

ND-45670 (E) ISSUE 2 PART OF STOCK # 151901



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PAGE No.	001	002	003	004	005	006	007	008	PAGE No.	001	002	003	004	005	006	007	008
i									31								
ii	2.1								32								
iii	2.1								33								
iv	2.1	2.2							34								
v	2.1	2.2							35								
vi									36								
vii									37					_			
viii									38								
1									39								
2									40								
3									41								
4									42								
5									43	-							
0									44								
/									40								
0									40								
10									47								
10									40								
12									50								
13									51								
14									52								
15									53								
16									54								
17									55								
18									56								
19	1								57								
20									58								
21									59								
22									60								
23									61								
24									62								
25									63								
26									64								
27									65								
28									66								
29									67								
30									68								
ADDE	NDUM-	001			ADDE	NDUM	1-002		ADDEN	NDUM-(	003			ADDE	NDUM	-004	
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PAGE NO.	001	002	003	004	005	006	007	800	PAGE No.	001	002	003	004	005	006	007	008
69									107	2.1							
70									108								
71									109								
72		2.2							110								
73									111								
74		2.2							112								
75									113								
76									114								
77									115								
78									116								
79									117								
80									118								
81									119								
82									120		2.2						
83									121								
84									122								
85									123								
86		2.2							124								
87		2.2							125								
88	2.1	2.2							126								
89		2.2							127								
90									128								
91									129								
92									130								
93									131								
94									132								
95									133								
96									134								
97									135								
98									136								
99									137								
100									138								
101									139								
102									140								
103									141								
104									142								
105									143								
106	2.1								144								
ADDE	NDUM-	001			ADDE	NDUN	1-002		ADD	ENDUM-	003			ADDE	NDUM	-004	
DATE	JULY,	1998		DATE		JANUA	ARY, 19	99	DATE				DATE				
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PAGE No.	001	002	003	004	005	006	007	800	PAGE No.	001	002	003	004	005	006	007	008
145									183								
146									184								
147									185								
148									186								
149									187								
150									188								
151									189								
152									190								
153									191								
154									192								
155									193								
156									194								
157									195								
158									196								
159									197								
160									198								
161									199	1							
162									200								
163	1								201								
164									202								
165									203								
166									204								
167									205								
168									206								
169									207								
170									208								
171									209								
172									210								
173									211	1							
174									212								
175									213								
176									214	1							
177									215								
178									216	1							
179									217								
180									218								
181									219								
182									220	1							
ADDE	NDUM-	001			ADDE	NDUN	1-002		ADDEI	DUM-0	003	<u> </u>		ADDE	NDUM	-004	
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221									255								
222									256								
223									257								
224									258								
225									259								
226									260								
227									261								
228									262								
229									263								
230									264								
231									265								
232									266								
233									267	-							
234									268								
235									269								
236									270								
237									271								
238									271								
239									272								
240									270								
240									275								
242									276								
243									277								
243-1	21								278								
243-2	21								279								
243-3	21								280								
243-4	21								281								
244									282								
245									283								
246									284								
247									285								
248									286								
240									287	_							
250									288								
251									289								
257									200	-							
253									200	-							
254									292								
	I NDUM-	001					1-002				103	I				-004	
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PAGE NO.	001	002	003	004	005	006	007	008	PAGE No.	001	002	003	004	005	006	007	008
293									331								
294									332								
295									333								
296									334								
297									335								
298									336								
299									337								
300									338								
301									339								
302									340								
303									341								
304									342								
305									343								
306									344	2.1							
307									345								
308									346								
309									347								
310									348								
311									348-1	2.1							
312									348-2	2.1							
313									349								
314									349-1	2.1							
315									349-2	2.1							
316									350								
317									351								
318									352								
319									353								
320									354								
321									355								
322									356								
323									357								
324									358		22						
325									359		22						
326									359-1		2.2						
327									359-2		22						
328								$\left  \right $	359-3		22						
329	<u> </u>								359-4		22						
330									360		2.2						
	I NDUM-	001					1-002				003	I				-004	
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PAGE NO.	001	002	003	004	005	006	007	800	PAGEI	NO.	001	002	003	004	005	006	007	800
361									399									
362									400									
363									401									
364									402									
365									403									
366									404									
367									405									
368									406									
369									407									
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371									409									
372									410									
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379									417									
380									418									
381									419									
382									420									
383									421									
384									422									
385									423									
386									424									
387									425									
388									425-2	1	2.1							
389									425-2	2	2.1							
390									425-3	3	2.1							
391									425-4	1	2.1							
392									426									
393									427			2.2						
394									428		2.1							1
395									429									
396									430									
397									431			2.2						
398		2.2							432									
ADDE	NDUM-	001			ADDE	NDUN	1-002		AI	DDEN	DUM-0	003			ADDE	NDUM	-004	1
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	5	3.													20 /		
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# NEAX2000 IVS Feature Programming Manual

# TABLE OF CONTENTS

		•
СНА	PTER 1 INTRODUCTION	.1
1.	PURPOSE	.1
2.	OUTLINE OF THE MANUAL	.1
3.	MULTILINE TERMINAL/SN610 ATTCON/SN716 DESKCON/DSS CONSOLE/ADD-ON	
	MODULE KEY ASSIGNMENT.	.2
CHA	PTER 2 FEATURE PROGRAMMING	19
1.	GENERAL	19
2.	DESCRIPTION OF SERVICE FEATURES	19
2.1	Business Features	20
	ACCOUNT CODE	20
	ADD-ON MODULE (1200 Series Ennancement)	21
	ALPHANUMERIC DISPLAT     ANALOC DOPT ADAPTED (1200 Series Enhancement)	24
		21
	ANNOUNCEMENT SERVICE     ATTENDANT ASSISTED CALLING	20
	ATTENDANT-ASSISTED CALLING	39 40
	ATTENDANT CONSOLE (SN610 ATTCON)	40 //1
	ATTENDANT CALLED/CALLING NAME DISPLAY	43 43
	ATTENDANT CALL SELECTION	45
	ATTENDANT CONSOLE LOCKOUT-PASSWORD	46
	ATTENDANT DO NOT DISTURB SETUP AND CANCEL	47
	ATTENDANT INTERPOSITION CALLING/TRANSFER	48
	ATTENDANT LISTED DIRECTORY NUMBER	49
	ATTENDANT LOOP RELEASE	52
	ATTENDANT PROGRAMMING	53
	CALL QUEUING	54
	CALL SPLITTING	55
	CALL WAITING DISPLAY	56
	COMMON ROUTE INDIAL	57
	DIALED NUMBER IDENTIFICATION SERVICE (DNIS) (1300 Series Enhancement)	60
		64
		65
		66
		67
		68
		69 70
		1U 71
		/1 70
	• ATTENDANT CONSULE (SN/16 DESKCON)	12

ND-45670 (E)

#### Page

	•
ATTENDANT DELAY ANNOUNCEMENT.	
ATTENDANT OVERFLOW	
• ATTENDANT OVERRIDE	
AUTHORIZATION CODE	
• AUTOMATED ATTENDANT	
AUTOMATIC CALL DISTRIBUTION (ACD)	
• AUTOMATIC CAMP-ON	104
AUTOMATIC NUMBER IDENTIFICATION (ANI) (1300 Series Enhancement)	105
• AUTOMATIC RECALL	
• BACKGROUND MUSIC (BGM)	
• BOSS/SECRETARY CALLING	
• BROKER'S CALL	
• CALL BACK.	
CALLER ID CLASS (1500 Series Enhancement)	
CALLER ID DISPLAY (1800 Series Enhancement)	
CALL FORWARDING	-
CALL FORWARDING - ALL CALLS	
CALL FORWARDING-BUSY LINE	
CALL FORWARDING-NO ANSWER	
CALL FORWARDING-DESTINATION	135
MULTIPLE CALL FORWARDING-ALL CALLS	.136
MULTIPLE CALL FORWARDING-BUSY LINE	137
MULTIPLE CALL FORWARDING-NO ANSWER	138
SPLIT CALL FORWARDING - ALL CALLS (1200 Series Enhancement)	139
SPLIT CALL FORWARDING-NO ANSWER (1200 Series Enhancement)	146
SET/RESET FROM MAT/CAT (1700 Series Enhancement)	.150
GROUP DIVERSION.	
• CALL PARK-SYSTEM	
• CALL PARK - TENANT	.153
• CALL PICKUP-DIRECT	
• CALL PICKUP-GROUP	155
CALL PICKUP-DESIGNATED GROUP.	
CALL REDIRECT (1800 Series Enhancement)	
• CALL TRANSFER-ATTENDANT.	
• CAMP-ON	.159
• CCSA ACCESS	
CENTREX COMPATIBILITY	.163
CLASS OF SERVICE	
CODE RESTRICTION	
• CONFERENCE	
CONSECUTIVE SPEED DIALING	
CONSULTATION HOLD	183
CUSTOMER ADMINISTRATION TERMINAL (CAT).	
• DATA LINE SECURITY	.186
• DELAYED RINGING	
• DIAGNOSTICS	
DIAL CONVERSION	
• DIRECT DIGITAL INTERFACE	192
• DIRECT INWARD DIALING (DID).	
• DIRECT INWARD DIALING (CALL WAITING)	
• DIRECT INWARD SYSTEM ACCESS (DISA)	190

## Page

• DIRECT INWARD TERMINATION (DIT).	205
• DIRECT OUTWARD DIALING (DOD)	206
DIRECT STATION SELECTION/BUSY LAMP FIELD (DSS/BLF) CONSOLE	209
• DISTINCTIVE RINGING	.210
• DO NOT DISTURB	212
• DUAL HOLD	214
• E & M TIE LINE ACCESS	215
• ENHANCED 911	222
• EXECUTIVE CALLING	225
	226
	227
	231
	239
• GROUP CALL-AUTOMATIC CONFERENCE (6/10 PARTY) ASSIGNMENT	243-1
	243-3
	045
	201
	252
	252
	255
	257
INTERNAL ZONE PAGING WITH MEET-ME	250
• LAST NUMBER REDIAL	261
• LEAST COST ROUTING-3/6-DIGIT	262
	276
• LINE PRESELECTION	277
MAINTENANCE ADMINISTRATION TERMINAL (MAT)	278
• MAT: FAULT MESSAGE	280
• MAT: PEG COUNT	.281
MAT: REMOVE AND RESTORE.	.282
• MAT: STATION/TRUNK STATUS	
MESSAGE CENTER INTERFACE (MCI)	284
MESSAGE REMINDER.	285
MISCELLANEOUS TRUNK ACCESS	
CODE CALLING EQUIPMENT ACCESS	289
DICTATION EQUIPMENT ACCESS	291
FOREIGN EXCHANGE (FX) ACCESS	292
RADIO PAGING EQUIPMENT ACCESS	293
WIDE AREA TELEPHONE SERVICE (WATS) ACCESS	298
MULTILINE TERMINAL ATTENDANT POSITION	299
• MUSIC ON HOLD	306
NIGHT SERVICE	

	314
OALE REROOTING	315
DAY/NIGHT MODE CHANGE BY ATTENDANT CONSOLE	316
DAY/NIGHT MODE CHANGE BY STATION DIALING	317
NIGHT CONNECTION-FIXED	318
NIGHT CONNECTION-FLEXIBLE	319
TRUNK ANSWER ANY STATION (TAS)	320
• OFF-HOOK ALARM	324
OFF PREMISES EXTENSION	325
PAD LOCK (1300 Series Enhancement)	326
PERIODIC TIME INDICATION TONE	335
POOLED LINE ACCESS	336
POWER FAILURE TRANSFER	338
PRIORITY CALL	339
PRIVACY/PRIVACY RELEASE	340
• PRIVATE LINES	341
PROPRIETARY MULTILINE TERMINAL	342
AUTOMATIC IDLE RETURN	346
CALLING NAME AND NUMBER	347
DIGITAL SINGLE LINE	348
DYNAMIC DIAL PAD (1900 Series Enhancement)	. 348-1
MULTIPLE LINE OPERATION	349
MUTE KEY (1900 Series Enhancement)	. 349-1
OFF-HOOK VOICE ANNOUNCEMENT (1200 Series Enhancement)	350
PRIME LINE PICKUP	352
RECALL KEY	353
RELAY CONTROL FUNCTION.	354
RING FREQUENCY CONTROL	356
SOFT KEY	358
REMOTE HOLD (1900 Series Release 2 Enhancement)	. 359-3
RESIDENT SYSTEM PROGRAM	
• RETURN MESSAGE SCHEDULE DISPLAY	361
• RINGING LINE PICKUP	362
• ROUTE ADVANCE	
• SAVE AND REPEAT.	364
	365
• SECURITY ALARM	366
SECURITY ALARM     SIX/TEN-PARTY CONFERENCE	
SECURITY ALARM     SIX/TEN-PARTY CONFERENCE     SOFTWARE LINE APPEARANCE	
SECURITY ALARM     SIX/TEN-PARTY CONFERENCE     SOFTWARE LINE APPEARANCE     STACK DIAL	
SECURITY ALARM     SIX/TEN-PARTY CONFERENCE     SOFTWARE LINE APPEARANCE     STACK DIAL     STATION HUNTING	
SECURITY ALARM.     SIX/TEN-PARTY CONFERENCE.     SOFTWARE LINE APPEARANCE.     STACK DIAL     STATION HUNTING     STATION HUNTING-CIRCULAR.	
<ul> <li>SECURITY ALARM.</li> <li>SIX/TEN-PARTY CONFERENCE.</li> <li>SOFTWARE LINE APPEARANCE.</li> <li>STACK DIAL.</li> <li>STATION HUNTING STATION HUNTING-CIRCULAR STATION HUNTING-TERMINAL.</li> </ul>	
<ul> <li>SECURITY ALARM.</li> <li>SIX/TEN-PARTY CONFERENCE.</li> <li>SOFTWARE LINE APPEARANCE.</li> <li>STACK DIAL.</li> <li>STATION HUNTING STATION HUNTING-CIRCULAR.</li> <li>STATION HUNTING-TERMINAL</li> <li>STATION HUNTING-SECRETARIAL.</li> </ul>	
<ul> <li>SECURITY ALARM.</li> <li>SIX/TEN-PARTY CONFERENCE.</li> <li>SOFTWARE LINE APPEARANCE.</li> <li>STACK DIAL.</li> <li>STATION HUNTING STATION HUNTING-CIRCULAR STATION HUNTING-TERMINAL.</li> <li>STATION HUNTING-SECRETARIAL.</li> <li>STATION MESSAGE DETAIL RECORDING (SMDR).</li> </ul>	
<ul> <li>SECURITY ALARM.</li> <li>SIX/TEN-PARTY CONFERENCE.</li> <li>SOFTWARE LINE APPEARANCE.</li> <li>STACK DIAL.</li> <li>STATION HUNTING STATION HUNTING-CIRCULAR STATION HUNTING-TERMINAL STATION HUNTING-SECRETARIAL.</li> <li>STATION MESSAGE DETAIL RECORDING (SMDR).</li> <li>STATION SPEED DIALING.</li> </ul>	
<ul> <li>SECURITY ALARM.</li> <li>SIX/TEN-PARTY CONFERENCE.</li> <li>SOFTWARE LINE APPEARANCE.</li> <li>STACK DIAL.</li> <li>STATION HUNTING STATION HUNTING-CIRCULAR STATION HUNTING-TERMINAL STATION HUNTING-SECRETARIAL.</li> <li>STATION MESSAGE DETAIL RECORDING (SMDR).</li> <li>STATION SPEED DIALING.</li> <li>STEP CALL.</li> </ul>	
<ul> <li>SECURITY ALARM.</li> <li>SIX/TEN-PARTY CONFERENCE.</li> <li>SOFTWARE LINE APPEARANCE.</li> <li>STACK DIAL.</li> <li>STATION HUNTING</li> <li>STATION HUNTING-CIRCULAR.</li> <li>STATION HUNTING-TERMINAL</li> <li>STATION HUNTING-SECRETARIAL.</li> <li>STATION MESSAGE DETAIL RECORDING (SMDR).</li> <li>STATION SPEED DIALING.</li> <li>STEP CALL.</li> <li>SUPERVISORY CONTROL OF PERIPHERAL EQUIPMENT.</li> </ul>	
<ul> <li>SECURITY ALARM.</li> <li>SIX/TEN-PARTY CONFERENCE.</li> <li>SOFTWARE LINE APPEARANCE.</li> <li>STACK DIAL.</li> <li>STATION HUNTING</li> <li>STATION HUNTING-CIRCULAR.</li> <li>STATION HUNTING-TERMINAL.</li> <li>STATION HUNTING-SECRETARIAL.</li> <li>STATION MESSAGE DETAIL RECORDING (SMDR).</li> <li>STATION SPEED DIALING.</li> <li>STEP CALL.</li> <li>SUPERVISORY CONTROL OF PERIPHERAL EQUIPMENT.</li> <li>SYSTEM SPEED DIALING.</li> </ul>	
<ul> <li>SECURITY ALARM.</li> <li>SIX/TEN-PARTY CONFERENCE.</li> <li>SOFTWARE LINE APPEARANCE.</li> <li>STACK DIAL.</li> <li>STATION HUNTING</li> <li>STATION HUNTING-CIRCULAR</li> <li>STATION HUNTING-TERMINAL.</li> <li>STATION HUNTING-SECRETARIAL.</li> <li>STATION MESSAGE DETAIL RECORDING (SMDR).</li> <li>STATION SPEED DIALING.</li> <li>STEP CALL.</li> <li>SUPERVISORY CONTROL OF PERIPHERAL EQUIPMENT.</li> <li>SYSTEM SPEED DIALING.</li> <li>TENANT SERVICE.</li> </ul>	
<ul> <li>SECURITY ALARM.</li> <li>SIX/TEN-PARTY CONFERENCE.</li> <li>SOFTWARE LINE APPEARANCE.</li> <li>STACK DIAL.</li> <li>STATION HUNTING</li> <li>STATION HUNTING-CIRCULAR.</li> <li>STATION HUNTING-TERMINAL.</li> <li>STATION HUNTING-SECRETARIAL.</li> <li>STATION MESSAGE DETAIL RECORDING (SMDR).</li> <li>STATION SPEED DIALING.</li> <li>STEP CALL.</li> <li>SUPERVISORY CONTROL OF PERIPHERAL EQUIPMENT.</li> <li>SYSTEM SPEED DIALING.</li> <li>TENANT SERVICE.</li> <li>TIE LINE TANDEM SWITCHING</li> </ul>	

	• TIMED REMINDER	392
	• TRUNK-DIRECT APPEARANCES	398
		401
		402
		406
		416
	• VARIABLE TIMING PARAMETERS	
	• VOICE MAIL INTEGRATION (IN BAND)	
	• VOICE MAIL TRANSFER	
	• WHISPER PAGE	
	ASYNCHRONOUS DATA SWITCHING	
2.2	DATA COMMUNICATIONS FEATURES.	
	• DATA HOTLINE.	
	• DATA HOTLINE-OUTSIDE	
	• DATA HUNTING	
	DATA INTERFACE-AUTOMATIC ANSWER	440
	• DO NOT DISTURB-DATA LINE	441
	NAILED-DOWN CONNECTION	442
		אדר
		۰۰۰۰۰، ۲443 ۸۸۵

Page

This page is for your notes.

#### LIST OF FIGURES

Figure	Title Pa	ge
Figure 1-1	Multiline Terminal Key Numbers	. 2
Figure 1-2	SN610 ATTCON Key Numbers	12
Figure 1-3	SN716 DESKCON Key Numbers.	13
Figure 1-4	DSS Console Key Numbers.	14
Figure 1-5	Add-On Module Key Numbers	16

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# CHAPTER 1 INTRODUCTION

## 1. PURPOSE

This manual provides the information necessary for programming each service feature provided by the NEAX2000 IVS (PBX).

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 procedures for installation and programming. For the outline of the function, the operating procedure and the service conditions of each service feature, refer to FEATURES AND SPECIFICATIONS. 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.

This manual covers the service features provided by voice communication system without any Application Processors (AP), and provided by data communication system via the Multiline Terminal with data adapter. For the other service features, refer to the individual manuals listed below.

- SMDR System Manual
- Hotel System Manual
- PMS System Manual
- DTI System Manual
- No.7 CCIS System Manual
- OAI System Manual
- ACD-MIS System Manual
- Maintenance Manual
- D<sup>term</sup> Series III Data Adapter Operation Manual
- Data Communication Command Guide

For a detailed description of each command, refer to the following manual.

Command Manual

#### INTRODUCTION

# 3. MULTILINE TERMINAL/SN610 ATTCON/SN716 DESKCON/DSS CONSOLE/ADD-ON MODULE KEY ASSIGNMENT

Figures 1-1 through 1-5 show the key number of each Multiline Terminal, SN610 ATTCON, SN716 DESKCON, DSS Console and Add-On Module. Refer to this section when performing a key assignment by CM90 or CM97 in FEATURE PROGRAMMING.



Figure 1-1 Multiline Terminal Key Numbers



Figure 1-1 Multiline Terminal Key Numbers (Continued)



Figure 1-1 Multiline Terminal Key Numbers (Continued)



Figure 1-1 Multiline Terminal Key Numbers (Continued)

**Note:** *Key numbers 30 through 37 require Add-On Module key assignment. (For details, see "Proprietary Multi-line Terminal" feature in Chapter 2).* 



Figure 1-1 Multiline Terminal Key Numbers (Continued)



Figure 1-1 Multiline Terminal Key Numbers (Continued)



Figure 1-1 Multiline Terminal Key Numbers (Continued)



Figure 1-1 Multiline Terminal Key Numbers (Continued)



Figure 1-1 Multiline Terminal Key Numbers (Continued)

Note: Key numbers 30 through 37 can be used as either Line/Trunk/Feature key or DSS key. In other words:

- Line/Trunk key, Feature key =16 + DSS key =16 or
- *Line/Trunk key, Feature key* = 24 + *DSS key* = 8

When key numbers 30 through 37 are used as the Line/Trunk/Feature keys, the Add-on Module key assignment is required. (For details, see "Proprietary Multiline Terminal" feature in Chapter 2).



Figure 1-1 Multiline Terminal Key Numbers (Continued)

- **Note:** *Key numbers 30 through 37 can be used as either Line/Trunk/Feature key or DSS key. In other words:* 
  - Line/Trunk key, Feature key =16 + DSS key =16 or
  - Line/Trunk key, Feature key =24 + DSS key =8

When key numbers 30 through 37 are used as the Line/Trunk/Feature keys, the Add-on Module key assignment is required. (For details, see "Proprietary Multiline Terminal" feature in Chapter 2).



Figure 1-2 SN610 ATTCON Key Numbers

Note: The key No. 30-37 can be used as either Line/Trunk/Feature key or DSS key. In other words:

- Line/Trunk key, Feature key × 16 + DSS key × 16 or
- *Line/Trunk key, Feature key*  $\times 24 + DSS$  *key*  $\times 8$

When the key No. 30-37 is used as the Line/Trunk/Feature key, the Add-on Module Data assignments for these keys are required, according to the same method as the ETJ-24DS-1 (Multiline Terminal providing 24 Line/Trunk keys).



Figure 1-3 SN716 DESKCON Key Numbers



Figure 1-4 DSS Console Key Numbers



Figure 1-4 DSS Console Key Numbers (Continued)



Figure 1-5 Add-On Module Key Numbers



This page is for your notes.

# CHAPTER 2 FEATURE PROGRAMMING

## 1. GENERAL

This section provides the description for programming each service feature.

## 2. DESCRIPTION OF SERVICE FEATURES

The description of each service feature comprises the following items:

#### 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  $\triangleleft$  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 ( $\triangleleft$ ) is automatically assigned for each command.

#### (INITIAL) : System Initialization

: After entering the data, system reset is required (press SW1 on the MP card).

#### HARDWARE REQUIRED

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

- (a) Single-line telephone set and interface card (PN-4LC)
- (b) Central Office Trunk Card (PN-4COT)
- **Note:** For Series E Multiline Terminals (DTP-8-1, DTP-8D-1, DTP-16-1, DTP-16D-1, DTP-32-1, DTP-32D-1), the feature programming is available in same method as the Series III Multiline Terminal. However, when the Series E Multiline Terminal with Series III mode or the Elite Terminal is accommodated, it is necessary to specify the kind of the terminal accommodated in a DLC card by programming of CM12 Y= 17. Refer to "Proprietary Multiline Terminal" for the programming of CM12 Y = 17.

The feature programming for SN716 DESKCON is available in same method as the SN610 ATTCON. However, it is necessary to specify the type of console by programming of CM60 YY=22. Refer to "SN716 DESKCON" for programming related to SN716 DESKCON.
#### 2.1 Business Features

#### PROGRAMMING

<u>START</u>	DESCRIPTION	DATA
CM08	Specify whether Service Set Tone should be sent after dialing the access code for Account Code entry.	<ul> <li>(1) 362</li> <li>(2) 0/1  <ul> <li>(2) 362</li> <li>(2) 11 </li> <li>(3) 11 </li> <li>(4) 11 </li> <li>(5) 11 </li> <li>(5) 11 </li> <li>(6) 11 </li> <li>(7) 11 </li></ul></li></ul>
CM12 CM15	Assign the Class of Service for Account Code entry to the required stations.	<ul> <li>CM12 YY = 02</li> <li>(1) X-XXXX: Primary Extension No.</li> <li>(2) XX XX *a</li> <li>*a: Service Restriction Class (A): 00-15◄</li> </ul>
		<ul> <li>CM15 YY = 30</li> <li>(1) 00-15 : Service Restriction Class (A) assigned by CM12 YY = 02</li> <li>(2) 1 ◀ : Allowed</li> </ul>
CM42	Specify the maximum number of digits for Account Codes. Note: If the SMDR message format (2400 IMS Format) is assigned, the maxi- mum number of digits is 10. (See CM D001-82/102/122 in the SMDR Sys- tem Manual.)	<ol> <li>10 : Max. number of digits for Account Codes</li> <li>(2) 01-16  </li> <li>(3) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2</li></ol>
CM20	Assign an access code for Account Code en- try.	<ul> <li>Y = 0-3: Numbering Plan Group 0-3</li> <li>(1) X-XXX: Access Code (* #)</li> <li>(2) 085</li> </ul>
CM90 END	Assign an Account Code feature access key to a Multiline Terminal.	<ul> <li>YY = 00</li> <li>(1) Primary Extension No. + , + Key No.</li> <li>(2) F0085</li> </ul>

#### HARDWARE REQUIRED

SMDR (PN-AP00 card and cables)

# ADD-ON MODULE (1200 Series Enhancement)

<u>START</u>	DESCRIPTION	DATA (1) 0000-0511 (LEN No.) (2) EC00-EC31: Add-On Module No. For PIM0/1: EC00-EC07 For PIM2/3: EC08-EC15 For PIM4/5: EC16-EC23 For PIM6/7: EC24-EC31 Note			
CM10	<ul> <li>Assign the Add-On Module Number to its associated LEN.</li> <li>Note: 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.</li> </ul>				
CM98	<ul> <li>Assign the Multiline Terminal which will be associated with the Add-On Module.</li> <li>Note: The Multiline Terminal and the Add-On Module must be in the same PIM (Port Interface Module).</li> </ul>	<ul> <li>Y=0</li> <li>(1) 00-31 (Add-On Module No.: Last two digits of EC00-EC31 assigned by CM10.)</li> <li>(2) X-XXXX (Primary Extension Number) Note</li> </ul>			
CM12	Assign the Class of Service for the accommodation of Single-Line Telephone to Multiline Terminal. (Assignment for Single- Line Telephone only).	<ul> <li>YY=05</li> <li>(1) X-XXXX: Station No.</li> <li>(2) 0: Accommodated</li> </ul>			
CM90	<ul> <li>Assign the station and trunk numbers to the keys on each Add-On Module.</li> <li>Note: Single-Line, Virtual Line or Primary Extension can be assigned on Add-On Module.</li> </ul>	<ul> <li>YY=00</li> <li>(1) Primary Extension No. + + Add-On Module Key No. (30-54)</li> <li>(2) X-XXXX (Station No.) Note DXXX *a</li> <li>*a: 000-255 (Trunk No.)</li> </ul>			

## ADD-ON MODULE (1200 Series Enhancement)

A	DESCRIPTION	DATA			
CM90	Assign the Automatic/Manual/Dial Intercom key to each Add-On Module, if required. For details, refer to INTERCOM.	<ul> <li>YY=00</li> <li>(1) Primary Extension No. + → + Add-On Module Key No. (30-54)</li> <li>(2) A000 A000 A031 Automatic Intercom No.</li></ul>			
		A 100 $\langle$ A 100 $\langle$ A 131 A 200 $\langle$ A 700 A 201 $\langle$ A 701 $\langle$ A 701 $\langle$ A 224 $\langle$ A 724 B 900 B 901 B 100 A 100 A 100 A 201 $\langle$ B 200 B 200 B 200 A 201 $\langle$ B 200 B 200 A 201 $\langle$ B 200 B 200 A 201 $\langle$ B 200 B 200 B 200 A 201 $\langle$ B 200 B 200 A 201 $\langle$ B 200 B 200 A 201 $\langle$ B 200 B 200 A 201 $\langle$ B 200 A 201 $\langle$ B 200 A 201 $\langle$ B 200 A 201 $\langle$ B 200 B 200 A 201 A			
		$ \begin{array}{c} & \\ B901 \\ B024 \\ & \\ B924 \end{array} $ $ \begin{array}{c} \\ B024 \\ & \\ B924 \end{array} $			
	Assign the Station Speed Dialing to the keys on each Add-On Module, if required. For details, refer to STATION SPEED DIALING.	<ul> <li>YY=00</li> <li>(1) Primary Extension No. + → + Add-On Module Key No. (30-89)</li> <li>(2) F11<u>XX</u> *a</li> <li>*a: 00: Station Speed Dialing 00</li></ul>			
В		99: Station Speed Dialing 99			

## ADD-ON MODULE (1200 Series Enhancement)

в	DESCRIPTION	DATA			
CM90	Assign the Day/Night Key on each Add-On Module, if required.	<ul> <li>YY=00</li> <li>(1) Primary Extension No. + + + Add-On Module Key No. (87-89)</li> <li>(2) F0043: Day/Night Key</li> </ul>			
	Specify the tone ringer enabled on call termination to each line/trunk key on each Add-On Module, if required.	<ul> <li>YY=01</li> <li>(1) Primary Extension No. + → + Add-On Module Key No. (30-54)</li> <li>(2) 0/1 ◀ : Disabled/Enabled</li> </ul>			
	<ul> <li>Assign the Delayed Ringing feature to each line/trunk key on an Add-On Module, if required.</li> <li>Note: Delayed Ringing can be assigned to the first 16 line/trunk keys (Key No. 30-45).</li> </ul>	<ul> <li>YY=03</li> <li>(1) Primary Extension No. + + + Add-On Module Key No. (30-45) Note</li> <li>(2) 0: Delayed Ringing</li> </ul>			
CM41	Specify the Delayed Ringing timing.	<ul> <li>Y=1</li> <li>(1) 09</li> <li>(2) 01-20: Timer Data for 2 sec 40 sec. (2 sec. increment)</li> <li>If no data is set, the default setting is 10 seconds.</li> </ul>			
CM30 END	Provide Trunk-Direct Appearances to the trunk number.	<ul> <li>YY=18</li> <li>(1) Trunk No. (000-255)</li> <li>(2) 0: To be provided</li> </ul>			

#### HARDWARE REQUIRED

DSS Console PN-2DLC/4DLC Card (Two or four DSS Console can be accommodated per card)

## ALPHANUMERIC DISPLAY

<u>START</u>	DESCRIPTION	DATA		
CM08	Provide the system with the Name Display Service.	(1) (2)	255 $1 \blacktriangleleft$ : To be provided	
	Station number and number display provided when an incoming call terminates to a Prime Line and a Primary Extension.	(1) (2)	<ul><li>335</li><li>1 ◀ : To be provided</li></ul>	
CM20	Assign the access code for station user name entry (used from individual stations).	• (1) (2)	Y= 0-3 (Numbering Plan Group 0-3) X-XXX: Access Code (62) A10	
CM35	Assign a Trunk Name Number to each Trunk Route.	• (1) (2)	YY = 03 00-63 : Trunk Route No. 00 : Trunk Name No. 00 2 14 : Trunk Name No. 14 15◀ : Kind of Trunk Route assigned by CM35 YY = 00 is displayed 16 : Trunk Name No.16 2 63 : Trunk Name No. 63	
CM77	Assign the desired station user's name to each station number by $Y = 0$ or $Y = 1$ .	• (1) (2) • (1) (2)	Y = 0 (By Character Code) X-XXXX: Station No. Character Code (20-7F:See Character Code Table Max. 16 digits) Y = 1 (By Character) X-XXXX: Station No. Character (A-Z, 0-9) Max. 8 characters	

## ALPHANUMERIC DISPLAY



- Note 1: 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.
- Note 2: User names can be assigned to stations that do not have an LCD.
- **Note 3:** 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.
- **Note 4:** 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 existing name.

## **Character Code Table**

151 2ND	2	3	4	5	6	7
0		0	@	Р	\	p
1	!	1	A	Q	a	q
2	,,	2	В	R	b	r
3	#	3	C	S	с	s
4	\$	4	D	Т	d	t
5	%	5	E	U	e	υ
6	&	6	F	V	f	V
7	,	7	G	W	g	V
8	(	8	Н	X	h	Х
9	)	9	Ι	Y	i	У
Α	*	:	J	Z	j	Z
В	+	;	K	[	k	{
С	,	<	L	¥	1	
D	-	=	M	]	m	}
E		>	N	^	n	_
F	/	?	0	_	0	<i>~</i>

To assign the Single Port Mode:

<u>START</u>	DESCRIPTION	DATA		
CM13	Provide the Analog Port Adapter to the required stations.	<ul> <li>YY=32</li> <li>(1) X-XXXX: Primary Extension No.</li> <li>(2) 0: To be provided</li> </ul>		
	Assign the Single Port Mode to the required stations.	<ul> <li>YY=33</li> <li>(1) X-XXXX: Primary Extension No.</li> <li>(2) 1 ◀ : Single Port Mode</li> </ul>		
END	Specify whether a ringing signal is sent to the Analog terminal.	<ul> <li>YY=35</li> <li>(1) X-XXXX: Primary Extension No.</li> <li>(2) 0/1 ◀ : Not to be sent/To be sent</li> </ul>		

To assign the Dual Port Mode:

1. Data Assignment for Multiline Terminal accommodates the Analog Port Adapter.

<u>START</u>	DESCRIPTION	DATA		
CM13	Provide the Analog Port Adapter to the required stations.	<ul> <li>YY=32</li> <li>(1) X-XXXX: Primary Extension No.</li> <li>(2) 0: To be provided</li> </ul>		
END	Assign the Dual Port Mode to the required stations. (INITIAL)	<ul> <li>YY=33</li> <li>(1) X-XXXX: Primary Extension No.</li> <li>(2) 0: Dual Port Mode</li> </ul>		

#### **ANALOG PORT ADAPTER (1200 Series Enhancement)**

#### 2. Data Assignment for Analog Terminal connected to the Analog Port Adapter.



## **ANALOG PORT ADAPTER (1200 Series Enhancement)**

A	DESCRIPTION	DATA			
СМ90	Assign a key for Analog Terminal.	<ul> <li>YY=00</li> <li>(1) Analog Terminal Station No. + + Key No.</li> <li>(2) X-XXXX: Analog Terminal Station No. assigned by CM10.</li> </ul>			
CM93	Assign an Analog Terminal Station No. as Prime Line.	<ol> <li>X-XXXX: Analog Terminal Station No.</li> <li>X-XXXX: Analog Terminal Station No.</li> </ol>			
CM13	Provide the Analog Port Adapter to the required station.	<ul> <li>YY=34</li> <li>(1) X-XXXX: Analog Terminal Station No.</li> <li>(2) 0: To be provided</li> </ul>			
	Specify whether a ringing signal is sent to the Analog Terminal.	<ul> <li>YY=35</li> <li>(1) X-XXXX: Primary Extension No.</li> <li>(2) 0/1 ◀ : Not to be sent/To be sent</li> </ul>			
	Specify the PAD control of the Analog Terminal.	<ul> <li>YY=09</li> <li>(1) X-XXXX: Analog Terminal Station No.</li> <li>(2) 0/1 ◀ : Not Available/Available</li> </ul>			
END					

<u>START</u>	DESCRIPTION	DATA
CM08	Specify the Multi-Connection of the Digital Announcement Trunk (PN-2DATA) on Announcement Service.	<ul> <li>(1) 124</li> <li>(2) 0/1 ◀ : Available/Not Available (Single Connection)</li> </ul>
CM10	<ul> <li>Assign a Digital Announcement Trunk Circuit No. to the required LEN.</li> <li>Note: The Digital Announcement Trunk Circuit No. must be assigned to the first LEN (Level 0) and/or the third LEN (Level 2) of each LT slot.</li> </ul>	(1) LEN (0000-0511) (2) EB000-EB127: Digital Announcement Trunk Circuit No. $\begin{bmatrix} For PIM0/1: EB000-EB031 \\ For PIM2/3: EB032-EB063 \\ For PIM4/5: EB064-EB095 \\ For PIM6/7: EB096-EB127 \end{bmatrix}$
CM12 CM15		<ul> <li>CM12 YY = 02</li> <li>(1) X-XXXX: Primary Extension No.</li> <li>(2) XX XX *a</li> <li>*a: Service Restriction Class (A): 00-15</li> <li>CM15 YY = 34 (Group 0)</li> <li>CM15 YY = 35 (Group 1)</li> <li>CM15 YY = 36 (Group 2)</li> <li>CM15 YY = 37 (Group 3)</li> <li>CM15 YY = 38 (Group 4)</li> <li>CM15 YY = 39 [Recording for Announcement Service (Group 0-4)]</li> <li>(1) 00-15 : Service Restriction Class (A) assigned by CM12 YY = 02</li> <li>(2) 1 &lt; : Allowed</li> </ul>
CM20	Assign access codes for Announcement Service.	<ul> <li>Y = 0-3 (Numbering Plan Group 0-3)</li> <li>X-XXX: Access Code</li> <li>A03: Recording message (Group 0-4) A04: Replaying message (Group 0) A05: Replaying message (Group 1) A06: Replaying message (Group 2) A07: Replaying message (Group 3) A08: Replaying message (Group 4) A09: Deleting message (Group 0-4)</li> </ul>

A	DESCRIPTION	DATA		
CM41	When multi-connection is provided (CM08124 = 0), specify the duration of message replay for Announcement Service.	<ul> <li>Y = 0</li> <li>(1) 53</li> <li>(2) 01-99: 4-396 sec. in 4 sec. increments If no data is set, the default setting is 60-64 seconds.</li> </ul>		
CM49	Assign the function for each Digital Announcement Trunk.	<ul> <li>YY = 00         <ul> <li>(1) 000-127: Digital Announcement Trunk Circuit No. assigned by CM10 (EB000-EB127)</li> <li>(2) 04X X *a*b</li></ul></li></ul>		
CM35 END	To provide a Tie Line party with this service, assign the Announcement Service Group 0-4 to the required Trunk Routes.	<ul> <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) 00-63 : Trunk Route No.</li> <li>(2) 1</li></ul>		

- **Note 1:** A maximum of five different announcements can be accessed. There is a limit of 10 Digital Announcement Trunk Circuit for each of the five different announcements. When recording an announcement, each Digital Announcement Trunk Circuit must be recorded individually.
- **Note 2:** *Each time a station is connected to a Digital Announcement Trunk Circuit, the message will be repeated three times. The station will then be disconnected.*
- **Note 3:** For the single connection of a Digital Announcement Trunk Circuit, the duration of an announcement is limited to 60 seconds.
- **Note 4:** For the multi-connection of a Digital Announcement Trunk Circuit, the duration of replay for an announcement is programmable from 4 to 396 seconds.

ND-45670 (E)

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:

<u>START</u>	DESCRIPTION	DATA			
CM10	<ul> <li>Assign a Digital Announcement Trunk Circuit No. to the required LEN.</li> <li>Note: The Digital Announcement Trunk Circuit No. must be assigned to the first LEN (Level 0) and/or the third LEN (Level 2) of each LT slot.</li> </ul>	<ul> <li>(1) LEN (0000-0511)</li> <li>(2) EB000-EB127: Digital Announcement Trunk Circuit No.</li> <li>For PIM0/1: EB000-EB031 For PIM2/3: EB032-EB063 For PIM4/5: EB064-EB095 For PIM6/7: EB096-EB127</li> </ul>			
CM65	Assign the feature for a voice message connection to a transferred trunk when the transferred destination does not answer or the transferred destination is busy to the required tenant.	<ul> <li>YY = 50 (No Answer)</li> <li>(1) 00-63: Tenant No.</li> <li>(2) 0</li> <li>YY = 51 (Busy)</li> <li>(1) 00-63: Tenant No.</li> <li>(2) 0</li> </ul>			
CM49	Assign the function for each Digital Announcement Trunk.	<ul> <li>YY = 00</li> <li>(1) 000-127: Digital Announcement Trunk Circuit No. assigned by CM10 (EB000-EB127)</li> <li>(2) 06<u>XX</u>: No Answer *a *a: Message No. (00-63)</li> <li>07<u>XX</u>: Busy *a: Message No. (00-63)</li> <li>YY = 06 (No Answer)</li> <li>YY = 07 (Busy)</li> <li>(1) 00-63: Tenant No. of transferring station</li> <li>(2) 00-63: Message No. assigned by YY = 00</li> </ul>			
CM20 END	To record, replay, or delete a message, assign the respective Digital Announcement Trunk access code.	<ul> <li>Y = 0-3 (Number Plan Group 0-3)</li> <li>(1) X-XXX: Access Code</li> <li>(2) A00: Record A01: Replay A02: Delete</li> </ul>			

- **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 60 seconds can be recorded on an individual Digital Announcement Trunk Circuit.
  - In this application, a minimum of two digital announcement Trunk Circuits are needed, one for busy condition, and one for no answer.
  - More than one Digital Announcement Trunk Circuit can be used, depending on traffic conditions.
  - System programming can be set to, wait until circuit(s) become free or immediately follow preprogrammed normal call handling, if a busy condition is encountered.
  - Digital Announcement Trunk Circuits can be shared among tenants.
  - This feature does not function on Attendant transferred calls.

To provide an Internal Recorded Message from a Digital Announcement Trunk (PN-2DATA) in place of Music On Hold:

<u>START</u>	DESCRIPTION	DATA
CM10	<ul> <li>Assign a Digital Announcement Trunk Circuit No. to the required LEN.</li> <li>Note: The Digital Announcement Trunk Circuit No. must be assigned to the first LEN (Level 0) and/or the third LEN (Level 2) of each LT slot.</li> </ul>	<ul> <li>(1) LEN (0000-0511)</li> <li>(2) EB000-EB127: Digital Announcement Trunk Circuit No.</li> <li>For PIM0/1: EB000-EB031 For PIM2/3: EB032-EB063 For PIM4/5: EB064-EB095 For PIM6/7: EB096-EB127</li> </ul>
CM48	Define the type of call to be provided with Hold Message.	<ul> <li>Y = 0</li> <li>(1) 00: C.O. Line Call 01: Tie Line Call 02: Internal Call</li> <li>(2) 0500: Hold Message</li> </ul>
CM49	Assign the function of the Digital Announcement Trunk to Hold Message Service.	<ul> <li>YY = 00         <ol> <li>000-127 : Digital Announcement Trunk Circuit No. assigned by CM10 (EB000-EB127)</li> <li>05<u>XX</u> : For Hold Message Service</li></ol></li></ul>
CM20 <u>END</u>	To record, replay, or delete a message, assign the respective Digital Announcement Trunk access code.	<ul> <li>Y = 0-3 (Number Plan Group 0-3)</li> <li>(1) X-XXX (Access Code)</li> <li>(2) A00: Record A01: Replay A02: Delete</li> </ul>

**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 Digital Announcement Trunk Circuit. 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.

To provide the Night Announcement by Digital Announcement Trunk (PN-2DATA)

<u>START</u>	DESCRIPTION	DATA			
CM10	<ul> <li>Assign each Digital Announcement Trunk Circuit No. to the required LEN.</li> <li>Note: The Digital Announcement Trunk Circuit No. must be assigned to the first LEN (Level 0) and/or the third LEN (Level 2) of each LT slot.</li> </ul>	<ul> <li>(1) LEN (0000-0511)</li> <li>(2) EB000-EB127: Digital Announcement Trunk Circuit No.</li> <li>For PIM0/1: EB000-EB031 For PIM2/3: EB032-EB063 For PIM4/5: EB064-EB095 For PIM6/7: EB096-EB127</li> </ul>			
CM30	Assign the Digital Announcement Trunk Circuit No. to each incoming trunk.	<ul> <li>YY = 03</li> <li>(1) 000-255: Trunk No.</li> <li>(2) 04: Direct-In Termination</li> <li>YY = 05</li> <li>(1) 000-255 : Trunk No.</li> <li>(2) EB000-EB127 : Digital Announcement Trunk Circuit No. assigned by CM10.</li> </ul>			
CM49	Assign the function of the Digital Announcement Trunk to Night Announcement.	<ul> <li>YY = 00</li> <li>(1) 000-127 : Digital Announcement Trunk Circuit No. assigned by CM10. (EB000- EB127)</li> <li>(2) 03000 : For Night Announcement Service</li> </ul>			
CM41	Specify the duration of a Night Announcement.	<ul> <li>Y = 0</li> <li>(1) 45</li> <li>(2) 01-99: 4 -396 sec. in 4sec. increments If no data is set, the default setting is 60-64 seconds.</li> </ul>			
CM20	To record, replay, or delete a message, assign the respective Digital Announcement Trunk Circuit access code.	<ul> <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>			
 <u>END</u>					

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

- Different messages can be programmed on each C.O. line.
- The voice message can be programmed for day/night.
- More than one connection can be made to a Digital Announcement Trunk Circuit. 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

Digital Announcement Trunk (PN-2DATA).

## **ANSWER KEY**

#### PROGRAMMING

<u>START</u>	DESCRIPTION		DATA
CM12 -	Assign the Class of Service for this feature to the required Multiline Terminals.	• (1) (2)	CM12 YY = 02 X-XXXX: Primary Extension No. XX $\underline{XX}_{a}$
		• (1) (2)	<ul> <li>*a: Service Restriction Class (B): 00-15 </li> <li>CM15 YY = 72</li> <li>XX : Service Restriction Class (B) assigned by CM12 YY = 02</li> <li>0 : Allowed</li> </ul>
END			

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

#### HARDWARE REQUIRED

ETJ-8-1/ETJ-16DC-1/ETJ-16DD-1/ETJ-24DS-1 and PN-2DLCB/PN-4DLCA card.

### ATTENDANT-ASSISTED CALLING

<u>START</u>	DESCRIPTION	DATA
CM20	Assign the Access code for an operator call.	<ul> <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 SN610 ATTCON.	<ul> <li>YY = 00</li> <li>(1) 0-7: ATTCON No. assigned by CM10.</li> <li>(2) 0-3: ATTCON Group No.</li> </ul>
	Assign the Master ATTCON within the ATTCON Group.	<ul> <li>YY = 01</li> <li>(1) 0-7: ATTCON No.</li> <li>(2) 0/1 ◀ : Master/Sub</li> </ul>
CM62	Specify the tenants to be handled by each ATT Group.	<ul> <li>Y = 0-3 (ATTCON Group No.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 SN610 ATTCON.	<ul> <li>(1) 142</li> <li>(2) 0/1 ◄ : Allowed/Restricted</li> </ul>
	Provide the system with Passing Dial Tone.	<ul> <li>(1) 048</li> <li>(2) 1 ◀ : To be provided</li> </ul>
	Provide the system with Attendant Night Transfer, if required.	<ul> <li>(1) 018</li> <li>(2) 0/1  <ul> <li>(2) 1. ■ : Not to be provided/Provided</li> </ul> </li> </ul>
	Specify the Individual Attendant access capability provided from a station belonging to a different tenant.	<ul> <li>(1) 143</li> <li>(2) 0/1 ◀ : Restricted/Allowed</li> </ul>
 <u>END</u>		

<u>STAKI</u>	DESCRIPTION	DATA
CM08	Specify the Camp-On Tone sent to busy station.	<ul> <li>(1) 068</li> <li>(2) 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>
CM41 END	Specify the recall timing of Camp-On.	<ul> <li>Y = 0</li> <li>(1) 00</li> <li>(2) 01-14: 2.4-33.6 sec. in 2.4 sec. increments 15-24: 38.4-124.8 sec. in 9.6 sec. increments</li> <li>If no data is set, the default setting is 31.2-33.6 seconds.</li> </ul>

To reenter a Camped-On trunk from an Attendant before Automatic Recall (1200 Series Enhancement):

<u>START</u>	DESCRIPTION	DATA	
CM20	Assign the access code for Call Pickup - Direct.	<ul> <li>Y=0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX: Access Code</li> <li>(2) 021: Call Pickup - Direct</li> </ul>	
END			

To display the busy station number and name on an Attendant Console when reentering a Camped-On trunk by depressing the loop key (1200 Series Enhancement):

<u>START</u>	DESCRIPTION	DATA
CM08 END	Provide the SN610 ATTCON with the busy station number/name display when reentering a Camped-On trunk.	<ul> <li>(1) 441</li> <li>(2) 0: To be provided</li> <li>1 ◀ : Not to be provided</li> </ul>

## ATTENDANT CONSOLE (SN610 ATTCON)

#### PROGRAMMING

А

<u>START</u>	DESCRIPTION	DATA
CM10	Assign the card number of the interface circuit for the SN610 ATTCON to its associated LEN.	<ol> <li>(1) 0000-0511 : LEN No.</li> <li>(2) E000-E007 : ATTCON No.</li> </ol>
CM30	Set the terminating system for the incoming calls to SN610 ATTCON.	<ul> <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> <li>YY = 00</li> <li>(1) ATTCON No. (E000-E007) + , + Key No.</li> <li>(2) F6000-F6067: Type of Calls to be assigned F6100-F6245: Functions to be assigned</li> </ul>

## ATTENDANT CONSOLE (SN610 ATTCON)



<u>END</u>

### ATTENDANT CONSOLE (SN610): ATTENDANT CALLED/CALLING NAME DISPLAY

<u>START</u>	DESCRIPTION	DATA			
CM08	Provide the system with the Name Display Service.	<ul> <li>(1) 255</li> <li>(2) 1</li></ul>			
CM20	Assign the access code for station user name entry, used from individual stations.	<ul> <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 a Trunk Name Number to each Trunk Route.	<ul> <li>YY = 03</li> <li>(1) 00-63 : (Trunk Route No.)</li> <li>(2) 00 : Trunk Name No. 00 <ul> <li> </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> </li> <li> </li> <li>63 : Trunk Name No. 63</li> </ul> </li> </ul>			
CM77	Assign the desired station user name to each station number by $Y = 0$ or $Y = 1$ .	<ul> <li>Y = 0 (By Character Code)</li> <li>(1) X-XXXX: Station No.</li> <li>(2) Character Code     <ul> <li>(20-7F: See Character Code Table) Max.</li> <li>16 digits</li> </ul> </li> <li>Y = 1 (By Character)</li> <li>(1) X-XXXX: Station No.</li> <li>(2) Character (A-Z, 0-9)     <ul> <li>Max. 8 characters</li> </ul> </li> </ul>			
CM77	Assign the desired trunk name to each trunk route by $Y = 2$ or $Y = 3$ .	<ul> <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>			
<u>END</u>					

## ATTENDANT CONSOLE (SN610): ATTENDANT CALLED/CALLING NAME DISPLAY

## **Character Code Table**

1ST 2ND	2	3	4	5	6	7
0		0	@	Р	\	р
1	!	1	A	Q	a	q
2	"	2	В	R	b	r
3	#	3	C	S	с	S
4	\$	4	D	Т	d	t
5	%	5	E	U	e	u
6	&	6	F	V	f	v
7	,	7	G	W	g	W
8	(	8	Н	X	h	X
9	)	9	Ι	Y	i	У
Α	*	•	J	Z	j	Z
В	+	•	K	[	k	{
С	,	<	L	¥	1	
D	-	=	М	]	m	}
E		>	N	^	n	$\rightarrow$
F	/	?	0	_	0	$\leftarrow$

<u>START</u>	DESCRIPTION	DATA
CM35	Specify the ATT call Selection key to which incoming calls from each trunk route terminate.	<ul> <li>YY = 15</li> <li>(1) Trunk Route No. (00-15)</li> <li>(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</li> </ul>
CM90 END	Assign the ATT Call Selection Keys required. the following ATT Call Selection Keys are initially set.Image: Collection Keys required. Image: Collection Keys required. Image: Collection Keys are Image: Collection Keys required. Image: Collection Keys required. 	<ul> <li>YY = 00</li> <li>(1) ATTCON No. + , + Key No.</li> <li>(2) F60<u>XX</u> *a</li> <li>*a: 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)</li> </ul>

<u>START</u>	DESCRIPTION	DATA
CM90	Assign the Mode key for providing Attendant Console Lockout on the SN610 ATTCON.	<ul> <li>YY = 00</li> <li>(1) ATTCON No. + , + Key No.</li> <li>(2) F6110</li> </ul>
CM20	Assign the access code for providing Attendant Console Lockout for an SN610 ATTCON, if required.	<ul> <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 the SN610 ATTCON in Attendant Console Lockout.	<ul> <li>(1) 353</li> <li>(2) 0/1 ◀ : Not to be provided/To be provided</li> </ul>
CM60 <u>END</u>	Assign the password code for Attendant Console Lockout.	<ul> <li>YY = 30</li> <li>(1) 0</li> <li>(2) XX-XX : Password Code (Max. 8 digits) X : 0-9, A (*) B (#)</li> <li>If no data is set, the default setting is NONE. In this case, the password is set to "12345678".</li> </ul>

<u>START</u>	DESCRIPTION	DATA
CM13	Assign Do Not Disturb-System to the required stations.	<ul> <li>YY = 00</li> <li>(1) X-XXXX (Station No.)</li> <li>(2) 0: To be provided</li> </ul>
CM90	<ul> <li>Assign DND and DNDOVR function keys to each SN610 ATTCON, if needed.</li> <li>Note: By resident system program, the Multi-Function keys are programmed to provide a DND OVR key when the ATTCON calls a station in DND.</li> </ul>	<ul> <li>YY = 00</li> <li>(1) ATTCON No. + + + + Key No.</li> <li>(2) F6102: DND F6108: DND Override F6104: RESET</li> </ul>
END		

<u>START</u>	DESCRIPTION	DATA
CM20	Assign the access code for Inter-Position Transfer.	<ul> <li>Y = 0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX (Access Code)</li> <li>(2) 095</li> </ul>
СМ90	Assign the Attendant Call Selection Key for this feature on the SN610 ATTCON.	<ul> <li>YY = 00</li> <li>(1) ATTCON No. + + + Key No.</li> <li>(2) F6067</li> </ul>
CM08	Specify the Inter-Position Transferred call to another tenant's SN610 Attendant Console. If the data is set to 1, a call from any station can be transferred to another SN610 Attendant Console regardless of Tenant Allocation by CM62.	<ul> <li>(1) 143</li> <li>(2) 0/1 ◀ : Restricted/Allowed</li> </ul>
<u>END</u>		

<u>START</u>	DESCRIPTION	DATA
CM08	Provide the system with diversion display.	<ul> <li>(1) 204</li> <li>(2) 0: To be provided</li> </ul>
CM35	Specify the Incoming Call Identification (ICI) key to which each LDN call or Tie Line call from each trunk route will terminate.	<ul> <li>YY = 15</li> <li>(1) Trunk Route No. (00-63)</li> <li>(2) 00: C.O. Incoming Call 0 </li> <li></li></ul>
CM90	Assign the ICI key, if required.	<ul> <li>YY = 00</li> <li>(1) ATTCON No. + , + Key No.</li> <li>(2) F60<u>XX</u> *a</li> <li>*a: 00-07 (C.O. Incoming Call 0-7)</li> <li>40-47 (Tie Line Incoming Call 0-7)</li> </ul>
CM50	Assign the indialed number to each LDN key or Tie Line key assigned by CM90. The indialed number should be different from any numbers assigned by CM10 and CM11.	<ul> <li>YY = 01 (For DID)</li> <li>(1) 0 : Effective data in CM35 YY = 15 1-8 : LDN Key No. (00-07) assigne by CM90</li> <li>(2) X-XXXX (Indialed No.)</li> <li>YY = 02 (For Tie Line)</li> <li>(1) 0 : Effective data in CM35 YY=15 1-8 : Tie Line Key No. (00-07) assigned by CM90</li> <li>(2) X-XXXX (Indialed No.)</li> </ul>

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

DESCRIPTION DATA START Provide the system with the LDN Diversion (1) 205 **CM08** feature. (2) 0: To be provided Assign the data for LDN Diversion to each YY = 00 (Tenant No. of the LDN) ٠ CM58 (1) 00 : Effective data in CM35 YY = 15indialed No. assigned by CM50 YY = 01/02. 01-08 : LDN Key No. (00-07) assigned A call is diverted to LDN0-7/TIE0-7 by CM50 YY = 01Note: keys as specified by CM58 YY = 02-: Effective data in CM35 YY = 1510 07, even if CM50 YY = 01/02, 1-8 has 11-18 : Tie Line Key No. (00-07) asbeen set. signed by CM50 YY = 02(2) Tenant No. (00-63) ٠ YY = 01 (TAS Group No.) (1) Same as YY = 00(2) TAS Group No. (00-63) YY = 02 (Day Mode Destination of the • LDN) (1) Same as YY = 00(2) 00: LDN/TIE key 0 2 2 07: LDN/TIE key 7 08: To TAS To the station assigned by CM58 09: YY = 08.٠ YY = 03 (Night Mode Destination) (1) Same as YY = 00(2) 00: LDN/TIE key 0 2 07: LDN/TIE key 7 08: To TAS 09: To the station assigned by CM58 YY = 09.YY = 04 (Day mode diversion for busy • destination station) (1) Same as YY = 00(2) 00: To ATTCON (BUSY key) 08: To TAS 09: Camped on

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

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



#### HARDWARE REQUIRED

PN-AUCA card (DID Trunk) PN-20DT (Tie Line Trunk)

## ATTENDANT CONSOLE (SN610): ATTENDANT LOOP RELEASE

#### PROGRAMMING

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

To reenter the call that has been released from a loop before Automatic Recall (1200 Series Enhancement):

<u>START</u>	DESCRIPTION		DATA
CM20 END	Assign the access code for Call Pickup - Direct.	• (1) (2)	Y=0-3 (Numbering Plan Group 0-3) X-XXX: Access Code 021: Call Pickup - Direct

<u>START</u>	DESCRIPTION	DATA
CM60	Assign the password code for Attendant Programming.	<ul> <li>YY = 30 <ul> <li>1</li> <li>(1) 1</li> <li>(2) XX-XX : Password Code (Max. 8 digits) X : 0-9, A (*), B(#)</li> </ul> </li> <li>If no data is set, the default setting is NONE. In this case, the password is set to "12345678".</li> </ul>
СМ90	Assign the program (PROG) key for providing Attendant Programming on the SN610 ATTCON.	<ul> <li>YY = 00</li> <li>(1) ATTCON No. + , + Key No.</li> <li>(2) F6111</li> </ul>
CM20	Assign the access code for providing Attendant Programming for the SN610 ATTCON, if required.	<ul> <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

### PROGRAMMING

Refer to CALL WAITING DISPLAY.

