MAT*.
2. Connection through modems is available, providing remote maintenance capabilities.
3. Connection to the system is through the MP (Main Processor) board. A special cable is required for connecting the *MAT* to the MP Board. The *MAT CA-D/F* cable connects the *MAT* directly to the MP. The *MAT CA-E* cable connects the MP to a modem.
4. The following functions can be performed from the *MAT*:
  - System, station, and trunk data entry and change.
  - Loading, saving, and verifying of system data to and from a disk.
  - ROM check readout of generic program.
  - *Peg Count* data display.
  - Display of fault condition codes.
  - Password level assignments.
  - On site or remote access to the system.
  - Printout of system data (when printer is connected to PC).
  - Display and setting of system clock/calendar.
5. The PC used as the *MAT* must have an RS-232-C port, and cannot be located more than 50 feet from the NEAX1400 IMS Main Processor board (MP) when connected on premises.
6. The ability to copy station data is available to help installation programming by duplicating existing assignments from one station to multiple stations.
7. The *MAT* can make backup disks of office data.
8. The data that can be changed from the *MAT* can be limited by the Password Level assigned in system programming. There are eight levels of passwords. Access to available commands for each password is assigned in system programming.

® IBM is a registered trademark of International Business Machine.



## MAINTENANCE ADMINISTRATION TERMINAL (MAT) (CONT'D)

	DESCRIPTION	DATA
<div style="border: 1px solid black; width: 20px; height: 20px; margin: 0 auto; text-align: center; line-height: 20px;">A</div> <div style="border: 1px solid black; width: 60px; height: 25px; margin: 5px auto; text-align: center;">CME9</div>	<p>Enable the system to change the password.</p> <p>Assign a password to each Password Level.</p>	<p>(1) 8            (2) 0 ◀ : Allowed</p> <p>(1) 0-7 (Password Level 0-7)            (2) X-X...X (Max. 8 digits            Password            Code)</p> <p>A password code for Password Level 7 should be assigned in advance because of providing the password service by Function No.9 of CME9.            The following passwords are not available.            "CCCCCCCC"            "FFFFFFFF"</p>
<div style="border: 1px solid black; width: 60px; height: 25px; margin: 5px auto; text-align: center;">CME9</div>	<p>Provide the system with Password Service.            After setting this data, access to system programming will be available with password entry.</p>	<p>(1) 9            (2) 0: Provided</p>
<div style="border: 1px solid black; width: 60px; height: 25px; margin: 0 auto; text-align: center;">END</div>		

**Note :** *If the Password Service is provided, enter a password predetermined by Command 03 before programming from the MAT.*

- ST +03+ DE +Password Level No. (0-7)+ DE +Password+ EXE
- "OK" will be displayed, if accepted.
  - "DATA ERROR" will be displayed if the password is incorrect.



## MAINTENANCE ADMINISTRATION TERMINAL; PEG COUNT

### GENERAL DESCRIPTION

This feature permits traffic information to be accessed from the *Maintenance Administration Terminal (MAT)*.

### STATION APPLICATION

Not applicable.

### OPERATING PROCEDURE

Refer to the NEAX1400 IMS MAT Operation Guide.

### SERVICE CONDITIONS

1. All information required for this feature is registered at the *MAT*.
2. The following information can be accessed:
  - Number of successful attempts at outgoing access, based on trunk route.
  - Number of times all trunks were busy, based on trunk route.
  - Number of incoming calls, based on trunk route.
  - Number of incoming calls connected to busy tone and then trunk abandoned.
  - Quantity of incoming calls with no answer and trunk abandoned, based on trunk route.
  - Number of times a push button register was connected, on a system basis.
  - Number of times all push button registers were busy, on a system basis.
  - Number of times modem trunks were used for outgoing connections, based on modem trunk group.
  - Number of times modem trunks used for incoming connections, based on modem trunk group.
  - Number of times all modem trunks were busy, based on modem trunk group.
  - Number of times the conference circuits were used, on a system basis.
  - Number of times conference circuits were all busy, on a system basis.
  - Number of times an incoming call was set to *Call Forwarding-No Answer* to the Attendant or another station (on DID, Tie or DIT lines), on a system basis.
  - Number of Tandem Connections, on a system basis.
  - Number of times a push button register was connected to a trunk, based on trunk route.
  - Number of Attendant calls including recalls, on a system basis.
  - Number of station-to-station calls, on a system basis.
  - Number of times senders were all busy, on a system basis.
  - Number of ring generator capacity overflows, on a system basis.
  - Number of DTE to DTE connections, on a system basis.

(UCD Peg Count)

  - Number of answered calls on the UCD station.
  - Number of incoming calls to the UCD group.
  - Number of waiting calls for a pre-determined time into queueing mode on the UCD group.
  - Number of incoming calls to all busy stations in the UCD group.
  - Number of answered calls in the UCD group.
3. This feature is also available from the *Customer Administration Terminal (CAT)*. All information required for this feature is registered at the *MAT*.

### PROGRAMMING

Refer to NEAX1400 IMS System Programming Manual. (Command Code: B0, B3)

## MAINTENANCE ADMINISTRATION TERMINAL; REMOVE AND RESTORE SERVICE

### GENERAL DESCRIPTION

This feature allows any station or trunk to be busied-out or restored from the *Maintenance Administration Terminal (MAT)*.

### STATION APPLICATION

Not applicable.

### OPERATING PROCEDURE

Refer to the NEAX1400 IMS MAT Operation Guide.

### SERVICE CONDITIONS

1. During busy-out state, call termination is restricted for stations and allowed for trunks, and call origination is available for stations and restricted on trunks.
2. This assignment is done by *MAT*, and is assigned on a per station or per trunk basis.
3. When a station or trunk is busied out while a call is in progress, the call is not interrupted. The station or trunk is made busy upon the circuit becoming idle.
4. The busy lamps on the associated interface card flash at 60 IPM (impulses per minute) when busied out.
5. This feature is also available from the *Customer Administration Terminal (CAT)*.

### PROGRAMMING

<u>START</u>	<u>DESCRIPTION</u>	<u>DATA</u>
START   CME5   END	Set or cancel make-busy to stations and trunks.	<ul style="list-style-type: none"> <li>• Y=0               <ol style="list-style-type: none"> <li>(1) X-XXXX: Station Number.</li> <li>(2) <math>\left\{ \begin{array}{l} 0: \text{ Make-busy Set} \\ 1 \blacktriangleleft: \text{ Make-busy cancel} \end{array} \right.</math></li> </ol> </li> <li>• Y=1               <ol style="list-style-type: none"> <li>(1) 000-255: Trunk Number</li> <li>(2) <math>\left\{ \begin{array}{l} 0: \text{ Make-busy Set} \\ 1 \blacktriangleleft: \text{ Make-busy cancel} \end{array} \right.</math></li> </ol> </li> </ul>

## MESSAGE REMINDER

### GENERAL DESCRIPTION

This feature allows a user or Attendant to turn on the message waiting (MW) lamp of a Single-Line Telephone, or the *Message Reminder* (MSG) LED of a Multiline Terminal (if assigned), and to display the number of messages on the LCD of a Multiline Terminal (if provided).

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

To set *Message Reminder* from a Single-Line Telephone:

1. Lift the handset and receive dial tone.
2. Dial the *Message Reminder* set access code.
3. Dial the desired station number and receive feature dial tone.
4. The MSG LED on the dialed Multiline Terminal or MW lamp on the dialed Single-Line Telephone lights. The LCD on the dialed Multiline Terminal displays **MSG X** (where **X** is the number of messages that have been set).

To set *Message Reminder* from a Multiline Terminal without calling the station to be set:

1. Lift the handset or press the **SPKR** key and receive dial tone.
2. Dial the *Message Reminder* set access code.
3. Dial the desired station number. Feature dial tone is received and the LCD displays **SET XXXX** where **XXXX** is the dialed station number.
4. The MSG LED on the dialed Multiline Terminal or MW lamp on the dialed Single-Line Telephone will light to indicate a message has been set. The LCD on the dialed Multiline Terminal displays **MSG X** (where **X** is the number of messages that have been set).

To set *Message Reminder* from a Multiline Terminal (after dialing the station to be set):

1. Lift the handset or press the **SPKR** key and receive dial tone.
2. Dial the desired station number. Ringback tone or busy tone is received.
3. Press the *Message Reminder* **MSG** key, or dial "6", if single digit feature access codes are enabled. Service set tone is received and the LCD displays **SET XXXX** where **XXXX** is the dialed station number.
4. The MSG LED on the dialed Multiline Terminal or MW lamp will light to indicate a message has been set. The LCD on the dialed Multiline Terminal displays **MSG X** (where **X** is the number of messages that have been set).

To retrieve a message from a Single-Line Telephone or Multiline Terminal:

1. Lift the handset and receive dial tone.
2. Dial the *Message Reminder* search access code.
3. Dial 2. The station which set the message is automatically called.
4. Converse when the call is answered.

OR

1. Lift the handset and receive dial tone.
2. Dial the *Message Reminder* retrieve access code.
3. The station which set the message is automatically called.

To clear the message indication, without calling the station that set the message, from a Single-Line Telephone or a Multiline Terminal:

1. Lift the handset and receive dial tone.
2. Dial the *Message Reminder* search access code.
3. Dial "3". The message indication is cleared.
4. Restore the handset.
5. If more than one message has been set, repeat the above procedure as required.

## MESSAGE REMINDER (CONT'D)

To Search/ Retrieve/ Cancel a message from a Multiline Terminal with LCD:

1. Press the **SPKR** key or lift the handset and receive dial tone.
2. Dial the Message Reminder Search access code; the LCD displays: **MSG XXXX** (where XXXX is the station number that set the message) and the time the message was sent.
3. Three options are now available:
  - Dial "1" to see the next message
  - Dial "2" to call the displayed station
  - Dial "3" to clear the message in the display

To call the first station that set a message, from a Multiline Terminal with a **MSG** key:

1. Lift the handset, or press the **SPKR** key, and receive dial tone.
2. Press the **MSG** key. The first station that set a message is called.
3. Use handset to speak when answered.

OR

1. Lift the handset and receive dial tone.
2. Dial the *Message Reminder* retrieve access code.
3. The station which set the message is automatically called.
4. Converse when answered.

To set a message from the *Attendant Console*:

1. Press an idle **LOOP** key.
2. Dial the *Message Reminder* feature access code.
3. Dial the desired station number and receive feature dial tone. Message indication is set.
4. Press the **RELEASE** key to return to an idle condition.

To cancel a message from the *Attendant Console*:

1. Press an idle **LOOP** key.
2. Dial the *Message Reminder* cancel access code.
3. Dial the desired station number and receive feature dial tone. Message indication is canceled.
4. Press the **RELEASE** key to return to an idle condition.

To cancel a message from the station that set it:

1. Lift handset and receive dial tone.
2. Dial the *Message Reminder* cancel code.
3. Dial the desired station number and receive feature dial tone. The message is cleared at the dialed station.
4. Restore the handset.

## SERVICE CONDITIONS

1. Single-Line Telephones must be connected to a 2LCH board for this feature to operate. In addition, a +80Vdc Booster Battery Unit (BBU) power supply must be connected to the system power panel to provide voltage for the message waiting lamps on the Single-Line Telephones. Single-Line Telephones must be equipped with message waiting lamps for 70 Vdc.
2. Multiline Terminals can be assigned a **MSG** key for use with this feature. This line button serves as an indicator for received messages, and allows setting of *Message Reminder* to other stations (after dialing the station number).
3. A maximum of four messages can be set to one station. If a fifth message is attempted, reorder tone is heard and the LCD at the setting station shows: **RST** (when LCD is provided.)
4. A maximum of 200 messages can be set from stations in one system.

## MESSAGE REMINDER (CONT'D)

5. Message indications are battery backed up and are not lost due to power failure or initialization of the system.
6. In *Multiple Console Operation*, messages set by one Attendant can not be canceled by another Attendant.
7. Messages can be set to a station in any status condition (idle, busy, in *Line Lockout*, etc.). Message indications are not provided when a Single-Line Telephone handset is off-hook.
8. When a Multiline Terminal calls a station that is forwarded and then presses the **MSG** key, the message is left at the station to which the call was forwarded.
9. When all stations in a hunt group are busy, messages set by a Multiline Terminal using the **MSG** key are left at the called station.
10. Voice Mail Systems that provide in-band signaling for this purpose may be able to set *Message Reminder(s)*.
11. Operating procedures and service conditions of a message waiting LED on Multiline Terminals without LCD are the same as those of Single-Line Telephones, except that the message waiting LED remains on when the terminal is off hook.
12. To set *Message Reminder* service for Multiple Stations, set *Message Reminder* for the first station, wait for feature dial tone, and then set the reminder for the next station.
13. The number of messages is displayed while the Multiline Terminal is in an idle state.
14. The number of messages displayed includes the setting of Message Waiting. Single-Line Telephones must be connected to a 2LCH board for this feature to operate. In addition, a +80Vdc Booster Battery Unit (BBU) power supply must be connected to provide voltage for the message waiting lamps on the Single-Line Telephones. Single-Line Telephones must be equipped with message waiting lamps for 70 Vdc.

## MESSAGE REMINDER (CONT'D)

### PROGRAMMING

To provide the Message Reminder service for each station

START	DESCRIPTION	DATA
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM08</div>	<p>To activate the Single-Digit Feature Access Code (1, 2, 3 and 6) feature, set the data for 050, 051, 069 and 148 to "1."</p>	(1) 050: *Button as Switch Hook-Flash. (2) 1 ◀ : Ineffective
		(1) 051: #Button as Switch Hook Flash. (2) 1 ◀ : Ineffective
		(1) 069: Single-Digit Dialing/on BT Connection (2) 1 ◀ : Step Call
		(1) 148: Same Last-Digit Redialing on BT Connection (2) 1 ◀ : Ineffective
		(1) 156 (2) 0: Available
		(1) 208 (2) 0: Available
		(1) 234 (2) 0/1 ◀ : To be provided/Not to be provided
		(1) 235 (2) 0/1 ◀ : To be provided/Not to be provided
		(1) 236 (2) 0/1 ◀ : Tone is not sent/Tone is sent
		(1) 280 (2) 0/1 ◀ : 24-Hour/12-Hour
(1) 294 (2) 0/1 ◀ : Flashing (60 IPM)/Lit steady		
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">A</div>	<p>Provide the system with the Single-Digit Feature Access Code on RBT or Voice Call Connection.</p> <p>Provide the system with the Single-Digit Feature Access Code on busy Connection.</p> <p>Provide the system with the Message Reminder Reset while the called station rings.</p> <p>Specify the Automatic Cancel Message Reminder when the desired station answers.</p> <p>Specify the Special Dial Tone (SDT) for HA-610Z/SN610 ATTCO or station when dialing a feature access code.</p> <p>Specify the time display for Message Reminder service on Multiline Terminals with an LCD.</p> <p>Specify the Message Waiting Lamp indication on the Multiline Terminal to which Message Reminder is set.</p>	

## MESSAGE REMINDER (CONT'D)

A	DESCRIPTION	DATA
CM13	Provide the Message Reminder service for each station.	<ul style="list-style-type: none"> <li>• YY=03</li> <li>(1) X-XXXX: Station No.</li> <li>(2) { 0: To be provided (for stations with MW lamp or Multiline Terminals with LCD)</li> <li>      1 ◀ : Not Provided</li> </ul>
CM12	Assign the Class of Service for Message Reminder (Setting Side)/Message Reminder (Set Side).	<ul style="list-style-type: none"> <li>• CM12, YY=02 (Service Rest. Class A)</li> <li>(1) X-XXXX: Station Number</li> <li>(2) XXXX                             <ul style="list-style-type: none"> <li>└ Service Restriction Class (A) (00-15 ◀)</li> </ul> </li> </ul>
CM15		
CM20	Assign the access code for Message Reminder Search, Retrieve, Set, or Cancel.	<ul style="list-style-type: none"> <li>• CM15, YY=47 Message Reminder (Setting Side)</li> <li>• YY=48 Message Reminder (Set Side)</li> <li>(1) XX: Service Rest Class A assigned by CM12, YY=02</li> <li>(2) 1 ◀ : Allowed</li> <li>• YY=0-3 Numbering Plan Group (0-3)</li> <li>(1) X-XXX: Access Code (*9, #9)                             <ul style="list-style-type: none"> <li>A46: Message Reminder Search</li> <li>A47: Message Reminder Retrieve</li> <li>A48: Message Reminder Set</li> <li>A49: Message Reminder Cancel</li> </ul> </li> <li>(2) {</li> </ul>
CM90	Assign the MSG key to each Multiline Terminal.	<ul style="list-style-type: none"> <li>• YY=00</li> <li>(1) Primary Extension No. + <input type="text"/> + Key No.</li> <li>(2) F1005</li> </ul>
END		

### HARDWARE REQUIRED

For providing the Single-Line Telephone with Message-Waiting Lamp:

- PK-2LCH card × n/2 (n: Number of Telephone sets equipped with MW Lamp)
- Booster Battery Unit (BBU)

For providing Multiline Terminal

- ETE-16D-2TEL, ETE-6D-2TEL, ETE-16-2TEL, or ETE-6-2TEL, and a PK-2DLC card.

## MESSAGE WAITING

### GENERAL DESCRIPTION

This feature allows the Message Front (*Attendant Console*, administrative station, or *DSS/BLF Console*) to light a lamp (on an uninterrupted or interrupted basis) on a Single-Line Telephone or Multiline Terminal without display to indicate a message is waiting.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE:

To set *Message Waiting* from the *Attendant Console*:

1. Dial desired station number.
2. Press **MW** key.
3. Press **START/ANSWER** key.
4. The above two steps can be repeated for additional stations.
5. Press **RELEASE** key.

To cancel *Message Waiting* from the *Attendant Console*:

1. Dial desired station number.
2. Press **MW** key.
3. Press **RESET** key.
4. The above two steps can be repeated for additional stations.
5. Press **RELEASE** key.

To set *Message Waiting* from the administrative station (Multiline Terminal):

1. Press **SPKR** key and receive dial tone.
2. Press **MW SET** key and receive second dial tone.
3. Dial desired station number and receive service set tone.
4. Press **SPKR** key.

To cancel *Message Waiting* from the administrative station (Multiline Terminal):

1. Press **SPKR** key and receive dial tone.
2. Press **MW RESET** key and receive second dial tone.
3. Dial desired station number and receive service set tone.
4. Press **SPKR** key.

To set *Message Waiting* from the administrative station (Single-Line Station):

1. Lift handset and receive dial tone.
2. Dial *Message Waiting* set access code.
3. Dial desired station number and receive service set tone.
4. Restore handset.

To cancel *Message Waiting* from the administrative station (Single-Line Station):

1. Lift handset and receive dial tone.
2. Dial *Message Waiting* reset access code.
3. Dial desired station number and receive service set tone.
4. Restore handset.



## MESSAGE WAITING (CONT'D)

To answer *Message Waiting* from the station which set MW:

Single-Line Telephone:

1. Lift handset and receive dial tone.
2. Dial *Message Waiting Retrieve* access code and receive ring-back tone.

OR

1. Lift handset and receive dial tone.
2. Dial *Message Waiting Search* access code.
3. Dial 2 to retrieve the set number and receive ring-back tone.

MultiLine Terminal:

1. Lift handset or press **SPKR** key and receive dial tone.
2. Press MW Lamp key and receive ring back tone.

OR

1. Lift handset or press **SPKR** key and receive dial tone.
2. Dial *Message Waiting Retrieve* access code and receive ring back tone.

OR

1. Lift handset or press **SPKR** key and receive dial tone.
2. Dial *Message Waiting Search* access code.
3. The following features are available by dialing a digit.
  - A. Dial "1": To search next *Message* on the display.
  - B. Dial "2": To retrieve the Number.
  - C. Dial "3": To cancel the *Message Waiting*.

Refer to *DSS/BLF Console* portion to set/cancel *Message Waiting* from the *DSS/BLF Console*.

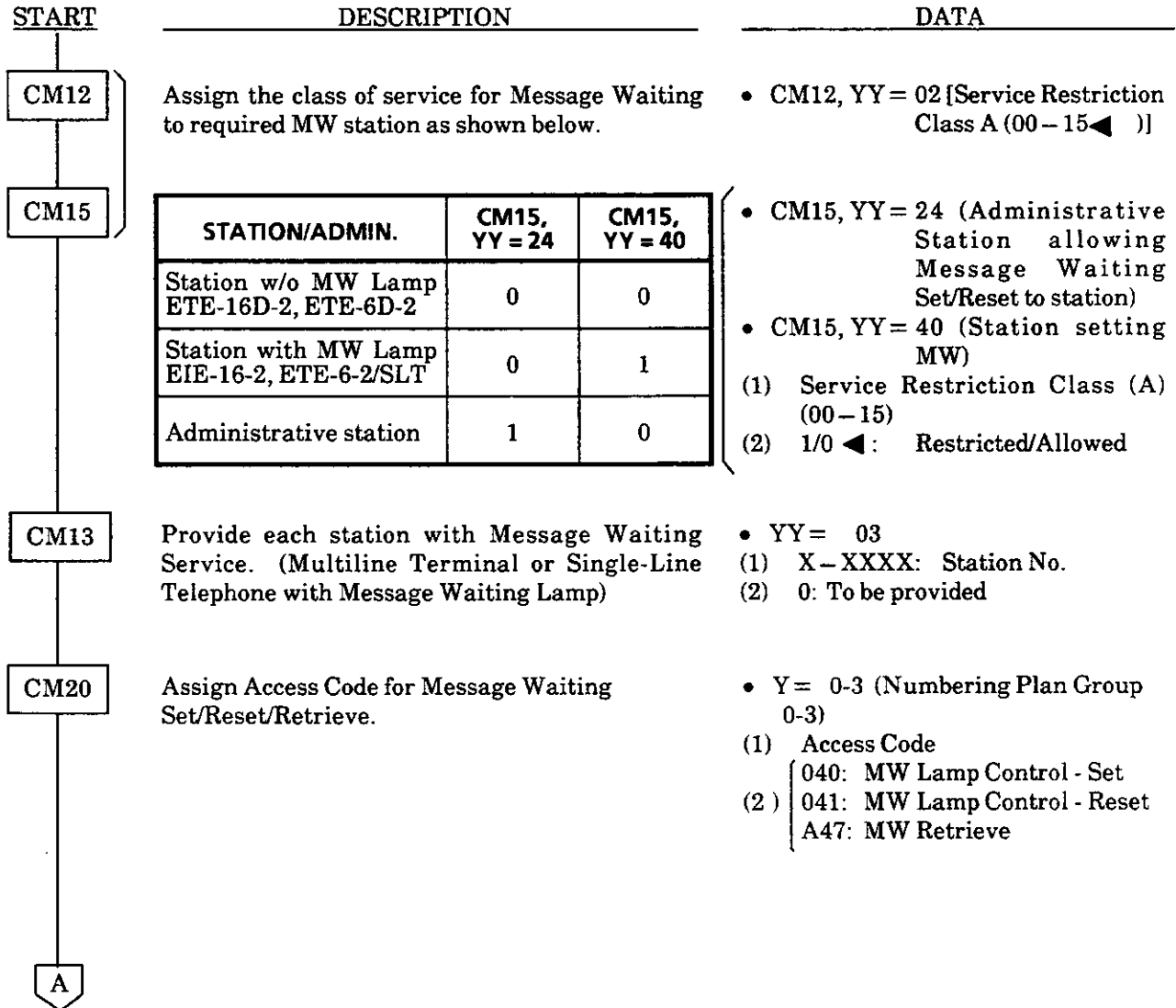
### SERVICE CONDITIONS

1. The *Message Waiting* function can be set even when the station is busy. The *Message Waiting* lamp will not light while the station has the handset in use for Single-Line station.
2. The *Message Waiting* status is displayed by the *Message Waiting* lamp on Single-Line Telephones.
3. One +80V booster power unit per system is required to light the *Message Waiting* lamp on Single-Line Telephones.
4. A 2LCH card is required to provide Single-Line Telephones with the *Message Waiting* function. Single-Line Telephones must be equipped with *Message Waiting* lamps for 70VDC.
5. *Message Waiting* can be automatically cleared by talking to the Message Front (on a system basis). If *Message Waiting* is not automatically cleared, the reset operation is required from the setting Message Front.
6. Only one *Message Waiting* indication can be sent to a station.
7. Since *Message Reminder* and *Message Waiting* share the same lamp, all *Message Reminder* indications and *Message Waiting* indications must be cleared before the lamp will go out.
8. Interrupted or uninterrupted *Message Waiting* lamping is selected on a system-wide basis.

## MESSAGE WAITING (CONT'D)

### PROGRAMMING

Refer to DSS/BLF Console portion to program the DSS/BLF as a Message Front.



## MESSAGE WAITING (CONT'D)

	DESCRIPTION	DATA
A		
CM51	Assign the Message Front Destination to be routed by dialing <i>Message Waiting Retrieve</i> access code or pressing <i>Message Waiting</i> Key on Multiline Terminal to which <i>Message Waiting</i> is set.	<ul style="list-style-type: none"> <li>• YY = 15</li> <li>(1) Tenant No. (00-63) to which MW set Multiline Terminal belongs</li> <li>(2) { Message Front No. X-XXX (Station No./Primary Extension No.) or E000 (Attendant Console)</li> </ul>
CM08	<p>If ATTCON is assigned to Message Front by CM51, YY=15, set the data for 233 to 0. With this setting, Message Waiting is automatically reset when the ATTCON answers.</p> <p>To reset Message Waiting indication while Message Front rings by dialing the MW Retrieve/Search access code or pressing the MW key on Multiline Terminal, set the data for 234 to 0.</p> <p>To reset Message Waiting indication when the set station answers a call by dialing the MW Retrieve/Search access code or pressing the MW key on Multiline Terminal from Message Front, set the data for 235 to 0.</p>	<ul style="list-style-type: none"> <li>(1) 233</li> <li>(2) 0</li> <li>(1) 234</li> <li>(2) 0</li> <li>(1) 235</li> <li>(2) 0</li> </ul>
CM47	Assign the Message-Waiting function key to the Attendant Console, if provided.	<ul style="list-style-type: none"> <li>(1) Key No. (00-11)</li> <li>(2) { 01: Message Waiting 04: Reset</li> </ul>
CM90	Assign the Message-Waiting function key to the Multiline Terminal and the administrative station, if provided.	<ul style="list-style-type: none"> <li>• YY=00</li> <li>(1) Primary Extension No. + <input type="text"/> + Key No. (01-16)</li> <li>(2) { F0040: Message Waiting Set F0041: Message Waiting Reset F1005: Message Waiting Lamp } For administrative station For station without MW Lamp</li> </ul>
END		

### HARDWARE REQUIRED

To provide Single-Line Telephone with the Message Waiting Lamp:

- PK-2LCH Card
- Booster Battery Unit (+80V, 1A)

## MISCELLANEOUS TRUNK ACCESS

### GENERAL DESCRIPTION

This feature provides for the connection of various types of external facilities. In addition to Loop and Ground Start Trunks, the following can also be interfaced with the NEAX1400 IMS: *Code Calling Equipment, Dictation Equipment, Foreign Exchange (FX) Lines, Radio Paging Equipment, and Wide Area Telephone Service (WATS) lines.* Refer to *CCSA Access, Direct Inward Dialing (DID), and E&M Tie Line Access* for more applications of *Miscellaneous Trunk Access*.

## MISCELLANEOUS TRUNK ACCESS; CODE CALLING EQUIPMENT ACCESS

### GENERAL DESCRIPTION

*Code Calling Equipment* consists of external paging units and external dialers requiring dial access from the NEAX1400 IMS.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

To access *Code Calling Equipment*:

1. Go off-hook and receive dial tone.
2. Dial *Code Calling* feature access code.
3. Dial code number for *Code Calling* unit desired.

### SERVICE CONDITIONS

1. *Code Calling Equipment* must be locally provided.
2. Loop Start or Ground Start trunks may be used to interface *Code Calling Equipment* to the NEAX1400 IMS.
3. An external equipment control relay board (PK-DK01) can be used when external equipment low power control is required (up to 125 mA). For higher power control, a locally provided external relay can be driven by the PK-DK01.
4. Access to this feature can be allowed or denied in *Class of Service* assignment.

## MISCELLANEOUS TRUNK ACCESS; CODE CALLING EQUIPMENT ACCESS (CONT'D)

### PROGRAMMING

START	DESCRIPTION	DATA
CM10	Assign the interface trunk (PK-2COT and/PK-DK01) to the required LEN.	(1) LEN (0000 – 0511) (2) { D000 – D255: PK-2COT E800 – E831: PK-DK01
CM30	Assign the trunk data to the Trunk Number.	<ul style="list-style-type: none"> <li>• YY=00 (Trunk Route Allocation)               <ul style="list-style-type: none"> <li>(1) Trunk No.</li> <li>(2) Route No. (Dedicated route number for this service should be assigned.)</li> </ul> </li> <li>• YY=01 (Tenant Allocation)               <ul style="list-style-type: none"> <li>(1) Trunk No.</li> <li>(2) Tenant No. (00 – 63)</li> </ul> </li> </ul>
CM35	Assign the route data to the trunk route specified by CM30, YY=00.	<ul style="list-style-type: none"> <li>• YY=00 (Kind of Route)               <ul style="list-style-type: none"> <li>(1) Route No. (00 – 63)</li> <li>(2) 05</li> </ul> </li> <li>• YY=01 (Type of Signal to be sent out).               <ul style="list-style-type: none"> <li>(1) Route No. (00 – 63)</li> <li>(2) { 2: DP                      4: DTMF</li> </ul> </li> <li>• YY=08 (Dial Pulse Sending)               <ul style="list-style-type: none"> <li>(1) Route No. (00 – 63)</li> <li>(2) 3 ◀ : To be sent</li> </ul> </li> </ul>
A		

## MISCELLANEOUS TRUNK ACCESS; CODE CALLING EQUIPMENT ACCESS (CONT'D)

	DESCRIPTION	DATA
A		
CM44	Assign the paging function to the PK-DK01 card.	(1) <u>XX X</u> ——— Circuit No. of PK-DK-01 (0-3) ——— Card No. (00-31) assigned by CM10 (E800-E831)
CM20	Assign the access code for this service.	(2) <u>02XX</u> : Zone assigned by CM30, YY=28 ——— 00: Speaker Paging Zone 0 ?     ?     ? ——— 09: Speaker Paging Zone 9  • Y= 0-3 (Numbering Plan Group 0-3) (1) X-XXX (Access Code) (2) 100-163 (Route No.00-63 assigned by CM30, YY=00)
END		

**Note:** For assigning the Class of Service for this feature, refer to CLASS OF SERVICE.

## MISCELLANEOUS TRUNK ACCESS; DICTATION EQUIPMENT ACCESS

### GENERAL DESCRIPTION

This feature permits dial access to customer provided *Dictation Equipment*, and in some instances allows them to maintain telephone-dial control of normal dictation system features.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

To access *Dictation Equipment* from any station:

1. Go off-hook and receive dial tone.
2. Dial *Dictation Equipment* feature access code.
3. Proceed according to operation procedures of associated *Dictation Equipment*.

### SERVICE CONDITIONS

1. One trunk circuit is required for each piece of dictation interface equipment accessed.
2. *Dictation Equipment* must be able to receive DTMF signals if dial control is desired; however, access is also available with rotary dial signals.
3. *Dictation Equipment* must be locally provided.
4. *Dictation Equipment* can be accessed from stations, *Attendant Consoles*, *E&M Tie Lines*, or remotely. Refer to the *Direct Inward System Access* feature.
5. Access to this feature can be allowed or denied in *Class of Service* assignment.



## MISCELLANEOUS TRUNK ACCESS; DICTATION EQUIPMENT ACCESS (CONT'D)

### PROGRAMMING

START	DESCRIPTION	DATA
CM10	Assign the Trunk Number to the required LEN.	(1) LEN (0000 – 0511) (2) Trunk No. (D000 – D255)
CM30	Assign the Trunk data to the Trunk Number.	<ul style="list-style-type: none"> <li>• YY = 00 (Trunk Route Allocation)               <ul style="list-style-type: none"> <li>(1) Trunk No. (000 – 255)</li> <li>(2) Trunk Route No. (00 – 63)                    (Dedicated route number for this service should be assigned)</li> </ul> </li> <li>• YY = 01 (Tenant Allocation)               <ul style="list-style-type: none"> <li>(1) Trunk No. (000 – 255)</li> <li>(2) Tenant No. (00 – 63)</li> </ul> </li> </ul>
CM35	Assign the route data to the trunk route specified by CM30, YY = 00.	<ul style="list-style-type: none"> <li>• YY = 00 (Kind of Route)               <ul style="list-style-type: none"> <li>(1) Trunk Route No. (00 – 63)</li> <li>(2) 05</li> </ul> </li> <li>• Y = 01 (Type of Signal to be sent out)               <ul style="list-style-type: none"> <li>(1) Trunk Route No. (00 – 63)</li> <li>(2) 4 : DTMF</li> </ul> </li> <li>• YY = 08 (Dial Pulse Sending)               <ul style="list-style-type: none"> <li>(1) Trunk Route No. (00 – 63)</li> <li>(2) 3 ◀ : To be sent</li> </ul> </li> </ul>
CM20	Assign the access code for this service.	<ul style="list-style-type: none"> <li>• Y = 0 – 3                (Numbering Plan Group 0 – 3)               <ul style="list-style-type: none"> <li>(1) X – XXX (Access Code)</li> <li>(2) 100 – 163 (Route No. 00 – 63 assigned CM30, YY = 00)</li> </ul> </li> </ul>
END		

**Note:** For assigning the Class of Service for this feature, refer to CLASS OF SERVICE.

## MISCELLANEOUS TRUNK ACCESS; FOREIGN EXCHANGE (FX) ACCESS

### GENERAL DESCRIPTION

An *FX* line is one that is terminated at a distant central office. With this feature, outgoing calls over the *FX* line become a local call at the distant CO.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

Outgoing Call from any station:

1. Go off-hook and receive dial tone.
  2. Dial the *FX* line access code and receive dial tone from distant CO.
  3. Dial desired telephone number.
- (Multiline Terminals can have direct trunk appearances of *FX* lines).

Incoming call to the *Attendant Console*:

1. *FX* lamp at *Attendant Console* flashes and an audible signal is received.
2. Attendant presses key assigned to *FX* line or presses the **ANSWER** key.
3. Attendant processes call in normal manner.

### SERVICE CONDITIONS

1. One circuit on the COT board is required for each *FX* line interface.
2. Care should be exercised in system data assignment when using this feature in conjunction with *Least Cost Routing (LCR)* since *FX* lines may require that the digit 1 be dialed prior to the desired number.
3. The maximum capacity of all lines, including *FX* lines, cannot exceed 256 lines.
4. Access to this feature can be allowed or denied in *Class of Service* assignment.
5. *FX* lines can be assigned as *Direct-In Terminations*.

### PROGRAMMING

In addition to the programming of Direct Outward Dialing, assign an *FX* line to the required trunk routes as shown below.

<u>START</u>	<u>DESCRIPTION</u>	<u>DATA</u>
START   CM35   END	Assign an <i>FX</i> line to the required trunk route.	<ul style="list-style-type: none"> <li>• YY = 00</li> <li>(1) Trunk Route No. (00 – 63)</li> <li>(2) 01: <i>FX</i> line</li> </ul>

**Note:** For assigning the *Class of Service* for this feature, refer to *CLASS OF SERVICE*

## MISCELLANEOUS TRUNK ACCESS; RADIO PAGING EQUIPMENT ACCESS

### GENERAL DESCRIPTION

This feature provides station users dial access to *Radio Paging Equipment*, and to selectively tone- or voice/tone-alert individuals carrying pocket paging devices. The paged party (when on premises) can be connected to the paging party by going to the nearest station and dialing an answer-back code.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

To page:

1. Go off-hook and receive dial tone.
2. Dial *Radio Paging Answer Code* and receive feature dial tone.
3. Dial the number of the paged radio and receive ring back tone.
4. On-premises paged party answers. The two parties can talk.

### SERVICE CONDITIONS

1. *Radio Paging Equipment* must be locally provided. Refer to the manufacturer's documentation for the following specifications:
  - type of tones
  - capability of receiving individual radio number
  - maximum number of users that can be assigned individual radio access numbers
2. A maximum of three digits can be assigned as *Radio Paging Equipment Access* and answer codes.
3. Individual radio numbers can be a maximum of four digits.
4. The *Attendant Console* can originate a radio paging call.
5. The maximum number of radio paging answer zones is nine.
6. The maximum number of trunk routes that can be assigned radio paging is nine.
7. If the paged party does not answer within 300 seconds, the on-premises paging-answer capability will be cancelled. This timing is programmable from 60 to 900 seconds (15 minutes).
8. Access to this feature can be allowed or denied in *Class of Service* assignment.

## MISCELLANEOUS TRUNK ACCESS; RADIO PAGING EQUIPMENT ACCESS (CONT'D)

### PROGRAMMING

START	DESCRIPTION	DATA
START		
CM10	Assign the trunk used for interfacing with the Radio Paging Equipment to the required LEN.	(1) LEN (0000 – 0511) (2) Trunk No. (D000 – D255)
CM12	Assign the Class of Service for Paging Access to the required stations.	<ul style="list-style-type: none"> <li>• CM12, YY=02 (Service Rest. Class A (00 – 15◀ ))</li> <li>• CM15, YY=08</li> </ul>
CM15		
CM41	Specify the timing for canceling the Paging Answer capability.	<ul style="list-style-type: none"> <li>• Y=0</li> <li>(1) 20</li> <li>(2) 01 – 15 (Timer Data for 60 – 900 sec.)</li> </ul> If no data is set, the default setting is 300 seconds.
CM08	Specify the conditions for Radio Paging Access.	(1) 094: Paging Access Tone (2) 0: To be sent out  (1) 095: Hooking Signal to Radio Paging Equipment (2) 0/1 ◀ : Allowed/Restricted  (1) 149: Automatic Call Back when paging station is busy through non-delay operation (2) 0/1 ◀ : Available/Not Available  (1) 157: Access Code for Paging Access and Answer (2) 0/1 ◀ : Same/Different  (1) 162: Multiple Radio Paging Access after accessing a radio paging trunk with delay type Radio Paging (2) 0/1 ◀ : Not Available/Available
A	In case of CM08 – 157:1 (Different)	
C	In case of CM08 – 157:0 (Same)	

## MISCELLANEOUS TRUNK ACCESS; RADIO PAGING EQUIPMENT ACCESS (CONT'D)

	DESCRIPTION	DATA
A		
CM20	Assign the access code for Paging Access and Answer.	<ul style="list-style-type: none"> <li>• Y = 0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX: Access Code                             <ul style="list-style-type: none"> <li>100-163: For Paging Access (Route 00-63)</li> <li>070-079: For Paging Answer (Paging Answer Zone 0-9)</li> </ul> </li> </ul>
CM30	Assign the data for the Radio Paging Equipment interface to the trunk number.	<ul style="list-style-type: none"> <li>• YY = 00 (Trunk Route Allocation)                             <ul style="list-style-type: none"> <li>(1) Trunk No.</li> <li>(2) Route No. (00-63)</li> </ul> </li> <li>• YY = 28 (Zone/Kind of Paging)                             <ul style="list-style-type: none"> <li>(1) Trunk No.</li> <li>(2) X X                                     <ul style="list-style-type: none"> <li>Type of Paging   <ul style="list-style-type: none"> <li>1: No Answer</li> <li>3: Non-Delay Answer</li> <li>5: Non-Delay or Delay Answer</li> <li>6: No Answer and Automatic Dialing of Calling Party's No.</li> </ul> </li> <li>Paging Answer Zone   <ul style="list-style-type: none"> <li>0: Paging Answer Zone 0</li> <li>?</li> <li>9: Paging Answer Zone 9</li> </ul> </li> </ul> </li> </ul> </li> </ul>
B		

## MISCELLANEOUS TRUNK ACCESS; RADIO PAGING EQUIPMENT ACCESS (CONT'D)

	DESCRIPTION	DATA
<div style="border: 1px solid black; width: 20px; height: 20px; margin: 0 auto; text-align: center; line-height: 20px;">B</div> <div style="border: 1px solid black; width: 60px; height: 20px; margin: 5px auto; text-align: center; line-height: 20px;">CM35</div> <div style="border-left: 1px solid black; border-right: 1px solid black; height: 400px; margin: 0 auto;"></div> <div style="text-align: center; margin-top: 10px;"><u>END</u></div>	<p>Assign the route data to the route number assigned by CM30, YY=00.</p>	<ul style="list-style-type: none"> <li>• YY=00-3                             <ul style="list-style-type: none"> <li>(1) Route No. (00-63) (07)</li> <li>(2) 05</li> </ul> </li>   <li>• YY=08 (Dial Sending to Radio Paging Equipment)                             <ul style="list-style-type: none"> <li>(1) Route No. (00-63)</li> <li>(2) 3 ◀ : Dial Pulses are sent out</li> </ul> </li>   <li>• YY=13 (Max. number of sending digits)                             <ul style="list-style-type: none"> <li>(1) Route No. (00-63)                                     <ul style="list-style-type: none"> <li>000: Unlimited</li> <li>001: 1 digit of Radio No. and calling Station number.</li> <li>  ?  </li> <li>(2) 004: 4 digits of Radio No. and calling Station number.</li> <li>  ?  </li> <li>005: } 2 digits of Radio Paging No. and calling Station number.</li> <li>  ?  </li> <li>031: } Station number.</li> <li>NONE: }</li> </ul> </li> </ul> </li> </ul> <p><b>Note:</b> <i>To send a calling station number automatically, the data for CM30, YY=28 must be sent to "X6".</i></p>

## MISCELLANEOUS TRUNK ACCESS; RADIO PAGING EQUIPMENT ACCESS (CONT'D)



DESCRIPTION	DATA								
<p>Assign the access code for Paging Answer.</p>	<ul style="list-style-type: none"> <li>• Y=0-3 (Numbering Plan Group 0-3)                             <ul style="list-style-type: none"> <li>(1) X-XXX: Access Code</li> <li>(2) 070-0799: Paging Answer Zone 0-9</li> </ul> </li> </ul>								
<p>Assign the data for the Radio Paging Equipment interface to the trunk number assigned by CM10 as follows:</p> <table style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; border-bottom: 1px solid black;">Paging Answer Zone</th> <th style="text-align: center; border-bottom: 1px solid black;">Trunk Route</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">0</td> <td style="text-align: center;">----- 50</td> </tr> <tr> <td style="text-align: center;">}</td> <td style="text-align: center;">}</td> </tr> <tr> <td style="text-align: center;">9</td> <td style="text-align: center;">----- 59</td> </tr> </tbody> </table>	Paging Answer Zone	Trunk Route	0	----- 50	}	}	9	----- 59	<ul style="list-style-type: none"> <li>• YY= 00 (Trunk Route Allocation)                             <ul style="list-style-type: none"> <li>(1) Trunk No.</li> <li>(2) Route No. (50-59)</li> </ul> </li> <li>• YY= 28 (Zone/Kind of Paging)                             <ul style="list-style-type: none"> <li>(1) Trunk No.</li> <li>(2) <u>X X</u> <ul style="list-style-type: none"> <li>└─ Type of Paging</li> <li>1: No Answer</li> <li>3: Non-Delay</li> <li>5: Non-Delay or Delay Answer</li> <li>6: No Answer and Automatic Dialing of Calling Party's No.</li> <li>└─ Paging Answer Zone</li> <li>0: Paging Answer Zone 0</li> <li>  }                  }</li> <li>9: Paging Answer Zone 9</li> </ul> </li> </ul> </li> </ul>
Paging Answer Zone	Trunk Route								
0	----- 50								
}	}								
9	----- 59								

## MISCELLANEOUS TRUNK ACCESS; RADIO PAGING EQUIPMENT ACCESS (CONT'D)

	DESCRIPTION	DATA
<div style="border: 1px solid black; width: 20px; height: 20px; margin: 0 auto; text-align: center; line-height: 20px;">D</div> <div style="border: 1px solid black; width: 60px; height: 25px; margin: 5px auto; text-align: center; line-height: 25px;">CM35</div> <div style="border-left: 1px solid black; border-right: 1px solid black; height: 400px; margin: 0 auto;"></div> <div style="text-align: center; margin-top: 10px;"><u>END</u></div>	<p>Assign the route data to the route number assigned by CM30, YY=00.</p>	<ul style="list-style-type: none"> <li>• YY=00               <ul style="list-style-type: none"> <li>(1) Route No. (50 – 59)</li> <li>(2) 05</li> </ul> </li>   <li>• YY= 08 (Dial Sending to Radio Paging Equipment)               <ul style="list-style-type: none"> <li>(1) Route No. (50 – 59)</li> <li>(2) 3 ◀ : Dial Pulses are sent out</li> </ul> </li>   <li>• YY= 13 (Max. number of sending digits)               <ul style="list-style-type: none"> <li>(1) Route No. (50 – 59)                   <ul style="list-style-type: none"> <li>000: Unlimited</li> <li>001: 1 digit of Radio No. and calling Station number.</li> <li>} {</li> <li>(2) 004: 4 digits of Radio No. and calling Station number.</li> <li>005: } 2 digits of Radio</li> <li>} Paging No. and calling</li> <li>031: Station number.</li> <li>NONE: }</li> </ul> </li> </ul> </li> </ul> <p><b>Note:</b> <i>To send a calling station number automatically, the data for CM30, YY=28 must be sent to "X6."</i></p>

### HARDWARE REQUIRED

- PK-2COT Card
- Radio Paging Equipment provided locally



## MISCELLANEOUS TRUNK ACCESS; WIDE AREA TELEPHONE SERVICE (WATS) ACCESS

### GENERAL DESCRIPTION

This feature allows any station user direct-dial access to outgoing WATS lines.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

Normal call handling procedures apply.