## ATTENDANT CONSOLE (SN610): CALL SPLITTING

#### PROGRAMMING



END
## ATTENDANT CONSOLE (SN610): CALL WAITING DISPLAY

<u>START</u>	DESCRIPTION	DATA			
CM42 END	Specify the number of waiting calls which cause the Call Waiting lamp to flash.	<ul> <li>(1) 00</li> <li>(2) No. of Waiting Calls (01-48)</li> <li>If no data is set, the default setting is 6.</li> </ul>			

## ATTENDANT CONSOLE (SN610): COMMON ROUTE INDIAL

<u>START</u>	DESCRIPTION	DATA
CM08	Provide the system with Diversion Display.	<ul> <li>(1) 204</li> <li>(2) 0: To be provided</li> </ul>
CM90	Assign the required number of LDN keys on the SN610 ATTCON.	<ul> <li>YY = 00</li> <li>(1) SN610 ATTCON No. + , + Key No.</li> <li>(2) F6000: LDN0 <ul> <li> </li> <li> </li> <li> </li> <li>F6007: LDN7</li> </ul> </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> <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> <li>YY = 06 (On DID Call)</li> <li>(1) Tenant No. (00-63)</li> <li>(2) X-XXXX (Station No.) E000: SN610 ATTCON</li> </ul>
<u>END</u>		

## ATTENDANT CONSOLE (SN610): COMMON ROUTE INDIAL

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

<u>START</u>		DESCRIPTION	DATA				
CM08	Provide feature.	e the system with the LDN Diversion	(1) (2)	<ul><li>205</li><li>0: To be provided</li></ul>			
CM58	Assign indialec	the data for LDN Diversion to each d No. assigned by CM50 YY = 01.	• (1) (2) • (1) (2)	YY = 00  (Tenant No. of the LDN) 01-08: LDN0-7 assigned by CM50 YY = 01. Tenant No. (00-63) YY = 01  (TAS Group No.) Same as YY = 00 TAS Group No. (00-63)			
	Note:	A call is diverted to LDN0-7 keys as specified by CM58 YY = 02-07, even if CM50 YY = 01, 1-8 has been set.	• (1) (2)	YY = 02 (Day Mode Destination of the LDN) Same as YY = 00 00: LDN0 key     07: LDN7 key 08: To TAS 09: To the station assigned by CM58 YY = 08.			
			• (1) (2)	YY = 03 (Night Mode Destination) Same as YY = 00 00: LDN0 key     07: LDN7 key 08: To TAS 09: To the station assigned by CM58 YY = 09.			
			• (1) (2)	YY = 04 (Day mode diversion for busy destination station) Same as YY = 00 00: To ATTCON (BUSY key) 08: To TAS 09: Camped on			
A							

## ATTENDANT CONSOLE (SN610): COMMON ROUTE INDIAL



#### HARDWARE REQUIRED

PN-AUCA card (DID Trunk)

## ATTENDANT CONSOLE (SN610): DIALED NUMBER IDENTIFICATION SERVICE (DNIS) (1300 Series Enhancement)

<u>START</u>	DESCRIPTION		DATA
CM08	Provide the system with Diversion Display.	(1) (2)	204 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.	• (1) (2)	YY=15Trunk Route No. (00-63)00:C.O. Incoming Call 0 $\iota$ $\iota$ 07:C.O. Incoming Call 740:Tie Line Incoming Call 0 $\iota$ $\iota$ 47:Tie Line Incoming Call 7
CM90	Assign the ICI key required number of LDN to ICI keys.	• (1) (2)	YY=00 Attendant Console No. + , + Key No. F6000-F6007 (C.O. Incoming Call 0-7) F6040-F6047 (Tie Line Incoming Call 0- 7)
CM50	Assign the indialed number to each LDN key or Tie Line key assigned by CM90. The indialed number should be different from any numbers assigned by CM10 and CM11.	• (1) (2)	<ul> <li>YY=01 (For DID)</li> <li>0: Effective data in CM35, YY=15</li> <li>1-8: LDN key No. (0-7) assigned by CM90</li> <li>X-XXXX (Indialed No.)</li> </ul>
A		• (1) (2)	<ul> <li>YY=02 (For Tie Line)</li> <li>0: Effective data in CM35, YY=15</li> <li>1-8: Tie Line key No. (0-7) assigned by CM90.</li> <li>X-XXXX (Indialed No.)</li> </ul>

#### ATTENDANT CONSOLE (SN610): DIALED NUMBER IDENTIFICATION SERVICE (DNIS) (1300 Series Enhancement)

A	DESCRIPTION	DATA			
CM58	Tenant Number of the LDN assigned by CM50-1.	<ul> <li>YY=00</li> <li>(1) 00: Effective data in CM35, YY=15 01-08: LDN Key No. assigned CM90.</li> <li>(2) 00-63: Tenant 00         <ul> <li>Tenant 63</li> </ul> </li> </ul>			
	Assign desired company name to each LDN/ Tie Line key number assigned by CM90.	<ul> <li>YY=10</li> <li>(1) 00: Effective data in CM35, YY=15 01-08: LDN key No. (0-7)</li> <li>10: Effective data in CM35, YY=15 11-18: Tie Line key No. (0-7)</li> <li>(2) Character Code (20-5F: See Character Code Table at- tached) MAX: 8 digits</li> </ul>			
END					

## ATTENDANT CONSOLE (SN610): DIALED NUMBER IDENTIFICATION SERVICE (DNIS) (1300 Series Enhancement)

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

<u>START</u>	DESCRIPTION	DATA
CM08	Provide the system with LDN Diversion feature.	<ul> <li>(1) 205</li> <li>(2) 0: To be provided</li> </ul>
CM58	Assign the data for LDN Diversion to each indialed number assigned by CM50, YY=01. Note that a call is diverted to LDN 0-7 keys as specified by CM58, YY=02, YY=03, even if CM50, YY=01, 1-8 has already been set.	<ul> <li>YY=02 (Day Mode Destination of the LDN)</li> <li>(1) 00: Effective data in CM35, YY=15 01-08: LDN key No. (0-7) assigned by CM90.</li> <li>00: Effective data in CM35, YY=15 01-08: Tie Line key No. (0-7) assigned by CM90</li> <li>(2) 00:LDN/TIE Line key 0 2 1000000000000000000000000000000000</li></ul>
	Assign desired company name to each LDN/ Tie Line key number assigned by CM90.	<ul> <li>(1) Same as 11-02</li> <li>(2) X-XXXX (Station No.)</li> <li>YY=09 (Night Mode destination station)</li> <li>(1) Same as YY=02</li> <li>(2) X-XXXX (Station No.)</li> <li>YY=10</li> <li>(1) 00: Effective data in CM35, YY=15 01-08: LDN key No. (0-7)</li> <li>10: Effective data in CM35, YY=15 11-18: Tie Line key No. (0-7)</li> <li>(2) Character Code (20-5F: See the table below) Max. 8 digit</li> </ul>
<u>END</u>		

# ATTENDANT CONSOLE (SN610): DIALED NUMBER IDENTIFICATION SERVICE (DNIS) (1300 Series Enhancement)

Character	DATA												
(space)	20	*	2A	4	34	>	3E	Н	48	R	52	×	5C
!	21	+	2B	5	35	?	3F	Ι	49	S	53	]	5D
"	22	,	2C	6	36	@	40	J	4A	Т	54	^	5E
#	23	-	2D	7	37	А	41	K	4B	U	55	-	5F
\$	24		2E	8	38	В	42	L	4C	V	56		
%	25	/	2F	9	39	C	43	М	4D	W	57		
&	26	0	30	:	3A	D	44	N	4E	Х	58		
•	27	1	31	;	3B	Е	45	0	4F	Y	59		
(	28	2	32	<	3C	F	46	Р	50	Z	5A		
)	29	3	33	=	3D	G	47	Q	51	[	5B		

#### **Character Code Table**

#### HARDARE REQUIRED

PN -4DIT card (DID Trunk) PN-2ODT card (Tie Line Trunk)

## ATTENDANT CONSOLE (SN610): INCOMING CALL IDENTIFICATION

#### PROGRAMMING

Refer to Attendant Called/Calling Number, Attendant Call Selection, Attendant Source Key, Attendant Listed Directed Number, and Common Route Indial.

<u>START</u>	DESCRIPTION	DATA
CM20	Assign the access code for Direct Trunk Selection.	<ul> <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 SN610 ATTCON.	<ul> <li>YY = 19 <ol> <li>Trunk No. (000-255) assigned by CM10 (D000-D255)</li> <li>XXXX: Trunk ID code Note *a: Set any desired number (4 digit). </li> </ol></li></ul> Note: By loading Resident System Program, Trunk Identification Codes are assigned as follows. <u>IXXXX</u> *a: Trunk Number (000-255)
END		

Refer to ATTENDANT CONSOLE (SN610 ATTCON).

<u>START</u>	DESCRIPTION	DATA
CM60	Provide each SN610 ATTCON Multi- Function key capability.	<ul> <li>YY = 17</li> <li>X: ATTCON No. (0-7) assigned by CM10</li> <li>1 ◀ : Ineffective/Effective</li> </ul>
CM90	<ul> <li>Assign the required Multi-Function keys the each SN610 ATTCON.</li> <li><b>Note 1:</b> The following data is assigned as initial data or resident data.</li> <li>Assign the required Multi-Function keys the following data is assigned as initial data or resident data.</li> <li>Assign the required Multi-Function keys the following data is assigned as initial data or resident data.</li> <li>Assign the required Multi-Function keys the following data is assigned as initial data or resident data.</li> <li>Assign the required Multi-Function keys the following data is assigned as initial data or resident data.</li> <li>Assign the following data is assigned as initial data or resident data.</li> <li>Assign the following data or resident data.</li> <li>Assign the following following data is assign the following following following data follow</li></ul>	<ul> <li>YY=00 <ul> <li>(1) EXX X + , + + + + Multi-Function key</li></ul></li></ul>
END		

## ATTENDANT CONSOLE (SN610): PUSHBUTTON CALLING-ATTENDANT

<u>START</u>	DESCRIPTION	DATA
CM35 END	Assign the type of signaling (DTMF) to Outgoing and Bothway Trunk Routes.	<ul> <li>YY = 01</li> <li>(1) Trunk Route No. (00–63)</li> <li>(2) 7</li> </ul>

## ATTENDANT CONSOLE (SN610): SERIAL CALL



<u>START</u>	DESCRIPTION	DATA
CM30	Assign the Trunk Group No. to each trunk. Several trunks may be assigned to one Trunk Group Number.	<ul> <li>YY = 09</li> <li>(1) 000-255 (Trunk No.)</li> <li>(2) 01-62 (Trunk Group No.)</li> </ul>
CM90	<ul> <li>For providing the Trunk Group Busy Lamps on SN610 ATTCON, assign the Trunk Group No. to required key on SN610 ATTCON.</li> <li>Note 1: Max.6 keys per SN610 ATTCON can be assigned. (Any six Trunk Group No. out of Trunk Group No. 01-62 can be assigned.)</li> </ul>	<ul> <li>YY = 00</li> <li>(1) ATTCON No. + + + Key No.</li> <li>(2) F12XX *a</li> <li>*a: 01-62 (Trunk Group No. assigned by CM30 YY = 09)</li> </ul>
	<b>Note 2:</b> Keys No. 1-6 should not be assigned to provide a Trunk Group Busy Lamp	
CM44	For providing external Trunk Group Busy Lamps, assign the Trunk Group No. to the required circuit number on the PN-DK00 card.	<ul> <li>(1) XX X *a*b</li> <li>*a: 00-31 (Card No. of PN-DK00 assigned by CM10, E800-E831)</li> <li>*b: 0-3 (Circuit No.)</li> <li>(2) 11XX *a</li> <li>*a: 01-62 (Trunk Group No. assigned by CM30 YY = 09)</li> </ul>
<u>END</u>		

#### HARDWARE REQUIRED

To provide the Trunk Group Busy Lamps on Attendant Console: SN610 ATTCON and PN-2DLCC card

To provide the Trunk Group Busy Lamps externally: PN-DK00 card and lamp indicator provided by the customer.

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

#### PROGRAMMING

<u>START</u>	DESCRIPTION	DATA
CM08	Provide the system with this feature.	<ul> <li>(1) 206</li> <li>(2) 1</li></ul>
END		

**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 do not lock up. Refer to TRUNK-TO-TRUNK CONNECTION for data to be assigned to each trunk.

## ATTENDANT CONSOLE (SN716 DESKCON)

<u>START</u>	DESCRIPTION	DATA
CM10	Assign the card number of the interface cir- cuit for the SN716 DESKCON to its associ- ated LEN.	<ol> <li>(1) 0000-0511 : LEN No.</li> <li>(2) E000-E007 : ATTCON No.</li> </ol>
CM30	Set the terminating system for the incoming calls to SN716 DESKCON.	<ul> <li>YY=02 (Day mode), YY=03 (Night mode)</li> <li>(1) Trunk No. (000-255)</li> <li>(2) 14: Termination to SN716 DESKCON</li> </ul>
CM90	Assign the required Attendant Call Selection keys and ATTCON Function keys to each SN716 DESKCON. If no data is set, the default setting is as fol- lows (Refer to MULTI-FUNCTION KEY for assignment of Multi-Function Keys):	<ul> <li>YY=00</li> <li>(1) ATTCON No.</li> <li>EXX X+ , + Key No.</li> <li>ATTCON No. (0-7)</li> <li>ATTCON Status No. (00-15)</li> <li>00: Idle State [Same as Key Assign (1)]</li> <li>01: When answering or originating</li> <li>02: When the called station is busy</li> <li>03: When the called station is in Do Not Disturb mode</li> <li>04: When accessing Hotel/Motel feature</li> <li>05: Not Used 15: Not Used </li> </ul>
		<ul> <li>(2) F6000-F6067: Type of Calls to be assigned</li> <li>F6100-F6245: Functions to be assigned</li> </ul>

## ATTENDANT CONSOLE (SN716 DESKCON)

DESCRIPTION					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)	Note:	When the SN716 is used to set H/A features, the "Reset" key should b
04	F6100 (RC)	F6101 (MW)	F6102 (DD)	F6109 (WU)		F6104 RESET		assigned to one of the feature key ( <i>i.e Key 21</i> ) in the Idle mode.
<u>KeyNo.</u>	Data		Desc	criptio	n			
13	F6000	C.0	. Incon	ming	0 (LD	N)		
14	F6040	Tie	Line I	ncomi	ing 0 (	TIE0)		
15	F6064	Call	Fowa	rding	-Busy	Line		
		Inco	ming	Indica	ation			
16	E6060	(BU	51) noton (					
10	F0000	Coll	Fator C	andin (A	AIND	) Nacion		
17	10003	Inco	ming	Indice	g-ino P ation	AIISWEI		
		(NA	NS)	maret	ation			
18	F6061	Reca	all (Re	ecall)				
19	F6200	Sou	rce (Sl	RC)				
20	F6201	Dest	tinatio	n (DE	EST)			
22	F6203	Talk	t (Talk	<b>x</b> )				
23	F6204	Holo	d (Hol	d)				
24	F6202	Can	cel (C	ancel)	)			
25		Ans	wer (A	Answe	er)			
26		Rele	ase (F	Releas	e)			

В

## ATTENDANT CONSOLE (SN716 DESKCON)

В	DESCRIPTION	DATA
CM60	Specify the type of the Attendant Console.	<ul> <li>YY=22</li> <li>(1) ATTCON No. (0-7)</li> <li>(2) 0 : SN716 DESKCON 1 ◀ : SN610 ATTCON</li> </ul>
	Allocate the ATT Group No. to each SN716 DESKCON.	<ul> <li>YY=00</li> <li>(1) ATTCON No. (0-7)</li> <li>(2) 0: ATT GROUP 0 <ul> <li> </li> <li>3: ATT GROUP 3</li> </ul> </li> </ul>
	Specify the Master SN716 DESKCON within the ATT Group assigned by YY=00.	<ul> <li>YY=01</li> <li>(1) ATTCON No. (0-7)</li> <li>(2) 0/1 ◀ : Master/Sub</li> </ul>
	When providing 2nd Ringing feature on the SN716 DESKCON, make Off-Hook Ringing effective.	<ul> <li>YY=16</li> <li>(1) ATTCON No. (0-7)</li> <li>(2) 0: To be provided</li> </ul>
CM62	Specify the tenants to be handled by each ATT Group.	<ul> <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>

#### ATTENDANT DELAY ANNOUNCEMENT

<u>START</u>	DESCRIPTION	DATA
CM10	Assign a Digital Announcement Trunk Circuit No. to the required LEN.	<ol> <li>(1) LEN (0000-0511)</li> <li>(2) EB000-EB127: Digital Announcement Trunk Circuit No.</li> </ol>
	<b>Note:</b> The Digital Announcement Trunk Circuit No. must be assigned to the first LEN (Level 0) and/or the third LEN (Level 2) of each LT slot.	For PIM0/1: EB000-EB031 For PIM2/3: EB032-EB063 For PIM4/5: EB064-EB095 For PIM6/7: EB096-EB127
CM35	Provide the Announcement Service via Digital Announcement Trunk on Attendant Delay Announcement.	<ul> <li>YY = 74</li> <li>(1) Trunk Route No. (00-63)</li> <li>(2) 0/1 ◀ : Allowed/Restricted</li> </ul>
CM49	Assign the function of the Digital Announcement Trunk Circuit.	<ul> <li>YY = 00</li> <li>(1) 000-127: Digital Announcement Trunk Circuit No. assigned by CM10 (EB000-EB127)</li> <li>(2) <u>OF XX:</u> *a *b</li> <li>*a: Attendant Delay Announcement</li> <li>*b: Message No. (00-63)</li> <li>YY = 0A</li> <li>(1) XX: Tenant No.</li> <li>(2) XX: Message No. (00-63) assigned by CM49 YY = 00</li> </ul>
A		

## ATTENDANT DELAY ANNOUNCEMENT

А	DESCRIPTION	DATA
CM08	Specify the replaying of the message recorded in the Digital Announcement Trunk.	<ul> <li>(1) 165</li> <li>(2) 0 : The message is replayed at an interval assigned by CM41 Y= 0, Function No. 47.</li> <li>1 ◀ : The message is played only once.</li> </ul>
CM20	To record, replay, and delete a message, assign the Digital Announcement Trunk access codes, respectively.	<ul> <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>
	Specify the unanswered timing of message replay.	<ul> <li>Y = 0</li> <li>16</li> <li>01-30: 4 sec-120 sec. in 4-sec. increments</li> <li>If no data is set, the default setting is 32-36 seconds.</li> </ul>
CM41	Specify the interval time of message replay.	<ul> <li>Y = 0</li> <li>(1) 47</li> <li>(2) 01-30: 4 sec120 sec. in 4-sec. increments</li> <li>If no data is set, the default setting is 32-36 seconds.</li> </ul>
<u>END</u>		

## ATTENDANT OVERFLOW

#### PROGRAMMING

START	DESCRIPTION	DATA
CM08	Provide the system with ATTENDANT OVERFLOW.	<ul><li>(1) 067</li><li>(2) 0: Available</li></ul>
CM30	Assign the data for terminating system in Day/ Night Mode for each trunk.	<ul> <li>YY = 02 (Day Mode)</li> <li>(1) Trunk No. (000-255)</li> <li>(2) 14: Termination to SN610 ATTCON</li> </ul>
		<ul> <li>YY = 03 (Night Mode)</li> <li>(1) Trunk No.</li> <li>(2) 04: DIT 09: Automated Attendant Note</li> </ul>
		<ul> <li>YY = 05 (Night Station Assignment)</li> <li>(1) Trunk No.</li> <li>(2) X-XXXX (Station No.)</li> </ul>
CM41	Specify the Timing Interval for ATTENDANT OVERFLOW.	<ul> <li>Y = 0</li> <li>(1) 01:</li> <li>(2) 01-30: 4-120 sec. in 4 sec. increments If no data is set, the default setting is 32-36 seconds.</li> </ul>
END		

**Note:** *Refer to the Automated Attendant feature programming section in this manual for assignment information of the Automated Attendant when using the Automated Attendant as the Attendant Overflow destination.* 

## ATTENDANT OVERRIDE

<u>START</u>	DESCRIPTION	DATA			
CM08	Provide the system with ATTENDANT OVERRIDE.	<ul> <li>(1) 012</li> <li>(2) 1</li></ul>			
	Specify the interval of the Warning Tone sent to the connected parties.	<ul> <li>(1) 045</li> <li>(2) 0 : Only Once</li> <li>1 ◀ : Every 4 sec.</li> </ul>			
	Specify whether the Warning Tone is sent to the outside party.	<ul> <li>(1) 076</li> <li>(2) 0 : To be sent out.</li> <li>1 ◀ : Not to be sent out.</li> </ul>			
CM12	Assign Service Restriction Class (A) to each station.	<ul> <li>YY = 02</li> <li>(1) X-XXXX (Station No.)</li> <li>(2) <u>XX</u> XX *a</li> <li>*a: Service Restriction Class (A) (00-15◀)</li> </ul>			
CM15	Assign this feature to the Service Restriction Class (A) assigned by CM12 YY= 02.	<ul> <li>YY = 09</li> <li>(1) XX:Service Restriction Class (A) assigned by CM12 YY = 02.</li> <li>(2) 1◀ : Allowed</li> </ul>			
СМ20	Assign the access code for Individual Trunk Access.	<ul> <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:</b> By loading the Resident System Program, Trunk Identification Codes are assigned as follows: $\frac{IXXX}{*a}$	<ul> <li>YY = 19</li> <li>(1) Trunk No. (000-255)</li> <li>(2) XXXX: Trunk ID Code</li> </ul>			
A	*a: Trunk Number (000-255)				

## ATTENDANT OVERRIDE

Α	DESCRIPTION			DATA		
CM90	Assign Consol	the BV key to SN610 Attendant e.	• (1) (2)	YY = 00 ATTCON No. + , + Key No. F6107: Busy Verification		
END	Note:	By Resident System Program, one of the Multi-Function keys is assigned as a BV key (when receiving Busy Tone).				

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

## PROGRAMMING

1. In a system with an Application Processor (PN-AP01)

<u>START</u>	DESCRIPTION	DATA
CM05	Assign a slot number to the PN-AP01 card according to the location of the card.	<ol> <li>(1) Slot Number (04-15)</li> <li>(2) 07: PN-AP01 card</li> </ol>
	<b>Note:</b> The slot number is given by the SENSE switch on the PN-AP01 card.	
CM08	Designate the AP card for this feature.	<ol> <li>(1) 216: Designates the Processor for the Authorization Code.</li> <li>(2) 1 ◀ : AP (PN-AP01)</li> </ol>
	Specify whether Service Set Tone should be sent after dialing the access code for the Authorization Code.	<ol> <li>362: Provision of Service Set Tone after dialing the access code.</li> <li>1◀ : Not to be provided/To be provided.</li> </ol>
CM12 CM15	Assign the Class of Service for Authorization Code defined.	<ul> <li>CM12 YY = 02</li> <li>(1) X-XXXX: Station No.</li> <li>(2) XX XX/(*a) *b</li> <li>*a: Service Restriction Class (A): 00-15 </li> <li>*b: Service Restriction Class (B): 00-15 </li> <li>CM15 YY = 31 (Authorization Code)</li> <li>(1) Service Restriction Class (A) (00-15) Assigned by CM12 YY = 02</li> <li>(2) 1 &lt; : Allowed</li> </ul>
A		





#### DATA

- Y = 0 (Designation of Significant digits for Check Code generation)
- (1) 0: For 1st Check Code 1: For 2nd Check Code
- (2)  $00 \underset{a * b}{X} \underset{A}{X}$ : Significant digit designation

\*a: 1st-4th digit (0-F) (See left column) \*b: 5th-8th digit (0-F)

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)
- (1) 0: For 1st Check Code 1: For 2nd Check Code
- (2) 0-9: Check Sum Data (Enter desired value)



- **Note 1:** Up to 1,000 Authorization 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 the PN-AP01 card at one time, do the following operation:

ST + D60 + DE + 0000 + DE + CCC + EXE

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

2. In a system without an Application Processor (PN-AP01)

<u>START</u>	DESCRIPTION		DATA
CM08	Designate the MP card for this feature.	(1) (2)	<ul> <li>216: Designation of Processor for Au- thorization Code</li> <li>0: MP (PN-CP00) card</li> </ul>
	Specify whether Service Set Tone should be provided after dialing the access code for Authorization Code.	(1) (2)	<ul> <li>362: Provision of Service Set Tone after dialing the access code.</li> <li>0/1  <ul> <li>Not to be provided/To be provided</li> </ul> </li> </ul>
CM12 CM15	Assign the Class of Service for Authorization Code to the required stations.	•	CM12 YY = 02 [Service Restriction Class (A) (00- $15 \triangleleft$ )]
		• (1) (2)	CM15 YY = 31 (Authorization Code) Service Restriction Class(A) (00-15) as- signed by CM12 YY = 02 $1 \blacktriangleleft$ : Allowed
CM20	Assign the access code for each Authorization Code.	• (1) (2)	Y = 0-3 (Numbering Plan Group 0-3) X-XXX: Access Code 086: Authorization Code
CM42	Specify the maximum number of digits for all Authorization Codes.	(1) (2)	11: Authorization Code Max. digits Max. number of digits (01-08◀)
CM2A	Define the Authorization Code.	• (1) (2)	Y = 0 XX: Code Serial No. (00-99) X-XX: Authorization Code Max. num- ber of digits specified by CM42 YY = 11.
A			



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

START	DESCRIPTION	DATA
CM30	Assign the data for Automated Attendan the required trunks.	<ul> <li>YY=02 (Terminating System in Day mode)</li> <li>YY=03 (Terminating System in Night mode)</li> <li>(1) Trunk No. (000-255)</li> <li>(2) 09: Automated Attendant</li> <li>YY=30 (Handling of busy/not available</li> </ul>
	<b>Note:</b> When providing a Night Message Automated Attendant, the 2nd swering Message which is assig by CM49 YY=00, 2nd data 02X2 used for the Night Message. In a case, the 2nd data 08 of CM YY=30, 31 cannot be specified handling of Busy/Not Available At mated Attendant destination.	<ul> <li>Automated Attendant destination in Day mode)</li> <li>YY=31 (Handling of busy/not available Automated Attendant destination in Night mode)</li> <li>(1) Trunk No. (000-255)</li> <li>(2) 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 + DT Connection for redial Note</li> <li>15 &lt; : C.O. Line Release</li> <li>YY=32 (Handling of timed-out Automated Attendant Call in day mode)</li> <li>YY=37 (Handling of time-out Automated Attendant in night mode)</li> <li>(1) Trunk No. (000-255)</li> <li>(2) 00 : C.O. Line Release</li> <li>01 : Forwarded to TAS</li> <li>03 : Forwarded to TAS</li> <li>(2) 00 : C.O. Line Release</li> <li>(3) : Forwarded to TAS</li> <li>(4) : Forwarded to TAS</li> <li>(5] : Forwarded to TAS</li> <li>(6) : DT Connection for redial</li> <li>(7) : Forwarded to TAS</li> <li>(8) : Forwarded to DIT Station</li> <li>(9) : C.O. Line Release</li> <li>(1) : Forwarded to DIT Station</li> <li>(2) : C.O. Line Release</li> <li>(3) : Forwarded to DIT Station</li> <li>(4) : Forwarded to DIT Station</li> <li>(5) : C.O. Line Release</li> </ul>
A		

Α	DESCRIPTION		DATA
CM30		• (1) (2)	YY=33 (When YY=30, 31 is set to data 08, and all DTMF Receivers are busy.) Trunk No. (000-255) 00 : Disconnection 01 : Forwarded to TAS Indicator 03 : Forwarded to SN610 ATTCON 15◀ : Disconnection
CM45	Assign the DTMF Receiver for only Automat- ed Attendant, if desired.	• (1) (2)	Y=2 XX X: DTMF Receiver No. Card No. 00-15 assigned by CM10 (E200-E215) Circuit No. (0-3) 0: Only for Automated Attendant
CM63	Specify whether inter-tenant connection is al- lowed on an Automated Attendant incoming call.	• (1) (2)	Y=2 XX XX $*a$ $*b$ *a: Tenant No. (00-63) of called station *b: Tenant No. (00-63) of trunk $0/1 \blacktriangleleft$ : Restricted/Allowed
CM64	Assign the answering method for the Auto- mated Attendant, to the required tenants.	• (1) (2)	Y=0 Tenant No. (00-63) 00 : DT Connection 02 : 1st Answering Message + DT Connection 03 ◀ : DT Connection
	For providing a Night message, assign the answering method of Night Mode, to the required tenants. (1900 Series Release 2 Enhancement)	• (1) (2)	Y=2 Tenant No. (00-63) 00 : DT Connection 01 : Hold Tone on MP Card + DT Connection 02 : Night Message (Assigned by CM49 YY=00-02XX) 03 ◀ : According to the data set by CM64 Y=0
B			

ND-45670 (E) Addendum-002 JANUARY, 1999

В	DESCRIPTION	DATA
CM48 CM08	Specify whether no Dial tone connection is re- quired for the answering method assigned by CM64 Y=0. Specify the ringing rate for an Automated At- tendant Call.	<ul> <li>Y=2</li> <li>(1) 06</li> <li>(2) 0/1  <ul> <li>: Without DT/With DT</li> </ul> </li> <li>(1) 180</li> <li>(2) 0/1  <ul> <li>: 0.2 sec. ON-0.2 sec. OFF</li> <li>0.2 sec. ON-0.2 sec. OFF</li> <li>0.2 sec. ON-2 sec. OFF</li> </ul> </li> </ul>
	Specify the process when a call is transferred by an Automated Attendant to a predeter- mined Station and time-out occurs.	<ul> <li>/As per CM35 YY=33</li> <li>(1) 359</li> <li>(2) 0/1 ◀ : Disconnect the call/Continue to call</li> </ul>
	Specify the process for an Automated Atten- dant call when a caller dials while receiving the message.	<ul> <li>(1) 363</li> <li>(2) 0/1 ◀ : Not allowed (Allowed after receiving the message/Allowed)</li> </ul>
CM41	Specify the time before an Automated Atten- dant Call is redirected because no digits are re- ceived from the calling party.	<ul> <li>Y=0</li> <li>(1) 34</li> <li>(2) 01-30: 4-120 sec. in 4 sec. increments If no data is set, the default setting is 32-36 seconds.</li> </ul>
	Specify the time before answering by Auto- mated Attendant.	<ul> <li>Y=0</li> <li>(1) 59</li> <li>(2) 00-08: 0-32 sec.</li> <li>If no data is set, the default setting is 4-8 seconds.</li> </ul>
	Specify the timing of unanswered call after forwarding to predetermined station in Auto- mated Attendant.	<ul> <li>Y=0</li> <li>(1) 39</li> <li>(2) 01-30: 4-120 sec. in 4 sec. increments If no data is set, the default setting is 32-36 seconds.</li> </ul>
C	Specify the time before Dial Tone time-out in Automated Attendant.	<ul> <li>Y=0</li> <li>(1) 43</li> <li>(2) 01-14: 1-14 sec. in 1 sec. increments If no data is set, the default setting is 14 seconds.</li> </ul>

ND-45670 (E) Addendum-002 JANUARY, 1999

When the 1st and/or 2nd answering message is required: CM30 YY=30, 31, 2nd data 08/CM64 Y=0, 2nd data 02, or Night Message is required: CM64 Y=2, 2nd data 02, do the following programming. The following steps are always required.

С	DESCRIPTION	DATA
CM10	<ul> <li>Assign a Digital Announcement Trunk Circuit No. to the required LEN.</li> <li>Note: The Digital Announcement Trunk Circuit No. must be assigned to the first LEN (Level 0) and/or the third LEN (Level 2) of each LT slot.</li> </ul>	(1) LEN (0000-0511) (2) EB000-EB127: Digital Announcement Trunk Circuit No. $\begin{bmatrix} For PIM0/1: EB000-EB031 \\ For PIM2/3: EB032-EB063 \\ For PIM4/5: EB064-EB095 \\ For PIM6/7: EB096-EB127 \end{bmatrix}$
CM49	Assign the function of the Digital Announce- ment Trunk.	<ul> <li>YY=00</li> <li>XXX: Digital Announcement Trunk Circuit No. (000-127) assigned by CM10.</li> <li>XX XX *a *b</li> <li>*a: 01: 1st Answering Message 02: 2nd Answering Message /Night Message</li> <li>*b: Message No. (00-63)</li> </ul>
	Assign the Message No. to the required ten- ants.	<ul> <li>YY=01 (For 1st Answering Message)</li> <li>YY=02 (For 2nd Answering Message /Night Message)</li> <li>(1) XX: Tenant No. (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 Digital Announcement Trunk access codes.	<ul> <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>
CM41 END	Specify the message replay timer for Auto- mated Attendant.	<ul> <li>Y=0</li> <li>(1) 51</li> <li>(2) 01-15: 4-60 sec. in 4 sec. increments</li> <li>If no data is set, the default setting is 36-40 seconds.</li> </ul>

#### HARDWARE REQUIRED

For providing the first and/or second Answering Message/Night Message, Digital Announcement Trunk (PN-2DATA) is required.

ND-45670 (E) Addendum-002 JANUARY, 1999 CHAPTER 2 Page 89 Revision 2.2

To activate ACD:

<u>START</u>	DESCRIPTION	DATA
CM17	<ul> <li>For each ACD Group, assign station numbers, one by one, in the order of hunting.</li> <li>Note: Up to 60 stations can be assigned into a single ACD group.</li> </ul>	<ul> <li>Y = 0</li> <li>(1) X-XXXX (Station No.)</li> <li>(2) X-XXXX (Another Station No. to be linked)</li> </ul>
	<b>Example:</b> For setting Station Numbers 200, 201, 202 into one ACD Group.	
	1 st Operation (1) 200 (2) 201 $1 \text{ st}$ $\bigcirc 0 \text{ operation}$ $\bigcirc 0 \text{ operation}$ 2nd Operation (1) 201 (2) 202 $1 \text{ st}$ $\bigcirc 0 \text{ operation}$ $\bigcirc 0 \text{ operation}$ 3rd Operation (1) 202 (2) 200 $\bigcirc 0 \text{ operation}$ $\bigcirc 0 \text{ operation}$ $\bigcirc 0 \text{ operation}$	
	<ul><li>Assign the Pilot Station and Member Station.</li><li>Note: <i>Pilot station must be a non-equipped</i> <i>LEN (CM10) phantom.</i></li></ul>	<ul> <li>Y = 1</li> <li>(1) X-XXXX (ACD Station No.)</li> <li>(2) 1/0◀ : Pilot Station/Member Station</li> </ul>
	Assign the ACD Group Number.	<ul> <li>Y = 2</li> <li>X-XXXX (ACD Station No.)</li> <li>00-15 (ACD Group 00-15)</li> </ul>
	Specify ACD service for each type of call.	<ul> <li>Y = 4 (Internal Call: from station/AT-TCON)</li> <li>(1) X-XXXX (Pilot Station No. of the ACD Group)</li> <li>(2) 0/1 ◀ :Not to be provided/To be provided</li> <li>Y = 5 (C.O. Incoming Call: DDD: FX/WATS)</li> <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>
A		

## AUTOMATIC CALL DISTRIBUTION (ACD)


В	DESCRIPTION	DATA
СМ90	Assign the ACD Busy-Out key on the Multiline Terminal, if required.	<ul> <li>YY = 00</li> <li>(1) Primary Extension No. + + + Key No.</li> <li>(2) F0044: ACD Busy-Out</li> </ul>
	Assign the Release key on the Multiline Terminal, if required.	<ul> <li>YY = 00</li> <li>(1) Primary Extension No. + + Key No.</li> <li>(2) F1020: Release</li> </ul>
CM08	Specify the processing for an incoming call when all ACD Stations are busy.	<ul> <li>(1) 212</li> <li>(2) 0/1 ◀ : Busy Tone Connection/Queuing</li> </ul>
	Specify the processing for a held call after the agent sets the ACD Busy-Out.	<ol> <li>(1) 214 (For the held Call from Tie Line)</li> <li>(2) 0/1 ◀ : Reconnected by Switch Hook Flash/ Disconnected</li> </ol>
		<ol> <li>(1) 215 (For the held call from C.O. Line)</li> <li>(2) 0/1 ◀ : Reconnected by Switch Hook Flash/ Disconnected</li> </ol>
	Specify whether the transferred C.O. call from a station or SN610 ATTCON is placed into queuing mode when all ACD stations are busy. Note: This data is only effective when	<ul> <li>(1) 227</li> <li>(2) 0: The call is placed into queuing mode.</li> <li>Note</li> <li>1 ◀ : Recall to the transferring station (when the call is transferred from a station) or attendant Camp-On is set (when the call is transferred</li> </ul>
	CM08-212 is set to 1.	from the ATTCON.)
	Enable the ACD Busy-Out set and reset from the secondary extension. (1200 Series Enhancement)	<ul> <li>(1) 442</li> <li>(2) 0/1 ◀ : Available/Not Available</li> </ul>

| <u>END</u>

To provide ACD delay announcement:

<u>START</u>	DESCRIPTION	DATA
CM12 CM15	Assign the Class of Service for Digital Announcement Trunk Access (Record/ Replay/Delete) to the required station.	<ul> <li>CM12 YY=02</li> <li>(1) X-XXXX: Station No.</li> <li>(2) <u>XX</u>XX *a *a *a: Service Restriction Class (A) (00-15◀)</li> <li>CM15 YY=33</li> <li>(1) XX: Service Restriction Class (A) assigned by CM12 YY=02</li> <li>(2) 1◀ : Allowed</li> </ul>
CM10	<ul> <li>Assign the Digital Announcement Trunk Circuit No. to the required LEN.</li> <li>Note: The Digital Announcement Trunk Circuit No. must be assigned to the first LEN (Level 0) and/or the third LEN (Level 2) of each LT slot.</li> </ul>	<ol> <li>LEN (0000-0511)</li> <li>EB000-EB127: Digital Announcement Trunk Circuit No.</li> <li>For PIM0/1: EB000-EB031 For PIM2/3: EB032-EB063 For PIM4/5: EB064-EB095 For PIM6/7: EB096-EB127</li> </ol>
CM17	Specify the pattern of the message sent to each ACD group periodically.	<ul> <li>Y=A</li> <li>(1) X-XXXX: Pilot Station number of the ACD Group</li> <li>(2) 0: To be sent periodically</li> </ul>
CM41	If the data for CMI7 $Y = A$ is "0," set the interval time for repetition of the ACD Delay Announcement.	<ul> <li>Y = 0</li> <li>(1) FUNCTION No.: 47</li> <li>(2) 01-30 (12 -134 sec.)</li> <li>If no data is set, the default setting is 44-50 sec.</li> </ul>
A	Define the maximum waiting time of an ACD Call before affecting the ACD PEG Count. This timing is also applied to the duration of Ringback Tone after a call arrives, prior to answer by the ACD Delay Announcement.	<ul> <li>Y = 0</li> <li>(1) FUNCTION No.: 16</li> <li>(2) 02-30 (8 -120 sec.)</li> <li>If no data is set, the default setting is 32-36 sec.</li> </ul>

A	DESCRIPTION	DATA
CM49	Assign the ACD Delay Announcement function to the required Digital Announcement Trunk.	<ul> <li>YY = 00</li> <li>(1) 000-127 (Digital Announcement Trunk Circuit No.)</li> <li>(2) 0B0<u>XX</u> *a</li> <li>*a: ACD Group No. (00-15)</li> </ul>
CM51	When transferring the call to an extension, or Attendant, after the 1st interval time of ACD Delay Announcement, assign the destination. <b>Note:</b> This command is effective when CM17 = A is set to 0 (to be set periodically).	<ul> <li>YY = 17</li> <li>(1) 00-63: Tenant No.</li> <li>(2) Destination: X-XXXX: Station No. E000: SN610 ATTCON</li> </ul>
	<b>Note:</b> This is a separate feature called "Delay Overflow". ACD Delay Announcement is required in order for this feature to work.	
CM20	Assign an access code to record, replay, and delete the Digital Announcement Trunk.	<ul> <li>Y=0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXXX: Access code</li> <li>(2) A00: Record A01: Replay A02: Delete</li> </ul>
CM08	Specify a diversion display on a transferred destination (Multiline Terminal or SN610 ATTCON)	<ul> <li>(1) 357</li> <li>(2) 0/1 ◀ : Available/Not Available</li> </ul>
END		

When sending the ACD second delay announcement:

А

<u>START</u>	DESCRIPTION	DATA
CM08	Provide the system with Busy Tone Connection for processing when all ACD stations are busy.	<ul><li>(1) 212</li><li>(2) 0: Busy Tone Connection</li></ul>
CM10	Assign the Digital Announcement Trunk Circuit No. to the required LEN.	<ol> <li>LEN (0000-0511)</li> <li>EB000-EB127: Digital Announcement Trunk Circuit No.</li> </ol>
	<b>Note:</b> The Digital Announcement Trunk Circuit No. must be assigned to the first LEN (Level 0) and/or the third LEN (Level 2) of each LT slot.	For PIM0/1: EB000-EB031 For PIM2/3: EB032-EB063 For PIM4/5: EB064-EB095 For PIM6/7: EB096-EB127
CM17	Specify the pattern of the message sent to each ACD group periodically.	<ul> <li>Y=A</li> <li>(1) X-XXXX: Pilot Station number of the ACD Group</li> <li>(2) 0: To be sent periodically</li> </ul>

Α	DESCRIPTION	DATA
CM41	Set the interval time of ACD Delay Announcement	<ul> <li>Y = 0</li> <li>(1) 47</li> <li>(2) 01-30: 4-120 sec. in 4 sec. increments If no data is set, the default setting is 32-36 seconds.</li> </ul>
	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, prior to answer by the ACD Delay Announcement.	<ul> <li>Y = 0</li> <li>16</li> <li>01-30: 4-120 sec. in 4 sec. increments</li> <li>If no data is set, the default setting is 32-36 seconds.</li> </ul>
CM49	Assign the ACD Delay Announcement function and the ACD Second Delay Announcement function to the required Digital Announcement Trunk.	<ul> <li>YY = 00</li> <li>(1) 000-127 (Digital Announcement Trunk Circuit No.)</li> <li>(2) 11<u>XX</u>: ACD Second Delay Announce- *a ment *a: ACD Group No. (00-15)</li> </ul>
<u>END</u>		

To provide DID Number Conversion for an ACD Group:

<u>START</u>		DESCRIPTION		DATA
CM35	Assign assigne	the data for DID to the Trunk Routes and by CM30	• (1) (2)	YY = 12 (Number of digit to be received) Trunk Route No. (00-63) 3◀ : 4 digits
			• (1) (2)	YY = 18 (Received Digit Conversion) Trunk Route No. (00-63) 0 : To be provided
			• (1) (2)	YY = 78 (Digit conversion of leading 2-4 digits of DID incoming LDN) Trunk Route No. (00-63) 0 : Available
CM76	When a (Receiv provide digits r	data for CM35, $YY = 18$ is set to "0" red Digits Conversion is to be ed), assign the data for interpreting the eccived.	• (1) (2)	Y = 0 (Day Mode) Y= 1 (Night Mode) X-XXXX:Station Number Received X-XXX:Station/Data Station Number to
CM49	Note:	When the digit conversion of leading 2-4 digits of DID incoming LDN is available (CM35, YY=78, Data=0), leading 2-4 digits LDN should be assigned as the first data of CM76. (When the DID incoming LDN is 1 digit, the digit conversion for only one digit is not available.)		DXX: Change Terminating System to: D01: D13: TAS D04: DIT D14: H A - 6 1 O Z / S N 6 1 0 ATTCON D16: DISA
END				



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





To provide Call Waiting (CW) LEDs on the Multiline Terminal:

<u>START</u>	DESCRIPTION		DATA	
CM08	Assign the incoming call to queuing mode when all ACD stations are busy.		(1) (2)	212 1◀ : Queuing
CM42	Specify the maximum number of queuing in each ACD group for controlling call waiting lamp of a Multiline Terminal.		(1) (2)	15 01-99 (Number of queuing in each ACD group)
	<b>Note:</b> Depending on the number of queuing station/trunk, lamp indication pattern on a Multiline Terminal is different as shown below:		11 11	o data is set, the default setting is of.
	N=Number of queuing station/trur	ık		
	CONDITIONS			
	2nd Data=01	Steady on red ir	irrespective of number of queuing station/trunk	
	$1 \le N < 2nd Data (2nd Data \neq 01)$ 2nd Data $\le N (2nd Data \neq 01)$	Steady on red		
	$2 \ln D ata \leq N (2 \ln D ata \neq 01)$	Trashing red		
CM90	Assign the ACD Call Waiting Indic to the required Multiline Terminal required.	cation LED , as	• (1) (2)	YY = 00 Primary Extension No. + + Key No. F1280: ACD Group 00 $\langle$ $\langle$ F1295: ACD Group 15
<u>END</u>				

To provide an external Call Waiting Indicator:

<u>START</u>	DESCRIPTION			DATA
CM08	Assign the incoming call to queuing mode when all ACD stations are busy.		(1) (2)	212 1◀ : Queuing
CM42	<ul> <li>Specify the maximum number of each ACD group for controlling lamp of a Multiline Terminal.</li> <li>Note: Depending on the number station/trunk, lamp pattern on a Multiline different as shown below</li> </ul>	f queuing in call waiting er of queuing indication Terminal is w:	(1) (2) If no	15 01-99 (Number of queuing in each ACD group) data is set, the default setting is 01.
	N=Number of queuing station/tr	unk		
	CONDITIONS			
	2nd Data=01	Lamp on irrespective indication pattern. s	ve of nu ee CM	imber of queuing station/trunk (For the 59.)
	$N < 2nd Data (2nd Data \neq 01)$	Lamp off		
	2nd Data $\leq$ N (2nd Data $\neq$ 01)	Lamp on (For the in	ndicatio	on pattern, see CM59.)
CM10	Assign the PN-DK00 card to the LEN. Note: The PN-DK00 card I assigned to the first La and/or third LEN (Leve LT slot.	required No. must be EN (Level 0) el 2) of each	(1) (2)	LEN: 0000-0511 E800-E831 (PN-DK00 card No.) E800-E807: For PIM0/1 E808-E815: For PIM2/3 E816-E823: For PIM4/5 E824-E831: For PIM6/7
CM44	Assign the function of ACD Call Indication to the PN-DK00.	ling Waiting	(1)	$\frac{XX}{*a} \frac{X}{*a}$ *a: Card No. (00-31) assigned by CM10 E800-E831 *b: Circuit No. (0-3) 14 $\frac{XX}{*a}$ *a: ACD Group No. (00-15) assigned by CM17.
A				



To provide the priority queuing for incoming trunk calls:

<u>START</u>	DESCRIPTION	DATA
CM35	Assign Priority Queuing per trunk route.	<ul> <li>YY = 60</li> <li>(1) Trunk Route No. (00-63)</li> <li>(2) 0/1 ◀ : To be provided/Not to be provided</li> </ul>
	Assign Digit Conversion on DID call, if required.	<ul> <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	Assign Priority Queuing per DID incoming LDN, if Digit Conversion is provided (CM35 YY=18 is set to 0).	<ul> <li>Y = 6</li> <li>(1) X-XXXX: Station Number received</li> <li>(2) 0/1 ◀ : Not to be provided/To be provided</li> <li>ed</li> </ul>

#### HARDWARE REQUIRED

To provide the delay announcement for ACD:

• PN-2DATA card

To provide the external Call Waiting Indicator:

- PN-DK00 card
- External Indicator

Requirement for External Indicator

Control Method: Ground/Battery (Max.125 mA) Type: Visual and/or Audible type with volume control

Make the following connections at the MDF according to the type of indicator. For details, refer to the MDF cross connection for an External Indicator (TAS Indicator) in the INSTALLATION PROCEDURE MANUAL.





#### PROGRAMMING

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

ND-45670 (E)

## **AUTOMATIC CAMP-ON**

#### PROGRAMMING

<u>START</u>	DESCRIPTION	DATA
CM08	Specify the Camp-On Tone pattern.	<ul> <li>(1) 068</li> <li>(2) 0/1  <ul> <li>is Sent out once/Sent out periodically (4- intervals)</li> </ul> </li> </ul>
CM30	Assign Automatic Camp-On to the required DIT Trunks.	<ul> <li>YY = 13 (In Day mode)</li> <li>YY = 14 (In Night mode)</li> <li>(1) Trunk No. (000-255)</li> <li>(2) 06: Automatic Camp-On</li> </ul>
<u>END</u>		

## AUTOMATIC NUMBER IDENTIFICATION (ANI) (1300 Series Enhancement)

#### PROGRAMMING

1. DTI Assignment for ANI

<u>START</u>	DESCRIPTION		DATA
CM30	Assign a trunk Route Number to each DTI.	• (1) (2)	YY=00 Trunk No. (000-255) Trunk Route No. (00-63)
	Specify the Terminating System in Day Mode and Night Mode for incoming calls.	• (1) (2)	YY=02 (Day Mode) YY=03 (Night Mode) Trunk No. (000-255) 31 ◀: DID, TIE and any call which is not handled by the PBX
CM35	Assign the trunk Route data to each DTI route.	• (1) (2)	YY=00 (Kind of Trunk Route) Trunk Route No. (00-63) 00: DDD (C.O./DID), ISDN Trunk
		• (1) (2)	YY=04 (Answer Signal from Distant Of- fice) Trunk Route No. (00-63) 2: Answer signal arrives
		• (1) (2)	YY=05 (Release Signal from Distant Of- fice) Trunk Route No. (00-63) 1◀:Release Signal arrives
		• (1) (2)	YY=09 (Incoming Connection Signaling) Trunk Route No. (00-63) 03: Wink Start
		• (1) (2)	YY=10 (2nd DT Sending on Call Termi- nation) Trunk Route No. (00-63) 0: 2nd Dial Tone is not sent.
A			

## AUTOMATIC NUMBER IDENTIFICATION (ANI) (1300 Series Enhancement)



ND-45670 (E) Addendum-001 JULY, 1998

## AUTOMATIC NUMBER IDENTIFICATION (ANI) (1300 Series Enhancement)

2. MF Signaling Assignment

START	DESCRIPTION	DATA
CM05	Assign a slot number to MF Receiver Trunk.	<ol> <li>(1) Slot No. (04-15)</li> <li>(2) 08: MF Receiver Trunk (PN-4RST)</li> </ol>
	<b>Note:</b> The SENSE switch on the MF Receiver Trunk gives the slot number.	
CM06	Assign MF Receiver Trunk Number to each MF Receiver Trunk. (INITIAL)	<ul> <li>YY=04</li> <li>(1) XX: MF Receiver Trunk No. (00-15)</li> <li>(2) XX X</li> <li>Slot No. assigned by CM05</li> <li>Circuit No. (0-3)</li> </ul>
СМ09	Provide system with MF Signaling.	<ol> <li>(1) 52 (MF Signaling)</li> <li>(2) 0: To be provided</li> </ol>
СМАА	Assign calling number sending method from the network to the slot number assigned by CMOS (PN-4RSTB).	<ul> <li>YY=07</li> <li>(1) Slot No. (00-15)</li> <li>(2) 0: Caller ID (Class SM) 1: T1-ANI</li> </ul>
CM35	Provide required DID trunk route with MF Signaling.	<ul> <li>YY=37 (MF Signaling Assignment)</li> <li>(1) Trunk Route No. (00-63)</li> <li>(2) 0: Available</li> </ul>
CM31	Assign MF PAD control level to the incoming signal.	<ul> <li>Y=1</li> <li>(1) 0 (MF PAD Control level)</li> <li>(2) 0: -8.0 dBm</li> <li>1: -10.0 dBm</li> <li>2: -11.5 dBm</li> <li>3: -9.13 dBm</li> <li>4-7: ◄ Not used</li> </ul>

## AUTOMATIC NUMBER IDENTIFICATION (ANI 1300 Series Enhancement)

Α	DESCRIPTION	DATA
CM31	Assign MF Receiver sensitive level.	<ul> <li>Y=1         <ol> <li>1 (MF Receiver Sensitive level)</li> <li>00: -21 dBm</li></ol></li></ul>
	Assign MF Receiver to each circuit number (0-3) of the MF Receiver Trunk.	<ul> <li>Y=2</li> <li>(1) 0-3 (AP Number) Note</li> <li>(2) 3◀ : All circuits assigned as Receiver</li> </ul>
	Note: AP Numbers 0-3 correspond to the Slot Numbers assigned by CM05 (00- 15): AP Number 0: Slot Number X AP Number 1: Slot Number Y AP Number 2: Slot Number Z AP Number 3: Slot Number W (X < Y < Z < W)	
	Assign supervisory timer of interdigit pause on incoming signal.	<ul> <li>Y=B</li> <li>(1) 05 (Supervisory Timer of Interdigit Pause on Incoming Signal)</li> <li>(2) NONE  <ul> <li>(2) A sec.</li> <li>(2) 1 sec.</li> <li>(3) 31 sec.</li> </ul> </li> </ul>
CM35 END	Assign Busy/Idle information not to be sent to T1 network.	<ul> <li>YY=48 (Busy/Idle Sending to T1 Network)</li> <li>(1) Trunk Route No. (00-63)</li> <li>(2) 0 : Not available</li> </ul>

# AUTOMATIC NUMBER IDENTIFICATION (ANI 1300 Series Enhancement)

3. ANI Assignment

<u>START</u>	DESCRIPTION	DATA
CM08	Assign requiring of ANI Signal from T1 network when an incoming call terminates.	<ul><li>(1) 472</li><li>(2) 0: Available</li></ul>
CM31	<ul> <li>Assign the Signal Pattern received from T1 network. INITIAL</li> <li>When the Signal Pattern from T1 network is FGD-Format: Assign the data to "NONE".</li> <li>When the Signal Pattern from T1 network is ANI-Format: Assign the data to "02". Note</li> </ul>	<ul> <li>Y=3</li> <li>(1) 00 (Signal Pattern from T1 Network)</li> <li>(2) NONE ◄: ANI + Called Number 02: ANI</li> </ul>
	Assign the number of digits of Called Number received from T1 network. (INITIAL)	<ul> <li>Y=1</li> <li>(1) 2 (Number of Digits of Called Number)</li> <li>(2) NONE ◀: NONE</li> <li>01: 1 digit</li> <li>2</li> <li>31: 31 digits</li> </ul>
	<ul> <li>Assign the signal kind of Called Number sent from T1 network.</li> <li>Note: <ul> <li>When the Signal Pattern from T1 network is FGD-Format: Assign the data to "1".</li> <li>When the Signal Pattern from T1 network is ANI-Format: Assign the data to "0".</li> </ul> </li> </ul>	<ul> <li>Y=A</li> <li>(1) 17 (Signal Kind of Called Number) Note</li> <li>(2) 0: DP 1 ◀: MF</li> </ul>
A	<ul> <li>Assign the ACK-WINK Signal to be sent to the DTI when the signal kind of Called Number received from T1 network is MF Signal.</li> <li>Note: <ul> <li>When the Signal Pattern from T1 network is FGD-Format: Assign the data to "0".</li> <li>When the Signal Pattern from T1 network is ANI-Format: Assign the data to "1".</li> </ul> </li> </ul>	<ul> <li>Y=A</li> <li>(1) 16 (Sending of ACK-WINK Signal on Receiving MF Signal) Note</li> <li>(2) 0: To be sent <ol> <li>I</li> <li>Not to be sent</li> </ol> </li> </ul>

## AUTOMATIC NUMBER IDENTIFICATION (ANI 1300 Series Enhancement)

A	DESCRIPTION	DATA
CM31	<ul> <li>Assign the ACK-WINK Signal to be sent to the DTI when the signal kind of Called Number received from T1 network is DP Signal.</li> <li>Note: <ul> <li>When the Signal Pattern from T1 network is FGD-Format: Assign the data to "1".</li> <li>When the Signal Pattern from T1 network is ANI-Format: Assign the data to "0".</li> </ul> </li> </ul>	<ul> <li>Y=A</li> <li>(1) 18 (Sending of ACK-WINK Signal on Receiving DP Signal) Note</li> <li>(2) 0: To be sent 1 ≤: Not to be sent</li> </ul>
	Assign the number of digits of ANI received from T1 network. (INITIAL)	<ul> <li>Y=1</li> <li>(1) 3 (ANI Digits from T1 Network)</li> <li>(2) NONE ◀: NONE</li> <li>01: 1 digit</li> <li>31: 31 digits</li> </ul>
CM31	Assign the number of digits to be deleted from ANI, if required. < An example of FGD Format > Received digits: Key Pulse + $XX$ + $1234567890$ + Stop Pulse ANI (10 digits) Information digits (2 digits) $\downarrow$ • 2 digits deletion • Identification on the terminal: 10 digits (ANI)	<ul> <li>Y=A</li> <li>(1) 14 (Number of Deleting Digits from ANI)</li> <li>(2) 00: No digit deletion         <ul> <li>01: Leading one digit deletion</li> <li>10: Leading 10 digits deletion</li> <li>11: </li> <li>12: No digits deletion</li> </ul> </li> </ul>
CM08	Assign whether ANI is sent to the OAI Terminal or not. Assign whether ANI is sent to the SMDR Terminal or not.	<ol> <li>462 (Sending ANI to OAI Terminal)</li> <li>0: To be sent         <ol> <li>1 ≤: Not to be sent</li> </ol> </li> <li>463 (Sending ANI to SMDR Terminal)</li> <li>0: To be sent</li> </ol>
END		$1 \blacktriangleleft$ : Not to be sent

## AUTOMATIC NUMBER IDENTIFICATION (ANI 1300 Series Enhancement)

When the signal pattern of the Called Number sent from T1 network is as shown below, assign the following data, if required.

<u>START</u>	DESCRIPTION	DATA
CM35	Assign the Digit Addition/Deletion on the incoming calls.	<ul> <li>YY=17 (Digit Addition/Deletion Assignment)</li> <li>(1) Trunk Route No. (00-63)</li> <li>(2) 00: "0" add <ul> <li><ul> <li><ul>&lt;</ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul>
CM20	Assign the access code for LCR Group 0-3.	<ul> <li>Y=0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXXX (Access Code)</li> <li>(2) A26: LCR Group 0 A27: LCR Group 1 A28: LCR Group 2 A29: LCR Group 3</li> </ul>
CM8A END	Assign an area code for Intra-Office Termination.	<ul> <li>YYY=405-407 (Area Code Development No. 5-7)</li> <li>X-XXXXX (Area Code, 1-5 digits)</li> <li>800: Intra-Office Termination</li> </ul>

#### Called Number = NPA + NNX + Called Station Number

**Note:** *FGD-Format and ANI-Format are:* 

SIGNAL PATTERN	CALLED NUMBER	ANI
FGD-Format	MF Signal	MF Signal
ANI-Format	DP Signal	MF Signal

#### HARDWARE REQUIRED

PN-24DTA card PN-4RST card

## AUTOMATIC RECALL

#### PROGRAMMING

<u>START</u>	DESCRIPTION		DATA
CM41	Specify the timing for AUTOMATICRECALL. If no data is set, the followingAutomatic Recall timing is applied:Attendant Recall- 31.2-33.6 secondsNon exclusive Hold- 60-64 secondsExclusive Hold- 236-240 secondsTransfer Recall- 24.28 seconds	• (1) (2)	Y = 0 00: Attendant Recall 01-24: 2.4-124.8 sec. (Increments 01-14 are 2.4-sec. increments, and in- crements 15-24 are 9.6-sec. incre- ments)
	Attendant Hold Recall-24-28 secondsCamp-On Recall-31.2-33.6 seconds-24-32 seconds	(1) (2)	<ul><li>05: Non exclusive Hold</li><li>01-98: 4-392 sec. in 4 sec. increments</li><li>99: Recall is not performed.</li></ul>
		(1)	06: Exclusive Hold
		(2)	01-98: 4-392 sec. in 4 sec. increments 99: Recall is not performed.
		(1)	07: Transfer Recall
		(2)	01-30: 4-120 sec. in 4 sec. increments
		(1) (2)	11: Attendant Hold Recall 01-24: 2.4-124.8 sec. (Increments 01-14 are 2.4-sec. increments, and in- crements 15-24 are 9.6-sec. incre- ments)
		(1) (2)	26: Camp-On Recall 01-15: 8-120 sec. in 8 sec. increments
<u>END</u>			

## **BACKGROUND MUSIC (BGM)**

#### PROGRAMMING

<u>START</u>	DESCRIPTION	DATA
CM10	Assign BGM Interface Trunks (PN-4COT/ PN-TNT) to the required LENs.	<ol> <li>(1) XXXX: 0000-0511 (LEN No.)</li> <li>(2) D000-D255: PN-4COT/PN-TNT Circuit No.</li> </ol>
	<b>Note:</b> The PN-TNT Circuit No. must be assigned to the first LEN (Level 0) and/or the third LEN (Level 2) of each LT slot.	
CM12	Assign the Service Restriction Class (A) to the required Multiline Terminals.	<ul> <li>YY = 02</li> <li>(1) X-XXXX:Primary Extension No. of the Multiline Terminal</li> </ul>
		(2) $\underline{XX}_{*o}$ XX
		*a: Service Restriction Class (A) (00- 15◀)
	Provide this feature to the Service Pastriction	• VV - 22
CM15	Class (A) assigned by CM12.	(1) Service Rest. Class (A) $(00-15)$
		(2) $1 \triangleleft$ : Allowed
CM20	Assign the access code for this feature.	• $Y = 0.3$ (Numbering Plan Group 0.3)
CMI20	-	(1) X-XXX: Access code (66)
		(2) 039: BGM
CM30	Assign a Trunk Route No. to the BGM	• YY = 00
CMISO	Interface Trunk (PN-4COT/PN-TNT).	(1) Trunk No. (000-255)
		(2) Trunk Route No. $(00-63)$
CM35	Assign the BGM interface to each trunk route.	• YY = 00
CIVI35		(1) XX: Trunk Route No. (2) $0.5$ (L + $0.5$ (1) DCM T = $0.5$ (1)
		(2) 05 (Interface with BGM Tone Source)
	Assign a BGM program number to each trunk	• Y = 4
CIVI40	number connected to the External Tone	(1) 00-09 (BGM program No. 0-9)
	Source.	(2) DXXX: Trunk number connected to the External Tone Source.
END		

## **BACKGROUND MUSIC (BGM)**

#### HARDWARE REQUIRED

External BGM Source (Up to 10 BGM Sources can be provided) PN-4COT/PN-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 details, refer to the MDF cross connection for an External Tone Source in the INSTALLATION PROCEDURE MANUAL.



## **BACKGROUND MUSIC (BGM)**



Set the switches within PN-TNT card according to the following table.



• Level Control of External BGM Source through JACK0/JACK1

No. 0 CIRCUIT (JACK0)			
OUTPUT LEVEL	SW-1	SW-2	
-10 dB	OFF	OFF	
-7 dB	ON	OFF	
-4 dB	OFF	ON	
-1 dB	ON	ON	

No. 1 CIRCUIT (JACK1)			
OUTPUT LEVEL	SW-3	SW-4	
-10 dB	OFF	OFF	
-7 dB	ON	OFF	
-4 dB	OFF	ON	
-1 dB	ON	ON	

## **BOSS/SECRETARY CALLING**

### PROGRAMMING

To set up the Secretary Station with the Multiline Terminal:

<u>START</u>	DESCRIPTION	DATA
CM13	Assign the Secretary Station to the required station number.	<ul> <li>YY = 12</li> <li>(1) X-XXXX (Primary Extension No. of Secretary)</li> <li>(2) 0: Secretary Station</li> </ul>
CM90	If the Boss' station is a Single-Line Telephone with MW lamp, provide the Message Waiting service to the Boss' station.	<ul> <li>YY = 03</li> <li>(1) X-XXXX (Boss Station No.)</li> <li>(2) 0: To be provided</li> </ul>
	Assign the Boss' line key as a Secondary Extension line to the Secretary's Multiline Terminal.	<ul> <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> </ul>
	Assign the MW SET/MW RESET keys to the Secretary's Multiline Terminal, if needed.	<ul> <li>YY = 00</li> <li>(1) Primary Extension No. of Secretary + , + Key No.</li> <li>(2) F0040: MW Set F0041: MW Reset</li> </ul>
CM20	If the Boss' station is a Multiline Terminal, assign a MW Lamp to the Boss' Multiline Terminal.	<ul> <li>YY = 00</li> <li>(1) Primary Extension No. of Boss + , + , Key No.</li> <li>(2) F1005: MW Lamp</li> </ul>
CM08	Assign the access code for MW Set/MW Reset to the secretary's Multiline Terminal, if required.	<ul> <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>
	Whether Message Waiting/Message Reminder is reset (turning the MW Lamp off) irrespective of answering of Calling Station when the called station calls to retrieve the message.	<ul> <li>(1) 234</li> <li>(2) 0/1: Available/Not Available (Reset by answering of Calling station)</li> </ul>
A	Specify the MW Lamp indication pattern for Multiline Terminal.	<ul> <li>(1) 294</li> <li>(2) 0/1 ◀ : Flashing (60 IPM)/Steady</li> </ul>

#### ND-45670 (E)

## **BOSS/SECRETARY CALLING**



<u>START</u>	DESCRIPTION		DATA	
CM12	Set the data for accommodating the Boss' line to the Secretary's Sub line.	• (1) (2)	YY = 05 X-XXXX: Boss Station No. 0/1 ◀ : Accommodated/ Not accommodated	
CM13 END	Specify whether to send ringing signal to the Boss Station.	• (1) (2)	YY = 08 X-XXXX: Boss Station No. 0/1 ◀ : Not send/Send	

## HARDWARE REQUIRED

ETJ-16DD-1/ETJ-24DS-1/DTP-32-1/DTP-32D-1 and DLC card.

ND-45670 (E)

## **BROKER'S CALL**

## PROGRAMMING

Refer to CALL HOLD feature.

## PROGRAMMING

<u>START</u>	DESCRIPTION	DATA
CM08	Provide the system with the Single-Digit Feature Access Code while the calling station hears ringback tone/busy tone.	<ol> <li>(1) 156 (Ringback Tone)</li> <li>(2) 0: Allowed</li> <li>(1) 208 (Busy Tone)</li> <li>(2) 0: Allowed</li> </ol>
CM12	Assign Service Restriction Class (A) to the necessary stations.	<ul> <li>YY = 02</li> <li>(1) X-XXXX: Station No.</li> <li>(2) XX XX *a</li> <li>*a: Service Restriction Class (A) (00-15◀)</li> </ul>
CM15	Assign the Call Back feature to the Service Restriction Class (A) assigned by $CM12 YY = 02$ .	<ul> <li>YY = 03</li> <li>(1) XX: Service Restriction Class (A) assigned by CM12 YY = 02.</li> <li>(2) 1◀ : Allowed</li> </ul>
	Assign the Call Back-Multiple Assignment feature to the Service Restriction Class (A) assigned by CM12 YY= 02, if required.	<ul> <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> <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 For setting the same access code as Trunk Queuing-Outgoing:</li> <li>(2) 004: Set 005: Cancel</li> </ul>
CM90 END	Assign a Call Back key to the Multiline Terminals, as required.	<ul> <li>YY = 00</li> <li>(1) Primary Extension No.+ + key No.</li> <li>(2) F0004: Trunk Queuing-Out-going/Call Back</li> </ul>

#### PROGRAMMING

1. Trunk Assignment for CALLER ID CLASS

<u>START</u>	DESCRIPTION	DATA		
CM30	Specify the Terminating System in Day Mode and Night Mode for incoming calls.	<ul> <li>YY=02 (Day Mode)</li> <li>YY=03 (Night Mode)</li> <li>Trunk No. (000-255)</li> <li>02: Trunk Line Appearance</li> <li>03: Trunk Line Appearance+TAS</li> <li>04: Direct-In Termination</li> <li>09: Automated Attendant</li> <li>11: ATTCON+Trunk Line Appearance</li> <li>13: TAS</li> <li>14: Termination to ATTCON</li> <li>16: Direct Inward System Access (DISA</li> <li>19: ATTCON+TAS</li> <li>20: ATTCON+TRUK Line Appearance</li> <li>+TAS</li> <li>31◀: DID, TIE and any call which is n handled by the PBX</li> </ul>	e SA) e not	
CM35	Assign the type of Trunk Route.	<ul> <li>YY=00 (Kind of Trunk Route)</li> <li>(1) Trunk Route No. (00-63)</li> <li>(2) 00: DDD (C.O./DID)</li> </ul>		
	Provide the Trunk Route with MF Signaling.	<ul> <li>YY=37 (MF Signaling)</li> <li>(1) Trunk Route No. (00-63)</li> <li>(2) 0: Available</li> </ul>		
	Specify the Busy/Idle status not to be sent to the network.	<ul> <li>YY=48 (Busy/Idle Sending)</li> <li>(1) Trunk Route No. (00-63)</li> <li>(2) 0: Not to be sent</li> </ul>		
	Assign the sending method of calling number from the network, to each Trunk Route.	<ul> <li>YYY=129 (Calling No. Sending Metho</li> <li>(1) Trunk Route No. (00-63)</li> <li>(2) 0: CALLER ID (CLASS SM) 1: T1-ANI</li> </ul>	od)	
<u>END</u>				

ND-45670 (E) Addendum-002 JANUARY, 1999

### 2. CALLER ID Receiver Assignment

<u>START</u>	DESCRIPTION	DATA		
CM09	Provide the system with MF Signaling.	<ol> <li>(1) 52 (MF Signaling)</li> <li>(2) 0: To be provided</li> </ol>		
CM05	Assign a Slot Number to the CIR (CALLER ID Receiver) Trunk. INITIAL	<ol> <li>(1) Slot No. (04-15)</li> <li>(2) 08: CIR Trunk (PN-4RSTC)</li> </ol>		
	on the CIR Trunk.			
CM06	Assign the MF Receiver trunk number to each circuit of the CIR Trunk.	<ul> <li>YY=04</li> <li>(1) XX: MF Receiver Trunk No. (00-15)</li> <li>(2) XX X Circuit No. (0-3) Slot No. assigned by CM05</li> </ul>		
CM08	Assign requesting of ANI/CALLER ID Signal from network when an incoming call terminates.	<ol> <li>472 (Request for ANI/CALLER ID Signal)</li> <li>0: Available</li> </ol>		
CMAA	Assign the sending method of calling number from the network, to the Slot Number assigned by CM05.	<ul> <li>YY=07</li> <li>(1) Slot No. (04-15)</li> <li>(2) 0: CALLER ID (CLASS SM)</li> <li>7: ◀ Not Used</li> </ul>		
CM31	Assign the number of digits of the calling number sent from the network. (INITIAL)	<ul> <li>Y=1</li> <li>(1) 3 (Number of Digits from Network)</li> <li>(2) 01: 1 digit</li> <li>31: 31 digits</li> <li>NONE </li> </ul>		
	Assign the CALLER ID Receiver to each AP Number (0-3) of the CIR Trunk 	<ul> <li>Y=2</li> <li>(1) 0: AP No.0=Slot No.X</li> <li>1 : AP No.1=Slot No.Y</li> <li>2 : AP No.2=Slot No.Z</li> <li>3 : AP No.3=Slot No.W</li> </ul>		
END	Number (00-15) assigned by CM05.	(2) $3 \blacktriangleleft$ : All circuits are assigned as a receiver.		

- 3. Memory Clear for CIR Trunk (PN-4RSTC Card) Clearing all data in memory for calling number development is necessary before assigning the calling number development data by CMDC and CMDB.
- **Note:** Before memory clear, set the SW1-1 to SW1-4 on the CIR Trunk to all ON (Make-busy) and after memory clear, restore them to OFF.

<u>START</u>	DESCRIPTION	DATA
CMDB END	Clear all memory for CMDC and CMDB.	<ul> <li>YY=90 (All Memory Clear)</li> <li>(1) 0000</li> <li>(2) CCC</li> </ul>

If required, clear the partial memory using the commands shown in below.

**Note:** Before memory clear, set the SW1-1 to SW1-4 on the CIR Trunk to all ON (Make-busy) and after memory clear, restore them to OFF.

<u>START</u>	DESCRIPTION	DATA		
CMDB	Clear the memory for the calling number Development Table No. assigned by CMDC and the calling number development data assigned by CMDB.	<ul> <li>YY=91 (Partial Memory Clear)</li> <li>(1) 0000</li> <li>(2) CCC</li> </ul>		
	Clear the memory for calling number development data assigned by CMDB.	<ul> <li>YY=92 (Partial Memory Clear)</li> <li>(1) 0000</li> <li>(2) CCC</li> </ul>		
END				

#### 4. CALLER ID Development Data Assignment

<u>START</u>		DESCRIPTION	DATA	
CMDC	Assign t number	he Development Table for the calling sent from the network.	• (1) (2)	YY=00-63 (Trunk Tenant No.) Calling Number 0◀: Development Table No.0 ? ? 1499: Development Table No.1499
CMDB	Assign v effective not.	whether the Trunk Tenant No. is of for developing the calling number, or	• (1) (2)	YY=30 0 (Trunk Tenant No. Development) 0 ◀ : Ignore actual Trunk Tenant and use the Development Table for Trunk Tenant 00 (CMDC YY=00) 1: Execute actual Trunk Tenant and use the Development Table for each Trunk Tenant (CMDC YY=00-63)
	By chara if requir A maxir the name	acter code, assign the name displayed, ed. num of 14 characters are available for e display.	• (1) (2)	YY=00 (Name Assignment) Development Table No.0-1499 Character Code (See CM77)
	Assign the termination destination on Day Mode/Night Mode for calling number, if required. A maximum of 12 digits are available.		• (1) (2)	YY=01 (Day Mode) YY=02 (Night Mode) Development Table No.0-1499 Destination Station Number (12 digits Max)
	Note:	If assigning the destination station number as below, the Terminating System overrides CM30 YY=02/03 for the selected Development Table.		(
	**** 0 2 **** 0 3 **** 0 4 **** 0 9 **** 1 1 **** 1 3 **** 1 4 **** 1 6 **** 1 9 **** 2 0 **** 3 1	<ul> <li>Trunk Line Appearance</li> <li>Trunk Line Appearance+TAS</li> <li>Direct-in Termination</li> <li>Automated Attendant</li> <li>ATTCON+Trunk Line Appearance</li> <li>TAS</li> <li>Termination to ATTCON</li> <li>Direct Inward System Access (DISA)</li> <li>ATTCON+TAS</li> <li>ATTCON+Trunk Line Appearance+TAS</li> <li>DID, TIE, and any call which is not handled by the PBX</li> </ul>		
A	Note:	The destination station number can also be an LCR access code plus outside telephone number.		

A	DESCRIPTION	DATA
CMDB	Specify the ringing tone for each calling number, if required.	<ul> <li>YY=04 (Ringing Tone Assignment)</li> <li>(1) Development Table No.0-1499</li> <li>(2) 0 ◀ : Depends on CM35 YY=33 <ul> <li>1: Not used</li> <li>2: Internal Ringing Tone</li> <li>3: External Ringing Tone</li> </ul> </li> </ul>
	Specify which is displayed on the LCD, when receiving both the calling number and the name from network on incoming call.	<ul> <li>YY=05 (Calling Number/Name Display)</li> <li>(1) Development Table No.0-1499</li> <li>(2) 0 ◀ : Calling Number Display</li> <li>1: Calling Name Display</li> </ul>
	Specify whether the Call Waiting is set for each calling number or not.	<ul> <li>YY=06 (Call Waiting)</li> <li>(1) Development Table No.0-1499</li> <li>(2) 0 ◀ : Not available <ol> <li>Available</li> </ol> </li> </ul>
	Specify whether the UCD Priority Queuing is set for each calling number or not.	<ul> <li>YY=07 (UCD Priority Queuing)</li> <li>(1) Development Table No.0-1499</li> <li>(2) 0 ◀ : Not Priority <ol> <li>Priority</li> </ol> </li> </ul>
	Specify the priority for calling name display.	<ul> <li>YY=12 (Priority for Name Display)</li> <li>(1) Development Table No.0-1499</li> <li>(2) 0◀: Name received from the network is displayed.</li> <li>1: Name assigned by CMDB YY=00 is displayed.</li> </ul>
	Specify the type of Single Data Message Frame Format.	<ul> <li>YY=30</li> <li>(1) 1 (Single Data Message Frame Format)</li> <li>(2) 0 ◀ : with Time Parameter 1: without Time Parameter</li> </ul>
END		

5. Other Relational Data Assignment

<u>START</u>	DESCRIPTION	DATA		
CM35	Assign the Trunk Access Code for outgoing call sent to the SMDR. For using Save & Repeat feature, this Trunk Access Code will save and sent with the calling number.	<ul> <li>YY=44 (Trunk Access Code for Save &amp;Repeat)</li> <li>(1) Trunk Route No. (00-63)</li> <li>(2) X/XX : Trunk Access Code 0-9/00-99</li> </ul>		
CM08	Specify whether the calling number is sent to the OAI Terminal or not.	<ol> <li>462 (Sending to OAI Terminal)</li> <li>0: To be sent         <ol> <li>1 ◀: Not to be sent</li> </ol> </li> </ol>		
	Specify whether the calling number is sent to the SMDR Terminal or not.	<ol> <li>463 (Sending to SMDR Terminal)</li> <li>0: To be sent         <ol> <li>1 ◀: Not to be sent</li> </ol> </li> </ol>		
СМ	Send ANI/Caller ID to SMDR.	(1) 143 (Sending to SMDR Terminal) (2) $0 \blacktriangleleft$ : Not to be sent		
D000	<b>Note:</b> This is reuired when using PN-AP00 for SMDR.	1: To be sent		
CM90	Provide the Multiline Terminal with a Display Change key for calling number/name display changing.	<ul> <li>YY=00</li> <li>(1) Primary Extension No.+ , +Key No.</li> <li>(2) F1099 : Calling No./Name Display</li> </ul>		
	Provide the ATTCON with a Display Change key for calling number/name display changing.	<ul> <li>YY=00</li> <li>(1) ATTCON No.+ , +Key No.</li> <li>(2) F6122 : Calling No./Name Display</li> </ul>		
I <u>END</u>				

6. Data Assignment for multiple CIR Trunk

The development data by CMDC and CMDB are assigned toward the first CIR Trunk which has been assigned a minimum Slot Number. When providing multiple CIR Trunks, save the development data and load them for the other CIR Trunks according to the following steps. For detail of MAT operations, refer to the MAT Operation Guide.

STEP 1 After assignment of CMDC and CMDB, save the office data by MAT. At this time, specify the AREA Number including the MEMORY ADDRESS 00900-2FFFF.

STEP 2 Set the MB switch to ON (UP) on the first CIR Trunk with minimum Slot Number X.

*Slot Number X*< *Y*< *Z*< *W* 

- STEP 3 As for the second CIR Trunk, change the Slot Number Y to X by CM05 and by the SENSE switch.
- STEP 4 Set the SW1-1 through SW1-4 to ON on the second CIR Trunk. Clear the memory for CMDC and CMDB by CMDB YY=90. Set the SW1-1 through SW1-4 to OFF on the second CIR Trunk.
- STEP 5 Load the office data saved in STEP1 by MAT.
- STEP 6 As for the second CIR Trunk, restore the Slot Number X to Y by CM05 and by the SENSE switch.
- Jump to STEP17 if no more CIR Trunks are provided.
- STEP 7 Set the MB switch to ON (UP) on the second CIR Trunk with Slot Number Y.
- STEP 8 As for the third CIR Trunk, change the Slot Number Z to X by CM05 and by the SENSE switch.
- STEP 9 Set the SW1-1 through SW1-4 to ON on the third CIR Trunk. Clear the memory for CMDC and CMDB by CMDB YY=90. Set the SW1-1 through SW1-4 to OFF on the third CIR Trunk.
- STEP 10 Load the office data saved in STEP1 by MAT.

STEP 11 As for the third CIR Trunk, restore the Slot Number X to Z by CM05 and by the SENSE switch.

Jump to STEP17 if no more CIR Trunks are provided.

- STEP 12 Set the MB switch to ON (UP) on the third CIR Trunk with Slot Number Z.
- STEP 13 As for the fourth CIR Trunk, change the Slot Number W to X by CM05 and by the SENSE switch.
- STEP 14 Set the SW1-1 through SW1-4 to ON on the fourth CIR Trunk. Clear the memory for CMDC and CMDB by CMDB YY=90. Set the SW1-1 through SW1-4 to OFF on the fourth CIR Trunk.
- STEP 15 Load the office data saved in STEP1 by MAT.
- STEP 16 As for the fourth CIR Trunk, restore the Slot Number X to W by CM05 and by the SENSE switch.
- STEP 17 Set the MB switches to OFF (DOWN) on all the CIR Trunks.

#### HARDWARE REQUIRED

PN-4COTG card PN-4RSTC card
## CALLER ID DISPLAY (1800 Series Enhancement)

#### PROGRAMMING

In addition to Automatic Number Identification (ANI) or Caller ID Class, assign the following data.

START	DESCRIPTION	DATA
CM90	Provide the Multiline Terminal with a Caller ID Display key for displaying the ANI or	• $YY=00$ (1) Primary Extension No. + $7$ + Key No.
	Caller ID.	<ul><li>(2) F5010: Caller ID Display</li></ul>
END		

#### PROGRAMMING

А

<u>START</u>	DESCRIPTION	DATA
CM12 CM15	Assign the Class of Service for this feature to the required stations. <b>Note:</b> When providing Call Forwarding-All Calls-Outside, set "1" (Allowed) for YY = 00, YY = 26 of CM15.	<ul> <li>CM12 YY=02 [Service Restriction Class (A) (00-15<sup>-+</sup>)]</li> <li>CM15 YY=00 (Call Forwarding-All Calls)</li> <li>CM15 YY=26 (Call Forwarding-All (1) Calls-Outside) XX: Service Restriction Class (A)</li> </ul>
CM20	Assign the access code for Call Forwarding- All Calls, Entry and Cancel, respectively.	<ul> <li>(2) assigned by CM12 YY=02. 1 ◀: Allowed</li> <li>Y = 0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX: Access Code (*5, #5)</li> <li>(2) 010: Entry 011: Cancel</li> </ul>
CM35 CM36	To apply this feature to incoming calls, set the trunk route combinations for Tandem Connection.	<ul> <li>CM35 YY=05</li> <li>(1) Trunk Route No. (00 - 63) Note</li> <li>(2) 1 ◀: Release Signal arrive Note</li> <li>CM36</li> </ul>
	<b>Note:</b> For Resident System Programming, refer to the Command Manual.	<ol> <li>Incoming Trunk Route No. + Outgoing Trunk Route No. (Assigned by CM35 YY=05)</li> <li>O: Allowed</li> </ol>

## CALL FORWARDING: CALL FORWARDING - ALL CALLS

A	DESCRIPTION	DATA
СМ08	Specify the setting method for Call Forward- ing-All Calls-Outside.	<ul> <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)</li> <li>1 ◀: The feature is set when receivin Service Set Tone (ORT time out)</li> </ul>
	Assign whether or not an extention can set Call Forwarding-All Calls-Outside by enter- ing only a trunk access code.	<ul> <li>(1) 386</li> <li>(2) 0: Restrict</li> <li>1≤: Allow</li> </ul>
	Assign whether or not the system should check the trunk restriction class of the for- warded station during a Call Forwarding-All Calls- Outside.	<ol> <li>(1) 387</li> <li>(2) 0: Call forwarding All Calls-Outsid follows setting station class</li> <li>1◄: No check</li> </ol>
CM90	Assign Call Forwarding-All Calls keys to the Multiline Terminals, as required.	<ul> <li>YY=00</li> <li>(1) Primary Extension No. + , + Key No.</li> <li>(2) F0010: Call Forwarding-All Calls Set/ Cancel</li> </ul>
CM65	Provide Call Forwarding feature to each tenant as per incoming call type.	<ul> <li>YY=23 (Internal Call or ATT-assiste Call)</li> <li>YY=24 (C.O. Incoming Call)</li> <li>YY=25 (Tie Line Incoming Call)</li> <li>(1) Tenant No. (00-63)</li> <li>(2) 1 ◀: Call Forwarding</li> </ul>
CM48	Select the Dial Tone on Setting Call Forward- ing-All Calls. (1300 Series Enhancement)	<ul> <li>Y=2</li> <li>(1) 13 (Dial Tone on Setting Call Forward ing-All Calls)</li> <li>(2) 0: Special Dial Tone (Stutter Dia Tone)</li> <li>1 ≤: Dial Tone</li> </ul>
END		

<u>START</u>	DESCRIPTION	DATA
CM12 CM15	Assign the Class of Service for this feature to the required stations. <b>Note:</b> When providing Call Forwarding- Busy Line-Outside, set "1" (Allowed) for YY = 11, YY = 28, YY = 12, YY= 29 of CM15.	<ul> <li>CM12 YY = 02 [Service Restriction Class (A) (00- 15 ◀ )]</li> <li>CM15YY = 11 (Call Forwarding-Busy Line)</li> <li>CM15YY = 28 (Call Forwarding-Busy Line-Outside)</li> <li>CM15YY=12 (Call Forwarding-Busy Line/-No Answer)</li> <li>CM15YY=29 (Call Forwarding-Busy Line-Outside/-No Answer-Outside)</li> <li>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- Busy Line, Entry and Cancel, respectively.	<ul> <li>Y = 0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX: Access Code (*6, #6)</li> <li>(2) 014: Entry 015: Cancel</li> <li>For setting the same access code as Call Forwarding-No Answer</li> <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.	<ul> <li>CM35YY = 05</li> <li>(1) Trunk Route No. (00 - 63) Note</li> <li>(2) 1          <ul> <li>CM26</li> </ul> </li> </ul>
	<b>Note:</b> For Resident System Programming, refer to the Command Manual.	<ul> <li>(1) Incoming Trunk Route No. + Outgoing Trunk Route No. (Assigned by CM35 YY = 05)</li> <li>(2) 0: Allowed</li> </ul>

# CALL FORWARDING: CALL FORWARDING-BUSY LINE

Α	DESCRIPTION	DATA
CM08	Specify the setting method for Call Forwarding-Busy Line-Outside.	<ul> <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)</li> <li>1 ◀ : The feature is set when receiving Service Set Tone (ORT time out)</li> </ul>
	Allow or restrict the ability to set Call Forwarding-Busy Line for a station with Do Not Disturb set.	<ul> <li>(1) 240</li> <li>(2) 0: Allow</li> <li>1 ≤ : Restrict</li> </ul>
	Assign whether or not an extension can set Call Forwarding-Busy Line-Outside by entering only a trunk access code.	<ul> <li>(1) 386</li> <li>(2) 0: Restrict</li> <li>1◀ : Allow</li> </ul>
	Assign whether or not the system should check the trunk restriction class of the forwarded station during a Call Forwarding- Busy Line Outside.	<ul> <li>(1) 387</li> <li>(2) 0: Call Forwarding-Busy Line-Outside follows setting station class</li> <li>1 ◀ : No check</li> </ul>
CM90	Assign Call Forwarding-Busy Line keys to the Multiline Terminals, as required.	<ul> <li>YY=00</li> <li>(1) Primary Extension No. + + Key No.</li> <li>(2) F0014: Call Forwarding-Busy Line Set/ Cancel</li> </ul>
		For setting the same key as Call Forwarding- No Answer (2) F0012: Set/Cancel
CM65 END	Provide Call Forwarding feature with each tenant as per incoming call type.	<ul> <li>YY=23 (Internal Call or ATT assisted Call)</li> <li>YY=24 (C.O. Incoming Call)</li> <li>YY=25 (Tie Line Incoming Call)</li> <li>(1) Tenant No. (00-63)</li> <li>(2) 1 ◀ : Call Forwarding</li> </ul>

<u>START</u>	DESCRIPTION	DATA
CM12 CM15	<ul> <li>Assign the Class of Service for this feature to the required stations.</li> <li>Note: When providing Call Forwarding-No Answer-Outside, set "1" (Allowed) for YY=10, YY=27, YY=12, YY=29 of CM15</li> </ul>	<ul> <li>CM12YY = 02 [Service Restriction Class (A) (00- 15◀)]</li> <li>CM15YY=10 (Call Forwarding-No An- swer)</li> <li>CM15YY=27 (Call Forwarding-No An- swer-Outside)</li> <li>CM15YY=12 (Call Forwarding-Busy Line/-No Answer)</li> <li>CM15YY=29 (Call Forwarding-Busy Line-Outside/-No Answer-Outside)</li> <li>XX: Service Restriction Class (A) as- signed by CM12 YY=02.</li> <li>(2) 1◀ : Allowed</li> </ul>
CM20	Assign the access code for Call Forwarding- No Answer, Entry and Cancel. respectively.	<ul> <li>Y = 0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX: Access Code (*6, #6)</li> <li>(2) 016: Entry 017: Cancel</li> <li>For setting the same access code as Call Forwarding-Busy Line</li> <li>(1) 012: Entry 013: Cancel</li> </ul>
CM41	Specify the timing for Call Forwarding-No Answer for a trunk incoming call.	<ul> <li>Y = 0</li> <li>(1) 01</li> <li>(2) 01-30 :4-120 sec. in 4 sec. increments If no data is set, the default setting is 32-36 seconds.</li> </ul>
A	Specify the timing for Call Forwarding-No Answer for an internal call or an assisted call.	<ul> <li>Y = 0</li> <li>(1) 15</li> <li>(2) 01-30: 4-120 sec. in 4 sec. increments If no data is set, the default setting is 32-36 seconds.</li> </ul>

# CALL FORWARDING: CALL FORWARDING-NO ANSWER

А	DESCRIPTION	DATA
CM35 CM36	To apply this feature to incoming calls, set the trunk route combinations for Tandem Connection.	<ul> <li>CM35 YY=05</li> <li>(1) Trunk Route No. (00-63) Note</li> <li>(2) 1</li></ul>
	<b>Note:</b> For Resident System Programming, refer to the Command Manual.	<ul> <li>CM36</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 for Call Forwarding-No Answer-Outside.	<ol> <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)</li> <li>1 ◀ : The feature is set when receiving Service Set Tone (ORT time out)</li> </ol>
	Assign whether or not an extention can set Call Forwarding-No Answer-Outside by entering only a trunk access code.	<ul> <li>(1) 386</li> <li>(2) 0: Restrict</li> <li>1◀ : Allow</li> </ul>
	Assign whether or not the system should check the trunk restriction class of the forwarded station during a Call Forwarding- No Answer-Outside.	<ol> <li>(1) 387</li> <li>(2) 0: Call forwarding No Answer-Outside follows setting station class 1 ◀ : No check</li> </ol>
CM90	Assign Call Forwarding-No Answer keys to the Multiline Terminals, as required.	<ul> <li>YY=00</li> <li>(1) Primary Extension No. + + Key No.</li> <li>(2) F0016: Call Forwarding-No Answer Set/ Cancel</li> </ul>
		For setting the same key as Call Forwarding- Busy Line (1) F0012: Set/Cancel
CM65 END	Provide Call Forwarding feature with each tenant as per incoming call type.	<ul> <li>YY=23 (Internal Call or ATT assisted Call)</li> <li>YY=24 (C.O. Incoming Call)</li> <li>YY=25 (Tie Line Incoming Call)</li> <li>(1) Tenant No. (00-63)</li> <li>(2) 1 ◀ : Call Forwarding</li> </ul>

<u>START</u>	DESCRIPTION	DATA
CM12	Assign Service Restriction Class (A) to each station.	• $YY = 02$ (1) X-XXXX: (Station No.) (2) $XXXX *_a$
		*a: Service Restriction Class (A) (00-15◀)
CM15	Assign this feature to Service Restriction Class (A) assigned by CM12 YY=02.	<ul> <li>Y=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> <li>YY=0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX: Access Code (*7, #7)</li> <li>(2) 018: Call Forwarding-Destination Entry 019: Call Forwarding-Destination Cancel</li> </ul>
CM90	Assign Call Forwarding-Destination Set/ Cancel Keys to the Multiline Terminals, as required.	<ul> <li>YY=0</li> <li>(1) Primary Extension No. + + Key No.</li> <li>(2) P0018: Set P0019: Cancel</li> </ul>
END		

## CALL FORWARDING: MULTIPLE CALL FORWARDING-ALL CALLS

#### PROGRAMMING

In addition to the programming for Call Forwarding-All Calls, do the following programming.

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

### CALL FORWARDING: MULTIPLE CALL FORWARDING-BUSY LINE

#### PROGRAMMING

In addition to the programming for Call Forwarding-Busy Line, do the following programming.

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

### CALL FORWARDING: MULTIPLE CALL FORWARDING-NO ANSWER

## PROGRAMMING

In addition to the programming for Call Forwarding-No Answer, do the following programming.

<u>START</u>	DESCRIPTION	DATA
CM41 END	Specify the timing for No Answer after second Call Forwarding.	<ul> <li>Y = 0</li> <li>(1) 46</li> <li>(2) 01-30: 4 -120 sec. in 4 sec. increments If no data is set, the default setting is 32-36 seconds.</li> </ul>

# CALL FORWARDING: SPLIT CALL FORWARDING - ALL CALLS (1200 Series Enhancement)

<u>START</u>	DESCRIPTION	DATA
CM12 CM15	Assign the Class of Service for this feature to the required stations.	<ul> <li>CM12 YY=02 [Service Restriction Class (A) (00- 15◀)]</li> </ul>
	<b>Note:</b> When providing Call Forwarding-All Calls-Outside, set "1" (Allowed) for YY=00, YY=26 of CM15	<ul> <li>CM15 YY=00 (Call Forwarding-All Calls)</li> <li>CM15 YY=26 (Call Forwarding-All Calls-Outside)</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- All Calls, Entry and Cancel, respectively.	<ul> <li>Y=0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX: Access Code (*5, #5)</li> <li>(2) 010: Entry 011: Cancel</li> </ul>
	Assign the access code for Split Call Forwarding-All Calls.	<ol> <li>X-XXX: Access Code</li> <li>A80: Entry A81: Cancel</li> </ol>
CM35 CM36	To apply this feature to incoming calls, set the trunk route combinations for Tandem Connection.	<ul> <li>CM35 YY=05</li> <li>(1) Trunk Route No. (00-63) Note</li> <li>(2) 1</li></ul>
	<b>Note:</b> For Resident System Programming, refer to the Command Manual.	<ul> <li>CM36</li> <li>Incoming Trunk Route No. + Outgoing Trunk Route No. (Assigned by CM35 YY=05)</li> <li>0: Allowed</li> </ul>
CM08	Specify the setting method for Call Forwarding-All Calls-Outside.	<ul> <li>(1) 0: The feature is set when the station goes on hook/when receiving Service Set Tone (ORT time out)</li> <li>1 ◀ : The feature is set when receiving Service Set Tone (ORT time out)</li> </ul>

# CALL FORWARDING: SPLIT CALL FORWARDING - ALL CALLS (1200 Series Enhancement)

A	DESCRIPTION	DATA
CM08	Assign whether or not an extention can set Split Call Forwarding-All Calls-Outside by entering only a trunk access code.	<ul> <li>(1) 386</li> <li>(2) 0: Restrict</li> <li>1◀ : Allow</li> </ul>
	Assign whether or not the system should check the trunk restriction class of the forwarded station during a Split Call Forwarding-All Calls-Outside.	<ul> <li>(1) 387</li> <li>(2) 0: Split Call forwarding-All Calls-Outside Follows setting station class 1  </li> <li>1  </li> <li>◄ : No check</li> </ul>
CM90	Assign Call Forwarding-All Calls keys to the Multiline Terminals, as required.	<ul> <li>YY=00</li> <li>(1) Primary Extension No. + + + Key No.</li> <li>(2) F0010: Call Forwarding-All Calls Set/ Cancel</li> </ul>
	Assign Split Call Forwarding-All Calls keys to the Multiline Terminals, as required.	<ol> <li>Primary Extension No. + + + Key No.</li> <li>F0A80: Split Call Forwarding-All Call 3.Set/Cancel</li> </ol>
CM65	Select the feature available in each tenant when an internal call and a Tie Line/C.O. incoming call is terminated.	<ul> <li>YY=23 (Internal Call or ATT assisted Call)</li> <li>YY=24 (C.O. Incoming Call)</li> <li>YY=25 (Tie Line Incoming Call)</li> <li>(1) Tenant No. (00-63)</li> <li>(2) 0: Split Call Forwarding 1 ◀ : Call Forwarding</li> </ul>
CM78	Assign the destination of Split Call Forwarding. <b>Note</b>	(1) $XX X$ Tenant No. (00-63) Block No. (0-7) $X-XXX + + + XX \cdots X$ (2) Trunk Access Code (1-3 digits) Called No. (Max. 26 digits) X-XXXX: Station No. (1-4 digits)
CM48 <u>END</u>	Select the Dial Tone on Setting Split Call Forwarding-All Calls. (1300 Series Enhancement)	<ul> <li>Y=2</li> <li>(1) 13 (Dial Tone on Setting Split Call Forwarding-All Calls)</li> <li>(2) 0: Special Dial Tone (Stutter Dial Tone 1 ◀ : Dial Tone</li> </ul>

CHAPTER 2 Page 140 Revision 2.0 ND-45670 (E)

Dial Destination No. X (0-9)

**Note:** The operating procedure for Split Call Forwarding-All Calls is as follows: CM78 is used to assign the destination forwarded when the destination No. 0-7 is specified.

Dial Access Code for Split Call		0: BLOCK N	No. 07	
Forwarding - All Calls.		1:	1	
		2:	2	
		3:	3	Destination assigned by
		4:	4	CM78.
Depress Split Call Forwarding - All	+	5:	5	
Calls key.		6:	6	
		7:BLOCK N	lo. 7_	
		8:Destination	n for Ca	all Forwarding-All Calls
		9:Destination	n for St	tation Speed Dialing BLOCK
		No. 0)		

CHAPTER 2 Page 141 Revision 2.0

<u>START</u>	DESCRIPTION	DATA
CM12 CM15	Assign the Class of Service for this feature to the required stations.	<ul> <li>CM12 YY = 02</li> <li>[Service Restriction Class (A) (0015 ◀ )]</li> </ul>
	Note: To provide this feature, set "1" (Allowed) for YY=11, YY=28, YY =12, YY=29 of CM15.	<ul> <li>CM15 YY = 11 (Call Forwarding-Busy Line)</li> <li>CM15 YY = 28 (Call Forwarding-Busy Line-Outside)</li> <li>CM15 YY=12 (Call Forwarding-Busy Line/-No Answer)</li> <li>•CM15 YY=29 (Call Forwarding-Busy Line-Outside/-No Answer-Outside)</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- Busy Line, Entry and Cancel, respectively.	<ul> <li>Y = 0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX: Access Code (*6, #6)</li> <li>(2) 014: Entry 015: Cancel</li> <li>For setting the same access code as Call Forwarding-No Answer</li> <li>(1) 012: Entry 013: Cancel</li> </ul>
A	Assign the access code for Split Call Forwarding-Busy Line.	<ol> <li>X-XXX: Access Code</li> <li>A82: Entry A83: Cancel</li> </ol>

A	DESCRIPTION	DATA
CM35 CM36	To apply this feature to incoming calls, set the trunk route combinations for Tandem Connection.	<ul> <li>CM35 YY=05</li> <li>(1) Trunk Route No. (00-63) Note</li> <li>(2) 1 ◀ : Release Signal arrive Note</li> </ul>
	<b>Note:</b> For Resident System Programming, refer to the Command Manual.	<ul> <li>CM36</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 for Call Forward- ing Busy Line-Outside.	<ul> <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)</li> <li>1 ◀ : This feature is set when receiving Service Set Tone (ORT time out)</li> </ul>
	Allow or restrict the ability to set Split Call Forwarding-Busy Line for a station with Do Not Disturb set.	<ul> <li>(1) 240</li> <li>(2) 0: Allow</li> <li>1 ◀ : Restrict</li> </ul>
	Assign whether or not an extention can set Split Call Forwarding-Busy Line-Outside by entering only a trunk access code.	<ul> <li>(1) 386</li> <li>(2) 0: Restrict</li> <li>1◀ : Allow</li> </ul>
B	Assign whether or not the system should check the trunk restriction class of the for- warded station during a Call Forwarding- Busy Line-Outside.	<ul> <li>(1) 387</li> <li>(2) 0: Split Call forwarding Busy Line Outside follows setting station class 1 ◀ : No check</li> </ul>

В	DESCRIPTION	DATA
CM65	Assign Call Forwarding-Busy Line keys to the Multiline Terminals, as required.	<ul> <li>YY=00</li> <li>(1) Primary Extension No. + + + Key No.</li> <li>(2) F0014: Call Forwarding-Busy Line Set/ Cancel</li> </ul>
		<ul><li>For setting the same key as Call Forwarding -No Answer</li><li>(3) F0012: Set/Cancel</li></ul>
	Assign Split Call Forwarding-Busy Line keys to the Multiline Terminals, as required.	<ol> <li>Primary Extension No. + + Key No.</li> <li>F0A82: Split Call Forwarding-Busy Line/-No Answer Set/Cancel</li> </ol>
CM78	Select the feature available in each tenant when an internal call and a Tie Line/C.O. incoming call is terminated.	<ul> <li>YY=23 (Internal Call or ATT Assisted Call)</li> <li>YY=24 (C.O. Incoming Call)</li> <li>YY=25 (Tie Line Incoming Call)</li> <li>(1) Tenant No. (00-63)</li> <li>(2) 0: Split Call Forwarding 1  </li> <li>1 Call Forwarding</li> </ul>
END	Assign the destination of Split Call Forwarding. <b>Note</b>	$\begin{array}{c} \underline{XX} \underline{X} \\ *a *b \\ *a: \text{Tenant No. (00-63)} \\ *b: \text{Block No. (0-7)} \\ \hline \underline{X-XXX} + \boxed{,} + \underline{XX\cdots X} \\ *a & *b \\ *a: \text{Trunk Access Code (1-3 digits)} \\ *b: \text{Called No. (Max. 26 digits)} \\ X-XXXX: \text{Station No. (1-4 digits)} \end{array}$

**Note:** *The operating procedure for Split Call Forwarding-Busy Line/No Answer is as follows: CM78 is used to assign the destination forwarded when the destination No. 0-7 is specified.* 

		Dial Dest	tination No. X	K (0-9).
Dial Access Code for Split Call Forwarding-Busy Line/-No An- swer. or	+	0: BLOC 1: 2: 3: 4: 5:	K No. 0	Destination assigned by CM78.
Depress Split Call Forwarding -		6:	6	
Busy Line/-No Answer key.		7: BLOC	K No. 7	
		8: Destin	ation for $Call$	Forwarding-Busy
		Line/-No	Answer	
		9: Destin	ation for Stati	on SpeedDialing

(BLOCK No. 0)

START	DESCRIPTION	DATA
CM12 CM15	Assign the Class of Service for this feature to the required stations.	<ul> <li>CM12YY=02 [Service Restriction Class (A) (00- 15◀)]</li> <li>CM15YY=10 (Call Forwarding-No</li> </ul>
	Note: To provide this feature, set " $1$ " (Allowed) for $YY=10$ , $YY=27$ , $YY=12$ , $YY=29$ of CM15.	<ul> <li>Answer)</li> <li>CM15YY=27 (Call Forwarding-No Answer-Outside)</li> <li>CM15 YY=12 (Call Forwarding-Busy Line/-No Answer)</li> <li>CM15 YY=29 (Call Forwarding-Busy Line-Outside/-No Answer-Outside)</li> <li>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 Cancel, respectively.	<ul> <li>Y=0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX: Access Code (*6, #6)</li> <li>(2) 016: Entry 017: Cancel</li> <li>For setting the same access code as Call Forwarding-Busy Line</li> <li>(2) 012: Entry 013: Cancel</li> </ul>
A	Assign the access code for Split Call Forwarding-No Answer.	<ol> <li>X-XXX: Access Code</li> <li>A82: Entry A83: Cancel</li> </ol>

Α	DESCRIPTION	DATA
CM41	Specify the timing for Call Forwarding-No Answer for a trunk incoming call.	<ul> <li>Y=0</li> <li>(1) 01</li> <li>(2) 01-30 (Timer Data for 0-120 sec. in 4-sec. increments)</li> <li>If no data is set, the default setting is 32-36 seconds.</li> </ul>
	Specify the timing for Call Forwarding-No Answer for an internal call or an assisted call.	<ul> <li>Y=0</li> <li>(1) 15</li> <li>(2) 01-30: 0-120 sec. in 4 sec. increments If no data is set, the default setting is 32-36 seconds.</li> </ul>
CM36 CM35	To apply this feature to incoming calls, set the trunk route combinations for Tandem Connection.	<ul> <li>CM35 YY=05</li> <li>(1) Trunk Route No. (00-63) Note</li> <li>(2) 1 ◀ : Release Signal arrive Note</li> </ul>
	<b>Note:</b> For Resident System Programming, refer to the Command Manual.	<ul> <li>CM36</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 for Call Forwarding-No Answer-Outside.	<ul> <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)</li> <li>1 ◀ : The feature is set when receiving Service Set Tone (ORT time out)</li> </ul>
	Assign whether or not an extention can set Split Call Forwarding-No Answer-Outside by entering only a trunk access code.	<ul> <li>(1) 386</li> <li>(2) 0: Restrict</li> <li>1 ◀ : Allow</li> </ul>
В	Assign whether or not the system should check the trunk restriction class of the forwarded station during a Split Call Forwarding-No Answer-Outside.	<ol> <li>(1) 387</li> <li>(2) 0: Split Call forwarding No Answer- Outside follows setting station class 1 ◀ : No check</li> </ol>

В	DESCRIPTION	DATA
CM90	Assign Call Forwarding-No Answer keys to the Multiline Terminals, as required.	<ul> <li>YY=00</li> <li>(1) Primary Extension No. + + Key No.</li> <li>(2) F0016: Call Forwarding-No Answer Set/ Cancel</li> <li>For setting the same key as Call Forwarding- Busy Line.</li> <li>(3) F0012: Set/Cancel</li> </ul>
CM65	Assign Split Call Forwarding-No Answer keys to the Multiline Terminals, as required.	<ol> <li>Primary Extension No. + + Key No.</li> <li>F0A82: Split Call Forwarding-Busy Line/-No Answer Set/Cancel</li> </ol>
	Select the feature available in each tenant when an internal call and a Tie Line/C.O. incoming call is terminated.	<ul> <li>YY=23 (Internal Call or ATT assisted Call)</li> <li>YY=24 (C.O. Incoming Call)</li> <li>YY=25 (Tie Line Incoming Call)</li> <li>(1) Tenant No. (00-63)</li> <li>(2) 0: Split Call Forwarding 1 ◀ : Call Forwarding</li> </ul>
CM78 END	Assign the destination of Split Call Forwarding. <b>Note</b>	(1) $XX X$ *a *b *a: Tenant No. (00-63) *b: Block No. (0-7) $X-XXX + 7 + XX \cdots X$ *a *b *a: Trunk Access Code (1-3 digits) *b: Called No. (Max. 26 digits) X-XXXX: Station No. (1-4 digits)

**Note:** The operating procedure for Split Call Forwarding-Busy Line/No Answer is as follows: CM78 is used to assign the destination forwarded when the destination No. 0-7 is specified.

+

Dial Access Code for Split Call Forwarding-Busy Line/-No Answer.

or

Depress Split Call Forwarding -Busy Line/-No Answer key. Dial Destination No. X (0-9).



8: Destination for Call Forwarding-Busy Line/ No Answer

9: Destination for Station Speed Dialing (BLOCK No. 0)

#### CALL FORWARDING: SET/RESET FROM MAT/CAT (1700 Series Enhancement)

To set or reset the Call Forwading service from a MAT/CAT, use the following command.

<u>START</u>	DESCRIPTION		DATA
CME6	Use YY = 00-03 for Call Forwarding and YY = 04-05 for Split Call Forwarding. To reset the service, assign "CCC" to the second data of each YY No.	• • (1) (2)	YY = 00 (CF-All Calls) YY = 01 (CF-Busy Line) YY = 02 (CF-No Answer) YY = 03 (CF-Busy Line/No Answer) X-XXXX: Station No. Destination=Extension> X-XXXX: Station No. <destination=outside party=""> <math>\frac{X-XX}{*a} + \frac{1}{*b} + \frac{YYYY}{*c}</math> *a: Outgoing Trunk/LCR GroupAc- cess Code (1-2 digits) *b: Separate Mark *c: Called No. (Max.26 digits) <destination=attcon> E000: ATTCON</destination=attcon></destination=outside>
END		• (1) (2)	YY = 04 (Split CF-ALL Calls) YY = 05 (Split CF-Busy Line/No An- swer) XXXX: Station No. 0: Target Station for Split CF (Block 0)/ ATT 1: Target Station for Split CF (Block 1) 2: Target Station for Split CF (Block 2) 3: Target Station for Split CF (Block 3) 4: Target Station for Split CF (Block 4) 5: Target Station for Split CF (Block 5) 6: Target Station for Split CF (Block 5) 6: Target Station for Split CF (Block 6) 7: Target Station for Split CF (Block 7) 8: Target Station for Call Forwarding 9: Station Speed Dialing (Block 0)

### CALL FORWARDING: GROUP DIVERSION

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

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

<u>START</u>	DESCRIPTION	DATA
CM12	Assign Service Restriction Class (C) to each station.	<ul> <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> <li>YY = 96</li> <li>(1) XX:Service Restriction Class (C) assigned by CM12 YY = 07.</li> <li>(2) 0: Without LCD 1 ◀ : With LCD</li> </ul>
CM20	Assign the access code for Call Park-System set/retrieve.	<ul> <li>Y = 0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX: Access Code (6*, 6#)</li> <li>(2) 008: Call Park-System Set 009: Call Park-System retrieve</li> </ul>
CM41	Specify the recall timing for Call Park- System.	<ul> <li>Y = 0</li> <li>(1) 05</li> <li>(2) 01-98: 4-392 sec. in 4 sec. increments If no data is set, the default setting is 60- 64 seconds.</li> </ul>
CM90 CM08	Assign a Call Park-System function key to the Multiline Terminals with LCD, if required. Assign a Call Park-System function key to SN610 ATTCON, as required. (1200 Series Enhancement) Specify whether a trunk placed on consultation hold by Call Park-System can be	<ul> <li>YY = 00</li> <li>Primary Extension No. + → + Key No.</li> <li>(2) F5000</li> <li>YY=00</li> <li>(1) ATTCON No. + → + Key No.</li> <li>(2) F6144: Call Park key</li> <li>(1) 133</li> <li>(2) 0/1 ◄ : Not Available/Available</li> </ul>
END	retrieved by pressing a trunk line appearance key on a Multiline Terminal.	