### SERVICE CONDITIONS

1. One circuit on the COT card is required for each WATS line interface.
2. *Least Cost Routing* and *Code Restriction* can be applied to WATS lines.
3. The maximum capacity of all lines including WATS Lines cannot exceed 256 lines.
4. Access to this feature can be allowed or denied in *Class of Service* assignment.

### PROGRAMMING

In addition to the programming of Direct Outward Dialing, assign WATS line to the required trunk route, as shown below.

<u>START</u>	<u>DESCRIPTION</u>	<u>DATA</u>
CM35	Assign a WATS line to the required trunk route.	<ul style="list-style-type: none"><li>• YY = 00</li><li>(1) Trunk Route No. (00 - 63) (05)</li><li>(2) 02: WATS line</li></ul>
<u>END</u>		

**Note:** For assigning the *Class of Service* for this feature, refer to *Class of Service*.

## MULTILINE TERMINAL ATTENDANT POSITION

### GENERAL DESCRIPTION

A Multiline Terminal with LCD can be programmed to function as an Attendant. This Attendant has limited access to Attendant-related features and functions, and can be substituted where *Attendant Console* features are required, but an *Attendant Console* is not necessary. The EDE-30-2 unit can be attached to this terminal, providing enhanced operation.

### STATION APPLICATION

ETE-16D-2 and ETE-6D-2 Multiline Terminals.

### OPERATING PROCEDURE

Answering and transferring an incoming CO line call:

With an incoming call in progress (DDD, FX, or WATS line-key LED, and ANS key LED are flashing, CO ring is heard):

1. Press the flashing line key or ANS key.
2. First available LOOP key LED lights steady green. Incoming indication stops. LCD shows trunk name and number.
3. Press the TRF key and dial the station number to be transferred to, or press the desired DSS key. The LCD shows called station number.
4. Press RLS key or go on-hook.

To Hold a call with a call in progress:

1. Press HOLD key. LOOP key flashes green.
2. Go on-hook or press RLS key.

To retrieve a held call:

1. Go off-hook.
2. Press flashing LOOP key. LED key indication goes to steady green.
3. Talk.

To set/cancel Message Waiting:

1. Press MW key on EDE-30-2 unit to enter message mode.
2. Press the associated DSS key for the desired station. The associated LED lights steady red for set Message Waiting or extinguishes when Message Wait is canceled.
3. Press the MW key to return to normal DSS mode.

To set/cancel Do Not Disturb:

1. Press DND key on EDE-30-2 unit to enter Do Not Disturb mode.
2. Press the applicable DSS key for the desired station. The associated LED lights steady red when Do Not Disturb is set and extinguishes when Do Not Disturb is canceled.
3. Press DND key to return to normal DSS mode.

To set/cancel Night Service:

1. Press the NT key on EDE-30-2 unit.  
or
2. Dial the Night Service set/cancel code.

## MULTILINE TERMINAL ATTENDANT POSITION (CONT'D)

Answering an Operator call or recall:

1. Press **OPE** key. The associated LED lights steady green and the LCD will display either trunk name and number or station name and number.
2. Talk with party.

### SERVICE CONDITIONS

1. Transfer of calls is possible with the transfer (**TRF**) key.
2. Answering of calls is possible using the answer (**ANS**) key or by direct line key selection.
3. Normal internal call operation is available using the station's primary extension, a secondary extension, or a software line appearance.
4. An EDE-30-2 unit can be associated with the Attendant Multiline Terminal, and its keys can be assigned as Direct Station Selection (**DSS**) keys and used in conjunction with the **RLS** key.
5. When the EDE-30-2 unit is assigned for use with the Multiline Terminal, the unit can be provided with a *Message Wait* (**MW**) key, a *Do Not Disturb* (**DND**) key and a *Night Transfer* (**NT**) key. Using the **MW** key converts the EDE-30-2 unit into a Message-Waiting Console. Using the **DND** key converts the EDE-30-2 unit into a *Do Not Disturb* console. Using the **NT** key places the associated tenant into night mode. Only one of these can be accessed at one time.
6. An **RLS** key can be assigned on the Multiline Terminal's line keys.
7. Use of the **RLS** key during a call in progress will terminate that call, unless a transfer is in progress, in which case the transfer occurs. (The **RLS** key acts the same as going on-hook).
8. The associated LED for **MW**, **DND**, or **NT** on the EDE-30-2 unit will light steady red when in use, and be off when canceled.

## MULTILINE TERMINAL ATTENDANT POSITION (CONT'D)

9. The associated LED for each station assigned MW or DND is lit steady green while it is set, but is displayed only when the Multiline Terminal user activates the *Message Wait mode* or *Do Not Disturb mode*.
10. Direct trunk-line appearances may be assigned to the Attendant Multiline Terminal. Operation is the same as on normal Multiline Terminals. Attendant-console-style operation is not available with direct trunk line appearances.
11. For operator call from Tie Line, outside party must dial a virtual Line Number associated with ATT position.

### PROGRAMMING

START	DESCRIPTION	DATA
CM10	Assign the Primary Extension number to the required LEN.	(1) LEN (0000 – 0511) (2) FX – FXXXX (Primary Extension No.)
CM12	Assign the Class of Service for the Multiline Terminal Attendant Position to the required Multiline Terminal.	• CM12, YY=02 Service Restriction Class B (00 – 15) • CM15, YY=71 (1) XX Service Restriction Class B assigned by CM12, YY=02 (00 – 15 ◀) (2) 0: Attendant Position
CM15		
CM11	Assign the required number of Loop, ICI (Incoming Call Identification) and OPR (Operator Call) Lines to the Virtual LENs.	(1) Virtual LEN (0000 – 0255) AAX X: LOOP Line No. (2) Loop Number (1 – 5) Attendant Position No. (0 – 7) AB00 – AB99: ICI/OPR Line No.
A	<b>Note:</b> <i>Usually, ICI/OPR Numbers are assigned on a per-Attendant-Position-Group basis.</i>	

## MULTILINE TERMINAL ATTENDANT POSITION (CONT'D)

A	DESCRIPTION	DATA
CM12	Assign the data for the Attendant Loop Line to each Loop Line No. assigned by CM11.	<ul style="list-style-type: none"> <li>• YY=03</li> <li>(1) Loop Line No. (AA01 – AA75) assigned by CM11.</li> <li>(2) 08: Attendant Position Loop Line</li> </ul>
CM12 CM15	Assign the Class of Service for the ICI key to the required ICI/OPR Line Numbers assigned by CM11.  <i>Note: The Service Restriction Class Number for the Multiline Terminal Position should be different from an ordinary station.</i>	<ul style="list-style-type: none"> <li>• CM12, YY=02</li> <li>(1) ICI/OPR Line No. assigned by CM11 (AB00 – AB99)</li> <li>(2) X X X X  <div style="margin-left: 40px;">└─ Service Rest. Class B (00 – 15 ◀)</div> </li> <li>• CM15, YY=73</li> <li>(1) XX (Service Rest. Class B assigned by CM12, YY=02)</li> <li>(2) 0: Allowed</li> </ul>
CM12	Assign a Hotline station to each ICI/OPR Line Number. With this assignment, each ICI/OPR Line is restricted from a call origination.	<ul style="list-style-type: none"> <li>• YY=03</li> <li>(1) ICI/OPR No. (AB00 – AB99)</li> <li>(2) 04: Hotline</li> </ul>
CM17	Assign a UCD station to each ICI/OPR Line Number. With this assignment, ICI/OPR Lines can provide the call-queuing facility individually.	<ul style="list-style-type: none"> <li>• Y=1</li> <li>(1) ICI/OPR Line No. (AB00 – AB99)</li> <li>(2) 1: Pilot Station</li> <li>• Y=2</li> <li>(1) ICI/OPR Line No. (AB00 – AB99)</li> <li>(2) 00 – 15: UCD Group No.</li> <li><i>Note: Individual UCD Group Nos. must be assigned to each ICI/OPR Line No.</i></li> </ul>
CM20	Assign the access code for Priority Call 0 used for Attendant Position access.	<ul style="list-style-type: none"> <li>• Y=0 – 3 (Numbering Plan Group 0 – 3)</li> <li>(1) X – XXX (Attendant Position Access Code)</li> <li>(2) 088</li> </ul>
B		

## MULTILINE TERMINAL ATTENDANT POSITION (CONT'D)

B	DESCRIPTION	DATA
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin-bottom: 5px;">CM51</div> <div style="border: 1px solid black; padding: 2px; width: fit-content; margin-bottom: 5px;">CM08</div> <div style="border: 1px solid black; padding: 2px; width: fit-content; margin-bottom: 5px;">CM30</div>	<p>Assign the destination of Priority Call 0 to each OPR Line.</p> <p>Assign the destination of DIT through the required trunks to each ICI Line.</p>	<ul style="list-style-type: none"> <li>• YY = 12                             <ul style="list-style-type: none"> <li>(1) Tenant No.</li> <li>(2) OPR Line No. (AB00 – AB99)</li> </ul> </li> <li>(1) 250</li> <li>(2) 0</li> </ul>
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin-bottom: 5px;">CM08</div>	<p>Provide the system with Day/Night Mode Change by an NT key on an Attendant Position.</p>	<ul style="list-style-type: none"> <li>• YY = 02                             <ul style="list-style-type: none"> <li>(1) 000 – 255 (Trunk Number)</li> <li>(2) 04: DIT</li> </ul> </li> <li>• YY = 04                             <ul style="list-style-type: none"> <li>(1) 000 – 255 (Trunk Number)</li> <li>(2) ICI Line No. (AB00 – AB99)</li> </ul> </li> </ul> <p>(1) 244 (Terminating system change)</p> <p>(2) 0: Available</p> <p>(1) 245 (Trunk Restriction Class change)</p> <p>(2) 0: Available</p>
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin-bottom: 5px;">CM12</div> <div style="border: 1px solid black; padding: 2px; width: fit-content; margin-bottom: 5px;">CM15</div>	<p>Assign the Class of Service for Day/Night Mode Change by station-dialing to Attendant Position.</p>	<ul style="list-style-type: none"> <li>• CM12, YY = 02 [Service Restriction Class B (00 – 15 ◀ )]</li> <li>• CM15, YY = 60                             <ul style="list-style-type: none"> <li>(1) 00 – 15 (Service Restriction Class B assigned by CM12, YY = 02)</li> <li>(2) 1 ◀ : Allowed</li> </ul> </li> </ul>
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin-bottom: 5px;">CM90</div>	<p>Assign the Loop keys to each Multiline Terminal, and assign the function keys required for the Attendant Position to the Multiline Terminal.</p>	<ul style="list-style-type: none"> <li>• YY = 00                             <ul style="list-style-type: none"> <li>(1) Primary Extension No. + <span style="border: 1px solid black; padding: 0 5px;"> </span> + Key No.</li> </ul> </li> <li>(2)                             <ul style="list-style-type: none"> <li>AA01 – AA75 : Loop Key</li> <li>AB00 – AB99 : ICI/OPR Key</li> <li>F1020: Release Key</li> <li>F0300: Operator Call Key</li> <li>F0043: Night Key</li> </ul> </li> </ul>
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin-bottom: 5px;">CM08</div>	<p>Specify the Line Preselection on Multiline Terminal after pressing desired LINE/ TRUNK button.</p>	<ul style="list-style-type: none"> <li>(1) 199</li> <li>(2) 0/1 ◀ : Not Required/Required</li> </ul>
<p><u>END</u></p>	<p><i>Note: To provide a Trunk Name / Station Name, refer to Alphanumeric Display.</i></p>	

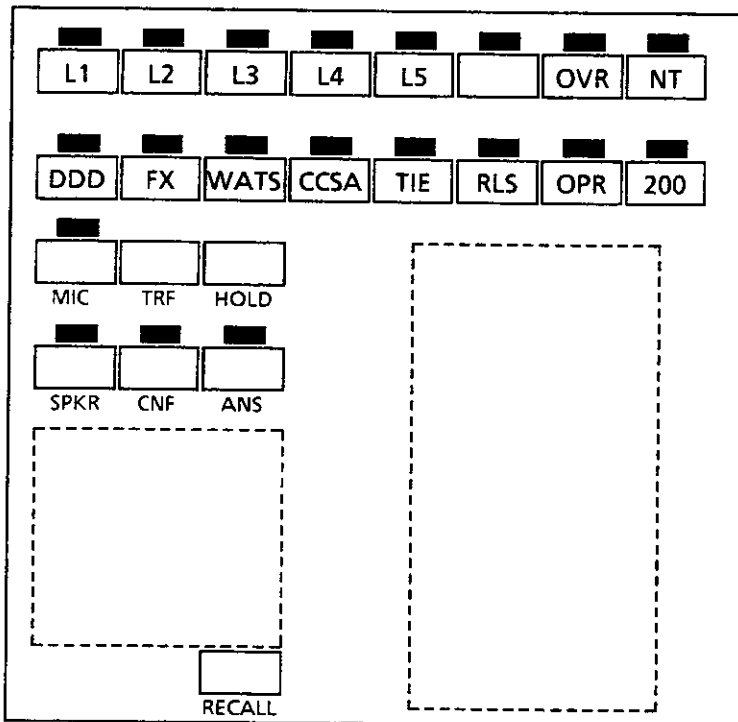
## MULTILINE TERMINAL ATTENDANT POSITION (CONT'D)

If a DSS Console (EDE-30-2) is associated with the Multiline Terminal Attendant Position, add the following system data programming.

START	DESCRIPTION	DATA
CM10	Assign the DSS Console No. to the required LEN.	(1) LEN (0000 – 0511) (2) DSS Console No. (E100 – E131) For PIM0: E100 – E107 For PIM1: E108 – E115 For PIM2: E116 – E123 For PIM3: E124 – E131
CM96	Assign the Primary Extension No. of the Multiline Terminal Attendant Position associated with each DSS Console.	(1) DSS Console No. (00 – 31) assigned by CM10 (E100 – E131) (2) X – XXXX (Primary Extension No. of Multiline Terminal Attendant Position)
CM97	Assign the Station number as the DSS key. Assign the MW, DND, NT keys as function keys.	(1) DSS Console No. (00 – 31) assigned by CM10 (E100 – E131) (2) For DSS key: Key No. (00 – 29) + [ ] + X – XXXX (Station No.) For Function key: Key No. (57 – 59) + [ ] + <u>Key data</u> — F1049: Message Waiting — F1053: Do Not Disturb — F0043: Night Key
END		

## MULTILINE TERMINAL ATTENDANT POSITION (CONT'D)

Example:



- L1 – L5: Loop Keys
- DDD: } ICI Keys
- FX: }
- WATS: }
- CCSA: }
- TIE: }
- RLS: Release Key
- OPR: Operator Call Key
- 200: Primary Extension Line Key
- OVR: Executive Override Key
- NT: Night Key

### Conditions

1. Operator Access Code: 0
2. Primary Extension No.: 200
3. ICI/Function Keys
  - DDD Line: TRUNK 000 – 004 (ICI Line No. = AB20)
  - FX Line: TRUNK 005 (ICI Line No. = AB21)
  - WATS Line: TRUNK 006 (ICI Line No. = AB22)
  - CCSA Line: TRUNK 007 (ICI Line No. = AB23)
  - TIE Line: TRUNK 008 – 010 (ICI Line No. = AB24)
  - OPR Line: Operator Call from Stations (OPR Line No. = AB10)
  - OVR Key: Executive Override
  - NT Key: Night Key
4. Number of Loop: 5 (Loop Line N. = AA01 – AA05)
5. Tenant No.: 00
6. Numbering Plan Group: 0
7. Type of Multiline Terminal: ETE-16D-2



## MULTILINE TERMINAL ATTENDANT POSITION (CONT'D)

Programming for Example:

<u>COMMAND CODE</u>	<u>1ST DATA</u>	<u>2ST DATA</u>	<u>REMARKS</u>	
11	0000	AA01	} Loop Line Number	
	0001	AA02		
	0002	AA03		
	0003	AA04		
	0004	AA05		
	12-02	0005	AB10	OPR Line Number
		0006	AB20	DDD
		0007	AB21	FX
		0008	AB22	WATS
		0009	AB23	CCSA
0010		AB24	TIE	
			} ICI Line Number	
12-02	200	1500	Service Class for Attendant Position	
12-03	AB10	1501	} Service Class for ICI Line	
	AB20	1501		
	AB21	1501		
	AB22	1501		
	AB23	1501		
	AB24	1501		
15-71	AA01	08	} Service Class for Loop Line	
	AA02	08		
	AA03	08		
	AA04	08		
	AA05	08		
	15-73	AB10	04	} Hotline Assignment
		AB20	04	
		AB21	04	
		AB22	04	
		AB23	04	
		AB24	04	
15-71	00	0	Attendant Position Class	
15-73	01	0	ICI/OPR Key Class	
17-1	AB10	1	} Assign UCD Pilot Station to the ICI/OPR Line Numbers.	
	AB20	1		
	AB21	1		
	AB22	1		
	AB23	1		
	AB24	1		

**MULTILINE TERMINAL ATTENDANT POSITION (CONT'D)**

<u>COMMAND CODE</u>	<u>1ST DATA</u>	<u>2ST DATA</u>	<u>REMARKS</u>
17-2 S	AB10	00	Assign UCD Group to the ICI/OPR Line Numbers
	AB20	01	
	AB21	02	
	AB22	03	
	AB23	04	
	AB24	05	
20-0	0	088	Operator Access Code
51-12	00	AB10	Operator Call Termination to OPR Line
08	250	0	
30-02 S	000	04	DIT
	001	04	
	002	04	
	003	04	
	004	04	
	005	04	
30-04 S	000	AB20	Incoming Call Termination to ICI Line
	001	AB20	
	002	AB20	
	003	AB20	
	004	AB20	
	005	AB21	
90-00 S	200,01	AA01	LOOP Key
	200,02	AA02	
	200,03	AA03	
	200,04	AA04	
	200,05	AA05	
	200,07	F0006	OVR Key
	200,08	F0043	NT Key
	200,09	AB20	DDD Key
	200,10	AB21	FX Key
	200,11	AB22	WATS Key
	200,12	AB23	CCSA Key
	200,13	AB24	TIE Key
	200,14	F1020	RLS Key
	200,15	AB10	OPR Key
	200,16	200	Primary Extension Line Key
	08	244	0
08	245	0	

## MUSIC ON HOLD

### GENERAL DESCRIPTION

This feature allows a party to hear music whenever that party is placed on hold. Music is provided by a music chip or a locally-provided music source.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

No manual operation is required.

### SERVICE CONDITIONS

1. Music may be played in three different cases: CO lines, *E&M Tie Lines*, and internal station-to-station calls. The same source can be used for all three.
2. If an external music source is desired, it must be locally provided. Refer to the NEAX1400 IMS Installation/Service Manual for installation instructions.
3. Any one of the following can be selected as the *Music On Hold* source:
  - TNTC board provides the following two synthesized melodies: For Elyse or Maiden's Prayer.
  - Hold tone
  - External Source – tuner, tape deck, CD player, etc.
  - Internal Recorded Message
4. Attendant operations resulting in *Music On Hold* being played include the following:
  - When incoming calls to the Attendant are answered and the Attendant presses the **HOLD** key, the held party receives *Music On Hold*.
  - When the Attendant camps on a call to a busy station, the calling party is connected to *Music On Hold* until the called party answers or the Attendant re-enters the switched loop.
5. When a station user in a two-party connection places the second party on hold, the second party is connected to *Music On Hold*.

## MUSIC ON HOLD (CONT'D)

### PROGRAMMING

For providing an Internal Music Source (PK-TNTC Card):

<u>START</u>	<u>DESCRIPTION</u>	<u>DATA</u>
CM10	Assign the PK-TNTC Card to the required LEN.	(1) LEN (0000 – 0511) (2) DA00
CM08	Select the music to be provided.	(1) 183 (2) { 0: For Elyse 1 ◀ : Maiden's Prayer
CM48	Define the type of call to be provided with music by the Melody Trunk.	• Y=0 (1) { 00: C.O. Line Call 01: Tie Line Call 02: Internal Call (2) 0200: Internal/External Music Source (PK-TNTC)
<u>END</u>		

For providing External Music Source through PK-TNTC Card:

<u>START</u>	<u>DESCRIPTION</u>	<u>DATA</u>
CM10	Assign the PK-TNTC Card to the required LEN.	(1) LEN (0000 – 0511) (2) DA00
CM48	Define the type of call to be provided with External Music.	• Y=0 (1) { 00: C.O. Line Call 01: Tie Line Call 02: Internal Call (2) 0200: Internal/External Music Source
<u>END</u>		

## MUSIC ON HOLD (CONT'D)

For providing Internal Hold Tone generated by DTG

START	DESCRIPTION	DATA
<p>CM48</p>	<p>Define the type of call to be provided with Internal Hold Tone generator.</p>	<ul style="list-style-type: none"> <li>• Y=0</li> <li>(1) { 00: C.O. Line Call 01: Tie Line Call 02: Internal Call</li> <li>(2) 1500: Hold Tone generated by DTG.</li> </ul>
<p>END</p>		

**Note:** Hold Message can be provided instead of Music/Tone by using CM10-LEN-EBXXX, CM48, Y=0-PTN-0500 and CM49 (Message on Hold). For the details, refer to ANNOUNCEMENT SERVICE.

### HARDWARE REQUIRED

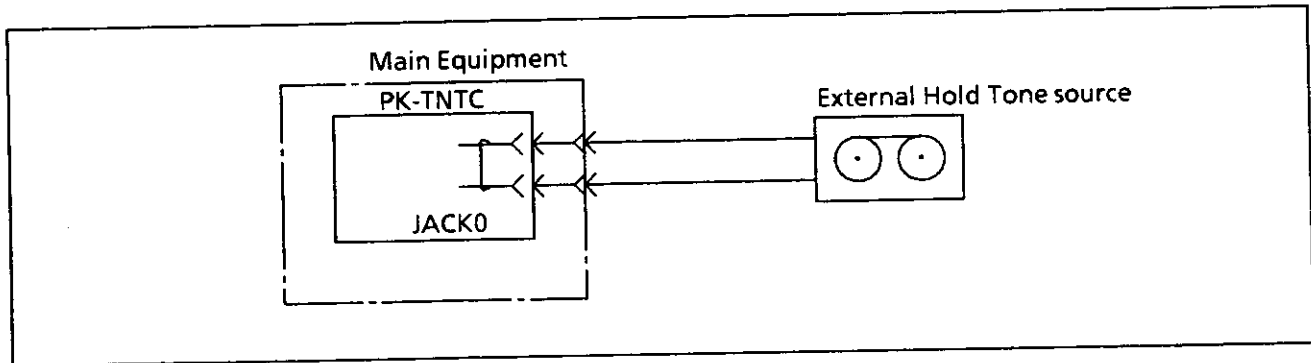
For providing the Internal Music Source:

- PK-TNTC Card × 1

For providing the External Music Source:

- PK-TNTC × 1
- External Music Source provided locally.

For connecting the external music source, plug the cable into JACK0 on the PK-TNTC card.





## NIGHT SERVICE

### GENERAL DESCRIPTION

This feature provides a variety of methods for handling incoming calls when the system is in night mode.

These include:

- *Attendant Night Transfer*
- *Call Rerouting*
- *Day/Night Mode Change by Attendant Console*
- *Day/Night Mode Change by Station Dialing*
- *Night Connection-Fixed*
- *Night Connection-Flexible*
- *Trunk Answer-Any Station*

## NIGHT SERVICE; ATTENDANT NIGHT TRANSFER

### GENERAL DESCRIPTION

When the *Attendant Console* is in *Night Service*, any operator directed calls (dial-0 calls) are automatically routed to a preprogrammed station. *Priority Calls* and *Off-Hook Alarms* which terminate to an Attendant are also routed by this feature.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

1. Calling party dials "0".
2. That call is automatically forwarded to the preprogrammed station.
3. Calling party receives ringback tone.
4. Ringing signal is sent to the preprogrammed station.
5. The preprogrammed station goes off-hook, and the answered call can be transferred to another station or outside party.

### SERVICE CONDITIONS

1. This feature may be provided together with *Night Connection Fixed* or *Night Connection Flexible* to a predetermined night station.
2. The predetermined night station for this feature can also be assigned as a night station for *Night Connection Fixed* or *Flexible*.
3. If the predetermined station is busy, the calling party will receive busy tone. Busy service (*Call Back*, *Camp-On*, *Executive Override*) features can now be activated.
4. If the night station is set for *Call Forwarding*, operator calls terminated to that station will be forwarded to the designated station.
5. The night station can be assigned as a station in a *Station Hunting* group.
6. One night station per tenant is available in multiple-tenant arrangements.
7. The night station can be assigned as a station in a *Uniform Call Distribution* (UCD) group.
8. This operation is not applicable to Listed Directory Number (LDN) calls. For LDN calls, *Night Connection Fixed/Flexible* or *Trunk Answer any Station* (TAS) service is applicable.
9. Night stations can use the *Call Hold*, *Call Transfer*, and *Conference* features, provided these features are programmed into the night station's *Class of Service*.



## NIGHT SERVICE; ATTENDANT NIGHT TRANSFER (CONT'D)

10. Any calls to the Attendant (dial 0) during *Night Service* are routed to the night station.
11. *Individual Attendant Access* calls are not transferred to the night station assigned by *Attendant Night Transfer*.

### PROGRAMMING

<u>START</u>	<u>DESCRIPTION</u>	<u>DATA</u>
CM08	Provide the system with Attendant Night Transfer.	(1) 018: Attendant Night Transfer (2) 1◀ : To be provided
CM51	Assign the Night Connection Station to each HA-610Z/SN610 ATTCON Group.	<ul style="list-style-type: none"> <li>• YY=13</li> <li>(1) ATTCON Group 0-3 (00-03) assigned by CM60, YY=00</li> <li>(2) X-XXXX: Night Connection Station No.</li> </ul>
<u>END</u>		

## NIGHT SERVICE; CALL REROUTING

### GENERAL DESCRIPTION

This feature provides flexible reroute capabilities for a variety of calls when the system is in night mode.

### STATION APPLICATION

Not applicable.

### OPERATING PROCEDURE

No manual operation is required.

### SERVICE CONDITIONS

1. The following is the call rerouting table according to different types of calls:

<u>Call type</u>	<u>Reroutes to</u>
Operator Call (dial 0 call)	Predetermined station (Refer to <i>Attendant Night Transfer</i> )
LDN Call	TAS or night station
<i>Direct Inward Termination (DIT)</i>	Predetermined station or <i>Announcement Service</i>
<i>DIT</i> when busy	TAS or <i>Automatic Camp-On</i> until the station becomes idle
<i>DIT</i> when no-answer	TAS or ringback tone
<i>DID</i> when busy or no answer	Predetermined station or <i>Announcement Service</i> *
<i>E&amp;M Tie Line</i> when busy or no answer	Predetermined station or <i>Announcement Service</i> *
<i>Trunk Direct Appearance</i>	TAS, night station, or TAS and night station with <i>Trunk Direct Appearance</i> .

\*In the day mode, the call also reroutes to the same service or Attendant.

2. When an Attendant presses the NT key, any calls existing in call-queuing memory or loop memory on the *Attendant Console* should be completed first. New incoming calls, after hitting NT key, will reroute according to assigned *Night Service* programming.

### PROGRAMMING

Refer to Night Connection-Fixed/Flexible, Trunk Answer - Any Station, Direct Inward Termination (DIT), Direct Inward Dialing (DID), and E&M Tie Line Access.

## NIGHT SERVICE; DAY/NIGHT MODE CHANGE BY ATTENDANT CONSOLE

### GENERAL DESCRIPTION

This feature provides activation of *DAY/NIGHT Mode Change* by pressing a predetermined key from the *Attendant Console* (SN610 ATTCON) or by NITE key on the *Attendant Console* (HA-610Z ATTCON).

### STATION APPLICATION

Not Applicable.

### OPERATING PROCEDURE

- *Attendant Console* (SN610)

To change Day to Night mode:

1. Press an idle **LOOP** key and associated green LED lights.
2. Dial Feature Access Code or press **MODE** key (Soft key) and the associated red LED lights. The LCD displays "**DAY**" for day mode and the green LED of the **DAY** key lights.
3. Press **NIGHT** key (Soft key) and the associated red LED lights. The LCD display changes from "**DAY**" to "**NIGHT**".
4. Press **ANS** key and receive service set tone. The LCD displays "**SET NIGHT.**" The mode of the console is now changed from day to night mode.
5. Press **RLS** key.

To change Night to Day mode:

1. Press **MODE** key and the associated red LED lights. And the LCD displays "**PASSWORD.**"
2. Dial a predetermined password number which will display on the LCD.
3. Press **DAY** key and the associated green LED lights. The LCD display changes from "**NIGHT**" to "**DAY.**"
4. Press **ANS** key and receive service-set tone. The LCD displays "**SET DAY.**" The mode of the console is now changed from night to day.
5. Press **RLS** key.

- *Attendant Console* (HA-610Z)

To change Day to Night mode:

1. Press **NITE** key and associated red LED lights.

To change Night to Day mode:

1. Press **NITE** key and associated red LED goes off.

### SERVICE CONDITIONS

1. The length of password is up to eight digits.
2. The password is assigned through the *MAT* or *CAT*.
3. This service feature can be activated from the master ATTCON only.

## NIGHT SERVICE; DAY/NIGHT MODE CHANGE BY ATTENDANT CONSOLE (CONT'D)

### PROGRAMMING

START	DESCRIPTION	DATA
CM60   CM90   CM20   END	Assign the password code for Day/Night Change by SN610 Attendant Console. <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">INITIAL</span>	<ul style="list-style-type: none"> <li>• YY=30</li> <li>(1) 1</li> <li>(2) XX-XX: Password Code (Max.8 digits)</li> <li style="padding-left: 20px;">X: 0-9, A(*), B(#)</li> <li style="padding-left: 20px;">If no data is set, the default setting is NONE. In this case, the password is set to "12345678."</li> </ul>
	Assign the Day/Night mode key on SN610 ATTCON.	<ul style="list-style-type: none"> <li>• YY=00</li> <li>(1) ATTCON No. + <span style="border: 1px solid black; padding: 0 5px;"> </span> + key No.</li> <li>(2) F6110</li> </ul>
	Assign the access code for providing Day/Night Mode change from SN610 ATTCON, if required.	<ul style="list-style-type: none"> <li>• Y=0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX (Access Code)</li> <li>(2) A55</li> </ul>

**Note:** *The following trunk data (CM30) can be changed by this feature (depending upon programming).*

Day (YY)		Night (YY)
02	↔	03
04	↔	05
13	↔	14
15	↔	16
30	↔	31

## NIGHT SERVICE; DAY/NIGHT MODE CHANGE BY STATION DIALING

### GENERAL DESCRIPTION

This feature allows selected stations to activate a change from day mode to night mode by dialing a special code.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

By dial access code:

1. Go off-hook and receive dial tone.
2. Dial feature access code and receive Special Dial Tone.
3. Dial "2" (to change from day to night) or "1" (to change from night to day) and receive Service Set Tone.
4. Restore handset.

By function key on Multiline Terminal:

1. Go off-hook or press **SPKR** key and receive dial tone.
2. Press the Day/Night Mode change key and receive Service Set Tone.  
The associated LED lights when Night Mode is set.
3. Restore handset or press **SPKR** key.

### SERVICE CONDITIONS

1. This feature is assigned in the station's *Class of Service*.
2. If using function key, associated lamp will be lit when tenant changes to night mode.
3. On a system basis, incoming trunk destination and trunk restriction class can be changed (depending upon programming) when the tenant or system is placed in *Night Service*.

## NIGHT SERVICE; DAY/NIGHT MODE CHANGE BY STATION DIALING (CONT'D)

### PROGRAMMING

START	DESCRIPTION	DATA
CM08	Provide the system with Day/Night Mode change by Station Dialing.	(1) 244: Change of Terminating System Incoming Trunk (CM30, YY = 02/03) (2) 0: Available  (1) 245: Change Trunk Restriction Class (CM30, YY = 02/03) (2) 0: Available
CM12	Assign Service Restriction B to each station.	• YY = 02 (1) X - XXXX (Station No.) (2) XXXX └─ Service Restriction Class B (00 - 15 ◀)
CM15	Assign the Day/Night Mode Change by Station Dialing to Service Restriction B assigned by CM12, YY = 02.	• YY = 60 (1) Service Restriction Class B (00 - 15) assigned by CM12, YY = 02 (2) 1 ◀ : Allowed
CM20	Assign the access code for Day/Night Mode change by Station Dialing.	• Y = 0 - 3 (Numbering Plan Group 0 - 3) (1) X - XXX: Access Code (68) (2) 043: Day/Night Mode Change by Station Dialing
CM90	Assign the Day/Night Mode Change by Station Dialing key on the Multiline Terminals.	• YY = 00 (1) X - XXXX: Primary Extension No. + <span style="border: 1px solid black; padding: 0 2px;"> </span> + Key No.  (2) F0043: Day/Night Mode Change by Station Dialing
END		

**Note:** The following trunk data (CM30) can be changed by this feature (depending upon programming).

<u>Day (YY)</u>		<u>Night (YY)</u>
02	↔	03
04	↔	05
13	↔	14
15	↔	16
30	↔	31

## NIGHT SERVICE; NIGHT CONNECTION-FIXED

### GENERAL DESCRIPTION

This feature allows incoming calls normally terminated to the Attendant to reroute to a predetermined station when the system is placed in *Night Service*.

### STATION APPLICATION

All stations, except fully-restricted stations.

### OPERATING PROCEDURE

With an incoming call during *Night Service*:

1. Outside party hears ringback tone.
2. Ringing signal is sent to the night station.
3. The night station goes off-hook and answers the call. If necessary, the answered call can be transferred to another station or outside party.

### SERVICE CONDITIONS

1. Night Connection station can be assigned the following types of trunks:
  - Direct Distance Dialing (DDD)*
  - Foreign Exchange (FX)*
  - Wide Area Telephone Service (WATS)*
  - Common Control Switching Arrangement (CCSA)*
  - Direct Inward Dialing (DID)* (available only for LDN calls)
  - E&M Tie* (available only for operator calls)
2. Each night station can be assigned multiple trunks.
3. A fully restricted station cannot be assigned as a night station.
4. If the night station to which an incoming call has been terminated is busy, the system can be programmed to provide one of the following choices on a per-trunk basis:
  - *Automatic Camp-On*
  - *Trunk Answer Any Station*
  - Ringback tone.
5. If the night station does not answer after a predetermined time, the system can provide one of the following options on a per-trunk basis:
  - *Trunk Answer Any Station*
  - Ringback tone.
6. The night station can be assigned to a *Station Hunting* Group.
7. The night station can be assigned to a *Uniform Call Distribution (UCD)* group.
8. If the night station has set *Call Forwarding*, incoming calls terminated to that station will be forwarded to the destination station.
9. If the night station has set *Call Forwarding* to Attendant, this setting will be ignored and incoming calls will terminate to the night station.

## NIGHT SERVICE; NIGHT CONNECTION-FIXED (CONT'D)

10. Night stations can access *Call Hold*, *Call Transfer*, and *Conference* if they are programmed into the station's *Class of Service*.

### PROGRAMMING

For providing Night Connection Station:

START	DESCRIPTION	DATA
CM30	Assign the Night Connection Station to each Incoming Trunk.	<ul style="list-style-type: none"> <li>• YY=03               <ul style="list-style-type: none"> <li>(1) Trunk No. (000–255)</li> <li>(2) 04: Direct-In Termination</li> </ul> </li> <li>• YY=05               <ul style="list-style-type: none"> <li>(1) Trunk No. (000–255)</li> <li>(2) X-XXXX: Night Connection Station No.</li> </ul> </li> </ul>
	Assign the destination of a call forwarded when Night Connection Station is Busy/No Answer.	<ul style="list-style-type: none"> <li>• YY= 14 (When Night Connection Station is busy.)               <ul style="list-style-type: none"> <li>(1) Trunk No. (000–255)                   <ul style="list-style-type: none"> <li>01: To TAS</li> <li>04: To HA-610Z/SN610 ATTCON</li> </ul> </li> <li>(2) 06: Automatic Camp-On</li> <li>15 ◀: Keep the call ringing (Waiting until the Night Connection Station becomes idle.)</li> </ul> </li> <li>• YY=16 (When Night Connection Station is not answering)               <ul style="list-style-type: none"> <li>(1) Trunk No. (000–255)                   <ul style="list-style-type: none"> <li>01: To HA-610Z/SN610 ATTCON</li> <li>03: To TAS</li> </ul> </li> <li>(2) 15 ◀: Keep the call ringing (Waiting until the Night Connection Station becomes idle.)</li> </ul> </li> </ul>
CM41	Specify the timing for call forwarding when Night Connection Station is No Answer.	<ul style="list-style-type: none"> <li>• Y=0               <ul style="list-style-type: none"> <li>(1) 01</li> <li>(2) 01–30 (Timer Data for 4 sec. – 120 sec.)</li> </ul> </li> </ul> <p>If no data is set, the default setting is 32-36 seconds.</p>
END		



## **NIGHT SERVICE; NIGHT CONNECTION-FLEXIBLE**

### **GENERAL DESCRIPTION**

This feature provides incoming calls normally terminated to the fixed night station to be call forwarded to another station.

### **STATION APPLICATION**

All stations, except fully-restricted stations.

### **OPERATING PROCEDURE**

1. Before placing the *Attendant Console* into Night Service, the Attendant sets *Call Forwarding-All Calls* from the fixed night station to the desired station.
2. The call forwarding setting should be canceled when the tenant or system is changed to the day mode.

### **SERVICE CONDITIONS**

1. The *Night Connection- Flexible* station may be programmed from either the *Attendant Console* or the *Night Connected - Fixed* station.
2. Refer to the *Call Forwarding* feature for more information.

### **PROGRAMMING**

Refer to *Night Connection-Fixed* and *Call Forwarding-All Calls*.

## NIGHT SERVICE; TRUNK ANSWER ANY STATION (TAS)

### GENERAL DESCRIPTION

This feature allows any station, other than one with incoming restrictions, to answer incoming calls when the system is in night mode. When this feature is activated, incoming exchange network calls will activate a common alert signal at customer premises. By dialing a specified code, any station may answer the call and then extend it to any other station by means of the *Call Transfer* feature.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

To answer a *Trunk Answer Any Station (TAS)* call:

1. *TAS* signal sounds.
2. Go off-hook and receive dial tone.
3. Dial specified *TAS* feature access code.

OR

- Press the specified *TAS* key (if provided on the Multiline Terminal)
4. Connection to incoming call is completed.

### SERVICE CONDITIONS

1. *TAS* service can be assigned to the following types of lines:
  - Direct Distance Dialing (DDD)*
  - Foreign Exchange (FX)*
  - Wide Area Telephone Service (WATS)*
  - Common Control Switching Arrangement (CCSA)*
  - Direct Inward Dialing (DID)* (available only for LDN calls)
  - E&M Tie* (available only for operator calls)
2. *TAS* indicator can be provided on a per-tenant basis, and there can only be one per tenant.
3. Stations which may access *TAS* service are programmed in *Class of Service*.
4. Stations accessing *TAS* service must be in the same tenant group.
5. By dialing different access codes, stations can access other tenants' *TAS* service.
6. A PK-2LCF/H or PK-DK01 board is required to interface with *TAS* equipment.