<u>START</u>	DESCRIPTION	DATA
CM20	Assign access codes for Call Park-Tenant set/ retrieve.	<ul> <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 whether 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> <li>(1) 133</li> <li>(2) 0/1</li></ul>
CM41	Specify the recall timing for Call Park - Tenant.	<ul> <li>Y = 0</li> <li>(1) 05</li> <li>(2) 01-98: 4-392 sec. in 4 sec. increments If no data is set, the default setting is 60- 64 seconds.</li> </ul>
CM90	Assign Call Park-Tenant Retrieve keys to the Multiline Terminals, as required.	<ul> <li>YY = 00</li> <li>(1) Primary Extension No. + + + Key No.</li> <li>(2) F3XX X *a*b</li> <li>*a: Group No. (00 - 63)</li> <li>*b: Serial Key No. (1 - 8)</li> </ul>
END		

## CALL PICKUP-DIRECT

<u>START</u>	DESCRIPTION	DATA
CM12	Assign Service Restriction Class (A) to each station.	<ul> <li>YY = 02</li> <li>(1) X-XXXX: Station Number</li> <li>(2) <u>XX</u> XX *a</li> <li>*a: Service Restriction Class (A) (00-15 ◀ )</li> </ul>
CM15	Assign this feature to Service Restriction Class (A) assigned by CM12 YY = $02$ .	<ul> <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> <li>Y = 0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX: Access Code</li> <li>(2) 021: Call Pickup-Direct</li> </ul>
CM90 <u>END</u>	Assign a Call Pickup-Direct key to Multiline Terminal, if required.	<ul> <li>YY = 00</li> <li>(1) Primary Extension No. + + Key No.</li> <li>(2) F0021: Call Pickup-Direct</li> </ul>

## CALL PICKUP-GROUP

#### PROGRAMMING

<u>START</u>	DESCRIPTION	DATA
CM16	Assign each Call Pickup Group, by assigning station numbers within a group one by one with the following operation: <b>Example:</b> For assigning Stations 300, 301 and 302 to the same Call Pickup Group: 1st Operation (1) 300 (2) 301	<ul> <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>
	2nd Operation (1) 301 (2) 302	
	3rd Operation (1) 302 (2) 300	
CM20	Assign the access code for Call Pickup-Group.	<ul> <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 a Call Pickup-Group key to each Multiline Terminal, as required.	<ul> <li>YY = 00</li> <li>(1) Primary Extension No. + + Key No.</li> <li>(2) F0020</li> </ul>
<u>END</u>		

**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

#### PROGRAMMING

<u>START</u>	DESCRIPTION	DATA
CM16	Assign each Call Pickup Group, by assigning station numbers within a group one by one with the following operation: <b>Example:</b> For assigning Stations 300, 301 and 302 to the same Call Pickup Group:	<ul> <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>
	1st Operation (1) 300 (2) 301	
	2nd Operation (1) 301 (2) 302	
	3rd Operation         (1)         302           (2)         300	
CM12	Assign the Service Restriction Class (A) to each station.	<ul> <li>YY = 02</li> <li>(1) X-XXXX: Station Number</li> <li>(2) XX/*a</li> <li>*a: Service Restriction Class (A) (00-15 ◀ )</li> </ul>
CM15	Assign the Call Pickup-Direct feature to Service Restriction Class (A) assigned by CM12 YY = 02.	<ul> <li>YY = 14</li> <li>(1) XX:Service Rest. Class (A) assigned by CM12 YY = 02.</li> <li>(2) 1 ◀ : Allowed</li> </ul>
CM20 END	Assign an access code for Call Pickup- Designated Group.	<ul> <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>

**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.

ND-45670 (E)

### CALL REDIRECT (1800 Series Enhancement)

START	DESCRIPTION		DATA
CM90	Provide the Multiline Terminal with a Call Redirect key for transferring a call to a destination station or VMS.	• (1) (2)	YY=00 Primary Extension No. + → + Key No. F5011: Call Redirect 0 (For transferring to a station as- signed by CM51 YY=22) F5012: Call Redirect 1 (For transferring to a VMS as- signed by CM51 YY=18)
CM51	Specify the destination VMS station of Call Redirect, to each tenant.	• (1) (2)	YY=18 Tenant No. (00-63) X-XXXX: VMS Station No.
END	Specify the destination station of Call Redirect,to each tenant.	• (1) (2)	YY=22 Tenant No. (00-63) X-XXXX: Station No.
END			

## CALL TRANSFER-ATTENDANT

<u>START</u>	DESCRIPTION	DATA
CM20	Assign the Access code for operator calls.	<ul> <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 Group.	<ul> <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 END	Specify Call Transfer from a station before the called SN610 ATTCON answers.	<ul> <li>(1) 063</li> <li>(2) 0/1 ◄ Available/Not Available</li> </ul>

## PROGRAMMING

Camp-On (Transfer Method)

<u>START</u>	DESCRIPTION		DATA
CM08	Provide the system with the Camp-On by Station feature.	(1) (2)	146 : Automatic Camp-On 0 : Available
		(1) (2)	<ul> <li>147 : Manual Camp-On (Result of Switch Hook-Flash while hearing Busy Tone.)</li> <li>0 : Special Dial Tone allowing use of Camp-On by Station access code.</li> </ul>
CM12	Assign the Class of Service for Camp-On to the required stations.	•	CM12 YY = 02 [Service Rest. Class (A) (00-15 ◀ )]
CM15		• (1) (2)	CM15 YY = 16 (Transfer Method) Service Rest. Class (A) (00-15) assigned by CM12 YY = 02 $1 \blacktriangleleft$ Allowed
CM08	Specify the Camp-On Tone sent to a busy station by Camp-On Transfer Method.	(1) (2)	068 0/1 ◀ Only once/Every 4 sec.
CM41	Specify the timing for the Camp-On Recall Timer.	• (1) (2)	Y = 0 26 01-15: 8-120 sec. in 8 sec. increments If no data is set, the default setting is 24- 32 seconds.
CM20	Assign an access code for Camp-On by Station (Transfer method).	• (1) (2)	Y = 0-3 (Numbering Plan Group 0-3) X-XXX: Access Code (*2) 007: Camp-On by Station (Transfer method)
END			

### Camp-On (Call Waiting Method)

<u>START</u>	DESCRIPTION		DATA
CM08	Provide the system with the Camp-On by Station feature.	<ul> <li>(1)</li> <li>(2)</li> <li>(1)</li> <li>(2)</li> </ul>	<ul> <li>146:Automatic Camp-On</li> <li>0: Available</li> <li>147: Manual Camp-On (Result of Switch Hook Flash while hearing Busy Tone.)</li> <li>0: Special Dial Tone allowing use of Camp-On by access code.</li> </ul>
CM12 CM15	Assign the Class of Service for Camp-On to the required stations.	• (1) (2)	CM12 YY = 02 [Service Rest. Class (A) (00-15 $\triangleleft$ )] CM15 YY = 43 (Call Waiting Method - Set from calling side) YY = 44 (Call Waiting Method - An- swer from called side) Service Rest. Class (A) (00-15) as- signed by CM12 YY = 02 1 $\triangleleft$ Allowed
CM20 END	Assign the access code for Camp-On by Station (Call Waiting Method).	• (1) (2)	Y = 0-3 (Numbering Plan Group 0-3) X-XXX:Access Code (#2) A25 : Camp-On by Station (Call Wait- ing Method)

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

#### CAMP-ON

When using a Single-Digit Feature-Access Code for Camp-On, add the following system data.



## CCSA ACCESS

#### PROGRAMMING

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

<u>START</u>	DESCRIPTION	DATA
CM35	Assign CCSA line to required routes.	<ul> <li>YY = 00</li> <li>(1) 00-63 (Trunk Route No.) (06)</li> <li>(2) 03: CCSA line</li> </ul>
	Specify the ICI key, for the ATTCON, to which a CCSA incoming call from the CCSA network will terminate.	<ul> <li>YY = 15</li> <li>(1) Trunk Route No. (00-63)</li> <li>(2) ICI key         <ul> <li>30: CCSA Incoming Call 0</li> <li></li> <li></li></ul></li></ul>
CM90	Assign the ICI key to the ATTCON, to which a CCSA incoming call will terminate.	<ul> <li>YY = 00</li> <li>(1) ATTCON No. + , + key No.</li> <li>(2) ICI key F6030: Call Termination from CCSA Line 0 F6037: Call Termination from CCSA Line 7</li> </ul>
CM20 END	Assign the CCSA access code.	<ul> <li>Y = 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>

#### HARDWARE REQUIRED

PN-2ODT card  $\times\,n$ 

## **CENTREX COMPATIBILITY**

## PROGRAMMING

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

<u>START</u>	DESCRIPTION	DATA
CM35	Assign the Centrex Trunk function to the required trunk routes.	<ul> <li>YY = 86</li> <li>(1) Trunk Route No. (00-63)</li> <li>(2) 0: Centrex Trunk</li> </ul>
	Provide the capability for sending a hookflash signal to the Centrex.	<ul> <li>YY = 16</li> <li>(1) Trunk Route No. (00-63)</li> <li>(2) 1 ◀ Sending</li> </ul>
CM20	Assign the access code for sending a hookflash signal to the Centrex Line from a PB Single-Line Telephone.	<ul> <li>Y = 0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX: Access Code</li> <li>(2) A58</li> </ul>
CM93	Assign the Centrex Trunk as a Prime Line to the desired Multiline Terminal extension.	<ol> <li>(1) (1)X-XXXX (Primary Extension No.)</li> <li>(2) D XXX (Trunk No.)</li> <li>*a: 000-255</li> </ol>
 END		
## PROGRAMMING

To assign the Telephone Class:

<u>START</u>	DESCRIPTION	DATA				
CM12	Assign the Telephone Class to each station.	• (1) (2)	YY = 00 (Type of Telephone) Station Number (X-XXXX) 1 : DP (Rotary Dial Telephone) 3◀ : DTMF (Push Button Tele- phone)/DP			
END		• (1) (2)	YY = 03 (Telephone Class) Station Number (X-XXXX) 00: House Phone 0 01: House Phone 1 02: House Phone 2 03: House Phone 3 04: Hot Line 05: Automatic Intercom 06: Manual Intercom 07: Dial Intercom 08: Attendant Position Loop Line 15 ◀ Ordinary Station			

### **CLASS OF SERVICE**

To assign the Trunk Restriction Class:

<u>START</u>	DESCRIPTION	DATA			
CM12	Assign the Trunk Restriction Class to each station.	<ul> <li>YY = 01 (Trunk Restriction Class)</li> <li>(1) Station Number (X-XXXX)</li> <li>(2) X X/*a*b</li> </ul>			
		<ul> <li>*a: Trunk Rest. Class in Day mode (1  </li> <li>*b: Trunk Rest. Class in Night mode (1  </li> <li>-8)</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 END	Set the Outgoing/Incoming Trunk Route Restriction Data by Trunk Restriction Classes (RCA-RCH).	<ul> <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</li></ul>			

### **CLASS OF SERVICE**

To assign the Service Feature Class:

<u>START</u>	DESCRIPTION		DATA
CM12	Assign the required Service Feature Class to each station. Service Feature categories for each class are specified by CM15.	• (1) (2) • (1) (2)	YY = 02  (Service Rest. Class - A/B) Station Number (X-XXXX) $\underline{XX} \underline{XX} \\ *a & *b \\ *a: \text{ Service Restriction Class A} \\ (00-15 \blacktriangleleft ) \\ *b: \text{ Service Restriction Class B} \\ (00-15 \bigstar ) \\ YY = 07 \text{ Service Restriction Class C} \\ (00-15) \\ \text{Station Number (X-XXXX)} \\ XX \\ *a \\ *a \\ *a: \text{ Service Restriction Class C (00-15t)} \\ \end{cases}$
CM15	Specify the service features in each Service Class A, B, and C.	<ul> <li>(1)</li> <li>(2)</li> </ul>	Service Class A (YY = 00-49, YYY = 100-104) Service Class B (YY = 53-73) XX [Service Restriction Class (A), (B) 00-15] $0/1 \blacktriangleleft$ Restricted/Allowed Service Class C YY = 80 XX: 00-15 $0/1 \clubsuit$ Restricted/Allowed YY = 82 XX: 00-15 $0/1 \clubsuit$ Allowed/Restricted YY = 83, 84 XX: 00-15 $0/1 \clubsuit$ Note 1 YY = 88, 89 XX: 00-15 $0/1 \clubsuit$ Note 2 YY = 90, 91 XX: 00-15 $0/1 \clubsuit$ Note 3 YY = 96 XX: 00-15 $0/1 \clubsuit$ Without LCD/With LCD YY = 97, 98 XX: 00-15 $0/1 \clubsuit$ Note 4

ND-45670 (E)

# **CLASS OF SERVICE**

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

		<ul> <li>Initial Data</li> </ul>	ta	
ΥY	83	84	MEANING OF DATA	
	0	0	600 +700 [Hz]	
Catting Data	1	0	1024 +1285 [Hz] ×16 [Hz] Modulating Signal	
Setting Data	0	1	480 + 606 [Hz] × 8 [Hz] Modulating Signal	
	1	1	480 +606 [Hz] × 16 [Hz] Modulating Signal	-

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

		<ul> <li>Initial Data</li> </ul>	a
88	89	MEANING OF DATA	
1	1	Effective (Special Dial Tone Connection)	]◀
0	1	Ineffective	1
0	0	Attendant Recall	

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

		<ul> <li>Initial Dat</li> </ul>	a
90	91	MEANING OF DATA	
1	1	Effective (Special Dial Tone Connection)	<b></b>  ◀
0	1	Ineffective	
0	0	Attendant Recall	

**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 (When UCD Pilot Station and CM08	3-212 = 0)
0	1	UCD (When UCD Pilot Station and CM08	3-212 = 1)
1	0	Call Waiting (When Ordinary Station)	
1	1	Hunting (When Ordinary Station)	•

<u>START</u>	DESCRIPTION			DATA
CM08	Provide the system with the Toll Restriction feature for an outgoing call by System Speed Dialing/Station Speed Dialing, if desired.	[	(1) (2) (1) (2)	<ul> <li>035 (Station Speed Dialing)</li> <li>0/1  ■ Not to be provided/To be provided</li> <li>044 (System Speed Dialing)</li> <li>0/1 ■ Not to be provided/To be provided</li> </ul>
	Provide the system with Toll Diversion or Toll Denial.		(1) (2)	<ul> <li>119</li> <li>0/1  <ul> <li>Toll Diversion (Routed to the "ICPT" key on the ATTCON)/ Toll Denial (Routed to Reorder Tone)</li> </ul> </li> </ul>
CM12	Assign a Trunk Restriction Class to each station.		• (1) (2)	YY = 01 X-XXXX (Station No.) X X (Trunk Restriction Class) *a*b *a: 1-8 (In Day Mode) 1
CM35	Assign the data for Dial Pulse sending to the Route No. assigned.		• (1) (2)	YY = 08 (Dial Pulse Sending) Trunk Route No. (00-63) 3 ◀ To be sent.
	Provide the Toll Restriction feature to the required trunk routes.		• (1) (2)	YY = 11 Trunk Route No. (00-63) (00) 0: To be provided
	Specify outgoing route access capability for each restriction class.		• (1) (2)	YY = 51-55 Trunk Route No. (00-63) 0/1
A	Assign the Area Code Development Pattern No. for Toll Restriction and Maximum Digit Analysis to each trunk route.		• (1) (2)	YY = 76 Trunk Route No. (00-63) 00-04 [Area Code Development Pattern (No. 0-4)]







(2) 200-207 (Time Pattern No. 00-07)

	DESCRIPTION		DATA
<u>STEP 3</u>	Assign the starting time for the Toll Restriction and Route Pattern No. to the Time Pattern No.	•	YYY = 200-207 (Time Pattern No. 00-07)
	assigned by above Step 2. Set the Starting Time as shown below.	(1)	XXXX (Time to Change) XX = XX *a = xb
			*a: Hours (00-23) *b: Minutes (00/30)
Note:	<i>Two times must be set. The first to start Toll Restriction and the sec-ond to stop it (or change it back).</i>	(2)	000-063 (Route Pattern No. 00-63) If Tenant Pattern is required, set 100- 115 (Tenant Pattern No. 00-15)
<u>STEP 4</u>	Assign the TR Pattern No. to the Route Pattern No. assigned by Step 3.	• (1) (2)	$YYY = 000-063 \text{ (Route Pattern No.} \\ 00-63\text{)}$ $\frac{1}{XXX} 00 \text{ (TR Pattern No.)}$ *a
			*a: TR Pattern No. 000-255
<u>STEP 5</u>	Assign the Trunk Restriction Pat- tern No. assigned by CM81 to the	•	YYY = 500-755 (TR Pattern No. 000- 255)
	<i>TR Pattern No. assigned by Step</i> 4.	(1) (2)	000 00-15 (Trunk Restriction Pattern No. 00-15)

### CONFERENCE

<u>START</u>	DESCRIPTION		DATA	
CM08	Provide the system with three-party conference.		(1) (2)	<ul> <li>101</li> <li>1 ◀ : Three Party Conference among stations.</li> </ul>
		Γ	(1) (2)	102 0: As per 101
		Γ	(1) (2)	103 0: As per 104
			(1) (2)	<ul> <li>104</li> <li>1  <ul> <li>Three Party Conference among stations and Trunk Call.</li> </ul> </li> </ul>
CM45	Provide the system with a four-party conference.	Γ	(1) (2)	246 1◀ : Four Party Conference
	<b>Note:</b> This feature can only be activated from a Multiline Terminal.			
	Provide the system with additional CFT, if required.		• (1) (2)	Y = 6 (Make Busy) 08-15 (Additional CFT Circuit No.) 1: Make Busy Off
END			• (1) (2)	Y = 7 (Purpose of the CFT) 08-15 (Additional CFT Circuit No.) 1: For both ATTCON and stations

#### PROGRAMMING

1. To provide an Extension Memory card (PN-ME00) for extending memory for Station Speed Dialing and One Touch keys:

<u>START</u>	DESCRIPTION	DATA		
CM05	Assign a slot number to the Extension Memory card. The slot number is given by the SENSE switch on the Extension Memory card.	<ol> <li>(1) 04-15 (Slot Number)</li> <li>(2) 19 (PN-ME00 card)</li> </ol>		
CMD000	Provide the system with the Extension Memory card. <b>Note:</b> <i>The SPN-AP00A card must be</i>	<ul> <li>(1) 56</li> <li>(2) 1: To be provided</li> </ul>		
END	mounted and installed prior to executing CMD000.			

2. To provide Single Line Telephone or Multiline Terminal:

<u>START</u>	DESCRIPTION	DATA			
CM08	Specify whether 1000-Slot Memory Block has 26 digits or 16 digits memory buffers.	<ul> <li>(1) 252</li> <li>(2) 0/1 ◀ : 26/16 digits</li> </ul>			
	Note 1: When CM08-252 is assigned as 0, only 3000 Station Speed Dialing numbers can be assigned, and 1000-Slot Memory Block No. 0-2 contains 26-digits memory buffers. When CM08-252 is assigned as 1, 4500 Station Speed Dialing numbers can be assigned, and 1000-Slot Memory Block No. 0-4 contains 16-digits memory buffers.	Note 2: Regardless of this data setting, a maximum of 26 digits number can be stored to Extension Memory card's memory area (1000-Slot Memory Block No. 8-F).			
CM12	Assign Service Restriction Class A to each station.	<ul> <li>YY = 02</li> <li>X-XXXX: Station No.</li> <li>XX ×a</li> <li>*a: Service Restriction Class A (00-15 ◀ )</li> </ul>			
CM15	Assign this service to Service Restriction Class A assigned by $CM12 YY = 02$ .	<ul> <li>YY = 07</li> <li>(1) 00-15: Service Restriction Class A</li> <li>(2) 1 ◀ : Allowed</li> </ul>			
CM20	Assign access codes for Station Speed Dialing, Origination, Entry and Cancel, respectively.	<ul> <li>Y = 0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX: Access Code (#*, 7*, 7#)</li> <li>(2) 064: Origination 065: Entry 066: Cancel</li> </ul>			
CM08	Specify whether to provide Toll Restriction for an outgoing call by Station Speed Dialing.	<ul> <li>(1) 035</li> <li>(2) 0/1 ◄ : Not provided/Provided</li> </ul>			
A	Specify whether to set "#" dialing 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> <li>(1) 168</li> <li>(2) 0/1          <ul> <li>i Paused data (1.5 sec.)/ Called number to C.O. line.</li> </ul> </li> </ul>			







3. To provide Multiline Terminal with One Touch keys (ETJ-16DD-1/ETJ-24DS-1/DTP-32-1/DTP-32D-1):

<u>START</u>	DESCRIPTION	DATA		
CM08	Specify whether 1000-Slot Memory Block has 26 digits or 16 digits memory buffers.	<ul> <li>(1) 252</li> <li>(2) 0/1 ◄ : 26/16 digits</li> </ul>		
	Note 1: When CM08-252 is assigned as 0, only 3000 Station Speed Dialing numbers can be assigned, and 1000-Slot Memory Block No. 0-2 contains 26-digits memory buffers. When CM08-252 is assigned as 1, 4500 Station Speed Dialing num- bers can be assigned and 1000-Slot Memory Block No. 0-4 contains 16- digits memory buffers.	Note 2: Regardless of this data setting, a maximum of 26 digits number can be stored to Extension Memory card's memory area (1000-Slot Memory Block No. 8-F).		
CM12	Assign Service Restriction Class A to each station.	<ul> <li>YY = 02</li> <li>(1) X-XXXX: Primary Extension No.</li> <li>(2) XX / *a</li> <li>*a: Service Restriction Class A (00-15 &lt; )</li> </ul>		
CM15	Assign this service to Service Restriction Class A assigned by CM12 $YY = 02$ .	<ul> <li>YY = 07</li> <li>(1) 00-15: Service Restriction Class A</li> <li>(2) 1 ◀ : Allowed</li> </ul>		
CM08	Specify whether to provide Toll Restriction for an outgoing call by Station Speed Dialing.	<ul> <li>(1) 035</li> <li>(2) 0/1</li></ul>		
	Specify whether to set "#" dialing as paused data (1.5 sec.) or called number to C.O. line when the Multiline Terminal dials "#" in the setting of the Station Speed Dialing feature.	<ul> <li>(1) 168</li> <li>(2) 0/1 ◄ : Paused data (1.5 sec.)/ Called number to C.O. line</li> </ul>		
A	Specify whether to set "*" dialing 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> <li>(1) 171</li> <li>(2) 0/1 ◄ : Programmable pause by CM41-38/Dialed digit</li> </ul>		



To provide System Speed Dialing:

<u>START</u>	DESCRIPTION	DATA				
CM12	Assign Service Restriction Class (A) to each station.	• $YY = 02$ (1) X-XXXX (Station No.) (2) $\underline{XX}_{*a}XX$				
		*a: Service Restriction Class (A) 00-15◀				
CM15	Assign this service to Service Restriction Class (A) assigned by CM12 $YY = 02$ .	<ul> <li>YY = 06 (System Speed Dialing)</li> <li>(1) XX (Service Rest. Class (A) assigned by CM12 YY = 02)</li> <li>(2) 1.1.4 Allowed</li> </ul>				
CM20	Assign the Access Code for System Speed Dialing.	<ul> <li>(2) 1    Allowed</li> <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>				
CM71	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.	(1) 00-63 (For stations within Tenant 00- 63) 64 (For ATTCON) (2) $XXX XXX *a XXX *b$				
	<b>Note:</b> The memory areas for Hot Line-Out- side and Route Advance from Tie Line to C.O. Line are included in 300 memo- ry slots.	<ul> <li>*a: First Memory Slot No. in Block. (000-299)</li> <li>*b: Number of Slots to be allocated in Block. (001-300)</li> </ul>				
	Abbreviated Call Codes required for accessing this feature are automatically given to each Tenant as shown below. <b>Example:</b>	For example, to provide 20 memory slots starting at Slot 60: Data = 060020				
	TENANT 00 20 MEMORY SLOTS $ \begin{bmatrix} SLOT 000 \rightarrow 00 \\ \langle \\ \rangle & \langle \\ \rangle \\ SLOT 019 \rightarrow 19 \end{bmatrix} ABBREVIATED CODES $	$15 \\ MEMORY \\ SLOTS Y \begin{bmatrix} SLOT 020 \rightarrow 00 \\ \langle \rangle & \langle \rangle \\ SLOT 034 \rightarrow 14 \end{bmatrix} ABBREVIATED \\ CODES \\ CO$				
	The number of digits for Abbreviated Codes are automatically determined as shown be- low:					
A	<ul> <li>Less than 100 memory slots per Tenant: 2 digits (00-99)</li> <li>More than 100 memory slots per Tenant: 3 digits (000-299)</li> </ul>					

Α	DESCRIPTION	DATA
СМ72	Set a stored number to each Memory Slot Number allocated by CM71, as needed.	<ol> <li>Memory Slot No. (000-299)</li> <li>Stored Number (Max. 26 digits) Stored Number: Outgoing Access Code (Max. 2 digits) + , + Stored Number (Max. 26 digits)</li> <li>To set a pause into the Stored No., enter "C" (Fixed pause = 1.5 sec.) or "D" (Pro- grammable pause specified by CM41- 38) after desired digits.</li> </ol>
CM08	Specify the System Speed Dialing security. (Stored number displays on Multiline Terminal for an outgoing call by System Speed Dialing.)	<ul> <li>(1) 043</li> <li>(2) 0/1 ◄ Not to be displayed/To be displayed.</li> </ul>
END	Specify Toll Restriction for an outgoing call by System Speed Dialing.	<ul> <li>(1) 044</li> <li>(2) 0/1 ◄ Not to be provided/To be provided.</li> </ul>

## **CONSULTATION HOLD**

<u>START</u>	DESCRIPTION	DATA				
CM08	Select the ringing pattern on station calls with a trunk line placed in Consultation Hold.	<ul> <li>(1) 137</li> <li>(2) 0: Change from Internal Ringing (CM08-138) to External Ringing (CM35 YY = 33) when transferring a call</li> <li>1   External Ringing (CM35 YY = 33)</li> </ul>				
CM12	Assign the Service Restriction Class (C) to each station.	<ul> <li>YY = 07</li> <li>(1) X-XXXX (Station No.)</li> <li>(2) XX/*a</li> <li>*a: Service Rest. Class (C) (00-15t)</li> </ul>				
CM15 END	Assign the Switch Hook Flash capability to the Service Restriction Class (C) assigned by CM12 YY = 07.	<ul> <li>YY = 88, 89 (Switch Hook Flash on Internal Call)</li> <li>YY = 90, 91 (Switch Hook Flash on External Call)</li> <li>(1) XX [Service Restriction Class (C) 00-15]</li> <li>(2) 1</li></ul>				

#### **CUSTOMER ADMINISTRATION TERMINAL (CAT)**

<u>START</u>	DESCRIPTION	DATA		
CM12 CM15	Assign the class of service for CAT to the required Multiline Terminals.	<ul> <li>CM12 YY = 02</li> <li>(1) X-XXXX (Primary Extension No.)</li> <li>(2) XX XX *a</li> </ul>		
		<ul> <li>*a: Service Restriction Class (B) (00-15 ◀ )</li> <li>CM15 YY = 56</li> <li>(1) XX: [Service Restriction Class (B) (00-15)] assigned by CM12 YY = 02.</li> </ul>		
		(2) $1 \triangleleft$ Allowed		
CME7	Specify the command codes accessible to each Password Level.	<ul> <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 0</li> <li>YY = 12: 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> <li>(1) XX/*a</li> <li>*a: 00-FF (Command Codes exclusive of 03, E7, E9)</li> <li>(2) 0/1 &lt; Allowed/Restricted</li> </ul>		
A				

### **CUSTOMER ADMINISTRATION TERMINAL (CAT)**

Α	DESCRIPTION	DATA
CME9	Enable the system to change the password.	(1) 8 (2) $0 \blacktriangleleft$ : Allowed
	Assign a password to each Password Level.	<ol> <li>0-7 (Password Level 0-7)</li> <li>X-XX (Max. 8 digits Password Code) A password code for Password Level 7 must be assigned prior to providing the password service by Function No. 9 of CME9.</li> <li>The following passwords are not available. "CCCCCCCC" "FFFFFFFF"</li> </ol>
END	Provide the system with Password service. After setting this data, access to system programming will be available with password entry only.	<ul><li>(1) 9</li><li>(2) 0: Provided</li></ul>

**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 PN-2DLCB/4DLCA card into LT00 Slot of PIM0
- 2. Connect the CAT to LEN0000 at the MDF
- 3. Set SW3 on the MP card to "B"
- 4. Press SW1 (RESET Switch) on the MP card (System Data All Clear/Partial Clear)
- 5. Set SW3 to "0" and press SW1.
- 6. Set the Multiline Terminal to CAT mode (Station Number 300 is automatically assigned to the Multiline Terminal).
- **Note 2:** If Password Service is activated, enter the predetermined password by CM03 before programming from a CAT.

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.

ND-45670 (E)

### DATA LINE SECURITY



## **DELAYED RINGING**

<u>START</u>	DESCRIPTION	DATA
CM90	Assign the Delayed Ringing feature to each line key on a Multiline Terminal.	<ul> <li>YY = 03</li> <li>(1) Primary Extension No. + , + Key No.</li> <li>Note</li> </ul>
	<b>Note:</b> The Delayed Ringing feature can be assigned to the first 16 line/trunk keys (Key 01-16).	(2) 0: Delayed Ringing
CM41 END	Specify the timing for Delayed Ringing.	<ul> <li>Y = 1</li> <li>(1) 09</li> <li>(2) 01-20: 2-40 sec. in 2 sec. increments If no data is set, the default setting is 10 seconds.</li> </ul>

## DIAGNOSTICS

### PROGRAMMING

Refer to the Maintenance Manual.

<u>START</u>	DESCRIPTION	DATA				
CM10	Assign the Card Number of the DTMF Receiver to the required LENs. INITIAL Note: When using the internal DTMF Re- ceiver on the PN-CP03 card, assign the Card No. E200 to LEN No. 0124	<ol> <li>LEN (0000-0511)</li> <li>Card No. of DTMF Receiver E200-E203: For PIM0/1 E204-E207: For PIM2/3 E208-E211: For PIM4/5 E212-E215: For PIM6/7</li> </ol>				
CM12	Assign the type of telephone set (DTMF) to DTMF Stations. This data assignment is not required for Multiline Terminal stations.	<ul> <li>YY = 00</li> <li>(1) X-XXXX (Station No.)</li> <li>(2) 3 ◀ : DTMF Telephone set</li> </ul>				
CM45	Assign DTMF Receivers for use with DTMF Stations.	<ul> <li>Y = 0 (Make Busy)</li> <li>(1) XX X Card No. 00-15 assigned by CM10 (E200-E215) Circuit No. 0-3</li> <li>(1) 1 ◀ : Make Busy Cancel</li> <li>Y = 1 (PBR for incoming call from Tie Line/DID)</li> <li>(1) XXX (Ditto to Y = 0)</li> <li>(2) 1 ◀ : For both DTMF station and Tie Line/DID</li> </ul>				

### **DIAL CONVERSION**

A	DESCRIPTION	DATA		
CM35	For a DP trunk, assign the type of signaling for Outgoing and Bothway trunk routes to DP.	<ul> <li>YY = 01</li> <li>(1) Trunk Route No. (00-63)</li> <li>(2) 2</li> </ul>		
	Specify the DP Sender characteristics to match the Central Office.	<ul> <li>YY = 23 (DP Sender Inter Digital Pause)</li> <li>(1) Trunk Route No. (00-63)</li> <li>(2) 0: 300 ms <ol> <li>400 ms</li> <li>500 ms</li> <li>600 ms</li> <li>600 ms</li> <li>700 ms</li> <li>900 ms</li> <li>1100 ms</li> </ol> </li> <li>YX = 25 (DP Sender Make Batic)</li> </ul>		
		• $Y Y = 25$ (DP Sender Make Rano) (1) Trunk Route No. (00-63) (2) $0/1 \blacktriangleleft$ : 33%/39%		
		<ul> <li>YY = 45 (DP Sender Release Timing)</li> <li>(1) Trunk Route No. (00-63)</li> <li>(2) 0: 2 sec. 1: 4 sec. 2: 6 sec. 3: 8 sec. 4: 12 sec. 5: 14 sec. 6: 16 sec. 7◄ : 10 sec.</li> </ul>		
В	For a DTMF trunk, assign the type of signaling for Outgoing and Bothway Trunk Routes to DTMF.	<ul> <li>YY = 01</li> <li>(1) Trunk Route No. (00-63)</li> <li>(2) 7 ◀</li> </ul>		

## **DIAL CONVERSION**

В	DESCRIPTION		DATA			
	Specify the DTMF Sender characteristics to match the Central Office.		• (1) (2) • (1) (2) • (1) (2)	YY = 24 (DTMF Inter Digital Pause) Trunk Route No. (00-63) 0: 32 ms 1: 64 ms 2: 80 ms 3: 96 ms 4: 160 ms 5: 192 ms 6: 240 ms 7◀ : 128 ms YY = 26 (DTMF Sender Signal Width) Trunk Route No. (00-63) 0/1◀ : 64 ms/128 ms YY = 46 (DTMF Sender Release Tim- ing) Trunk Route No. (00-63) 0: 2 sec. 1: 4 sec. 2: 6 sec. 3: 8 sec. 4: 12 sec. 5: 14 sec. 5: 14 sec. 6: 16 sec. 7◀ : 10 sec.		
CM08 END	Assign whether "*" or "#" from a DTMF Telephone is used as a Switch Hook Flash while hearing Busy Tone.	[ [	<ol> <li>(1)</li> <li>(2)</li> <li>(1)</li> <li>(2)</li> </ol>	<ul><li>050 (* is used as Switch Hook Flash)</li><li>0: Effective</li><li>051 (# is used as Switch Hook Flash)</li><li>0: Effective</li></ul>		

#### HARDWARE REQUIRED

DTMF Receiver (PN-8RST)  $\times$  n

n: Depends on the number of DTMF stations and the traffic condition of the system.

### DIRECT DIGITAL INTERFACE

#### PROGRAMMING

Refer to the DDI System Manual.

# HARDWARE REQUIRED

Refer to the DDI System Manual.

<u>START</u>	DESCRIPTION	DATA			
CM08	Assign the ring rate on a DID call.	<ul> <li>(1) 180</li> <li>(2) 0/1  <ul> <li>: 0.2 sec. ON, 0.2 sec. OFF, 0. sec. ON, 0.2 sec. OFF, 0.2 sec. ON, 0.2 sec. OFF/As per the d of CM35 YY = 33</li> </ul> </li> </ul>	0.2 ec. data		
CM10	Assign the Trunk Numbers to the required LENs.	<ol> <li>(1) LEN (0000-0511)</li> <li>(2) Trunk No. (D000-D255)</li> </ol>			
CM30	Assign the data for DID to the Trunk Numbers assigned by CM10.	<ul> <li>YY = 00 (Trunk Route Allocation)         <ol> <li>Trunk No. (000-255)</li> <li>Trunk Route No. (00-63) (03)</li> </ol> </li> <li>YY = 01 (Tenant Allocation)         <ol> <li>Trunk No. (000-255)</li> <li>Tenant No. (00-63) (00)</li> </ol> </li> <li>YY = 02 (Terminating System in Dam Mode)         <ol> <li>YY = 03 (Terminating System in Nig Mode)</li> <li>Trunk No. (000-255)</li> <li>Trunk No. (000-255)</li> <li>Trunk No. (000-255)</li> </ol> </li> </ul>	)ay ïght		
A					

#### **DIRECT INWARD DIALING (DID)**



### **DIRECT INWARD DIALING (DID)**

В	DESCRIPTION	_		DA	ATA
CM49	Assign the function of each Digital Announcement Trunk, if needed.	• (1) (2)	YY = 00 000-127: 0DD0: 0800:	Digita Trunk Annou when not an call Anno when termin tion.	l Announcement Circuit No. uncement Service the called station does swer the DID/Tie Line uncement Service the DID/Tie Line call nates to the Busy sta-
CM51	Automatic Transfer Destinations:				
	For the DID line, the destination to which an incoming call transfers when the station does not answer the call within a predetermined time.	• (1) (2)	YY = 00 XX EB000-E	: B127 :	Group No. Digital Announce- ment Trunk Circuit No.
C					

# **DIRECT INWARD DIALING (DID)**

С	DESCRIPTION	DATA	
С СМ76	<b>DESCRIPTION</b> When the data for CM35 YY = 18 is set to "0" (Received Digits Conversion is to be provided), assign the data for interpreting the digits received.	<ul> <li>Y = 0 (Day Mode)</li> <li>Y = 1 (Night Mode)</li> <li>(1) X-XXXX: Station Number received.</li> <li>(2) X-XXXX: Station Number to be terminated.</li> <li>DXX: Change Terminating System to: D01: D13: TAS D04: DIT D14: SN610 ATTCON D16: DISA D00: AUTO ATT</li> </ul>	
		D09: AUTO ATT.	

END

#### HARDWARE REQUIRED

PN-AUCA card  $\times$  n

### DIRECT INWARD DIALING (CALL WAITING)

START	DESCRIPTION			DATA	
 CM08	Specify station b	the Camp-On tone sent to a busy by Camp-On Call Waiting Method.	(1) (2)	<ul><li>367</li><li>0: Every 4 sec.</li><li>✓ Only once</li></ul>	
CM12 CM15	Assign the Class of Service for the Call Waiting feature to the required stations.			CM12, YY=02[Service Restriction Class (A) (00-15 ◀ )] CM15, YY=44 (Call Waiting Method Answer from called side) Service Restriction Class (A) (00-15) assigned by CM12, YY=02 1 ◀ : Allowed	
CM35	Assign t Trunk R	the data for DID Call Waiting to the outes assigned by CM30	• (1) (2)	YY = 59 (Call Waiting for DID call) Trunk No. (00-63) 0: To be provided	
CM42	Specify Tone.	the number of times for Call Waiting	(1) (2) If n	<ol> <li>18</li> <li>01-99 (Number of Times)</li> <li>If no data is set, the default setting is for no</li> </ol>	
	Note:	<i>This data is effective when the 2nd data of CM08-367 is "0"</i>	lim	itation.	
CM76	Specify Call Waiting for DID call per incoming LDN number, if desired		• (1)	<ul> <li>Y=5</li> <li>(1) X-XXXX: Station Number received 0 : Restricted</li> </ul>	
	Note:	This data is effective when the 2nd data of CM35, YY=18 is "0" (Received Dig- its Conversion is to be provided).		1 ◀ : Allowed	

END

#### **DIRECT INWARD DIALING (CALL WAITING)**



#### DIRECT INWARD SYSTEM ACCESS (DISA)

### PROGRAMMING

To provide the DISA without Application Processor (PN-AP01):

<u>START</u>	DESCRIPTION	DATA	
CM08	Designate the processor for checking the ID code on DISA.	<ul> <li>(1) 217</li> <li>(2) 0: MP (PN-CP00)</li> </ul>	
	Assign the ring rate on a DISA call.	<ul> <li>(1) 180</li> <li>(2) 0/1  <ul> <li>i 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 CM35 YY = 33</li> </ul> </li> </ul>	
CM30	Assign the data for DISA to the required trunks.	<ul> <li>YY = 02 (Terminating System in Day Mode)</li> <li>YY = 03 (Terminating System in Night Mode)</li> <li>(1) Trunk No. (000-255)</li> <li>(2) 16: DISA</li> <li>YY = 30 (Handling of DISA destination in Day mode)</li> <li>YY = 31 (Handling of busy/not avail- able DISA destination in Night mode)</li> <li>(1) Trunk No. (000-255)</li> <li>(2) 00 : C.O. Line Release</li> <li>01 : Forwarded to TAS</li> <li>03 : Forwarded to ATTCON</li> <li>04 : Forwarded to DIT Station assigned by CM30 YY = 04, 05.</li> <li>06 : DT Connection for redial</li> <li>08 : C.O. Line Release</li> <li>15◀ : C.O. Line Release</li> </ul>	
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> <li>YY = 18</li> <li>(1) Trunk Route No.(00-63)</li> <li>(2) 0/1  <ul> <li>Constraints</li> <li>Constraints&lt;</li></ul></li></ul>	
Α	DESCRIPTION	DATA	
------	---	---	
CM76	When the data for CM35 YY = 18 is set to 0, assign the data for converting the received digit(s) to DISA.	<ul> <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 maximum number of digits for an ID code is specified by CM42-13.	<ul> <li>Y = 5         <ul> <li>(1) XX : 00-07 (ID code serial number)</li> <li>(2) X-XX : ID code (Max. 16 digits)</li> </ul> </li> </ul>	
	Assign the required Trunk Restriction Class to each ID code.	<ul> <li>Y = 6</li> <li>(1) XX : 00-07 (ID code serial number)</li> <li>(2) 1 ◀ : Unrestricted (RCA)         <ul> <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> <li>Y = 7</li> <li>(1) XX: 00-07 (ID code serial number)</li> <li>(2) XX XX *a *b</li> <li>*a: Service Feature Class (A) (00-15 ◀ )</li> <li>*b: Service Feature Class (B) (00-15 ◀ )</li> </ul>	
CM42	Assign the required Service Class C to each ID code. The features available in each class are assigned by CM15.	<ul> <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>	
END	Specify the maximum number of digits for ID Codes on DISA.	<ol> <li>13</li> <li>01-16 (Number of digits) If no data is set, 10 digits of ID Code is available.</li> </ol>	

**Note:** Up to 8 DISA ID Codes can be set per system.

### To provide the DISA with an AP (PN-AP01):

<u>START</u>	DESCRIPTION	DATA			DESCRIPTION DATA	DATA
CM05	Assign the slot number to the PN-AP01 card. The SENSE Switch on the PN-AP01 card should be set to the slot number assigned by this command.	(1) (2)	Slot No. (04-15) 07			
CM08	Designate the processor for checking the DISA ID Codes.	(1) (2)	217 1◀ : AP (PN-AP01)			
	Assign the ring rate on a DISA call.	(1) (2)	<ul> <li>180</li> <li>0/1  </li> <li>: 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 CM35 YY = 33</li> </ul>			
CMD5	For the programming procedure of this command, refer to AUTHORIZATION CODE with an AP.					
CM30	Assign the data for DISA to the required trunks.	• (1) (2)	<ul> <li>YY = 02 (Terminating System in Day Mode)</li> <li>YY = 03 (Terminating System in Night Mode)</li> <li>Trunk No. (000-255)</li> <li>16: DISA</li> <li>XX = 30 (Handling of busy/not avail</li> </ul>			
		•	able DISA destination in Day mode) YY = 31 (Handling of busy/not avail- able DISA destination in Night			
A		(1) (2)	mode) Trunk No. (000-255) 00: C.O. Line Release 01: Forwarded to TAS 03: Forwarded to ATTCON 04: Forwarded to DIT Station as- signed by CM30 YY = 0. 06: DT Connection for redial 08: C.O. Line Release			



To access the Digital Announcement Trunk (PN-2DATA) via DISA, add the following programming.



- **Note 1:** Up to 1,000 Direct Inward System Access (DISA) codes combined with Authorization Codes and Forced Account Codes can be defined.
- **Note 2:** When deleting all ID codes stored in the PN-AP01 card at one time, do the following operation:

#### HARDWARE REQUIRED

PN-AP01 card  $\times$  1 (If 1,000 codes and/or Check Code is provided.) PN-2DATA card x n (n = 1-128) (If a Digital Announcement Trunk is required for the DISA.)

<u>START</u>	DESCRIPTION	DATA
CM30	Assign the data for terminating system in Day Mode and Night Mode, to each Loop/Ground Start trunk, respectively.	<ul> <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> <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> <li>YY = 13 (Day Mode)/YY = 14 (Night Mode)</li> <li>(1) Trunk No. (000-255)</li> <li>(2) 01: TAS BUZZER</li> <li>04: SN610 ATTCON</li> <li>06: Automatic Camp-On</li> <li>15◀ : Waiting until the DIT Station becomes idle.</li> </ul>
	Assign the transfer destination for an unanswered DIT call in the Day Mode and Night Mode, respectively.	<ul> <li>YY = 15 (Day)/YY = 16 (Night)</li> <li>(1) Trunk No. (000-255)</li> <li>(2) 01: SN610 ATTCON</li> <li>03: TAS</li> <li>15: To be continued DIT</li> </ul>
CM41	Specify the timing for an unanswered call to a DIT destination.	<ul> <li>Y = 0</li> <li>01</li> <li>01-30: 4-120 sec. in 4 sec. increments If no data is set, the default setting is 32- 36 seconds.</li> </ul>
CM08 END	Set the ring rate on a DIT call.	<ul> <li>(1) 179</li> <li>(2) 0/1</li></ul>

# DIRECT OUTWARD DIALING (DOD)

<u>START</u>	DESCRIPTION	DATA	
CM10	Assign the Trunk Numbers to the required LENs.	<ol> <li>(1) LEN (0000-0511)</li> <li>(2) Trunk No. (D000-D255)</li> </ol>	
CM30	Assign the data for Direct Outward Dialing to the Trunk No. assigned by CM10.	<ul> <li>YY = 00 (Trunk Route Allocation)</li> <li>(1) Trunk No. (000-255)</li> <li>(2) Route No. (00-63) Note</li> </ul>	
	<b>Note:</b> For Resident System Program, refer to the Command Manual.	<ul> <li>YY = 01 (Tenant Allocation)</li> <li>(1) Trunk No. (000-255)</li> <li>(2) Tenant No. (00-63) (01)</li> </ul>	
		<ul> <li>YY = 08 (Restriction on Night Mode)</li> <li>(1) Trunk No. (000-255)</li> <li>(2) 0/1 ◀ : Restricted/Allowed</li> </ul>	
A			

# **DIRECT OUTWARD DIALING (DOD)**



# DIRECT OUTWARD DIALING (DOD)

В	DESCRIPTION	DATA	
CM35	<ul> <li>According to the characteristics of each C.O. line, assign the data for DP/DTMF Sender to each route.</li> <li>For the details of the command, refer to the Command Manual.</li> <li>Note: For Resident System Program, refer to the Command Manual.</li> </ul>	<ul> <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>	
CM41	Specify the timing for Interdigital Pause on outgoing C.O. call.	<ul> <li>Y = 0</li> <li>(1) 27</li> <li>(2) 01-14: 1-14 sec. in 1 sec. increments If no data is set, the default setting is 7 seconds.</li> </ul>	
CM20	Assign the access code to each route.	<ul> <li>Y = 0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX: Access Code</li> <li>(2) 100-163: Route No. (00-63)</li> </ul>	
CM90 END	Assign the trunk appearance line key on a Multiline Terminal, if provided.	<ul> <li>YY = 00</li> <li>(1) Primary Extension No. + , + Key No.</li> <li>(2) DXXX (Trunk No. 000-255)</li> </ul>	

Note: For the Trunk Restriction Class, refer to Class of Service Individual.

### PROGRAMMING

<u>START</u>	DESCRIPTION		DATA		
CM10	Assign the DSS Console Number to its associated LEN.	(1) (2)	0000-0511 (LEN) DSS Console No. E100-E107: For PIM0/1 E108-E115: For PIM2/3 E116-E123: For PIM4/5 E124-E131: For PIM6/7		
CM96	Assign a single-line station, Multiline Terminal, or SN610 ATTCON to work in conjunction with the DSS Console.	(1) (2)	00-31 (DSS Console Number: Last two digits of E100-E131 assigned by CM10) X-XXXX (Station Number/Primary Extension No. of Multiline Terminal) E000-E007 (SN610 ATTCON No.)		
CM97	Assign the station and trunk numbers, as needed, to the keys on each DSS Console.	(1) (2)	00-31 (DSS Console Number) + , + DSS Key Number (00-59) X-XXXX (Station Number) D <u>XXX</u> *a *a: 000-255 (Trunk Number)		
	Assign a Do Not Disturb and Message waiting function key, if needed, on each DSS Console.	(1) (2)	00-31 (DSS Console Number) + , + Function key No. (57-59) F1049: Message Waiting Set/Reset F1053: Do Not Disturb Set/Reset		
	When providing Do Not Disturb or Message Waiting function key, assign a changing Function key on each DSS Console.	(1) (2)	00-31 (DSS Console Number) + , + Function key No. (56) F1052: Changing Function		
CM08 END	Specify the type of busy indication on the BLF of the DSS Console as Station Base or Extension Base.	(1) (2)	269 0/1◀ : Station Base/Extension Base		

### HARDWARE REQUIRED

DSS Console

PN-2DLCB/4DLCA card (Two or four DSS Consoles can be accommodated per card)

ND-45670 (E)

# **DISTINCTIVE RINGING**

<u>START</u>	DESCRIPTION	DATA		
CM08	Select the ringing pattern on an internal and Direct-In Termination Call, Direct Inward Dialing, DISA, and Automated Attendant.	<ul> <li>(1) 138 (For Internal)</li> <li>(2) 0/1</li></ul>		
		<ol> <li>(1) 179 (For DIT Call)</li> <li>(2) 0/1          <ul> <li>As per CM35 YY = 33/0.4 sec.</li> <li>ON, 0.2 sec. OFF, 0.4 sec. ON, 2 sec. OFF.</li> </ul> </li> </ol>		
		<ul> <li>(1) 180 (For DID, DISA and Automated Attendant)</li> <li>(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 CM35 YY = 33</li> </ul>		
CM35	<ul> <li>Select the ringing pattern on an external call.</li> <li>Note: For incoming calls to a Direct Trunk Appearance key on Multiline Terminals, the special ringing, 0.2 sec. ON, 0.2 sec. OFF, 0.2 sec. ON, 0.2 sec. OFF, will be applied.</li> </ul>	<ul> <li>YY = 33</li> <li>(1) Trunk Route No. (00-63)</li> <li>(2) 0 : 0.4 sec. ON, 0.2 sec. OFF Note 0.4 sec. ON, 2.0 sec. OFF Note</li> <li>1 : 0.4 sec. ON, 0.2 sec. OFF 0.4 sec. ON, 2.0 sec. OFF</li> <li>2 : 1 sec. ON, 2 sec. OFF</li> <li>3 ◀ : 2 sec. ON, 4 sec. OFF</li> </ul>		
CM08 END	Select the ringing pattern on station calls with a trunk line placed in Consultation Hold.	<ul> <li>(1) 137</li> <li>(2) 0: Change from Internal Ringing (CM08-138) to External Ringing (CM35 YY = 33) when transferring a call</li> <li>1 ◀ : External Ringing (CM35 YY = 33)</li> </ul>		

### **DISTINCTIVE RINGING**

To provide a distinctive lamp indication for Multiline Terminals during a call termination, do the following programming:



# DO NOT DISTURB

<u>START</u>		DESCRIPTION		DATA		
CM12 CM15	Assign t Disturb	he Class of Service for Do Not to the required stations.	• (1) (2)	CM12 YY=02: Service Rest. Class (A) (00-15t) CM15 YY=19 Service Rest. Class (A) (00-15) assigned by CM12 YY=02 1◀ : Allowed		
CM13	Assign t Disturb. (assigne by opera	he group of stations in Do Not Do Not Disturb is set to these stations d by this command) simultaneously ation from an Attendant Console.	• (1) (2)	YY=00 X-XXXX (Station No.) 0: To be provided		
CM20	Assign t Set/Can	he access code for Do Not Disturb cel.	• (1) (2)	Y=0-3 (Numbering Plan Group 0-3) X-XXX: Access Code (*8, #8) 022: Set 023: Cancel		
CM51	Assign t transfer Not Dis	he destination to which a call is red when the called station is set to Do turb.	• (1) (2)	YY=10 00-63 (Tenant No.) X-XXXX (Station No.) E000 (SN610 ATTCON)		
CM90	Assign a Termina	a DND function key to a Multiline l, if needed.	• (1) (2)	YY=00 Primary Extension No. + , + Key No. F0022: Do Not Disturb Set/Reset		
	Assign l the SN6	OND and DNDOVR function keys to 10 ATTCON.	• (1) (2)	YY=00 ATTCON No. + + + Key No. F6102: DND F6103: DND Override		
A	Note:	By Resident System Program, a DN- DOVR key is assigned as a soft key, on the SN610 ATTCON.		F6104: RESET		

# DO NOT DISTURB



# DUAL HOLD

<u>START</u>	DESCRIPTION		DATA
CM12 CM15	Assign the Class of Service for this feature to the required station.	• (1) (2)	CM12 YY = 02 X-XXXX: Station Number XX $\underline{XX}_{*a}$
			*a: Service Restriction Class B (00- 15
		• (1) (2)	CM15 YY = 64 XX Service Restriction Class B (00- 15) assigned by CM12 YY = 02.
END		(2)	

<u>START</u>	DESCRIPTION	DATA	
CM10	<ul> <li>Assign a Trunk Number for the PN-2ODT card to the required LENs.</li> <li>Note: The trunk number must be assigned to the first LEN (Level 0) and/or the second LEN (Level 1) of each LT slot.</li> </ul>	<ol> <li>(1) LEN (0000-0511)</li> <li>(2) D000-D255 (Trunk No.)</li> </ol>	
CM20	Assign a Trunk Route access code to each Tie Line Trunk route.	<ul> <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 a Trunk Route and Tenant number to each Trunk.	<ul> <li>YY = 00</li> <li>Trunk No. (000-255)</li> <li>Trunk Route No. (00-63) (01/02)</li> <li>YY = 01</li> <li>Trunk No. (000-255)</li> <li>Tenant No. (00-63) (00/00)</li> </ul>	
CM35	<ul> <li>Assign Trunk Route data to the Trunk Route Number assigned by CM30 YY = 00.</li> <li>Note: Both circuit must be set to same purpose (2-wire or 4-wire) on one PN-20DT card.</li> </ul>	<ul> <li>YYY =105 (2-wire E &amp; M/4-wire E &amp; M Trunk)</li> <li>(1) Trunk Route No. (00-63)</li> <li>(2) 0 : 2-wire E &amp; M Trunk</li> <li>1 &lt; : 4-wire E &amp; M Trunk</li> <li>YYY = 104 (Polarity of E &amp; M Trunk)</li> <li>(1) Trunk Route No. (00-63)</li> <li>(2) 1 : E wire (Open), M wire (Open)</li> <li>2 : E wire (Ground), M wire (Battery)</li> <li>3 &lt; : E wire (Ground), M wire (Ground)</li> </ul>	

A	DESCRIPTION	DATA
CM35	Assign Trunk Route data to the Trunk Route Number assigned by CM30 YY = 00.	<ul> <li>YY = 00 (Kind of Trunk Route)</li> <li>(1) Trunk Route No. (00-63) (01/02)</li> <li>(2) 04 (Tie Line)</li> </ul>
		<ul> <li>YY = 01</li> <li>(1) Trunk Route No. (00-63) (01/02)</li> <li>(2) &lt; Incoming &gt; &lt; Outgoing &gt; 2 : DP-10PPS DP 10PPS</li> <li>4 : DTMF DTMF</li> <li>7 ◀ : DTMF/DP DTMF</li> </ul>
		<ul> <li>YY = 02 (IC/OG)</li> <li>(1) Trunk Route No. (00-63) (01/02)</li> <li>(2) 1 : Incoming Trunk</li> <li>2 : Outgoing Trunk</li> <li>3 ◀ : Bothway Trunk</li> </ul>
		<ul> <li>YY = 04 (Answer Signal from Distant Office)</li> <li>(1) Trunk Route No. (00-63) (01/02)</li> <li>(2) 2/7 ◀ : Arrive/Not Arrive</li> </ul>
		<ul> <li>YY = 05 (Release Signal from Distant Office)</li> <li>(1) Trunk Route No. (00-63) (01/02)</li> <li>(2) 1 ◀ : Arrive</li> </ul>
		<ul> <li>YY = 08 (Sending of Dial Pulse)</li> <li>(1) Trunk Route No. (00-63) (01/02)</li> <li>(2) 3 ◀ : Send</li> </ul>
		<ul> <li>YY = 09 (Incoming Connection Signalling)</li> <li>(1) Trunk Route No. (00-63) (01/02)</li> <li>(2) 03: Wink Start 04: Delay Dial 05: Immediate Start 06: 2nd Dial Tone/Timing Start</li> </ul>
В		<ul> <li>YY = 10 (When YY = 09 is 06)</li> <li>(1) Trunk Route No. (00-63) (01/02)</li> <li>(2) 0/1 ◀ : No Tone/2nd Dial Tone</li> </ul>

В	DESCRIPTION	DATA
		<ul> <li>YY = 13 (Maximum Number of Sending Digits)</li> <li>(1) Trunk Route No. (00-63)</li> <li>(2) 001-031: 1 -31 digits</li> <li>If no data is set, sender is released when time out occurs or the called station answers</li> </ul>
CM35	Assign the appropriate data for the characteristic of the distant PBX.	<ul> <li>YY = 20 (Sender Start Condition)</li> <li>(1) Trunk Route No. (00-63) (01/02)</li> <li>(2) 00: Wink Start</li> <li>(1: Delay Dial</li> <li>15: Timing Start (As per YY = 21)</li> </ul>
		The above data should be set to each route according to the data for $YY = 09$ , as shown below.
		$\begin{array}{cccc} \underline{\text{Data for } YY = 09} & \underline{\text{Data for } YY = 20} \\ 03 & \rightarrow & 00 \\ 04 & \rightarrow & 01 \\ 05 & \rightarrow & 15 \\ 06 & \rightarrow & 15 \end{array}$ $\begin{array}{c} YY = 21 \text{ (Sender Start Timing)} \\ (1) & \text{Trunk Route No. } (00\text{-}63) \\ (2) & 00\text{: } 0 \sec & 08 & \text{: } 6.0 \sec \end{array}$
		$01: 0.5 \text{ sec}$ $09 : 7.0 \text{ sec}$ $02: 1.0 \text{ sec}$ $10 : 8.0 \text{ sec}$ $03: 1.5 \text{ sec}$ $11 : 9.0 \text{ sec}$ $04: 2.0 \text{ sec}$ $12 : 10.0 \text{ sec}$ $05: 2.5 \text{ sec}$ $13 : 11.0 \text{ sec}$ $06: 4.0 \text{ sec}$ $14 : 12.0 \text{ sec}$ $07: 5.0 \text{ sec}$ $15 \blacktriangleleft : 3.0 \text{ sec}$
C		