## NIGHT SERVICE; TRUNK ANSWER ANY STATION (TAS) (CONT'D)

### PROGRAMMING

START	DESCRIPTION	DATA
CM12	Assign the Trunk Restriction Class to each station.	<ul style="list-style-type: none"> <li>• YY=01</li> <li>(1) X-XXXX (Station No.)</li> <li>(2) XX               <ul style="list-style-type: none"> <li>└ Trunk Restriction Class in Night Mode (1-7)</li> <li>1 ◀ : Unrestricted (RCA)</li> <li>2: Non-Restricted 1 (RCB)</li> <li>3: Non-Restricted 2 (RCC)</li> <li>4: Semi-Restricted 1 (RCD)</li> <li>5: Semi-Restricted 2 (RCE)</li> <li>6: Restricted 1 (RCF)</li> <li>7: Restricted 2 (RCG)</li> </ul> </li> </ul>
CM12 CM15	Assign the Class of Service for TAS to the required stations.	<ul style="list-style-type: none"> <li>• CM12, YY=02</li> <li>Service Restriction Class B (00-15 ◀)</li> <li>• CM15, YY=53</li> <li>(1) Service Restriction Class B (00-15) assigned by CM12, YY=02</li> <li>(2) 1 ◀ : Allowed</li> </ul>
CM30	Assign TAS as the terminating system in Night Mode for the required trunks.	<ul style="list-style-type: none"> <li>• YY=03</li> <li>(1) 000-255 (Trunk No.)</li> <li>(2) 13: TAS</li> </ul>
	Assign the TAS Group No. to the trunks assigned by YY=03.	<ul style="list-style-type: none"> <li>• YY=17</li> <li>(1) 000-255 (Trunk No.)</li> <li>(2) 00-63 (TAS Group No.)</li> </ul>
A		

## NIGHT SERVICE; TRUNK ANSWER ANY STATION (TAS) (CONT'D)

	DESCRIPTION	DATA																																				
A																																						
CM53	Specify the function of each type of TAS within a system.	<ul style="list-style-type: none"> <li>Y = 0 - 4 (TAS Answer A - E)</li> </ul>																																				
	<table border="1"> <thead> <tr> <th>Y \ (1)</th> <th>0</th> <th>1</th> <th>3</th> <th>4</th> <th>7</th> </tr> </thead> <tbody> <tr> <td>0 TAS Answer A</td> <td>0/1 ◀</td> <td>0/1 ◀</td> <td>0/1 ◀</td> <td>0/1 ◀</td> <td>0/1 ◀</td> </tr> <tr> <td>1 TAS Answer B</td> <td>0/1 ◀</td> <td>0/1 ◀</td> <td>0/1 ◀</td> <td>0/1 ◀</td> <td>0/1 ◀</td> </tr> <tr> <td>2 TAS Answer C</td> <td>0/1 ◀</td> <td>0/1 ◀</td> <td>0/1 ◀</td> <td>0/1 ◀</td> <td>0/1 ◀</td> </tr> <tr> <td>3 TAS Answer D</td> <td>0/1 ◀</td> <td>0/1 ◀</td> <td>0/1 ◀</td> <td>0/1 ◀</td> <td>0/1 ◀</td> </tr> <tr> <td>4 TAS Answer E</td> <td>0/1 ◀</td> <td>0/1 ◀</td> <td>0/1 ◀</td> <td>0/1 ◀</td> <td>0/1 ◀</td> </tr> </tbody> </table>	Y \ (1)	0	1	3	4	7	0 TAS Answer A	0/1 ◀	0/1 ◀	0/1 ◀	0/1 ◀	0/1 ◀	1 TAS Answer B	0/1 ◀	0/1 ◀	0/1 ◀	0/1 ◀	0/1 ◀	2 TAS Answer C	0/1 ◀	0/1 ◀	0/1 ◀	0/1 ◀	0/1 ◀	3 TAS Answer D	0/1 ◀	0/1 ◀	0/1 ◀	0/1 ◀	0/1 ◀	4 TAS Answer E	0/1 ◀	0/1 ◀	0/1 ◀	0/1 ◀	0/1 ◀	<ul style="list-style-type: none"> <li>(1) Type of Call                             <ul style="list-style-type: none"> <li>1: C.O. Incoming Call</li> <li>2: Tie Line/DID</li> <li>3: C.O. Incoming Call in Night Mode</li> <li>4: Overflowed DIT Call</li> </ul> </li> <li>(2) 0/1 ◀ : Cannot be answered/ Can be answered</li> <li>(1) 7: A call terminated to a different tenant.</li> <li>(2) 0/1 ◀ : Can be answered</li> </ul>
Y \ (1)	0	1	3	4	7																																	
0 TAS Answer A	0/1 ◀	0/1 ◀	0/1 ◀	0/1 ◀	0/1 ◀																																	
1 TAS Answer B	0/1 ◀	0/1 ◀	0/1 ◀	0/1 ◀	0/1 ◀																																	
2 TAS Answer C	0/1 ◀	0/1 ◀	0/1 ◀	0/1 ◀	0/1 ◀																																	
3 TAS Answer D	0/1 ◀	0/1 ◀	0/1 ◀	0/1 ◀	0/1 ◀																																	
4 TAS Answer E	0/1 ◀	0/1 ◀	0/1 ◀	0/1 ◀	0/1 ◀																																	
CM20	Assign the access code for each type of TAS (TAS Answer A - E) assigned by CM53.	<ul style="list-style-type: none"> <li>Y = 0 - 3 (Numbering Plan Group 0 - 3)</li> <li>(1) X - XXX: Access Code (72)                             <ul style="list-style-type: none"> <li>047: TAS Answer A</li> <li>048: TAS Answer B</li> </ul> </li> <li>(2)                             <ul style="list-style-type: none"> <li>049: TAS Answer C</li> <li>050: TAS Answer D</li> <li>051: TAS Answer E</li> </ul> </li> </ul>																																				
CM63	Specify the Tenants allowing the TAS Answer between them.	<ul style="list-style-type: none"> <li>Y = 0</li> <li>(1) XXXX                             <ul style="list-style-type: none"> <li>00 - 63 (Tenant No. of Trunk)</li> <li>00 - 63 (Tenant No. of TAS Answer station)</li> </ul> </li> <li>(2) 0/1 ◀ : Allowed/Restricted</li> </ul>																																				
END																																						

To provide the External TAS Indicator using the PK-DK01 Card:

	DESCRIPTION	DATA
START		
CM10	Assign the Card Number of PK-DK01 to the required LEN.	<ul style="list-style-type: none"> <li>(1) LEN (0000 - 0511)</li> <li>(2) E800 - 831 (PK-DK01 Card No.)</li> </ul>
A		

## NIGHT SERVICE; TRUNK ANSWER ANY STATION (TAS) (CONT'D)

	DESCRIPTION	DATA
A		
CM44	Assign the TAS Group No. assigned by CM30, YY=17 to the circuit No. of the PK-DK01 card.	(1) <u>XXX</u> (Circuit No.) └─ Circuit No. (0-3) └─ Card No. (00-31) assigned by CM10 (E800-E831)  (2) <u>13XX</u> └─ 00-63 (TAS Group No. 00-63 assigned by CM30, YY=17)
CM59	Specify the indication pattern on the External TAS Indicator.	(1) 00 01 ◀: 30 IPM (1 sec. ON/OFF) 02: 60 IPM (0.5 sec. ON/OFF) (2) 03: 120 IPM (0.25 sec. ON/OFF) 07: Steadily on.
	<u>END</u>	

To provide the Telephone set for TAS Indication using the PK-2LC F/H card:

START	DESCRIPTION	DATA
CM10	Assign the TAS Buzzer No. (Telephone set for TAS Indication) to the required LEN. The TAS Buzzer No. must correspond to TAS Group No. assigned by CM30, YY = 17. E600 → TAS Group 00 { } E663 → TAS Group 63	(1) LEN (0000-0511) (2) E600 - E663 (TAS Buzzer No.)
	<u>END</u>	

## NIGHT SERVICE; TRUNK ANSWER ANY STATION (TAS) (CONT'D)

### HARDWARE REQUIRED

To provide the External TAS Indicator:

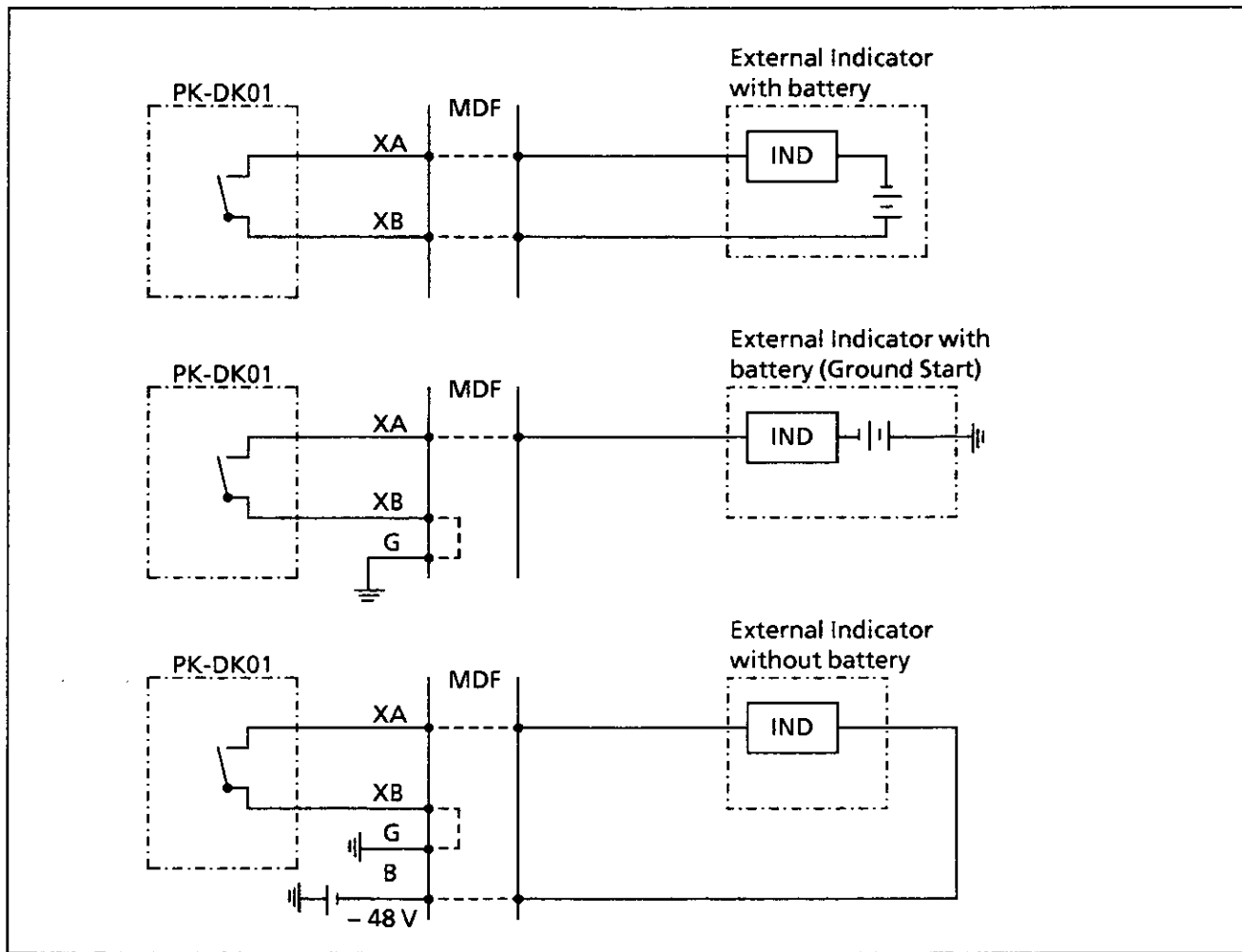
- PK-DK01 Card (Four Indicators per card can be equipped)
- Indicator (NEC Standard: Buzzer)

Requirement to External Indicator

Control Method: Loop/Ground/Battery (- 48 V) (Max. 125 mA)

Type: Visual and/or Audible type with volume control

Make the following connections at the MDF according to the type of the indicator.



To provide the Telephone set for TAS Indication:

- PK-2LC F/H Card (Two telephone sets per card can be equipped.)
- Conventional telephone sets

## OFF-HOOK ALARM

### GENERAL DESCRIPTION

This feature allows a station user to call the Attendant, or a predesignated station, by simply staying off-hook for a preprogrammed period of time. The calling number is automatically displayed at the Attendant Console or the predesignated station if equipped with an LCD.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

To operate:

1. Lift handset and stay off-hook.
2. After a predetermined time elapses (the default is 30 seconds), the call will terminate at the *Attendant Console* or predesignated station.
3. The calling station number will be displayed at the *Attendant Console* when answered.

### SERVICE CONDITIONS

1. Predetermined timing interval of 4-32 seconds at four-second intervals is programmable through the *Maintenance Administration Terminal (MAT)* or *Customer Administration Terminal (CAT)*.
2. The station assigned as a terminating station of each *Off-Hook Alarm* group can be a member of a hunting group.
3. This feature is assigned on a station basis for origination of *Off-Hook Alarm* and on a tenant basis for the destination assignment.
4. The *Attendant Console* can answer by pressing the **EMG** key, which must be assigned by the MAT or CAT. Answering by **ANS** key will not give priority to the *Off-Hook Alarm*.
5. The predesignated station, if allowed, can set *Call Forward-All Calls* and *Call Forward Busy*. The *Off-Hook Alarm* will follow the *Call Forward* setting.

## OFFHOOK ALARM (CONT'D)

### PROGRAMMING

<u>START</u>	<u>DESCRIPTION</u>	<u>DATA</u>																	
CM13	Provide this feature for the required stations.	<ul style="list-style-type: none"> <li>• YY=02</li> <li>(1) X-XXX (Station No.)</li> <li>(2) 0: To be provided</li> </ul>																	
CM51	Assign the destination of Off-Hook Alarm to a Station or HA-610Z/SN610 ATTCON.	<ul style="list-style-type: none"> <li>• YY=12</li> <li>(1) Tenant No. (00-63)</li> <li>(2) <math>\left\{ \begin{array}{l} X-XXXX \text{ (Station No.)} \\ E000: HA-610Z/SN610 \\ \text{ATTCON} \end{array} \right.</math></li> </ul>																	
CM46	If the Attendant Console is designated as destination of Off-Hook Alarm by CM51, YY=12, assign an EMG key for the Off-Hook Alarm to any Key.	<ul style="list-style-type: none"> <li>(1) Key No. (00-11)</li> <li>(2) 67</li> </ul>																	
	<b>INITIAL</b>																		
CM41	Specify the timing for Off-Hook Alarm.	<ul style="list-style-type: none"> <li>• Y=0</li> <li>(1) 22</li> <li>(2) 01-08 (Timer Data for 4 sec. - 32 sec.)</li> </ul> <p style="margin-left: 40px;">If no data is set, the default setting is 28-32 seconds.</p>																	
CM12	Specify the service to be applied to an Off Hook Alarm Call to a busy destination.	<ul style="list-style-type: none"> <li>• CM12, YY=07</li> <li>(1) X-XXXX (Station No. of destination)</li> <li>(2) Service Rest. Class C (00-15◀)</li> </ul>																	
CM15		<ul style="list-style-type: none"> <li>• CM15, YY=97, YY=98</li> <li>(1) Service Rest. Class C (00-15) assigned by CM12, YY=07.</li> <li>(2) See left column.</li> </ul>																	
	<table border="1" style="margin: auto; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: center;">YY</th> <th rowspan="2" style="text-align: center;">MEANING OF DATA</th> </tr> <tr> <th style="text-align: center;">97</th> <th style="text-align: center;">98</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">0</td> <td style="text-align: center;">0</td> <td>Call Waiting (In case of UCD Pilot Station and CM08-212=0)</td> </tr> <tr> <td style="text-align: center;">0</td> <td style="text-align: center;">1</td> <td>UCD (In case of UCD Pilot Station and CM08-212=1)</td> </tr> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">0</td> <td>Call Waiting (In case of Ordinary Station)</td> </tr> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">1</td> <td>Hunting (In case of Ordinary Station) ◀</td> </tr> </tbody> </table>	YY		MEANING OF DATA	97	98	0	0	Call Waiting (In case of UCD Pilot Station and CM08-212=0)	0	1	UCD (In case of UCD Pilot Station and CM08-212=1)	1	0	Call Waiting (In case of Ordinary Station)	1	1	Hunting (In case of Ordinary Station) ◀	
YY		MEANING OF DATA																	
97	98																		
0	0	Call Waiting (In case of UCD Pilot Station and CM08-212=0)																	
0	1	UCD (In case of UCD Pilot Station and CM08-212=1)																	
1	0	Call Waiting (In case of Ordinary Station)																	
1	1	Hunting (In case of Ordinary Station) ◀																	
<u>END</u>																			



## OFF PREMISES EXTENSION

### GENERAL DESCRIPTION

This feature allows the connection of a standard Single-Line Telephone, located remotely from the main installation site, to access the system's features with the same capabilities as an on-premises Single-Line Telephone.

### STATION APPLICATION

Single-Line Telephones.

### OPERATING PROCEDURE

Normal programming assignments and call-handling procedures apply.

### SERVICE CONDITIONS

1. When a leased line is obtained from the local operating company:
  - A 2LLC board is required to support the *Off Premises Extension* (OPX). Each 2LLC board provides two circuits.
  - An externally mounted OPX unit should be connected to the 2LLC board. The OPX unit should be mounted close to the NEAX1400 IMS. Refer to the NEAX1400 IMS Installation/Test Manual (ND-43177-002(E)) for detailed installation procedures.
  - The maximum loop resistance between the 2LLC board and the OPX unit is 50 ohms.
  - The maximum loop resistance between the OPX unit and the OPX Single-Line telephone is 1200 ohms for Dual-Tone, Multi-Frequency Single-Line Telephones, and 3000 ohms for rotary dial Single-Line Telephones.
  - The OPX unit can drive three ringers with a ringer equivalence of 1.0.
2. When locally provided cable is used to connect the Off Premises Extension:
  - The 2LC board can be used and can support a 600 ohm loop.
  - The 2LLC board can be used and can support a 1200 ohm loop.

### PROGRAMMING

<u>START</u>	<u>DESCRIPTION</u>	<u>DATA</u>
CM13 END	Remove the PAD on Off Premises Extension	<ul style="list-style-type: none"> <li>• YY = 09</li> <li>(1) X - XXXX (Station Number)</li> <li>(2) 0: No PAD (6 dB)</li> </ul>

### HARDWARE REQUIRED

PK-2LLC Card

## PERIODIC TIME INDICATION TONE

### GENERAL DESCRIPTION

This feature provides a periodic tone to the station user who has made an outgoing call. This feature can be allowed or denied for each station.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

No manual operation is required

### SERVICE CONDITIONS

1. This feature is allowed or denied in the station's *Class of Service* assignment using the *Maintenance Administration Terminal (MAT)* or the *Customer Administration Terminal (CAT)*. Additionally, this feature can be allowed or denied on a system basis for CO lines and *E&M Tie Lines*.
2. The *Periodic Time Indication Tone* is 80 ms. in duration. The interval between tones is programmable from 32 seconds to 724 seconds (the default is 180 seconds).
3. Outgoing calls initiated by the Attendant will not have this feature.

## PERIODIC TIME INDICATION TONE (CONT'D)

### PROGRAMMING

<u>START</u>	<u>DESCRIPTION</u>	<u>DATA</u>
CM08	Provide the system with this feature.  Specify this service on a Tie Line Call.	(1) 135 (2) 0: To be provided (1) 136 (2) 0/1 ◀ : To be provided/Not to be provided.
CM12	Assign the Class of Service for this feature to the required stations.	• CM12, YY=02 Service Rest. Class B (00-15◀ )
CM15		• CM15, YY=61 (1) 00-15 (Service Rest. Class B assigned by CM12, YY=02) (2) 1 ◀ : Allowed
CM13	Assign the Ordinary Station to the required stations. If assigned to 0 (Analog Data Station), this feature will not be applied to the station.	• YY=07 (1) X-XXXX (Station No.) (2) 1 ◀ : Ordinary Station
CM41	Specify the interval time of Periodic Time Indication Tone.	• Y=0 (1) 09 (2) 00-12 (Timer Data of 36 sec-724 sec) If no data is set, the default setting is 180-184 seconds.
<u>END</u>		

## POOLED LINE ACCESS

### GENERAL DESCRIPTION

A line key can be assigned to access *Pooled Lines*. Each line key will allow incoming, outgoing, or both-way access to a trunk route.

### STATION APPLICATION

All Multiline Terminals.

### OPERATING PROCEDURE

To originate a call on *Pooled Lines*:

1. Go off-hook and select the applicable line key.
2. Receive dial tone from a trunk in that Pooled Line's assigned trunk route.
3. Dial desired number.

To answer a call on *Pooled Lines*:

1. Go off-hook and select the ringing-line key.
2. Talk.

### SERVICE CONDITIONS

1. When all trunks in the *Pooled Line* group are busy, no visual indication is provided on the associated line key LED. However, a different line key can be assigned for this purpose when required.
2. A user on a *Pooled Line* can access *Call Park*, *Call Transfer*, *Conference*, and *Station and System Speed Dialing*. *Station Message Detail Recording* will provide a record of calls made on a *Pooled Line*.
3. When all trunks in the *Pooled Line* are busy and access is attempted, busy tone is received.
4. If the NEAX1400 IMS is designated as KF registration, this feature will not be available.

## POOLED LINE ACCESS (CONT'D)

### PROGRAMMING

#### START

CM11

Assign the Pooled Lines (Virtual Line Station Number) to the required Virtual LEN.

- DATA
- (1) Virtual LEN (0000-0255)
  - (2) X-XXXX (Virtual Line Station No.)

The Virtual LENs have no relation with the physical LEN used in CM10. Therefore, any Virtual LENs can be assigned to each Virtual Line Station Number. However, the Virtual Line Station Number should be different from the Single Line Number assigned by CM10.

CM90

Assign the Pooled Line keys to each Multiline Terminal. Pooled Lines 00-63 can answer a call terminated to Tenants 00-63 respectively, and can originate a call using Trunk Routes 00-63 respectively.

- YY=00
- (1) Primary Extension No +  + Key No.
- (2) F4100-F4163 (Pooled Line 00-63)

<u>Pooled Line</u>	<u>Origination</u>	<u>Termination</u>
00	Trunk Route 00	Tenant 00
01	01	01
?	?	?
63	Trunk Route 63	Tenant 63

CM30

Assign the Trunk Route No. and Tenant No. to the trunks in the Pooled Line group.

- YY=00 (Trunk Route Allocation)
- (1) 000-255 (Trunk No.)
- (2) 00-63 (Trunk Route No.) **Note**

**Note:** Refer to Chapter 7 of the System Programming Manual for the Resident System Program.

- YY=01 (Allocation of tenants to trunks)
- (1) 000-255 (Trunk No.)
- (2) 00-63 (Tenant No.) (00)

Specify the terminating system, including TAS, of the trunks in the Pooled Line group.

- YY=02 (Terminating System in Day mode)
- YY=03 (Terminating System in Night mode)
- (1) 000-255 (Trunk No.)
- (2)
  - 03: Trunk-Direct Appearances and TAS
  - 13: TAS
  - 19: H A - 6 1 0 Z / S N 6 1 0  
ATTCON+TAS
  - 20: H A - 6 1 0 Z / S N 6 1 0  
ATTCON+Trunk Direct Appearances+TAS

END

### HARDWARE REQUIRED

ETE-16-2/ETE-6-2 ETE-16D-2/ETE-6D-2 and PK-2DLC Card.

## PRIORITY CALL

### GENERAL DESCRIPTION

This feature allows the Attendant to answer a call before other calls, at the Attendant's discretion.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

To initiate a *Priority Call*:

1. Lift handset and receive dial tone.
2. Dial *Priority Call* number.

To answer a *Priority Call* at the Attendant Console:

Attendant presses the designated *Priority Call* key.

### SERVICE CONDITIONS

1. A *Priority Call* can be answered by pressing the **ANSWER** key, provided no other calls are waiting. If other calls are waiting, the *Priority Call* must be answered by pressing the designated *Priority Call* key in order to be answered first.
2. The designated *Priority Call* key must be assigned using the *Maintenance Administration Terminal (MAT)* or the *Customer Administration Terminal (CAT)*.
3. Two *Priority Call* numbers can be assigned. Separate *Priority Call* keys must be assigned at the *Attendant Console*.
4. The ability to place a *Priority Call* can be allowed or denied in *Class of Service*.
5. A *Priority Call* to an *Attendant Console* when the system is in night mode receives reorder tone.
6. When a station is assigned as the destination of a *Priority Call* and the station has set *Call Forwarding*, the *Priority Call* will follow the *Call Forwarding* setting.

## PRIORITY CALL (CONT'D)

### PROGRAMMING

START	DESCRIPTION	DATA
CM12	Assign the Class of Service for the Priority Call to the required stations.	<ul style="list-style-type: none"> <li>• CM12, YY=02 (Service Rest. Class A 00-15◀ )</li> </ul>
CM15		
CM20	Assign the access code for Priority Calls 0 and 1 respectively.	<ul style="list-style-type: none"> <li>• Y=0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX (Access Code)</li> <li>(2) { 088: Priority Call 0 089: Priority Call 1</li> </ul>
CM08	Specify the terminated destination of Priority Calls 0 and 1.	<ul style="list-style-type: none"> <li>(1) 250 (For Priority Call 0)</li> <li>(2) 0: Same Station as Off Hook Alarm</li> <li>1◀ : HA-610Z/SN610 ATTCON</li> <li>(1) 251 (For Priority Call 1)</li> <li>(2) 0: Same station as Off-Hook Alarm</li> <li>1◀ : HA-610Z/SN610 ATTCON</li> </ul>
CM46	If CM08-250/251 is set to "1," assign the Priority Calls 0 and 1 to any Priority Call Keys on the HA-610Z Attendant Console. <span style="border: 1px solid black; border-radius: 15px; padding: 2px;">INITIAL</span>	<ul style="list-style-type: none"> <li>(1) Key No. (00-11)</li> <li>(2) { 54: Priority Call 0 55: Priority Call 1</li> </ul>
CM90	If CM08-250/251 is set to "1," assign the Priority Calls 0 and 1 to any Priority Call Keys on SN610 Attendant Console.	<ul style="list-style-type: none"> <li>• YY=00</li> <li>(1) ATTCON No. + <span style="border: 1px solid black; padding: 0 5px;"> </span> + Key No.</li> <li>(2) { F6054: Priority Call 0 F6055: Priority Call 1</li> </ul>
CM51	If CM08-250/251 is set to "0," assign the destination of Priority Calls 0 and 1 to the desired station.	<ul style="list-style-type: none"> <li>• YY=12</li> <li>(1) Tenant No. (00-63)</li> <li>(2) X-XXXX (Station No.)</li> </ul>
END		

## PRIVACY/PRIVACY RELEASE

### GENERAL DESCRIPTION

This feature restricts Multiline Terminal users from pressing a busy-line button and entering a conversation unless permitted by the Multiline Terminal user currently on that line button.

### STATION APPLICATION

All Multiline Terminals.

### OPERATING PROCEDURE

To activate *Privacy Release* with a call in progress:

1. Press the CNF key. The CNF LED flashes.
2. Another station with the same line appearance presses that line button.
3. Privacy on that line is released and a three-party Conference is in progress.
4. Repeat above procedure to establish a four-party Conference, if desired.

### SERVICE CONDITIONS

1. When a line is busy and *Privacy Release* has not been activated on that line, any attempt to access that line will result in busy tone.
2. *Privacy Release* is available for Multiline Terminals connected to any extension line key.
3. When a Multiline Terminal user presses the CNF key, *Privacy* on the active line is released. If the CNF key is pressed again or another party enters the connection *Privacy* is re-established.
4. After a third party enters the conversation, the CNF key can be pressed again. *Privacy* is released and a fourth party is allowed to join the conversation by the same operating procedure.
5. *Privacy Release* is activated only on a connection during which the CNF key is pressed. Once the station releases the connection, *Privacy Release* is canceled and *Privacy* is restored.
6. The primary extension of the station entering the conversation is accessed when that station enters the conversation. For this reason, the primary extension must be idle at the entering station for this feature to work.



## PRIVACY/PRIVACY RELEASE (CONT'D)

### PROGRAMMING

<u>START</u>	<u>DESCRIPTION</u>	<u>DATA</u>
<div style="border: 1px solid black; width: 40px; height: 20px; margin: 5px auto; text-align: center; line-height: 20px;">CM12</div> <div style="border: 1px solid black; width: 40px; height: 20px; margin: 5px auto; text-align: center; line-height: 20px;">CM15</div>	Assign the Class of Service for Privacy Release to the required stations.	<ul style="list-style-type: none"> <li>• CM12, YY=02               <ol style="list-style-type: none"> <li>(1) X-XXXX: Primary Extension No.</li> <li>(2) XXXX                   <ul style="list-style-type: none"> <li>└ Service Rest. Class B (00-15 ◀)</li> </ul> </li> </ol> </li> <li>• CM15, YY=63               <ol style="list-style-type: none"> <li>(1) 00-15 (Service Rest. Class B assigned by CM12, YY=02)</li> <li>(2) 1 ◀ : Allowed</li> </ol> </li> </ul>
<u>END</u>		

## PRIVATE LINES

### GENERAL DESCRIPTION

This feature is available to all Multiline Terminal users. Only a Multiline Terminal which has been programmed for a *Private Line* can have access to this line.

### STATION APPLICATION

All Multiline Terminals.

### OPERATING PROCEDURE

No manual operation is required.

### SERVICE CONDITIONS

1. *Private Lines* can be assigned using the *Flexible Line Assignment* feature.
2. Incoming and outgoing restriction assignments can be used to assure privacy.
3. The following features are available:
  - Outgoing call connection restriction, *Code Restriction*, *Conference*, *Delayed Ringing*, *Station Message Detail Recording (SMDR)*, *Hold*, *Call Transfer*, *Call Park*, *Call Hold*, *Save and Repeat*, *Last Number Redial*, *Broker's Call* and *Station Speed Dialing* using feature keys.
4. When an outgoing call is placed, the following restrictions apply:
  - *Trunk Queuing-Outgoing* is not available.
  - *System Speed Dialing* cannot be used.
  - *Account Code* may be entered using a function key programmed for *Account Code* entry or *Account Code* can be dialed on second dial tone.
5. The LED associated with the line key will be lit red when the trunk is busy, and green when being used by the station that selected that trunk. The LED indication is always red on the ETE-6-2.
6. For further information refer to the *Flexible Line Key Assignment*, *Flexible Ringing Assignment*, and *Trunk - Direct Appearance* features.

### PROGRAMMING

Refer to TRUNK-DIRECT APPEARANCES.

## PROPRIETARY MULTILINE TERMINAL

### GENERAL DESCRIPTION

There are four Multiline Terminals available which can be used with the NEAX1400 IMS. The ETE-16D-2 and the ETE-16-2 both have 16 line keys, of which 15 are flexible and one is reserved for the primary extension. The ETE-16D-2 has a Liquid Crystal Display (LCD). The ETE-6D-2 and the ETE-6-2 both have six line keys, of which five are flexible and one is reserved for the primary extension. The ETE-6D-2 has an LCD. The following features apply to these Multiline Terminals.

## PROPRIETARY MULTILINE TERMINAL; AUTOMATIC IDLE RETURN

### GENERAL DESCRIPTION

This feature returns a station to the idle state after three seconds of reorder tone is received due to the distant end disconnecting.

### STATION APPLICATION

All Multiline Terminals.

### OPERATING PROCEDURE

No manual operation is required.

### SERVICE CONDITIONS

1. *Automatic Idle Return* only applies when the call was made using the **SPKR** key.
2. The call can be either an internal or external call. If it is an external call a release signal from the CO must be supplied.
3. *Automatic Idle Return* can be allowed or denied on a system basis.

### PROGRAMMING

<u>START</u>	<u>DESCRIPTION</u>	<u>DATA</u>
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM08</div>	Provide the system with this feature.	(1) 172 (2) 1 ◀ : Available
<u>END</u>		

## PROPRIETARY MULTILINE TERMINAL; CALLING NAME AND NUMBER DISPLAY

### GENERAL DESCRIPTION

This feature provides a display on the LCD of the Multiline Terminal receiving a call, indicating the station number or trunk number of the incoming call.

### STATION APPLICATION

ETE-6D-2 and ETE-16D-2 Multiline Terminals.

### OPERATING PROCEDURE

No manual operation is required.

### SERVICE CONDITIONS

1. When a call terminates to a line other than the primary extension or Prime Line, the *Calling Name and Number Display* will be indicated only after the ringing line key is pressed or the call is answered. For trunk calls, the LCD displays the trunk route name and trunk number. For primary extension calls, the LCD displays the extension number and caller's name. For *Direct Inward Termination* (DIT), the LCD displays DIT, the trunk route name, and trunk number.
2. When an incoming call terminates to the primary extension or Prime Line, the station number and name can be displayed when the call begins ringing in.
3. Refer to the *Alphanumeric Display* and *Elapsed Call Timer* features for additional information.
4. The same trunk/station should not be used as a Prime Line for two different stations. If this is done, only the station with the lowest number will receive incoming indication.

### PROGRAMMING

<u>START</u>	<u>DESCRIPTION</u>	<u>DATA</u>
CM08	Specify the station number and name display when an incoming call begins ringing in.	(1) 335  (2) { 0 : Station number and name are displayed only when an incoming call is terminated to Prime Line. 1 ◀ : Station number and name are displayed when an incoming call is terminated to Prime Line or Primary Extension.
<u>END</u>		

## PROPRIETARY MULTILINE TELEPHONE; MULTIPLE LINE OPERATION

### GENERAL DESCRIPTION

This feature allows for the appearance of multiple lines on the *Flexible Line Keys* and feature keys of all Multiline Terminals.

### STATION APPLICATION

All Multiline Terminals.

### OPERATING PROCEDURE

No manual operation is required.

### SERVICE CONDITIONS

The following lines can be assigned to appear on the line keys of Multiline Terminals:

- **Primary Extension** - this line is associated with the extension number assigned to the circuit on the 2DLC board.
- **Secondary Extension** - this line is a secondary appearance of a primary extension appearing on another Multiline Terminal, a Single-Line Telephone extension, or a *Software Line Appearance*.
- **Trunk - Direct Appearances** - Refer to the *Miscellaneous Trunk Access* feature for available trunks.
- **Intercom** - three types are available, refer to the *Intercom* feature for detailed information.
- **Hotlines** - refer to the *Hotline* feature for detailed information.
- **Pooled Lines** - refer to the *Pooled Lines Access* feature for detailed information.

### PROGRAMMING

<u>START</u>	<u>DESCRIPTION</u>	<u>DATA</u>
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM90</div>	Specify the tone ringer enabled on call termination to flexible line keys and feature keys.	<ul style="list-style-type: none"> <li>• YY=01</li> <li>(1) Primary Extension No. + <input style="width: 20px; height: 15px;" type="text"/>,</li> <li style="padding-left: 20px;">+ Key No.</li> <li>(2) 0/1 ◀ : Disabled/Enabled</li> </ul>
<u>END</u>		

## PROPRIETARY MULTILINE TELEPHONE; OFF-HOOK VOICE ANNOUNCEMENT

### GENERAL DESCRIPTION

This feature provides a secondary voice path for any Multiline Terminal with a DPA-E Unit and display. This allows the station to receive a voice call through the speaker while on a handset call on the Primary Extension, a secondary extension, or a Direct Trunk Line Appearance.

### STATION APPLICATION

ETE-6D-2/ETE-16D-2 with DPA-E Unit.

### OPERATING PROCEDURE

With call in progress using handset:

1. A Multiline Terminal with a DPA-E Unit receives an incoming extension call on the Primary Extension, a secondary extension, or a Direct Trunk Line Appearance and hears voice page alert tone.
2. Respond with hands free.
3. Press the ANSWER key to respond with the handset. If the original call is on the Primary Extension, it is automatically put on *Consultation Hold*. If the original call is on a key other than the Primary Extension, it is automatically put on *Non-Exclusive Hold*.

The Multiline Terminal with this feature can program the following two modes:

- Voice mode: allows an incoming call to terminate with Voice Announcement.
- Tone mode: allows an incoming call to terminate with ringing.

To set Voice/Tone mode:

1. Press the SPKR key.
2. Dial Voice/Tone Programming access code and receive feature dial tone. The LCD will show the current mode of the Multiline Terminal.
3. Dial any single digit (0-9). Voice mode is switched to Tone mode or vice versa and Service Set tone is received.
4. Press SPKR key.

### SERVICE CONDITIONS

1. This feature is assigned in *Class of Service* on a per-station basis.
2. This feature is only available for the incoming call to the Primary Extension of Multiline Terminal with DPA-E Unit.
3. The DPA-E Unit cannot be installed in a Multiline Terminal equipped with an INT-E Unit (used for connecting the DA-005A Data Adapter). However, Multiline Terminals can have both the DTA-E Data Adapter and the DPA-E Unit.
4. The Multiline Terminal with DPA-E Unit requires two ports (voice only--three ports for voice & data). Therefore, the maximum number of Multiline Terminals with DPA-E Units that can be assigned this feature is limited by the total number of ports per PIM or system.
5. The voice announcement to the Multiline Terminal in DND is restricted.
6. The voice call on *Automatic Intercom/Boss-Secretary Transfer* is not affected by the mode programming (Voice/Tone mode) of the called station.

## PROPRIETARY MULTILINE TELEPHONE; OFF-HOOK VOICE ANNOUNCEMENT (CONT'D)

### PROGRAMMING

START	DESCRIPTION	DATA
CM11	Assign the Virtual-Line station No. for Off-Hook Voice Announcement.	(1) 0000-0255: Virtual LEN (2) CX-CXXXX: Virtual-Line Station No. for Off-Hook Voice Announcement.  Note: X-XXXX represents Primary Extension No. of Multiline Terminal.
CM90	Assign the Virtual-Line station for Off-Hook Voice Announcement to the required Multiline Terminal.	● YY = 00 (1) Primary Extension No. (1-4 digits) + <span style="border: 1px solid black; padding: 0 5px;"> </span> + Key No (01-16)  (2) CX-CXXXX: Virtual-Line Station No. for Off-Hook Voice Announcement assigned by CM11.
CM13	Provide the Off-Hook Voice Announcement to the required Multiline Terminal.	● YY = 28 (1) X-XXXX: Station No. (1-4 digits) (2) 0: To be provided. 1 ◀: Not to be provided
<b>INITIAL</b>		
CM08	Specify the Voice Call when calling a Multiline Terminal set to Voice First from a Single-Line Telephone or a Multiline Terminal without LCD.	(1) 270 (2) { 0: Not provided (Busy Tone) 1 ◀: Provided
CM08	Specify the Voice Call when calling a Multiline Terminal set to Voice First from an HA-610Z ATTCOM.	(1) 271 (2) { 0: Not provided (Busy Tone) 1 ◀: Provided
CM08	Specify the Voice Call when a called Multiline Terminal goes off-hook while being called via Off-Hook Voice Announcement.	(1) 279 (2) { 0: Not provided (Ring Tone) 1 ◀: Provided (Voice Call)
CM12	Assign the Class of Service of Voice Call (called side) to the required Multiline Terminal.	● CM12, YY = 02 (1) X-XXXX: Primary Extension No. (2) XXXX
CM15		— Service Restriction Class (B) (00-15 ◀)  ● CM15, YY = 67 (1) 00-15: Service Restriction Class (B) (2) 1 ◀: Available
A		



## PROPRIETARY MULTILINE TELEPHONE; OFF-HOOK VOICE ANNOUNCEMENT (CONT'D)

	DESCRIPTION	DATA
	<p>Assign the Class of Service of Voice Call Mike Off (called side) to the required Multiline Terminal.</p> <p><b>Note:</b> <i>This feature automatically turns the Microphone off at the called station.</i></p> <p>Assign the Class of Service of Answer Hold to the required Multiline Terminal.</p> <p>Assign the Voice Call/Ring Tone Programming access code.</p>	<ul style="list-style-type: none"> <li>● CM12, YY=07                             <ul style="list-style-type: none"> <li>(1) X-XXXX: Primary Extension No.</li> <li>(2) XX: Service Restriction Class (C) (00-15◀ )</li> </ul> </li> <li>● CM15, YY=99                             <ul style="list-style-type: none"> <li>(1) XX: Service Restriction Class (C) assigned by CM12, YY=07</li> <li>(2) 0:◀ Available 1 · Not available</li> </ul> </li> <li>● CM12, YY=02                             <ul style="list-style-type: none"> <li>(1) X-XXXX: Primary Extension No.</li> <li>(2) XXXX     └─ Service Restriction Class (B) (00-15◀ )</li> </ul> </li> <li>● CM15, YY=72                             <ul style="list-style-type: none"> <li>(1) XX: Service Restriction Class (B) assigned by CM12, YY=02</li> <li>(2) 0: Allowed</li> </ul> </li> <li>● YY=0-3 (Numbering Plan Group 0-3)                             <ul style="list-style-type: none"> <li>(1) X-XXX: Access Code</li> <li>(2) A63</li> </ul> </li> </ul>

### HARDWARE REQUIRED

- ETE-16D-2 TEL or ETE-6D-2 TEL, and a PK-2DLC card
- DPA-E Unit (Dual Path Adapter Unit)

Follow this procedure to install the DPA-E Unit:

- Step 1:** Unplug the line cord and turn the Multiline Terminal upside down (face down). Locate the access panel on the bottom of the terminal. See Figure 1.
- Step 2:** Slide the directory out of the way.
- Step 3:** Insert the blade of a flat-blade screwdriver into notch A. Apply a light upward pressure until the edge of the panel is above the front lip; with the panel edge lifted up, push the back of the panel (at B) to slide it forward.
- Step 4:** Remove the access panel.
- Step 5:** Find the 13-pin connector labeled DPA-E. Carefully plug the DPA-E card into this connector.
- Step 6:** Replace the access panel.