D	DESCRIPTION	DATA
		<ul> <li>YY = 46 (DTMF Sender Release Timing)</li> <li>(1) Trunk Route No. (00-63)</li> <li>(2) 0 : 2 sec <ol> <li>:4 sec</li> <li>:4 sec</li> <li>:6 sec</li> <li>:8 sec</li> <li>:12 sec</li> <li>:14 sec</li> <li>:14 sec</li> <li>:14 sec</li> </ol> </li> </ul>
CM35	Specify the desired Station Ringing Cadence and Multiline Terminal Tone Ringer.	<ul> <li>YY = 33 (Ringing Cadence)</li> <li>(1) Trunk Route No. (00-63)</li> <li>(2) 2 : 1 sec ON, 2 sec OFF</li> <li>3◀ : 2 sec ON, 4 sec OFF</li> <li>To make this data assignment effective enter the data "1" for CM08-180</li> </ul>
		<ul> <li>YY = 34 (Multiline Terminal Tone Ringer)</li> <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> </ul>
E		





<u>START</u>	DESCRIPTION	DATA
CM05	Assign a slot number to 911 Sender trunk. (INITIAL) The slot number is given by the SENSE switch on the 911 Sender trunk.	<ol> <li>(1) Slot No. (04-15)</li> <li>(2) 19 (PN-ME00 card)</li> </ol>
CM06	Assign 911 Sender trunk number to each 911 Sender trunk.	• YY=04 (1) XX: 911 Sender trunk No. (00-15) (2) $XX X$ Circuit No. (0-3) Slot No. assigned by CM05
CM08	Provide the system with Enhanced 911.	<ul><li>(3) 474 (Enhanced 911)</li><li>(4) 0: Provided</li></ul>
	Specify whether the Sender Tone will be sent when a call originated, or not.	<ul> <li>(5) 475 (Sending of Sender Tone)</li> <li>(6) 0: Sent 1 ◀: Not Sent</li> </ul>
CM09	Provide the System with Enhanced 911.	<ol> <li>(1) 52 (Enhanced 911)</li> <li>(2) 0: Provided</li> </ol>
CM31	Specify that all circuits on the 911 Sender trunk are used as sender.	<ul> <li>Y=2</li> <li>(1) 0-3 (AP Number) Note</li> <li>(2) 0: All circuits are used as the 911 Sender.</li> </ul>
CMAA	Note: The AP Number 0-3 correspond to the Slot Numbers assigned by CM05 (00-15) as shown below: AP Number 0: Slot Number X AP Number 1: Slot Number Y AP Number 2: Slot Number Z AP Number 3: Slot Number W (X <y<z<w)< td=""><td>• VV-07 (Sending method of calling</td></y<z<w)<>	• VV-07 (Sending method of calling
A	Specify the sending method of calling number to the 911 Sender trunk.	<ul> <li>(1) Slot No. (04-15)</li> <li>(2) 3: Enhanced 911</li> </ul>

Δ	DESCRIPTION	DATA
CM35	Set the trunk route that no answer signal arrives from the distant office for outgoing connection.	<ul> <li>YY=04 (Answer Signal from distant office.</li> <li>(1) Trunk Route No. (00-63)</li> <li>(2) 3: No Answer signal</li> <li>(Polarity Reversal is ignored)</li> </ul>
	Specify incoming connection signaling.	<ul> <li>YY=09 (Incoming connection signal- ing)</li> </ul>
	Note: PN-24DTA must be set to Wink Start. PN-20DT and AN-4COT must be set to Ring Down. Enhanced 911 will not function if PN-20DT is set to Wink Start.	<ol> <li>Trunk Route No. (00-63)</li> <li>03: Wink Start 15: Ring Down</li> </ol>
	Provide SMDR/Centralized Billing for outgoing.	<ul> <li>YY=14 (SMDR for outgoing call)</li> <li>(1) Trunk Route No. (00-63)</li> <li>(2) 1 ◀: Provided</li> </ul>
	<ul><li>(3) Specify sender start condition to Wink Start.</li><li>Note: Digital and Analog Tie Lines are set</li></ul>	<ul> <li>YY=20 (Sender start condition)</li> <li>(1) Trunk Route No. (00-63)</li> <li>(2) 00: Wink Start</li> <li>15: Timing Start</li> </ul>
	to Wink Start. Analog Loop Start Lines are set to Timing Start.	13. Thing Start
	Specify the trunk seizure pattern.	<ul> <li>YY=36 (Trunk seizure pattern)</li> <li>(1) Trunk Route No. (00-63)</li> <li>0: After dialing maximum number of digits</li> </ul>
	Provide the trunk route with Enhanced 911.	<ul> <li>YY=38 (Enhanced 911)</li> <li>(1) Trunk Route No. (00-63)</li> <li>(2) 3: Enhanced 911</li> </ul>
	Specify the sending method of calling number to the 911 Sender trunk.	<ul> <li>YYY=129 (Sending method of calling number)</li> <li>(1) Trunk Route No. (00-63)</li> <li>(2) 3: Enhanced 911</li> </ul>
CM85	Assign the Area Code Development Pattern number for maximum digit analysis.	<ul> <li>YY=76 (Area Code Development Pattern)</li> <li>(1) Trunk Route No. (00-63) 00-07: Area Code Development Pattern No. 0-7</li> </ul>
CM20	Define the maximum number of digits which can be sent to the network.	<ul> <li>Y=0-7 (Area Code Development Pattern No. 0-7)</li> <li>(1) X-XXX: Area Code/Office Code or its part (Max. 8 digits)</li> <li>(2) 01-79: 1-79 digits</li> </ul>
B	Assign the access code for LCR Group 0-3.	<ul> <li>Y=0-3 (Numbering Group No. 0-3)</li> <li>(1) X-XXXX: Access Code (Max. 4 digits)</li> <li>(1) A26-A28: Access Code for LCR Group 0-3</li> </ul>

ND-45670 (E)

### ENHANCED 911



### HARDWARE REQUIRED

PN-4RSTB card

ND-45670 (E)

# **EXECUTIVE CALLING**



# **EXECUTIVE OVERRIDE**

<u>START</u>	DESCRIPTION	DATA
CM12	Assign Service Restriction Class (A) to each station.	• $YY = 02$ (1) X-XXXX (Station No.) (2) $XX = \frac{XX}{*a}$ *a: Service Restriction Class (A) (00-15
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> <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> <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> <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 an Executive Override key to the Multiline Terminal, as needed.	<ul> <li>YY = 00</li> <li>(1) Primary Extension No. + , + key No.</li> <li>(2) F0006: Executive Override</li> </ul>
CM08	Specify the Waiting Tone sent to connected parties during Executive Override.	<ul> <li>(1) 045</li> <li>(2) 0 : Only once</li> <li>1 ◀ : Every 4 sec.</li> </ul>

<u>START</u>	DESCRIPTION	_		DATA
CM10	<ul> <li>Assign the Paging Trunk (PN-4COT and PN-DK00) to the required LEN.</li> <li>Note: The PN-DK00 card No. must be assigned to the first LEN (Level 0) and/or third LEN (Level 2)</li> </ul>		(1) (2)	LEN (0000-0511) D000-D255: PN-4COT E800-E831: PN-DK00 E800-E807: For PIM0/1 E808-E815: For PIM2/3 E816-E823: For PIM4/5 E824-E831: For PIM6/7
CM12 CM15	Assign the Class of Service for Paging Access to the required stations.		• (1) (2)	CM12 YY = 02 [Service Rest. Class (A) (00-15)] CM15 YY = 08 $\frac{XX}{*a}$ *a: Service Rest. Class (A) (00-15) assigned by CM12 YY = 02 1 $\triangleleft$ : Allowed
CM44	Assign the paging function to the PN-DK00 card, if needed.		(1)	$\frac{XX}{*a} \frac{X}{*b}$ *a: Card No. (00-31) assigned by CM10 (E800-E831) *b: Circuit No. of PN-DK00 (0-3) 02 <u>XX</u> : Zone assigned by CM30 YY = *a 28 *a: 00: Speaker Paging Zone 0 $\langle \rangle$ 09: Speaker Paging Zone 9
CM08 A When CM08-157=1 (Different)	Specify the conditions for Paging access. B When CM08-157=0 (Same)		<ul> <li>(1)</li> <li>(2)</li> <li>(1)</li> <li>(2)</li> <li>(1)</li> <li>(2)</li> <li>(1)</li> <li>(2)</li> <li>(1)</li> </ul>	<ul> <li>094 (Paging Access Tone)</li> <li>0/1 ◀ : To be sent out/Not to be sent out</li> <li>096 (Hook flash Signal to the Paging Equipment)</li> <li>0/1 ◀ : To be sent out/Not to be sent out</li> <li>149 (Automatic Call Back when the paging station is busy through non delay operation.)</li> <li>0/1 ◀ : Allowed/Not Allowed</li> <li>157 (Access code for Paging Access and Answer)</li> <li>0/1 ◀ : Same/Different</li> </ul>





To provide an Attendant Console with a Paging Key (1200 Series Enhancement):



### HARDWARE REQUIRED

Paging Trunk (PN-4COT)  $\times$  n/4 (n: Number of Zones of external paging) PN-DK00 card

Paging Equipment provided locally.

To accommodate the Paging Equipment, make the following connections at the MDF. For details, refer to the MDF cross connection for Paging Equipment in the INSTALLATION PROCEDURE MANUAL.



## FAX ARRIVAL INDICATOR

<u>START</u>	DESCRIPTION	DATA
CM10	Assign the fax call station number. This number is used as the fax call indicator button on the Multiline Terminal. Also this is the number to which the incoming fax call is directed.	<ol> <li>LEN Number (0000-0511)</li> <li>X-XXXX : Single Line Station No. FX-FXXXX : Primary Extension No.</li> </ol>
CM11	Assign a virtual number to be used as a fax call station number. (Similar to CM10 above but using a virtual extension instead of a real station number.)	<ol> <li>(1) LEN Number (0000-0255)</li> <li>(2) X-XXXX: Virtual Extension No.</li> </ol>
CM13	Assign the function of fax call station to the station or extension assigned above in either CM10 or CM11.	<ul> <li>YY = 29</li> <li>(1) X-XXXX: Station Number</li> <li>(2) 0: Fax Call Station <ol> <li>Ordinary Station</li> </ol> </li> </ul>
CM52	<ul> <li>Assign the fax call station and fax station using the Hot Line feature if the Hot Line function is to be used to set this feature.</li> <li>Note: Proper assignment of this feature requires use of either the Hot Line or House Phone feature. See service conditions for limitations of each assignment, in the Features and Specifications Manual.</li> </ul>	<ul> <li>YY = 00-99</li> <li>(1) 0: Fax Call Station (calling side) (This is the extension to which the call is directed and will be the fax call indicator on the Multi- line Terminal.)</li> <li>(2) X-XXXX: Station Number</li> <li>(1) 1: Fax Station (called side) (This is the actual single line port to be connected to the facsimile ma- chine.)</li> <li>(2) X-XXXX: Station Number</li> </ul>
CM12	When using the House Phone feature, assign the fax call station numbers to a House Phone group.	<ul> <li>YY = 03</li> <li>(1) X-XXXX: Fax Call Station No.</li> <li>(2) 00-03: Fax Call Group No.</li> </ul>
A	<ul> <li>Specify the accommodation of the fax call station to the Multiline Terminal.</li> <li>Note: This command needs to be set when assigning a single line station as a fax call station number by CM10.</li> </ul>	<ul> <li>YY = 05</li> <li>(1) X-XXXX: Fax Call Station No.</li> <li>(2) 0: Accommodated <ol> <li>Not Accommodated</li> </ol> </li> </ul>

# FAX ARRIVAL INDICATOR



# FLEXIBLE LINE KEY ASSIGNMENT

### PROGRAMMING

To indicate the busy/idle status of the extensions accommodated to the Flexible Line Keys on the Series E Terminal without the One Touch Speed Dial Keys, assign the following data. (1800 Series Enhancement)

START	DESCRIPTION	DATA
CM08	Specify whether 1000-Slot Memory Block has 26 digits or 16 digits memory buffers.	<ul> <li>(1) 252</li> <li>(2) 0/1 ◀ : 26/16 digits</li> </ul>
	Note 1: When CM08-252 is assigned as 0, only 3000 Station Speed Dialing numbers can be assigned, and 1000-Slot Memory Block No.0-2 contains 26-digits memory buffers. When CM08-252 is assigned as 1, 4500 Station Speed Dialing num- bers can be assigned, and 1000-Slot Memory Block No. 0-4 contains 16- digits memory buffers.	Note 2: Regardless of this data setting, a maximum of 26 digits number can be stored to Extension Memory card's memory area (1000-Slot Memory Block No. 8-F).
CM12	Assign Service Restriction Class A to each station.	<ul> <li>YY=02 (Service Restriction Class A·B)</li> <li>(1) X-XXXX (Station No.)</li> <li>(2) XX/*a</li> <li>*a: Service Restriction Class A</li> </ul>
		(00-15◀)
CM15	Assign Station Speed Dialing to Service Re- striction Class A assigned by CM12 YY=02.	<ul> <li>YY=07</li> <li>(1) 00-15: Service Restriction Class A</li> <li>(2) 1 ◀ : Allowed</li> </ul>
A		

# FLEXIBLE LINE KEY ASSIGNMENT



# FLEXIBLE LINE KEY ASSIGNMENT


# FLEXIBLE LINE KEY ASSIGNMENT

С	DESCRIPTION		DATA
CM94	Allocate the memory area for Station Speed Dial- ing to each station. The same memory area must be assigned on CM73 and CM94.	(1) (2)	X-XXXX (Primary Extension No.) X XX 0 XX *a *b *c *a: 1000-Slot Memory Block No. (0-4) *b: Start of 10-Slot Memory Block No. (00-49) *c: Number of 10-Slot Memory Blocks (01/02)
CM90	Assign Station Speed Dialing keys on each Multiline Terminal. For the key number and the last two digits of the second data, assign the same number as follows. $\frac{1 \text{st Data}}{XXXX, 01} \frac{2 \text{nd Data}}{F1101}$ $\frac{XXXX, 02}{XXXX, 02} F1102$ $\frac{XXXX, 03}{E} F1103$ $\frac{1}{E} \frac{1}{E}$ $\frac{1}{XXXX, 16} F1116$	• (1) (2)	YY=00 Primary Extension No. + , + Key No. (01-16) F11 <u>XX</u> *a *a: 00: Station Speed Dialing 00 $\langle$ $\langle$ 99: Station Speed Dialing 99
CM08 END	Specify the type of busy indication on the BLF of the DSS Console as Station Base or Extension Base.	(1) (2)	269 0/1 ◀ : Station Base/Extension Base

Refer to the applicable feature for more information on that feature:

- Trunk-Direct Appearances
- Save and Repeat
- Do Not Disturb
- Intercom
- Hot Line
- Proprietary Multiline Terminal
- Station Speed Dialing

ND-45670 (E)

### FLEXIBLE NUMBERING PLAN

<u>START</u>	DESCRIPTION	DATA	
CM29	Assign a Numbering Plan Group to each Tenant.	(1) Tenant No. (00 - 63) (2) $\underline{XXX}$ : Numbering Plan *a: 710 (Numbering Plan $\langle \rangle$ 713 (Numbering Plan)	Group 0-3 in Group 0) in Group 3)
CM20	Specify the number of digits for station numbers. <b>Example:</b> For setting Station No. "2XXX" (1) 804	<ul> <li>Y = 0-3 (Numbering Pla</li> <li>801: 1 digit 802: 2 digits 803: 3 digits 804: 4 digits</li> <li>X: 1st digit of Station N</li> </ul>	n Group 0-3) o. (2, 3, 4)
CM10 END	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.	<ol> <li>(1) LEN (0000-0511)</li> <li>(2) X-XXXX (Station No.)</li> </ol>	

### FLEXIBLE NUMBERING PLAN

To provide Single-Digit Feature Access Code:

<u>START</u>	DESCRIPTION	_			DATA
CM08	To activate this feature, set the data for 050, 051, 069 and 148 to "1."		(1)	050 1◀	<ul> <li>*Button as Switch Hook Flash.</li> <li>Ineffective</li> </ul>
		Γ	(1)	051	: *Button as Switch Hook Flash.
		L	(2)	1◀	: Ineffective
		Γ	(1)	069	: Single-Digit Dialing on BT Connection
		L	(2)	1◀	: Step Call
		Γ	(1)	148	: Same Last-Digit Redialing on BT Connection
		L	(2)	1◀	: Ineffective
	Provide the System with the Single-Digit Feature Access Code on RBT (or Voice Call Connection).		(1) (2)	156 0: Av	vailable
END	Provide the System with the Single-Digit Feature Access Code on BT Connection.		(1) (2)	208 0: Av	vailable

### FLEXIBLE RINGING ASSIGNMENT

#### PROGRAMMING



#### HARDWARE REQUIRED

ETJ-8-1/ETJ-16DC-1/ETJ-16DD-1/ETJ-24DS-1 and PN-2DLCB/PN-4DLCA card.

ND-45670 (E)

#### PROGRAMMING

When the PN-AP01 is not used.

<u>START</u>	DESCRIPTION	DATA
CM08	Designate the processor (MP or AP) for this feature.	<ul> <li>(1) 216</li> <li>(2) 0: MP (PN-CP00)</li> </ul>
	Specify whether Confirmation Tone is provided after dialing the Forced Account Code.	<ul> <li>(1) 362</li> <li>(2) 0/1</li></ul>
CM12 CM15	Assign the Class of Service for Forced Account Code to the required stations.	<ul> <li>CM12 YY = 02</li> <li>[Service Restriction Class (A) 00-15◀ ]</li> </ul>
		<ul> <li>CM15 YY = 31</li> <li>(1) XX (Service Rest. Class A assigned by CM12 YY = 02.)</li> <li>(2) 1 ◀ : Allowed.</li> </ul>
CM42	Specify the maximum number of digits for Forced Account Codes.	<ol> <li>(1) 12</li> <li>(2) Max. number of digits (01-08)</li> <li>If no data is set, the default setting is 8 digits</li> </ol>
CM2A	Set the ID Codes used as Forced Account Codes.Note:Up to 100 codes combined with Au- thorization Code can be set.	<ul> <li>Y = 0 (ID Code Set)</li> <li>(1) Code No. (00-99)</li> <li>(2) X-XX (Max. number of digits is specified by CM42.)</li> </ul>

А



#### When the PN-AP01 is used:

<u>START</u>	DESCRIPTION	DATA
CM05	Assign a slot number to the PN-AP01 card according to the location of the card. INITIAL Note: The slot number is given by the SENSE switch on the PN-AP01 card.	<ol> <li>(1) Slot Number (04-15)</li> <li>(2) 07: PN-AP01 card</li> </ol>
CM08	Designate the AP processor for this feature.	(1) 216 (2) $1 \triangleleft : AP (PN-AP01)$
	Specify whether Confirmation Tone is provided after dialing the access code for Forced Account Code.	<ul> <li>(1) 362</li> <li>(2) 0/1</li></ul>
CM12 CM15	Assign the Class of Service for Forced Account Code to the required stations.	<ul> <li>CM12 YY = 02</li> <li>(1) X-XXXX: Station No.</li> <li>(2) XX/*a XX/*b</li> <li>*a: Service Restriction Class (A): 00-15 ◀ *b: Service Restriction Class (B): 00-15 ◀</li> <li>CM15 YY = 31</li> <li>(1) XX (Service Rest. Class A assigned by CM12 YY = 02)</li> <li>(2) 1 ◀ : Allowed</li> </ul>
CM42	Specify the maximum number of digits for Forced Account Codes.	<ol> <li>(1) 11, 12</li> <li>(2) Max. number of digits (01-10) If Check Code is provided, the maximum of dig- its is limited to 8</li> </ol>
	<b>Note:</b> The same number of digits must be assigned by CM42-11 and CM42-12.	If no data is set, the default setting is 10 dig- its.
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.	
A		



- **Note 1:** Up to 1,000 Forced Account Codes combined with Authorization Codes and Direct Inward System Access (DISA) codes can be defined.
- **Note 2:** When deleting all ID codes stored in the PN-AP01 card at one time, do the following operation: ST + D60 + DE + 0000 + DE + CCC + EXE

#### HARDWARE REQUIRED

In the following cases, the PN-AP01 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 CALL: AUTOMATIC CONFERENCE (6/10 PARTY) DATA ASSIGNMENT

To provide the Group Call-Automatic Conference (6/10 Party):

<u>START</u>	DESCRIPTION	DATA
CM10	Assign a Conference Trunk Card Number to the required LEN.	<ol> <li>(1) LEN (0000-0511)</li> <li>(2) ED00-ED03: Conference Trunk Card No.</li> </ol>
CM56	<ul> <li>Assign the stations which belongs to each paging group, and their number within the group.</li> <li>A maximum of 9 stations can be paged simultaneously except the conference leader.</li> <li>Note 1: Single line telephones, Multline Terminals and PS can be assigned as the station within the group.</li> <li>A virtual-line cannot be assigned.</li> <li>Note 2: A station can belong to multiple groups.</li> </ul>	<ul> <li>YY=00-07: Simultaneous Paging Group 0- 7</li> <li>(1) 00-15: Serial No. within the Group</li> <li>(2) X-XXXX: Station No.</li> </ul>
CM12	Assign a Service Restriction Class to each sta- tion.	<ul> <li>YY=02</li> <li>X-XXXX: Station No.</li> <li>XX XX</li> <li>00-15: Service Restriction Class A</li> </ul>
CM15	Allow the Service Restriction Class A to page the group.	<ul> <li>YYY=119</li> <li>(1) 00-15: Service Restriction Class A assigned by CM12 YY=02</li> <li>(2) 0: Allowed</li> </ul>
CM20	Assign the access code of paging groups for Group Call-Automatic Conference (6/10 Par- ty).	<ul> <li>Y=0-3 (Tenant Group No.)</li> <li>(1) X-XX: Access Code</li> <li>(2) B00: Simultaneous Paging Group 0</li> </ul>
A	<b>Note:</b> Even if an extension does not be- long to the conference group, the extension can page the confer- ence group, and can re-partici- pate in the conference if there is an idle circuit on the Conference Trunk.	B07: Simultaneous Paging Group 7 B10: Re-participation Group 0

A	DESCRIPTION	DATA
СМ90	<ul> <li>Assign a Group Call-Automatic Conference (6/10 Party) key of each paging group to the Multiline Terminal, if required.</li> <li>Note: Even if an extension does not be- long to the conference group, the extension can page the confer- ence group, and can re-partici- pate in the conference if there is an idle circuit on the Conference Trunk.</li> </ul>	<ul> <li>Y=00</li> <li>(1) X-XXXX: Primary Extension No. +, +key No.</li> <li>(2) F0B00: Simultaneous Paging Group 0</li> <li><i>i</i></li> <li><i>i</i></li> <li>F0B07: Simultaneous Paging Group 7</li> <li>F0B10: Re-participation Group 0</li> <li><i>i</i></li> <li><i>i</i></li> <li>F0B17: Re-participation Group 7</li> </ul>
CM41 END	Specify the duration of simultaneous paging.	<ul> <li>Y=0</li> <li>(1) 95</li> <li>(2) 01-99: 4-396 sec. in 4 sec. increments If no data is set, the default setting is 32-36 seconds.</li> </ul>

### **GROUP CALL: 2-WAY CALLING**

To provide the Group Call-2 Way Calling:

<u>START</u>	DESCRIPTION	DATA
CM56	<ul> <li>Assign the stations which belongs to each paging group, and their number within the group.</li> <li>A maximum of 9 stations can be paged simultaneously except the conference leader.</li> <li>Note 1: Single line telephones, Multline Terminals and PS can be assigned as the station within the group.</li> <li>A virtual-line cannot be assigned.</li> <li>Note 2: A station can belong to multiple groups.</li> </ul>	<ul> <li>YY=00-07: Simultaneous Paging Group 0- 7</li> <li>(1) 00-15: Serial No. within the Group</li> <li>(2) X-XXXX: Station No.</li> </ul>
CM12	Assign a Service Restriction Class to each station.	<ul> <li>YY=02</li> <li>(1) X-XXXX: Station No.</li> <li>(2) XX XX</li> <li>00-15  Service Restriction Class A</li> </ul>
CM15	Allow the Service Restriction Class A to page the group.	<ul> <li>YYY=119</li> <li>(1) 00-15: Service Restriction Class A assigned by CM12 YY=02</li> <li>(2) 0: Allowed</li> </ul>
CM20	<ul> <li>Assign the access code of paging groups for Group Call-2 Way Calling.</li> <li>Note: Even if an extension does not belong to the conference group, the extension can page the conference group.</li> </ul>	<ul> <li>Y=0-3 (Tenant Group No.)</li> <li>(1) X-XX: Access Code</li> <li>(2) B20: Simultaneous Paging Group 0 </li> <li>B27: Simultaneous Paging Group 7</li> </ul>
CM90	<ul> <li>Assign a Group Call-2 Way Calling key of each paging group to the Multiline Terminal, if required.</li> <li>Note: Even if an extension does not belong to the conference group, the extension can page the conference group.</li> </ul>	<ul> <li>Y=00</li> <li>X-XXXX: Primary Extension No. +, + key No.</li> <li>F0B20: Simultaneous Paging Group 0</li> <li>F0B27: Simultaneous Paging Group 7</li> </ul>

This page is for your notes.

ND-45670 (E) Addendum-001 JULY, 1998 CHAPTER 2 Page 243-4 Revision 2.1

### **GROUP LISTENING**



<u>START</u>	DESCRIPTION	DATA
CM12	Assign Service Restriction Class A to the required stations.	• $YY = 02$ (1) X-XXXX: Station No. (2) $\underline{XX}_{*a} XX$
		*a: Service Restriction Class A (00-15◀)
CM15	Assign this feature to Service Restriction	• $YY = 01$
	Class A assigned by CM12 $Y Y = 02$ .	(1) XX: Service Restriction Class A assigned by $CM12 YY = 02$ .
		(2) $1 \triangleleft$ : Allowed
CM20	Assign the access code for Call HOLD.	• $Y = 0.3$ (Numbering Plan Group 0.3)
		<ol> <li>(1) X-XXX: Access Code (11)</li> <li>(2) 046: Call Hold</li> </ol>
CM90	Assign a CALL HOLD key to the Multiline	• YY = 00
	Terminal, if needed.	<ul> <li>(1) Primary Extension No. + + key No.</li> <li>(2) F0046</li> </ul>
	<b>Note:</b> This line key is not the same key nor- mally assigned to the key labeled HOLD. That key is normally as- signed the Non Exclusive/Exclusive Hold feature.	
END		

# HOLD: EXCLUSIVE HOLD

<u>START</u>	DESCRIPTION	DATA
CM08	Provide the system with Exclusive Hold.	<ul> <li>(1) 130</li> <li>(2) 1</li></ul>
CM41 END	Specify the Recall timing on Exclusive Hold.	<ul> <li>Y = 0</li> <li>(1) 06</li> <li>(2) 01-98: 4-392 sec. in 4 sec. increments If no data is set, the default setting is 236-240 seconds.</li> </ul>

# HOTLINE

### PROGRAMMING

For internal Hotline:

<u>START</u>	DESCRIPTION	DATA
CM12	Assign the Hotline Station to the required stations.	<ul> <li>YY = 03</li> <li>(1) X-XXXX (Station No.)</li> <li>(2) 04: Hotline Station</li> </ul>
CM52	<ul> <li>Set up the Hotline pair. Bidirectional Hotlines should be assigned as follows:</li> <li><u>Hotline Pair No. Calling Side Called Side</u> 00 Station A Station B 01 Station B Station A</li> <li>Note: 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</li> </ul>	<ul> <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.) E00X *a</li> <li>*a: SN610 ATTCON No.</li> </ul>
CM08 END	<ul><li>maximum of 50 bidirectional Hot- lines can be assigned.</li><li>Specify the result of a Switch Hook Flash on each Hotline Station.</li><li>To allow Hotline Stations to transfer a call or access a feature, set the data to "0".</li></ul>	<ul> <li>(1) 057</li> <li>(2) 0 : Special Dial Tone Connection 1 ◀ : Attendant Recall</li> </ul>

# HOTLINE

#### For Hotline-Outside:

<u>START</u>	DESCRIPTION	DATA
CM12	Assign a Hotline to the required stations.	<ul> <li>YY = 03</li> <li>(1) X-XXXX (Station No.)</li> <li>(2) 04: Hotline</li> </ul>
CM71	Allocate the memory area for the Hotline- Outside call. For example, to assign the 10 Hotline-Outside calls into No. 100 through No. 109 Memory Slots, 2nd data is "100010." Abbreviated Nos. are automatically assigned as shown below: <u>Abbrev.</u> 00 () Memory Slot 00 () 09	<ul> <li>(1) 65: For Hotline-Outside</li> <li>(2) XXX XXX: See left column.</li> <li>*a: Starting Memory Slot No. in blocks (000-299)</li> <li>*b: Number of Memory Slots to be assigned in blocks (001-100)</li> </ul>
СМ72	Set the outside party's number to each Memory Slot No.	<ol> <li>(1) XXX: Memory Slot No. (000-299)</li> <li>(2) XX: Outside Party's No. (Max. 28 digits)</li> </ol>
CM52 END	Define the Hotline pairs.	<ul> <li>YY = 00-99 (Hotline pair No.)</li> <li>(1) 0: Calling Station <ol> <li>Called Outside party</li> </ol> </li> <li>(2) Station No. (For Calling Station) <ol> <li>XX (For Called Outside party)</li> </ol> </li> </ul>

\*a: Abbreviated No. given by CM71.

### HOTLINE

### For Brokerage Hotline:

<u>START</u>	DESCRIPTION	DATA
CM11	Assign the Virtual Station numbers to the required virtual LENs.	<ol> <li>(1) Virtual LEN (0000-0255)</li> <li>(2) X-XXXX (Virtual Station Number)</li> </ol>
CM12	Assign the Virtual Station No. assigned by CM11 as Hotline.	<ul> <li>YY = 03</li> <li>(1) Virtual Station No.</li> <li>(2) 04: Hotline</li> </ul>
CM52	Define the Hotline pairs.	<ul> <li>YY = 00-99 (Hotline Pair No.)</li> <li>(1) 0: Calling party</li> <li>(2) Virtual Station No.</li> <li>(1) 1: Called party</li> <li>(2) Station No. / 01XX (For Outside party) *a: Abbreviated No. given by CM71 (See Hotline-Outside)</li> </ul>
CM90 END	Assign the Virtual Line Station and RELEASE keys on the Multiline Terminal.	<ul> <li>YY = 00</li> <li>(1) Primary Extension No. + , +Key No.</li> <li>(2) X-XXXX (Virtual Station No.) F1020 (Release key)</li> </ul>

### INDIVIDUAL ATTENDANT ACCESS

<u>START</u>	DESCRIPTION	DATA	
CM10	Assign an Attendant Console Number to each SN610 ATTCON.	<ul> <li>(1) 0000-0511 (LEN)</li> <li>(2) E000-E007 (SN61)</li> </ul>	0 ATTCON No.)
CM20	Assign the access code for Individual Attendant Access.	<ul> <li>Y = 0-3 (Numberin</li> <li>(1) X-XXX (Access C</li> <li>(2) 095</li> </ul>	ng Plan Group 0-3) ode)
CM08	Specify the Individual Attendant Access capability provided from a station belonging to a different tenant.	<ul> <li>(1) 143</li> <li>(2) 0/1 ◄ : Restricted/</li> </ul>	Allowed
END			

### INTERCEPT ANNOUNCEMENT

<u>START</u>	DESCRIPTION	DATA		
CM10	<ul> <li>Assign a Digital Announcement Trunk Circuit No. to the required LEN.</li> <li>Note: The Digital Announcement Trunk Circuit No. must be assigned to the first LEN (Level 0) and/or the third LEN (Level 2) of each LT slot.</li> </ul>	<ul> <li>(1) LEN (0000-0511)</li> <li>(2) EB000-EB127: Digital Announcement Trunk Circuit No.</li> <li>For PIM0/1: EB000-EB031 For PIM2/3: EB032-EB063 For PIM4/5: EB064-EB095 For PIM6/7: EB096-EB127</li> </ul>		
CM12	Assign Service Restriction Class (A) to the required stations.	<ul> <li>YY = 02</li> <li>(1) X-XXX: Station No.</li> <li>(2) XX/*a XX</li> <li>*a: Service Restriction Class (A)</li> </ul>		
CM15	Assign Digital Announcement Trunk Circuit access to Service Restriction Class (A) assigned by CM12 YY = $02$ .	<ul> <li>YY = 33</li> <li>(1) XX: Service Restriction Class (A) assigned by CM12 YY = 02.</li> <li>(2) 1 ◀ : Allowed</li> </ul>		
CM49	Assign the function to each Digital Announcement Trunk Circuit.	<ul> <li>YY = 00</li> <li>(1) 000-127 [Voice Digital Announcement Trunk Circuit No. assigned by CM10 (EB000-EB127)]</li> <li>(2) 0A00: Call Forwarding-Intercept Announcement</li> </ul>		
CM51	Assign a Digital Announcement Trunk Circuit as the destination of the call intercepted on each Tenant.	<ul> <li>YY = 07</li> <li>(1) 00-63 (Tenant No.)</li> <li>(2) EB000-EB127 (Digital Announcement Trunk Circuit No.)</li> </ul>		
CM20 END	To record, replay, or delete a message, assign the appropriate Digital Announcement Trunk access codes.	<ul> <li>Y = 0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX (Access Code)</li> <li>(2) A00: Digital Announcement Trunk access (Record)</li> <li>A01: Digital Announcement Trunk access (Replay)</li> <li>A02: Digital Announcement Trunk access (Delete)</li> </ul>		

# INTERCOM: MANUAL INTERCOM

<u>START</u>	DESCRIPTION	DATA		
CM11	<ul> <li>Assign a Manual Intercom number to the Virtual LEN. The last two digits of each Manual Intercom Number represent the Manual Intercom Group Number.</li> <li>Note: A Manual Intercom group can consist of two to six Multiline Terminals. A maximum of 25 Manual Intercom groups can be assigned per system.</li> </ul>	<ul> <li>(1) 0000-0255 (Virtual LEN)</li> <li>(2) A200-A224 A300-A324 A400-A424 A500-A524 A600-A624 A700-A724 (Manual Intercom Numbers)</li> </ul>		
	MANUAL         INTERCOM <u>GROUP</u> <u>INTERCOM GROUP</u> 00       A200, A300, A400, A500, A600, A700         01       A201, A301, A401, A501, A601, A 701         2       2         24       A224, A324, A424, A524, A624, A724			
CM12	Assign the Manual Intercom Station.	<ul> <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> <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> <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>		
CM08 END	Specify the Manual Intercom access capability when a called intercom station has set Do Not Disturb.	<ul> <li>(1) 238</li> <li>(2) 0/1</li></ul>		

#### **INTERCOM: AUTOMATIC INTERCOM**

#### PROGRAMMING

<u>START</u>	<u>RT</u> DESCRIPTION DAT		DATA
CM11	Assign an Automatic Intercom number to the Virtual LEN. The Automatic Intercom Stations are paired as shown below. $\underline{GROUPNo.}$ INTERCOM NUMBER 0000A000, A100 0101A001, A101 $\langle$ $\langle$ $\langle$ 31A031, A131Note: The maximum number of Automatic Intercom paired stations per system ia 22	(1) (2)	0000-0255 (Virtual LEN) A000-A031 A100-A131 (Automatic Intercom Number) A $X \times Xx_{*a} \times b$ *a: 0/1 to be made one pair. *b: Automatic Intercom Group No. (00-31)
CM12	<i>is 32.</i> Assign each Automatic Intercom Station.	• (1) (2)	YY = 03 Automatic Intercom No. assigned by CM11. 05: Automatic Intercom
CM56	Assign the Primary Extension number to each Automatic Intercom Number.		YY = 10 A000-A031 A100-A131 (Automatic Intercom No. assigned by CM11) X-XXXX (Primary Extension No.)
CM90	Assign the AUTOMATIC INTERCOM Key to each Multiline Terminal.	• (1) (2)	YY = 00 Primary Extension No. + , + Key No. (01-16) A000-A031 A100-A131 (Automatic Intercom No. of each Multi- line Terminal)
CM08	Specify the Automatic Intercom access capability when a called intercom station has set Do Not Disturb.	(1) (2)	237 0/1◀ : Restricted/Allowed

**Note:** To activate the Voice Announcement call, refer to INTERNAL TONE/VOICE SIGNALING.

ND-45670 (E)

### INTERCOM: AUTOMATIC INTERCOM



# **INTERCOM: DIAL INTERCOM**

<u>START</u>	DESCRIPTION	DATA	
CM11	Assign a Dial Intercom number to the Virtual LEN. The last two digits of each Dial Intercom No. represent the Dial Intercom Group No. The first digit is the intercom code (0-9) assigned to the associated virtual extension. $\frac{\text{GROUP No.}}{00} \frac{\text{INTERCOMNo.}}{\text{B000, B100, B200} - \text{B900}} \\ 01 & \text{B001, B101, B201} - \text{B901}} \\ 24 & \text{B024, B124, B224} - \text{B924}}$	<ul> <li>(1) 0000-0255 (Virtual LEN)</li> <li>(2) B000-B024</li> <li>B100-B124</li> <li>B200-B224</li> <li>B300-B324</li> <li>B400-B424</li> <li>B500-B524</li> <li>B600-B624</li> <li>B700-B724</li> <li>B800-B824</li> <li>B900-B924</li> <li>(Dial Intercom Numbers)</li> </ul>	
	<b>Note:</b> A maximum of 25 Dial Intercom groups are available per system. A maximum of ten Multiline Terminals can belong to a Dial Intercom group.	B X *a XX *a: Intercom Code (0-9) *b: Dial Intercom Group	
CM12	Assign the Dial Intercom Station.	<ul> <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> <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> <li>YY = 00</li> <li>(1) Primary Extension No. + , +key No. (01 - 16)</li> <li>(2) Dial Intercom No. of each Multiline Terminal.</li> </ul>	

### **INTERCOM: DIAL INTERCOM**



**Note:** To activate the Voice Announcement call, refer to INTERNAL TONE/VOICE SIGNALING.

<u>START</u>	DESCRIPTION		DATA	
CM08	To activate the Single-Digit Feature Access Code feature, set the data for 050, 051, 069 and 148 to "1"	(1) (2)	050: * Button as Switch Hook Flash. 1 ◀ : Ineffective	
		(1) (2)	<ul><li>051: # Button as Switch Hook Flash.</li><li>1 ◀ : Ineffective</li></ul>	
		(1)	069: Single Digit Dialing on BT Connection	
		(2)	1◀ : Step Call	
		(1)	148: Same Last Digit Redialing on BT Connection	
		(2)	1	
	Provide the System with the Single-Digit Feature Access Code on RBT (or Voice Call Connection).	(1) (2)	156 0: Available	
	Specify if Voice Call is provided when calling a Multiline Terminal is set to Voice First from a Single-Line Telephone or a Multiline Terminal without an LCD.	(1) (2)	<ul> <li>270:</li> <li>0: Not to be provided (Ring Tone)</li> <li>1 ◀ : To be provided</li> </ul>	
CM12 CM15	Assign the Class of Service for Voice Call (called side) to the required Multiline Terminal.	• (1) (2)	CM12 YY = 02 X-XXXX: Primary Extension No. XX $\frac{XX}{*a}$ *a: Service Restriction Class (B) (00- 15 $\triangleleft$ )	
A		• (1) (2)	CM15 YY = 67 00-15: Service Restriction Class (B) assigned by CM12 YY = 02 0: Restricted 1◀ : Allowed	
$\checkmark$				

### **INTERNAL TONE / VOICE SIGNALING**



### PROGRAMMING

To provide Internal Zone Paging with Meet-Me:

<u>START</u>	DESCRIPTION	DATA	
CM12 CM15	Assign the Class of Service for Internal Zone Paging to the required stations.	• CM12 YY = 02 [Service Rest. Class (A) (00-15 ◀ )]	
		<ul> <li>CM15 YY = 49</li> <li>(1) Service Restriction Class (A) assigned by CM12 YY = 02, (00-15)</li> <li>(2) 1◀ : Allowed</li> </ul>	
CM20	Assign Internal Zone Paging access codes and Meet-Me answer codes, as required.	<ul> <li>Y = 0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX: Access code (50-54, 55-59)</li> <li>(2) A30-A37 (A30-A34) (Group 0-7: Paging Access) A38-A45 (A38-A42) (Group 0-7: Meet-Me Answer)</li> </ul>	
CM56	Assign the Dterm into the required Internal Zone Paging Groups.	<ul> <li>YY = 00-07 (Paging Group Number)</li> <li>(1) 00-15 (Serial number in a Paging Group)</li> </ul>	
	<b>Note:</b> A maximum of 8 internal zone paging is available. Up to 16 Multiline Terminals can be grouped per zone.	(2) X-XXXX	
CM90	Assign Internal Zone Paging to each button on the Multiline Terminal.	<ul> <li>YY = 00</li> <li>X-XXXX (Primary Extension No.) + , + Key No.</li> <li>F1270 - F1277 (Group 0-7)</li> </ul>	
END			

### INTERNAL ZONE PAGING WITH MEET-ME

To provide All Zone Internal Paging:

<u>START</u>	DESCRIPTION	DATA		
CM08	Provide the system with All Zone Internal Paging.	<ul> <li>(1) 158</li> <li>(2) 1</li></ul>		
CM12 CM15	Assign the Class of Service for All Zone Internal Paging to the required stations.	<ul> <li>CM12 YY = 02</li> <li>(1) X-XXXX: Station No.</li> <li>(2) XX XX *a</li> <li>*a: Service Restriction Class (A) (00-15◀)</li> </ul>		
		<ul> <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>		
СМ20	Assign an All Zone Internal Paging access code.	<ul> <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>		
CM56	<ul> <li>Assign Group for Internal Zone Paging to the required Multiline Terminals.</li> <li>Note: A maximum of 6 zones (0-5) internal paging groups are available. Up to 16 Multiline Terminals can be grouped per zone.</li> </ul>	<ul> <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>		
CM90 <u>END</u>	Assign an All Zone Internal Paging function key to a line button on the desired Multiline Terminals.	<ul> <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

### PROGRAMMING

<u>START</u>	DESCRIPTION	DATA	
СМ08	Provide the system with Last Number Redial.	<ol> <li>(1) 177</li> <li>(2) 0: Available</li> </ol>	
	Specify the capability for internal calls with this feature. If the data for CM08-178 is set to "0", this feature will only be applied to outgoing calls.	<ul> <li>(1) 178</li> <li>(2) 0/1 ◀ : Not available/Available</li> </ul>	
CM20	Assign the access code for Last Number Redial.	<ul> <li>Y = 0-3 (Numbering Plan Group 0-3)</li> <li>(1) X - XXX: Access Code (**)</li> <li>(2) 069</li> </ul>	
СМ90	Assign the Last Number Redial or Stack Dial feature access key to each Multiline Terminal, as required.	<ul> <li>YY = 00</li> <li>(1) Primary Extension No. + , +Key No.</li> <li>(2) F0069: Last Number Redial F1000: Stack Dial</li> </ul>	
END	Refer to the Stack Dial feature for details on programming Stack Dial.		

To provide SN610 ATTCON with this feature (1200 Series Enhancement).

<u>START</u>	DESCRIPTION	DATA	
CM90	Assign the Last Number Redial/Stack Dial key to each SN610 ATTCON.	<ul> <li>YY=00</li> <li>(1) ATTCON No. + + + Key No.</li> <li>(2) F6121: Last Number Redial/Stack Dial</li> </ul>	
	Refer to the Stack Dial feature for details on programming Stack Dial.		
<u>END</u>			

<u>START</u>	DESCRIPTION		DATA
CM20	Assign the access	code for LCR Group 0-2.	<ul> <li>Y = 0-3 (Number Plan Group 0-3)</li> <li>(1) X-XXX (Access Code)</li> <li>(2) A26: LCR Group 0         <ul> <li>A27: LCR Group 1</li> <li>A28: LCR Group 2</li> </ul> </li> </ul>
CM81	Assign the Toll Restriction Patterns with five kinds of Trunk Restriction Classes assigned by CM12 YY = 01. Toll Restriction Patterns 00-15 are preassigned as shown below. If a new Restriction Pattern is required, change the data for Restriction Patterns 01- 13 (00, 14 and 15 are fixed).		<ul> <li>YY = 01-13 (Toll Restriction Pattern No. 01-13)</li> <li>(1) Trunk Restriction Class (1-5)</li> <li>(2) 0: Restricted 3: Allowed</li> </ul>
CM8A	TRUNK RESTRICTION CLASS1RCA2RCB3RCC4RCD5RCE	01       02       03       04       05       06         TOLL RESTRICTION PATTER         01       02       03       04       05       06         3       0       3       3       3       0         3       0       3       3       0       0         3       0       3       0       0       0         3       0       3       0       0       0         3       0       0       0       0       0         3       0       0       0       0       0         3       0       0       0       0       0         3       0       0       0       0       0         3       0       0       0       0       0         0       0       0       0       0       0         0       0       0       0       0       0         0       0       0       0       0       0         0       0       0       0       0       0         0       0       0       0       0       0         <	YY           07         08         09         10         11         12         13         14         15         00           NUMBER ON EACH TRUNK RESTRICTION CLASS           07         08         09         10         11         12         13         14         15         00           0         0         3         3         3         3         0         3         0           0         0         3         3         3         3         0         3         0           0         0         3         3         0         0         0         3         0           0         0         3         0         0         0         3         0           0         0         0         0         0         0         3         0           0         0         0         0         0         0         3         0           0         0         0         0         0         0         3         0           0         0         0         0         0         0         3         0           0         0         0
A	Assign a Route Pat for the Area Code assigned by YYY	ttern No. to each area code Development Pattern No. = A00.	<ul> <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>

А	DESCRIPTION	DATA	
CM8A	Specify the order of LCR selection for the Route Pattern No. assigned by $YYY = 405-407$	<ul> <li>YYY = 000-063 (Route Pattern No. 00-63)</li> <li>(1) 1 4: Order of LCP Selection</li> </ul>	
	407.	(1) 1-4. Older of LCK Selection 1: 1st 2: 2nd 3: 3rd	
		$\begin{array}{c} 4: 4th \\ (2)  \underline{XXX}_{*a}  \underline{XX}_{*b} \end{array}$	
		*a: 000-255 (LCR Pattern No. 000-255) *b: 00-63 (Trunk Route No. 00-63)	
	For area code deletion, designate the digits to be deleted.	• $YYY = 500-755$ (LCR Pattern No. 000-255)	
		To delete all digits of the area code:	
		(1) 151 [Deletion of all digits of the area code (NXX, 1NXX) assigned by YYY = 405-407]	
		(2) 0: To be deleted	
		To delete the designated digit of an area code:	
		• YYY = 500-755	
		<ol> <li>(1) 153 (Designation of digit to be deleted)</li> <li>(2) 00: No digits deleted</li> <li>01: First digit deleted</li> </ol>	
		10: First 10 digits deleted CCC: No digits deleted	
	For area code addition, designate the digits to be added.	<ul> <li>YYY = 500-755</li> <li>(1) 100 (Designation of digit Addition Pattern No.)</li> </ul>	
		<ul> <li>(2) 00-49 (Digit Addition Pattern No. 00-49)</li> <li>CCC: No digit addition</li> </ul>	
		• YYY = 900-949 (Digit Addition Pattern No. 00-49)	
		(1) 0	
В		<ul> <li>(2) X-XX [Digits to be added (Max. 32 digits.)]</li> <li>X = 0.0 A(#) P(#) C(Eined Pance)</li> </ul>	
		A = 0.7, A(1), D(#), C(FIXeu Fause)	

в	DESCRIF		TION		DATA	
CM8A	B       If three-digit Toll Restriction is provided, assign the Toll Restriction Pattern No. to the LCR Pattern No.         If 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.         (1) Specify the Trunk Restriction Classes to which 6-digit Toll Restriction applies.         Example: <u>412</u> - <u>211</u> Area Code Office Code		provided, rn No. to the wided, assign ttern No. and on Pattern	• (1) (2)	YYY = 500-755 (LCR Pattern No. 000-255) 000 00-15 (Toll Restriction Pattern No. specified by CM81)	
			on Classes to on applies.	• (1)	<ul> <li>YYY = 500-755 (LCR Pattern No. 000-255)</li> <li>021-028 (Trunk Restriction Class assigned by CM12 YY = 0.)</li> <li>021: Unrestricted (RCA)</li> </ul>	
	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)				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)	
	CM8A			(2)	0 : 6-digit Toll Restriction Pattern 1◀ : 3-digit Toll Restriction Pattern	
	YYY 500	TRUNK REST CLASS 021 022 023 024 025	DATA 1 0 0 1 1		as per 1st Data = 000	
	(2) Assign the six-digit Toll Restriction Pat- tern No. to the LCR Pattern No.			• (1) (2)	YYY = 500-755 020 00-49 (6-digit Toll Restriction Pattern No. 00-49)	
С	<ul> <li>(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).</li> </ul>			• (1) (2)	YYY = 800-849 (6-digit Toll Restric- tion Pattern No. 00-49) XXX (3 digits of Office Code) 0/1 ◀ : Restricted/Allowed	

С	DESCRIPTION	DATA	
CM8A	If the Prefix is to be added, assign the following data to the LCR Pattern No.		
	(1) Assign the 6-digit Prefix Pattern No. to the LCR Pattern No.	<ul> <li>YYY = 500-755 (LCR Pattern No. 000-255)</li> <li>(1) 150</li> <li>(2) 00: 6-digit Prefix Pattern No. 00</li></ul>	
	<ul><li>(2) Assign the office code (three digits), re- quiring the Prefix, to the six-digit Prefix Pattern No.</li></ul>	<ul> <li>YYY = 800-849</li> <li>(1) XXX (3-digit of Office Code)</li> <li>(2) 1 ◀ : Allowed</li> </ul>	
CM85	Specify the maximum number of digits to be dialed by the calling party.	• Y = 5-7 (Area Code Development Pattern No. 5-7 assigned by CM8A, YYY = A00)	
	The maximum number of digits including the area codes should be assigned to each area code.	<ol> <li>X-XX (Area Code dialed, Max. 8 digits)</li> <li>01 : 1 digit         <ul> <li>24 &lt; 24 digits</li> <li>279 : 79 digits</li> </ul> </li> </ol>	
CM35	Provide the Toll Restriction feature to the required trunk routes.	<ul> <li>YY = 11</li> <li>(1) Trunk Route No. (00-63) (00)</li> <li>(2) 0: To be provided</li> </ul>	
	Specify route access capability for each restriction class.	<ul> <li>YY = 51-55</li> <li>(1) Trunk Route No. (00-63)</li> <li>(2) 0/1 ◀ : Restricted/Allowed</li> </ul>	
END	Assign the Area Code Development Pattern No. for Toll Restriction and Maximum Digit Analysis to each trunk.	<ul> <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>	

To provide L.C.R. with Time of Day Routing, add the following system data programming.

<u>START</u>	DESCRIPTION	DATA	
CM8A	Assign the Date Pattern No. to each area code for the Area Code Development Pattern No. assigned by $YYY = A00$ .	<ul> <li>YYY = 405-407(Area Code Development Pattern No. 5-7)</li> <li>(1) X-XX (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 Date Pattern No. assigned by YYY = 405-407.	<ul> <li>YYY = 300-303 (Date Pattern No. 0-3)</li> <li>(1) 0: SUN <ul> <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			



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
To provide C.O. operator call with LCR, assign the following system data.







Figure 2-1 LCR Development Sequence

### Example:



Conditions:

- Order of LCR Selection:
   1st... Route 02 (FX)
   2nd... Route 01 (WATS)
   3rd... Route 00 (DDD)
- (2) Dialed Number: 9-212 - NXX - XXXX \*a \*b \*c \*d
  - \*a: Access Code \*b: Area Code \*c: Office Code \*d: Telephone Number
- (3) Toll Restriction Pattern:

-: Allowed

CLASS	RCA	RCB	RCC	RCD	RCE
00	-	_	_	—	-
01	-	—	—	×	×
02	_	_	×	×	×

Programming for **Example 1**:

<u>Step 1</u>: Assign "9" to the access code of LCR Group 0 in Numbering Plan Group 0. <u>ST</u> + 200 + <u>DE</u> + 9 + <u>DE</u> + A26 + <u>EXE</u>

<u>Step 2</u>: Assign Area Code Development Pattern No. 5 to LCR Group 0.  $\boxed{ST} + 8AA00 + \boxed{DE} + 0 + \boxed{DE} + 5 + \boxed{EXE}$ 

<u>Step 3</u>: Assign Route Pattern No. 00 to area code (212) for Area code Development Pattern No. 5.  $\boxed{ST} + 8A405 + \boxed{DE} + 212 + \boxed{DE} + 000 + \boxed{EXE}$ 

Step 4: In Route Pattern No. 00, specify the order of LCR selection as shown below. 1st: Route 02 (FX)

LCR Pattern No. 002

Step 5: In LCR Pattern No. 000 (for FX), delete the area code dialed.

<u>Step 6</u>: Assign the Toll Restriction Pattern to each Route (LCR Pattern No.)

For LCR Pattern No. 000 (Route 02):

 $\boxed{ST} + 8A500 + \boxed{DE} + 000 + \boxed{DE} + \frac{10}{10} + \boxed{EXE}$ Toll Restriction Pattern No. specified by CM81.

For LCR Pattern No. 001 (Route 01):

<u>ST</u> + 8A501 + <u>DE</u> + 000 + <u>DE</u> + 09 + <u>EXE</u>

For LCR Pattern No. 002 (Route 00):

<u>ST</u> + 8A502 + <u>DE</u> + 000 + <u>DE</u> + 01 + <u>EXE</u>

Step 7: Assign the maximum number of digits dialed.

ND-45670 (E)

CHAPTER 2 Page 271 Revision 2.0



#### 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 a Toll Office.
  - 9-213-NXX-XXXX
- (3) Toll Restriction Pattern:

-: Allowed

-				,	
CLASS	RCA	RCB	RCC	RCD	RCE
00	-	_	_	_	-
01	_	-	_ Note	×	×
02	_	Note	×	×	×



Programming for **Example 2**:

<u>Step 1</u>: Assign "9" to the access code of LCR Group 0 in Numbering Plan Group 0. <u>ST</u> + 200 + <u>DE</u> + 9 + <u>DE</u> + A26 + <u>EXE</u>

<u>Step 2</u>: Assign Area Code Development Pattern No. 5 to LCR Group 0. <u>ST</u> + 8AA00 + DE + 0 + DE + 5 + EXE

<u>Step 3</u>: Assign Route Pattern Nos. 00 and 01to area codes 214 and 213 respectively.  $\boxed{ST} + 8A405 + \boxed{DE} + 214 + \boxed{DE} + 000 + \boxed{EXE}$ 

Route Pattern No. 00

 $\boxed{ST}$  + 8A405 +  $\boxed{DE}$  + 213 +  $\boxed{DE}$  +  $\underbrace{001}_{\text{Route Pattern No. 01}}$  +  $\boxed{EXE}_{\text{Route Pattern No. 01}}$ 

<u>Step 4</u>: 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 + EXELCR Pattern No. 000 2nd: Route 01 (WATS) ST + 8A000 + DE + 2 + DE + <u>001</u>01 + EXELCR Pattern No. 001 3rd: Route 02 (DDD) ST + 8A000 + DE + 3 + DE + <u>002</u> 02 + EXE LCR Pattern No. 002 For Route Pattern 01: 1st: Route 00 (FX) ST + 8A001 + DE + 1 + DE + 003 00 + EXELCR Pattern No. 003 2nd: Route 01 (WATS) ST + 8A001 + DE + 2 + DE + 00401 + EXELCR Pattern No. 004 3rd: Route 02 (DDD) ST + 8A001 + DE + 3 + DE + 005 02 + EXELCR Pattern No. 005

> CHAPTER 2 Page 273 Revision 2.0

AREA CODE	ROUTE PATTERN No.	ORDER OF LCR	ROUTE	LCR PATTERN No.	RCA	RCB	RCC	RCD	RCE
214	00	1st	00	000	-	-	-	-	-
		2nd	01	001	-	-	-	×	×
		3rd	02	002	-	-	×	×	×
	01	1st	00	003	-	-	-	-	-
213		2nd	01	004	_	-	×	×	×
		3rd	02	005	_	×	×	×	×

TOLL RESTRICTION

-: Allowed

×: Restricted

Step 5: In LCR Pattern Nos. 000 and 003, delete the area code dialed.