**PROPRIETARY MULTILINE TELEPHONE;  
OFF-HOOK VOICE ANNOUNCEMENT (CONT'D)**

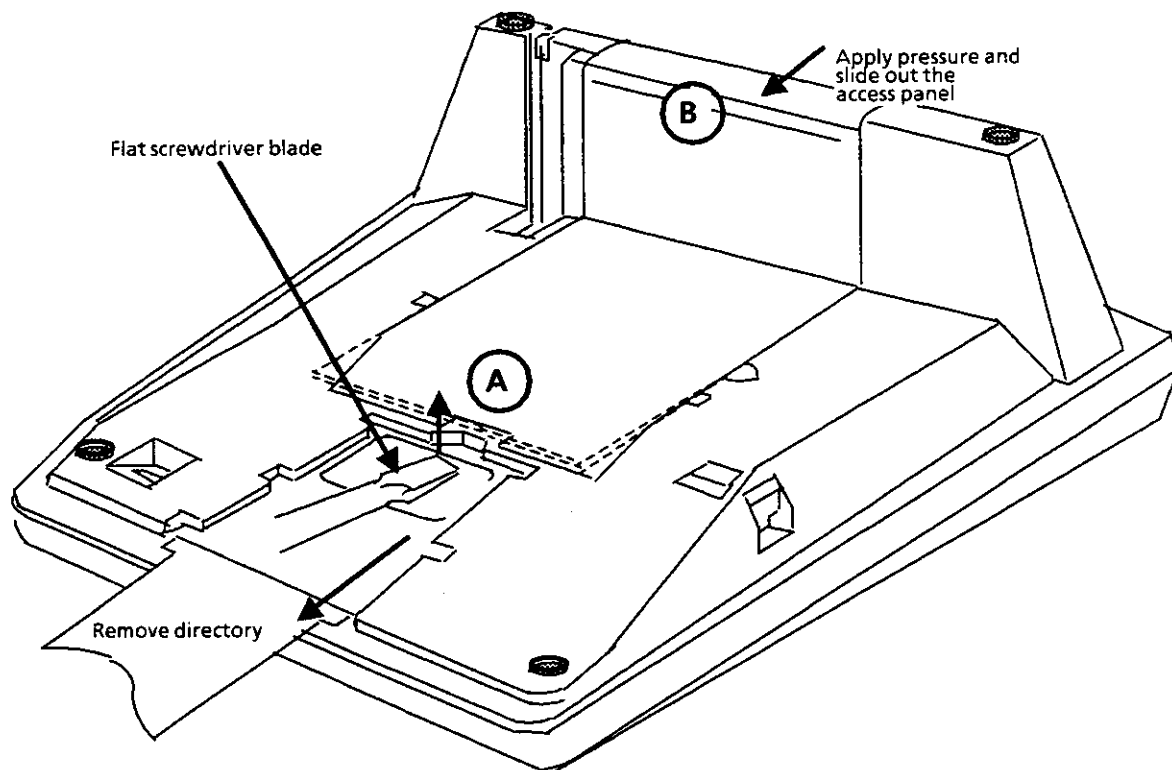


Figure 1. Removing the Multiline Terminal Access Panel

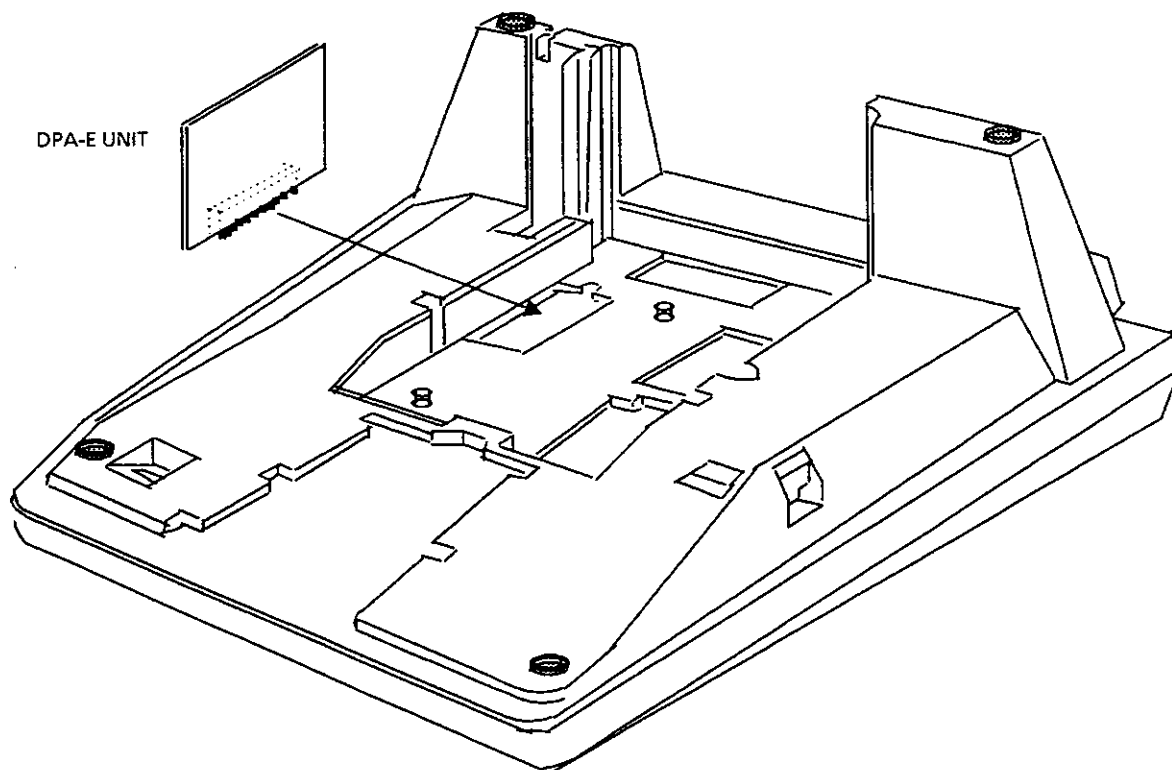


Figure 2. DPA-E Unit Installation

## PROPRIETARY MULTILINE TELEPHONE; PRIME-LINE PICKUP

### GENERAL DESCRIPTION

This feature allows a Multiline Terminal user to go off-hook and originate a call, from the line assigned as the Prime Line, without pressing the associated line key.

### STATION APPLICATION

All Multiline Terminals.

### OPERATING PROCEDURE

1. Lift handset or press **SPKR** key.
2. Dial tone from Prime Line is received.
3. Proceed with normal call processing.

### SERVICE CONDITIONS

1. One *Prime Line* per station is allowed. *Prime Line* is assigned on a per-station basis by the *Maintenance Administration Terminal (MAT)* or *Customer Administration Terminal (CAT)*.
2. Only extensions or Direct Trunk Appearances can be assigned as *Prime Lines*.
3. The default setting for *Prime Line* is the station's primary extension.

### PROGRAMMING

<u>START</u>	<u>DESCRIPTION</u>	<u>DATA</u>
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM93</div>	Assign the station or trunk to the desired Multiline Terminal Extension as Prime Line. It is recommended that the Primary Extension is assigned as the Prime Line.	(1) X-XXXX (Primary Extension No.) (2) ( X-XXXX (Station No.) <b>Note 1</b> DXXX (Trunk No.) └─ 000-255  <b>Note 1:</b> <i>Primary Extension No. or Virtual Line No. can be assigned to the Prime Line. However, the data station and Single Line Telephone cannot be assigned to the Prime Line.</i>  <b>Note 2:</b> <i>By loading the Resident System Program, the Primary Extension Number is assigned as Prime Line Number for all Multiline Terminals.</i>
<u>END</u>		

## PROPRIETARY MULTILINE TELEPHONE; RECALL KEY

### GENERAL DESCRIPTION

Each Multiline Terminal is equipped with a Recall Key that is used to generate a hookflash to access features provided by the outside exchange, or to abandon a call while retaining the outside line for origination of another call.

### STATION APPLICATION

All Multiline Terminals.

### OPERATING PROCEDURE

With outside or *E&M Tie Line* call in progress using extension appearance:

1. Press **RECALL** key.
2. Receive internal dial tone and trunk is released.

With outside or *E&M Tie Line* call in progress using direct appearance:

1. Press **RECALL** key.
2. Key operation is not effected. The call is still in progress.

With CENTREX call in progress, using extension or Direct Trunk Appearance:

1. Press **RECALL** key.
2. Receive CENTREX feature dial tone.

With internal call:

1. Press **RECALL** key.
2. Receive internal dial tone.

With *Conference* in progress:

1. Press **RECALL** key.
2. Receive internal dial tone.

### SERVICE CONDITIONS

1. The default duration of the timed disconnect signal or hookflash signal is 600 msec., and is programmable on a per-system basis.
2. The **RECALL** key functions differently, depending on the type of line key appearance and type of outgoing trunk.
3. On trunk routes programmed as CENTREX, regardless of whether they are accessed using an extension or Direct Trunk Appearance, a timed disconnect corresponding to a hookflash is sent to the distant exchange. The duration of the hookflash is programmable on a system basis.
4. On Direct Trunk Appearances, a timed disconnect (of the same duration as that for CENTREX) is sent to the Central Office. The same trunk is reserved and new Central Office dial tone is received.
5. If a call was placed through *Least Cost Routing*, the **RECALL** Key releases the CO call and new extension dial tone is received.
6. The **RECALL** Key does not function on intercom calls.

## PROPRIETARY MULTILINE TELEPHONE; RECALL KEY (CONT'D)

### PROGRAMMING

For internal call:  
 RECALL Key is initially assigned onto all Multiline Terminals.

For internal call:

<u>START</u>	<u>DESCRIPTION</u>	<u>DATA</u>
CM35	Assign the data for the hooking signal sending to outside to the route No. assigned by CM30, YY=00.	<ul style="list-style-type: none"> <li>• YY=16</li> <li>(1) Trunk Route No. (00-63)</li> <li>(2) 1 ◀ : Sending</li> </ul>
CM90	Assign the Flush Over Trunk key to the required Multiline Terminal.	<ul style="list-style-type: none"> <li>• YY=00</li> <li>(1) Primary Extension No. + <input type="text"/>, + Key No.</li> <li>(2) F1009</li> </ul>
CM41	Specify the duration of hooking signal to outside.	<ul style="list-style-type: none"> <li>• Y=2</li> <li>(1) 17</li> <li>(2) 02-30 (Timer Data for 64 ms - A20 ms)</li> </ul> <p>If no data is set, the default setting is 576 - 640 ms.</p>
<u>END</u>		

## PROPRIETARY MULTILINE TELEPHONE; RELAY CONTROL FUNCTION KEY

### GENERAL DESCRIPTION

This feature provides the Multiline Terminal with the relay control function keys for equipment connected externally.

### STATION APPLICATION

All Multiline Terminals.

### OPERATING PROCEDURE

To turn on the contact:

1. Press the relay control function key while the associated LED goes off.
  - the associated LED will light
  - the contact will close and latch

To turn off the contact:

1. Press the relay control function key while the associated LED lights.
  - the associated LED will go off
  - the contact will open

### SERVICE CONDITIONS

1. Up to 128 contacts can be controlled by each system.
2. One PK-DK01 is required for every four external items to be controlled.
3. The relay control key functions regardless of a Multiline Terminal condition (busy or idle).
4. The contact returns to the previous status after being open momentarily, for a maximum of 10 seconds, when the system is reset.
5. The same relay control function key should not be assigned to plural Multiline Terminals.
6. The relay control function key can also be assigned to SN610 ATTCON.

### PROGRAMMING

START	DESCRIPTION	DATA
<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 5px auto;">CM10</div>	Assign the PK-DK01 card to the required LEN.	(1) LEN: Even No. out of 0000 – 0511 (2) E800 – E831: PKDK01 card No. { For PIM0...E800 – E807 } { For PIM1...E808 – E815 } { For PIM2...E816 – E823 } { For PIM3...E824 – E831 }
<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 5px auto;">CM44</div>	Assign the function of relay control via Multiline Terminal to the PKDK01.	(1) XXX └─┬─┘ Circuit No. (0-3) └─┬─┘ Card No. (00-31) └─┬─┘ assigned by CM10, E800- └─┬─┘ E831 (2) 1500 └─┬─┘ Relay Control (On/Off) └─┬─┘ Via Multiline Terminal └─┬─┘ Relay Control Function └─┬─┘ Key
<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 5px auto;">A</div>		

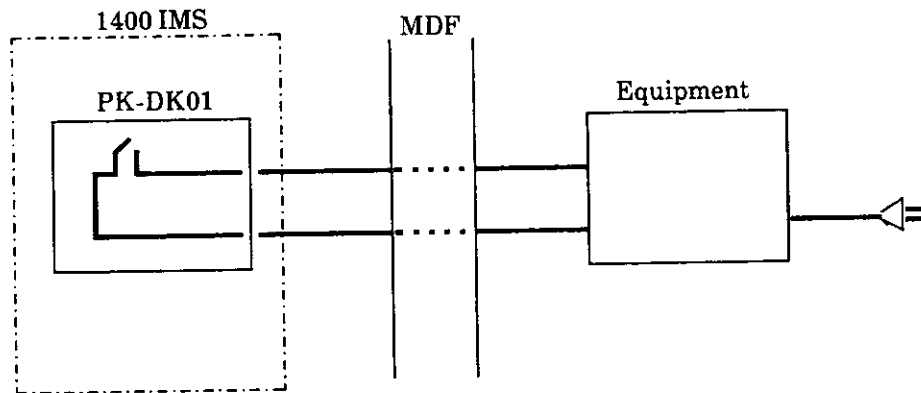
## PROPRIETARY MULTILINE TELEPHONE; RELAY CONTROL FUNCTION KEY (CONT'D)

	DESCRIPTION	DATA
<div style="text-align: center;"> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 0 auto; display: flex; align-items: center; justify-content: center;">A</div> <div style="border: 1px solid black; width: 60px; height: 20px; margin: 5px auto; display: flex; align-items: center; justify-content: center;">CM90</div> <div style="border-bottom: 1px solid black; width: 100%; height: 20px; margin: 5px auto;"></div> <div style="text-align: center;">END</div> </div>	<p>Assign the Relay Control (ON/OFF) key on the required Multiline Terminal.</p>	<ul style="list-style-type: none"> <li>● YY = 00</li> <li>(1) Primary Extension no. (1-4 digits)                      + <span style="border: 1px solid black; padding: 0 5px;">  </span> + Key No.</li> <li>(2) F7XXX                     <ul style="list-style-type: none"> <li>└─ Circuit No. (0-3)                              assigned by CM44</li> <li>└─ Card No. (00-31)                              assigned by CM44,                              E800-E831</li> </ul> </li> </ul>

### HARDWARE REQUIRED

- PK-DK01 Card (Four relay contacts per card can be equipped)
- External equipment provided locally
- ETE-16D-2TEL/ETE-6D-2TEL/ETE-16-2TEL/ETE-6-2TEL/SN610 ATTCON, and PK-2DLC card

To accommodate the external equipment, make the following connection at the MDF.



## PROPRIETARY MULTILINE TELEPHONE; RING FREQUENCY CONTROL

### GENERAL DESCRIPTION

A switch located on the bottom of the Multiline Terminal is the *Ring Frequency Control* of that Multiline Terminal. Three frequencies are available by selecting one of three positions on the switch. Additionally, the ring frequency can be controlled on a station basis in system programming. System programming takes priority over switch setting.

### STATION APPLICATION

All Multiline Terminals.

### OPERATING PROCEDURE

1. Turn the Multiline Terminal upside down and locate the *Ring Frequency Control* switch.
2. Select one of three switch positions corresponding to the desired frequency.

### SERVICE CONDITIONS

1. The ring frequency can also be controlled by system programming on a system basis. When the system is assigned to control the ringing, the frequency can be assigned on a per-station basis by *Class of Service* assignment.
2. The default setting assigns control to the *Ring Frequency Control* switch.



**PROPRIETARY MULTILINE TELEPHONE;  
 RING FREQUENCY CONTROL (CONT'D)**

**PROGRAMMING**

To control the frequency by the system data programming.

START

CM08

DESCRIPTION

Enable the ring frequency control by the system data programming.

INITIAL

DATA

- (1) 390
- (2) 1 ◀ : By System Data Programming

CM12

CM15

Specify the ring frequency of each Multiline Terminal for internal calls.

- CM12, YY = 07 [Service Restriction Class (C) (00 - 15 ◀ )]
- CM15, YY = 83, 84
- (1) 00 - 15 (Service Rest. Class C assigned by CM12, YY = 07)
- (2) 0/1 ◀ : See left column

YY		RING FREQUENCY
83	84	
0	0	600 + 700 [Hz]
1	0	1024 + 1285 [Hz] × 16 [Hz]
0	1	480 + 606 [Hz] × 8 [Hz]
1	1	480 + 606 [Hz] × 16 [Hz] ◀

CM35

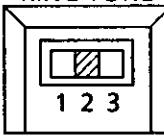
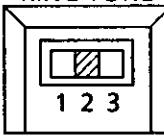
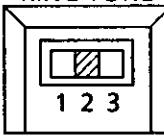
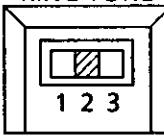
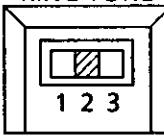
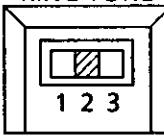
Specify the ring frequency for incoming call using each trunk route.

- YY = 34
- (1) 00 - 63 (Trunk Route No.)
- (2) { 0: 1024 + 1285 [Hz] × 16 [Hz]  
 1: 480 + 606 [Hz] × 8 [Hz]  
 2: 600 + 700 [Hz]  
 3 ◀ : 480 + 606 [Hz] × 16 [Hz]

END

## PROPRIETARY MULTILINE TELEPHONE; RING FREQUENCY CONTROL (CONT'D)

To control the frequency by switch setting of Multiline Terminal.

START	DESCRIPTION	DATA																			
CM08	Disable the ring frequency by the system data programming. <div style="text-align: right; border: 1px solid black; border-radius: 10px; padding: 2px; display: inline-block;">INITIAL</div>	(1) 390 (2) 0: By switch equipped with Multiline Terminal																			
CM12 CM15	Assign one of the following ring frequencies to each Multiline Terminal for internal calls.	<ul style="list-style-type: none"> <li>• CM12, YY = 07 (Service Restriction Class (C) (00 - 15 ◀ ))</li> <li>• CM15, YY = 83, 84</li> </ul> (1) 00 - 15 (Service Rest. Class (C) assigned by CM12, YY = 07) (2) 0/1 ◀ : See left column																			
	<table border="1" style="margin: auto; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: center;">YY</th> <th rowspan="2" style="text-align: center;">RING FREQUENCY</th> </tr> <tr> <th style="text-align: center;">83</th> <th style="text-align: center;">84</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">0</td> <td style="text-align: center;"><math>1024 + 1285 \text{ [Hz]} \times 16 \text{ [Hz]}</math></td> </tr> <tr> <td style="text-align: center;">0</td> <td style="text-align: center;">1</td> <td style="text-align: center;"><math>480 + 606 \text{ [Hz]} \times 8 \text{ [Hz]}</math></td> </tr> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">1</td> <td style="text-align: center;"><math>480 + 606 \text{ [Hz]} \times 16 \text{ [Hz]}</math> ◀</td> </tr> </tbody> </table>	YY		RING FREQUENCY	83	84	1	0	$1024 + 1285 \text{ [Hz]} \times 16 \text{ [Hz]}$	0	1	$480 + 606 \text{ [Hz]} \times 8 \text{ [Hz]}$	1	1	$480 + 606 \text{ [Hz]} \times 16 \text{ [Hz]}$ ◀						
YY		RING FREQUENCY																			
83	84																				
1	0	$1024 + 1285 \text{ [Hz]} \times 16 \text{ [Hz]}$																			
0	1	$480 + 606 \text{ [Hz]} \times 8 \text{ [Hz]}$																			
1	1	$480 + 606 \text{ [Hz]} \times 16 \text{ [Hz]}$ ◀																			
CM35	Assign one of the ring frequencies for incoming calls via each trunk route except for 600 + 700 [Hz] (2nd Data = 2).	<ul style="list-style-type: none"> <li>• YY = 34</li> </ul> (1) 00 - 63 (Trunk Route No.) (2) { <table style="display: inline-table; vertical-align: middle; border-left: 1px solid black; border-right: 1px solid black; border-collapse: collapse;"> <tr> <td style="padding: 0 5px;">0:</td> <td style="padding: 0 5px;"><math>1024 + 1285 \text{ [Hz]} \times 16 \text{ [Hz]}</math></td> </tr> <tr> <td style="padding: 0 5px;">1:</td> <td style="padding: 0 5px;"><math>480 + 606 \text{ [Hz]} \times 8 \text{ [Hz]}</math></td> </tr> <tr> <td style="padding: 0 5px;">3 ◀ :</td> <td style="padding: 0 5px;"><math>480 + 606 \text{ [Hz]} \times 16 \text{ [Hz]}</math></td> </tr> </table>	0:	$1024 + 1285 \text{ [Hz]} \times 16 \text{ [Hz]}$	1:	$480 + 606 \text{ [Hz]} \times 8 \text{ [Hz]}$	3 ◀ :	$480 + 606 \text{ [Hz]} \times 16 \text{ [Hz]}$													
0:	$1024 + 1285 \text{ [Hz]} \times 16 \text{ [Hz]}$																				
1:	$480 + 606 \text{ [Hz]} \times 8 \text{ [Hz]}$																				
3 ◀ :	$480 + 606 \text{ [Hz]} \times 16 \text{ [Hz]}$																				
	Set the Ring Tone switch provided at the bottom of Multiline Terminal to select the desired ring frequency.																				
	<table border="1" style="margin: auto; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">SWITCH</th> <th style="text-align: center;">POSITION</th> <th style="text-align: center;">RING FREQUENCY</th> </tr> </thead> <tbody> <tr> <td rowspan="3" style="text-align: center; vertical-align: middle;"> <table border="1" style="border-collapse: collapse;"> <tr> <td colspan="3" style="text-align: center;">RING TONE</td> </tr> <tr> <td colspan="3" style="text-align: center;">  </td> </tr> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">3</td> </tr> </table> </td> <td style="text-align: center;">1</td> <td style="text-align: center;"><math>480 + 606 \text{ [Hz]} \times 8 \text{ [Hz]}</math></td> </tr> <tr> <td style="text-align: center;">2</td> <td style="text-align: center;"><math>480 + 606 \text{ [Hz]} \times 16 \text{ [Hz]}</math></td> </tr> <tr> <td style="text-align: center;">3</td> <td style="text-align: center;"><math>1024 + 1285 \text{ [Hz]} \times 16 \text{ [Hz]}</math></td> </tr> </tbody> </table>	SWITCH	POSITION	RING FREQUENCY	<table border="1" style="border-collapse: collapse;"> <tr> <td colspan="3" style="text-align: center;">RING TONE</td> </tr> <tr> <td colspan="3" style="text-align: center;">  </td> </tr> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">3</td> </tr> </table>	RING TONE						1	2	3	1	$480 + 606 \text{ [Hz]} \times 8 \text{ [Hz]}$	2	$480 + 606 \text{ [Hz]} \times 16 \text{ [Hz]}$	3	$1024 + 1285 \text{ [Hz]} \times 16 \text{ [Hz]}$	
SWITCH	POSITION	RING FREQUENCY																			
<table border="1" style="border-collapse: collapse;"> <tr> <td colspan="3" style="text-align: center;">RING TONE</td> </tr> <tr> <td colspan="3" style="text-align: center;">  </td> </tr> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">3</td> </tr> </table>	RING TONE						1	2	3	1	$480 + 606 \text{ [Hz]} \times 8 \text{ [Hz]}$										
	RING TONE																				
																					
1	2	3																			
2	$480 + 606 \text{ [Hz]} \times 16 \text{ [Hz]}$																				
3	$1024 + 1285 \text{ [Hz]} \times 16 \text{ [Hz]}$																				
END																					

## RESIDENT SYSTEM PROGRAM

### GENERAL DESCRIPTION

This feature provides the installers a simple procedure to have the system generate system data according to the system hardware configuration, thereby providing immediate operation and shorter programming time. When activated, the system scans hardware configuration (such as line/trunk card slot location) and assigns system data (such as extension numbers, trunk numbers, etc.) according to a predetermined generic program assignment.

### STATION APPLICATION

Not applicable.

### OPERATING PROCEDURE

Refer to the NEAX1400 IMS Installation/Test Manual (ND-43177-002(E)) for activation procedures.

### SERVICE CONDITIONS

1. This feature is only applicable for equipment installed in Port Interface Modules (PIM) 0 and 1.
2. System data is not assigned to any vacant slot .
3. Virtual extensions are not assigned.
4. The Resident System Program scans the hardware configuration and the first two Multiline Terminals with LCD scanned are assigned as *Customer Administration Terminals (CAT)*.
5. Details of Resident System Program:
  1. Extension Numbers:  
Extension Numbers 200 through 455 are assigned according to the sequential slot location numbers of the associated circuit boards.
  2. SN610 ATTCON Numbers:  
DSS Console Numbers E004 through E007 are assigned according to the sequential slot location numbers of the associated circuit card.
  3. Trunk Numbers:  
Trunk Numbers 000 through 255 are assigned according to the sequential slot location numbers of the associated circuit boards.
  4. Multifrequency Receivers (4RSTA)/External Equipment Interface (DK01)/Key Interface (DK02)/External Memory for AP00 (ME00)/Voice Recording (ME01):  
Consecutive circuit numbers beginning at 00 are assigned according to the sequential slot location numbers of the associated circuit boards.
  5. TNTC Card:  
Number 0 circuit of the card is assigned to External Hold Music Interface.
  6. Extension data:  
Following data is assigned on a per-extension basis.  
Type of dial signal: Dual-Tone, Multi-Frequency (DTMF) for Single-Line Telephones.

## RESIDENT SYSTEM PROGRAM (CONT'D)

7. The following trunk data is assigned on a per-trunk basis:  
Trunk Route Numbers:
  - 00 for Central Office Lines
  - 01 for 2-wire *E&M Tie Lines*
  - 02 for 4-wire *E&M Tie Lines*
  - 03 for *Direct Inward Dial* linesIncoming call indication:  
Provided at trunk line appearance LED and ANS key LED.
  
8. Trunk Route Data:  
Following data is assigned on a trunk-route basis.  
Type of trunk:
  - RT00→Direct Distance Dialing
  - RT01, RT02→*E&M Tie Lines*
  - RT03→*Direct Inward Dialing*Type of address signaling for all trunk routes is DTMF for incoming and outgoing calls.  
  
*E&M Tie Lines* are assigned for wink-start operation.
  
9. *System Speed Dialing* memory block data:  
100 Memory blocks are allocated to tenant 00.
  
10. Multiline Terminal line key data:  
The following data is assigned according to the type of the terminal.
  - ETE-6D-2, ETE-6-2
    - Line key 06 - Primary extension
    - Line keys 01 through 05 - Trunks 000 through 004
  
  - ETE-16D-2, ETE-16-2
    - Line key 16 - Primary extension
    - Line keys 01 through 15 - Trunks 000 through 014
  
11. Prime Line:  
For all Multiline Terminals, primary extension is assigned as *Prime Line*.
  
12. Memory allocation for *Direct Station Selection (DSS)/Station Speed Dial* keys :
  - Multiline Terminals with DSS keys - 20 buffers,
  - Multiline Terminals without DSS keys - 10 buffers,
  - Single-Line Telephones - 10 buffers,
  - Up to the maximum of 4500 buffers.
  
13. All stations are assigned to tenant 00.
  
14. Station Message Detail Record (SMDR) (**Series 600 enhancement**)

**RESIDENT SYSTEM PROGRAM (CONT'D)**

14. The following table shows the numbering plan.

SERVICE FEATURES		ACCESS CODE
Operator Call		0
Call Hold		11
First digit of three-digit extension number		2, 3, or 4
Internal Zone Page (Access)	Group 0	50
	Group 1	51
	Group 2	52
	Group 3	53
	Group 4	54
Internal Zone Page (Meet-Me)	Group 0	55
	Group 1	56
	Group 2	57
	Group 3	58
	Group 4	59
Timed Reminder/Automatic Wake Up	Set	5*
	Cancel	5#
Name Change by Station		62
Background Music (Access)		66
Day/Night Mode change by station dialing		68
Call Park System Set		6*
Call Park System Retrieve		6#
Tunk Answer Any Station (Access)		72
Call Pickup Directed		73
Call Pickup Group		74
Call Pickup Designated Group		75
Station Speed Dial Programming	Set	7*
	Cancel	7#
Trunk Access Codes	RT00	9
	RT01	81
	RT02	82

• Refer to the Variable Timing Parameters feature for default data relating to timeouts.

**PROGRAMMING**

No programming is required. (For the details of system data programmed, refer to CHAPTER 7 RESIDENT SYSTEM PROGRAM of the System Programming Manual.)

## RETURN MESSAGE SCHEDULE DISPLAY

### GENERAL DESCRIPTION

This feature permits any station user to register their *Return Schedule* from their phone when they leave their desk or the premises, and have the *Return Schedule* displayed on a calling Multiline Terminal with a Liquid Crystal Display (LCD) during their absence.

### STATION APPLICATION

All stations can set a *Return Schedule*. However, only Multiline Terminals with LCD can display the schedule.

### OPERATING PROCEDURE

To set *Return Schedule* from any station:

1. Go off-hook and receive internal dial tone.
2. Dial the *Return Schedule* feature access code.
3. Dial the number corresponding to desired message:

<u>Dial</u>	<u>Message</u>
0	IN:BACK HH:MM
1	OUT:BACK HH:MM
2	AWAY:BACK MM:DD

4. If 0 or 1 is selected, dial the desired time (in five-minute increments on a 24-hour basis, depending on programming).
5. If 2 is selected, dial the month and date (ex.: for June, 8, enter 0608).
6. Restore handset and the *Return Schedule* is registered.

To cancel *Return Schedule* from the station that set *Return Schedule*:

1. Go off-hook and receive internal dial tone.
2. Dial *Return Schedule* cancel code.
3. Restore handset and the *Return Schedule* is canceled.

### SERVICE CONDITIONS

1. Registration of a *Return Schedule* is possible from any type of station (either Single-Line Telephone or Multiline Terminal).
2. Multiline Terminal users can not only register *Return Schedule* on their primary extensions but also on secondary extension appearances for the associated extension user. Calls to the primary extension will result in receipt of the *Return Schedule* message.
3. The *Call Forwarding* feature has priority over the *Return Schedule* feature.
4. When a call is rerouted to another station (by *Call Forwarding*), and if that station has registered a *Return Schedule*, that *Return Schedule* is displayed to the calling party.
5. The feature access code for *Return Schedule* can be programmed in a DSS key on the Multiline Terminal.
6. Up to three different messages can be selected:
  - a. In: Back:—recommended when the station user is not at his desk but is still on premises (in a meeting, in the building, etc.) Provides an hour and minute display.

## RETURN MESSAGE SCHEDULE DISPLAY (CONT'D)

- b. Out: Back:—recommended when the station user has left the premises but will be back within the same day. Provides an hour and minute display.
  - c. Away: Back:—recommended when the station user has left the premises and will be away for an extended time period. Provides a month and date display.
7. Reorder tone is heard by the calling party when a station that set *Return Schedule* is called. An option is available (system wide) to allow calling that station and receiving Ringback tone.
  8. The lower portion of the LCD on a Multiline Terminal with display is used to provide the *Return Schedule* display.
  9. Entry of return time is through four dialed digits (HH:MM) for hours and minutes.
  10. Entry of return date is through four dialed digits (MM:DD) representing the month and day.

### PROGRAMMING

START	DESCRIPTION	DATA
CM12	Assign the Class of Service for setting the Return Message Schedule.	<ul style="list-style-type: none"> <li>• CM12, YY=02</li> <li>(1) X-XXXX (Station No.)</li> <li>(2) XXXX                             <ul style="list-style-type: none"> <li>Service Restriction Class A (00-15 ◀)</li> </ul> </li> </ul>
CM15		
CM08	Assign whether the call to station, set for Return Message Schedule Display, gets ringing or Reorder Tone. (Series 600 enhancement)	<ul style="list-style-type: none"> <li>• CM=15, YY=19</li> <li>(1) Service Restriction Class A (00-15) assigned by CM12, YY=02</li> <li>(2) 1 ◀ : Allowed</li> </ul>
CM20	Assign an access code for the Return Message Schedule set and cancel.	<ul style="list-style-type: none"> <li>(1) 334</li> <li>(2)                             <ul style="list-style-type: none"> <li>0 : Available (Ringing)</li> <li>1 ◀ : Not Available (ROT Connection)</li> </ul> </li> </ul>
END		<ul style="list-style-type: none"> <li>• Y=0-3 (Number Plan Group 0-3)</li> <li>(1) X-XXX: Access Code (#8)</li> <li>(2)                             <ul style="list-style-type: none"> <li>A54: Return Message Schedule Display Set</li> <li>023: DND and/or Return Message Schedule Display Cancel</li> </ul> </li> </ul>

### HARDWARE REQUIRED

ETE-16D-2/ETE-6D-2/ETE-16-2/ETE-6-2 and PK-2DLC Card.

## RINGING LINE PICKUP

### GENERAL DESCRIPTION

This feature provides the ability to answer any call ringing into a Multiline Terminal by just lifting the handset.

### STATION APPLICATION

All Multiline Terminals.

### OPERATING PROCEDURE

With an incoming call (or recall) in progress:

1. Lift handset and the call is answered.
2. Talk.

### SERVICE CONDITIONS

1. This feature is assigned in station *Class of Service*.
2. The following priority applies for answering of multiple incoming calls:
  1. Voice Call.
  2. Incoming call on primary extension; recalls on primary extension.
  3. Incoming call on trunk line key; recalls on trunk line key.
  4. Incoming call on secondary extension; recalls on secondary extension.
3. Line preselection has priority over ringing-line pickup. This provides priority selection for the user.
4. The *Prime Line Pickup* feature takes priority over *Ringling Line Pickup* when the SPKR key is used to answer the call. If necessary, the *Prime Line Pickup* feature can be disabled on a per-station basis.



## RINGING LINE PICKUP (CONT'D)

### PROGRAMMING

<u>START</u>	<u>DESCRIPTION</u>	<u>DATA</u>
CM12	Assign the Class of Service for Ringing-Line Pickup.	<ul style="list-style-type: none"> <li>• CM12, YY=07</li> <li>(1) X-XXXX (Primary Extension)</li> <li>(2) 00-15 ◀ (Service Restriction Class C)</li> </ul>
CM15		<ul style="list-style-type: none"> <li>• CM15, YY=82</li> <li>(1) 00-15 (Service Restriction Class C assigned by CM12, YY=07.)</li> <li>(2) 0: Allowed</li> </ul>
CM15	Assign the Class of Service for Ringing-Line Pickup by ANS key, if required.	<ul style="list-style-type: none"> <li>• CM15, YY=86</li> <li>(1) 00-15 (Service Restriction Class C assigned by CM12, YY=07.)</li> <li>(2) 0: Ringing-Line Pickup by ANS key is provided</li> </ul>
<u>END</u>		

### HARDWARE REQUIRED

ETE-16D-2TEL, ETE-6D-2TEL, ETE-16-2TEL, or ETE-6-2TEL, and a PK-2DLC card.

## ROUTE ADVANCE

### GENERAL DESCRIPTION

This feature automatically routes outgoing calls over alternate facilities when the first choice trunk group is busy. Users select the first choice route by dialing the corresponding access code, and the equipment then advances through alternate trunk groups only if the first choice is busy.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

No manual operation is required.

### SERVICE CONDITIONS

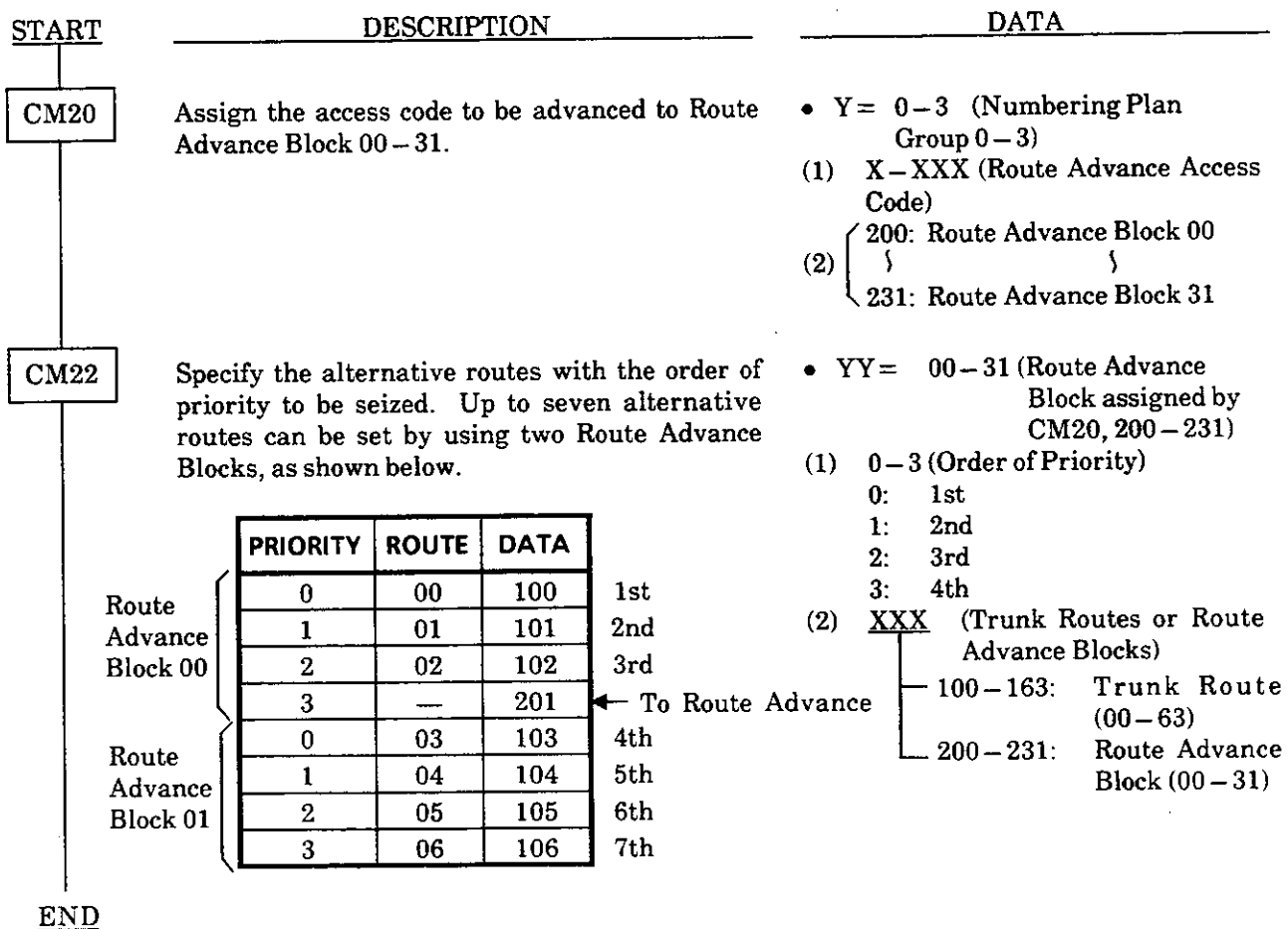
1. There is no indication provided to the station user whether the call is routed over the first choice or subsequent choice facilities.
2. *Station Message Detail Recording* (SMDR) will generate call records in conjunction with this feature.
3. *Route Advance* is trunk-route based.
4. Careful consideration should be given to the use of FX trunks as an alternate facility since in many instances these lines require outpulsing of digits for long distance (which the user may not dial because he will not know he is connected to an FX trunk). Use of the *Least Cost Routing* feature overcomes this difficulty.
5. The maximum number of trunk routes to be included in a single *Route Advance* group is seven.
6. The total number of routes that can be contained in all *Route Advance* groups is 64.
7. The same route can be included in two or more different groups.
8. *Route Advance* occurs only when the dialed code accesses the first-choice trunk route in the *Route Advance* table.
9. No code conversion capability is provided with *Route Advance*. The digits the user dials (after the trunk access code) will be sent over the selected trunk regardless of trunk route used. The user will not know which trunk group is selected; therefore, only those trunk routes that accept the same dialing format may be assigned to a given *Route Advance* group.
10. FX trunk groups to a foreign number plan area (FNPA) do not require the dialing of that FNPA area code. Therefore, these FX trunks may not be used in the same *Route Advance* table with local exchange or WATS trunks. Use of the *Least Cost Routing* feature overcomes this difficulty.
11. *E&M Tie Lines* should not be assigned to a *Route Advance* table that includes CO, FX, or WATS trunk groups.
12. *Route Advance* is available for use with outgoing CO, FX, WATS, CCSA, and *E&M Tie Lines*.

## ROUTE ADVANCE (CONT'D)

13. The dialing party may be either a station, Attendant, *E&M Tie Line*, or outside party using *Direct Inward System Access (DISA)*.

14. If the NEAX1400 IMS is designated as KF registration, this feature will not be available.

### PROGRAMMING



## SAVE AND REPEAT

### GENERAL DESCRIPTION

This feature allows a Multiline Terminal to save a specific dialed number and then redial that number at a later time.

### STATION APPLICATION

All Multiline Terminals.

### OPERATING PROCEDURE

1. Go off-hook, seize any idle line, and dial a number.
2. After the number has been dialed, press the Save and Repeat feature key. The dialed number is stored for future use. The associated LED lights red.
3. To access this number later, go off-hook, and receive dial tone. Press the Save and Repeat key and the saved number will be dialed.

### SERVICE CONDITIONS

1. Three *Save and Repeat* keys can be assigned per station.
2. The *Save and Repeat* function may be set at any time after the number has been dialed and before going on-hook.
3. It is not necessary to erase the stored number in order to save another. The second number will automatically replace the first.
4. If necessary, dialing can be added after pressing the *Save and Repeat* key.
5. When a call is originated using the *Save and Repeat* feature, the LED associated with the *Save and Repeat* key goes out. However the memory is retained and that number can be accessed again.
6. To monitor the saved digits, press the *Save and Repeat* key while the station is idle. The saved digits will be displayed if the Multiline Terminal is equipped with an LCD.
7. The trunk access code is saved along with the dialed number on a *Trunk Direct Appearance*. This allows use of the *Save and Repeat* key on an extension.
8. The maximum number of digits that can be stored is 26.