 $ST + \underline{8A500} + \underline{DE} + 151 + \underline{DE} + 0 + \underline{EXE}$ -LCR Pattern No. 000 To be deleted $ST + \underline{8A503} + \underline{DE} + 151 + \underline{DE} + 0 + \underline{EXE}$ -LCR Pattern No. 003 To be deleted

Step 6: Assign the Toll Restriction Pattern to each LCR Pattern No. For LCR Pattern No. 000:

 $\boxed{ST} + \underbrace{8A500}_{LCR \text{ Pattern No. }000} + \underbrace{DE}_{Toll \text{ Restriction Pattern No. specified by CM81.}} + \underbrace{01 + \underbrace{EXE}_{Toll \text{ Restriction Pattern No. specified by CM81.}}$ 

For LCR Pattern No. 001: <u>ST</u> + 8A501 + <u>DE</u> + 000 + <u>DE</u> + 03 + <u>EXE</u>

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

ND-45670 (E)

<u>Step 7</u>: In LCR Pattern No. 000, designate the prefix "1", in addition to the office code 236, by the six-digit Prefix Pattern.



## PROGRAMMING

<u>START</u>	DESCRIPTION	DATA		
CM08	Provide the system with Howler Tone sent to locked-out stations, if required.	<ul> <li>(1) 153</li> <li>(2) 0/1</li></ul>		
CM13	If Howler Tone is provided (CM08-153 = 1), set this feature to the required stations.	<ul> <li>YY = 04</li> <li>(1) X-XXXX (Station No.)</li> <li>(2) 1 ◀ : Provide</li> </ul>		
CM41	Specify the timing for Line Lockout.	<ul> <li>Y = 0</li> <li>(1) 22</li> <li>(2) 01-08: 4-32 sec. in 4 sec. increments</li> <li>If no data is set, the default setting is 28-32 seconds.</li> </ul>		
CM42 END	Specify the number of stations in Line Lockout to give a MN alarm.	<ul> <li>(1) 01</li> <li>(2) 01-99: Number of Lockout Stations</li> <li>If no data is set, no Lockout Alarm Display functions.</li> </ul>		

# LINE PRESELECTION

### PROGRAMMING

<u>START</u>	DESCRIPTION	DATA
CM08 <u>END</u>	Specify the operation of Line Preselection on a Multiline Terminal.	<ul> <li>(1) 199</li> <li>(2) 0 : Only desired line key.</li> <li>1 ◀ : SPKR key is required after pressing the desired line key.</li> </ul>

## MAINTENANCE ADMINISTRATION TERMINAL (MAT)

# PROGRAMMING

To provide password service for the MAT:

<u>START</u>	DESCRIPTION	DATA			
CME7	Specify the command codes accessible to each Password Level.	<ul> <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> <li>(1) XX *a</li> <li>*a: 00-FF (Command Codes exclusive of 03, E7, E9)</li> <li>(2) 0/1 &lt; : Allowed/Restricted</li> </ul>			
CME9	Enable the system to change the password.	<ul> <li>(1) 8</li> <li>(2) 0◀ : Allowed</li> </ul>			
	Assign a password to each Password Level.	<ol> <li>0-7 (Password Level 0-7)</li> <li>X-XX (Max. 8 digits Password Code) A password code for Password Level 7 should be assigned in advance because of providing the password service by Func- tion No. 9 of CME9.</li> <li>The following passwords are not available. "CCCCCCCC" "FFFFFFFF"</li> </ol>			
	Provide the system with Password Service. After setting this data, access to system programming is only available with password entry.	(1) 9 (2) 0: Provided			
<u>END</u>					

### MAINTENANCE ADMINISTRATION TERMINAL (MAT)

Note: If the Password Service is provided, enter a password predetermined by CM03 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.

# MAT: FAULT MESSAGE

## PROGRAMMING

Refer to the Maintenance Manual.

# PROGRAMMING

Refer to the Command Manual. (Command Code: B0, B3)

## MAT: REMOVE AND RESTORE

### PROGRAMMING

<u>START</u>	DESCRIPTION	DATA
CME5	Set or cancel make-busy to stations and trunks.	<ul> <li>Y = 0</li> <li>(1) X-XXXX: Station Number.</li> <li>(2) 0: Make-busy Set 1 ◀ : Make-busy cancel</li> </ul>
END		<ul> <li>Y = 1</li> <li>(1) 000-255: Trunk Number</li> <li>(2) 0 : Make-busy Set</li> <li>1 ◀ : Make-busy cancel</li> </ul>

# MAT: STATION/TRUNK STATUS

## PROGRAMMING

Refer to the Maintenance Manual.

# **MESSAGE CENTER INTERFACE (MCI)**

## PROGRAMMING

Refer to the Message Center Interface (MCI) System Manual.

# PROGRAMMING

To provide Message Reminder service for each station:

<u>START</u>	DESCRIPTION			DATA
CM08	MSG Display.		(1) (2)	025 0/1 ◀ : MSG (only) /MSGX (X: No. of messages)
	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."	[ [ [	<ul> <li>(1)</li> <li>(2)</li> <li>(1)</li> <li>(2)</li> <li>(1)</li> <li>(2)</li> <li>(1)</li> <li>(2)</li> <li>(2)</li> </ul>	<ul> <li>050: *Button as Switch Hook-Flash.</li> <li>1 ≤ : Ineffective</li> <li>051: #Button as Switch Hook Flash.</li> <li>1 ≤ : Ineffective</li> <li>069 : Single-Digit Dialing/on BT Connection</li> <li>1 ≤ : Step Call</li> <li>148: Same Last-Digit Redialing on BT Connection</li> <li>1 ≤ : Ineffective</li> </ul>
	Provide the system with the Single-Digit Feature Access Code on RBT (or Voice Call Connection).		(1) (2)	156 0: Available
	Provide the system with the Single-Digit Feature Access Code on busy Connection.		(1) (2)	208 0: Available
	Provide the system with the automatic cancel of Message Reminder while the called station rings.		(1) (2)	<ul><li>234</li><li>0/1 ◀ : To be provided/Not to be provided</li></ul>
	Specify the Automatic Cancel of Message Reminder when the desired station answers.		(1) (2)	<ul><li>235</li><li>0/1 ◀ : To be provided/Not to be provided</li></ul>
	Specify the sending of Special Dial Tone (SDT) for SN610 ATTCON or station when dialing a feature access code.		(1) (2)	236 $0/1 \blacktriangleleft$ : Tone is not sent/Tone is sent
	Specify the time display for Message Reminder service on Multiline Terminals with an LCD.		(1) (2)	280 0/1◀ : 24-Hour/12-Hour
A	Specify the Message Waiting Lamp indication on the Multiline Terminal to which Message Reminder is set.		(1) (2)	294 0/1

### MESSAGE REMINDER



#### HARDWARE REQUIRED

For providing the Single-Line Telephone with Message-Waiting Lamp: - PN-4LCD card × n/4 (n: Number of Telephone sets equipped with MW Lamp)

For providing Multiline Terminal - ETJ-8-1/ETJ-16DC-1/ETJ-16DD-1/ETJ-24DS-1 and PN-2DLCB/PN-4DLCA card.

CHAPTER 2 Page 286 Revision 2.0 ND-45670 (E)

## **MESSAGE WAITING**

#### PROGRAMMING

Refer to the DSS/BLF Console feature to program the DSS/BLF as a Message Front Station.

<u>ST</u>	<u>ART</u>	DESCRIPTION				
CM	112	Assign the class of service for Waiting to required stations as	Messag shown	ge below.		
CN	115	STATION/ADMIN.	CM15 YY=24	CM15 YY=40		
		Station w/o MW Lamp	0	0		
		Station with MW Lamp ETJ-8-1/ETJ-16DC-1/ ETJ-16DD-1/ETJ-24DS-1/SLT	0	1		
		Administrative station	1	0		
CN	120	Service. (Multiline Terminal of Telephone with Message Waiti Assign an Access Code for Me Set/Reset/Retrieve.	r Single ing Lan essage V	e-Line 1p) Waiting		
CN	151 A	Assign the Message Front Des which a call is to be routed by Message Waiting Retrieves acc pressing the Message Waiting Multiline Terminal to which M is set.	tinatior dialing cess coo key on essage	n to the de or a Waiting		

- CM12 YY=02 [Service Restriction Class A (00-15t)]
- • CM15 YY=24 (Administrative Station allowing Message Waiting Set/Reset to station)
- CM15 YY=40 (Station setting MW)
- (1) Service Restriction Class (A) (00-15)
- (2)  $0/1 \blacktriangleleft$  : Restricted/Allowed
- YY=03
- (1) X-XXXX: Station No.
- (2) 0: To be provided
- Y=0-3 (Numbering Plan Group 0-3)
- (1) Access Code
- (2) 040: MW Lamp Control-Set 041: MW Lamp Control-Reset A47: MW Retrieve
- YY=15
- (1) Tenant No. (00-63) to which MW set Multiline Terminal belongs
- (2) Message Front No. X-XXX (Station No./Primary Extension No.) or E000 (Attendant Console)

A	DESCRIPTION		
CM08	If an ATTCON is assigned as the Message Front destination by CM51 YY=15, set the data for 233 to 0. With this setting, Message Waiting is automatically reset when the ATTCON answers.	(1) (2)	233 0
	To reset the Message Waiting indication while the Message Front Station rings by dialing the MW Retrieve/Search access code or pressing the MW key on a Multiline Terminal, set the data for 234 to 0.	(1) (2)	234 0
	To reset the Message Waiting indication when the set station answers a second call from the Message Front Station, set the data for 235 to 0.	(1) (2)	235 0
CM90	Assign the Message Waiting function key to the Multiline Terminal and the administrative station, if provided.	• (1) (2)	YY=00 Primary Extension No. + , + Key No. For administrative station F0040: Message Waiting Set F0041: Message Waiting Reset For station without MW Lamp F1005: Message Waiting Lamp
CM48 <u>END</u>	Select the Dial Tone on Setting Message Waiting. (1300 Series Enhancement) (INITIAL)	• (1) (2)	Y=2 12 (Dial Tone on Setting Message Wait- ing) 0: Special Dial Tone (Stutter Dial Tone) 1◀ : Dial Tone

### HARDWARE REQUIRED

To provide a Single-Line Telephone with the Message Waiting Lamp:

• PN-4-LCD Card

# PROGRAMMING

<u>START</u>	DESCRIPTION	DATA
CM10	Assign the interface trunk (PN-4COT and/ PN-DK00) to the required LEN. <b>Note:</b> The PN-DK00 Card No. must be as- signed to the first LEN (Level 0) and/or the third LEN (Level 2).	<ol> <li>LEN (0000-0511)</li> <li>D000-D255: PN-4COT E800-E831: PN-DK00 E800-E807: For PIM0/1 E808-E815: For PIM2/3 E816-E823: For PIM4/5 E824-E831: For PIM6/7</li> </ol>
CM30	Assign the trunk data to the Trunk Number.	<ul> <li>YY = 00 (Trunk Route Allocation)</li> <li>(1) Trunk No.</li> <li>(2) Route No. (A dedicated route number for this service should be assigned.)</li> <li>YY = 01 (Tenant Allocation)</li> <li>(1) Trunk No.</li> <li>(2) Tenant No. (00-63)</li> </ul>
CM35	Assign the route data to the trunk route specified by CM30 YY = 00.	<ul> <li>YY = 00 (Kind of Route)</li> <li>(1) Route No. (00-63)</li> <li>(2) 05</li> <li>YY = 01 (Type of Signal to be sent out.)</li> <li>(1) Route No. (00-63)</li> <li>(2) 2: DP         <ul> <li>4: DTMF</li> </ul> </li> <li>YY = 08 (Dial Pulse Sending)</li> <li>(1) Route No. (00-63)</li> <li>(2) 3 ◀ : To be sent</li> </ul>

## MISCELLANEOUS TRUNK ACCESS: CODE CALLING EQUIPMENT ACCESS

Α	DESCRIPTION	DATA
CM44	Assign the paging function to the PN-DK00 card.	(1) $XX X$ *a*b *a: Card No. (00-31) assigned by CM10 (E800-E831) *b: Circuit No. of PN-DK00 (0-3) (2) 02 $XX$ : Zone assigned by CM30 YY = *a 28 *a 00: Speaker Paging Zone 0 $\langle$ $\langle$ $\langle$ 09: Speaker Paging Zone 9
CM20 END	Assign the access code for this service.	<ul> <li>Y = 0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX (Access Code)</li> <li>(2) 100-163 (Route No. 00-63 assigned by CM30 YY = 00)</li> </ul>

**Note:** For assigning the Class of Service for this feature, refer to CLASS OF SERVICE.

## PROGRAMMING

<u>START</u>	DESCRIPTION	DATA
CM10	Assign the Trunk Number to the required LEN.	<ul> <li>(1) LEN (0000-0511)</li> <li>(2) Trunk No. (D000-D255)</li> </ul>
CM30	Assign the Trunk data to the Trunk Number.	<ul> <li>YY = 00 (Trunk Route Allocation)</li> <li>(1) Trunk No. (000-255)</li> <li>(2) Trunk Route No. (00-63) (Dedicated route number for this service should be assigned)</li> <li>YY = 01 (Tenant Allocation)</li> <li>(1) Trunk No. (000-255)</li> <li>(2) Tenant No. (00-63)</li> </ul>
CM35	Assign the route data to the trunk route specified by CM30 YY = 00.	<ul> <li>YY = 00 (Kind of Route)</li> <li>(1) Trunk Route No. (00-63)</li> <li>(2) 05</li> <li>Y = 01 (Type of Signal to be sent out)</li> <li>(1) Trunk Route No. (00-63)</li> <li>(2) 4: DTMF</li> <li>YY = 08 (Dial Pulse Sending)</li> <li>(1) Trunk Route No. (00-63)</li> <li>(2) 3 ◀ : To be sent</li> </ul>
CM20 END	Assign the access code for this service.	<ul> <li>Y = 0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX (Access Code)</li> <li>(2) 100-163 (Route No. 00-63 assigned CM30 YY = 00)</li> </ul>

**Note:** For assigning the Class of Service for this feature, refer to CLASS OF SERVICE.

## MISCELLANEOUS TRUNK ACCESS: FOREIGN EXCHANGE (FX) ACCESS

#### 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>	DESCRIPTION	DATA
CM35	Assign an FX line to the required trunk route.	<ul> <li>YY = 00</li> <li>(1) Trunk Route No. (00-63)</li> <li>(2) 01: FX line</li> </ul>
<u>END</u>		

**Note:** For assigning the Class of Service for this feature, refer to CLASS OF SERVICE.

## PROGRAMMING

<u>START</u>	DESCRIPTION	DATA
CM10	Assign the trunk used for interfacing with the Radio Paging Equipment to the required LEN.	<ol> <li>(1) LEN (0000-0511)</li> <li>(2) Trunk No. (D000-D255)</li> </ol>
CM12 CM15	Assign the Class of Service for Paging Access to the required stations.	<ul> <li>CM12 YY = 02 [Service Rest. Class A (00-15 ◀ )]</li> <li>CM15 YY = 08</li> <li>(1) Service Rest. Class A (00-15) assigned by CM12 YY = 02</li> <li>(2) 1 ◀ : Allowed</li> </ul>
CM41	Specify the timing for canceling the Paging Answer capability.	<ul> <li>Y = 0</li> <li>(1) 20</li> <li>(2) 01-15: 60-900 sec. in 60 sec. increments If no data is set, the default setting is 300 seconds.</li> </ul>
CM08	Specify the conditions for Radio Paging Access.	<ol> <li>(1) 094: Paging Access Tone</li> <li>(2) 0: To be sent out</li> </ol>
		<ol> <li>(1) 095: Hooking Signal to Radio Paging Equipment</li> <li>(2) 0/1 ◀ : Allowed/Restricted</li> </ol>
		(1) 149: Automatic Call Back when paging station is busy through
		(2) $0/1 \blacktriangleleft$ : Available/Not Available
		(1) 157: Access Code for Paging Access and Answer
		(2) $0/1 \blacktriangleleft$ : Same/Different
A When	C When CM08-157:0	(1) 162: Multiple Radio Paging Access after accessing a radio paging trunk with delay type Radio
CM08-157:1 (Different)	(Same)	(2) $0/1 \blacktriangleleft$ : Not Available/Available

A	DESCRIPTION		DATA
CM20	Assign the access code for Paging Access and Answer.	• (1) (2)	Y = 0-3 (Numbering Plan Group 0-3) X-XXX: Access Code 100-163: For Paging Access (Route 00-63) 070-079: For Paging Answer (Paging Answer Zone 0-9)
СМ30	Assign the data for Radio Paging to the desired trunk number.	• (1) (2) • (1) (2)	YY = 00 (Trunk Route Allocation) Trunk No. Route No. (00-63) YY = 28 (Zone/Kind of Paging) Trunk No. $\frac{X}{X} \frac{X}{*a*b}$ *a: Paging Answer Zone 0: Paging Answer Zone 0 2 9: Paging Answer Zone 9 *b: Type of Paging 1: No Answer 3: Non-Delay Answer 5: Non-Delay or DelayAnswer 6: No Answer and Automatic Di- aling of Calling Party's No.

В	DESCRIPTION	DATA
CM35	Assign the route data to the route number assigned by CM30 $YY = 00$ .	<ul> <li>YY = 00</li> <li>(1) Route No. (00-63)(07)</li> <li>(2) 05</li> </ul>
		• YY = 08 (Dial Sending to Radio Paging Equipment)
		<ul> <li>(1) Route No. (00-63)</li> <li>(2) 3 ◀ : Dial Pulses are sent out</li> </ul>
		• YY = 13 (Max. number of sending dig- its)
		(1) Route No. (00-63)
		<ul><li>(2) 000: Unlimited</li><li>001: 1 digit of Radio No. and calling</li></ul>
		$\langle$ Station number.
		004: 4 digits of Radio No. and calling Station number.
		005: 2 digits of Radio Paging ∧ No. and calling Station number.
C		<b>Note:</b> To send a calling station number auto- matically, the data for CM30 $YY = 28$ must be set to "X6".



D	DESCRIPTION	DATA
CM35	Assign the route data to the route number assigned by CM30 YY = $00$ .	<ul> <li>YY = 00</li> <li>(1) Route No. (50-59)</li> <li>(2) 05</li> </ul>
		<ul> <li>YY = 08 (Dial Sending to Radio Paging Equipment)</li> <li>(1) Route No. (50-59)</li> <li>(2) 3◀ : Dial Pulses are sent out</li> </ul>
		<ul> <li>YY = 13 (Max. number of sending digits)</li> <li>(1) Route No. (50-59)</li> <li>(2) 000: Unlimited</li> <li>001: 1 digit of Radio No. and calling</li> <li>♦ Station number. 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>Note: 1 digit of Radio number.</li> </ul>
END		<b>Note:</b> To send a calling station number auto- matically, the data for $CM30 YY = 28$ must be set to "X6".

#### HARDWARE REQUIRED

- PN-4COT card
- Radio Paging Equipment provided locally

#### PROGRAMMING

In addition to the programming of Direct Outward Dialing, assign an WATS line to the required trunk route, as shown below:

<u>START</u>	DESCRIPTION	DATA
CM35 END	Assign a WATS line to the required trunk route.	<ul> <li>YY = 00</li> <li>(1) Trunk Route No. (00-63)(05)</li> <li>(2) 02: WATS line</li> </ul>

**Note:** For assigning the Class of Service for this feature, refer to CLASS OF SERVICE.

### PROGRAMMING

DESCRIPTION	DATA
Assign the Primary Extension number to the required LEN.	<ol> <li>(1) LEN (0000-0511)</li> <li>(2) FX-FXXXX (Primary Extension No.)</li> </ol>
<ul> <li>Assign the Class of Service for the Multiline Terminal Attendant Position to the required Multiline Terminal.</li> <li>Note: The Service Restriction Class Number for the Multiline Terminal Attendant Po- sition should be different from an ordi- nary station.</li> </ul>	<ul> <li>CM12 YY = 02 Service Restriction Class B (00-15)</li> <li>CM15 YY = 71</li> <li>(1) XX Service Restriction Class B assigned by CM12 YY = 02 (00-15 ◀ )</li> <li>(2) 0: Attendant Position</li> </ul>
Assign the required number of Loop, ICI (Incoming Call Identification) and OPR (Operator Call) Lines to the Virtual LENs. <b>Note:</b> Usually, ICI/OPR Numbers are assigned on a per-Attendant-Position-Group	<ol> <li>Virtual LEN (0000-0255)</li> <li>AA X X: LOOP Line No. *a*b</li> <li>*a: Attendant Position No. (0-7)</li> <li>*b: Loop Number (1-5)</li> <li>AB00-AB99: ICI/OPR Line No.</li> </ol>
Assign each Loop Line No. assigned by CM11 as an Attendant Loop Line.	<ul> <li>YY = 03</li> <li>(1) Loop Line No. (AA01-AA75) assigned by CM11.</li> <li>(2) 08: Attendant Position Loop Line</li> </ul>
<ul> <li>Assign the Class of Service for the ICI key to the required ICI/OPR Line Numbers assigned by CM11.</li> <li>Note: The Service Restriction Class Number for the Multiline Terminal Attendant Position should be different from an ordinary station.</li> </ul>	<ul> <li>CM12 YY = 02</li> <li>(1) ICI/OPR Line No. assigned by CM11 (AB00-AB99)</li> <li>(2) XX XX *a *a: Service Rest. Class B (00-15◀)</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>
	DESCRIPTION         Assign the Primary Extension number to the required LEN.         Assign the Class of Service for the Multiline Terminal Attendant Position to the required Multiline Terminal.         Mere:       The Service Restriction Class Number for the Multiline Terminal Attendant Position should be different from an ordinary station.         Assign the required number of Loop, ICI (Incoming Call Identification) and OPR (Operator Call) Lines to the Virtual LENs.         Mere:       Usually, ICI/OPR Numbers are assigned on a per-Attendant-Position-Group         Assign the Class of Service for the ICI key to the required ICI/OPR Line Numbers assigned by CM11 as an Attendant Loop Line.         More:       The Service Restriction Class Number for the Multiline Terminal Attendant Position should be different from an ordinary station.

A	DESCRIPTION	DATA
CM12	Assign a Hotline station to each ICI/OPR Line Number. With this assignment, each ICI/OPR Line is restricted from call origination.	<ul> <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 are provided the call-queuing facility individually.	<ul> <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> </ul> Note: Individual UCD Group Nos. must be assigned to each ICI/OPR Line No.
CM20	Assign the access code for Priority Call 0 (used for Attendant Position access).	<ul> <li>Y = 0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX (Attendant Position Access Code)</li> <li>(2) 088</li> </ul>
CM51	Assign the destination of Priority Call 0 to each OPR Line.	<ul> <li>YY = 12</li> <li>(1) Tenant No.</li> <li>(2) OPR Line No. (AB00-AB99)</li> </ul>
CM08	Destination of Priority Call 0.	<ol> <li>(1) 250</li> <li>(2) 0</li> </ol>
CM30	On the required trunks, assign the destination of DIT to each ICI Line.	<ul> <li>YY = 02</li> <li>(1) 000-255 (Trunk Number)</li> <li>(2) 04: DIT</li> <li>YY = 04</li> <li>(1) 000-255 (Trunk Number)</li> <li>(2) ICI Line No. (AB00-AB99)</li> </ul>
CM08 B	Provide the system with Day/Night Mode Change by an NT key on an Attendant Position.	<ol> <li>(1) 244 (Terminating system change)</li> <li>(2) 0: Available</li> <li>(1) 245 (Trunk Restriction Class change)</li> <li>(2) 0: Available</li> </ol>

В	DESCRIPTION		DAT	A
CM12 CM15	Assign the Class of Service for Day/Night Mode Change by station-dialing to Attendant.	• (1) (2)	CM12 YY = 02 [Service Restriction CM15 YY = 60 00-15 (Service Resigned by C $1 \triangleleft$ : Allowed	on Class B (00-15◀)] striction Class B as- CM12 YY = 02)
СМ90	Assign the Loop keys to each Multiline Terminal, and assign the function keys required for the Attendant Position to the Multiline Terminal.	• (1) (2)	YY = 00 Primary Extension AA01-AA75: AB00-AB99: F1020: F0300: F0043:	n No. + , + Key No. Loop Key ICI/OPR Key Release Key Operator Call Key Night Key
CM08	Specify Line Preselection on a Multiline Terminal after pressing the desired LINE/ TRUNK button.	(1) (2)	199 0/1◀ : Not Requi	red/Required
FND	<b>Note:</b> To provide a Trunk Name/Station Name, refer to Alphanumeric Display.			

If a DSS Console is associated with the Multiline Terminal Attendant Position, add the following system data programming.

<u>START</u>	DESCRIPTION	DATA
CM10	Assign the DSS Console No. to the required LEN.	<ol> <li>LEN (0000-0511)</li> <li>DSS Console No. (E100-E131) E100-E107: For PIM0/1 E108-E115: For PIM2/3 E116-E123: For PIM4/5 E124-E131: For PIM6/7</li> </ol>
CM96	Assign the Primary Extension No. of the Multiline Terminal Attendant Position associated with each DSS Console.	<ol> <li>DSS Console No. (00-31) assigned by CM10 (E1<u>00</u>-E1<u>31</u>)</li> <li>X-XXXX (Primary Extension No. of Multiline Terminal Attendant Position)</li> </ol>
CM97	Assign Station numbers to the DSS keys. Assign the MW, DND, NT keys as function keys.	<ol> <li>(1) DSS Console No. (00-31) assigned by CM10 (E1<u>00</u>-E1<u>31</u>)</li> <li>(2) For DSS key: Key No. (00-29) + → + X-XXXX (Station No.) For Function key: Key No. (57-59) + → + <u>Key data</u> *a</li> <li>*a: F1049: Message Waiting F1053: Do Not Disturb F0043: Night Key</li> </ol>

#### Example:



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: ETJ-16DD-1

ND-45670 (E)
# **MULTILINE TERMINAL ATTENDANT POSITION**

Programming for Example:

COMMAND CODE	1ST DATA	2ND DATA	REMARKS
11	0000	AA01 -	7
	0001	AA02	
	0002	AA03	Loop Line Number
	0003	AA04	
(	0004	AA05	
	0005	AB10	OPR Line Number
	0005	AB20	
	0000	AB20 AB21	EV
)	0007	AD21 AD22	WATS ICLLing Number
/	0008	AD22	
	0009	AB23 AB24	TIF
	0010	AD24	
12-02	200	1500	Service Class for Attendant Position
(	AB10	1501 -	
	AB20	1501	
	AB21	1501	Service Class for ICI Line
	AB22	1501	
)	AB23	1501	
/	AB24	1501	
12-03	AA01	08 -	-
12 00	AA02	08	
	AA03	08	Service Class for Loop Line
,	AA04	08	Service Class for Loop Line
(	AA05	08	
		<u> </u>	
	AB10	04 -	7
	AB20	04	
	AB21	04	Hotline Assignment
/	AB22	04	
	AB23	04	
	AB24	04	
	200	15	
15-71	00	0	Attendant Position Class
15-73	01	0	ICI/OPR Key Class
17-1	AB10	1 -	7
(	AB20	1	
(	AB21	- 1	Assign UCD Pilot Station to the ICI/OPR
	AB22	1	Line Numbers
	AB22	1	Line runions.
)	ΔΒ24	1	
/	AD24	1 _	

# MULTILINE TERMINAL ATTENDANT POSITION

COMMAND CODE	<b>1ST DATA</b>	2ND DATA	4	REMARKS
17-2	AB10	00	٦	
1	AB20	01		
	AB21	02		Assign UCD Group to the ICI/OPR Line
	AB22	03		Numbers
	AB23	04		
	AB24	05		
)				
20-0	0	088		Operator Access Code
51-12	00	AB10	٦	
00	250	0		Operator Call Termination to OPR Line
08	230	0		
30-02	000	04	٦	
,	001	04		
(	002	04		
	003	04		DIT
	004	04		
	005	04		
)	006	04		
30-04	000	AB20	٦	
0001	001	AB20		
(	002	AB20		
	002	AB20		Incoming Call Termination to ICL Line
	003	AB20		medining can remination to lef Ente
	005	AB21		
	005	AB21		
/	000	AD22		
90-00	200,01	AA01	Г	
	200,02	AA02		
	200,03	AA03		LOOP Key
	200,04	AA04		5
	200,05	AA05		
(	200.07	F0006	٦	OVR Key
	200,08	F0043		NT Key
	200,00	AB20		DDD Key
	200,09	AB21		FX Key
	200,10	AB21		WATS Key
/	200,11	AB22		CCSA Koy
	200,12	AD23		
	200,13	AB24		
	200,14	F1020		KLS Key
	200,15	AB10		OPK Key
	200,16	200		Primary Extension Line Key
08	244	0	٦	Definition of NT key function
08	245	0		

To provide Hold Tone Source on the MP card:

<u>START</u>	DESCRIPTION	DATA
CM08	Select the music to be provided.	<ul> <li>(1) 183</li> <li>(2) 0: Nocturne</li> <li>1 ◀ : Minuet</li> </ul>
CM48	Define the type of call to be provided with Hold Tone on the MP card.	<ul> <li>Y = 0</li> <li>(1) 00: C.O. Line Call</li> <li>01: Tie Line Call</li> </ul>
	<b>Note:</b> When using PN-CP03 card, set the JP1 switch to UP (Internal Hold Tone Source).	<ul> <li>02: Internal Call</li> <li>(2) 1400: Hold Tone Source on the MP card</li> </ul>
<u>END</u>		

To provide External Hold Tone Source through PN-4COT and PN-DK00 card:

<u>START</u>	DESCRIPTION	DATA
CM10	Assign the PN-4COT and PN-DK00 for interface with External Hold Tone Source to the required LENs.	<ol> <li>LEN (0000-0511)</li> <li>DA00-DA09: PN-4COT Circuit No. Note 2 E800-E831: PN-DK00 Card No.</li> </ol>
	Note 1: The PN-DK00 card No. must be as- signed to the first LEN (Level 0) and/or the third LEN (Level 2) of each LT slot.	E800-E807: For PIM0/ E808-E815: For PIM2/8 E816-E823: For PIM4/5 E824-E831: For PIM6/7
	<b>Note 2:</b> The PN-4COT Circuit No. must be assigned for each tenant (One Ex- ternal Hold Tone Source can be pro- vided for each tenant).	
CM44	Set the function of External Hold Tone Source interface to the PN-DK00 card.	(1) $XX X:$ 0-31: Card No. E800-E831 assigned by CM10 0-3:Circuit No.
A		(2) 0000-0009

Α	DESCRIPTION	DATA			
CM48	Define the type of call to be provided with External Music.	<ul> <li>Y=0</li> <li>(1) 00: C.O. Line Call 01: Tie Line Call 02: Internal Call</li> <li>(2) 200: External Hold Tone Source</li> </ul>			
CM64	Specify External Hold Tone Source per each tenant.	<ul> <li>Y=1</li> <li>(1) Tenant No. (00-63)</li> <li>(2) 00-09: External Hold Tone Source No.</li> </ul>			
CM08 END	Specify which tenant External Hold Tone is sent from.	<ul> <li>(1) 388</li> <li>(2) 0: Tenant of held station/trunk</li> <li>1 ◀ : Tenant of holding station</li> </ul>			

For providing Internal Hold Tone generated by DTG:

<u>START</u>	DESCRIPTION		DATA
CM48 END	Define the type of call to be provided with Hold Tone.	• (1) (2)	Y = 0 00: C.O. Line Call 01: Tie Line Call 02: Internal Call 1500: Hold Tone generated by DTG

For providing the Hold Message by Digital Announcement Trunk (PN-2DATA):

<u>START</u>	DESCRIPTION	DATA
CM10	Assign a Digital Announcement Trunk Circuit No. to the required LEN.	<ol> <li>LEN (0000-0511)</li> <li>EB000-EB127: Digital Announcement Trunk Circuit No.</li> </ol>
	Note: The Digital Announcement Trunk Circuit No. must be assigned to the first LEN (Level 0) and/or the third LEN (Level 2) of each LT slot.	For PIM0/1: EB000-EB031 For PIM2/3: EB032-EB063 For PIM4/5: EB064-EB095 For PIM6/7: EB096-EB127
CM12	Assign the Class of Service for Digital	• CM12 YY = 02 (1) X XXXX: Station No.
CM15	Replay/Delete) to required station.	(1) $X = X = X = X = X = X = X = X = X = X $
		*a: Service Restriction Class (A)
		• CM15 YY = 33
		(1) XX: Service Restriction Class (A) assigned by CM12 YY = 02
		(2) $1 \triangleleft$ : Allowed
CM48	Define the type of call to be provided with	• Y = 0
CIVI40	Hold Message.	(1) 00: C.O. Line Call
		02: Internal Call
		(2) 0500: Hold Message

A	DESCRIPTION	DATA		
CM49	Assign the data for Hold Message Service to the Digital Announcement Trunk Circuit.	<ul> <li>YY=00</li> <li>(1) 000-127: Digital Announcement Trunk Circuit No. assigned by CM10 (EB000-EB127)</li> <li>(2) 05 XX: For Hold Message Service *a *a: Message No. (00-63)</li> </ul>		
	To record replay or delete a massage assign	<ul> <li>YY=05</li> <li>(1) Tenant No. (00-63)</li> <li>(2) Message No. (00-63) assigned by YY=00</li> <li>Y=0.3 (Numbering Plan Group 0.3)</li> </ul>		
CM20 END	the appropriate Digital Announcement Trunk access code.	<ul> <li>(2) A00: Record A01: Replay A02: Delete</li> </ul>		

To provide External Hold Tone Source through PN-TNT Card (1200 Series Enhancement):

<u>START</u>	DESCRIPTION		DATA		
CM10	Assign the TNT Circuit No. (External Hold Tone Source No. ) to the required LEN.	(1) (2)	LEN (0000-0511) DA00-DA09: TNT Circuit No. <b>Note</b>		
	<b>Note:</b> The TNT Circuit No. must be assigned to the first LEN (Level 0) and/or the third LEN (Level 2) of each LT slot.				
	The TNT Circuit No. must be as- signed for each tenant (One Exter- nal Hold Tone Source can be provided for each tenant).				
CM48	Define the type of call to be provided with External Hold Tone.	• (1) (1)	Y=0 00: C.O. Line Call 01: Tie Line Call 02: Internal Call 0200: External Hold Tone Source		
CM64	Specify External Hold Tone Source per each tenant.	• (1) (2)	Y=1 Tenant No. (00-63) 00-09: External Hold Tone Source No. (TNT Circuit No. DA00-DA09)		
CM08 END	Specify which tenant External Hold Tone is sent from.	(1) (2)	<ul> <li>388</li> <li>0: Tenant of held station/trunk</li> <li>1 ◀ : Tenant of holding station</li> </ul>		

To provide External Hold Tone Source through PN-CP03 Card (1500 Series Enhancement):

<u>START</u>	DESCRIPTION		DATA
CM48	Define the type of call to be provided with Hold Tone.	• (1) (1)	Y=0 00: C.O. Line Call 01: Tie Line Call 02: Internal Call 1400:Hold Tone Source through MP card
END			
CHAPTER 2	ND-45670 (E)		

### HARDWARE REQUIRED

To provide External Hold Tone Source through PN-4COT and PN-DK00 card:

- PN-4COT
- PN-DK00
- External Hold Tone Source provided locally

Make the following connections between the trunks and the External Hold Tone Source at the MDF.

For details, refer to the MDF cross connection for an External Tone Source in the INSTALLATION PROCEDURE MANUAL.



To provide the Hold Message by Digital Announcement Trunk:

• PN-2DATA

To provide the External Hold Tone Source through PN-TNT card:

- PN-TNT
- External Music Source provided locally

To connect the External Hold Tone Source, plug the cable into JACK0 or JACK1 on the PN-TNT card.



Set the switches on the PN-TNT card to adjust the External Hold Tone Source level.



CIRCUIT (JACK1)

SW-3 OFF

ON OFF

ON

SW-4

OFF OFF

ON ON

• Level Control of External Hold Tone Source through JACK0/JACK1

No. 0 CIRCUIT (JACK0)		No. 1	
OUTPUT LEVEL	SW-1	SW-2	OUTPUT LEVEL
-10 dB	OFF	OFF	-10 dB
-7 dB	ON	OFF	-7 dB
-4 dB	OFF	ON	-4 dB
-1 dB	ON	ON	-1 dB

To provide External Hold Tone Source through PN-CP03 card:

• External Hold Tone Source provided locally.

To connect the External Hold Tone Source, plug the cable into JACK on the PN-CP03 card.



Set the switches on the PN-CP03 card as follows.



To provide Hold Tone Source on the MP card: Set the JP1 switch to UP.

# NIGHT SERVICE: ATTENDANT NIGHT TRANSFER

#### PROGRAMMING

<u>START</u>	DESCRIPTION		DATA		
CM08	Provide the system with Attendant Night Transfer.	(1) (2)	018: Attendant Night Transfer 1		
CM51 END	Assign the Night Connection Station to each ATTCON Group.	• (1) (2)	YY = 13 ATTCON Group 0-3 (00-03) assigned by CM60 YY = 00 X-XXXX: Night Connection Station No.		

# NIGHT SERVICE: CALL REROUTING

#### 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.

<u>START</u>	DESCRIPTION	DATA	
CM60	Assign the password code for Day/Night Change by SN610 ATTCON.	<ul> <li>YY = 30</li> <li>1</li> <li>(2) XX-XX: Password Code (Max. 8 dig- its) X: 0-9, A(*), B(#)</li> <li>If no data is set, the default setting is NONE. In this case, the password is set to "12345678."</li> </ul>	
CM90	Assign the Day/Night mode key on SN610 ATTCON.	<ul> <li>YY = 00</li> <li>(1) ATTCON No. + , + key No.</li> <li>(2) F6110</li> </ul>	
CM20 END	Assign the access code for providing Day/ Night Mode change from a SN610 ATTCON, if required.	<ul> <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 (Y	<u>Y)</u>	Nigh	nt (YY)
02	-	<b>—</b>	03
04	◀		05
13	-		14
15	-		16
30	-		31

<u>START</u>	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 $(CM30 XX = 02/03)$
		(2) 0: Available
CM12	Assign Service Restriction B to each station.	<ul> <li>YY = 02</li> <li>(1) X-XXXX (Station No.)</li> <li>(2) XX XX / *a</li> <li>*a: Service Restriction Class B (00-15 ◀ )</li> </ul>
CM15	Assign the Day/Night Mode Change by Station Dialing to Service Restriction B assigned by CM12 YY = $02$ .	<ul> <li>YY = 60</li> <li>(1) Service Restriction Class B (00-15) assigned by CM12 YY = 02</li> <li>(2) 1 ◀ : Allowed</li> </ul>
CM20	Assign the access code for Day/Night Mode change by Station Dialing.	<ul> <li>Y = 0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX: Access Code (68)</li> <li>(2) 043: Day/Night Mode Change by Station Dialing</li> </ul>
CM90 <u>END</u>	Assign the Day/Night Mode Change by Station Dialing key on the Multiline Terminals.	<ul> <li>YY = 00</li> <li>(1) X-XXXX: Primary Extension No. + , + Key No.</li> <li>(2) F0043: Day/Night Mode Change by Station Dialing</li> </ul>

**Note:** The following trunk data (CM30) can be changed by this feature (depending upon programming).

Day (Y	<u>Y)</u>	Nig	ht (YY)
02	◀—		03
04	◀—		05
13	◀—		14
15	-		16
30	<		31

To Provide Night Connection Stations.

<u>START</u>	DESCRIPTION	DATA
CM30	Assign a Night Connection Station to each Incoming Trunk.	<ul> <li>YY = 03</li> <li>(1) Trunk No. (000-255)</li> <li>(2) 04: Direct-In Termination</li> </ul>
		<ul> <li>YY = 05</li> <li>(1) Trunk No. (000-255)</li> <li>(2) X-XXXX: Night Connection Station No.</li> </ul>
	Assign the destination to which a call is forwarded when the Night Connection Station is Busy/No Answer.	<ul> <li>YY = 14 (When Night Connection Station is busy.)</li> <li>Trunk No. (000-255)</li> <li>01: To TAS</li> <li>04: To SN610 ATTCON</li> <li>06: Automatic Camp-On</li> <li>15 ◀ : Keep the call ringing (Waiting until the Night Connection Station becomes idle.)</li> </ul>
		<ul> <li>YY = 16 (When Night Connection Station is not answering)</li> <li>(1) Trunk No. (000-255)</li> <li>(2) 01: To SN610 ATTCON 03: To TAS</li> <li>15◀: Keep the call ringing (Waiting until the Night Connection Station becomes idle.)</li> </ul>
CM41	<ul> <li>Specify the timing for a call forwarding when the Night Connection Station is No Answer.</li> <li>Note: This timing is also applied to Call Forwarding-No Answer, Attendant Overflow, and Group Diversion.</li> </ul>	<ul> <li>Y = 0</li> <li>01</li> <li>01-30: 4-120 sec. in 4 sec. increments</li> <li>If no data is set, the default setting is 32-36 seconds.</li> </ul>
END		

# NIGHT SERVICE: NIGHT CONNECTION-FLEXIBLE

## PROGRAMMING

Refer to Night Connection-Fixed and Call Forwarding-All Calls.

#### PROGRAMMING

<u>START</u>	DESCRIPTION	DATA
CM12	Assign a Trunk Restriction Class to each station.	• YY = 01 (1) X-XXXX (Station No.) (2) $X \frac{X}{*a}$
		<ul> <li>*a: 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>
CM12 CM15	Assign the Class of Service for TAS to the required stations.	<ul> <li>CM12 YY = 02 Service Restriction Class B (00-15 ◀ )</li> <li>CMI5 YY = 53</li> <li>(1) Service Restriction Class B (00-15) assigned by CM12 YY = 02</li> </ul>
CM30	Assign TAS as the terminating system in Night Mode for the required trunks.	<ul> <li>(2) 1</li></ul>
A	Assign the TAS Group No. to the trunks assigned by $YY = 03$ .	<ul> <li>YY = 17</li> <li>(1) 000-255 (Trunk No.)</li> <li>(2) 00-63 (TAS Group No.)</li> </ul>



To provide the External TAS Indicator using the PN-DK00 card:

<u>START</u>	DESCRIPTION	DATA
CM10	Assign the PN-DK00 card No. to the required LEN.	<ul> <li>(1) LEN (0000-0511)</li> <li>(2) E800-831 (PN-DK00 Card No.)</li> <li>For PIM0/1: E800-E807 For PIM2/3: E808-E815 For PIM4/5: E816-E823 For PIM6/7: E824-E831</li> </ul>
CM44	Assign the TAS Group No. assigned by CM30 YY = 17 to the circuit No. of the PN- DK00 card.	<ul> <li>(1) <u>XX X</u> (Circuit No.)</li> <li>*a: Card No. (00-31) assigned by CM10 (E800-E831)</li> <li>*b: Circuit No. (0-3)</li> </ul>
		<ul> <li>(2) 13<u>XX</u> *a: 00-63 (TAS Group No.00-63 assigned by CM30 YY = 17)</li> </ul>
CM59	Specify the indication pattern on the External TAS Indicator.	<ul> <li>(1) 00</li> <li>(2) 01  30 IPM (1 sec. ON/OFF)</li> <li>02: 60 IPM (0.5 sec. ON/OFF)</li> <li>03: 120 IPM (0.25 sec. ON/OFF)</li> <li>07: Steadily on.</li> </ul>
END		

To provide the Telephone set for TAS Indication using the PN-4LC card:

<u>START</u>	DESCRIPTION		DATA
CM10 <u>END</u>	Assign the TAS Buzzer TAS Indication) to the The TAS Buzzer No. m TAS Group No. assigne E600→TAS E663→TAS	No. (Telephone set for required LEN. nust correspond to the ed by CM30 YY = 17. Group 00 $\langle$ Group 63	<ul> <li>(1) LEN (0000-0511)</li> <li>(2) E600-E663 (TAS Buzzer No.)</li> </ul>

ND-45670 (E)

## HARDWARE REQUIRED

To provide the External TAS Indicator:

- PN-DK00
- Indicator
  - Requirement for External Indicator Control Method: Ground/Battery (-24 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. For details, refer to the MDF cross connection for a TAS Indicator in the INSTALLATION PROCEDURE MANUAL.



To provide the Telephone set for TAS Indication:

- PN-4LC card (Four telephone sets per card can be equipped.)
- Conventional telephone sets

<u>START</u>	DESCRIPTION		DATA
CM13	Provide this	s feature for the required stations.	<ul> <li>YY = 02</li> <li>(1) X-XXX (Station No.)</li> <li>(2) 0: To be provided</li> </ul>
CM51	Assign the to a Station	destination for Off-Hook Alarm or SN610 ATTCON.	<ul> <li>YY = 12</li> <li>(1) Tenant No. (00-63)</li> <li>(2) X-XXXX (Station No.) E000: SN610 ATTCON</li> </ul>
CM90	If the Atten destination = 12, assign Alarm to an	dant Console is designated as the of Off-Hook Alarm by CM51 YY n an EMG key for the Off-Hook ny Key.	<ul> <li>YY = 00</li> <li>(1) ATTCON No. + + + Key No.</li> <li>(2) F6056: Emergency Call</li> </ul>
CM41	Specify the	timing for Off-Hook Alarm.	<ul> <li>Y = 0</li> <li>(1) 22</li> <li>(2) 01-08: 4-32 sec. in 4 sec. increments If no data is set, default setting is 28-32 seconds.</li> </ul>
CM12 CM15	Specify the service to be applied for an Off- Hook Alarm Call to a busy destination.		<ul> <li>CM12 YY = 07</li> <li>(1) X-XXXX (Station No. of destination)</li> <li>(2) Service Rest. Class C (00-15 ◀ )</li> </ul>
	YY 97 98	MEANING OF DATA	<ul> <li>CM15 YY = 97, YY = 98</li> <li>(1) Service Rest. Class C (00-15) assigned</li> </ul>
	0 0	Call Waiting (When UCD Pilot Station and CM08-212 = 0)	by CM12 YY = 07. (2) See left column.
	0 1	UCD (When UCD Pilot Station and CM08-212 = 1)	
	1 0	Call Waiting (For Ordinary Station)	
	1 1	Hunting (For Ordinary Station)	<

<u>END</u>

# **OFF PREMISES EXTENSION**

#### PROGRAMMING



#### HARDWARE REQUIRED

PN-AUCA card

1. In case of a system with AP card (PN-AP01):

<u>START</u>	DESCRIPTION	DATA
CM05	Assign the slot number to AP card	<ol> <li>(1) Slot No. (04-15)</li> <li>(2) 07: PN-AP01 card</li> </ol>
CM08	Note: Set SENSE switch on the card to the slot number assigned INITIAL Designate the AP card for Authorization	(1) 216:Designation of Processor for Autho-
	Code.	(2) $1 \triangleleft$ : AP (PN-AP01)
	Specify the Service Set Tone after dialling the access code for Authorization Code.	<ol> <li>362:Provision of Service Set Tone after dialling the access code</li> </ol>
		(2) $1 \triangleleft$ : To be provided
	Set the data for 281 to 1. (Maid ID Code is not used.)	<ul> <li>(1) 281</li> <li>(2) 1</li></ul>
CM15	Assign the Service Restriction Class (A) allowed for Authorization Code feature.	<ul> <li>YY=31 (Authorization Code)</li> <li>(1) Service Restriction Class (A) (00-15)</li> <li>(2) 1◀ : Allowed</li> </ul>
	Assign allowed class and restricted class for Maid Status feature.	<ul> <li>YY=75 (Maid Status)</li> <li>(1) Service Restriction Class (B) (00-15)</li> <li>(2) 0: Restricted 1 ◀ : Allowed</li> </ul>
CM12	To the station that uses PAD LOCK feature, assign the Service Restriction Class (A) allowed for Authorization Code feature. Moreover, to all the station, assign the Service Restriction Class (B) restricted for Maid Status feature.	<ul> <li>YY=02</li> <li>(1) X-XXXX: Station No.</li> <li>(2) XX XX</li> <li>Service Restriction Class (A)</li> <li>Service Restriction Class (B)</li> </ul>
A	Assign the access code for Authorization Code.	<ul> <li>Y=0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX: Access Code</li> <li>(2) 086: Authorization Code</li> </ul>









END

2. In case of a system without AP card (PN-AP01):

<u>START</u>	DESCRIPTION	DATA
CM08	Designate the MP card for Authorization Code.	<ol> <li>(1) 216: Designation of Processor for Authorization Code</li> <li>(2) 0: MP (PN-CP00) card</li> </ol>
	Specify the Service Set Tone after dialling the access code for Authorization Code.	<ol> <li>362: Provision of Service Set Tone after dialling the access code</li> <li>1 ◀ : To be provided</li> </ol>
CM15	Set the data for 281 to 1. (Maid ID Code is not used.)	<ul> <li>(1) 281</li> <li>(2) 1</li></ul>
CM15	Assign the Service Restriction Class (A) allowed for Authorization Code feature.	<ul> <li>YY:31 (Authorization Code)</li> <li>(1) Service Restriction Class (A) (00-15)</li> <li>(2) 1t: Allowed</li> </ul>
CM12	Assign allowed class and restricted class for Maid Status features.	<ul> <li>YY=75 (Maid Status)</li> <li>(1) Service Restriction Class (B) (00-15)</li> <li>(2) 0: Restricted 1t: Allowed</li> </ul>
CM20	To the station that uses PAD LOCK feature, assign the Service Restriction Class (A) allowed for Authorization Code feature. Moreover, to all the station, assign the Service Restriction Class (B) restricted for Maid Status feature.	<ul> <li>YY=02</li> <li>(1) X-XXXX: Station No.</li> <li>(2) XX XX</li> <li>Service Restriction Class (A)</li> <li>Service Restriction Class (B)</li> </ul>
A	Assign the access code for Authorization Code.	<ul> <li>Y=0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX: Access Code</li> <li>(2) 086: Authorization Code</li> </ul>

А	DESCRIPTION	DATA
CM42	Specify the maximum number of digits for Authorization Code.	<ul> <li>(1) 11: Authorization Code Max. digits</li> <li>(2) Max. number of digits</li> <li>01: 1 digit</li> <li>2</li> <li>08: 8 digits</li> <li>NONE ◄ : 8 digits</li> </ul>
CM2A	Set the Authorization Code.	<ul> <li>Y=0</li> <li>(1) XX: Code Serial No. (00-99)</li> <li>(2) X-XX: Authorization Code</li> </ul>
	Set the purpose and the Temporary Service Class of each Authorization Code.	<ul> <li>Y=1 (Purpose of the Code)</li> <li>(1) XX: Code Serial No. (00-99)</li> <li>(2) 1 : Authorization Code</li> </ul>
	Service Restriction Class (B) of the Temporary Service Class should be set to the allowed class for Maid Status.	<ul> <li>Y=3</li> <li>XX: Code Serial No. (00-99)</li> <li>XX XX:</li> <li>Service Restriction Class (A) (00-15)</li> <li>Service Restriction Class (B) (00-15)</li> <li>(Allowed class for Maid Status)</li> </ul>
CM20	Assign the access code for Maid Status.	<ul> <li>YY=0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX (Access Code)</li> <li>(2) 029</li> </ul>
CMD015	Assign the Class of Service for Maid Status.	<ol> <li>(1) X-XXXX: Station No.</li> <li>(2) Service Class No. (00-15)</li> </ol>





#### HARDWARE REQUIRED

PN-AP00 card PN-AP01 card is required for providing the Authorization Code:

- exceeding 8 digits.
- with check code.
- total of more than 100 codes.

ND-45670 (E)

# PERIODIC TIME INDICATION TONE

## PROGRAMMING

<u>START</u>	DESCRIPTION	DATA
CM08	Provide the system with this feature (for C.O lines).	<ul> <li>(1) 135</li> <li>(2) 0: To be provided</li> </ul>
	Specify this service on a Tie Line Call.	<ul> <li>(1) 136</li> <li>(2) 0/1 ◀ : To be provided/Not to be provided.</li> </ul>
CM12 CM15	Assign the Class of Service for this feature to the required stations.	<ul> <li>CM12 YY = 02 [Service Rest. Class B (00-15 ◄ )]</li> <li>CM15 YY = 61</li> <li>00-15 (Service Rest. Class B assigned by CM12 YY = 02)</li> <li>(2) 1 ◀ : Allowed</li> </ul>
CM13	Assign as Ordinary Station the required stations. If assigned to 0 (Analog Data Station), this feature will not be applied to the station.	<ul> <li>YY = 07</li> <li>(1) X-XXXX (Station No.)</li> <li>(2) 1 ◀ : Ordinary Station</li> </ul>
CM41 END	Specify the interval time for Periodic Time Indication Tone.	<ul> <li>Y = 0</li> <li>(1) 09</li> <li>(2) 00: 36 sec. 01-12: 64-724 sec. in 60 sec. increments If no data is set, the default setting is 180-184 seconds.</li> </ul>

# POOLED LINE ACCESS

#### PROGRAMMING

<u>START</u>	DESCRIPTION	DATA
CM11	Assign the Pooled Lines (Virtual Line Station Number) to the required Virtual LEN.	<ol> <li>Virtual LEN (0000-0255)</li> <li>X-XXXX (Virtual Line Station No.)</li> </ol>
	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.	<ul> <li>YY = 00</li> <li>(1) Primary Extension No. + , + Key No.</li> <li>(2) F4100-F4163 (Pooled Line 00-63)</li> </ul>
	Pooled LineOriginationTermination00Trunk Route 00Tenant 00010101<	
A		

# POOLED LINE ACCESS

A	DESCRIPTION	DATA
CM30	Assign a Trunk Route No. and Tenant No. to the trunks in the Pooled Line group.	<ul> <li>YY = 00 (Trunk Route Allocation)</li> <li>(1) 000-255 (Trunk No.)</li> <li>(2) 00-63 (Trunk Route No.) Note</li> </ul>
	<b>Note:</b> Refer to the Command Manual for the Resident System Program.	<ul> <li>YY = 01 (Allocation of tenants to trunks)</li> <li>(1) 000-255 (Trunk No.)</li> <li>(2) 00-63 (Tenant No.) (00)</li> </ul>
	Specify the terminating system, including TAS, of the trunks in the Pooled Line group.	<ul> <li>YY = 02 (Terminating System in Day mode)</li> <li>YY = 03 (Terminating System in Night mode)</li> <li>(1) 000-255 (Trunk No.)</li> <li>(2) 03: Trunk-Direct Appearances and TAS 13: TAS 19: SN610 ATTCON + TAS 20: SN610 ATTCON + Trunk Direct Appearances + TAS</li> </ul>
CM08 END	Specify whether call terminating is indicated on the Pooled Line keys assigned by CM90- F4100-F4163.	<ul> <li>(1) 116</li> <li>(2) 0/1 ◀ : Available/Not Available</li> </ul>

#### HARDWARE REQUIRED

ETJ-8-1/ETJ-16DC-1/ETJ-16DD-1/ETJ-24DS-1 and PN-2DLCB/4DLCA card.

# **POWER FAILURE TRANSFER**

#### PROGRAMMING

To use the PN-AUC card:

<u>START</u>	DESCRIPTION		DATA
CM10	Assign the PN-AUCA cards to the required LENs.	(1) (2)	LEN: 0000-0511 X-XXXX: Station No.
	Assign the PN-4COT cards to the required LENs.	(1) (2)	LEN: 0000-0511 D000-D255: Trunk No.
<u>END</u>			

To use the PZ-8PFT card: No programming is required.

#### HARDWARE REQUIRED

PN-AUC card and PN-4COT card, or PZ-8PFT card.

Make the following connections between the cards. For details, refer to the MDF cross connection for the PFT in the INSTALLATION PROCEDURE MANUAL.



CHAPTER 2 Page 338 Revision 2.0 ND-45670 (E)

<u>START</u>	DESCRIPTION			DATA
CM12	Assign the Class of Service for Priority Call to the required stations.		•	CM12 YY = 02 (Service Rest. Class A $00-15 \blacktriangleleft$ )
CM15			• • (1) (2)	CM15 YY = 17 (Priority Call 0) YY = 18 (Priority Call 1) 00-15 (Service Restriction Class A as- signed by CM12 YY = 02) 1◀ : Allowed
CM20	Assign the access code for Priority Calls 0 and 1 respectively.		• (1) (2)	Y = 0-3 (Numbering Plan Group 0-3) X-XXX (Access Code) 088: Priority Call 0 089: Priority Call 1
CM08	Specify the destination for Priority Calls 0 and 1.	[ [	<ol> <li>(1)</li> <li>(2)</li> <li>(1)</li> <li>(2)</li> </ol>	<ul> <li>250 (For Priority Call 0)</li> <li>0: Same Station as Off Hook Alarm</li> <li>1 ◀ : SN610 ATTCON</li> <li>251 (For Priority Call 1)</li> <li>0: Same station as Off-Hook Alarm</li> <li>1 ◀ : SN610 ATTCON</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 ATTCON.		• (1) (2)	YY = 00 ATTCON No. + , + Key No. F6054: Priority Call 0 F6055: Priority Call 1
CM51	If CM08-250/251 is set to "0", assign the des- tination of Priority Calls 0 and 1 to the desired station.		• (1) (2)	YY = 12 Tenant No. (00-63) X-XXXX (Station No.)
<u>END</u>				
# PRIVACY/PRIVACY RELEASE

<u>START</u>	DESCRIPTION		DATA
CM12 CM15	Assign the Class of Service for Privacy Re- lease to the required stations.	• (1) (2)	CM12YY = 02 X-XXXX: Primary Extension No. $XX \frac{XX}{*a}$ *a: Service Rest. Class B (00-15 $\triangleleft$ )
END		• (1) (2)	CM15 YY = 63 00-15 (Service Rest. Class B assigned by CM12 YY = 02) 1◀ : Allowed

# **PRIVATE LINES**

# PROGRAMMING

When providing Private Lines for a single line or Multiline Terminal, do the following TRUNK-DIRECT APPEAR-ANCES programming.