## SAVE AND REPEAT (CONT'D)

### PROGRAMMING

<u>START</u>	<u>DESCRIPTION</u>	<u>DATA</u>
CM90	Assign the SAVE & REPEAT key to the Multiline Terminal.  <b>Note:</b> <i>Up to three Save and Repeat keys can be assigned per Multiline Terminal.</i>	<ul style="list-style-type: none"><li>• YY=00</li><li>(1) Primary Extension No. + <input type="text"/> + Key No.</li><li>(2) F1001, F1013, F1014</li></ul>
<u>END</u>		

### HARDWARE REQUIRED

ETE-16D-2TEL, ETE-6D-2TEL, ETE-16-2TEL, or ETE-6-2TEL, and a PK-2DLC card.

## SECURITY ALARM

### GENERAL DESCRIPTION

This feature provides an indication on the *Attendant Console* when a contact closure occurs.

### STATION APPLICATION

Not applicable.

### OPERATING PROCEDURE

No manual operation is required.

### SERVICE CONDITIONS

1. The contact to be monitored is connected across Tip (T) and Ring (R) of one circuit on a 2LC card.
2. The contact installed must be a normally open contact.
3. The contact generated signal is non-latching; therefore, if the contact opens again, the signal to the *Attendant Console* stops.
4. The station number assigned to the single-line circuit associated with the contact closure is displayed when the Attendant presses the **ATND** key or **ANSWER** key.
5. Assignment of this feature is accomplished using *Hotline* assignment of a single-line extension to the *Attendant Console*. Refer to the *Hotline* feature for more information.

### PROGRAMMING

<u>START</u>	<u>DESCRIPTION</u>	<u>DATA</u>
CM12	Assign the Hot Line to the Station connected to the contact.	<ul style="list-style-type: none"> <li>• YY=03</li> <li>(1) X-XXXX (Station No.)</li> <li>(2) 04: Hot Line</li> </ul>
CM52	Assign the HA-610Z/SN610 Attendant Console as the Hot Line destination of the Station.	<ul style="list-style-type: none"> <li>• YY=00-99 (Hot Line Pair No.)</li> <li>(1) 0: Calling Side</li> <li>(2) X-XXXX (Station No. associated with the contact closure.)</li> </ul> <ul style="list-style-type: none"> <li>(1) 1: Called Side</li> <li>(2) E00X               <ul style="list-style-type: none"> <li>— HA-610Z ATTCON No.0-7 assigned by CM06, YY=01.</li> <li>— SN610 ATTCON No.0-7 assigned by CM10.</li> </ul> </li> </ul>
<u>END</u>		

## SOFTWARE LINE APPEARANCE

### GENERAL DESCRIPTION

This feature permits assignment of circuits, which do not physically exist, to be used as secondary extensions on Multiline Terminals. There are 256 software ports that can be assigned to line keys and used as desired.

### STATION APPLICATION

All Multiline Terminals.

### OPERATING PROCEDURE

Normal call processing procedures apply.

### SERVICE CONDITIONS

1. A *Software Line Appearance* can be assigned as follows:
  - *Hotline*
  - *Intercom*
  - *Station Hunting* pilot number
  - *Uniform Call Distribution* phantom number
  - Secondary appearance on Multiline Terminals
  - Pilot numbers for hunting groups and *Uniform Call Distribution (UCD)* groups
2. When accessing the *Call Pickup* feature, the *Software Line Appearance* assigned as a secondary extension can only pickup calls directed to the group programmed for that secondary extension.
3. A *Software Line Appearance* can enter or access the *Speed Dialing* data on the station of the same Multiline Terminal on which it appears.
4. All *Station Message Detail Recording (SMDR)* data of the *Software Line Appearance* will be recorded as activity on the primary extension of the Multiline Terminal on which it appears, including that on secondary extension appearances.
5. In addition to the standard 256 *Software Line Appearances* provided, when less than 448 time slots are assigned, additional software appearances are available. When stations, trunks, or other circuits are assigned time slots later, this may require removal of programmed *Software Line Appearances* to reassign these time slots.
6. When a real number (corresponding to an installed station) is not used as a pilot number for *Station Hunting* or UCD groups, a software line can be used.
7. See *Intercom*, *Station Hunting*, *Uniform Call Distribution With Overflow* and *Hotline* features for details.

## SOFTWARE LINE APPEARANCE (CONT'D)

### PROGRAMMING

<u>START</u>	<u>DESCRIPTION</u>	<u>DATA</u>
CM11	<p>Assign the Software Line Appearance (Virtual-Line Station Number) to the required Virtual LEN.</p> <p>The Virtual LENs have no relation with the physical LENs used in CM10. Therefore, any Virtual LENs can be assigned to each Virtual Line Station Number. However, the Virtual-Line Station Number should be different from the Single-Line Number assigned by CM10.</p>	<p>(1) Virtual LEN (0000-0255)            (2) X-XXXX (Virtual-Line Station No.)</p>
CM12	<p>Assign the Station Class data to each Virtual-Line Station No.</p>	<ul style="list-style-type: none"> <li>• YY= 01 (Trunk Restriction Class)</li> <li>• YY= 02 (Service Restriction Class)</li> <li>• YY= 03 (Kind of Telephone)</li> <li>• YY= 04 (Tenant Allocation)</li> </ul> <p>(1) X-XXXX (Virtual-Line Station No.)            (2) Refer to:            Class of Service Individual,            Restriction From Outgoing Calls</p>
CM13	<p>Assign the Station Class data to each Virtual-Line Station No.</p>	<ul style="list-style-type: none"> <li>• YY=12</li> <li>(1) X-XXXX (Virtual-Line Station No.)</li> <li>(2) 1 ◀: Ordinary Station</li> </ul> <ul style="list-style-type: none"> <li>• YY=13</li> <li>(1) X-XXXX (Virtual Line Station No.)</li> <li>(2) 1 ◀: Ordinary Station</li> </ul>
CM90	<p>Assign the Virtual-Line Station to a Multiline Terminal. One Virtual-Line Station may be assigned to several Multiline Terminals.</p>	<ul style="list-style-type: none"> <li>• YY=00</li> <li>(1) Primary Extension No. + <input type="text"/> + Key No.</li> <li>(2) X-XXXX (Virtual-Line Station No.)</li> </ul>
<u>END</u>		



## STATION HUNTING

### GENERAL DESCRIPTION

Three *Station Hunting* arrangements are available. *Circular Hunting* processes the call no matter which station in the hunt group is called. *Terminal Hunting* initiates a hunt only when the pilot number of a hunt group is called. *Secretarial Hunting* is initiated when a busy secretarial station in a *Circular Hunt* group or *Terminal Hunt* group is called.

## STATION HUNTING-CIRCULAR

### GENERAL DESCRIPTION

When a busy station in a hunt group is called, this feature permits the call to be processed automatically through the hunt group in a preprogrammed order from that station's position within the hunt group.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

No manual operation is required.

### SERVICE CONDITIONS

1. When all stations within a *Station Hunting - Circular* group are busy, the calling party will receive busy tone unless the call is rerouted by *Station Hunting - Secretarial*.
2. Assignment of station numbers to a *Station Hunting - Circular* group may be in any numerical order.
3. Calls to any programmed station in a *Station Hunting - Circular* group will, when that station is busy, proceed through all other stations entered subsequently in the hunt group until reaching the last. Optionally, the hunting can continue down from the first station called or from the first station programmed in the hunt group. The last station can be set to perform Switch Back. If the station is called directly and is busy, the hunt will commence in the reverse direction of the normal hunt direction.
4. If a hunt group station has set *Do Not Disturb*, hunting will bypass that station and continue in the order of hunting.
5. The maximum number of stations per hunt group is 60.
6. There is no limit to the number of *Station Hunting - Circular* groups within the system.
7. In a *Station Hunting - Circular* group, any number of stations can be designated as secretarial stations. When all stations in the the *Station Hunting - Circular* group are busy, the system will reroute a call initiated to the secretarial station to a preassigned *Station Hunting - Secretarial* group. All stations within the *Station Hunting - Circular* group can be assigned the same station as an entry to the *Station Hunting - Secretarial* group.
8. *Call Forwarding All Calls* has priority over Station Hunting if the dialed station has this feature set. *Call Forwarding - Busy*, if set at the called station, can occur if all stations in the hunting group are busy.
9. Recalls (*Call Back, Call Park, Camp-On, Call Transfer, etc.*) return to the originating station and do not hunt.

## STATION HUNTING-CIRCULAR (CONT'D)

10. Each station can belong to only one hunt group.
11. This feature will be activated whenever the hunt group is dialed or terminated under the following conditions:
  - Dialed from a station
  - Dialed from *Attendant Console*
  - Dialed from *Direct Inward Dialing (DID)*
  - Dialed from an *E&M Tie Line*
  - Terminated by *Direct In Termination (DIT)*
  - Terminated by *Hotline*
  - Terminated by *Off-Hook Alarm*
  - Terminated by *Priority Call*
12. The *Attendant Console* cannot be a member of a hunt group.

### PROGRAMMING

START	DESCRIPTION	DATA
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin-bottom: 10px;">CM18</div> <div style="border-left: 1px solid black; border-right: 1px solid black; height: 200px; margin-left: 5px;"></div>	<p>Setup Station Hunting Group. To set up one Hunting Group, assign the station numbers one-by- one in the order of hunting, as shown below:</p> <p><b>Example:</b> For setting Station Numbers 200, 201, 202 into one Hunting Group.</p> <div style="display: flex; align-items: center; margin: 10px 0;"> <div style="margin-right: 10px;"> <p>1 st Operation [ (1) 200 (2) 201</p> <p>2 nd Operation [ (1) 201 (2) 202</p> <p>3 rd Operation [ (1) 202 (2) 200</p> </div> <div style="text-align: center;"> </div> </div> <p>Specify the Hunting capability of each Station. To continue the hunt in the original direction, if the station is busy, set to "1"; to reverse the direction (last station only), set to "5".</p>	<ul style="list-style-type: none"> <li>• Y=0                             <ol style="list-style-type: none"> <li>(1) X-XXXX (Station No. to be included in the Station Hunting Group)</li> <li>(2) X-XXXX (Another Station No. to be linked.)</li> </ol> </li>   <li>• Y=1                             <ol style="list-style-type: none"> <li>(1) X-XXXX (Station No.)                                     <div style="margin-left: 20px;"> <p>(2) { 1: If busy, hunt in original direction. 5: If busy, hunt in reverse direction.</p> </div> </li> </ol> </li> </ul>
END		

- Note 1:** The maximum number of stations per hunt group is 60.  
 There is no limit to the number of Circular Hunt groups within the system.
- Note 2:** Each station can belong to only one hunt group.
- Note 3:** The Attendant Console cannot be a member of a hunt group.

## STATION HUNTING-TERMINAL

### GENERAL DESCRIPTION

When a pilot number is dialed and that number is busy, sequential Station Hunting begins. However, if a number other than the pilot number is dialed and that number is busy, busy tone will be provided; *Station Hunting will not start.*

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

No manual operation is required.

### SERVICE CONDITIONS

1. If all lines in a hunt group are busy, the caller will receive busy tone.
2. Only calls to the pilot number will initiate a Terminal Hunt. Calls to other stations in the Terminal Hunt group will ring at that station, or receive busy tone.
3. The maximum number of stations that can be included in one *Station Hunting* group is 60, including the pilot station.
4. When the extension number used as a pilot number has set *Call Forwarding-All Calls*, the Call Forward will reroute the call and *Station Hunting-Terminal* will not occur.
5. When an extension within the *Station Hunting-Terminal* group other than the pilot extension sets *Call Forwarding-All Calls*, calls already in the hunt process will bypass the extension and continue hunting. Calls directed to the extension (versus directed to the pilot extension) will follow the Call Forward setting.
6. When any extension except a pilot in a hunt group has set *Do Not Disturb*, the extension will be bypassed and the Station Hunting continues. When a pilot station has set *Do Not Disturb*, the calling party will receive reorder tone.
7. There is no limit to the number of *Station Hunting - Terminal* groups within the system.
8. The features-priority for call handling is as follows:
  - *Call Forwarding - All Calls*
  - *Station Hunting*
  - *Call Forwarding - Busy Line*
  - *Camp-On (Call Waiting Method/Transfer Method)*

## STATION HUNTING-TERMINAL (CONT'D)

9. Recalls (*Call Back, Call Park, Camp-On, Call Transfer, etc.*) return to the originating station and do not hunt.
10. This feature will be activated whenever the hunt group is dialed or terminated under the following conditions:
- Dialed from a station
  - Dialed from *Attendant Console*
  - Dialed from *Direct Inward Dial (DID)*
  - Dialed from an *E&M Tie Line*
  - Terminated by *Direct In Termination (DIT)*
  - Terminated by *Hotline*
  - Terminated by *Off-Hook Alarm*
  - Terminated by *Priority Call*

### PROGRAMMING

<u>START</u>	<u>DESCRIPTION</u>	<u>DATA</u>
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM18</div>	<p>Setup Station Hunting Group. To set up one Station Hunting Group, assign the station numbers one by one shown below.</p> <p>1 st Operation [ (1) Station A                   (2) Station B</p> <p>2 nd Operation [ (1) Station B                   (2) Station C</p> <p>Assign the Pilot Station to the required station number within the Hunting Group. For the Member Stations, set the data to "0."</p>	<ul style="list-style-type: none"> <li>• Y=0</li> <li>(1) X-XXXX (Station No. to be included in the Station Hunting Group)</li> <li>(2) X-XXXX (Another Station No. to be included in the Same Hunting Group.)</li> </ul> <ul style="list-style-type: none"> <li>• Y=1</li> <li>(1) X-XXXX (Station No.)</li> <li>(2) { 1: Pilot Station       0: Member Station</li> </ul>
<u>END</u>		

**Note:** *The maximum number of stations that can be included in one Station Hunting group is 60, including the pilot station. There is no limit to the number of Terminal Hunt groups within the system.*

## STATION HUNTING-SECRETARIAL

### GENERAL DESCRIPTION

This feature allows assignments to be given to members of Terminal and Circular Hunting groups to reroute calls (when their hunting group is all busy) to a back-up hunting group.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

No manual operation is required.

### SERVICE CONDITIONS

1. When all stations in a hunt group are busy, a method of rerouting the incoming calls to a back-up *Station Hunting-Secretarial* hunt group exists. For a Terminal Hunt group, the pilot number is assigned an extension number of a station within the back-up *Station Hunting - Secretarial* group. For a *Station Hunting - Circular* group, each station (because each station can be considered a pilot station) is assigned an extension number of a station within the back-up *Station Hunting-Secretarial* group. When all stations in the Terminal or Circular Hunt are found busy, the system will reroute incoming calls to that station in the *Station Hunting-Secretarial* group, and station hunting will continue.
2. The *Station Hunting-Secretarial* hunt group can be a Circular or Terminal Hunt group.
3. A maximum of 31 extensions can be members of the *Station Hunting - Secretarial* group.
4. Any number of stations in *Station Hunting - Terminal* groups and *Station Hunting - Circular* groups can have their calls rerouted to a station within the *Station Hunting - Secretarial* group. In practice, it is best to assign an entry extension into the *Station Hunting - Secretarial* group for the pilot number of *Station Hunting - Terminal* group and every member of the group. All *Station Hunting - Terminal* and *Station Hunting - Circular* groups can be rerouted to a single extension within the *Station Hunting - Secretarial* group. Multiple entry points can be used by assigning different *Station Hunting - Terminal* pilot extensions and different *Station Hunting - Circular* member extensions to different *Station Hunting - Secretarial* extensions.
5. Unlike the normal Circular Hunt group where a call to a member extension which has *Call Forwarding-All Calls* or *Call Forwarding-Busy* set will result in Call Forwarding occurring, a rerouted Station Hunt group will not follow call forward setting, but will bypass the forwarded station and continue the Secretarial Hunt.
6. One *Station Hunting Secretarial* group is available per system.

## STATION HUNTING-SECRETARIAL (CONT'D)

### PROGRAMMING

<u>START</u>	<u>DESCRIPTION</u>	<u>DATA</u>
CM18	Assign the Secretary Station Serial Number to each Station Hunting Group.  <b>Note:</b> <i>A maximum of 31 extensions can be members of the Secretarial Hunt group.</i>	<ul style="list-style-type: none"> <li>• Y=2</li> <li>(1) X-XXXX: Pilot Station No. (Terminal)/All Member Station numbers (Circular)</li> <li>(2) 00-30 (Secretary Station Serial No.)</li> </ul>
CM19	Assign the station number to each Secretary Station Serial Number assigned by CM18, Y=2.  Specify the Hunting capability of each Secretary Station.  Set up the order of Secretary Hunting. Assign the Secretary Station Numbers one by one in order of the Secretary Hunting shown below.	<ul style="list-style-type: none"> <li>• Y=0</li> <li>(1) 00-30 (Secretary Station Serial Number)</li> <li>(2) X-XXXX (Secretary Station No.)</li> </ul> <ul style="list-style-type: none"> <li>• Y=1</li> <li>(1) 00-30 (Secretary Station Serial No.)</li> <li>(2) { 5: Hunting (As per Y=2) 7: No Hunting</li> </ul> <ul style="list-style-type: none"> <li>• Y=2</li> <li>(1) X-XXXX (Secretary Station No.)</li> <li>(2) X-XXXX (Another Secretary Station No. to be hunted.)</li> </ul>
	1 st Operation [ (1) Station A (2) Station B  2 nd Operation [ (1) Station B (2) Station C	
<u>END</u>		

## STATION MESSAGE DETAIL RECORDING (SMDR)

### GENERAL DESCRIPTION

This feature provides a call record for all outgoing station-to-trunk calls and incoming trunk-to-station calls. This facilitates cost control by identifying trunk use and misuse by individual stations. Station Message *Detail Recording* (SMDR) enables call billing to customers and clients, and provides a means for checking local telephone bills.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

No manual operation is required.

### SERVICE CONDITIONS

1. *SMDR* can be programmed to record outgoing calls or toll calls only, depending on the customers' requirements.
2. An RS-232-C compatible printer with an RS-232-C straight connection cable and/or a call accounting unit must be locally provided. For outgoing calls, up to 26 digits dialed can be recorded.
3. When customer-provided computer equipment is connected using the RS-232-C interface, *SMDR* information will be transmitted directly to the equipment as each call record is completed.
4. One RS-232-C interface port is provided. The following specifications apply to this port:
  - Synchronization - Asynchronous
  - Data Speed - 4800 bps (maximum)
  - Code - ASCII 7-bit + parity bit

If the distance between the NEAX1400 IMS and the processing computer exceeds 50 feet, an asynchronous modem should be used.

5. If the outgoing call is directed to a trunk which does not supply answer supervision, the *SMDR* will start recording the call approximately 10 seconds after the last digit has been dialed.
6. Supervision of the status of the external RS-232-C terminal is not supplied.
7. The optional AP00 board is required to supply the *SMDR* feature. This application processor provides memory for a maximum of 1000 calls. To expand the memory by up to 12,000 calls, up to three additional memory boards (APMEM-A) can be installed. When a call is completed, the record is sent to the output device and is removed from memory. Should the amount of calls exceed the *SMDR* memory, those overflow calls will not be recorded.
8. *Account Codes, Forced Account Codes, Authorization Codes, and DISA Codes* on Tandem connections are reported in the applicable call record.



## STATION MESSAGE DETAIL RECORDING (SMDR) (CONT'D)

9. *SMDR* provides a record of incoming *E&M Tie Line* tandem calls where another trunk is dial accessed.
10. For details of *SMDR* format, data stream, memory buffer, etc., refer to the NEAX1400 IMS SMDR System Manual [ND-43651(E)].

### PROGRAMMING

Refer to NEAX1400 IMS SMDR System Manual [ND-43651(E)].

### HARDWARE REQUIRED

PJ-AP00 Board and cables (AP CA-B and SMDS CA-D)

PK-ME00 Card (As required)

1 – 3 Additional Memory Cards (PK-ME00) are required depending on the number of calls that can be stored simultaneously shown below.

<u>No. of PK-ME00 Cards</u>	<u>No. of Calls</u>
1	4,000
2	8,000
3	12,000

Customer-owned computer system

For hardware installation, refer to NEAX1400 IMS SMDR System Manual [ND-43651(E)].

## STATION SPEED DIALING

### GENERAL DESCRIPTION

This feature allows a station user to dial frequently called numbers by dialing an access code and an abbreviated code, or by pressing a feature key or line key assigned to *Station Speed Dialing*.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

#### Multiline Terminals

To operate using One-Touch key:

Press the feature key associated with the desired telephone number. The speaker automatically turns on and the number is dialed.

To operate using dial access:

1. Press **SPKR** key and dial the Station Speed Dialing access code.
2. Dial abbreviated code assigned to desired number.
3. Number is dialed.

To program numbers in memory:

1. Press the **CNF** key and the desired feature key or line key. Previously stored digits are displayed on the LCD.
2. Dial the desired number. Old digits will be erased and the new number is displayed.
3. Press the **CNF** key. The LCD will display SET.

#### Single-Line Telephones

To operate :

1. Go off-hook and dial the Station Speed Dialing access code.
2. Dial the abbreviated code assigned to the desired number.
3. The number is dialed.

To program numbers in memory:

1. Go off-hook and dial the Station Speed Dialing programming code.
2. Dial the abbreviated code to be assigned.
3. Dial the trunk access code and the desired telephone number.
4. Restore handset.

### SERVICE CONDITIONS

1. Each *Station Speed Dialing* buffer can store a maximum of 16 digits, including pauses. The trunk access code (maximum two digits) must be dialed to be stored; however, the trunk access code is not counted in the 16 digits. If the first and/or second digit is not a trunk access code, a maximum of six digits can be stored.
2. There are 10 Speed Dialing buffers in a memory block, and there are 450 memory blocks for a total of 4500 Speed Dialing buffers per system.

## STATION SPEED DIALING (CONT'D)

3. Single-Line Telephones can be assigned up to 10 memory blocks (100 buffers) each. The ETE-6-2 and ETE-6D-2 Multiline Terminals can be assigned up to 11 memory blocks (100 dial access buffers plus 10 feature keys) each. The ETE-16D-2 Multiline Terminal can be assigned up to 12 memory blocks (100 dial access buffers plus 20 feature keys) each. When *Station Speed Dialing* is assigned, the minimum assignment is one memory block (10 buffers).
4. The same memory blocks can be shared by multiple stations. When the same memory blocks are shared, there is an assignment that allows selected stations to be able to reprogram the buffer on a per-station basis.
5. Only the feature keys on Multiline Terminals can be programmed for internal or external calls. All other Speed Dialing buffers are for trunk calls only.
6. *Code Restriction* can be allowed or denied with *Station Speed Dialing* on a system basis.
7. The numbers stored in each Speed Dialing buffer will be retained in the event of a system reinitialization or power failure.
8. A pause may be programmed by using the # or \* key. If # is used, the pause duration is 1.5 seconds. If \* is used, a system programmable pause (1.5 - 12 seconds; default is 3 seconds) is provided.
9. Hook flashes cannot be programmed into *Station Speed Dialing*.
10. Refer to the *Consecutive Speed Dialing* feature for additional information.
11. If the NEAX1400 IMS is designated as KF registration, this feature will not be available, except for the following operations:
  - Press Trunk (TRK) key (trunk service)
  - Press One-Touch key (station speed dialing)

## STATION SPEED DIALING (CONT'D)

### PROGRAMMING

START	DESCRIPTION	DATA
CM12	Assign Service Restriction Class A to each station.	<ul style="list-style-type: none"> <li>• YY=02</li> <li>(1) X-XXXX (Station No.)</li> <li>(2) XXXX                             <ul style="list-style-type: none"> <li>└ Service Restriction Class A 00-15 ◀</li> </ul> </li> </ul>
CM15	Assign this service to Service Restriction Class A assigned by CM12, YY=02.	<ul style="list-style-type: none"> <li>• YY=07</li> <li>(1) XX (Service Restriction Class A assigned by CM12, YY=02)</li> <li>(2) 1 ◀ : Allowed</li> </ul>
CM20	Assign the access codes for Station Speed Dialing Origination, Entry and Cancel respectively.	<ul style="list-style-type: none"> <li>• Y=0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX: Access Code (*, 7*, 7#)</li> <li>(2) {                             <ul style="list-style-type: none"> <li>064: Origination</li> <li>065: Entry</li> <li>066: Cancel</li> </ul> </li> </ul>
CM08	Specify the Toll Restriction for an outgoing call by Station Speed Dialing.	<ul style="list-style-type: none"> <li>(1) 035</li> <li>(2) 0/1 ◀ : Not to be provided/To be provided:</li> </ul>
	Specify "#" dialing is set as paused data (1.5 sec.) or called number to C.O line when the DTMF station or Multiline Terminal dials "#" in the setting of the Station Speed Dialing feature.	<ul style="list-style-type: none"> <li>(1) 168</li> <li>(2) 0/1 ◀ : Paused data (1.5 sec.)/ Called number to C.O line.</li> </ul>
	Specify "*" dialing is set as programmable pause by CM41-38 or dialed digit when the DTMF station or Multiline Terminal dials "*" in the setting of the Station Speed Dialing feature.	<ul style="list-style-type: none"> <li>(1) 171</li> <li>(2) 0/1 ◀ : Programmable pause by CM41-38/Dialed digit</li> </ul>
A	D	
For Single-Line Telephones or Multiline Terminals (ETE-16-2/ETE-6-2 ETE-16D-2/ETE-6D-2)	For Multiline Terminals (ETE-6D-2/ETE-16D-2)	

## STATION SPEED DIALING (CONT'D)

A  
 CM73

DESCRIPTION		DATA																
<p>Allocate the memory area for Station Speed Dialing to each station. The memory area for storing one called number of Station Speed Dialing is called a "Memory Parcel". An assembly of 10-Memory Parcels is called "10-Slot Memory Block," and one hundred 10-Slot Memory Blocks are called a "1000-Slot Memory Block."</p>		<p>(1) X-XXXX (Station No.)                      (2) XXXXXX <b>Note 2</b></p> <p>Number of blocks in Memory Parcel (01-10)                      Facility for programming the dialed number from the Station (0/1: Effective/Ineffective)                      Memory Start Block No. (00-99) : 10-Slot Memory Block <b>Note 1</b>                      1000-Slot Memory area Number (0-4)</p>																
<table border="1"> <tr><td>Memory Parcel</td></tr> <tr><td>0</td></tr> <tr><td>1</td></tr> <tr><td>⋮</td></tr> <tr><td>9</td></tr> </table>	Memory Parcel	0	1	⋮	9	<table border="1"> <tr><td>10-Slot Memory Block</td></tr> <tr><td>00</td></tr> <tr><td>01</td></tr> <tr><td>⋮</td></tr> <tr><td>99</td></tr> </table>	10-Slot Memory Block	00	01	⋮	99	<table border="1"> <tr><td>1000-Slot Memory Block</td></tr> <tr><td>0</td></tr> <tr><td>1</td></tr> <tr><td>2</td></tr> <tr><td>3</td></tr> <tr><td>4</td></tr> </table>	1000-Slot Memory Block	0	1	2	3	4
Memory Parcel																		
0																		
1																		
⋮																		
9																		
10-Slot Memory Block																		
00																		
01																		
⋮																		
99																		
1000-Slot Memory Block																		
0																		
1																		
2																		
3																		
4																		
	<p>1,000 Memory Parcels                      1,000 Memory Parcels                      1,000 Memory Parcels                      1,000 Memory Parcels                      500 Memory Parcels</p>																	

The number of Memory Parcels for a station is specified by the Number of blocks in Memory Parcel (01-10) shown below.

DATA	Number of Memory Parcel for a station
XXXX01	10
⋮	⋮
XXXX10	100

**Note 1:** If the 1000-slot Memory area Specifier is 4, the Memory Start Block No. should be set to 00-49.

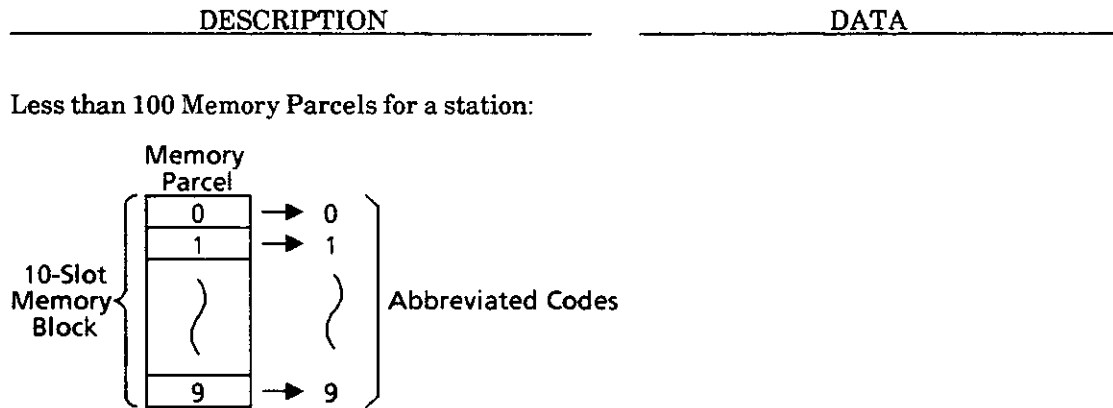
**Note 2:** Refer to Chapter 7 of System Programming Manual for the Resident System Program.

The abbreviated codes required for accessing this feature are automatically given to each station depending on the number of Memory Parcels specified.

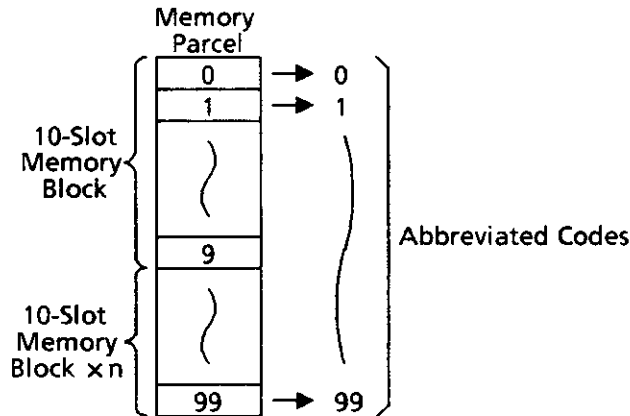
B

## STATION SPEED DIALING (CONT'D)

B



In excess of 100 Memory Parcels for a station:



CM74

Set the stored number to each Memory Slot Number, if required. The stored numbers are usually set from individual stations.

- (1) XXXX (Memory Slot No.)
  - 000 – 999
  - 1000-Slot Memory area Number (0 – 4)
- (2) Stored No. (Max. 16 digits)
 

Setting Method:  
 Outgoing Call Access Code  
 (Max. 2 digits) + [ ] + Stored Number (Max. 16 digits)

To set a pause into the Stored No., enter "C" (Fixed Pause = 1.5 sec) or "D" (Programmable Pause specified by CM41-38) after desired digits.

C

## STATION SPEED DIALING (CONT'D)

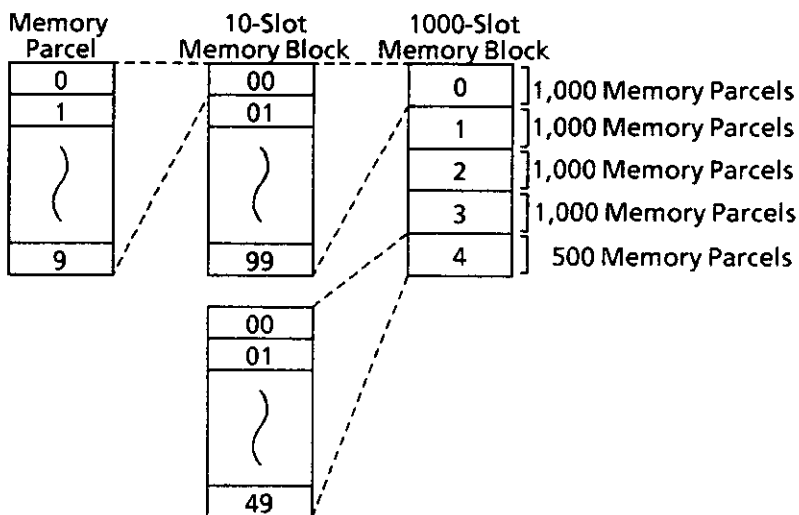


DESCRIPTION	DATA
Assign the Station Speed Dialing keys on each Multiline Terminal, if required.	<ul style="list-style-type: none"> <li>• YY=00</li> <li>(1) Primary Extension No. + <input type="text"/> ,</li> <li style="padding-left: 20px;">+key No. (01-16)</li> <li>(2) F11XX               <ul style="list-style-type: none"> <li>00: Station Speed Dialing 00</li> <li>99: Station Speed Dialing 99</li> </ul> </li> </ul>
Assign the Station Speed Dialing keys on each Add-On Module, if required.	<ul style="list-style-type: none"> <li>• YY=00</li> <li>(1) Primary Extension No. + <input type="text"/> ,</li> <li style="padding-left: 20px;">+key No. (30-59, 87-89)</li> <li>(2) F11XX               <ul style="list-style-type: none"> <li>00: Station Speed Dialing 00</li> <li>99: Station Speed Dialing 99</li> </ul> </li> </ul>

END

## STATION SPEED DIALING (CONT'D)

D	DESCRIPTION	DATA
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">D</div> <div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 5px auto;">CM94</div>	<p>Allocate the memory area for feature keys on each Multiline Terminal.</p> <p>The memory area for storing one called number is called a "Memory Parcel." An assembly of 10 Memory Parcels is called "10-Slot Memory Block", and one hundred 10-Slot Memory Block is called "1000-Slot Memory Block."</p> <p>The ETE-6-2 and ETE-6D-2 require one 10-Slot Memory Block (10 numbers) and the ETE-16D-2 requires two 10-Slot Memory Blocks (20 numbers).</p>	<p>(1) X-XXXX (Primary Extension No.)</p> <p>(2) X XX0 XX</p> <div style="margin-left: 20px;"> <p>Number of 10 slot Memory Blocks              01: For ETE-6D-2              02: For ETE-16D-2</p> <p>Start of 10-Slot Memory Block No. } 000              }              1000-Slot Memory area Number } 449</p> </div>



END



## STEP CALL

### GENERAL DESCRIPTION

This feature allows the Attendant or station user, after calling a busy station, to call an idle station by simply dialing an additional digit. This feature will operate only if the number of the idle station is identical to that of the busy station, excepting the last digit.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

To operate:

1. Dialed station (220) is busy.
2. Dial "5".
3. If station 225 is idle, call will be connected there.

### SERVICE CONDITIONS

1. If the second selected station is also busy, *Step Call* can continue until an idle station is reached. When *Call Forwarding - All* is set, and a station called during *Step Call* meets the *Call Forwarding* condition, *Call Forwarding* will occur.
2. *Step Call* can be activated when busy tone is returned on a *Consultation Hold* attempt or *Call Park* attempt.
3. When a call is rerouted by *Call Forwarding*, and the station to which the call was forwarded to is busy, *Step Call* will occur within the forwarded-to station's tens group of stations, and not the initially dialed station's tens group of stations.

### PROGRAMMING

<u>START</u>	<u>DESCRIPTION</u>	<u>DATA</u>
CM08	Provide the system with the Step-Call feature.	(1) 069 (For internal Call) (2) 1 ◀ : Available  (1) 163 (For Tie Line Incoming Call) (2) 1 ◀ : Available  (1) 208 <span style="float: right;"><b>Note</b></span> (2) 1 ◀ : Not Available
<u>END</u>		<b>Note:</b> <i>This feature is mutually exclusive with the single digit feature access code.</i>

## SUPERVISORY CONTROL OF PERIPHERAL EQUIPMENT

### GENERAL DESCRIPTION

When various types of peripheral equipment (such as facsimiles, dictation equipment, etc.) are connected to the line circuits of the NEAX1400 IMS, this feature allows the polarity of the line circuit concerned to reverse for a programmable interval, and send a release signal to the peripheral equipment when the calling party disconnects.

### STATION APPLICATION

Not applicable.

### OPERATING PROCEDURE

No manual operation is required.

### SERVICE CONDITIONS

1. The duration of the momentary reversal is flexible, and can be programmed from 200 ms to 1000 ms in system programming.
2. When the calling party releases the connection, a release signal (polarity reversal) is sent to the peripheral equipment.
3. The calling party can be internal or external.
4. A 2LCH board must be installed to provide this feature.

### PROGRAMMING

START	DESCRIPTION	DATA
CM13	Provide the Station connected to peripheral equipment with momentary reversal capability.	<ul style="list-style-type: none"> <li>• YY = 22</li> <li>(1) X - XXXX (Station No.)</li> <li>(2) 0: To be provided</li> </ul>
CM41	Specify the duration of the momentary reversal.	<ul style="list-style-type: none"> <li>• Y = 1</li> <li>(1) 08</li> <li>(2) 03 - 14 (Timer Data for 256 - 1280 ms)</li> </ul> <p>If no data is set, the default setting is 256 - 384 seconds.</p>
END		

## SYSTEM SPEED DIALING

### GENERAL DESCRIPTION

This feature provides all users the ability to dial frequently called numbers using an abbreviated call code.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

#### Multiline Terminals

To initiate a call:

1. Press the **SPKR** key or lift handset and receive extension dial tone.
2. Press System Speed Dialing access key or dial System Speed Dialing access code.
3. Dial abbreviated call code (two or three digits).
4. Talk when party answers.

#### Single-Line Telephones

To initiate a call:

1. Lift handset and receive dial tone.
2. Dial System Speed Dialing access code.
3. Dial abbreviated call code (two or three digits).
4. Talk when party answers.

### SERVICE CONDITIONS

1. *System Speed Dialing* can be allowed or denied to individual stations in that station's *Class of Service* assignment. *System Speed Dialing* may also be allowed or denied on a per-tenant or system-wide basis.
2. *System Speed Dial* numbers are assigned in system programming via the *Maintenance Administration Terminal (MAT)* or *Customer Administration Terminal (CAT)*. Two pauses are available to be programmed in *System Speed Dialing* buffers. One pause is preset at 1.5 seconds, the other pause is programmable from 1.5 seconds to 12 seconds (default is three seconds).
3. *Code Restriction* can be allowed/denied to *System Speed Dialing* on a system basis only.
4. When *Least Cost Routing* is supplied in the system, it will be applied when *System Speed Dialing* is accessed.
5. There is a total of 300 *System Speed Dialing* buffers per system, as set in default. This total can be increased to a maximum of 4000 buffers by reassigning *Station Speed Dialing* buffers as *System Speed Dialing* buffers.

## SYSTEM SPEED DIALING (CONT'D)

6. Each tenant in the system can be assigned up to 300 buffers.
7. Each buffer can store up to 26 digits.
8. When *Station Message Detail Recording* (SMDR) is provided, the dialed number is recorded and printed.
9. If the NEAX1400 IMS is designated as KF registration, this feature will not be available.

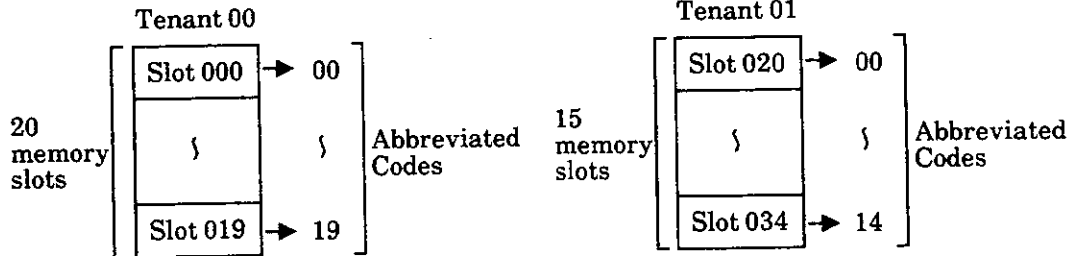
### PROGRAMMING

START	DESCRIPTION	DATA
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM12</div>	Assign Service Restriction Class A to each station.	<ul style="list-style-type: none"> <li>• YY=02</li> <li>(1) X-XXXX (Station No.)</li> <li>(2) <u>XXXX</u>  <span style="margin-left: 20px;">└─ Service Restriction Class (A) 00-15 ◀</span></li> </ul>
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM15</div>	Assign this service to Service Restriction Class A assigned by CM12, YY=02.	<ul style="list-style-type: none"> <li>• YY=06 (System Speed Dialing)</li> <li>(1) XX (Service Rest. Class A assigned by CM12, YY=02)</li> <li>(2) 1 ◀ : To be allowed</li> </ul>
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM20</div>	Assign the Access Code for System Speed Dialing.	<ul style="list-style-type: none"> <li>• Y= 0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX: Access Code (##)</li> <li>(2) 067 (System Speed Dialing)</li> </ul>
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">A</div>		

## SYSTEM SPEED DIALING (CONT'D)

A  
 CM71

DESCRIPTION	DATA
<p>Assign the memory area for the System Speed Dialing. 300 memory slots are available per system. The number of slots available for each Tenant is also 300. Note that the memory areas for Hot Line-Outside and Route Advance from Tie Line to C.O. Line are included in 300 memory slots.</p> <p>Abbreviated Call Codes required for accessing this feature are automatically given to each Tenant shown in the following example.</p> <p><b>Example:</b></p>	<p>(1) 00 – 63 (For stations within the Tenant 00 – 63)                      64 (For ATTCON)</p> <p>(2) <u>XXXXXX</u> <b>Note</b>                      Number of Slots to be allocated in Block. (001 – 300)                      First Memory /Slot No. in Block. (000 – 299)</p> <p>For example, to provide 20 memory slots starting at Slot 60:                      Data = 060020</p>



Number of digits of Abbreviated Code is automatically determined, as shown below:

- Less than 100 memory slots per Tenant: 2 digits (00 – 99)
- In excess of 100 memory slots per Tenant: 3 digits (000 – 299)

**Note:** By loading the Resident System Program, the following data is assigned for Tenant 00.  
 XXXXXX = 000/00

CM72

Set the stored number to the Memory Slot Number allocated by CM71.	(1) Memory Slot No. (000 – 299) (2) Stored Number (Max. 26 digits) Stored Number: Outgoing Access Code (Max. 2 digits) + [ ] + Stored Number (Max. 26 digits) To set a pause into the Stored No., enter "C" (Fixed pause = 1.5 sec) or "D" (Programmable pause specified by CM41 – 38) after desired digits (more than 2 digits).
Specify the Toll Restriction for an outgoing call by System Speed Dialing.	

CM08

Specify the System Speed Dialing security. (Stored number displays on Multiline Terminal for an outgoing call by System Speed Dialing.)	(1) 043 (2) 0/1 ◀ : Not to be displayed/To be displayed.
Specify the Toll Restriction for an outgoing call by System Speed Dialing.	(1) 044 (2) 0/1 ◀ : Not to be provided/To be provided.