<u>START</u>	DESCRIPTION	DATA
CM12	Assign the trunks to be seized on a per-station basis.	<ul> <li>YY = 16</li> <li>(1) X-XXXX: Station number</li> <li>(2) D000-D255: Trunk number</li> </ul>
CM35	Specify the designated seizure of trunks on a per-trunk route basis.	<ul> <li>YY = 98</li> <li>(1) Trunk route number (00-63)</li> <li>(2) 0/1 ◀ : Private Lines/No Private Lines</li> </ul>
CM42	Specify the number of times to hunt through the trunks within the trunk route.	<ul> <li>(1) 08</li> <li>(2) 01-16: One time-16 times</li> <li>If data is not set, the default setting (none) is 00 (no seizure when the designated trunk is busy). To assign default setting, assign "ccc".</li> </ul>

<u>START</u>	DESCRIPTION	DATA
CM10	<ul> <li>Assign the Multiline Terminal Number to the associated LEN.</li> <li>Note: When PN-4DLC card is accommodated, the Multiline Terminal Number must be assigned for the all lines (4 lines) of the card.</li> </ul>	<ol> <li>(1) 0000-0511 (LEN No.)</li> <li>(2) FX-FXXXX: Multiline Terminal No.X- XXXX represents Primary Exten- sion No.</li> </ol>
CM12	Assign the Class of Service for the accommo- dation of Single Line Telephone to Multiline Terminal, if required (Assignment for Single Line Telephone only).	<ul> <li>YY = 05</li> <li>(1) X-XXXX: Station No.</li> <li>(2) 0: Accommodated</li> </ul>
CM90	Assign the station numbers, trunk numbers or service feature access keys on each Multiline Terminal, if required. Assign the Dedicated Feature Keys as follows. $\frac{\overline{\text{Key No.}} 2 \text{nd Data}}{17 \text{ F1015 (RECALL)}}$ $\frac{17 \text{ F1015 (RECALL)}}{18 \text{ F1011 (FNC)}}$ $\frac{19 \text{ F1012 (CNF)}}{20 \text{ F1000 (LNR/SPD)}}$ $\frac{21 \text{ F1016 (SPKR)}}{22 \text{ F4000 (ANS)}}$ $\frac{23 \text{ F1004 (TRF)}}{24 \text{ F1010 (HOLD)}}$	<ul> <li>YY = 00</li> <li>(1) Primary Extension No. + + + Key No. (01-16)</li> <li>(2) Refer to Command Manual (CM90)</li> <li>YY = 00</li> <li>(1) Primary Extension No. + + + Key No. (17-24)</li> <li>(2) See left table</li> </ul>
A	No data setting is required for the ◀ ► keys. Specify whether call termination is indicated on the Call Indicator Lamp or not on each line key.	<ul> <li>YY = 05</li> <li>(1) Primary Extension No.+ , + Key No. (01-16)</li> <li>(2) 0: Not to be indicated 1 ◀ : To be indicated</li> </ul>

DESCRIPTION	DATA
Assign the Outgoing Call Preset/Answer Pre- set functions to Multiline Terminal, if re- quired.	<ul> <li>(1) 145</li> <li>(2) 0: To be provided</li> <li>1 ◀ : Not to be provided</li> </ul>
Assign whether the answer key rings on TAS and Pooled Line or not.	<ul> <li>(1) 116</li> <li>(2) 0: Available</li> <li>1◀ : Not Available</li> </ul>
Specify the Delayed Ringing timing.	<ul> <li>Y = 1</li> <li>(1) 09</li> <li>(2) 01-20: 2-40 sec. in 2 sec. increments If no data is set, the default setting is 10 seconds.</li> </ul>
Provide Trunk-Direct Appearances to the trunk number.	<ul> <li>YY = 18</li> <li>(1) Trunk No. (000-255)</li> <li>(2) 0: To be provided.</li> </ul>
	DESCRIPTION Assign the Outgoing Call Preset/Answer Pre- set functions to Multiline Terminal, if re- quired. Assign whether the answer key rings on TAS and Pooled Line or not. Specify the Delayed Ringing timing. Provide Trunk-Direct Appearances to the trunk number.

I END

To provide the key number 30 through 37 of Multiline Terminal (ETJ-24DS-1/DTP-32-1/DTP-32D-1), do the following programming.

<u>START</u>	DESCRIPTION	DATA
CM10	Assign the dummy terminal number (Add- On-Module number) for the key number 30 through 37.	<ol> <li>(1) 0000-0511 (LEN No.)</li> <li>(2) EC00-EC31: Add-On Module No. For PIM0/1: EC00-EC07 For PIM2/3: EC08-EC15</li> </ol>
	<b>Note:</b> When the data assignment of both Add-On Module and DSS Console are required, do not use the same	For PIM4/5: EC16-EC23 For PIM6/7: EC24-EC31
	number (the last two digits of the da- ta).	<b>Note:</b> <i>EC00-EC31 may be assigned in any PIM for 1900 series software.</i>
CM98	Assign the Multiline Terminal associated with the dummy terminal (Add-On Module)	<ul> <li>Y=0</li> <li>(1) 00-31: Add-On Module No. (Last two</li> </ul>
	the duminy terminal (Add-On Module).	digits of EC00-EC31 assigned by CM10)
	<b>Note:</b> <i>This data must be assigned before the data assignment of CM90.</i>	(2) X-XXXX: Primary Extension No.
	Assign station numbers, trunk numbers, or	• YY=00
CM90	service feature access keys to key numbers 30 through 37.	(1) Primary Extension No. + + Add-On Module Key No. (30-37)
	C	(2) Refer to Command Manual (CM90)
	Specify whether to indicate call termination	• YY=05
	on the Call Indicator Lamp or on each line	(1) Primary Extension No. $+$ , + key No.
	кеу.	(2) 0 : Not indicated $1 \blacktriangleleft$ : Indicated
 <u>END</u>		

To select the language indicated on the LCD of the Multiline Terminal, set the following data.

<u>START</u>	DESCRIPTION	DATA
CM04	Select language to display on LCD.	<ul> <li>YY = 00</li> <li>(1) 00</li> <li>(2) 1 : English</li> <li>2 : French</li> <li>7 ◀ : Depends on nation code</li> </ul>
I END		

To Accommodate the Series E Multiline Terminal with Series III mode or to accommodate the Elite Terminal, do the following programming.

<u>START</u>	DESCRIPTION	DATA
CM12	Specify the type of Multiline Terminal accommodated in each DLC card.	<ul> <li>YY = 17</li> <li>(1) XXXX: Primary Extension No.</li> <li>(2) 0 ◀ : Series E (Series III mode) 1 : Elite</li> </ul>
	Note 1: For PN-4DLCD or 4DLCA cards, assign this data to the first LEN (Lev- el 0) of each 4 posts DLC card. For PN-8DLCD cards, assign this data to first (Level 0) and fifth (Level 4) LENS of each 8 post card.	3 : Series E (Series E mode), Series III, E-pro
	<b>Note 2:</b> For 4-wire type DLC card (2DLCC, 4DLCF), this data is not required.	
END	<b>Note 3:</b> The same type of Multiline Terminals must be accommodated in the same DLC card. For detail conditions, re- fer to the CM12 YY = 17 in the Com- mand Manual.	

#### HARDWARE REQUIRED

## PROPRIETARY MULTILINE TERMINAL: AUTOMATIC IDLE RETURN

#### PROGRAMMING

<u>START</u>	DESCRIPTION	DATA	
CM08	Provide the system with this feature.	<ul> <li>(1) 172</li> <li>(2) 1</li></ul>	
END			

#### HARDWARE REQUIRED

## PROGRAMMING

<u>START</u>	DESCRIPTION		DATA
CM08	Specify station number and name display when an incoming call begins ringing.	(1) (2)	<ul> <li>335</li> <li>0 : Station number and name display only when incoming call terminates to prime line.</li> <li>1 ◄ : Station number and name display when incoming call terminates to prime line or primary extension.</li> </ul>
END			

#### HARDWARE REQUIRED

## PROGRAMMING

START	DESCRIPTION	DATA
CM12		<ul> <li>YY = 07:Service Restriction Class C</li> <li>(1) Station X-XXXX</li> <li>(2) Restriction Class 00-15</li> </ul>
CM15	Disable Dial Tone Activation when pressing One-Touch Spd. key while terminal is idle.	<ul> <li>YY = 87:One-Touch activates DT when Terminal Idle</li> <li>(1) Station Class C</li> <li>(2) 0 : Remain Idle</li> <li>1 ◀ : Off Hook and Dial Tone</li> </ul>
CM90	<ul> <li>Assign and delete feature keys.</li> <li>Note: Use Key Number 20 for Redial key. Use Key Number 23 for Flash key.</li> </ul>	<ul> <li>YY = 00:Key Data</li> <li>(1) X-XXXX: Primary Extension No. + , + Key #.</li> <li>(2) F1100 - F1199: Station Speed Dial</li> </ul>
	Prime line should be assigned to Key 9. Digital Single Line is a D <sup>term</sup> and can use any key assigned in CM90. However, the Digital Single Line Terminal has no LEDs, speaker, or microphone. Assign any features that can be used without these devices.	<ul> <li>F1012: <u>CNF</u> Conference key This key is required to program speed dial keys.</li> <li>F0069: Last number redial (Key #20)</li> <li>F1004: <u>TRF</u> Transfer key (Key #23)</li> </ul>
CM93	Assign prime line to primary extension.	<ol> <li>Primary Extension #: X-XXXX</li> <li>Prime Line: X-XXXX</li> </ol>

#### HARDWARE REQUIRED

## PROPRIETARY MULTILINE TERMINAL: DYNAMIC DIAL PAD (1900 Series Enhancement)

#### PROGRAMMING

Do the following programming to make an outgoing call. Press any key on the dial pad of a Multiline Terminal, without pressing a Speaker key or going off hook.

START	DESCRIPTION	DATA
CM93	Assign a Prime line to the Multiline Terminal.	<ol> <li>X-XXXX: Primary Extension No.</li> <li>X-XXXX: Station No.</li> </ol>
CM12	Assign Service Restriction Class A to each station.	<ul> <li>YY=02</li> <li>(1) X-XXXX: Station No.</li> <li>(2) XX: Service Restriction Class A (00-15 ◀ )</li> </ul>
CM15	Assign this service to Service Restriction Class A assigned by CM12 YY=02.	<ul> <li>YYY=120</li> <li>(1) 00-15: Service Restriction Class A</li> <li>(2) 0: Allowed</li> </ul>

This page is for your notes.

CHAPTER 2 Page 348-2 Revision 2.1 ND-45670 (E) Addendum-001 JULY, 1998

## **PROPRIETARY MULTILINE TERMINAL: MULTIPLE LINE OPERATION**

#### PROGRAMMING

<u>START</u>	DESCRIPTION	DATA
CM90	Specify whether to enable ringing on call ter- mination to flexible line keys and feature keys.	<ul> <li>YY = 01</li> <li>(1) Primary Extension No. + , + Key No.</li> <li>(2) 0/1 ◀ : Disabled/Enabled</li> </ul>
<u>END</u>		

#### HARDWARE REQUIRED

## PROPRIETARY MULTILINE TERMINAL: MUTE KEY (1900 Series Enhancement)

#### PROGRAMMING

<u>START</u>	DESCRIPTION		DATA
CM90 	Assign the MUTE Key to the Multiline Terminal.	• (1) (2)	YY=00 Primary Extension No. + + Key No. F5013 (MUTE)

ND-45670 (E) Addendum-001 JULY, 1998 This page is for your notes.

ND-45670 (E) Addendum-001 JULY, 1998 CHAPTER 2 Page 349-2 Revision 2.1

## PROPRIETARY MULTILINE TERMINAL: OFF-HOOK VOICE ANNOUNCEMENT (1200 Series Enhancement)

<u>START</u>	DESCRIPTION	DATA		
CM11	Assign the Virtual-Line station No. for Off- Hook Voice Announcement.	<ol> <li>(1) 0000-0255: Virtual LEN</li> <li>(2) CX-CXXXX: Virtual-Line Station No. for Off-Hook Voice Announcement</li> </ol>		
		<b>Note:</b> X-XXXX represents Primary Extension No. of Multiline Terminal.		
CM90	Assign the Virtual-line station for Off-Hook Voice Announcement to the required Multi- line Terminal.	<ul> <li>YY=00</li> <li>(1) Primary Extension No. (1-4 digits) + , + Key No. (01-16)</li> <li>(2) CX-CXXXX: Virtual-Line Station No. for Off-Hook Voice Announcement assigned by CM11.</li> </ul>		
CM13	Provide the Off-Hook Voice Announcement to the required Multiline Terminal.	<ul> <li>YY=28</li> <li>(1) X-XXXX: Station No. (1-4 digits)</li> <li>(2) 0: To be provided <ol> <li>1◀ : Not to be provided</li> </ol> </li> </ul>		
CM08	Specify the Voice Call when calling a Multi- line Terminal set to Voice First from a Single- Line Telephone or a Multiline Terminal with- out LCD.	<ul> <li>(1) 270</li> <li>(2) 0: Not provided (Busy Tone)</li> <li>1 ◀ : To be provided</li> </ul>		
CM12 CM15	Specify the Voice Call when a called Multiline Terminal goes off-hook while being called via Off-Hook Voice Announcement.	<ul> <li>(1) 279</li> <li>(2) 0: Not to be provided (Ring Tone)</li> <li>1 ◀ : To be provided (Voice Call)</li> </ul>		
	Assign the Class of Service of Voice Call (called side) to the required Multiline Termi- nal.	<ul> <li>CM12 YY=02</li> <li>X-XXXX: Primary Extension No.</li> <li>XX XX *a</li> <li>*a: Service Restriction Class (B) (00-15t)</li> </ul>		
A		<ul> <li>CM15 YY=67</li> <li>(1) 00-15: Service Restriction Class (B) assigned by CM12 YY=02</li> <li>(2) 1 ◀ : Available</li> </ul>		

# PROPRIETARY MULTILINE TERMINAL: OFF-HOOK VOICE ANNOUNCEMENT (1200 Series Enhancement)

Α	DESCRIPTION	DATA		
СМ12 СМ15	Assign the Service Restriction Class of Voice Call Mike Off (called side) to the required Multiline Terminal.	<ul> <li>CM12 YY = 07</li> <li>(1) X-XXXX: Primary Extension No.</li> <li>(2) XX: Service Restriction Class C (00-15 ◀ )</li> </ul>		
	<b>Note:</b> This feature automatically turns the Microphone off at the called station.	<ul> <li>CM15 YY = 99</li> <li>(1) 00-15: Service Restriction Class C</li> <li>(2) 0 : Available 1 ◀ : Not Available</li> </ul>		
CM12 CM15	Assign Service Restriction Class of Answer Hold to the required Multiline Terminal.	<ul> <li>CM12 YY = 02</li> <li>(1) X-XXXX: Primary Extension No.</li> <li>(2) XXXX *a</li> <li>*a: Service Restriction Class B (00-15 ◀ )</li> </ul>		
		<ul> <li>CM15 YY = 72</li> <li>(1) 00-15: Service Restriction Class B</li> <li>(2) 0 : Allowed</li> </ul>		
CM20	Assign Voice Call/Ring Tone Programming access code.	<ul> <li>Y = 0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX: Access Code</li> <li>(2) A63</li> </ul>		
<u>END</u>				

#### HARDWARE REQUIRED

Multiline Terminal and DLC card APR or APA Unit

#### **PROPRIETARY MULTILINE TERMINAL: PRIME LINE PICKUP**

#### PROGRAMMING

<u>START</u>	DESCRIPTION	DATA
CM93	Assign station or trunk to desired Multiline Terminal Extension as Prime Line. It is rec- ommended that the Primary Extension be as- signed as the Prime Line.	<ol> <li>X-XXXX: Primary Extension No.</li> <li>X-XXXX: Station No. Note 1, Note 2 DXXX: Trunk No. D000-D255</li> </ol>
		Note 1: Primary Extension No. or Virtual Line No. can be assigned to the Prime Line. However, the data sta- tion and Single Line Telephone can- not be assigned to the Prime Line.
END		<b>Note 2:</b> By loading the Resident System Pro- gram, the Primary Extension Num- ber is assigned as Prime Line Number for all Multiline Terminals.

#### HARDWARE REQUIRED

#### PROGRAMMING

For internal call:

RECALL Key is initially assigned to all Multiline Terminals.

For internal call:

<u>START</u>	DESCRIPTION	DATA
CM35	Assign the data for hookflash signal sending to the route number assigned by CM30 $YY = 00$ .	<ul> <li>YY = 16</li> <li>(1) Trunk Route No. (00-63)</li> <li>(2) 1 ◀ : Sending</li> </ul>
CM90	Assign a Flash Over Trunk key to the required Multiline Terminal.	<ul> <li>YY = 00</li> <li>(1) Primary Extension No. + , + Key No.</li> <li>(2) F1009</li> </ul>
CM41	Specify duration of the hookflash signal to trunks.	<ul> <li>Y = 2</li> <li>17</li> <li>01-30: 128-1920 msec. in 64 msec. increments</li> </ul>
		If no data is set, default setting is 576-640 msec.
END		

# HARDWARE REQUIRED

<u>START</u>	DESCRIPTION	DATA
CM10	<ul> <li>Assign the PN-DK00 card to the required LEN.</li> <li>Note: The PN-DK00 card No. must be assigned to the first LEN (Level 0) and/or the third LEN (Level 2) of each LT slot.</li> </ul>	<ul> <li>(1) LEN: 0000-0511</li> <li>(2) E800-E831: PN-DK00 card No.</li> <li>For PIM0/1: E800-E807 For PIM2/3: E808-E815 For PIM4/5: E816-E823 For PIM6/7: E824-E831</li> </ul>
CM44	Assign the function of relay control via Multi- line Terminal to the PN-DK00.	<ul> <li>(1) X/(*a XX/*b)</li> <li>*a: Card No. (00-31) assigned by CM10, E800-E831</li> <li>*b: Circuit No. (0-3)</li> <li>(2) 15 00/*a *b</li> <li>*a: Relay Control Function Key</li> <li>*b: Relay Control (On/Off) Via Multiline Terminal</li> </ul>
CM90 END	Assign the Relay Control (ON/OFF) key on the required Multiline Terminal.	<ul> <li>YY = 00</li> <li>(1) Primary Extension No. (1-4 digits) + , + Key No.</li> <li>(2) F7 X XX *a *b</li> <li>*a: Card No. (00-31) assigned by CM10 E800-E831</li> <li>*b: Circuit No. (0-3) assigned by CM44</li> </ul>

#### HARDWARE REQUIRED

- PN-DK00 card
- External equipment provided locally
- Multiline Terminal and DLC card
- SN610 ATTCON and DLC card

To accommodate the external equipment, make the following connection at the MDF. For details, refer to the MDF cross connection for an External Equipment in the INSTALLATION PROCEDURE MANUAL.



## PROPRIETARY MULTILINE TERMINAL: RING FREQUENCY CONTROL

## PROGRAMMING

To control the ring frequency by system data programming;

<u>START</u>	DESCRIPTION	DATA			
CM08	Enable the frequency control by system data programming.	<ul> <li>(1) 390</li> <li>(2) 1 ◀ : By System Data Programming</li> </ul>			
CM12	Specify the ring frequency of each Multiline Terminal for internal calls.	<ul> <li>CM12 YY = 07 [Service Restriction Class (C) (00-15 ◀ )]</li> <li>CM15 YY = 83, 84</li> </ul>			
CM15 -	YY     RING FREQUENCY       83     84	(1) 00-15 (Service Rest. Class (C) assigned by CM12 $YY = 07$ )			
	0         0         600 + 700 [Hz]           1         0         1024 + 1285 [Hz] x 16 [Hz]           0         1         480 + 606 [Hz] x 8 [Hz]           1         1         480 + 606 [Hz] x 16 [Hz]	(2) $0/1 \blacktriangleleft$ : See left column			
CM35	Specify the ring frequency for incoming calls on each trunk route.	<ul> <li>YY = 34</li> <li>(1) 00-63 (Trunk Route No.)</li> <li>(2) 0: 1204 + 1285 [Hz] × 16 [Hz] 1: 480 + 606 [Hz] × 8 [Hz] 2: 600 + 700 [Hz] 3 ◀ : 480 + 606 [Hz] × 16 [Hz]</li> </ul>			
END					

#### **PROPRIETARY MULTILINE TERMINAL: RING FREQUENCY CONTROL**

To control the ring frequency at the Multiline Terminal:



#### HARDWARE REQUIRED

<b>START</b>	DESCRIPTION		DATA
CM12	Specify whether Soft Key feature is avail- able to each Multiline Terminal.	• (1) (2)	YY=22 X-XXXX: Primary Extension No. 0 : Available 1 ≤ : Not available
	Assign Soft Key Pattern to each Multiline Terminal.	• (1) (2)	YY=23 X-XXXX: Primary Extension No. 0 : Soft Key Pattern No. 0 1 : Soft Key Pattern No. 1 2 : Soft Key Pattern No. 2 3 ◀ : Soft Key Pattern No. 3
A			

# PROPRIETARY MULTILINE TERMINAL: SOFT KEY

<ul> <li>CM9A</li> <li>Assign the function of each Soft Key on each status of the Multiline Terminal.</li> <li>To the 2nd data of this command, the 2nd data (F0XXX, F1XXX, F50XX) of CM90 should be assigned except for Scroll Key data (F5002).</li> <li>The LED shows a maximum of 4 Soft Keys at once. If assigning more than 4 Soft Keys on one status, it is necessary to assign Scroll key at every 4 keys (on 1st through 4th display).</li> <li>Note 1: Scroll key nust be assigned as a key for each active display.</li> <li>Note 2: Help key is only available in Pattern No. 3 the initial Soft Key data for NEAX Mail AD-8 live recording is assigned. See the following section.</li> <li>Note 4: Pattern No. 3 is fixed. If Pattern No. 3 is changed only way to reset to default is to clear all data in PBX and load the Resident System Program.</li> <li>YY=00-03 (Soft Key Pattern No. 0-3 signed by CM12 YY=23)</li> <li>XX XX Setting Cholding static trunk)</li> <li>During speaking (Holding no call)</li> <li>Of: When called party is busy (Holding no call)</li> <li>Of: When called party is busy (Holding station/trunk)</li> <li>During speaking (Holding station/trunk)</li></ul>	A	DESCRIPTION	DATA
	A CM9A	<ul> <li>DESCRIPTION</li> <li>Assign the function of each Soft Key on each status of the Multiline Terminal.</li> <li>To the 2nd data of this command, the 2nd data (FOXXX, F1XXX, F5OXX) of CM90 should be assigned except for Scroll Key data (F5002).</li> <li>The LED shows a maximum of 4 Soft Keys at once. If assigning more than 4 Soft Keys on one status, it is necessary to assign Scroll key at every 4 keys (on 1st through 4th display).</li> <li>Note 1: Scroll key must be assigned as a key for each active display.</li> <li>Note 2: Help key is only available in Pattern No. 3.</li> <li>Note 3: For the Pattern No. 3, the initial Soft Key data for NEAX Mail AD-8 live recording is assigned. See the following section.</li> <li>Note 4: Pattern No. 3 is fixed. If Pattern No. 3 is changed, only way to reset to default is to clear all data in PBX and load the Resident System Program.</li> </ul>	<ul> <li>YY=00-03 (Soft Key Pattern No. 0-3 assigned by CM12 YY=23)</li> <li>(1) XX XX *a *b</li> <li>*a: Status Number 00-15 00: Idle state 01: During dialing (Holding no call) 02: During dialing (Holding no call) 03: During calling (Holding no call) 04: During calling (Holding no call) 04: During calling (Holding station/ trunk)</li> <li>05: Being called 06: When called party is busy (Holding no call)</li> <li>07: When called party is busy (Holding station/trunk)</li> <li>08: When called party is setting DND</li> <li>09: Trunk busy</li> <li>10: During speaking (Holding no call)</li> <li>11: During speaking (Holding sta- tion/trunk)</li> <li>12: During live recording/after live recording to NEAX Mail AD-8 Note 3</li> <li>13-15: Not used</li> <li>*b: Soft Key No. 00-15</li> <li>00-03: Indicated on 1st display 04-07: Indicated on 3rd display 12-15: Indicated on 4th display</li> <li>(2) F5002 : Scroll key to change Soft Key Indication</li> <li>XXXXX: Setting of each function (Same as "F0XXX, F1XXX, F50XX" of CM90)</li> </ul>
<ul> <li>Assign the Characters indicated on each status of the Multiline Terminal, corresponding to the Soft Key function assigned by CM9A YY=00-03.</li> <li><u>END</u></li> <li>YY=10-13 (Soft Key Pattern No. 0-3 signed by CM12 YY=23)</li> <li>Same as YY=00-03</li> <li>Characters (Max. 6 characters) <i>See the following page.</i></li> </ul>	END	Assign the Characters indicated on each status of the Multiline Terminal, corresponding to the Soft Key function assigned by CM9A YY=00-03.	<ul> <li>YY=10-13 (Soft Key Pattern No. 0-3 assigned by CM12 YY=23)</li> <li>(1) Same as YY=00-03</li> <li>(2) Characters (Max. 6 characters) See the following page.</li> </ul>

ND-45670 (E) Addendum-002 JANUARY, 1999 CHAPTER 2 Page 359 Revision 2.2

## PROPRIETARY MULTILINE TERMINAL: SOFT KEY

## NAME ASSIGNMENT

Character Code Table

	2	3	4	5	6	7
0		0	@	Р	\	р
1	!	1	А	Q	а	q
2	,,	2	В	R	b	r
3	#	3	С	S	с	S
4	\$	4	D	Т	d	t
5	%	5	Е	U	e	u
6	&	6	F	V	f	v
7	,	7	G	W	g	W
8	(	8	Н	Х	h	Х
9	)	9	Ι	Y	i	У
Α	*	:	J	Ζ	j	Z
В	+	;	K	[	k	{
С	,	<	L	¥	1	
D	-	=	М	]	m	}
E	•	>	N	^	n	$\rightarrow$
F	/	?	0	_	0	$\leftarrow$

ND-45670 (E) Addendum-002 JANUARY, 1999

#### PROPRIETARY MULTILINE TERMINAL: SOFT KEY

To provide the Soft Keys for NEAX Mail AD-8 live recording, assign the following data. (1900 Series Release 2 Enhancement)

<u>START</u>	DESCRIPTION				DATA
CM90	Provide the Record key on the feature key of the Muliline Terminal.		• (1) (2)	YY=00 Primary Extension No. + , + Key No. (01-16) F1091 (Record)	
CM9A	Assign the function of each Soft Key for NEAX Mail AD-8 live recording.Note:For the Pattern No. 3, the initial Soft Key data for NEAX Mail AD-8 live recording is assigned as follows.CM9A YY=03CM9A YY 12		• (1)	YY=00-03 (Soft Key Pattern No. 0-3 as- signed by CM12 YY=23) 12 XX Soft Key No. 00-15 00-03: Indicated on 1st display 04-07: Indicated on 2nd display 08-11: Indicated on 3rd display 12-15: Indicated on 4th display	
			CM9A	(2)	F1092: Pause F1093: Re-record
	1st Data	2nd Data	Indication		F1094: End
	1200	F1096 (Address)	Addrs		F1095: Erase F1096: Address
	1201	F1092 (Pause)	Pause		F1097: Urgent Page
	1202	F1094 (End)	End	•	VV-10 12 (Soft Koy Pottorn No. 0.2 as
	1203	F5002 (Scroll)	>>>>	•	signed by CM12 YY=23)
	1204	F1093 (Re-record)	ReRec	(1)	Same as YY=00-03
	1205	F1095 (Erase)	Erase	(2)	Characters (Max. 6 characters)
	1206	F1017 (MIC)	MIC		See previous page.
	1207	F5002 (Scroll)	>>>>		
	1208	F1097 (Urgent Page)	Urgnt		
	1209	NONE			
	1210	NONE			
	1211	F5002 (Scroll)	>>>>		

#### <u>END</u>

#### HARDWARE REQUIRED

Multiline Terminal with Soft Keys (DTP-8D-1, DTP-16D-1, DTP-32D-1) and DLC card

ND-45670 (E) Addendum-002 JANUARY, 1999 CHAPTER 2 Page 359-2 Revision 2.2

# REMOTE HOLD (1900 Series Release 2 Enhancement)

<u>START</u>	DESCRIPTION	DATA		
CM12	Assign Service Restriction Class (A) to each station.	<ul> <li>YY=02</li> <li>(1) X-XXXX: Station No.</li> <li>(2) XX: Service Restriction Class (A) (00-15 ◀ )</li> </ul>		
CM15	Assign this service to Service Restriction Class (A) assigned by CM12 YY=02.	<ul> <li>YYY=124</li> <li>(1) XX: Service Restriction Class (A) assigned by CM12 YY=02.</li> <li>(2) 0: Allowed</li> </ul>		
CM41	Specify the recall timing for Remote Hold.	<ul> <li>Y=0</li> <li>(1) 06</li> <li>(2) 01-98: 4-392 sec. in 4 sec. increments 99: Recall is not performed</li> <li>If no data is set, the default setting is 236-240 seconds.</li> </ul>		
CM90 END	Assign a Hold key to the Multiline Terminal.	<ul> <li>YY=00</li> <li>(1) Primary Extension No. + + + Key No.</li> <li>(2) F1010</li> </ul>		

This page is for your notes.

ND-45670 (E) Addendum-002 JANUARY, 1999 CHAPTER 2 Page 359-4 Revision 2.2

# **RESIDENT SYSTEM PROGRAM**

#### PROGRAMMING

No programming is required. (For the details of programmed system data, refer to the Command Manual.)

## **RETURN MESSAGE SCHEDULE DISPLAY**

#### PROGRAMMING

<u>START</u>	DESCRIPTION	DATA		
CM12 CM15	Assign the Class of Service for setting a Re- turn Message Schedule.	• (1) (2)	CM12 YY = 02 X-XXXX (Station No.) $\frac{XX}{*a}$ *a: Service Restriction Class A (00- 15 $\triangleleft$ )	
		• (1) (2)	CM15 YY = 19 Service Restriction Class A (00-15) as- signed by CM12 YY = 02 $1 \blacktriangleleft$ : Allowed	
CM08	Assign whether the call to a station, set for Re- turn Message Schedule Display, gets ringing or Reorder Tone.	(1) (2)	<ul> <li>334</li> <li>0: Available (Ringing)</li> <li>1 ◀ : Not Available (ROT Connection)</li> </ul>	
CM20	Assign an access code for Return Message Schedule set and cancel, respectively.	• (1) (2)	<ul> <li>Y = 0-3 (Number Plan Group 0-3)</li> <li>X-XXX: Access Code (#8)</li> <li>A54: Return Message Schedule Display Set</li> <li>023: DND and/or Return Message Schedule Display Cancel</li> </ul>	
<u>END</u>				

#### HARDWARE REQUIRED

ETJ-8-1/ETJ-16DC-1/ETJ-16DD-1/ETJ-24DS-1 and PN-2DLCB/PN-4DLCA card.

# **RINGING LINE PICKUP**

#### PROGRAMMING

<u>START</u>	DESCRIPTION	DATA		
CM12 -	Assign the Class of Service for Ringing-Line Pickup.	<ul> <li>CM12 YY = 07</li> <li>(1) X-XXXX (Primary Extension)</li> <li>(2) 00-15◀ (Service Restriction Class C)</li> </ul>		
		<ul> <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> <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

ETJ-8-1/ETJ-16DC-1/ETJ-16DD-1/ETJ-24DS-1 and PN-2DLCB/PN-4DLCA card.

<u>START</u>	DESCRIPTION	DATA
CM20	Assign the access code to Route Advance Block 00-31.	<ul> <li>Y = 0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX (Route Advance Access Code)</li> <li>(2) 200: Route Advance Block 00 <ul> <li> </li> <li> </li> <li>231: Route Advance Block 31</li> </ul> </li> </ul>
CM22	Specify the alternative routes with the order of priority to be seized. Up to seven alternative routes can be set by using two Route Advance Blocks, as shown below. Route Advance Block 00 Route Advance Block 01 Route Advance Discrete Advance Discrete Advance Block 01 Route Advance Discrete Advance Discrete Advance Discrete Advance Block 01 Route Advance Discrete Advance Discr	<ul> <li>YY = 00-31 (Route Advance Block assigned by CM20, 200-231)</li> <li>(1) 0-3 (Order of Priority)         <ul> <li>0: 1st</li> <li>1: 2nd</li> <li>2: 3rd</li> <li>3: 4th</li> </ul> </li> <li>(2) XXX (Trunk Routes or Route Advance *a Blocks)         <ul> <li>*a: 100-163: Trunk Route (00-63)</li> <li>200-231: Route Advance Block (00-31)</li> </ul> </li> </ul>

# SAVE AND REPEAT

#### PROGRAMMING

<u>START</u>	DESCRIPTION			DATA	
СМ90	Assign tiline T	the SAVE & REPEAT key to the Mul- erminal.	• (1) (2)	YY = 00 Primary Extension No. + , + Key No. F1001, F1013, F1014	
	Note:	Up to three Save and Repeat keys can be assigned per Multiline Terminal			
		be assigned per manune terminal.			
END					

#### HARDWARE REQUIRED

ETJ-8-1/ETJ-16DC-1/ETJ-16DD-1/ETJ-24DS-1 and PN-2DLCB/PN-4DLCA card.

# SECURITY ALARM

<u>START</u>	DESCRIPTION		DATA	
CM12	Assign the Hot Line to the Station connected to the contact.	• (1) (2)	YY = 03 X-XXXX (Station No.) 04: Hot Line	
CM52	Assign the SN610 ATTCON as the Hot Line destination of the Station.	• (1) (2) (1) (2)	YY = 00-99 (Hot Line Pair No.) 0: Calling Side X-XXXX (Station No. associated with the contact closure.) 1: Called Side E00X *a	
END			*a: SN610 ATTCON No.0-7 assigned by CM10.	

## SIX/TEN-PARTY CONFERENCE

# PROGRAMMING

To use this feature by dialing the feature access code:

<u>START</u>	DESCRIPTION	DATA
CM10	Assign the card number of the Conference trunk (CFT card) to the required LENs.	<ol> <li>(1) LEN: 0000-0511</li> <li>(2) ED00-ED03: CFT card No.</li> </ol>
	<b>Note:</b> The CFT card number must be assigned to the first LEN (Level 0) of each LT slot.	
CM12 -	Assign the Service Restriction Class B for Conference leader.	<ul> <li>CM12 YY = 02 (Service Restriction Class A·B)</li> <li>(1) X-XXXX: Primary Extension No.</li> <li>(2) XX XX</li></ul>
		<ul> <li>CM15 YY = 69 (Conference Leader)</li> <li>(1) 00-15:Service Restriction Class B</li> <li>(2) 1</li></ul>
CM20	Assign the access codes for Conference.	<ul> <li>Y = 0-3</li> <li>X-XXXX: Access code</li> <li>A59:Seizing CFT card for 6-party A60: Seizing CFT card for 10-party A61: Connecting participant in CFT card</li> <li>A62: Forced release of participant</li> </ul>
END		

# SIX/TEN-PARTY CONFERENCE

To use this feature by using the feature keys assigned on the Multiline Terminal (1500 Series Enhancement):

<u>START</u>	DESCRIPTION	DATA	
CM90	Assign the feature key for Six/Ten-Party Con- ference, on the Multiline Terminal of the Con- ference leader.	<ul> <li>YY=00</li> <li>(1) Primary Extension No. + + + key No.</li> <li>(2) F0A85 :6-party conference F0A86 : 10-party conference</li> </ul>	
	Assign maximum of 6 or 10 Multiple Line keys on the Multiline Terminal of the Confer- ence leader.	<ul> <li>YY=00</li> <li>(1) Primary Extension No. + + + key No.</li> <li>(2) X-XXXX: Multiple Line No.</li> </ul>	
CM12	Specify the Multiple Line number set by CM90 to be accommodated to Multiline Ter- minal.	<ul> <li>YY=05</li> <li>(1) X-XXXX: Multiple Line No.</li> <li>(2) 0: Accommodated</li> </ul>	
CM10	Assign the card number of the Conference trunk (CFT card) to the required LENs.	<ol> <li>(1) LEN: 0000-0511</li> <li>(2) ED00-ED03: CFT card No.</li> </ol>	
	<b>Note:</b> The CFT card number must be assigned to the first LEN (Level 0) of each LT slot.		
CM12 CM15	Assign the Service Restriction Class B for Confernce leader.	<ul> <li>CM12 YY = 02 (Service Restriction Class A·B)</li> <li>(1) X-XXXX: Primary Extension No.</li> <li>(2) XX XX</li></ul>	
END		<ul> <li>CM15 YY = 69 (Conference Leader)</li> <li>(1) 00-15:Service Restriction Class B</li> <li>(2) 1 ◀ :Allowed</li> </ul>	
## SOFTWARE LINE APPEARANCE

<u>START</u>	DESCRIPTION	DATA
CM11	Assign a Software Line Appearance (Virtual- Line Station Number) to the required Virtual LEN.	<ol> <li>(1) Virtual LEN (0000-0255)</li> <li>(2) X-XXXX (Virtua1-Line Station No.)</li> </ol>
	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.	
CM12	Assign the Station Class data to each Virtual- Line Station No.	<ul> <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> <li>(1) X-XXXX (Virtual-Line Station No.)</li> <li>(2) Refer to: Class of Service Individual, Restriction From Outgoing Calls</li> </ul>
CM13	Assign the Station Class data to each Virtual- Line Station No.	<ul> <li>YY = 12</li> <li>(1) X-XXXX (Virtual-Line Station No.)</li> <li>(2) 1 ◀ : Ordinary Station</li> <li>YY = 13</li> <li>(1) X-XXXX (Virtual-Line Station No.)</li> <li>(2) 1 ◀ : Ordinary Station</li> </ul>
CM90 END	Assign the Virtual-Line Station to a Mul- tiline Terminal. One Virtual-Line Station may be assigned to several Multiline Ter- minals.	<ul> <li>YY = 00</li> <li>(1) Primary Extension No. + , + Key No.</li> <li>(2) X-XXXX (Virtual-Line Station No.)</li> </ul>

## PROGRAMMING

<u>START</u>	DESCRIPTION	DATA
CM08	Specify whether Stack Dial is to be activated for an internal call.	<ul> <li>(1) 178</li> <li>(2) 0: Not to be activated 1</li></ul>
CM12	Assign Service Restriction Class (C) to the re- quired stations.	<ul> <li>YY = 07</li> <li>(1) X-XXXX: Station number</li> <li>(2) 00-15</li></ul>
CM15	Specify the Multiline Terminal LCD display service.	<ul> <li>YY = 96</li> <li>(1) 00-15: Service Restriction Class (C) assigned by CM12 YY = 07</li> <li>(2) 0: Without LCD 1          <ul> <li>I</li></ul></li></ul>
CM90 END	Assign the Stack Dial/Redial/Speed Dialing key to each Multiline Terminal.	<ul> <li>YY = 00</li> <li>(1) Primary extension number + comma , + Key No.</li> <li>(2) F1000: Stack Dial/Redial/Speed Dialing</li> </ul>

To provide SN610 ATTCON with this feature (1200 Series Enhancement):

<u>START</u>	DESCRIPTION	DATA
CM90	Assign the Stack Dial/Redial key to each SN610 ATTCON.	<ul> <li>YY=00</li> <li>(1) ATTCON number + comma + Key No.</li> <li>(2) F6121: Stack Dial/Last Number Redial</li> </ul>
END		

#### STATION HUNTING: STATION HUNTING-CIRCULAR

#### PROGRAMMING



**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.* 

CHAPTER 2 Page 370 Revision 2.0 ND-45670 (E)

## STATION HUNTING: STATION HUNTING-TERMINAL

### PROGRAMMING

<u>START</u>	DESCRIPTION	DATA		
CM18	To set up each Station Hunting Group, assign the station numbers, one by one, as shown be- low. 1st Operation (1) Station A (2) Station B 2nd Operation (1) Station B (2) Station C	• (1) (2)	Y=0 X-XXXX (Station No. to be included in the Station Hunting Group) X-XXXX (Another Station No. to be included in the Same Hunting Group.)	
	Assign the Pilot Station to the required station number within the Hunting Group. For the Member Stations, set the data to "0".	• (1) (2)	Y = 1 X-XXXX (Station No.) 1: Pilot Station 0: Member Station	
CM08	Allow or restrict the ability to set Station Hunting-Terminal for a station with Do Not Disturb set.	(1) (2)	240 0: Allow 1 ◀ : Restrict	

**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: STATION HUNTING-SECRETARIAL

<u>START</u>	DESCRIPTION	DATA
CM18	<ul> <li>Assign a Secretary Station Serial Number to each Station Hunting Group.</li> <li>Note: A maximum of 31 extensions can be members of the Secretarial Hunt group.</li> </ul>	<ul> <li>Y=2         <ul> <li>X-XXXX: Pilot Station No. (Terminal)/ All Member Station numbers (Circular)</li> <li>00-30 (Secretary Station Serial No.)</li> </ul> </li> </ul>
CM19	Assign a station number to each Secretary Sta- tion Serial Number assigned by CM18Y=2.	<ul> <li>Y=0</li> <li>(1) 00-30 (Secretary Station Serial Number)</li> <li>(2) X-XXXX (Secretary Station No.)</li> </ul>
	Specify the Hunting capability of each Secre- tary Station.	<ul> <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>
	Assign the Secretary Station Numbers, one by one, in order of the desired Secretary Hunting, as shown below.	<ul> <li>Y=2</li> <li>(1) X-XXXX (Secretary Station No.)</li> <li>(2) X-XXXX (Another Secretary Station No. to be hunted to.)</li> </ul>
	1st Operation (1) Station A (2) Station B 2nd Operation (1) Station B (2) Station C	
CM08	Allow or restrict the ability to set Station Hunting-Secretarial for a station with Do Not Disturb set.	<ul> <li>(1) 240</li> <li>(2) 0: Allow</li> <li>1 ◀ : Restrict</li> </ul>
<u>END</u>		

## STATION MESSAGE DETAIL RECORDING (SMDR)

#### PROGRAMMING

Refer to the SMDR System Manual.

#### HARDWARE REQUIRED

Refer to the SMDR System Manual.

### PROGRAMMING

1. To provide an Extension Memory card (PN-ME00) for extending memory for Station Speed Dialing and One Touch keys:

<u>START</u>	DESCRIPTION		DATA	
CM05	Assign a slot number to the Extension Memory card. The slot number is given by the SENSE switch on the Extension Memory card.	(1) (2)	04-15 (Slot Number) 19 (PN-ME00 card)	
CMD000	Provide the system with the Extension Memory card.	(1) (2)	56 1: To be provided	
END				

2. To provide Single Line Telephone or Multiline Terminal:

START	DESCRIPTION	DATA			
CM08	Specify whether 1000-Slot Memory Block has 26 digits or 16 digits memory buffers.	<ul> <li>(1) 252</li> <li>(2) 0/1 ◄ : 26/16 digits</li> </ul>			
	Note: When CM08-252 is assigned as 0, only 3000 Station Speed Dialing numbers can be assigned, and 1000-Slot Memory Block No. 0-2 contains 26-digits memo- ry buffers. When CM08-252 is assigned as 1, 4500 Station Speed Dialing num- bers can be assigned, and 1000-Slot Memory Block No. 0-4 contains 16-dig- its memory buffers.	Note: Regardless of this data setting, a maximum of 26 digits number can be stored to Extension Memory card's memory area (1000-Slot Memory Block No. 8-F).			
CM12	Assign Service Restriction Class A to each station.	<ul> <li>YY = 02</li> <li>(1) X-XXXX (Station No.)</li> <li>(2) XX XX *a</li> <li>*a: Service Restriction Class A (00-15 ◀ )</li> </ul>			
CM15	Assign this service to Service Restriction Class A assigned by CM12 YY = $02$ .	<ul> <li>YY = 07</li> <li>(1) 00-15: Service Restriction Class A</li> <li>(2) 1 ◀ : Allowed</li> </ul>			
CM20	Assign access codes for Station Speed Dialing, Origination, Entry and Cancel, respectively.	<ul> <li>Y = 0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX: Access Code (#*, 7*, 7#)</li> <li>(2) 064: Origination 065: Entry 066: Cancel</li> </ul>			
CM08	Specify whether to provide Toll Restriction for an outgoing call by Station Speed Dialing.	<ul> <li>(1) 035</li> <li>(2) 0/1 ◀ : Not provided/Provided</li> </ul>			
A	Specify whether to set "#" dialing as paused data (1.5 sec.) or called number to C.O. line when DTMF station or Multiline Terminal dials "#" in the setting of Station Speed Dialing feature.	<ul> <li>(1) 168</li> <li>(2) 0/1 ◄ : Paused data (1.5 sec.)/ Called number to C.O. line</li> </ul>			







3. To provide Multiline Terminal with One Touch keys (ETJ-16DD-1/ETJ-24DS-1/DTP-32-1/DTP-32D-1):

<u>START</u>	DESCRIPTION	DATA
CM08	Specify whether 1000-Slot Memory Block has 26 digits or 16 digits memory buffers.	<ul> <li>(1) 252</li> <li>(2) 0/1</li></ul>
	Note 1: When CM08-252 is assigned as 0, only 3000 Station Speed Dialing numbers can be assigned, and 1000- Slot Memory Block No. 0-2 contains 26-digits memory buffers. When CM08-252 is assigned as 1, 4500 Station Speed Dialing numbers can be assigned and 1000-Slot Memory Block No. 0-4 contains 16-digits memory buffers.	Note 2: Regardless of this data setting, a maximum of 26 digits number can be stored to Extension Memory card's memory area (1000-Slot Memory Block No. 8-F).
CM12	Assign Service Restriction Class A to each station.	<ul> <li>YY = 02 (Service Restriction Class A·B)</li> <li>(1) X-XXXX (Station No.)</li> <li>(2) XX / *a</li> <li>*a: Service Restriction Class A</li> <li>(00-15 ◀ )</li> </ul>
CM15	Assign this service to Service Restriction Class A assigned by CM12 $YY = 02$ .	<ul> <li>YY = 07</li> <li>(1) 00-15: Service Restriction Class A</li> <li>(2) 1◀ : Allowed</li> </ul>
CM08	Specify whether to provide Toll Restriction for an outgoing call by Station Speed Dialing.	<ul> <li>(1) 035</li> <li>(2) 0/1</li></ul>
	Specify whether to set "#" dialing as paused data (1.5 sec.) or called number to C.O. line when Multiline Terminal dials "#" in the set- ting of Station Speed Dialing feature.	<ul> <li>(1) 168</li> <li>(2) 0/1          <ul> <li>i Paused data (1.5 sec.)/ Called number to C.O. line</li> </ul> </li> </ul>
A	Specify whether to set "*" dialing as program- mable pause by CM41-38 or dialed digit when DTMF station or Multiline Terminal dials "*" in the setting of Station Speed Dialing feature.	<ul> <li>(1) 171</li> <li>(2) 0/1  ✓ : Programmable pause by CM41- 38/Dialed digit</li> </ul>
$\sim$		



4. To provide the One Touch key to send "Hooking Signal + Called Number" to a Centrex, set the following data in addition to the programming (2). (1500 Series Enhancement)

<u>START</u>	DESCRIPTION	_	DATA
CM20	Assign the access code for sending of a Hook- ing signal to a Centrex. Maximum of two digits are available.	• (1) (2)	Y = 0-3 X-XX: Access code A58: Hooking signal to a Centrex
CM90	Assign a RECALL key on the Multiline Ter- minal. RECALL key is used to return to a former line.	• (1) (2)	YY = 00 Primary Extension No. + , + key No. F1015: RECALL
CM35	Provide Centrex trunk route with Centrex function.	• (1) (2)	YY = 86 Trunk Route No. (00-63) 0: Centrex
END			

5. To provide the One Touch key to send "Called Number + DTMF Signal" for such as VMS operation, set the following data in addition to the programming (2), when the called number includes a trunk access code. If the called number includes no trunk access code, this data is not required. (1500 Series Enhancement)

<u>START</u>	DESCRIPTION	_	DATA
CM08	Specify whether to set consecutive dialing "* #" as a delimiter between the called number and the DTMF signal.	(1) (2)	<ul> <li>448</li> <li>0 : *# (as it is)</li> <li>1 ◀ : Delimiter between called number and DTMF signal</li> </ul>

END

<u>START</u>		DESCRIPTION		_	DATA
CM08	Provide	e the system with the Step-Call feature.	Γ	(1) (2)	069 (For internal Call) 1 ◀ : Available
	Note:	This feature is mutually exclusive with the single digit feature access code.	Ľ	(1) (2)	<ul><li>163 (For Tie Line Incoming Call)</li><li>1 ◀ : Available</li></ul>
			Γ	(1) (2)	208 <b>Note</b> 1 ◀ : Not Available
END					

<u>START</u>	DESCRIPTION	DATA
CM13	Provide the Station connected to the peripher- al equipment with momentary reversal/open capability.	<ul> <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/open.	<ul> <li>Y = 1         <ul> <li>(1) 08</li> <li>(2) 01-10: 128-1280 msec. in 128 msec. increments</li> <li>If no data is set, the default setting is 896-1024 msec.</li> </ul> </li> </ul>
END		

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<u>START</u>	DESCRIPTION	DATA		
CM12	Assign Service Restriction Class A to each station.	• (1) (2)	YY = 02 X-XXXX (Station No.) $\frac{XX}{*a}XX$	
CM15	Assign this service to Service Restriction Class A assigned by CM12 YY = $02$ .	• (1)	<ul> <li>*a: Service Restriction Class (A) 00- 15 ◀</li> <li>YY = 06 (System Speed Dialing) XX (Service Rest. Class A assigned by CM12 XX = 02)</li> </ul>	
CM20	Assign the Access Code for System Speed Di-	•	1 ◀ : To be allowed $Y = 0-3 (Numbering Plan Group 0-3)$	
	aling.	(1) (2)	X-XXX: Access Code (##) 067 (System Speed Dialing) XX = 00	
СМ90	Assign an access key for System Speed Dial- ing to the D <sup>term</sup> s, as needed.	(1) (2)	<ul> <li>Primary Extension No. + , + key No.</li> <li>F0067: System Speed Dialing origination (For 300 numbers)</li> <li>F0068: System Speed Dialing origination (For 1000 numbers)</li> </ul>	
A				



To use the 1000 Slot Memory Block Number (0-3) for Station Speed Dialing as the Memory Block for System Speed Dialing, add the following programming.

<u>START</u>	DESCRIPTION	DATA		
CM08	Specify the 1000-Slot Memory Block Number 0-3.	$\begin{bmatrix} (1) & 112: 1000\text{-Slot Memory Block No.0} \\ (2) & 0/1 \blacktriangleleft : \text{Available/Not Available} \\ \hline (1) & 111: 1000\text{-Slot Memory Block No.1} \\ (2) & 0/1 \blacktriangleleft : \text{Available/Not Available} \\ \hline (1) & 176: 1000\text{-Slot Memory Block No.2} \\ (2) & 0/1 \blacktriangleleft : \text{Available/Not Available} \\ \hline (1) & 110: 1000\text{-Slot Memory Block No.3} \\ (2) & 0/1 \blacktriangleleft : \text{Available/Not Available} \\ \end{bmatrix}$		
	Specify whether 1000-Slot Memory Block has 26-digits or 16-digits memory buffers.	<ul> <li>(1) 252</li> <li>(2) 0/1  </li> <li>(26/16-digits</li> </ul>		
	Note: When CM08-252 is assigned as 0, only 3000 Station Speed Dialing numbers can be assigned, and 1000- Slot Memory Block No. 0-2 contains 26-digits memory buffers. When CM08-252 is assigned as 1, 4000 Station Speed Dialing numbers can be assigned, and 1000-Slot Memory Block No. 0-3 contains 16-digits memory buffers.			
CM20	Assign the Access Code for System Speed Di- aling.	<ul> <li>Y = 0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX (Access Code)</li> <li>(2) A52: 1000-Slot Memory Block No.0 A51: 1000-Slot Memory Block No.1 068: 1000-Slot Memory Block No.2 A50: 1000-Slot Memory Block No.3</li> </ul>		



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<u>START</u>	DESCRIPTION	DATA		
CM12	Assign a Tenant No. to each station.	<ul> <li>YY = 04</li> <li>(1) X-XXXX (Station No.)</li> <li>(2) 00 ◄ -63 (Tenant No.)</li> </ul>		
CM30	Assign a Tenant No. to each trunk.	<ul> <li>YY = 01</li> <li>(1) 000-255 (Trunk No.)</li> <li>(2) 00 ◀ -63 (Tenant No.)</li> </ul>		
CM29	Assign a Numbering Plan Group No. to each Tenant.	<ol> <li>(1) 00-63 (Tenant No.)</li> <li>(2) 710-713 (Numbering Plan Group 0-3)</li> </ol>		
CM20	<ul> <li>Assign the required access codes for each Numbering Plan Group. To provide a trunk route for each Tenant, assign Tenant Block 00- 23 to the desired Trunk Route access code.</li> <li>Note: Refer to the Command Manual for the Resident System Program.</li> </ul>	<ul> <li>Y = 0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX (Access Code) Note</li> <li>(2) 000-099 <ul> <li>801-811</li> <li>A00-A52</li> <li>100-163</li> <li>300-323 (Tenant Block 00-23)</li> </ul> </li> </ul>		
CM23	When Tenant Block 00-23 is assigned by CM20, assign a trunk route and Tenant No. to the Tenant Block.	<ul> <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>		

# **TENANT SERVICE**



END

## TIE LINE TANDEM SWITCHING

#### PROGRAMMING

<u>START</u>	DESCRIPTION	DATA
CM36	Specify the combination of Trunk Routes al- lowing the Tandem connection. The incoming trunk route must provide a release signal for the Tandem Connection. (See CM35 $YY = 05$ )	<ul> <li>(1) XX/*a XX/*b</li> <li>*a: 00-63 (Incoming Trunk Route)</li> <li>*b: 00-63 (Outgoing Trunk Route)</li> <li>(2) 0/1 ◀ : Allowed/Restricted</li> </ul>
<u>END</u>		

#### HARDWARE REQUIRED

Tie Line Trunk Card (PN-2ODT)

### PROGRAMMING

		DATA		
CM41	Specify the timer data for this feature. If no data is set, the following data is applied:	• (1) (2)	Y = 0 35 (Number of Times of Call Attempt) 01-07: Once-7 times	
	<ul> <li>Number of Call Attempts: 3 times</li> <li>Interval Time of Call Attempt: 120 sec 124 sec.</li> <li>Duration of Calling: 28 sec32 sec.</li> </ul>	(1) (2) (1) (2)	<ul> <li>36 (Interval time of Call Attempt)</li> <li>11-31: 44 -124 sec. in 4 sec. increments</li> <li>37 (Duration of Calling)</li> <li>05-31: 20-124 sec. in 4 sec. increments</li> </ul>	
CM90	Assign the Call Back feature to the required key on the Multiline Terminals, as required.	• (1) (2)	YY = 00 Primary Extension No. + + Key No. F0004	

#### HARDWARE REQUIRED

ETJ-8-1/ETJ-10DC-1/ETJ-16DD-1/ETJ-24DS-1 and PN-2DLCB/PN-4DLCA card.