END

## SYSTEM SPEED DIALING (CONT'D)

To use the 1000 Slot Memory Area Number (0–4) for Station Speed Dialing as the Memory Area for System Speed Dialing, add the following programming.

START	DESCRIPTION	DATA
CM08	Specify the 1000-Slot Memory Area Number 0–4.	(1) 112: 1000-Slot Memory Area No.0 (2) 0/1 ◀: Available/Not Available (1) 111: 1000-Slot Memory Area No.1 (2) 0/1 ◀: Available/Not Available (1) 176: 1000-Slot Memory Area No.2 (2) 0/1 ◀: Available/Not Available (1) 110: 1000-Slot Memory Area No.3 (2) 0/1 ◀: Available/Not Available
CM20	Assign the Access Code for System Speed Dialing.	• Y= 0–3 (Numbering Plan Group 0–3) (1) X–XXX (Access Code) A52: 1000-Slot Memory Area No.0 A51: 1000-Slot Memory Area No.1 (2) 068: 1000-Slot Memory Area No.2 A50: 1000-Slot Memory Area No.3
CM74	Assign the stored number to each Memory Slot Number.	(1) X XXX (Memory Slot No.) ┌───┐ │ 000–999 └───┘ 1000-Slot Memory Area Number (0–4) (2) Stored No. (Max. 16 digits) Setting Method: Outgoing Call Access Code (Max.2 digits) + [ ] + Stored No. (Max.16 digits) To set a pause into the stored No., enter "C" (Fixed Pause=1.5 sec) or "D" (Programmable Pause specified by CM41–38) after desired digits.
END		

## TENANT SERVICE

### GENERAL DESCRIPTION

This feature allows more than one organization (tenant) to share the same NEAX1400 IMS system. Through system programming, each organization may be restricted to its own Central Office trunks, Attendant Consoles, and extension group. In addition, incoming calls are directed to the specific tenant.

### STATION APPLICATION

Not applicable.

### OPERATING PROCEDURE

No manual operation is required.

### SERVICE CONDITIONS

1. An *Attendant Console* can be provided for each tenant. However, a single common *Attendant Console* may be shared by two or more tenants. The number of *Attendant Consoles* per tenant is limited by the system total.
2. Interoffice calling between tenants may or may not be restricted, depending on system data programming.
3. Different tenants may share a common group of trunks where required.
4. When a station dials the access code 0, it will be connected to the associated Attendant.
5. There are four different numbering plans. Different tenants can utilize the same numbering plan when necessary.
5. The NEAX1400 IMS can provide tenant service up to a maximum of 64 tenants.
6. Programming on the *Maintenance Administration Terminal (MAT)* or *Customer Administration Terminal (CAT)* is common to the system.
7. Station-to-station, *Call Transfer*, *Conference*, and *Trunk Answer any Station* between tenants can be allowed or denied in system programming.
8. The same feature access code(s) can be shared between tenants.
9. When more than one numbering plan is assigned in the system, more than one *Day/Night Mode Change By Station Dialing* access code can be assigned. When the access code is dialed by a station, only the associated tenant will be placed in *Night Service*.

## TENANT SERVICE (CONT'D)

10. One AP00 board is required for *Station Message Detail Recording (SMDR)*. The same AP00 board is applied to all tenants.
11. Paging can be shared between tenants, or the assignment of different paging zones and different numbering plans allow for individual paging access by tenants.
12. When *Multiple Console Operation* is applied, a master *Attendant Console* must be designated to place multiple tenants into *Night Service*.

### PROGRAMMING

START	DESCRIPTION	DATA
CM12	Assign the Tenant No. to each station.	<ul style="list-style-type: none"> <li>• YY=04</li> <li>(1) X-XXXX (Station No.)</li> <li>(2) 00 ◀-63 (Tenant No.)</li> </ul>
CM30	Assign the Tenant No. to each trunk.	<ul style="list-style-type: none"> <li>• YY=01</li> <li>(1) 000-255 (Trunk No.)</li> <li>(2) 00 ◀-63 (Tenant No.)</li> </ul>
CM29	Assign the Numbering Plan Group No. to each Tenant.	<ul style="list-style-type: none"> <li>(1) 00-63 (Tenant No.)</li> <li>(2) 710-713 (Numbering Plan Group 0-3)</li> </ul>
CM20	Assign the required access codes for each Numbering Plan Group. To provide its own trunk route for each Tenant, assign the Tenant Block 00-23 to the desired Trunk Route access code.  <b>Note:</b> Refer to Chapter 7 of <i>System Programming Manual for the Resident System Program</i> .	<ul style="list-style-type: none"> <li>• Y=0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX (Access Code) Note</li> <li>(2) {                             <ul style="list-style-type: none"> <li>000-099</li> <li>801-811</li> <li>A00-A52</li> <li>100-163</li> <li>300-323 (Tenant Block 00-23)</li> </ul> </li> </ul>
CM23	In case the Tenant Block 00-23 is assigned by CM20, assign the trunk route and Tenant No. to the Tenant Block.	<ul style="list-style-type: none"> <li>• YY=00-23 (Tenant Block 00-23)</li> <li>(1) 00-63 (Tenant No.)</li> <li>(2) 100-163 (Trunk Route 00-63)</li> </ul>
A		



## TENANT SERVICE (CONT'D)

A	DESCRIPTION	DATA
CM61	For providing the external keys for the Day/Night mode changeover or the Class of Service changeover, assign the Tenant No. to each circuit No. on the PK-DK02 Card.	<ul style="list-style-type: none"> <li>• YY=00</li> <li>(1) <u>XXX</u> <ul style="list-style-type: none"> <li>└─ Circuit No. (0-7)</li> <li>└─ Card No.(00-63) for PK-DK02 assigned by CM10 (E900-E963)</li> </ul> </li> <li>(2) 00-63 (Tenant No.)</li> </ul>
CM62	Specify the Tenants to be handled by each HA-610Z/SN610 ATTCON Group. <span style="border: 1px solid black; border-radius: 15px; padding: 2px 10px;">INITIAL</span>	<ul style="list-style-type: none"> <li>• Y=0-3 (ATTCON Group 0-3 assigned by CM60, YY=00)</li> <li>(1) 00-63 (Tenant No.)</li> <li>(2) 0/1 ◀ : To be handled/Not to be handled</li> </ul>
CM63	Specify the Inter-Tenant connection for the station-to-station calling, incoming call termination and TAS answer.	<ul style="list-style-type: none"> <li>• Y=0 (TAS Answer)</li> <li>(1) <u>XXXX</u> <ul style="list-style-type: none"> <li>└─ Tenant No. of Trunk</li> <li>└─ Tenant No. of TAS Answer Station</li> </ul> </li> <li>(2) 0/1 ◀ : Allowed/Restricted</li> <li>• Y=1 (Station to Station Calling)</li> <li>(1) <u>XXXX</u> <ul style="list-style-type: none"> <li>└─ Tenant No. of Called Station</li> <li>└─ Tenant No. of Calling Station</li> </ul> </li> <li>(2) 0/1 ◀ : Restricted/Allowed</li> <li>• Y=2 (Incoming Call Termination)</li> <li>(1) <u>XXXX</u> <ul style="list-style-type: none"> <li>└─ Tenant No. of Trunk</li> <li>└─ Tenant No. of Called Station</li> </ul> </li> <li>(2) 0/1 ◀ : Restricted/Allowed</li> </ul>
END		

## TIE LINE TANDEM SWITCHING

### GENERAL DESCRIPTION

This feature allows trunk-to-trunk connections through the NEAX1400 IMS without the need for any Attendant assistance or control. The major use of this feature is in association with the dial tandem tie line network to allow tie line connections and incoming tie line calls automatic access to, and completion of, local Central Office calls.

### STATION APPLICATION

Not applicable.

### OPERATING PROCEDURE

1. *E&M Tie Line* is seized by distant-end system.
2. Distant-end system dials applicable trunk access code and desired number.

### SERVICE CONDITIONS

1. In two-wire applications (2EMTB board) there may be an appreciable decrease in transmission decibel levels.
2. In four-wire applications an ODT board is required for every tie line. This board provides amplification/attenuation so that the desired transmitting and receiving levels can be maintained, providing the overall tandem system with transparency.
3. When all tie lines are busy, the calling station will receive busy tone.
4. Incoming trunks may be restricted from outgoing access to other trunks on a trunk-route basis.
5. Consideration should be given to access code numbering plans to avoid unnecessary loss of access codes and code duplication within the same system.
6. There is no limitation on the allowable number of *Tie Line Tandem Switching* connections.
7. Incoming dial repeating tie lines can connect to the following types of outgoing trunks:
  - Dial repeating tie lines
  - CO trunks
  - FX trunks
  - WATS trunks
  - CCSA trunks

## TIE LINE TANDEM SWITCHING (CONT'D)

8. All trunk routes assigned for no release signal are restricted from tandem connections.
9. The *Station Message Detail Recording* feature does not apply to incoming tie line calls which dial-access an outgoing trunk.

### PROGRAMMING

<u>START</u>	<u>DESCRIPTION</u>	<u>DATA</u>
START   <div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM36</div>   END	Specify the combination of Trunk Routes allowing the Tandem connection. The incoming trunk route must provide a release signal for the Tandem Connection. (See CM35, YY = 05)	(1) <u>XXXX</u> ├── 00-63 (Outgoing Trunk Route) └── 00-63 (Incoming Trunk Route)  (2) 0/1 ◀ : Allowed/Restricted

### HARDWARE REQUIRED

Tie Line Trunk Card (PK-2EMT/ODT)

## TIMED QUEUE

### GENERAL DESCRIPTION

When a user originates an outgoing trunk call and the called party is busy or does not answer, the caller can set the Timed Queue feature. When this feature is set, the trunk seizure is repeated and the number is redialed after a predetermined time interval.

### STATION APPLICATION

Multiline Terminals.

### OPERATING PROCEDURE

1. Press the **SPKR** key and receive dial tone.
2. Dial trunk access code and desired number.
3. Receive busy tone or ring no answer. Press the line key assigned as **CALL BACK** key. The associated LED flashes green and the LCD displays **TIMED-Q**. Timed Queue is now set.
4. Within a preprogrammed time interval, the system will automatically seize a trunk (dial tone is heard), redial the number (dialed digits are heard), and ring back or busy tone (depending on the status of the called party) will be sent to the station that set Timed Queue.
5. Lift handset and talk.

### SERVICE CONDITIONS

1. The time between setting the *Timed Queue* and when the system releases the trunk is programmable from 4-120 seconds (the default is 30 seconds). During this period, the station's **SPKR** key LED is lit and the station is considered off-hook by the system.
2. The time between the release of the trunk and the reseizure of the trunk is programmable from 4-120 seconds (the default is 60 seconds).
3. The number of times a *Timed Queue* will occur is programmable from 1-7 times (the default is three times). When the programmed number of attempts is reached, *Timed Queue* will be canceled.
4. *Timed Queue* is canceled if a station user either lifts the handset or presses the **SPKR** key while this feature is activated.
5. When a *Timed Queue* occurs and ringback tone is supplied to the station, the station user should immediately lift the handset when the called party answers. This operation cancels the *Timed Queue*; therefore, the period of ringback tone will not time out.
6. The combined maximum number of *Timed Queues* set and *Trunk Queuing Outgoing* set cannot exceed 32. When the maximum is reached and an attempt to access *Timed Queue* is made, Multiline Terminals with an LCD will receive a visual and audible indication.
7. If all trunks are busy when reseizure is attempted, the system waits for a trunk in the same trunk route to become idle.

## TIMED QUEUE (CONT'D)

### PROGRAMMING

<u>START</u>	<u>DESCRIPTION</u>	<u>DATA</u>
<p>CM41</p>	<p>Specify the timer data for this feature.                      If no data is set, following data will be applied:</p> <ul style="list-style-type: none"> <li>• Number of Call Attempts: 3 times</li> <li>• Interval Time of Call Attempt: 60 sec – 64 sec</li> <li>• Duration of Calling: 28 sec – 32 sec</li> </ul>	<ul style="list-style-type: none"> <li>• Y=0                             <ul style="list-style-type: none"> <li>(1) 35 (Number of Times of Call Attempt)</li> <li>(2) 01 – 07 (Once – 7 times)</li> <li>(1) 36 (Interval time of Call Attempt)</li> <li>(2) 01 – 31 (4 sec – 124 sec)</li> <li>(1) 37 (Duration of Calling)</li> <li>(2) 03 – 31 (12 sec – 124 sec)</li> </ul> </li> </ul>
<p>CM90</p>	<p>Assign the Call Back feature to the required key on the Multiline Terminal.</p>	<ul style="list-style-type: none"> <li>• YY=00                             <ul style="list-style-type: none"> <li>(1) Primary Extension No. + <input type="checkbox"/> + Key No.</li> <li>(2) F0004</li> </ul> </li> </ul>
<p>END</p>		

### HARDWARE REQUIRED

ETE-16D-2TEL, ETE-6D-2TEL, ETE-16-2TEL, or ETE-6-2TEL, and a PK-2DLC.

## TIMED REMINDER

### GENERAL DESCRIPTION

This feature allows the system to be programmed to automatically call stations at specified times. Upon answering, the station is connected to a recorded announcement or music source.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

To set time:

1. Go off-hook and receive dial tone from the primary extension.
2. Dial *Timed Reminder* feature access code or press the *Timed Reminder* feature access key and receive feature dial tone.
3. Dial the Voice Recording Memory Card access code.
3. Dial the desired reminder time in military format.
4. Receive service set tone.
5. Restore the handset.

To record the message:

1. Go off-hook and receive dial tone from the primary extension.
2. Dial Voice Recording Memory Card access code.
3. Dial the Voice Recording Memory Card number and receive Service Set Tone for three seconds.
4. Record message.
5. Restore the handset

To cancel *Timed Reminder*:

1. Go off-hook and receive dial tone.
2. Dial *Timed Reminder* cancellation code, or press the *Timed Reminder* feature access key and press \*.
3. Receive service set tone.
4. Restore handset.

### SERVICE CONDITIONS

1. The time is entered on a 24-hour basis in one-minute increments.
2. A maximum of 32 stations can set the same reminder time. When the number of settings exceeds 32, the excess stations will automatically be set to five minutes prior to the time set at the other 32 stations.
3. *Timed Reminder* attempts, whether successful or not, can be printed out at a locally provided printer. When a *Timed Reminder* is set or canceled, a printout is provided.
4. The ringing signal is the same as station-to-station calls, and its time can be assigned from 4 seconds to 32 seconds (programmable) on a system basis. The default is 28-32 seconds.
5. The *Timed Reminder* will ring a station in *Do Not Disturb*.
6. When setting or canceling has been completed, service set tone is heard as confirmation.
7. When a *Timed Reminder* is answered, either music or announcement is provided to the station. Either a TNT-C, ME01 (as an internal announcement source), or COT card (with locally provided music or announcement source) is required. As an option, a PK-DK01 card can be programmed to provide a contact closure for starting the external announcement or music source when used in conjunction with a COT card.

## TIMED REMINDER (CONT'D)

When providing the internal announcement via ME01 card, multiple connections can be made to the announcement card. Only the first station user can be assured of starting at the beginning of the message.

8. The number of *Timed Reminder* attempts is programmable in system data from 1 to 15 times, when the called station does not answer.

### PROGRAMMING

For providing Internal Music Source (PK-TNTC card):

START	DESCRIPTION	DATA
CM12	Assign the class of service for Timed Reminder to required stations.	<ul style="list-style-type: none"> <li>• CM12, YY=02 (Service Restriction Class (A) (00-15 ◀))</li> <li>• CM15, YY=13                             <ol style="list-style-type: none"> <li>(1) Service Restriction Class (A) assigned by CM12, YY=02 (00-15)</li> <li>(2) 1 ◀ : Allowed</li> </ol> </li> </ul>
CM15		
CM20	Assign the access code for Timed Reminder set and cancel.	<ul style="list-style-type: none"> <li>• Y=0-3 (Numbering Plan Group 0-3)                             <ol style="list-style-type: none"> <li>(1) X-XXX: Access Code (5*, 5#)</li> <li>(2) { 024: Set 025: Cancel</li> </ol> </li> </ul>
CM48	Designate the type of music source to be connected when answering a Timed Reminder call.	<ul style="list-style-type: none"> <li>• Y=1                             <ol style="list-style-type: none"> <li>(1) 00: Tone source of Timed Reminder</li> <li>(2) 0500: Voice Recording Memory Card</li> </ol> </li> </ul>
CM10	Assign the PK-TNTC Card to the required LEN.	<ol style="list-style-type: none"> <li>(1) LEN (0000-0511)</li> <li>(2) DB00</li> </ol>
CM90	Assign the Timed Reminder feature access key to the Multiline Terminals, if required.	<ul style="list-style-type: none"> <li>• YY=00                             <ol style="list-style-type: none"> <li>(1) Primary Extension No. + [ ] + Key No.</li> <li>(2) F0024</li> </ol> </li> </ul>
CM08	Specify the timing for Timed Reminder Start.	<ol style="list-style-type: none"> <li>(1) 228: Timed Reminder Start timing</li> <li>(2) 0/1 ◀ : At preset time/Before 5 minutes of preset time</li> </ol>
CM41	Specify the duration of Timed Reminder Call.	<ul style="list-style-type: none"> <li>• Y=0                             <ol style="list-style-type: none"> <li>(1) 52:</li> <li>(2) 01-99 : 0-396 sec., in 4-sec increments</li> </ol> </li> </ul> <p>If no data is set, the default setting is 16 (60-64 sec.)</p>
A		

### TIMED REMINDER (CONT'D)

A	DESCRIPTION	DATA
CM42	Specify the number of Timed Reminder attempts before abandonment.	(1) 03 (2) 01-05 : No. of attempted Timed Reminder Call If no data is set, the default setting is 05.
END	Specify the maximum number of Timed Reminder Calls that can be set at the same time.	(1) 04 (2) No. of Timed Reminder Calls. If no data is set, the default setting is 10.

For providing External Announcement Machine via PK-TNTC/PK-2COT card:

START	DESCRIPTION	DATA
CM12	Assign the class of service for Timed Reminder to the required stations.	<ul style="list-style-type: none"> <li>• CM12, YY=02 [Service Restriction Class (A) (00-15 ◀ )]</li> <li>• CM15, YY=13 (1) Service Restriction Class (A) assigned by CM12, YY=02 (00-15) (2) 1 ◀ : Allowed</li> </ul>
CM15		
CM20	Assign the access code for Timed Reminder set and cancel.	<ul style="list-style-type: none"> <li>• Y=0-3 (Numbering Plan Group 0-3) (1) X-XXX: Access Code (5*, 5#) (2) { 024: Set 025: Cancel</li> </ul>
CM48	Designate the type of tone source to be connected when answering a Timed Reminder call.	<ul style="list-style-type: none"> <li>• Y=1 (1) 00: Tone source of Timed Reminder (2) 0500: Voice Recording Memory Card</li> </ul>
CM10	Assign the PK-TNTC/PK-2COTG Card to the required LEN.	<ul style="list-style-type: none"> <li>(1) LEN (0000-0511)</li> <li>(2) DB00: Interface Card for External Tone Source E800-E831: PK-DK01 Card E800-E807 (For PIM0) E808-E815 (For PIM1) E816-E823 (For PIM2) E824-E831 (For PIM3) These data should be set to even LEN.</li> </ul>
A		



## TIMED REMINDER (CONT'D)

A	DESCRIPTION	DATA
CM44	Assign the function of PK-DK01 card.	(1) <b>XXX</b> : PK-DK01 Circuit No. └─┬─┘ └─┬─┘ Circuit No. (0-3) └─┬─┘ Last two digits of data assigned by CM10 (00-31) (2) 0100: External Announcement Machine for Timed Reminder Calling
CM90	Assign the Timed Reminder feature access key to the Multiline Terminals, if required.	• YY=00 (1) Primary Extension No. + <input type="text"/> + Key No. (2) F0024
CM08	Specify the timing for Timed Reminder start.	(1) 228: Timed Reminder start timing (2) 0/1 ◀ : At preset time/Before 5 minutes of preset time
CM41	Specify the duration of Timed Reminder call.	• Y=0 (1) 52: (2) 01-99: 0-396 sec., in 4-sec increments If no data is set, the default setting is 16 (60-64 sec.)
CM42	Specify the number of Timed Reminder attempts before abandonment.	(1) 03 (2) 01-15: No of attempted Timed Reminder call If no data is set, the default setting is 05.
	Specify the maximum number of Timed Reminder calls that can be set at the same time.	(1) 04 (2) No. of Timed Reminder calls If no data is set, the default setting is 10.
END		

## TIMED REMINDER (CONT'D)

For providing the internal announcement via Voice Recording Memory Card (PK-ME01)

START	DESCRIPTION	DATA
CM10	Assign the LEN to each Voice Recording Memory Card.	(1) LEN: Even No. out of 0000 – 0511 (2) EB000 – EB127: Voice Recording Memory Card ( For PIM0...EB000 – EB031 ) ( For PIM1...EB032 – EB063 ) ( For PIM2...EB064 – EB095 ) ( For PIM3...EB096 – EB127 )
CM12	Assign the Class of Service for Timed Reminder set and cancel.	• CM12, YY = 02 Service Restriction Class (A) (00-15 ◀ )
CM15		• CM15, YY = 13 (1) Service Restriction Class (A) assigned by CM12, YY = 02 (00-15) (2) 1 ◀ : Allowed
CM20	Assign the access code for Timed Reminder set and cancel.	• Y = 0 – 3 (Numbering Plan Group 0-3) (1) X-XXX: Access Code (5*, 5#) 024: Set (2) [ 025: Cancel
CM48	Designate the type of music source to be connected when answering a Timed Reminder call.	• Y = 1 (1) 00: Tone source of Timed Reminder (2) 0500: Voice Recording Memory Card
CM49	Assign the function of the Voice Recording Memory Card.	• YY = 00 (1) XXX: Card No. (000-127) assigned by CM10. (2) 0CXX └─ Message No. (00-63) └─ Answering Message on Timed Reminder • YY = 08 (1) XX: Tenant No. (00-63) assigned by CM10. (2) XX: Message No. (00-63) assigned by CM49, YY = 00
A		

**TIMED REMINDER (CONT'D)**

A	DESCRIPTION	DATA
CM90	Assign the Timed Reminder feature access key to the Multiline Terminals, if required.	<ul style="list-style-type: none"> <li>• YY = 00</li> <li>(1) Primary Extension No. + <input type="text"/> + Key No.</li> <li>(2) F0024</li> </ul>
CM08	Specify the timing for Timed Reminder start.	<ul style="list-style-type: none"> <li>(1) 228: Timed Reminder start timing</li> <li>(2) 0/1 ◀: At preset time/Before 5 minutes of preset time</li> </ul>
CM41	Specify the duration of Timed Reminder call.	<ul style="list-style-type: none"> <li>• Y = 0</li> <li>(1) 23: Timed Reminder call duration</li> <li>(2) 01 - 08: 0 - 32 sec.</li> <li>If no data is set, the default setting is 28 - 32 sec.</li> </ul>
CM42	Specify the duration of message replay for Timed Reminder.	<ul style="list-style-type: none"> <li>• Y = 0</li> <li>(1) 52</li> <li>(2) 01 - 99: 4 - 396 sec.</li> <li>If no data is set, the default setting is 60 - 64 sec.</li> </ul>
CM42	Specify the number of Timed Reminder attempts before abandonment.	<ul style="list-style-type: none"> <li>(1) 03</li> <li>(2) 01 - 15: No of attempted Timed Reminder call</li> <li>If no data is set, the default setting is 05.</li> </ul>
CM20	Specify the maximum number of Timed Reminder calls that can be set at the same time.	<ul style="list-style-type: none"> <li>(1) 04</li> <li>(2) No. of Timed Reminder calls</li> <li>If no data is set, the default setting is 10.</li> </ul>
CM20	To record, replay, or delete a message, assign the appropriate Voice Recording Memory Card access code.	<ul style="list-style-type: none"> <li>• Y = 0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX: Access Code</li> <li>(2) [ A00: Record A01: Replay A02: Delete</li> </ul>
END		

## TIMED REMINDER (CONT'D)

### HARDWARE REQUIRED

For providing the Internal Music Source:

- PK-TNTC × 1

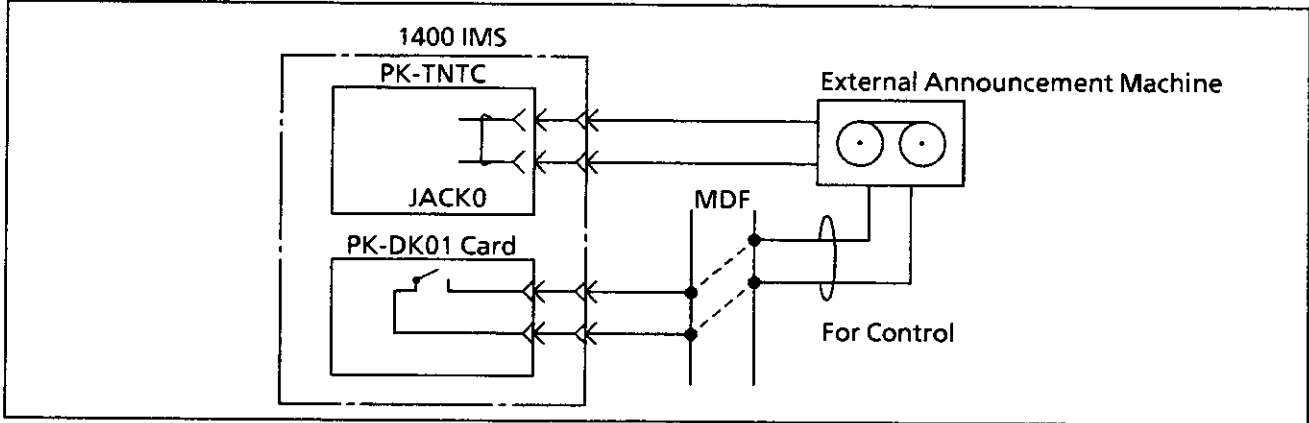
For providing the External Announcement Machine:

- PK-TNTC/PK-2COTG × n/2
- PK-DK01 × n/4 n: Number of circuit
- External Announcement Machine provided locally.

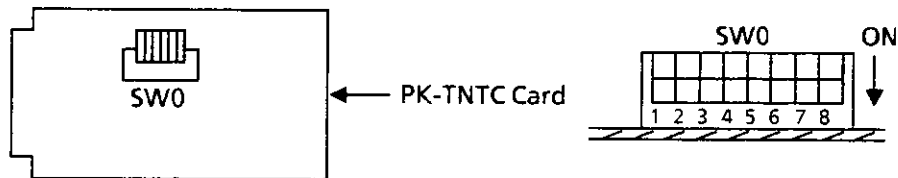
For providing the internal announcement via Voice Recording Memory Card (PK-ME01):

- PK-ME01 × 1

For connecting the external announcement machine, plug the cable into JACK0 on the PK-TNTC card.



Set the switches within the PK-TNTC card to select the desired music on the card, and to adjust the external music source level.



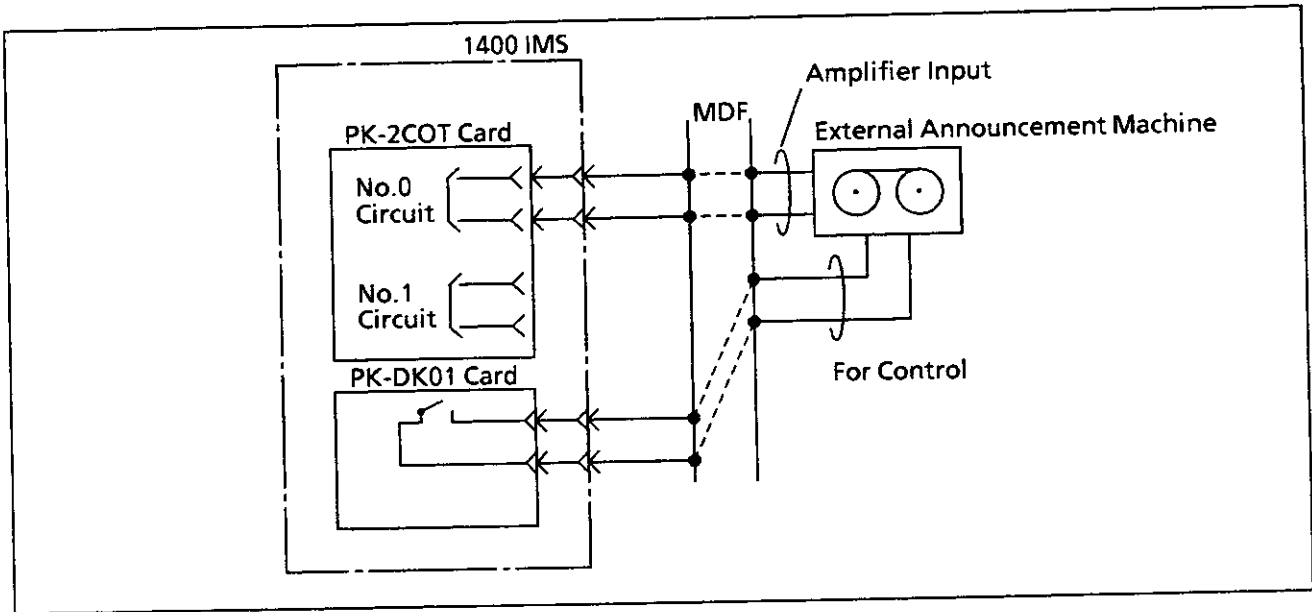
- Music Selection
  - Internal Music Source ..... SW0-7 OFF
  - External Music Source ..... SW0-8 ON
- Level Control of External Music Source through JACK0/JACK1
  - ..... ON
  - ..... OFF

No.0 CIRCUIT (JACK0)			
OUTPUT LEVEL	SW0 - 1	SW0 - 2	SW0 - 3
-10 dB	ON	OFF	OFF
-7 dB	OFF	ON	OFF
-4 dB	OFF	OFF	ON
-1 dB	OFF	OFF	OFF

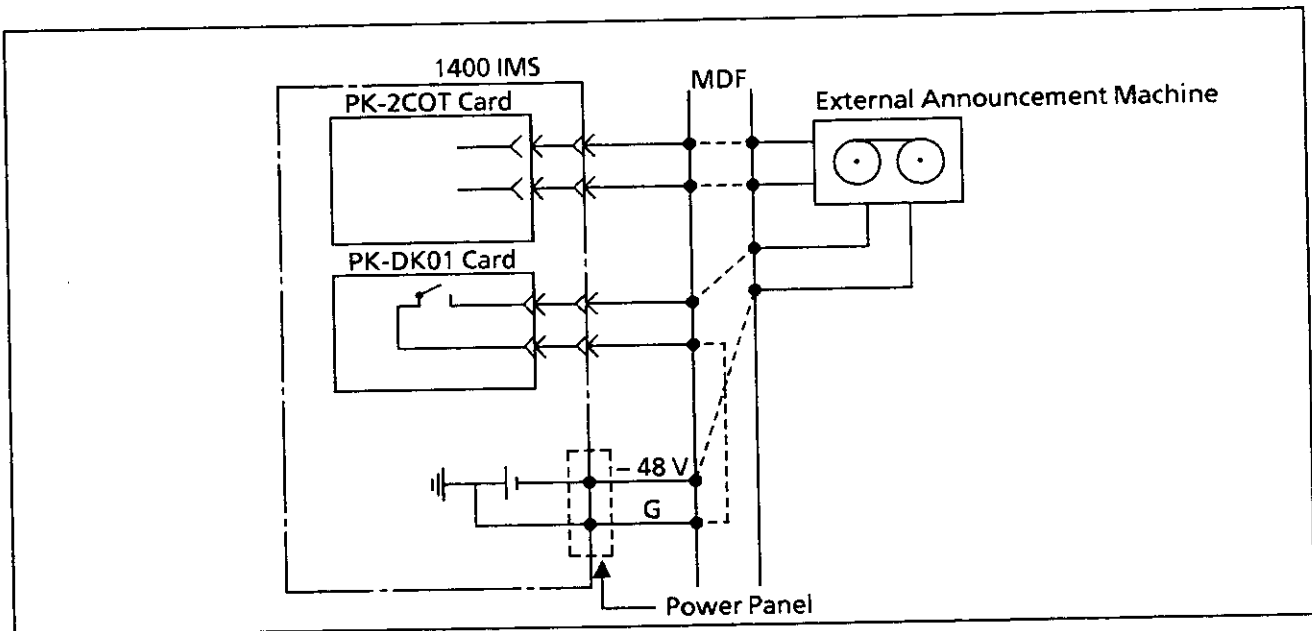
No.1 CIRCUIT (JACK1)			
OUTPUT LEVEL	SW0 - 4	SW0 - 5	SW0 - 6
-10 dB	ON	OFF	OFF
-7 dB	OFF	ON	OFF
-4 dB	OFF	OFF	ON
-1 dB	OFF	OFF	OFF

### TIMED REMINDER (CONT'D)

To accommodate the External Announcement Machine, make the following connections at the MDF.



If the External Announcement Machine requires the DC (-48 V) power supply, make the following connections at the MDF.



## TRUNK-DIRECT APPEARANCES

### GENERAL DESCRIPTION

This feature allows Multiline Terminal users the ability to access a CO line or *E&M Tie Line* without dialing an access code. For this feature, trunks must be assigned to the line keys on the Multiline Terminal. Incoming calls on CO lines can be answered on the appropriate trunk-line appearance.

### STATION APPLICATION

All Multiline Terminals.

### OPERATING PROCEDURE

To make an outgoing call:

1. Press the desired line key.
2. Lift the handset or press the **SPKR** key and receive dial tone from outside exchange.
3. Dial the desired number.

To answer an incoming call:

1. Press the ringing line key.
2. Lift the handset.
3. Answer the incoming call.

### SERVICE CONDITIONS

1. The ETE-16D-2 and ETE-16-2 have 15 available line keys which can be assigned as *Trunk-Direct Appearances*. The ETE-6D-2 and ETE-6-2 have five available line keys which can be assigned as *Trunk-Direct Appearances*.
2. The following features are available:
  - Outgoing call connection restriction, *Code Restriction*, *Conference*, *Delayed Ringing*, *Station Message Detail Recording (SMDR)*, *Hold*, *Call Transfer*, *Call Park*, *Save and Repeat*, *Last Number Redial*, *Broker's Call*, and *Station Speed Dialing* using feature keys.
3. When an outgoing call is placed, the following restrictions apply:
  - *Trunk Queuing Outgoing* is not available.
  - *System Speed Dialing* cannot be used.
  - *Account Code* may be entered using function key programmed for *Account Code* entry, or *Account Code* can be dialed on second dial tone.
4. The LED associated with the line key will be lit red when the trunk is busy, and green when being used by the station that selected that trunk. The LED indication is always red on the ETE-6-2.
5. Trunks assigned as *Trunk-Direct Appearance* on Multiline Terminals can also be assigned to ring at *Attendant Consoles* and *Trunk Answer any Station*.
6. For further information, refer to the *Flexible Line Key Assignment* and *Flexible Ringing Assignment* features.

## TRUNK-DIRECT APPEARANCES (CONT'D)

### PROGRAMMING

<u>START</u>	<u>DESCRIPTION</u>	<u>DATA</u>
START   [ CM30 ] 	Assign the terminating system of required C.O. Trunks to the Trunk-Direct Appearances.	<ul style="list-style-type: none"> <li>• YY = 02</li> <li>(1) 000 – 255 (Trunk No.)</li> <li>(2) 02: Trunk Line Appearance</li> </ul>
	Provide the Trunk-Direct Appearances feature to the required C.O. trunk assigned by YY = 02.	<ul style="list-style-type: none"> <li>• YY = 18</li> <li>(1) 000 – 255 (Trunk No.)</li> <li>(2) 0: To be provided</li> </ul>
	Assign the Trunk-Direct Appearances key to each Multiline Terminal.	<ul style="list-style-type: none"> <li>• YY = 00</li> <li>(1) Primary Extension No. + <input type="checkbox"/> + Key No.</li> <li>(2) D000 – D255 (Trunk No.)</li> </ul> <p><b>Note:</b> Refer to Chapter 7 of System Programming Manual for the Resident System Program.</p>
END		

### HARDWARE REQUIRED

ETE-16D-2/ETE-6D-2/ETE-16-2/ETE-6-2 TEL, and a PK-2DLC Card.

## TRUNK QUEUING-OUTGOING

### GENERAL DESCRIPTION

This allows a station user, upon encountering a busy signal on a trunk, to dial a feature access code and enter a first-in, first-out queue. As soon as an outgoing trunk becomes available, stations in the queue will be called back on a first-in, first-out basis.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

Single-Line Telephones:

When Least Cost Routing is not provided:

1. Dial trunk access code and receive busy tone.
2. Press **FLASH** key (or momentarily press hook switch) and receive feature dial tone.
3. Dial Trunk Queuing-Outgoing access code and receive service set tone.
4. Replace handset.
5. When trunk becomes idle, station will be recalled.

When Least Cost Routing is provided:

1. Dial trunk access code and receive PBX dial tone.
2. Dial desired number and receive busy tone.
3. Press **FLASH** key (or momentarily press hook switch) and receive dial tone.
4. Dial Trunk Queuing-Outgoing access code and receive service set tone.
5. Replace handset.
6. When the trunk becomes idle, the station will be recalled. Once connected to the trunk, the system will automatically redial the number.

Multiline Terminals:

When Least Cost Routing is not provided:

1. Dial trunk access code and receive busy tone.
2. Press the assigned **CALL BACK** key and receive service set tone.
3. Replace handset.

When Least Cost Routing is provided:

1. Dial trunk access code and receive PBX dial tone.
2. Dial desired number and receive busy tone.
3. Press the assigned **CALL BACK** key and receive service set tone.
4. Replace handset.
5. When the trunk becomes idle, the station will be recalled. Once connected to the trunk, the system will automatically redial the number.

### SERVICE CONDITIONS

1. Once an outgoing trunk becomes available, the user's station will ring for 30 seconds. If not answered within that time, the station will be automatically dropped from the queue.
2. When this feature is utilized in conjunction with *System Speed Dialing* or *Least Cost Routing*, the system will automatically dial out the called subscriber number when the handset is lifted.
3. If the user wishes to remove himself from the queue prior to being recalled, a *Trunk Queuing-Outgoing* cancellation code must be dialed.



## TRUNK QUEUING-OUTGOING (CONT'D)

4. Individual stations may only initiate one outgoing Trunk Queue at a time. Subsequent attempts will result in a reorder tone.
5. Stations may be restricted from use of this feature in *Class Of Service*.
6. This feature is not available on an *Attendant Console*.
7. Maximum number of simultaneous *Trunk Queues-Outgoing* per system is 32.
8. *Call Pickup* group cannot be used to answer a call directed to another station using the *Trunk Queuing-Outgoing* feature.
9. The *Trunk Queuing-Outgoing* call back will return to the originating station, not to the *Call Forwarding* terminating station.
10. *Account Code* information can be recorded on *Station Message Detail Recording (SMDR)* when used in conjunction with *Trunk Queuing-Outgoing*.
11. If the NEAX1400 IMS is designated as KF registration, this feature will not be available.

### PROGRAMMING

START	DESCRIPTION	DATA
CM12	Assign the class of service for Trunk Queuing-Outgoing to the required stations.	<ul style="list-style-type: none"> <li>• CM12, YY=02 (Service Rest. Class (A) (00-15 ◀ ))</li> </ul>
CM15		
CM20	Assign access code for setting and resetting this service.	<ul style="list-style-type: none"> <li>• Y=0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX: Access Code (*1, #1)               <ul style="list-style-type: none"> <li>• If a different access code from Call Back is used. 000: Set</li> <li>001: Reset</li> </ul> </li> <li>(2)               <ul style="list-style-type: none"> <li>• If the same access code as Call Back is used. 004: Set</li> <li>005: Reset</li> </ul> </li> </ul>
CM90	Assign the Trunk Queuing-OG (Call Back) key to the required Multiline Terminal.	<ul style="list-style-type: none"> <li>• YY=00</li> <li>(1) Primary Extension No. + <input type="text"/> , + Key No.</li> <li>(2) F0004</li> </ul>
CM35	Specify the Trunk Queuing-Outgoing capability to each trunk route.	<ul style="list-style-type: none"> <li>• YY=28</li> <li>(1) XX (Trunk Route No. 00-63)</li> <li>(2) 0/1 ◀ : Restricted/Allowed</li> </ul>
END		

## TRUNK-TO-TRUNK CONNECTION

### GENERAL DESCRIPTION

This feature provides any station user with the ability to join together two outside trunk calls and abandon the connection without dropping the *Trunk-to-Trunk Connection*.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

To establish a *Trunk-to-Trunk Connection* from a Single-Line Telephone:

1. Press the **FLASH** key (or momentarily press the hookswitch). The original call is placed on Consultation Hold and feature dial tone is received.
2. Dial applicable trunk access code.
3. Dial desired number and wait for party to answer.
4. Press the **FLASH** key (or momentarily press the hookswitch). A Conference is now in progress.

OR

Restore handset, original call and second call are now connected.

To establish a *Trunk-to-Trunk Connection* from a Multiline Terminal:

1. Press the **TRF** key. The original call is placed on Consultation Hold and feature dial tone is received.
2. Dial applicable trunk access code.
3. Dial desired number and wait for party to answer.
4. Press the **TRF** key. A Conference is now in progress.

OR

Restore the handset, original call and second call are now connected.

To establish a *Trunk to Trunk Connection* from the Attendant Console:

1. Attendant answers incoming call.
2. Dial the applicable trunk access code. The original party is placed on Consultation Hold.
3. Dial the desired number.
4. Press the **RLS** key. Original call and second call are now connected.

### SERVICE CONDITIONS

1. The initiating station may hang up at any time. The additional two parties will not be disconnected.
2. At least one of the two trunks must provide a release signal (some loop start trunks do not provide any signal after the distant party abandons the call).
3. This feature may be restricted to individual stations in system data programming.
4. If an originating Single-Line Telephone encounters a busy or no answer condition after dialing out to *Conference* a third party, the originating party can be reconnected to held caller by providing a hookflash or by pressing the **FLASH** key on a Single-Line Telephone to establish a *Conference*, and a second hookflash to release the last party called.
5. If an originating Single-Line Telephone encounters a busy condition because all trunks are busy, a single hookflash will return to the first trunk.

## TRUNK-TO-TRUNK CONNECTION (CONT'D)

6. If an originating Multiline Terminal user encounters a busy or no answer condition after dialing to conference a third party, the **RECALL** key can be used to return to feature dial tone to allow making another call, or to allow pressing the **TRF** key to return to the original party.
7. Stations and Attendants can establish a *Trunk-to-Trunk Connection* either before or after the distant station answers.
8. There is no limitation on the number of *Trunk-to-Trunk Connections* in the system.
9. *Trunk-to-Trunk Connection* can be restricted, by trunk route, to trunk route restriction assignments.
10. Recalls will apply to a *Trunk-to-Trunk Connection* except where answer supervision is provided (i.e. second trunk is a tie line).
11. Pressing the **ANS** key after the second call is established allows the station user to return to the original line, resulting in a *Broker's Call*.
12. Stations cannot re-enter a *Trunk-to-Trunk Connection* once they have established the connection.
13. After a *Trunk-to-Trunk Connection* is established, both trunks are released when a disconnect signal is received by either trunk.
14. A station or attendant can transfer a trunk call to an outside party via a C.O. trunk if the incoming trunk can receive a release signal from the C.O., the outgoing trunk has already received an answer signal and can receive a release signal from the C.O., or the outgoing trunk has not received an answer signal and can receive a release signal from the C.O.
15. If the NEAX 1400 IMS is designated as KF registration, this feature will not be available.

### PROGRAMMING

START	DESCRIPTION	DATA
<div style="border: 1px solid black; padding: 2px; width: fit-content;">CM12</div> <div style="border: 1px solid black; padding: 2px; width: fit-content;">CM15</div>	Provide the switch hook flash capability during C.O. Line connection to the required stations.	<ul style="list-style-type: none"> <li>• CM12, YY = 07 (Service Restriction Class (C) (00 - 15 ◀)</li> <li>• CM15, YY = 90, 91                             <ol style="list-style-type: none"> <li>(1) Service Restriction Class (C) 00 - 15 assigned by CM12, YY = 07</li> <li>(2) 1 ◀</li> </ol> </li> </ul>
<div style="border: 1px solid black; padding: 2px; width: fit-content;">CM36</div>	Specify the combination of Trunk Routes allowing the Trunk to Trunk Connection. Incoming Trunk Route must provide release signal for this feature. (See CM35, YY = 05)	<ol style="list-style-type: none"> <li>(1) <u>XXXX</u> <ul style="list-style-type: none"> <li>└── 00 - 63 (Outgoing Trunk Route)</li> <li>└── 00 - 63 (Incoming Trunk Route)</li> </ul> </li> <li>(2) 0/1 ◀ : Allowed/Restricted</li> </ol>
<div style="border: 1px solid black; padding: 2px; width: fit-content;">A</div>		

## TRUNK-TO-TRUNK CONNECTION (CONT'D)

A	DESCRIPTION	DATA
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM08</div>	<p>Specify the C.O. to C.O. transfer by station or attendant (HA-610Z/SN610ATTCON).</p>	<p>(1) 028            (2) 0/1 ◀ : To be allowed/Not to be allowed</p>
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM41</div>	<p>Specify the forced disconnection of a tandem call.</p> <p>In case CM08-029 is set to "0," specify the timer of the forced disconnection.</p>	<p>(1) 029            (2) 0/1 ◀ : To be disconnected/To be continued</p> <p>• Y=0            (1) 54            (2) 01-07: 34-272 min, in 34-min increments.</p> <p>If no data is set, the default setting is 06, (204-238 min.)</p>
<p><u>END</u></p>		

## UNIFORM CALL DISTRIBUTION (UCD) WITH OVERFLOW

### GENERAL DESCRIPTION

The *Uniform Call Distribution* (UCD) feature permits incoming calls to terminate to a prearranged group of stations. Calls are distributed in the order of arrival to idle terminals within the group.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

To set busy-out at a UCD station:

1. Lift handset and receive extension dial tone.
2. Dial busy-out-set feature access code.
3. Restore handset.

To cancel busy out at a UCD station:

1. Lift handset and receive extension dial tone.
2. Dial busy-out-cancel feature access code.
3. Restore handset.

(Series 600) To monitor conversation/to cancel monitoring (Supervisor only):

1. Lift handset, or depress SPKR key, and receive extension dial tone.
2. Dial monitor feature access code, or depress MONITOR key.
3. Dial extension number to be monitored.
4. Monitor conversation via handset or speaker.

**Note:** *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 beep-tone(s), 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.*

### SERVICE CONDITIONS

1. A maximum of 16 UCD groups may be assigned per system. Each UCD group is assigned a pilot number. Calls directed to the pilot number are directed to that UCD group.
2. Up to 60 stations may be programmed into a single UCD group.
3. Assignment of UCD groups is performed at the *Maintenance Administration Terminal* (MAT) or *Customer Administration Terminal* (CAT).
4. UCD groups consist of two or more stations arranged in a circular-type hunt group. A call directed to the circular pattern starts at the next idle station in the prearranged hunt order, following the last station to receive a call.
5. If the stations within the UCD group to which a call has been terminated are all busy, the call waits in queue until a station is available. The caller will receive ringback tone. Calls are answered on a first-in, first-out basis. Stations and attendants can transfer calls into the UCD group busy queue.
6. Any agent in a UCD group can busy itself out by dialing a busy-out code (one to three digits), or by pressing the busy-out key on a Multiline Terminal. When busy-out is activated, the station will receive calls directed to its own station number, but not the UCD group number, and can originate calls.

## UNIFORM CALL DISTRIBUTION (UCD) WITH OVERFLOW (CONT'D)

7. The agents can busy-out their stations while idle, or while on an incoming outside call. When that call is completed, the station is busied-out.
8. When the pilot station has set *Call Forwarding - All Calls*, incoming calls to the UCD group will be transferred to the destination of that *Call Forwarding - All Calls* setting.
9. A UCD group number can be used as the destination station of *Direct Inward Termination (DIT)*, or as a designated *Night Service* station.
10. A UCD group number can be assigned as the destination station of *Off-Hook Alarms, Priority Calls, and Attendant Night Transfer*.
11. UCD group pilot numbers should not be placed in *Station Hunting* groups. The *Station Hunting* feature would take priority over the UCD function.
12. Two types of traffic measurements can be provided for UCD:
  - 1) UCD group *Peg Count*
    - count of incoming calls
    - count of answered calls
    - count of abandoned calls
    - count of waiting calls
    - count of all busy calls
  - 2) UCD station *Peg Count*
    - count of answered calls
13. When a call has terminated to UCD group A, and all stations in group A are busy, and group B is assigned as the overflow destination, the call is transferred to group B. When all the stations are busy in group B, the call queues onto UCD group A.
14. *UCD Overflow* must be to another UCD group.
15. One overflow group can be provided for each UCD group.
16. Overflow is performed only once.
17. After a call has been in a UCD group queue for a programmed period of time (from 4 to 120 seconds; the default is 34 seconds), the following sequence of events occurs:
  - A brief ringback tone is supplied to the caller
  - A recorded announcement is supplied to the caller (when VRMEM board is installed for this)
  - *Music On Hold* is supplied to the caller (when MOH is equipped)
  - The recorded announcement and then *Music On Hold* can be repeated until a UCD station becomes idle, or can be automatically forwarded to the Attendant or a station after one period of message and *Music On Hold*, on a per-tenant basis.
18. When a UCD station becomes available, the caller is immediately connected to the station, even if the recorded announcement is in progress.
19. Incoming call billing to the outside party starts when the first recorded announcement begins.
20. A VRMEM board is required to provide the recorded announcement.
21. A Delay Announcement service can be provided for DIT, DID, or a trunk call transferred by a station user or the attendant to a UCD Group. Internal calls or station-to-station transferred calls to the ACD group go into the ACD queue but do not receive Delay Announcement.
22. Specified stations can monitor UCD agent calls, with no warning tone. Written agent agreement is required.

## UNIFORM CALL DISTRIBUTION (UCD) WITH OVERFLOW (CONT'D)

### PROGRAMMING

To activate UCD:

START

CM17

DESCRIPTION	DATA
<p>Assign UCD group. For one UCD Group, assign station numbers one by one in the order of hunting.</p> <p><b>Note:</b> <i>Up to 60 stations can be assigned into a single UCD group.</i></p> <p><b>Example:</b> <i>For setting Station Numbers 200, 201, 202 into one UCD Group.</i></p> <div style="display: flex; align-items: center;"> <div style="margin-right: 20px;"> <p>1st Operation { (1) 200 1st (2) 201</p> <p>2nd Operation { (1) 201 (2) 202</p> <p>3rd Operation { (1) 202 (2) 200</p> </div> <div style="text-align: center;"> </div> </div>	<ul style="list-style-type: none"> <li>• Y=0                     <ul style="list-style-type: none"> <li>(1) X-XXXX (Station No.)</li> <li>(2) X-XXXX (Another Station No. to be linked)</li> </ul> </li> </ul>
<p>Assign the Pilot Station and Member Station.</p>	<ul style="list-style-type: none"> <li>• Y=1                     <ul style="list-style-type: none"> <li>(1) X-XXXX (UCD Station No.)</li> <li>(2) 1/0 ◀ : Pilot Station/Member Station</li> </ul> </li> </ul>
<p>Assign the UCD Group Number.</p>	<ul style="list-style-type: none"> <li>• Y=2                     <ul style="list-style-type: none"> <li>(1) X-XXXX (UCD Station No.)</li> <li>(2) 00-15 (UCD Group 00-15)</li> </ul> </li> </ul>
<p>Specify the UCD service for each type of call.</p>	<ul style="list-style-type: none"> <li>• Y=4 (Internal Call: from station/ATTCON)                     <ul style="list-style-type: none"> <li>(1) X-XXXX (Pilot Station No. of the UCD Group)</li> <li>(2) 0/1 ◀ : Not to be provided/To be provided</li> </ul> </li> <li>• Y=5 (C.O. Incoming Call: DDD: FX/WATS)                     <ul style="list-style-type: none"> <li>(1) X-XXXX (Pilot Station No. of the UCD Group)</li> <li>(2) 0/1 ◀ : Not to be provided/To be provided</li> </ul> </li> </ul>

A

## UNIFORM CALL DISTRIBUTION (UCD) WITH OVERFLOW (CONT'D)

A	DESCRIPTION	DATA
CM41	Specify the basic call answer delay time for use in PEG Count analysis.	<ul style="list-style-type: none"> <li>• Y = 6 (Tie Line Incoming Call)               <ol style="list-style-type: none"> <li>(1) X-XXXX (Pilot Station No. of the UCD Group)</li> <li>(2) 0/1 ◀ : Not to be provided/To be provided</li> </ol> </li> <li>• Y = 7 (DID Call)               <ol style="list-style-type: none"> <li>(1) X-XXXX (Pilot Station No. of the UCD Group)</li> <li>(2) 0/1 ◀ : Not to be provided/To be provided</li> </ol> </li> <li>• Y = 0               <ol style="list-style-type: none"> <li>(1) 16</li> <li>(2) 01-30 (4 sec-120 sec) If no data is set, the default setting is 32-36 sec.</li> </ol> </li> </ul>
CM20	Assign the access code for UCD Station Busy-Out Set and Reset.	<ul style="list-style-type: none"> <li>• Y = 0-3 (Numbering Plan Group 0-3)               <ol style="list-style-type: none"> <li>(1) X-XXX (Access Code)</li> <li>(2) { 044: Busy-Out Set 045: Busy-Out Reset</li> </ol> </li> </ul>
CM90	Assign the UCD Busy-Out key on the Multiline Terminal, if required.	<ul style="list-style-type: none"> <li>• YY = 00               <ol style="list-style-type: none"> <li>(1) Primary Extension No. + [ ] + Key No.</li> <li>(2) F0044: UCD Busy-Out</li> </ol> </li> </ul>
CM08	Assign the Release key on the Multiline Terminal, if required.	<ul style="list-style-type: none"> <li>• YY = 00               <ol style="list-style-type: none"> <li>(1) Primary Extension No. + [ ] + Key No.</li> <li>(2) F1020: Release</li> </ol> </li> </ul>
CM08	Specify the processing for an incoming call when all UCD Stations are busy.	<ol style="list-style-type: none"> <li>(1) 212</li> <li>(2) 0/1 ◀ : Busy Tone Connection/Queuing</li> </ol>
CM08	Specify the processing for a held call after setting the UCD Busy-Out.	<ol style="list-style-type: none"> <li>(1) 214 (For the held Call from Tie Line)</li> <li>(2) 0/1 ◀ : Reconnected by Switch Hook Flash/Disconnected</li> </ol>
CM08		<ol style="list-style-type: none"> <li>(1) 215 (For the held call from C.O. Line)</li> <li>(2) 0/1 ◀ : Reconnected by Switch Hook Flash/Disconnected</li> </ol>
B		



## UNIFORM CALL DISTRIBUTION (UCD) WITH OVERFLOW (CONT'D)

	DESCRIPTION	DATA
B CM08	Specify that the transferred C.O. call from a station or HA-610Z/SN610 ATTCON is placed into queuing mode when all UCD stations are busy.	(1) 227 0: The call is placed into queuing mode. <b>Note</b> (2) 1 ◀: Recall to the transferring station (when the call is transferred from station) or attendant Camp-On is set (when the call is transferred from ATTCON.)
	<b>Note:</b> <i>This data is only effective when CM08-212 is set to 1.</i>	
END	Specify a diversion display on a Multi-line terminal or SN610 ATTCON when originating or terminating a UCD call.	(1) 357 (2) 0/1◀: Available/Not Available

To provide the delay announcement for UCD:

	DESCRIPTION	DATA
START		
CM10	Assign the Voice Recording Memory Card (PK-ME01) to each LEN No.	(1) 0000 - 0511 (LEN No.) (2) EB000 - EB127 (Voice Recording Memory Card No.)
CM17	Specify the pattern of the message sent to each UCD group.	• Y=A (1) X-XXXX: Pilot Station number of the UCD Group (2) 0: To be sent periodically 1 ◀: To be sent only once.
CM41	If the data for CM17, Y=A is "0," set the interval time of UCD Delay Announcement.	• Y=0 (1) FUNCTION No.: 47 (2) 01 - 30 (12 sec. - 134 sec.) If no data is set, the default setting is 44 - 50 sec.
	Define the maximum waiting time of UCD Call for the UCD PEG Count. This timing is also applied to the duration of Ringback Tone after a call arrives.	• Y=0 (1) FUNCTION No.: 16 (2) 02 - 30 (12 sec. - 136 sec.) If no data is set, the default setting is 44 - 52 sec.
CM49	Assign the UCD Delay Announcement function to the required Voice Recording Memory Card (s) (PK-ME01).	• YY=00 (1) 000 - 127 (Voice Recording Memory Card No.) (2) 0B0XX └ UCD Group No. (00-15)
CM20	Assign an access code to record, replay, and delete the Voice Recording card.	• Y=0-3 (1) X-XXXX: access code (2) { A00 : Record A01 : Replay A02 : Delete
A		

## UNIFORM CALL DISTRIBUTION (UCD) WITH OVERFLOW (CONT'D)

A	DESCRIPTION	DATA
CM51	When transferring the call to an extension or Attendant after the 1st interval time of UCD Delay Announcement, assign the destination. (Series 600 enhancement) <b>Note:</b> <i>This command is effective when CM17, Y=A is set to 0 (to be sent periodically).</i>	<ul style="list-style-type: none"> <li>• Y=17</li> <li>(1) 00-63: Tenant No.</li> <li>(2) Destination: X-XXXX: Station No. or E000: HA-610Z/SN610 ATTCON</li> </ul>
END		

To monitor a UCD call, with or without Warning Tone (Series 600 enhancement):

START	DESCRIPTION	DATA
CM08	Specify the warning tone sent to connected parties (in two-way calling) when monitoring.	<ul style="list-style-type: none"> <li>(1) 259</li> <li>(2) <math>\left\{ \begin{array}{l} 0: \text{ No Tone} \\ 1 \blacktriangleleft: \text{ One Warning Tone} \end{array} \right.</math> </li> </ul>
CM12	Assign the Class of Service for monitoring stations.	<ul style="list-style-type: none"> <li>• CM12, YY = 02</li> <li>(1) X-XXXX: Station number</li> <li>(2) XXXX  <span style="margin-left: 20px;">└ Service Restriction Class (A) (00-15) ◀</span> </li> </ul>
CM15		
CM12	Assign the Class of Service for monitored stations. <b>Note:</b> <i>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 beep-tone(s), 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.</i>	<ul style="list-style-type: none"> <li>• CM12, YY = 02</li> <li>(1) X-XXXX: Station number</li> <li>(2) XXXX  <span style="margin-left: 20px;">└ Service Restriction Class (A) (00-15) ◀</span> </li> </ul>
CM15		
CM20	Assign the access code for monitoring (if required).	<ul style="list-style-type: none"> <li>• Y=0-3 (Number Plan Group 0-3)</li> <li>(1) X-XXX: Access Code</li> <li>(2) 033: Monitor</li> </ul>
CM90	Assign monitoring function key to the required multiline terminals.	<ul style="list-style-type: none"> <li>• YY = 00</li> <li>(1) X-XXX: (Primary Ext. No.)  <span style="margin-left: 40px;">+ [ ] + Key No. (01-16)</span> </li> <li>(2) F0033: Monitor</li> </ul>
END		

## UNIFORM CALL DISTRIBUTION (UCD) WITH OVERFLOW (CONT'D)

To provide the LEDs on the Multiline Terminal for Overflowed UCD Call:

START	DESCRIPTION	DATA
CM90	Assign the Overflowed UCD Call Indication LED to the required Multiline Terminal.	<ul style="list-style-type: none"> <li>• YY=00</li> <li>(1) Primary Extension No. + <input type="text"/> + Key No.</li> <li>(2) { F1280: UCD Group 00 ? ? F1295: UCD Group 15</li> </ul>
END		

To provide the Indicator for Overflowed UCD Call:

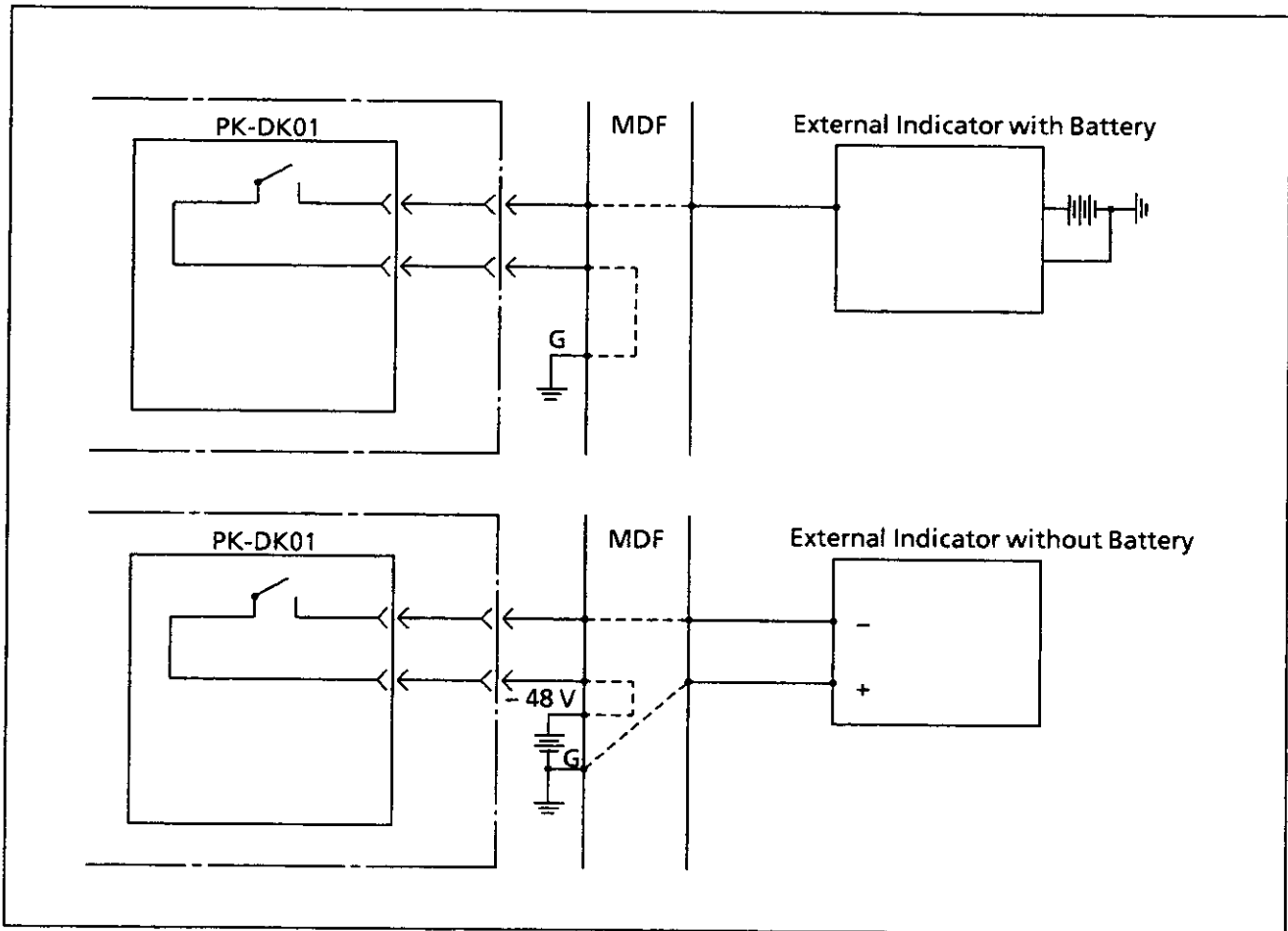
START	DESCRIPTION	DATA
CM10	Assign the PK-DK01 Card to the required LEN.	<ul style="list-style-type: none"> <li>(1) LEN (0000 - 0511)</li> <li>(2) E800 - E831 (PK-DK01 card No.) E800 - E807: For PIM0 E808 - E815: For PIM1 E816 - E823: For PIM2 E824 - E831: For PIM3</li> </ul>
CM44	Assign the function of UCD Overflow Indication to the PK-DK01.	<ul style="list-style-type: none"> <li>(1) XXX     └─ Circuit No. (0-3)     └─ Card No. (00-31) assigned by CM10, E800-E831</li> <li>(2) 14XX     └─ UCD Group No. (00-15) assigned by CM17.</li> </ul>
CM59	Specify the UCD Overflow Indicator indication pattern.	<ul style="list-style-type: none"> <li>(1) 00</li> <li>    01 ◀ : 30 IPM (1 sec. ON/OFF)</li> <li>    02: 60 IPM (0.5 sec. ON/OFF)</li> <li>(2) 03: 120 IPM (0.25 sec. ON/OFF)</li> <li>    07: Steadily On</li> </ul>
END		

### HARDWARE REQUIRED

To provide the delay announcement for UCD: PK-ME01 card  
 To provide the Indicator for Overflowed UCD call: PK-DK01 Card × 1  
 External Indicator (visual or audible type) provided by the customer

## UNIFORM CALL DISTRIBUTION (UCD) WITH OVERFLOW (CONT'D)

For connecting the Indicator for UCD Overflow:



## UNIFORM NUMBERING-VOICE & DATA

### GENERAL DESCRIPTION

In a private voice/data network it is necessary to have the ability to add or delete digits for determining the destination of the dialed digits being received from a distant PBX.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

The following describes two applications of the uniform numbering plan:

(a) **Station Number**

As shown in Figure 1, all the stations of each PBX, connected using Tie Lines, are assigned a station number of three or four digits, and the location of the PBX can be identified by the first two digits of the station number. This is referred to as a "closed" numbering plan because each PBX is restricted in the choice of station numbers. The station numbers must not be duplicated in any other PBX within the private network.

When this numbering plan is employed, a station user from any PBX within the private network can call a desired party using a uniform dialing method.

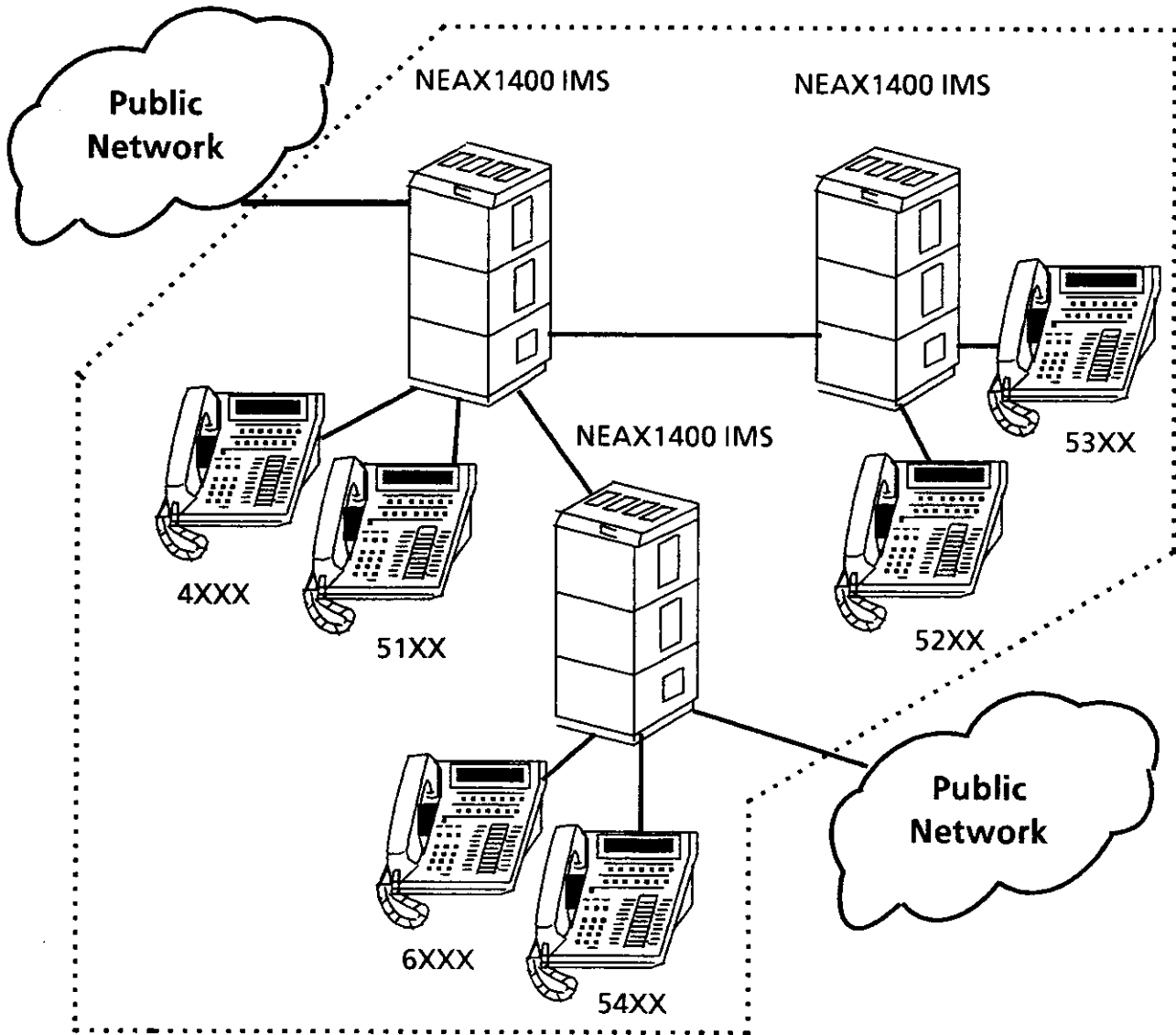
(b) **Office Code and Station Number**

As shown in Figure 2, each PBX in the private network is assigned a one, two, or three-digit office code (which uniquely identifies a specific PBX) and each station in the PBX is assigned a two, three, or four-digit station number. This is referred to as an "open" numbering plan because each PBX is free to select any station number. The station numbers may be duplicated in other PBXs within the private network since each PBX is identified by an office code. Normally, when calling another station, the calling station dials as follows:

xx		xxx	xxxx
Access	2nd dial tone or	Office	Station
Code	no dial tone	Code	Number

x = 0-9

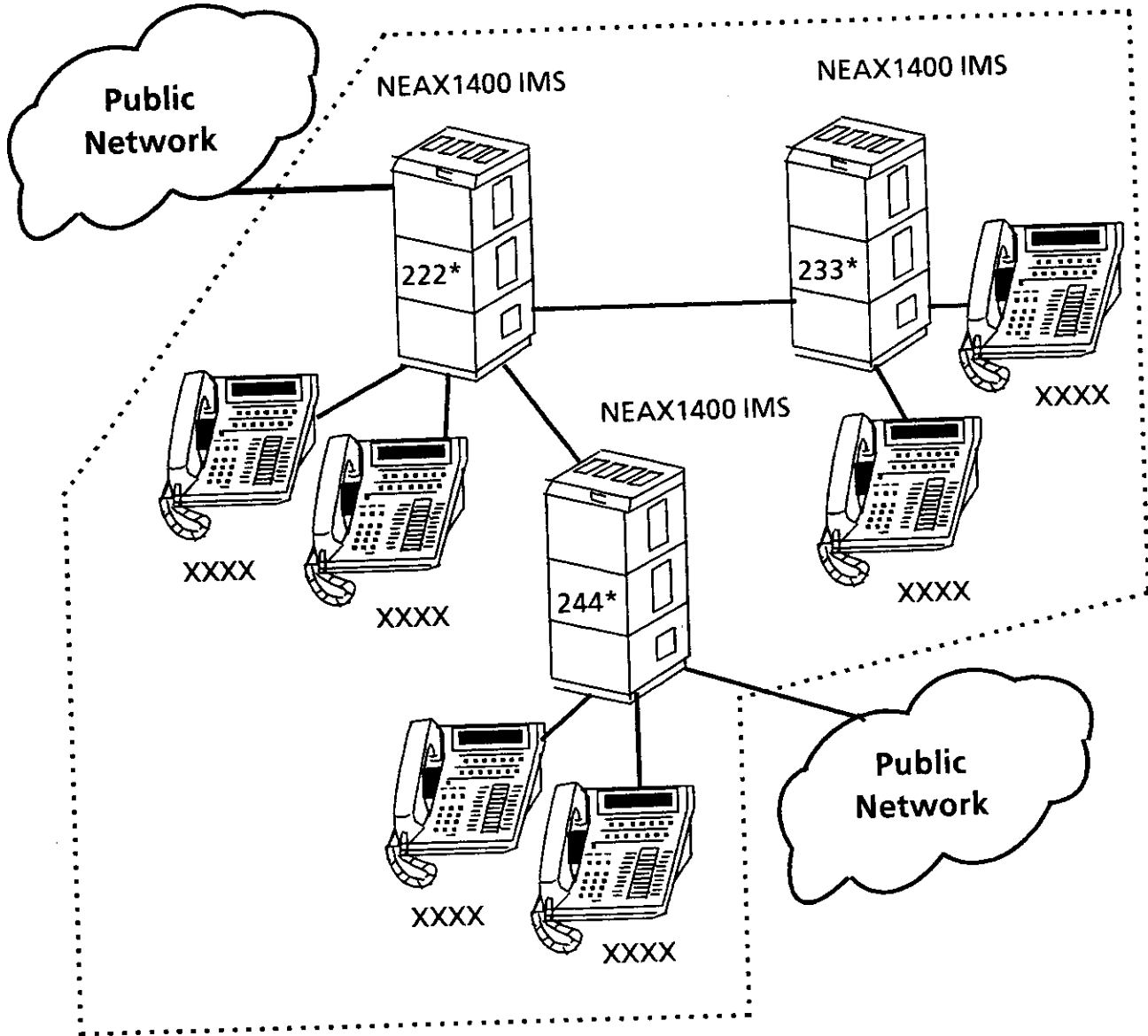
### UNIFORM NUMBERING-VOICE & DATA (CONT'D)



- First 1 or 2 digits indicate the PBX LOCATION.
- The broken line surrounds the private network of PBXs.

Figure 1. Closed Numbering Plan - Station Numbers

## UNIFORM NUMBERING-VOICE & DATA (CONT'D)



- The asterisk (\*) indicates the office code of the individual PBX.
- The broken line surrounds the private network of PBXs.

Figure 2. Open Numbering Plan - Office Code and Station Numbers

## UNIFORM NUMBERING-VOICE & DATA (CONT'D)

### SERVICE CONDITIONS

1. In pattern (a), the location of the PBX can be identified by either the first digit or the first and second digits of the Station Number.
2. In pattern (b), the total number of digits of the Access Code plus the Office Code can be a maximum of four, which must be assigned within the network. However, assignment of station numbers of different lengths is allowed, as shown below:

8 - xxx - xx  
 8 - xxx - xxx  
 8 - xxx - xxxx

3. In Pattern (b), within the same PBX, a station-to-station call can be performed only by dialing the Station Number.
4. For outgoing calls from a Data Port using a "DATA" key on a Multiline Terminal, a voice call must be established first, then data can be activated.
5. The system within a network can identify the intra-office terminating call by receiving LCR access code and its own area/office code.

### PROGRAMMING

For open numbering system:

START	DESCRIPTION	DATA
CM80	Provide the system with the LCR feature.	(1) 0 (2) 2◀ : LCR
CM20	Assign the access code for LCR Group 0-3.	<ul style="list-style-type: none"> <li>• Y=0-3 (Numbering Group 0-3)</li> <li>(1) X-XXX (Access Code)                             <ul style="list-style-type: none"> <li>A26: LCR Group 0</li> <li>A27: LCR Group 1</li> </ul> </li> <li>(2)                             <ul style="list-style-type: none"> <li>A28: LCR Group 2</li> <li>A29: LCR Group 3</li> </ul> </li> </ul>
CM8A	Assign the Area Code Development Pattern No. to each LCR Group.  Assign the Route Pattern No. to each area code for the Area Code Development Pattern No. assigned by CM8A, YYY = A00.	<ul style="list-style-type: none"> <li>• YYY = A00</li> <li>(1) 0-3: LCR Group 0-3</li> <li>(2) 5-7: Area Code Development Pattern No. 5-7</li> <li>• YYY = 405-407 (Area Code Development Pattern No. 5-7)</li> <li>(1) NXX/1NXX (Area Code, Max. 8 digits)</li> <li>(2) 000-063 (Route Pattern No. 00-63)</li> </ul>
<div style="border: 1px solid black; width: 20px; height: 20px; margin: 0 auto; display: flex; align-items: center; justify-content: center;">A</div>		



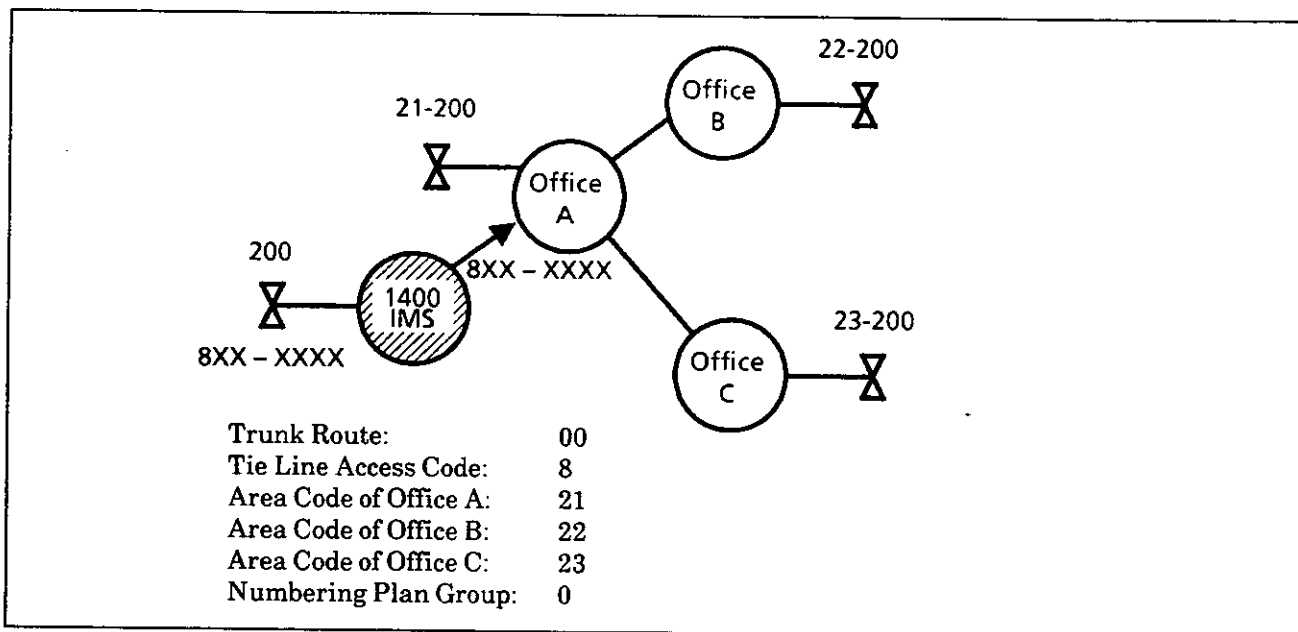
## UNIFORM NUMBERING-VOICE & DATA (CONT'D)

A	DESCRIPTION	DATA
CM8A	Assign an area code for the Intra-Office Termination, if required.	<ul style="list-style-type: none"> <li>• <math>YYY = 405-407</math> (Area Code Development Pattern No. 5-7)</li> </ul>
CM8A	Specify the order of LCR selection for the Route Pattern No. assigned by $YYY = 405 - 407$ .	<ul style="list-style-type: none"> <li>(1) X-XXXXX (Area Code, 1-5 digits)                             <ul style="list-style-type: none"> <li>800 (Intra-Office Termination)</li> <li>801 (1-digit intra-office station)</li> </ul> </li> <li>(2)                             <ul style="list-style-type: none"> <li>802 (2-digit intra-office station)</li> <li>803 (3-digit intra-office station)</li> <li>804 (4-digit intra-office station)</li> <li>805 (5-digit intra-office station)</li> </ul> </li> </ul>
CM8A	Assign the digits to be deleted from calls to distant offices. To delete all digits of area code:	<ul style="list-style-type: none"> <li>• <math>YYY = 000 - 063</math> (Route Pattern No. 00 - 63)</li> <li>(1) 1-4 : Order of LCR Selection                             <ul style="list-style-type: none"> <li>1: 1st</li> <li>2: 2nd</li> <li>3: 3rd</li> <li>4: 4th</li> </ul> </li> <li>(2) <u>XXX XX</u> <ul style="list-style-type: none"> <li>00-63 (Trunk Route No.00-63)</li> <li>000-255 (LCR Pattern No.000-255)</li> </ul> </li> </ul>
CM8A	To delete the designated digit of an area code:	<ul style="list-style-type: none"> <li>• <math>YYY = 500 - 755</math> (LCR Pattern No.000 - 255)</li> <li>(1) 151 [Deletion of all digits of area code (NXX, 1NXX)] assigned by <math>YYY = 405 - 407</math></li> <li>(2) 0: To be deleted</li> </ul>
CM8A	Assign the digits to be added to the digits sent to the distant office.	<ul style="list-style-type: none"> <li>• <math>YYY = 500 - 755</math></li> <li>(1) 153 (Designation of digit to be deleted)</li> <li>(2)                             <ul style="list-style-type: none"> <li>00: No digits deleted</li> <li>01: First digit deleted</li> <li>10: First 10 digits deleted</li> <li>CCC: No digits deleted</li> </ul> </li> <li>• <math>YYY = 500-755</math></li> <li>(1) 100 (Designation of digit Addition Pattern No.)</li> <li>(2)                             <ul style="list-style-type: none"> <li>00-49 (Digit Addition Pattern No. 00-49)</li> <li>CCC: No digits added</li> </ul> </li> <li>• <math>YYY=900-949</math> (Digit Addition Pattern No. 00-49)</li> <li>(1) 0</li> <li>(2) X-X...X [Digits to be added (Max. 32 digits)]</li> </ul> <p>X=0-9, A (*), B (#), C (Fixed Pause)</p>
B		

## UNIFORM NUMBERING-VOICE & DATA (CONT'D)

	DESCRIPTION	DATA
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">B</div> <div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 5px auto;">CM35</div> <div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 50px auto;">CM50</div> <div style="text-align: center; margin-top: 5px;">END</div>	<p>Assign the digits to be added to required trunk routes when adding digits to those received from a distant office.</p> <p>Assign the data for digit deletion to required trunk routes for deleting the first one or two digits received from a distant office.</p> <p>If two digits are added, assign the digits to be added.</p>	<ul style="list-style-type: none"> <li>• YY = 17</li> <li>(1) 00-63 (Trunk Route No.)                             <ul style="list-style-type: none"> <li>00: Add 0</li> <li>01: Add 1</li> <li>02: Add 2</li> <li>03: Add 3</li> <li>04: Add 4</li> </ul> </li> <li>(2) 05: Add 5</li> <li>06: Add 6</li> <li>07: Add 7</li> <li>08: Add 8</li> <li>09: Add 9</li> <li>10: Add 2 digits per CM50</li> </ul> <ul style="list-style-type: none"> <li>• YY = 17</li> <li>(1) 00-63 (Trunk Route No.)</li> <li>(2) 11: Delete first digit</li> <li>12: Delete first two digits</li> </ul> <ul style="list-style-type: none"> <li>• YY = 00</li> <li>(1) 0</li> <li>(2) XX (Digits to be added)</li> </ul>

**Example 1:** When the NEAX1400 IMS is an end office in a network employing an Open Numbering System, office A requires all the digits dialed on an incoming call from the NEAX1400 IMS.

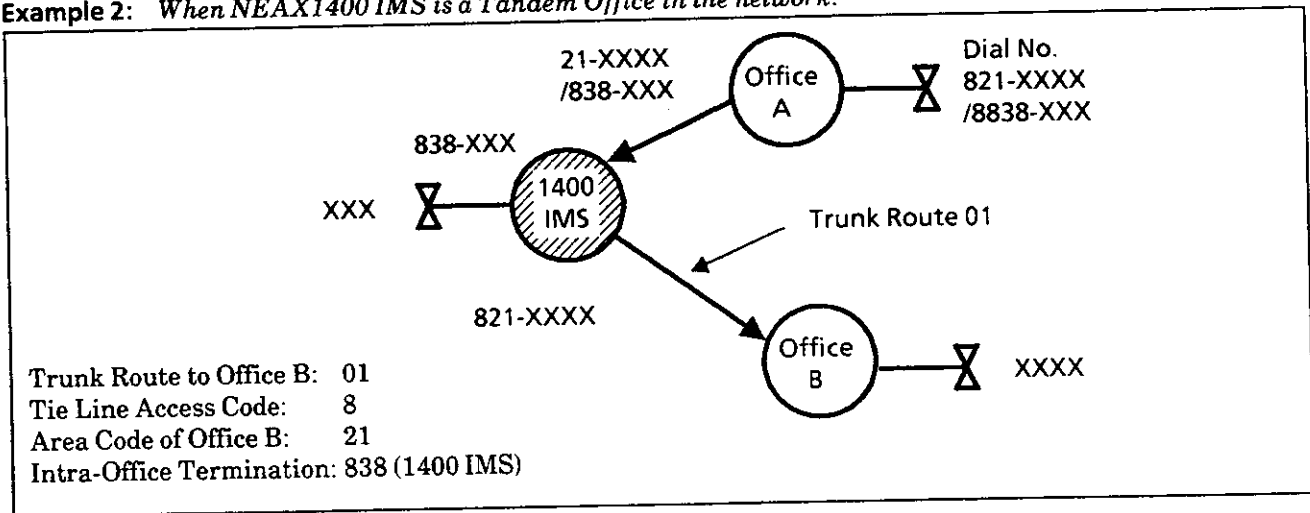


## UNIFORM NUMBERING-VOICE & DATA (CONT'D)

Programming for Example 1.

<u>COMMAND CODE</u>	<u>1ST DATA</u>	<u>2ND DATA</u>	<u>REMARKS</u>
80	0	2	Provision of LCR feature.
20, Y=0	8	A26	Assignment of Access Code 8 of LCR Group 0.
8A, YYY=A00	0	5	Assignment of Area Code Development Pattern No. 5.
8A, YYY=405	21	000	Assignment of Route Pattern No. 00 to Area Codes 21, 22, and 23.
8A, YYY=405	22	000	
8A, YYY=405	23	000	
8A, YYY=000	1	00000	Assignment of the order of LCR selection (1st) for Route Pattern No. assigned by YYY=405.
8A, YYY=500	100	00	Assignment of Digit Addition Pattern No. 00.
8A, YYY=900	0	8	Assignment of the digital code to be added for each area code.

Example 2: When NEAX1400 IMS is a Tandem Office in the network.



Programming for Example 2.

<u>COMMAND CODE</u>	<u>1ST DATA</u>	<u>2ND DATA</u>	<u>REMARKS</u>
80	0	2	Provision of LCR feature.
20, Y=0	8	A26	Assignment of Access Code 8 of LCR Group 0.
8A, YYY=A00	0	5	Assignment of Area Code Development Pattern No. 5.
8A, YYY=405	21	000	Assignment of Route Pattern No. 01 to Area Code 21 of office B.
8A, YYY=405	838	800	Assignment of Intra-Office Termination to the office code 838.
8A, YYY=000	1	00001	Assignment of the order of LCR selection (1st) for Route Pattern No. assigned by YYY=405.

## UNIFORM NUMBERING-VOICE & DATA (CONT'D)

• For Closed Numbering System

START	DESCRIPTION	DATA
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM80</div>	Provide the system with the LCR feature.	(1) 0 (2) 2◀ : LCR
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM20</div>	Assign the access code for LCR Group 3.	<ul style="list-style-type: none"> <li>• YY = 0-3 (Numbering Group 0-3)</li> <li>(1) X-XXX (Access Code)</li> <li>(2) A29: LCR Group 3</li> </ul>
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM8A</div>	Assign the Area Code Development Pattern No. to LCR Group 3.  Assign the Route Pattern No. to each area code for the Area Code Development Pattern No. assigned by CM8A, YYY = A00.  Assign an area code (station number) for the Intra-Office Termination.	<ul style="list-style-type: none"> <li>• YYY = A00</li> <li>(1) 3: LCR Group 3</li> <li>(2) 5-7: Area Code Development Pattern No. 5-7</li> </ul> <ul style="list-style-type: none"> <li>• YYY = 405-407 Area Code Development Patten No. 5-7</li> <li>(1) NXX/1NXX (Area Code, max. 8 digits)</li> <li>(2) 000-063 (Route Pattern No. 00-63)</li> </ul> <ul style="list-style-type: none"> <li>• YYY = 405-407 Area Code Development Patten No. 5-7</li> <li>(1) X-XXXXX (Area Code, max. 5 digits)</li> <li>(2) {               <ul style="list-style-type: none"> <li>801: 1-digit Intra-Office Station</li> <li>  {</li> <li>805: 5-digit Intra-Office Station</li> </ul> </li> </ul>
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">CM8A</div>	Specify the order of LCR selection for the Route Pattern No. assigned by YYY = 405 - 407.	<ul style="list-style-type: none"> <li>• YYY = 000 - 063 (Route Pattern No. 00 - 63)</li> <li>(1) 1 - 4 : Order of LCR Selection               <ul style="list-style-type: none"> <li>1: 1st</li> <li>2: 2nd</li> <li>3: 3rd</li> <li>4: 4th</li> </ul> </li> <li>(2) <u>XXX XX</u> <ul style="list-style-type: none"> <li>00 - 63 (Trunk Route No.00 - 63)</li> <li>000 - 255 (LCR Pattern No.000 - 255)</li> </ul> </li> </ul>
<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">A</div>		

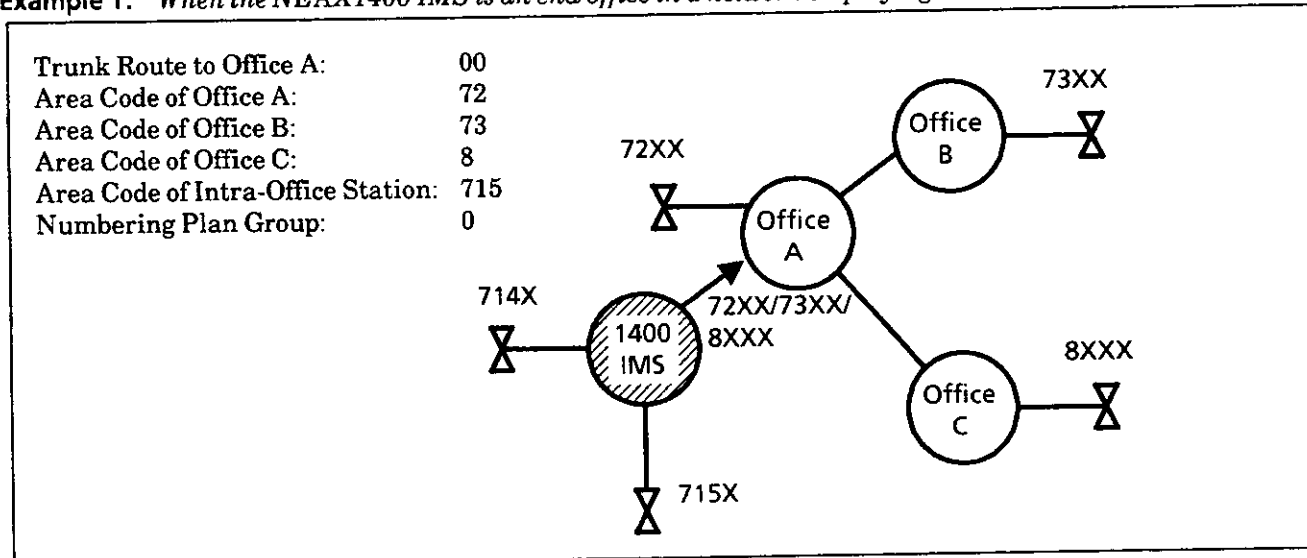
## UNIFORM NUMBERING-VOICE & DATA (CONT'D)

A	DESCRIPTION	DATA
CM8A	Assign the digits to be deleted when deleting digits of an area code sent to a distant office. To delete all digits of area code:	<ul style="list-style-type: none"> <li>• <math>YYY = 500 - 755</math> (LCR Pattern No.000 - 255)</li> <li>(1) 151 [Deletion of all digits of area code (NXX, 1NXX)] assigned by <math>YYY = 405 - 407</math></li> <li>(2) 0: To be deleted</li> </ul>
	To delete the designated digit of an area code:	<ul style="list-style-type: none"> <li>• <math>YYY = 500 - 755</math></li> <li>(1) 153 (Designation of digit to be deleted)</li> <li>(2) {               <ul style="list-style-type: none"> <li>00: No digits deleted</li> <li>01: First digit deleted</li> <li>} {</li> <li>10: First 10 digits deleted</li> <li>CCC: No digits deleted</li> </ul> </li> </ul>
CM8A	Assign the digits to be added when adding digits to those sent to a distant office.	<ul style="list-style-type: none"> <li>• <math>YYY = 500-755</math></li> <li>(1) 100 (Designation of digit Addition Pattern No.)</li> <li>(2) {               <ul style="list-style-type: none"> <li>00-49 (Digit Addition Pattern No. 00-49)</li> <li>CCC: No digits added</li> </ul> </li> <li>• <math>YYY=900-949</math> (Digit Addition Pattern No. 00-49)</li> <li>(1) 0</li> <li>(2) X-X...X [Digits to be added (Max. 32 digits)]</li> <li>X=0-9, A (*), B (#), C (Fixed Pause)</li> </ul>
CM35	Assign the digit to be added to the required trunk routes when adding digits to those received from a distant office.	<ul style="list-style-type: none"> <li>• <math>YY = 17</math></li> <li>(1) 00-63 (Trunk Route No.)</li> <li>(2) {               <ul style="list-style-type: none"> <li>00: Add 0</li> <li>01: Add 1</li> <li>02: Add 2</li> <li>03: Add 3</li> <li>04: Add 4</li> <li>05: Add 5</li> <li>06: Add 6</li> <li>07: Add 7</li> <li>08: Add 8</li> <li>09: Add 9</li> <li>10: Add 2 digits per CM50</li> </ul> </li> </ul>
B		

## UNIFORM NUMBERING-VOICE & DATA (CONT'D)

	DESCRIPTION	DATA
<div style="border: 1px solid black; padding: 2px; width: 20px; margin: 0 auto;">B</div> <div style="border-left: 1px solid black; border-right: 1px solid black; height: 100px; margin: 0 auto;"></div>	Assign the data for digit deletion to required trunk routes for deleting the first one or two digits received from a distant office.	<ul style="list-style-type: none"> <li>• YY = 17</li> <li>(1) 00-63 (Trunk Route No.)</li> <li>(2) { 11: Delete first digit 12: Delete first two digits</li> </ul>
<div style="border: 1px solid black; padding: 2px; width: 40px; margin: 0 auto;">CM50</div> <div style="border-left: 1px solid black; border-right: 1px solid black; height: 100px; margin: 0 auto;"></div>	If two digits addition, assign the digits to be added.	<ul style="list-style-type: none"> <li>• YY = 00</li> <li>(1) 0</li> <li>(2) XX (Digits to be added)</li> </ul>
<div style="border-bottom: 1px solid black; padding: 2px; width: 40px; margin: 0 auto;">END</div>		

**Example 1:** When the NEAX1400 IMS is an end office in a network employing a Closed Numbering System.

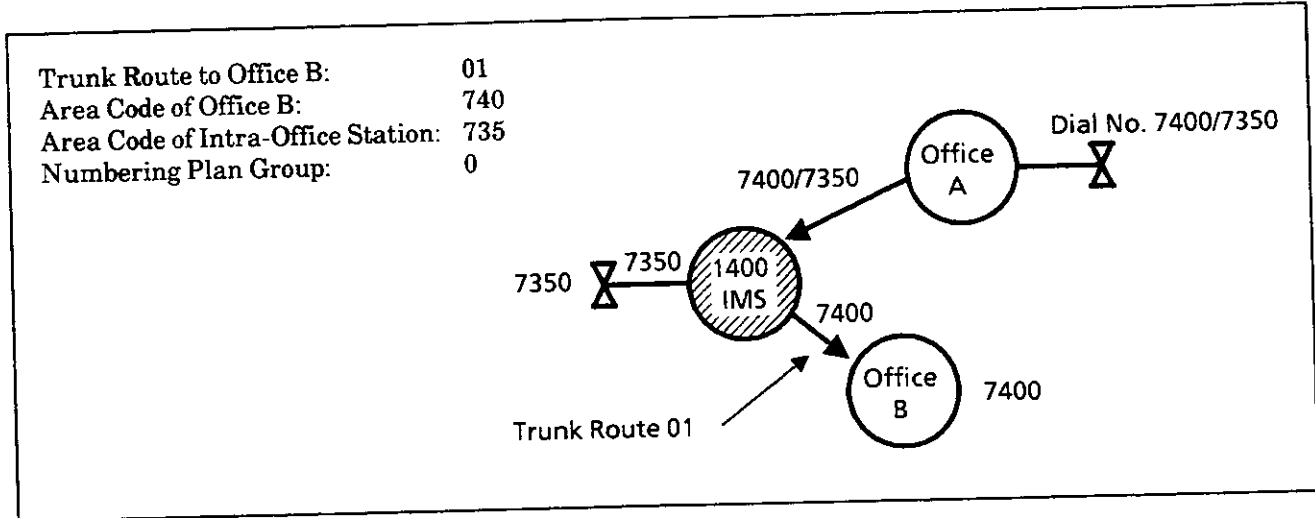


• Programming for Example 1:

COMMAND CODE	1ST DATA	2ND DATA	REMARKS
80	0	2	Provision of LCR feature. Assignment of Access Code (7, 8) to LCR Group 3.
20, Y=0	7	A29	
20, Y=0	8	A29	
8A, YYY=A00	0	5	Assignment of Area Code Development Pattern No. 5.
8A, YYY=405	72	000	Assignment of Route Pattern No. 00 to Area Code (72, 73, & 74).
8A, YYY=405	73	000	
8A, YYY=405	8	000	
8A, YYY=405	715	804	
8A, YYY=000	1	00000	Assignment of the 4-digit Intra-Office Station to the Area Code 715. Assignment of the order of LCR selection (1st) for Route Pattern No. assigned by YYY=405.

## UNIFORM NUMBERING-VOICE & DATA (CONT'D)

**Example 2:** When NEAX1400 IMS is a Tandem Office in the network.



• Programming for Example 2:

<u>COMMAND CODE</u>	<u>1ST DATA</u>	<u>2ND DATA</u>	<u>REMARKS</u>
80	0	2	Provision of LCR feature.
20, Y=0	7	A29	Assignment of Access Code 7 of LCR Group 3.
8A, YYY=A00	3	5	Assignment of Area Code Development Pattern No. 5.
8A, YYY=405	740	001	Assignment of Route Pattern No. 01 to Area Code 740 of Office B.
8A, YYY=405	735	804	Assignment of the 4-digit Intra-Office Station to the Area Code 735.
8A, YYY=000	1	00001	Assignment of the order of LCR selection (1st) for Route Pattern No. assigned by YYY = 405.

## VARIABLE TIMING PARAMETERS

### GENERAL DESCRIPTION

This feature gives the NEAX1400 IMS the versatility to change timing duration using the *Maintenance Administration Terminal (MAT)* or the *Customer Administration Terminal (CAT)*. All timing parameters are set initially in the *Resident System Program*. These timing parameters can be changed according to the customer's requirements.

### STATION APPLICATION

Not applicable.

### OPERATING PROCEDURE

Refer to the NEAX1400 IMS Installation/Service Manual for programming instructions.

### SERVICE CONDITIONS

The NEAX1400 IMS System Manual contains instructions on how to change the following timing durations:

Automatic Recall of Attendant transferred *Camp-On* and unanswered calls :

- a. Standard timing: 31.2 - 33.6 seconds
- b. Variable timing: 2.4 - 124.8 seconds (2.4-second increments in 2.4 - 33.6 seconds  
9.6-second increments in 38.4 - 124.8 seconds)

Elapsed time before *Call Forward - No Answer* for incoming trunk calls or Attendant overflow activation:

- a. Standard timing: 32 - 36 seconds
- b. Variable timing: 4 - 120 seconds (four-second increments)

Station Message Detail Recording (SMDR) valid call timer:

- a. Standard timing: 20 - 24 seconds
- b. Variable timing: 8 - 40 seconds

Disconnect recognition time for trunks:

- a. Standard timing: 0.96 - 1.44 seconds
- b. Variable timing: 0.48 - 6.72 seconds (0.48-second increments)

Recall timing for *Exclusive Hold*:

- a. Standard timing: 236 - 240 seconds
- b. Variable timing: 4 - 396 seconds (four-second increments)

Recall timing for *Nonexclusive Hold* and *Call Park*:

- a. Standard timing: 60 - 64 seconds
- b. Variable timing: 4 - 396 seconds (four-second increments)

Recall timing after station release for *Call Transfer*:

- a. Standard timing: 24 - 28 seconds
- b. Variable timing: 4 - 120 seconds (four-second increments)

*Periodic Time Indication Tone* interval:

- a. Standard timing: 180 - 184 seconds
- b. Variable timing: 32 - 724 seconds (60-second increments)

Automatic cancel time for unanswered external paging calls:

- a. Standard timing: 300 seconds
- b. Variable timing: 60-900 seconds (60-second increments)



## VARIABLE TIMING PARAMETERS (CONT'D)

Reorder tone timeout to enter *Line Lockout* state and *Off-Hook Alarm*:

- a. Standard timing: 28-32 seconds
- b. Variable timing: 4 to 32 seconds (four-second increments)

Ringling duration of *Automatic Wake Up* call (*Timed Reminder*):

- a. Standard timing: 28-32 seconds
- b. Variable timing: 4 - 32 seconds (four-second increments)

Single-digit dialing timer (*Timing Start*):

- a. Standard timing: 4-5 seconds
- b. Variable timing: 2-8 seconds (one-second increments)

Maximum *Uniform Call Distribution* (UCD) call waiting time before answer or abandonment for *Peg Count*:

- a. Standard timing: 32-36 seconds
- b. Variable timing: 4-120 seconds (four-second increments)

Automatic recall of *Camp-On*:

- a. Standard timing: 24-32 seconds
- b. Variable timing: 8-128 seconds (eight-second increments)

Timing before unanswered *Automated Attendant* call forwards:

- a. Standard timing: 32-36 seconds
- b. Variable timing: 4-120 seconds (four-second increments)

Interval time between attempts for *Timed Queue*:

- a. Standard timing: 60 - 64 seconds
- b. Variable timing: 4-124 seconds (four-second increments)

Duration of call by *Timed Queue*:

- a. Standard timing: 30 seconds
- b. Variable timing: 8-124 seconds (four-second increments)

Programmable pause for *System and Station Speed Dialing*:

- a. Standard timing: 3 seconds
- b. Variable timing: 1.5, 3, 4.5, 6, 8, 10, 12, or 16 seconds

*Night Service* announcement timer:

- a. Standard timing: 60-64 seconds
- b. Variable timing: 4-120 seconds (four-second increments)

Timing of *Multiple Call Forwarding - No Answer* (after second forwarding):

- a. Standard timing: 32-36 seconds
- b. Variable timing: 4-120 seconds (four-second increments)

Interval time of UCD delay announcement:

- a. Standard timing: 32-36 seconds
- b. Variable timing: 4-120 seconds (four-second increments)

Automatic Recall of Attendant-held calls:

- a. Standard timing: 31.2-33.6 seconds
- b. Variable timing: 2.4-124.8 seconds (2.4-second increments in 2.4-33.6 seconds.  
9.6-second increments in 38.4-124.8 seconds.)

## VARIABLE TIMING PARAMETERS (CONT'D)

Elapsed Time before Call Forward-No Answer for internal and assisted calls:

- a. Standard timing: 32-36 seconds
- b. Variable timing: 4-120 seconds (four-second increments)

Message Replay Timer for Automatic Wake-Up/Timed Reminder:

- a. Standard timing: 60-64 seconds
- b. Variable timing: 4-396 seconds (four-second increments)

Message Relay Timer for Announcement Service:

- a. Standard timing: 60-64 seconds
- b. Variable timing: 4-396 seconds

Forced Disconnection Timer on Tandem Connection:

- a. Standard timing: 204-238 seconds
- b. Variable timing: 136-544 seconds (34-minute increments)

## PROGRAMMING

START

CM41

DESCRIPTION

DATA

Specify the required Timing Parameters according to the user's requirements. If no data is set (Displayed "NONE") the Standard timing which is initially set is applied.

- Y = 0
  - (1) 00 – 54 (Timing Parameter)  
(See left column)
  - (2) XX (Data)  
(See left column)
- Y = 1
  - (1) 08, 09 (Timing Parameter)  
(See left column)
  - (2) XX (Data)  
(See left column)
- Y = 2
  - (1) 17 (Timing Parameter)  
(See left column)
  - (2) XX (Data)  
(See left column)

TIMING PARAMETER (Y = 0)		TIMING	
No.	DESCRIPTION	DATA	DESCRIPTION
00	Automatic Recall of HA-610Z/ SN610 ATTCON transferred Camp-On and unanswered call	01	0 – 2.4 sec (2.4-sec increments)
		02	2.4 – 4.8 sec
		\	\
		13	28.8 – 31.2 sec
		14	31.2 – 33.6 sec
		15	28.8 – 38.4 (9.6-sec increments)
		16	38.4 – 48.0
		\	\
		23	105.6 – 115.2
		24	115.2 – 124.8
		NONE	31.2 – 33.6 (Standard)

A

**VARIABLE TIMING PARAMETERS (CONT'D)**



DESCRIPTION		DATA	
TIMING PARAMETER (Y = 0)		TIMING	
No.	DESCRIPTION	DATA	DESCRIPTION
01	Elapsed time before Call Forwarding-No Answer for Trunk incoming call, Attendant Overflows or Group Diversion	01 02 3 29 30 NONE	0-4 sec (4-sec increments) 4-8 sec 112-116 sec 116-120 sec 32-36 sec (Standard)
02	Path on delay - single-line toll restriction Defeat Guard Timer	01 02 3 08 NONE	0-80 ms. 80-160 ms. 1040-1120 ms. 960-1040 ms.
03	SMDR Valid call timer (Pseudo-Answer Timer)	01 02 3 08 NONE	8-12 sec (4-sec increments) 12-16 sec 36-40 sec 20-24 sec (Standard)
04	Disconnect Recognition time for trunks	01 02 3 13 14 NONE	0-0.48 sec (0.48-sec increments) 0.48-0.96 sec 5.76-6.24 sec 6.24-6.72 sec 0.96-1.44 sec (Standard)
05	Recall timing for Non-exclusive Hold or Call Park	01 02 3 99 NONE	0-4 sec (4-sec increments) 4-8 sec 392-396 sec 60-64 sec (Standard)
06	Recall timing for Exclusive Hold	01 02 3 99 NONE	0-4 sec (4-sec increments) 4-8 sec 392-396 sec 236-240 sec (Standard)
07	Recall timing after station release for Call Transfer	01 02 3 30 NONE	0-4 sec (4-sec increments) 4-8 sec 116-120 sec 24-28 sec (Standard)
09	Periodic time indication tone	00 01 02 03 3 12 NONE	32-36 sec (60-sec increments) 60-64 sec 120-124 sec 180-184 sec 720-724 sec 180-184 sec (Standard)

**VARIABLE TIMING PARAMETERS (CONT'D)**

B  
 CM41

DESCRIPTION		DATA	
TIMING PARAMETER (Y = 0)		TIMING	
No.	DESCRIPTION	DATA	DESCRIPTION
11	Attendant Recall of HA-610Z/SN610 ATTCON held call.	01	0 – 2.4 sec (2.4-sec increments)
		02	2.4 – 4.8 sec
		13	28.8 – 31.2 sec
		14	31.2 – 33.6 sec
		15	28.0 – 38.4 (9.6-sec increment)
		16	38.4 – 48.0 sec
		23	105.6 – 115.2 sec
	NONE	31.2 – 33.6 sec (Standard)	
13	Single-digit dialing time (Timing Start)	03	2 – 3 sec (1-sec increments)
		04	3 – 4 sec
		08	7 – 8 sec
		NONE	4 – 5 sec (Standard)
14	DTMF Signal Width of Out Pulse - Long from HA-610Z/SN610 ATTCON.	01	64 ms (64-msec increments)
		02	128 msec
		50	3200 msec
		NONE	512 msec (Standard)
15	Call Forwarding - No Answer for Internal Call and Assisted Call.	01	0 – 4 sec (4-sec increments)
		02	4 – 8 sec
		30	116 – 120 sec
		NONE	32 – 36 sec (Standard)
16	Maximum UCD call waiting time before answer or abandonment for Peg Count.	01	0 – 4 sec (4-sec increments)
		02	4 – 8 sec
		30	116 – 120 sec
		NONE	32 – 36 sec (Standard)
	UCD or Attendant Incoming call waiting timer before delay announcement.	01	12 – 20 sec (4-sec increments)
02		16 – 24 sec	
30		128 – 136 sec	
NONE		44 – 52 sec (Standard)	
20	Automatic cancel time for unanswered external paging calls.	01	60 sec (60-sec increments)
		02	120 sec
		15	900 sec
		NONE	300 sec (Standard)
22	Reorder Tone timeout to enter Line Lockout State and Off Hook Alarm	01	0 – 4 sec (4-sec increments)
		02	4 – 8 sec
		08	28 – 32 sec
		NONE	28 – 32 sec (Standard)

C

**VARIABLE TIMING PARAMETERS (CONT'D)**

C  
 CM41

DESCRIPTION		DATA	
TIMING PARAMETER (Y = 0)		TIMING	
No.	DESCRIPTION	DATA	DESCRIPTION
23	Ringing duration of Automatic Wake Up call (Timed Reminder Call)	01 02 } 08 NONE	0 - 4 sec (4 sec increments) 4 - 8 sec } 28 - 32 sec 28 - 32 sec (Standard)
26	Automatic recall timing of Camp-On by Station	01 02 } 15 NONE	8 - 16 sec (8-sec increments) 16 - 24 sec } 120 - 128 sec 24 - 32 sec (Standard)
27	ORT timeout of outgoing call	03 04 } 14 NONE	3 sec (1-sec increments) 4 sec } 14 sec 7 sec (Standard)
33	Duration of music connection before Dial Tone for Automated Attendant	01 02 } 48 NONE	0 - 4 sec (4-sec increments) 4 - 8 sec } 56 - 60 sec 16 - 20 sec (Standard)
34	Timing before unanswered Automated Attendant call forwards	01 02 } 30 NONE	0 - 4 sec (4-sec increments) 4 - 8 sec } 116 - 120 sec 32 - 36 sec (Standard)
35	Number of call attempts by Timed Queue	01 02 } 07 NONE	Once Twice } 7 times 3 times (Standard)
36	Interval time between attempts for Timed Queue	01 02 } 31 NONE	0 - 4 sec (4-sec increments) 4 - 8 sec } 120 - 124 sec 60 - 64 sec (Standard)
37	Duration of call by Timed Queue	03 04 } 31 NONE	8 - 12 sec (4 sec increments) 12 - 16 sec } 120 - 124 sec 28 - 32 sec (Standard)

D

**VARIABLE TIMING PARAMETERS (CONT'D)**

D  
 CM41

DESCRIPTION		DATA	
TIMING PARAMETER (Y = 0)		TIMING	
No.	DESCRIPTION	DATA	DESCRIPTION
38	Programmable pause for System Speed Dialing or Station Speed Dialing	00	1.5 sec
		01	3.0 sec
		02	4.5 sec
		03	6.0 sec
		04	8.0 sec
		05	10.0 sec
		06	16.0 sec
		07	12.0 sec
	NONE	3.0 sec (Standard)	
39	Timing of unanswered call after forwarding to predetermined Station in Automated Attendant	01	0 – 4 sec (4-sec increments)
		02	4 – 8 sec
		\	\
		30	116 – 120 sec
	NONE	32 – 36 sec (Standard)	
44	Prepause Timer for VMS	00	0 sec
		01	1 sec
		\	\
		12	12 sec
		13	0.5 sec
	NONE	1 sec (Standard)	
45	Night Announcement service timer	01	0 – 4 sec (4-sec increments)
		02	4 – 8 sec
		\	\
		30	116 – 120 sec
	NONE	60 – 64 sec (Standard)	
46	Timing of Multiple Call Forwarding-No Answer after second forwarding	01	0 – 4 sec (4-sec increments)
		02	4 – 8 sec
		\	\
		30	116 – 120 sec
	NONE	32 – 36 sec (Standard)	
47	Interval time of UCD Delay Announcement/Attendant Delay Announcement	01	12 – 18 sec (4-sec increments)
		02	16 – 22 sec
		\	\
		30	128 – 134 sec
	NONE	44 – 50 sec (Standard)	
48	DTMF Signal Width for VMS	01	64 msec
		02	128 msec
		NONE	128 msec

E

**VARIABLE TIMING PARAMETERS (CONT'D)**

E  
 CM41

DESCRIPTION		DATA	
TIMING PARAMETER (Y = 0)		TIMING	
No.	DESCRIPTION	DATA	DESCRIPTION
49	DTMF Inter-Digital Pause for VMS	01 02 03 \ 08 NONE	32 msec 64 msec 96 msec \ 240 msec 160 msec
52	Message Replay Timer for Automatic Wake Up/Timed Reminder	01 02 \ 99 NONE	0-4 sec. (4-sec. increments) 4-8 sec. \ 392-396 sec. 60-64 sec. (Standard)
53	Message Replay Timer for Announcement Service	01 02 \ 99 NONE	0-4 sec. (4-sec. increments) 4-8 sec. \ 392-396 sec. 60-64 sec. (Standard)
54	Forced disconnection of tandem connection	01 02 \ 07 NONE	34-68 sec. (34-sec. incrmnt) 68-102 sec. \ 238-272 sec. 204-238 sec. (Standard)
08 (Y=1)	Momentary Open Reverse Timer	02 03 04 \ 10 NONE	128-256 (128-ms increments) 256-384 384-512 \ 1152-1280 256-384
09 (Y=1)	Delayed Ringing Timer	01 02 \ 20 NONE	2 sec. (2-sec. increments) 4 sec. \ 40 sec. 10 sec. (Standard)
17 (Y=2)	Duration of SHF sent out from COT	02 03 \ 30 NONE	64-128 (64-ms increments) 128-192 \ 1856-1920 576-640 (Standard)
31 (Y=2)	Loop on delay for OG ground start turnks	01 02 \ 99 NONE	256-320 (64-ms increments) 320-384 \ 6528-6592 640-704 (Standard)

END

## VOICE MAIL INTEGRATION

### GENERAL DESCRIPTION

This feature is used to interface the NEAX1400 IMS with a locally-provided stand-alone type Voice Mail System (VMS). The VMS, connected to the single NEAX1400 IMS line circuit (LC), is controlled by sending/receiving DTMF signals across this LC. The VMS's voice mail feature can be used by accessing this VMS directly from an extension. If a station sets its call forwarding destination to the VMS, calls to this station are connected to the VMS, and the messages can be registered according to the VMS instructions. In addition, the Message-Waiting Lamp of the station can be turned on automatically by the VMS.

### STATION APPLICATION

All stations.

### OPERATING PROCEDURE

From any station:

To originate a Voice Mail message:

1. Go off-hook and receive dial tone.
2. Dial Voice Mail extension number (or Voice Mail hunt group number) and receive ringback tone.
3. Follow the instructions given by the Voice Mail System.

To set call forwarding (- All Calls, - Busy Line, - No Answer) to Voice Mail System:

1. Go off-hook and receive dial tone.
2. Dial call forwarding feature access code and receive feature dial tone.
3. Dial voice mail extension number and receive service set tone.

The LCD displays:

[SET xxxx]

VMS: Voice mail extension number

Connection when an extension line number whose call forwarding is set to a Voice Mail System is called:

From another station:

1. Go off-hook and receive dial tone.
2. Dial the desired station number and receive ringback tone.

The LCD displays:

[FDA xxx]

VMS: Voice mail extension number

3. Follow the instructions given by the Voice Mail System.

To retrieve a voice mail message from the Voice Mail System:

1. Go off-hook and receive dial tone.
2. Dial voice mail extension number or Message Waiting/Message Reminder retrieve code and receive ringback tone.

The LCD displays:

[ xxx]

VMS: Voice mail extension number

3. Follow the instructions given by the Voice Mail System.

### SERVICE CONDITIONS

1. The Voice Mail System is interfaced to the NEAX1400 IMS via the PK-2LC-P or PK-2LC-H board.
2. The NEAX1400 IMS transfers only DTMF signals to the connected Voice Mail System. It cannot transfer dial pulses to the system.



## VOICE MAIL INTEGRATION (CONT'D)

3. Messages can be retrieved from any Multiline Terminal, DTMF telephone, or the *Attendant Console*, but not from dial pulse (DP) telephones.
4. When calling party is connected to the Voice Mail System, only DTMF signals can be sent to the Voice Mail System for registering a message, DP telephones cannot be used.
5. Stations can set *Call Forwarding-All Calls*, *Call Forwarding-No Answer*, and *Call Forwarding-Busy Line* to the Voice Mail System. The NEAX1400 IMS sends out a mail box number to the Voice Mail System. Calls to a station which is Call Forwarded to VMS are automatically answered by VMS.
6. The DTMF signal prepause, Inter-Digit Pause, and DTMF signal width of the station number to be automatically sent out to VMS from NEAX1400 are as follows:

Prepause:	Variable from 1sec to 12 sec in 1-second increments
Inter-Digit Pause:	Fixed at 160 ms
DTMF signal width:	Fixed at 128 ms
7. A special number of up to four digits (including an Inter-Digit Pause) can be automatically added both before and after the station number that is sent to the VMS from the NEAX1400. This can be used for a variety of identification codes, as required. Two types of Inter-Digit Pauses can be set. One is fixed at 1.5 sec, and the other is programmable from 1.5 sec to 15 sec.
8. The Voice Mail System can control the Message Waiting Lamp of the Station set by using the Message Waiting feature. The retrieval access code for Message Waiting is variable and can be set from 1 to 3 digits in programming.
9. When the Voice Mail System is All Busy (assuming the following condition):

Station A (or outside party) ....Calling Party  
Station B ....Called Party  
Station B sets *Call Forwarding-All Calls*, *Call Forwarding-Busy Line*, or *Call Forwarding-No Answer* to the VMS.  
Station A (or outside party) makes a call to station B.

  - (1) *Call Forwarding-All Calls*
    - Station A hears reorder tone.
    - Outside party hears busy tone.
  - (2) *Call Forwarding-Busy Line*
    - Station A hears busy tone, and can set any busy service to station B.
    - Outside party hears busy tone.
  - (3) *Call Forwarding-No Answer*
    - Station B continues to ring until the VMS becomes idle even after a predetermined time has elapsed. When the VMS becomes idle, station A is connected to the VMS.
  - (4) Direct access to VMS
    - If station A or outside party accesses the VMS directly, the calling party hears busy tone. Station A can set call back to the VMS.
10. *Multiple Call Forwarding to VMS*

When the final destination for any combination of *Multiple Call Forwarding* is the VMS, calls can be transferred to the VMS. The station number sent to the VMS is the last station's number.
11. Voice mail can blind transfer to an attendant.
12. When the VMS is recalled due to a no answer condition after transferring a call to a station, the system can sent that station number to the VMS upon re-answer by the VMS.

## VOICE MAIL INTEGRATION (CONT'D)

### PROGRAMMING

In addition to the data assignment of CALL FORWARDING-ALL CALLS/BUSY LINE/NO ANSWER, assign the following data.

START	DESCRIPTION	DATA
CM08	Specify the Ringing Transfer to Attendant via VMS.  Specify the sending of the Mail Box No. to VMS when VMS is recalled after transferring a call to an unanswered station. (Series 600 enhancement)	(1) 063 (2) 0/1 ◀ : Available/ Not Available  (1) 333 (2) { 0: To be sent 1 ◀ : Not to be sent
CM13	Provide the Message waiting service for a station with MW lamp.  Provide the VMS service for a station port interfaced with VMS (VMS station).  Provide the Message Waiting service for a VMS station port.	• YY=03 (1) X-XXXX: Station No. (2) 0: To be provided  • YY=10 (1) X-XXXX: Station No. (2) 0: To be provided  • YY=13 (1) X-XXXX: Station No. (2) 0: To be provided
CM12	Assign the Class of Service for Message Waiting to a station with MW lamp and a VMS stationport.	• CM12, YY=02 (1) X-XXXX: Station No. (2) XXXX
CM15		Service Restriction Class (A) (00-15 ◀ )
CM20	Assign the access code for MW lamp set/cancel from a VMS station port.  Assign the access code to retrieve a message from the VMS and search Message Reminder/Message Waiting.	• CM15 YY=24 (Station with MW lamp) YY=40 (VMS Station) (1) XX: Service Restriction Class (A) assigned by CM12, YY=02 (2) 1 ◀ : Allowed  • Y=0-3 (Numbering Plan Group 0-3) (1) X-XXX: Access Code (2) { 040: Set 041: Cancel  • Y= 0-3 (Numbering Plan Group 0-3) (1) X-XXX: Access Code (2) { A46: Search A47: Retrieve
A		

## VOICE MAIL INTEGRATION (CONT'D)

A	DESCRIPTION	DATA
CM50	<p>Assign the access code to be sent out to a VMS after/before a Mail Box Number, if required.</p> <p><b>Note 1:</b> "C" or "D" should not be assigned as the first digit of a access code to insert a prepause timing. The prepause timing should be assigned by CM41, Y=0, Function No.44.</p> <p><b>Note 2:</b> If "C" is inserted in the access code, it can be used as a pause (1.5 sec.). For providing the programmable pause, insert "D" instead of "C" (Programmable Pause: CM41, Y=0, Function No.38).</p>	<ul style="list-style-type: none"> <li>• YY=00                             <ul style="list-style-type: none"> <li>(1) 3: Access Code to be sent out before a Mail Box No. <b>Note 1</b></li> <li>4: Access Code to be sent out after a Mail Box No.</li> <li>(2) <math>\left. \begin{array}{l} X \\ \} \\ XXXX \end{array} \right\}</math> Access code to be sent out to a VMS X: 0-9, A (*), B (#), C/D (Pause) <b>Note 2</b></li> <li>NONE ◀: Not to be sent out</li> </ul> </li> </ul>
CM41	<p>Specify the prepause timing, DTMF Signal Width, and Inter-digital Pause for VMS.</p> <p>Specify the DTMF signal width for VMS.</p> <p>Specify the DTMF inter-digital pause for VMS.</p>	<ul style="list-style-type: none"> <li>• Y= 0                             <ul style="list-style-type: none"> <li>(1) 44 (Prepause Timing)</li> <li>(2) 00-13: Timer Data (0-12, 0.5 sec.)</li> </ul> <p>If no data is set, the default setting is 1 sec.</p> <li>• Y=0                             <ul style="list-style-type: none"> <li>(1) 48</li> <li>(2) 01/02: 64msec/128 msec</li> </ul> <li>• Y=0                             <ul style="list-style-type: none"> <li>(1) 49</li> <li>(2) 01-08: Timer Data (32-240 msec)</li> </ul> <p>If no data is set, the default setting is 160 sec.</p> </li> </li></li></ul>
CM77	<p>Assign VMS display, if required.</p>	<ul style="list-style-type: none"> <li>• Y= 0 (By Character Code)                             <ul style="list-style-type: none"> <li>(1) X-XXXX: Station No.</li> <li>(2) 564D53 (VMS character code)</li> </ul> <li>• Y= 1 (By Character)                             <ul style="list-style-type: none"> <li>(1) X-XXXX: Station No.</li> <li>(2) VMS (Character)</li> </ul> </li> </li></ul>
CM51	<p>Assign the VMS station as the destination of a call from a station which is set Message Waiting.</p>	<ul style="list-style-type: none"> <li>• YY=15                             <ul style="list-style-type: none"> <li>(1) Tenant No. (00-63)</li> <li>(2) X-XXXX (VMS Station No.)</li> </ul> </li> </ul>
CM90	<p>Assign the data to provide the MW lamp on a Multiline Terminal, if required.</p>	<ul style="list-style-type: none"> <li>• YY=00                             <ul style="list-style-type: none"> <li>(1) Primary Extension No. + <input type="text"/> + Key No.</li> <li>(2) F1005</li> </ul> </li> </ul>
B		

## VOICE MAIL INTEGRATION (CONT'D)

	DESCRIPTION	DATA
<div style="border: 1px solid black; width: 20px; height: 20px; margin: 0 auto; text-align: center; line-height: 20px;">B</div> <div style="border: 1px solid black; width: 60px; height: 25px; margin: 5px auto; text-align: center;">CM47</div>	<p>To access the VMS from HA-610Z ATTCON, assign Out Pulse (DTMF Signal) - Short/Long key.</p>	<p>(1) ATTCON Key No. (00-11)</p> <p>(2) { 15: Out Pulse (DTMF Signal) - Short 16: Out Pulse (DTMF Signal) - Long</p>
<div style="border: 1px solid black; width: 60px; height: 25px; margin: 5px auto; text-align: center;">CM90</div>	<p>To access the VMS from SN610 ATTCON, assign Out Pulse (DTMF Signal) - Short/Long key.</p>	<p>● YY=00</p> <p>(1) ATTCON No. <span style="border: 1px solid black; padding: 0 5px;">  </span> + Key No.</p> <p>(2) { F6112: Out Pulse (DTMF Signal) - Short F6113: Out Pulse (DTMF Signal) - Long</p>
<div style="border: 1px solid black; width: 60px; height: 25px; margin: 5px auto; text-align: center;">CM41</div>	<p>When Out Pulse (DTMF Signal)-Long is designated by CM47 or CM90, assign the DTMF signal width.</p> <p><b>Note:</b> When Out Pulse (DTMF Signal)-Short is designated by CM47 or CM90, the DTMF Signal width is set to 128 ms (Fixed).</p>	<p>● YY=0</p> <p>(1) 14</p> <p>(2) 01-50 [Timer Data (64-3200 ms)]          If no data is set, the default setting is 512 ms.</p>
<div style="text-align: center;">END</div>		

### HARDWARE REQUIRED

For interfacing to VMS:

- PK-2LCF/PK-2LCH/PK-2LCP card

For providing the Single-Line Telephone with Message Waiting Lamp:

- PK-2LCH card × n/2 (n: Number of Telephone sets equipped with MW Lamp)
- Booster Battery Unit (BBU)  
 (For connecting the BBU, refer to "MESSAGE WAITING".)

For providing the Multiline Terminal:

ETE-16-2 TEL, ETE-6-2TEL, ETE-16D-2TEL, or ETE-6D-2TEL, and a PK-2DLC Card.