## PROGRAMMING

For providing the internal Music Source for the MP card:

<u>START</u>	DESCRIPTION	DATA
CM12 CM15	Assign the class of service for Timed Reminder to required stations.	<ul> <li>CM12 YY = 02 [Service Restriction Class (A) (00- 15 ◀ )]</li> <li>CM15 YY = 13</li> <li>(1) Service Restriction Class (A) assigned by CM12 YY = 02 (00-15)</li> <li>(2) 1 ◀ : Allowed</li> </ul>
CM20	Assign the access code for Timed Reminder set and cancel.	<ul> <li>Y = 0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX: Access Code (5*, 5#)</li> <li>(2) 024: Set 025: Cancel</li> </ul>
CM48	Designate the type of music source to be con- nected when answering a Timed Reminder call.	<ul> <li>Y = 1</li> <li>(1) 00: Tone source of Timed Reminder</li> <li>(2) 1400: Hold Tone source on MP card</li> </ul>
CM90	Assign the Timed Reminder feature access key to the Multiline Terminals, if required.	<ul> <li>YY = 00</li> <li>(1) Primary Extension No. + , + Key No.</li> <li>(2) F0024</li> </ul>
CM08	Specify the timing for Timed Reminder Start.	<ol> <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 a Timed Reminder Call.	<ul> <li>Y = 0</li> <li>(1) 52:</li> <li>(2) 01-99: 4-396 sec. in 4-sec. increments If no data is set, the default setting is 60-64 seconds.</li> </ul>

Α

A	DESCRIPTION	DATA
CM42	Specify the number of Timed Reminder at- tempts before abandonment.	<ul> <li>(1) 03</li> <li>(2) 01-05: No. of attempted Timed Reminder Calls</li> </ul>
		If no data is set, the default setting is 05.
	Specify the maximum number of Timed Re-	(1) 04
	minder Calls that can be set at the same time.	<ul><li>(2) No. of Timed Reminder Calls.</li><li>If no data is set, the default setting is 10.</li></ul>
END		

For providing an External Announcement Machine via PN-4COT card:

<u>START</u>		DESCRIPTION	DATA	
CM12 CM15	Assign er to th	the class of service for Timed Remind- e required stations.	• (1) (2)	CM12 YY = 02 [Service Restriction Class (A) (00- $\checkmark$ 15)] CM15 YY = 13 Service Restriction Class (A) assigned by CM12 YY = 02 (00-15 $\checkmark$ ) 1 $\checkmark$ : Allowed
CM20	Assign set and	the access code for Timed Reminder cancel.	• (1) (2)	Y = 0-3 (Numbering Plan Group 0-3) X-XXX: Access Code (5*, 5#) 024: Set 025: Cancel
CM10	Assign to the r	the PN-4COT card and PN-DK00 card equired LENs.	(1) (2)	LEN (0000-0511) – DB00: Interface Card for External Tone Source
A	Note:	The PN-DK00 card No. must be as- signed to the first LEN (Level 0) and/ or the third LEN (Level 2) of each LT slot.	l	- E800-E831: PN-DK00 Card E800-E807: For PIM0/1 E808-E815: For PIM2/3 E816-E823: For PIM4/5 E824-E831: For PIM6/7

Α	DESCRIPTION	DATA
CM44	Assign the function of the PN-DK00 card.	<ol> <li>(1) XX X: PN-DK00 Circuit No.</li> <li>*a: Last two digits of data assigned by CM10 (00-31)</li> <li>*b: Circuit No. (0-3)</li> <li>(2) 0100: External Announcement Machine for Timed Reminder Calling</li> </ol>
CM90	Assign the Timed Reminder feature access key to the Multiline Terminals, if required.	<ul> <li>YY = 00</li> <li>(1) Primary Extension No. + , + Key No.</li> <li>(2) F0024</li> </ul>
CM08	Specify the timing for Timed Reminder start.	<ol> <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 a Timed Reminder call.	<ul> <li>Y = 0</li> <li>(1) 52:</li> <li>(2) 01-99: 4-396 sec. in 4-sec. increments If no data is set, the default setting is 60-64 seconds.</li> </ul>
CM42	Specify the number of Timed Reminder at- tempts before abandonment.	<ol> <li>(1) 03</li> <li>(2) 01-15: No. of attempted Timed Reminder calls</li> <li>If no data is set, the default setting is 05.</li> </ol>
ENID	Specify the maximum number of Timed Re- minder calls that can be set at the same time.	<ul> <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>
END		

To provide the internal announcement via Digital Announcement Trunk (PN-2DATA):

<u>START</u>	DESCRIPTION	DATA
CM10	<ul> <li>Assign a Digital Announcement Trunk Circuit No. to the required LEN.</li> <li>Note: The Digital Announcement Trunk Circuit No. must be assigned to the first LEN (Level 0) and/or the third LEN (Level 2) of each LT slot.</li> </ul>	<ul> <li>(1) LEN (0000-0511)</li> <li>(2) EB000-EB127: Digital Announcement Trunk Circuit No.</li> <li>For PIM0/1: EB000-EB031 For PIM2/3: EB032-EB063 For PIM4/5: EB064-EB095 For PIM6/7: EB096-EB127</li> </ul>
CM12 CM15	Assign the Class of Service for Timed Re- minder set and cancel.	<ul> <li>CM12YY = 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>
CM20	Assign the access code for Timed Reminder set and cancel.	<ul> <li>Y = 0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX: Access Code (5*, 5#)</li> <li>(2) 024: Set 025: Cancel</li> </ul>
CM48	Designate the type of music source to be con- nected when answering a Timed Reminder call.	<ul> <li>Y = 1</li> <li>(1) 00: Tone source of Timed Reminder</li> <li>(2) 0500: Digital Announcement Trunk</li> </ul>
CM49	Assign the function of the Digital Announce- ment Trunk.	<ul> <li>YY = 00</li> <li>(1) XXX: Digital Announcement Trunk Circuit No. (000-127) assigned by CM10.</li> <li>(2) OC XX **b</li> <li>*a: Answering Message on Timed Reminder</li> <li>*b: Message No. (00-63)</li> <li>YY = 08</li> <li>(1) XX: Tenant No. (00-63) assigned by CM10.</li> </ul>
A		(2) XX: Message No. (00-63)

A	DESCRIPTION	DATA		
CM90	Assign the Timed Reminder feature access key to the Multiline Terminals, if required.	<ul> <li>YY = 00</li> <li>(1) Primary Extension No. + , + Key No.</li> <li>(2) F0024</li> </ul>		
CM08	Specify the timing for Timed Reminder start.	<ol> <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 a Timed Reminder call.	<ul> <li>Y = 0</li> <li>(1) 23: Timed Reminder call duration</li> <li>(2) 02-14: 8-56 sec. in 4 sec. increments</li> <li>If no data is set, the default setting is 28-32 seconds.</li> </ul>		
	Specify the duration of message replay for Timed Reminder.	<ul> <li>Y = 0</li> <li>(1) 52</li> <li>(2) 01-99: 4-396 sec. in 4 sec. increments If no data is set, the default setting is 60-64 seconds.</li> </ul>		
CM42	Specify the number of Timed Reminder at- tempts before abandonment.	<ol> <li>03</li> <li>01-15: No. of attempted Timed Reminder calls</li> <li>If no data is set, the default setting is 05.</li> </ol>		
	Specify the maximum number of Timed Re- minder calls that can be set at the same time.	<ol> <li>04</li> <li>No. of Timed Reminder calls</li> <li>If no data is set, the default setting is 10.</li> </ol>		
CM20	To record, replay, or delete a message, assign the appropriate Digital Announcement Trunk access code.	<ul> <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				

#### HARDWARE REQUIRED

For providing the Internal Music Source: -PN-CP00 card

For providing the External Announcement Machine: -PN-4COT card -PN-DK00 card External Announcement Machine provided locally.

For providing the internal announcement using a Digital Announcement Trunk: -PN-2DATA card  $\times\,1$ 

To accommodate an External Announcement Machine, make the following connections at the MDF. For details, refer to the MDF cross connection for an External Tone Source in the INSTALLATION PROCEDURE MANUAL.



## **TRUNK-DIRECT APPEARANCES**

START	DESCRIPTION	DATA		
CM30	Assign the terminating system for required C.O. Trunks to Trunk-Direct Appearances.	• (1) (2)	YY=02 000-255 (Trunk No.) 02: Trunk-Direct Appearance	
	Provide the Trunk-Direct Appearances fea- ture to the required C.O. trunk assigned by YY=02.	• (1) (2)	YY=18 000-255 (Trunk No.) 0: To be provided	
CM90	Assign the Trunk-Direct Appearances key to each Multiline Terminal, as required.	• (1) (2)	YY=00 Primary Extension No. + , + Key No. D000-D255 (Trunk No.)	
	Assign a Hold key for holding the Trunk Di- rect Appearance call to each Multiline Ter- minal, as required. By this assignment, the held Trunk Direct Appearance call can be transferred by Voice call, and can be answered by the Trunk Direct Appearance key on the destination station. (1800 Series Enhancement)	• (1) (2)	YY=00 Primary Extension No. + , + Key No. F0058	
CM08	Specify whether a Dial Tone is sent when the call is held by the Hold key for Trunk Direct Appearance (CM90 YY=00 (2) F0058). (1800 Series Enhancement)	(1) (2)	<ul> <li>365</li> <li>0 : Sent</li> <li>1 ◀ : Not sent</li> </ul>	
	Specify whether Hold Transfer for a trunk line placed in Consultation Hold is available or not available.	(1) (2)	<ul> <li>161</li> <li>0 : Available (Hold Transfer)</li> <li>1 ◀ : Not Available (Consultation Hold)</li> </ul>	
 <u>END</u>				

## **TRUNK-DIRECT APPEARANCES**

To provide enhanced Trunk-Direct Appearance:

<u>START</u>	DESCRIPTION	DATA	
CM90	Program enhanced Hold key to each D <sup>term</sup> .	<ul> <li>YY = 00</li> <li>(1) X-XXXX,24: Station No., Button No.</li> <li>(2) F0058: Enhanced Hold Key</li> </ul>	
	Program Trunk Answer key.	<ol> <li>X-XXXX,XX: Station No., Button No.</li> <li>F0059: Trunk Answer Key</li> </ol>	
CM20	Assign Trunk Answer code to be used for analog telephones.	<ul> <li>Y = 0-3</li> <li>(1) X-XXX: 1-3 digit access code</li> <li>(2) 059: Trunk answer code</li> </ul>	
	Assign Trunk Hold code to be used for analog telephones.	<ul> <li>Y = 0-3</li> <li>X-XXX: 1-3 digit access code</li> <li>058: Trunk hold code</li> </ul>	
CM30	Assign ID code for each C.O. trunk	<ul> <li>YY = 19</li> <li>(1) 000-255: Trunk number</li> <li>(2) ABCD: 4-digit Trunk ID code</li> </ul>	
CM08	Assign Answer preference.	<ol> <li>(1) 114</li> <li>(2) 1: Answer by 4-digit Trunk ID code [Answer Code + Trunk ID Code (ABCD)]</li> <li>O: Answer by 2-digit Trunk ID code [Answer Code + Trunk ID Code (CD)]</li> </ol>	
CM51 END	Assign Hold Recall to alternate destination.	<ul> <li>YY = 21</li> <li>(1) 00-63: Tenant number</li> <li>(2) X-XXXX:Station No. or SN-610 Console</li> </ul>	

**Note:** If the incoming call is routed via the Internal Automated Attendant feature (PN-2DATA card), the tenant number programmed in CM49, YY=01 must match the tenant number programmed in CM20, YY=01 for the incoming trunk.

#### HARDWARE REQUIRED

Multiline Terminal and DLC card PN-4COTB / PN-COTG

# **TRUNK-DIRECT APPEARANCES**

The table below shows the availability of the HOLD key (CM90 YY=00 2nd data: F0058) on each condition.

Trunk-Direct Appearances (CM30 YY=18)	Trunk ID Code Assignment (CM30 YY=19)	Kind of Trunks	Trunk ID Code Display	Availability of HOLD Key (CM90 YY=00 2nd Data: F0058)
0 (Provided)	-	-	-	Available
1 (Not provided)	Not assigned	-	_	Not available
	Assigned	CCIS trunk	-	Not available
		ISDN trunk	CM35 YYY=146 is set to 0. (Trunk ID Code is displayed.)	Available
			CM35 YYY=146 is set to 1. (Calling/called sub-address is displayed)	Not available
		Other trunks	CM35 YY=75 is set to 0. (DID incoming LDN is displayed.)	Not available
			CM35 YY=75 is set to 1. (Trunk ID Code is displayed.)	Available

#### HARDWARE REQUIRED

Multiline Terminal and DLC card.

# **TRUNK QUEUING-OUTGOING**

<u>START</u>	DESCRIPTION	DATA
CM12 CM15	Assign the class of service for Trunk Queuing- Outgoing to the required stations.	<ul> <li>CM12 YY = 02 [Service Rest. Class (A) (00-15 ◄ )]</li> <li>CM15 YY = 02</li> <li>(1) Service Restriction Class (A) (00-15) assigned by CM12 YY = 02</li> </ul>
CM20	Assign the access code for setting and reset- ting this service.	<ul> <li>(2) 1</li></ul>
CM90	Assign the Trunk Queuing-OG (Call Back) key to the required Multiline Terminal.	<ul> <li>YY = 00</li> <li>(1) Primary Extension No. + , + Key No.</li> <li>(2) F0004</li> </ul>
CM35	Specify the Trunk Queuing-Outgoing capabil- ity for each trunk route.	<ul> <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**

<u>START</u>	DESCRIPTION	DATA
CM12	Assign the Service Restriction Class C to each station.	<ul> <li>YY = 07</li> <li>(1) X-XXXX:Primary Extension No.</li> <li>(2) XX:Service Restriction Class C (00-15)</li> </ul>
CM15	Provide the switch hook flash capability dur- ing C.O. line connection, to the required sta- tions.	<ul> <li>YY = 90, 91</li> <li>(1) 00-15:Service Restriction Class C</li> <li>(2) 1 ◀ :Allowed</li> </ul>
CM36	Specify the combination of trunk routes al- lowing the Trunk to Trunk Connection.	<ul> <li>(1) XX XX Incoming trunk route 00-63 Outgoing trunk route 00-63</li> <li>(2) 0/1 ◀ : Allowed/Restricted</li> </ul>
CM08	Provide the system with Ring Transfer for Call Transfer-All Calls to a trunk when a sta- tion holds another station or trunk.	<ol> <li>(1) 253</li> <li>(2) 0: Allowed</li> </ol>
	Provide the system with forced disconnection when a tandem call duration passes a predeter- mined time.	<ul> <li>(1) 029</li> <li>(2) 0/1 ◀ : Available/Not available</li> </ul>
CM35	Allow or restrict forced disconnection of tan- dem connection for the incoming trunk route. This data is available when CM08-029 is set to 0.	<ul> <li>YYY = 119</li> <li>(1) 00-63:Trunk route No.</li> <li>(2) 0/1 ◀ :Allowed/Restricted</li> </ul>
CM41	Specify the forced disconnection timing for tandem call.	<ul> <li>Y = 0</li> <li>54</li> <li>01-06:64-224 min. (32 min. increments)</li> <li>If no data is set, the default setting is 128 min.</li> </ul>

# **TRUNK-TO-TRUNK CONNECTION**

A	DESCRIPTION	DATA
CM08	Provide the system with Trunk to Trunk Con- nection when no release signal arrives from the incoming trunk route and answer signal ar- rives from the outgoing trunk route.	<ul> <li>(1) 324</li> <li>(2) 0/1 ◀ :Available/Not available</li> </ul>
	Provide the system with Trunk to Trunk Con- nection transferred by a station or an atten- dant, when no answer signal arrives and release signal arrives from the outgoing trunk route.	<ul> <li>(1) 028</li> <li>(2) 0/1 ◀ :Available/Not available</li> </ul>
CM41	Specify the forced disconnection timing for tandem connection when the called party does not answer. This data is available when no release signal arrives from incoming trunk route.	<ul> <li>Y = 0</li> <li>55</li> <li>01-13:12-60 sec. (4 sec. increments)</li> <li>If no data is set, the default setting is 20-24 sec.</li> </ul>
END		
### **TRUNK-TO-TRUNK CONNECTION**

To provide the AMP trunk for Trunk-to-Trunk Connection (1500 Series Enhancement):

<u>START</u>	DESCRIPTION	DATA	
CM10	<ul> <li>Assign the Card Number of the AMP trunk (PN-2AMP).</li> <li>Maximum of two digits are available.</li> <li>Note: The AMP card number must be assigned to both of the first LEN (Level 0) and the third LEN (Level 2) of each slot.</li> </ul>	<ol> <li>(1) LEN (0000-0511)</li> <li>(2) Card No. of AMP trunk C100-C115 : For PIM0/1 C116-C131 : For PIM2/3 C132-C147 : For PIM4/5 C148-C163 : For PIM6/7</li> </ol>	
CM38	Assign the AMP patterns to each combination of the trunk routes.	<ul> <li>YY = 00</li> <li>(1) XX XX</li> <li>Incoming trunk route 00-63</li> <li>Outgoing trunk route 00-63</li> <li>(2) 00-14:AMP pattern No. 00-14</li> <li>15 ◀ : Not use the AMP trunk</li> </ul>	
	Assign the gain value of each AMP pattern.	<ul> <li>YY = 01</li> <li>(1) 00-14: AMP pattern No. 00-14</li> <li>(2) X X</li> <li>Fixed gain         <ul> <li>0 : 12 dB</li> <li>1 : 8 dB</li> <li>2 : 4 dB</li> <li>3 ◀ : 0 dB</li> </ul> </li> <li>AGC (Automatic Gain Control)         <ul> <li>0 : 0 dBr</li> <li>1 : +4 dBr</li> <li>2 : -4 dBr</li> <li>3 ◀ : Through (assigned by Fixed Gain)</li> </ul> </li> </ul>	
	Assign the Echo Canceller function to each AMP pattern.	<ul> <li>YY = 02</li> <li>(1) 00-14:AMP pattern No. 00-14</li> <li>(2) 0:Through 1 ◀ : Normal</li> </ul>	
A	Assign the Gain Controller of Echo Canceller to each AMP pattern.	<ul> <li>YY = 03</li> <li>(1) 00-14: AMP pattern No. 00-14</li> <li>(2) 0:ON 1 ◀ : OFF</li> </ul>	

## **TRUNK-TO-TRUNK CONNECTION**

С	DESCRIPTION	DATA	
CM38	Select the Tone Disabler's mode on each AMP pattern.	<ul> <li>YY=04</li> <li>(1) 00-14: AMP pattern No. 00-14</li> <li>(2) 0:G164</li> <li>1 ◀: G165</li> </ul>	
	Specify the Detect Timing of Tone Disabler on each AMP pattern.	<ul> <li>YY=05</li> <li>(1) 00-14: AMP pattern No. 00-14</li> <li>(2) 0:0 sec. 1 ◀: 2 sec.</li> </ul>	
	Specify the channels connected to each AMP pattern.	<ul> <li>YY=06</li> <li>(1) 00-14: AMP pattern No. 00-14</li> <li>(2) 0:Incoming route: Tie Line Outgoing route: C.O. Line 1 ◀:Incoming route: C.O. Line Outgoing route: Tie Line</li> </ul>	
	Specify the Timing of AMP trunk connection on each AMP pattern.	<ul> <li>YY=07</li> <li>(1) 00-14: AMP pattern No. 00-14</li> <li>(2) 0:When dialing is finished 1 ◀:When answering</li> </ul>	

END

#### PROGRAMMING

To activate UCD:

<u>START</u>	DESCRIPTION	DATA	
CM17	For each UCD Group, assign station numbers, one by one, in the order of hunting.	• (1) (2)	Y = 0 X-XXXX (Station No.) X-XXXX (Another Station No. to be linked)
	<b>Note:</b> Up to 60 stations can be assigned into a single UCD group.		mixed)
	<b>Example:</b> For setting Station Numbers 200, 201, 202 into one UCD Group.		
	$ \begin{array}{cccc} 1 \text{ st Operation (1) 200} \\ (2) 200 \\ 2nd Operation (1) 201 \\ (2) 202 \\ 3rd Operation (1) 202 \\ (2) 200 \\ \end{array} \xrightarrow[201]{} \begin{array}{c} & & \bigcirc \\ 200 \\ 201 \\ 2nd \end{array} \xrightarrow[202]{} \end{array} \xrightarrow[202]{} \end{array} $		
	Assign the Pilot Station and Member Station.	• (1) (2)	Y = 1 X-XXXX (UCD Station No.) 1/0◀ : Pilot Station/Member Station
	Assign the UCD Group Number.	• (1) (2)	Y = 2 X-XXXX (UCD Station No.) 00-15 (UCD Group 00-15)
A	Specify the UCD service for each type of call.	• (1) (2) • (1) (2)	Y = 4 (Internal Call: from station/AT- TCON) X-XXXX (Pilot Station No. of the UCD Group) 0/1 ◀ : Not to be provided/To be provid- ed Y = 5 (C.O. Incoming Call: DDD: FX/ WATS) X-XXXX (Pilot Station No. of the UCD Group) 0/1 ◀ : Not to be provided/To be provid- ed

A	DESCRIPTION	DATA	
CM17		<ul> <li>Y = 6 (Tie Line Incoming Call)</li> <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>	
		<ul> <li>Y = 7 (DID Call)</li> <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>	
		<ul> <li>Y=B (Designation of the number of queuing in each UCD group)</li> <li>(1) X-XXXX (Pilot Station No. of the UCD Group)</li> <li>(2) 0/1 ◀ : To be provided (See CM42-16)/Not to be provided</li> </ul>	
CM42	Specify the maximum number of queuing in each UCD group.	<ul> <li>(1) 16</li> <li>(2) 01-99 (Number of queuing in each UCD group)</li> </ul>	
CM41	Specify the basic call answer delay time for use in PEG Count analysis.	<ul> <li>Y = 0</li> <li>(1) 16</li> <li>(2) 01-30: 4-120 sec. in 4 sec. increments If no data is set, the default setting is 32-36 seconds.</li> </ul>	
CM20	Assign the access code for UCD Station Busy- Out Set and Reset.	<ul> <li>Y = 0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX (Access Code)</li> <li>(2) 044: Busy-Out Set 045: Busy-Out Reset</li> </ul>	
CM90	Assign the UCD Busy-Out key on the Multiline Terminal, if required.	<ul> <li>YY = 00</li> <li>(1) Primary Extension No. + , + Key No.</li> <li>(2) F0044: UCD Busy-Out</li> </ul>	
В	Assign the Release key on the Multiline Terminal, if required.	<ul> <li>YY = 00</li> <li>(1) Primary Extension No. + , + Key No.</li> <li>(2) F1020: Release</li> </ul>	

В	DESCRIPTION	DATA	
CM08	Specify the processing for an incoming call when all UCD Stations are busy.	<ul> <li>(1) 212</li> <li>(2) 0/1</li></ul>	
	Specify the processing for a held call after set- ting the UCD Busy-Out.	<ol> <li>(1) 214 (For the held Call from Tie Line)</li> <li>(2) 0/1          (2) Reconnected by Switch Hook Flash/Disconnected     </li> </ol>	
		<ol> <li>(1) 215 (For the held call from C.O. Line)</li> <li>(2) 0/1          (2) Reconnected by Switch Hook Flash/Disconnected     </li> </ol>	
	<ul> <li>Specify that the transferred C.O. call from a station or SN610 ATTCON is placed into queuing mode when all UCD stations are busy.</li> <li>Note: This data is only effective when CM08-212 is set to 1.</li> </ul>	<ul> <li>(1) 227</li> <li>(2) 0: The call is placed into queuing mode. Note</li> <li>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).</li> </ul>	
	Enable the UCD Busy-Out set and reset from the secondary extension. (1200 Series Enhancement)	<ul> <li>(1) 442</li> <li>(2) 0/1 ◀ : Available/Not Available</li> </ul>	

<u>END</u>

To provide the delay announcement for UCD:



ND-45670 (E)

CHAPTER 2 Page 409 Revision 2.0

A	DESCRIPTION	DATA		
CM20	Assign an access code to record, replay, and delete the Digital Announcement Trunk.	<ul> <li>Y=0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXXX: Access code</li> <li>(2) A00: Record A01: Replay A02: Delete</li> </ul>		
CM51	<ul> <li>When transferring the call to an extension or Attendant after the 1st interval time of UCD Delay Announcement, assign the destination.</li> <li>Note: This command is only effective when CM17, Y=A is set to 0 (to be sent periodically).</li> </ul>	<ul> <li>Y=17</li> <li>(1) 00-63: Tenant No.</li> <li>(2) Destination: X-XXXX: Station No. or E000: SN610 ATTCON</li> </ul>		
CM08 END	Specify a diversion display on a transferred destination (Multiline Terminal or SN610 AT-TCON).	<ul> <li>(1) 357</li> <li>(2) 0/1 ◀ : Available/Not Available</li> </ul>		

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



ND-45670 (E)

To provide the LEDs on the Multiline Terminal for UCD Call Waiting Indication:

<u>START</u>	DESCRIPTION		DATA	
CM08	Assign the incoming call to queuing mode when all UCD stations are busy.		<ul> <li>(1) 212</li> <li>(2) 1</li></ul>	
CM42	Specify the maximum number of queuing in each UCD group for controlling call waiting lamp of a Multiline Terminal.		<ol> <li>(1) 15</li> <li>(2) 01-99 (Number of queuing in each UCD group)</li> <li>If no data is set, the default setting is 01</li> </ol>	
	<b>Note:</b> Depending on the number station/trunk, lamp indi tern on a Multiline Termin ent as shown below:	r of queuing ication pat- nal is differ-	In no cala is set, ale default setting is off	
	N=Number of queuing station/trunk			
	CONDITIONS		LAMP INDICATION	
	2nd Data=01	Steady on red irre	respective of number of queuing station/trunk	
	$1 \le N < 2$ nd Data (2nd Data $\ne 01$ ) Steady on red			
	2nd Data $\leq$ N (2nd Data $\neq$ 01)	Flashing red		
CM90 END	Assign the Call Waiting Indication required Multiline Terminal.	LED to the	<ul> <li>YY = 00</li> <li>(1) Primary Extension No. + , + Key No.</li> <li>(2) F1280: UCD Group 00 <ul> <li> </li> <li> </li> <li>F1295: UCD Group 15</li> </ul> </li> </ul>	
21.12				

To provide an external indicator for UCD Call Waiting:

<u>START</u>	DESCRIPTION		DATA	
CM08	Assign the incoming call to queuing mode when all UCD stations are busy.		<ul> <li>(1) 212</li> <li>(2) 1 ◀ : Queuing</li> </ul>	
CM42	Specify the maximum number of queuing in each UCD group for controlling external equipment Interface.		<ol> <li>15</li> <li>01-99 (Number of qu group)</li> <li>If no data is set, the defaul</li> </ol>	euing in each UCD It setting is 01.
	<b>Note:</b> Depending on the numbe station/trunk, lamp indi tern on an external equip ferent as shown below:	r of queuing ication pat- oment is dif-		
	N=Number of queuing station/true	nk		
	CONDITIONS		LAMP INDICATION	
	2nd Data = 01	Lamp on irrespe	ive of number of queuing stati see CM59.)	ion/trunk (For the
	N < 2nd Data (2nd Data ≠ 01) 2nd Data ≤N (2nd Data ≠ 01)	Lamp off Lamp on (For th	indication pattern, see CM59.	)
CM10	Assign the PN-DK00 card to the r LEN.	required	<ol> <li>LEN (0000-0511)</li> <li>E800-E831 (PN-DK( E800-E807: For PIM E808-E815: For PIM E816-E823: For PIM E824-E831: For PIM</li> </ol>	00 Card No.) 0/1 2/3 4/5 6/7
CM44	Assign the function of UCD Call dication to the PN-DK00.	Waiting In-	<ul> <li>(1) XX X *a *b</li> <li>*a: Card No. (00-31) E800-E831.</li> <li>*b: Circuit No. (0-3)</li> <li>(2) 14XX *a</li> <li>*a: UCD Group No. (CM17.</li> </ul>	assigned by CM10 (00-15) assigned by
A				



To provide the priority queuing for incoming trunk calls:

START	DESCRIPTION	DATA	
CM35	Assign Priority Queuing per trunk route.	<ul> <li>YY=60</li> <li>(1) Trunk Route No. (00-63)</li> <li>(2) 0/1</li></ul>	
	Assign Digit Conversion on DID call, if re- quired.	<ul> <li>YY=18</li> <li>(1) Trunk Route No. (00-63)</li> <li>(2) 0/1          (2) 1 ≤ : To be provided/Not to be provided     </li> </ul>	
CM76	Assign Priority Queuing per DID incoming LDN, if Digit Conversion is provided (CM35 YY=18 is set to 0).	<ul> <li>Y=6</li> <li>(1) X-XXXX: Station Number received</li> <li>(2) 0/1          <ul> <li>i Not to be provided/To be provided</li> </ul> </li> </ul>	

#### HARDWARE REQUIRED

To provide the delay announcement for UCD: - PN-2DATA card

To provide the LEDs on the Multiline Terminal: -ETJ-8-1/ETJ-16DC-1/ETJ-16DD-1/ETJ-24DS-1 and PN-2DLCB/PN-4DLCA card

To provide the Indicator for UCD Call Waiting:

- PN-DK00 card

- External Indicator provided by the customer Requirement for External Indicator

Control Method: Ground/Battery (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. For details, refer to the MDF cross connection for an External Indicator (TAS Indicator) in the INSTALLATION PROCEDURE MANUAL.



### PROGRAMMING

For an open numbering system:

<u>START</u>	DESCRIPTION		DATA		
CM20	Assign an access code for LCR Group 0-3.	• (1) (2)	Y = 0-3 (Numbering Group 0-3) X-XXX (Access Code) A26: LCR Group 0 A27: LCR Group 1 A28: LCR Group 2 A29: LCR Group 3		
CM8A	Assign an Area Code Development Pattern No. to each LCR Group.	• (1) (2)	<ul> <li>YYY = A00</li> <li>0-3: LCR Group 0-3</li> <li>5-7: Area Code Development Pattern No. 5-7</li> </ul>		
	Assign a Route Pattern No. to each area code for the Area Code Development Pattern No. assigned by CM8A YYY = A00.	• (1) (2)	<ul> <li>YYY = 405-407 (Area Code Development Pattern No. 5-7)</li> <li>NXX/1NXX (Area Code, Max. 8 digits)</li> <li>000-063 (Route Pattern No. 00-63)</li> </ul>		
	Assign an area code for Intra-Office Termina- tions, if required.	• (1) (2)	<ul> <li>YYY = 405-407 (Area Code Development Pattern No. 5-7)</li> <li>X-XXXXX (Area Code, 1-5 digits)</li> <li>800 (Intra-Office Termination)</li> <li>801 (1-digit intra-office station)</li> <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>		
	Specify the order of LCR selection for the Route Pattern No. assigned by YYY = 405- 407.	• (1) (2)	YYY = 000-063 (Route Pattern No. 00-63) 1-4: Order of LCR Selection 1: 1st 2: 2nd 3: 3rd 4: 4th $XXX XX = \frac{XX}{*a} = \frac{1}{b}$		
A			*a: 000-255 (LCR Pattern No. 000-255) *b: 00-63 (Trunk Route No. 00-63)		

A	DESCRIPTION	DATA	
CM8A	Assign the digits to be deleted from calls to distant offices. To delete all digits of an area code:	<ul> <li>YYY = 500-755 (LCR Pattern No. 000-255)</li> <li>(1) 151 [Deletion of all digits of area code (NXX, 1NXX)] assigned by YYY</li> </ul>	
		= 405-407) (2) 0: To be deleted	
	To delete the designated digit of an area code:	<ul> <li>YYY = 500-755</li> <li>(1) 153 (Designation of digit to be deleted)</li> <li>(2) 00: No digits deleted</li> <li>01: First digit deleted</li> <li> </li> </ul>	
		10: First 10 digits deleted CCC: No digits deleted	
	Assign the digits to be added to the digits sent	• YYY = 500-755	
	to the distant office.	(1) 100 (Designation of digit Addition Pat- tern No.)	
		<ul><li>(2) 00-49 (Digit Addition Pattern No. 00-49)</li><li>CCC: No digits added</li></ul>	
		• YYY = 900-949 (Digit Addition Pattern No. 00-49)	
		(1) 0	
		(2) X-XX [Digits to be added (Max. 32 digits)]	
		X = 0.9, A(*), B(#), C (Fixed Pause)	
	Assign the digits to be added to the required	• YY = 17	
CM35	trunk routes when adding digits to those re-	(1) $00-63$ (Trunk Route No.)	
	ceived from a distant office.	(2) 00: Add 0 01: Add 1	
		02: Add 2	
		03: Add 3	
		04: Add 4	
		05: Add 5	
		06: Add 6	
		07: Add 7	
		08: Add 8	
		09: Add 9 10: Add 2 digits per CM50	
В		10. Add 2 digns per Civido	



**Example 1:** When the PBX 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 PBX.



#### Programming for **Example 1**:

COMMAND CODE	1ST DATA	2ND DATA	REMARKS
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 F	Assignment of Route Pattern
8A YYY = 405	22	000	No. 00 to Area Codes 21, 22, and 23.
8A YYY = 405	23	000	
8A YYY = 000	1	00000	Assignment of the order of LCR selection (1st) for Route Pattern No. assigned by YY $Y = 405$ .
8A YYY = 500	100	00	Assignment of Digit Addition Pattern No. 00.
8A YYY = 900	0	8	Assignment of the digital code to be add- ed for each area code.

#### **Example 2:** When the PBX is a Tandem Office in the network.



COMMAND CODE	1ST DATA	2ND DATA	REMARKS
20  Y = 0	8	A26	Assignment of Access Code 8 of LCR Group 0.
8A YYY = A00	0	5	Assignment of Area Code Development Pat- tern 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.

Programming for **Example 2**:

• For Closed Numbering System

<u>START</u>	DESCRIPTION	DATA
CM20	Assign an access code for LCR Group 3.	<ul> <li>YY = 0-3 (Numbering Group 0-3)</li> <li>(1) X-XXX (Access Code)</li> <li>(2) A29: LCR Group 3</li> </ul>
CM8A	Assign an Area Code Development Pattern No. to LCR Group 3.	<ul> <li>YYY = A00</li> <li>(1) 3: LCR Group 3</li> <li>(2) 5-7: Area Code Development Pattern No. 5-7</li> </ul>
	Assign a Route Pattern No. to each area code for the Area Code Development Pattern No. assigned by CM8A $YYY = A00$ .	<ul> <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>
	Assign an area code (station number) for In- tra-Office Terminations, if required.	<ul> <li>YYY = 405-407 (Area Code Development Pattern No. 5-7)</li> <li>(1) X-XXXXX (Area Code, max. 5 digits)</li> <li>(2) 801: 1-digit Intra-Office Station <ul> <li> </li> <li>805: 5-digit Intra-Office Station</li> </ul> </li> </ul>
	Specify the order of LCR selection for the Route Pattern No. assigned by YYY = 405- 407.	• $YYY = 000-063$ (Route Pattern No. 00- 63) (1) 1-4: Order of LCR Selection 1: 1st 2: 2nd 3: 3rd 4: 4th (2) $XXX XX = \frac{XX}{*a} = \frac{XXX}{*b}$ *a: 000-255 (LCR Pattern No. 000-255) *b: 00-63 (Trunk Route No. 00-63)
A	Assign the digits to be deleted when deleting digits of an area code sent to a distant office. To delete all digits of an area code:	<ul> <li>YYY = 500-755 (LCR Pattern No. 000-255)</li> <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>

A	DESCRIPTION	DATA	
CM8A	To delete the designated digit of an area code:	<ul> <li>YYY = 500-755</li> <li>(1) 153 (Designation of digit to be deleted)</li> <li>(2) 00: No digits deleted</li> <li>01: First digit deleted</li> <li>   </li> </ul>	
		10: First 10 digits deleted CCC: No digits deleted	
	Assign the digits to be added when adding digits to those sent to a distant office.	<ul> <li>YYY = 500-755</li> <li>(1) 100 (Designation of digit Addition Pattern No.)</li> <li>(2) 00-49 (Digit Addition Pattern No. 00-49) CCC: No digits added</li> <li>YYY = 900-949 (Digit Addition Pattern No. 00-49)</li> <li>(1) 0</li> <li>(2) X-XX [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 re- ceived from a distant office.	<ul> <li>YY = 17</li> <li>(1) 00-63 (Trunk Route No.)</li> <li>(2) 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>	
	Assign the data for digit deletion to re- quired trunk routes for deleting the first one or two digits received from a distant office.	<ul> <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>	
CM50 END	If two digit addition is required, assign the digits to be added (See CM35 YY=17, 2nd data = 10).	<ul> <li>YY = 00</li> <li>(1) 0</li> <li>(2) XX (Digits to be added)</li> </ul>	





#### Programming for **Example 1:**

COMMAND CODE	1ST DATA	2ND DATA	REMARKS
20  Y = 0	7	A29	Assignment of Access Code (7, 8) to
20 Y = 0	8	A29	LCR Group 3.
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
8A YYY = 405	73	000	Area Code (72, 73, & 74).
8A YYY = 405	8	000	
8A YYY = 405	715	804	Assignment of the 4-digit Intra-Office Station to the Area Code 715.
8A YYY = 000	1	00000	Assignment of the order of LCR selection (1st) for Route Pattern No. assigned by $YYY = 405$ .





Programming for **Example 2**:

COMMAND CODE	1ST DATA	2ND DATA	REMARKS
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

#### PROGRAMMING

<u>START</u>	DESCRIPTION	DATA
CM41 END	Specify the required Timing Parameters ac- cording to the user's requirements. If no data is set (Displayed "NONE") the Standard tim- ing which is initially set is applied.	• $Y = 0-2$ (1) $XX$ (2) $XX$ See the Command Manual.

# **VOICE GUIDE (1900 Series Enhancement)**

#### PROGRAMMING

To provide the message that is sent when a station goes off hook while Message Waiting/Call Forwarding-All Calls/ No No Disturb service is set to the station:

<u>START</u>	DESCRIPTION	DATA
CM08	Specify the Multi-Connection of the Dig- ital Announcement Trunk (PN-2DATA) on Announcement Service.	<ul> <li>(1) 124</li> <li>(2) 0/1 ◄ : Available/Not Available (Single Connection)</li> </ul>
CM10	<ul> <li>Assign a Digital Announcement Trunk Circuit No. to the required LEN.</li> <li>Note: The Digital Announcement Trunk Circuit No. must be assigned to the first LEN (Level 0) and/or the third LEN (Level 2) of each LT slot.</li> </ul>	<ul> <li>(1) LEN (0000-0511)</li> <li>(2) EB000-EB127: Digital Announcement Trunk Circuit No.</li> <li>For PIM0/1: EB000-EB031 For PIM2/3: EB032-EB063 For PIM4/5: EB064-EB095 For PIM6/7: EB096-EB127</li> </ul>
CM12 CM15	Assign the Class of Service for An- nouncement Service to the required sta- tions.	<ul> <li>CM12 YY = 02</li> <li>(1) X-XXXX: Primary Extension No.</li> <li>(2) XX/*a</li> <li>*a: Service Restriction Class (A): 00-15 ◀</li> <li>CM15 YY = 34 (Group 0)</li> <li>CM15 YY = 35 (Group 1)</li> <li>CM15 YY = 36 (Group 2)</li> <li>CM15 YY = 37 (Group 3)</li> <li>CM15 YY = 38 (Group 4)</li> <li>CM15 YY = 39 [Recording for Announcement Service (Group 0-4)]</li> <li>(1) 00-15: Service Restriction Class (A) assigned by CM12 YY = 02</li> <li>(2) 1 ◀ : Allowed</li> </ul>
CM20	Assign access codes for Announcement Service.	<ul> <li>Y = 0-3 (Numbering Plan Group 0-3)</li> <li>X-XXX: Access Code</li> <li>A03: Recording message (Group 0-4) A04: Replaying message (Group 0) A05: Replaying message (Group 1) A06: Replaying message (Group 2) A07: Replaying message (Group 3) A08: Replaying message (Group 4) A09: Deleting message (Group 0-4)</li> </ul>

CHAPTER 2 Page 425-1 Revision 2.1

### **VOICE GUIDE (1900 Series Enhancement)**

A	DESCRIPTION	DATA	
CM48	Specify the dial tone, which is sent when a sta- tion goes off hook while the service is set for the station, as Special Dial Tone.	<ul> <li>Y=2</li> <li>(1) 12 (Dial Tone on Setting Ning) 13 (Dial Tone on Setting Cing-All Calls) 14 (Dial Tone on Setting E turb)</li> <li>(2) 0: Special Dial Tone</li> </ul>	Iessage Wait- Call Forward- Do Not Dis-
CM15	Validate the data set by CM48 Y=2 first data 12, 13, 14.	<ul> <li>YYY=116</li> <li>(1) 00-15: Service Restriction</li> <li>(2) 1 ◀: Valid</li> </ul>	Class A
CM49	Assign the function for each Digital An- nouncement Trunk Circuit.	<ul> <li>YY=00         <ol> <li>000-127: Digital Announce Circuit No. assig (EB000-EB127)</li> <li>17XX: Voice Guide Message No. used ff (00-63)</li> </ol> </li> </ul>	ement Trunk ned by CM10 or this feature
END	Assign the Message sent when the station goes off hook.	<ul> <li>YY=13</li> <li>(1) 00 (Message sent when Me is set) 03 (Message sent when Cal All Calls/Do Not Disturb i</li> <li>(2) Message No. (00-63)</li> </ul>	ssage Waiting 1 Forwarding- s set)

- **Note 1:** While both Message Waiting and Call Forwarding-All Calls/Do Not Disturb Service are set to the station, the message assigned by CM49 YY=13 1st data 00 is sent.
- **Note 2:** While Message Reminder (from STA/ATT) Service is set to the station, the message assigned by CM49 YY=13 1st data 00 is sent.
- **Note 3:** While Split Call Forwarding-All Calls Service is set to the station, the message assigned by CM49 YY=13 *1st data 03 is sent.*

## **VOICE GUIDE (1900 Series Enhancement)**

To provide the Message which is sent when the service feature setting to the station is completed or cancelled:

<u>START</u>	DESCRIPTION	DATA
CM49	Assign the function for each Digital An- nouncement Trunk Circuit.	<ul> <li>YY=00         <ol> <li>000-127: Digital Announcement Trunk Circuit No. assigned by CM10 (EB000-EB127)</li> <li>17XX: Voice Guide Message No. used for this feature (00-63)</li> </ol> </li> </ul>
	Assign the Message No. when service setting is completed or cancelled to station.	<ul> <li>YY=13</li> <li>(1) 01 (Message sent when service is set) 02 (Message sent when service is cancelled)</li> <li>(2) Message No. (00-63)</li> </ul>
CM41 END	Message Replay Timer for Announcement Service.	<ul> <li>Y=0</li> <li>53</li> <li>01-99 (4 sec396 sec.)</li> <li>If no data is set, the default setting is 60-64 sec.</li> </ul>

#### HARDWARE REQUIRED

Digital Announcement Trunk (PN-2DATA)

This page is for your notes.

CHAPTER 2 Page 425-4 Revision 2.1

### PROGRAMMING

In addition to the programming of CALL FORWARDING-ALL CALLS/BUSY LINE/NO ANSWER, do the following programming.

<u>START</u>	DESCRIPTION	DATA
CM08	Specify whether Ringing Transfer to an At- tendant via VMS is available.	<ul> <li>(1) 063</li> <li>(2) 0/1 ◀ : Available/Not Available</li> </ul>
	Specify the sending of the Mail Box No. to the VMS when the VMS is recalled after transferring a call to an unanswered station.	<ul> <li>(1) 333</li> <li>(2) 0: To be sent</li> <li>1 ◀ : Not to be sent</li> </ul>
CM13	Provide Message Waiting service for a station with MW lamp.	<ul> <li>YY = 03</li> <li>(1) X-XXXX: (Station No.)</li> <li>(2) 0: To be provided</li> </ul>
	Provide VMS service for a station port inter- faced with the VMS (VMS station).	<ul> <li>YY = 10</li> <li>(1) X-XXXX: (Station No.)</li> <li>(2) 0: To be provided</li> </ul>
	Provide Message Waiting service for a VMS station port.	<ul> <li>YY = 13</li> <li>(1) X-XXXX: (Station No.)</li> <li>(2) 0: To be provided</li> </ul>
CM12 CM15	Assign the Class of Service for Message Wait- ing to a station with a MW lamp and a VMS station port.	<ul> <li>CM12 YY = 02</li> <li>(1) X-XXXX: (Station No.)</li> <li>(2) <u>XX</u>XX *a</li> </ul>
		<ul> <li>*a: Service Restriction Class (A) (00-15</li></ul>
	Assign the access code for MW lamp set/can- cel from a VMS station port.	<ul> <li>YY = 0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX: Access code</li> <li>(2) 040: Set 041: Cancel</li> </ul>
A	Assign the access code to retrieve a message from the VMS and search Message Reminder/ Message Waiting.	<ul> <li>YY = 0-3 (Numbering Plan Group 0-3)</li> <li>(1) X-XXX: Access code</li> <li>(2) A46: Search A47: Retrieve</li> </ul>

### **VOICE MAIL INTEGRATION (IN BAND)**



Addendum-002 JANUARY, 1999 CHAPTER 2 Page 427 Revision 2.2

## **VOICE MAIL INTEGRATION (IN BAND)**

В	DESCRIPTION	DATA	
CM51	Assign the VMS station as the destination of a call from a station which is set Message.	<ul> <li>YY = 15</li> <li>(1) Tenant No. (00-63)</li> <li>(2) X-XXXX: (VMS Station No.)</li> </ul>	
CM90	Assign the data to provide the MW lamp on a Multiline Terminal, if required.	<ul> <li>YY = 00</li> <li>(1) Primary Extension No. + , + Key No.</li> <li>(2) F1005</li> </ul>	
	To access the VMS from SN610 ATTCON, assign Out Pulse (DTMF Signal) -Short/Long key.	<ul> <li>YY = 00</li> <li>(1) ATTCON No. , + Key No.</li> <li>(2) F6112:Out Pulse (DTMF Signal) - Short F6113:Out Pulse (DTMF Signal) - Long</li> </ul>	
CM41	When Out Pulse (DTMF Signal)-Long is des- ignated by CM90, assign the DTMF signal width.	<ul> <li>Y = 0</li> <li>(1) 14 (DTMF Signal Width)</li> <li>(2) 01-50: 64-3200 msec</li> <li>(64 msec_increments)</li> </ul>	
	<b>Note:</b> When Out Pulse (DTMF Signal)- Short is designated by CM90, DTMF Signal width is set to 128 msec (Fixed).	If no data is set, default setting is 512 msec.	
	To allow Voice Mail Password Privacy		
CM65	Assign Password Privacy for the Tenant num- ber of the VMS ports.	<ul> <li>YY = 30</li> <li>(1) Tenant No. of VMS ports</li> <li>(2) 0: Allowed</li> </ul>	
	<b>Note:</b> This is effective for ports assigned as VMS ports in CM13 YY=10	$1 \blacktriangleleft$ : Not allowed	
END			

### **VOICE MAIL TRANSFER**

To transfer a call from an ATTCON to a VMS, if Camp-On is set to the transferred destination, and that is not answered by predetermined timing:

<u>START</u>	DESCRIPTION	DATA
CM08	Provide the system with VMS transfer.	<ol> <li>(1) 428 (VMS transfer with Camp-On)</li> <li>(2) 0: Provided</li> </ol>
CM41	Specify timer of Attendant Recall for Camp- On.	<ul> <li>Y=0</li> <li>(1) 00 (Attendant Recall Timer)</li> <li>(2) 01: 0-2.4 sec.</li> <li><i>i</i></li> <li><i>i</i>&lt;</li></ul>
CM51 END	Specify the destination VMS station number when a Camp-On call is not answered. The first data should be the tenant number of the destination station called.	<ul> <li>YY=18 (Destination VMS No. assignment)</li> <li>(1) 00-63 (Tenant No.)</li> <li>(2) X-XXXX (VMS pilot number)</li> </ul>

### **VOICE MAIL TRANSFER**

To transfer a call from an ATTCON or a station to a VMS by dialing of a Single Digit Feature Access Code "9" or by pushing a function key, while hearing RBT or BT from the destination station:

<u>START</u>	DESCRIPTION	DATA		
CM08	Specify whether dialing of the Single Digit Feature Access Code is allowed or not while hearing RBT.	<ol> <li>(1) 156 (Single Digit Feature Access Code while hearing RBT)</li> <li>(2) 0: Allowed 1◀ : Not allowed</li> </ol>		
	Specify whether dialing of the Single Digit Feature Access Code is allowed or not while hearing BT.	<ol> <li>(1) 208 (Single Digit Feature Access Code while hearing BT)</li> <li>(2) 0: Allowed 1 ◀ : Not allowed</li> </ol>		
CM51	Specify the destination VMS station number by transferring with Single Digit Feature Ac- cess Code or a function key. The first data should be the tenant number of the destination station called.	<ul> <li>YY=18 (Destination VMS No. assignment)</li> <li>(1) 00-63 (Tenant No.)</li> <li>(2) X-XXXX (VMS pilot number)</li> </ul>		
CM90 END	To the ATTCON or the Multiline Terminal, assign a function key to transfer a call to a VMS while hearing RBT or BT, if required.	<ul> <li>YY=00 For ATTCON:</li> <li>(1) ATTCON No. (E000-E007) + , + Key No. (01-24)</li> <li>(2) F6123 (Transferring to VMS) For Multiline Terminal:</li> <li>(1) Primary Extension No. (X-XXXX) + , + Key No. (01-24, 30-37)</li> <li>(2) F5001 (Transferring to VMS)</li> </ul>		

To provide a Multiline Terminal with One Touch keys to send Called Number + DTMF Signal after the called party answered, for VMS operations (such as "VMS Extension No. + Mail Box Number or Password"), refer to the programming (2), (4) in the "STATION SPEED DIALING".

#### HARDWARE REQUIRED

For interfacing to a VMS with Analog Dialogic Board: PN-4LCJ or PN-4LCD-A

For interfacing to a VMS with Digital Dialogic Board: PN-4DLCA or PN-4DLCD

For providing the Single-Line Telephone with a Message Waiting Lamp: PN-4LCD card

For providing the Multiline Terminal: PN-2DLCB/PN-4DLCA card

CHAPTER 2 Page 430 Revision 2.0 ND-45670 (E)

# WHISPER PAGE

#### PROGRAMMING

START	DESCRIPTION	DATA	
CM12	Assign the Service Restriction Class to re- quired stations.	• (1) (2)	YY=02 X-XXXX: Station No. XX XX Service Restriction Class A (00-15 ◀)
CM15	Specify the Service Restriction Class for whispering station and whispered station.	• (1) (2)	YYY=111 (Whispering station's class) YYY=112 (Whispered station's class) 00-15: Service Restriction Class A 0 : Restricted 1 ◀: Allowed
CM20	Assign the access code for Whisper Page.	• (1) (2)	Y=0-3 (Numbering Plan Group 0-3) X-XXX (Access code) A88 (Whisper Page)
CM90	Provide the Multiline Terminal (whispering side) with a Whisper Page key, if required.	• (1) (2)	YY=00 Primary Extension No. + + + Key No. F0A88 (Whisper Page)
CM08	Specify whether the call termination to My Line is restricted or allowed, while the station user makes a call with a secondary extension or trunk line on the Multiline Terminal.	(1) (2)	268 0 : Restricted 1 ◀ : Allowed
	Specify Busy/Idle Status Check Method as "Station Base" or "Extension Base".	(1) (2)	<ul> <li>269</li> <li>0 : Station Base</li> <li>1 ◀ : Extension Base</li> </ul>
	Note: When 2nd data of CM08-268 and CM08-269 is set to "0", Whisper Page is available for the extension which is making a call with a sec- ondary extension or trunk line on the Multiline Terminal.		
CM48	Specify the dial tone, which is sent to the oth- er party when the whispered station answers the Whisper Page. (1900 Series Release 2 Enhancement)	• (1) (2)	Y=2 17 0 : No Tone 1 ◀ : Hold Tone
END	ND-45670 (E) Addendum-002		CHAPTER 2 Page 431

**JANUARY**, 1999

Revision 2.2

#### 2.2 Data Communications Features

#### PROGRAMMING

<u>START</u>	DESCRIPTION	DATA		
CM1A	Assign a Data Station Number to the Primary Extension Number (assigned by CM10) of the Multiline Terminal equipped with a Data Adapter.	<ol> <li>Primary Extension Number (X-XXXX)</li> <li>Data Station Number (X-XXXX)</li> </ol>		
CM20	Specify the Data Station Number length.	<ul> <li>Y = 0-3 (Numbering Plan Group 0-3)</li> <li>(1) Leading one/two/three digits of Data Station No.</li> <li>(2) 801: Single digit 802: 2 digits 803: 3 digits 804: 4 digits</li> </ul>		
CM90	<ul> <li>Assign the functions for data communication to Programmable Keys on the Multiline Terminal.</li> <li>Note: The minimum keys which must be programmed are DATA and DTX.</li> </ul>	<ul> <li>Y = 00 (Programmable Key Assignment)</li> <li>(1) Primary Extension No. + + + Key No.</li> <li>(2) F2000: DATA F2001: AUTO/DISP F2002: DTX F2003: DISP F2004: AUTO F2005: DATA DND</li> </ul>		
CMA0	Assign the type of Data Adapter to the Data Station Number.	<ol> <li>(1) Data Station No. (X-XXXX)</li> <li>(2) 02: SN1152 DTAM-A Data Adapter</li> </ol>		

A

A	DESCRIPTION	DATA	
CMA1	Assign the attribute data for Data Adapter in accordance with the specification of the DTE connected.	<ul> <li>YY = 00 (Detection of E DTE)</li> <li>(1) Data Station No. (X-XX</li> <li>(2) 0/1 ◀ : Not detected/Det</li> <li>YY = 01 (Automatic An</li> <li>(1) Data Station No. (X-XX</li> <li>(2) 0/1 ◀ : Automatic Answ AUTO Key</li> </ul>	OTR signal from XX) ected swer) XX) er/Selected by
		<ul> <li>YY = 04 (Data Transmis</li> <li>(1) Data Station No. (X-XX</li> <li>(2) 00 : 50 bps 01 : 75 bps 02 : 110 bps 03 : 150 bps 04 : 200 bps 05 : 300 bps 06 : 600 bps 07 : 1200 bps 08 : 2400 bps 09 : 4800 bps 10 : 9600 bps 11 : 19.2 Kbps 12 : 48 Kbps 13 : 56 Kbps 31 ◀ : 1200 bps</li> </ul>	sion Speed) XX)
В		<ul> <li>YY = 05 (Parity Check)</li> <li>(1) Data Station No. (X-XX</li> <li>(2) 0/1 ◀ : Effective/Ineffect</li> <li>YY = 06 (Async./Sync.)</li> <li>(1) Data Station No. (X-XX</li> <li>(2) 7 ◀ : Asynchronous</li> <li>YY = 07 (Transmission 1)</li> <li>(1) Data Station No. (X-XX</li> <li>(2) 0/1 ◀ : Half Duplex/Full</li> </ul>	XX) tive XX) Mode) XX) Duplex



#### HARDWARE REQUIRED

SN1152 DTAM-A Data Adapter

ETJ-8-1/ETJ-16DC-1/ETJ-16DD-1/ETJ-24DS-1 and PN-2DLCB/4DLCA card

DTE
## DATA HOTLINE

### PROGRAMMING

In addition to the programming of Asynchronous/Synchronous Data Switching, do the following programming to the required data stations.

<u>START</u>	DESCRIPTION	DATA		
CMA1	Assign the attribute data for the desired Data Hotline Stations.	<ul> <li>YY = 11 (Hotline Data Station)</li> <li>(1) Data Station No. (X-XXXX)</li> <li>(2) 0 : Hotline Data Station (Calling Side)</li> </ul>		
		<ul> <li>YY = 12 (Hotline call originating method)</li> <li>(1) Data Station No. (X-XXXX)</li> <li>(2) 0 : By pressing DATA key or turning DTR signal from DTE on.</li> <li>1◀ : By pressing DATA key</li> </ul>		
CM52	Set up the Hotline Pair Data Stations. Bidirectional Hotline should be assigned as follows:	<ul> <li>YY = 00-99 (Hotline Pair Number)</li> <li>To assign calling station:</li> <li>(1) 0</li> </ul>		
	Hotline Pair No.Calling SideCalled Side00Station AStation B01Station BStation A	<ul> <li>(2) Calling Data Station No.</li> <li>To assign calling station:</li> <li>(1) 1</li> <li>(2) Called Data Station No.</li> </ul>		
END	<b>Note:</b> 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 assigned. A maximum of 50 bidirectional Hotline pairs can be assigned.	(2) Canod Data Station 110.		

## DATA HOTLINE-OUTSIDE

## PROGRAMMING

In addition to the programming of Asynchronous/Synchronous Data Switching, do the following programming to the required data stations.

<u>START</u>	DESCRIPTION	DATA		
CM71	Allocate the memory area for the Hotline- Outside call.For example, to assign the 10 Hotline-Outside calls into No. 100 through No. 109 Memory Slots, 2nd data is "100010". Abbreviated numbers are automatically assigned as shown below. $Memory Slot 100$ $00$ $\int$ $00$ $\int$ $00$	<ul> <li>(1) 65: For Hotline-Outside</li> <li>(2) XXX ×a XXX: See left column</li> <li>*a: First Memory Slot No. in Block (000-299)</li> <li>*b: Number of Memory Slots to be assigned in Block (001-300)</li> </ul>		
CM72	Assign the outside party's number to each Memory Slot No.	<ol> <li>XXX: Memory Slot No. (000-299)</li> <li>XX: Access Code (Maximum of 2 dig- its) + , + Outside Party's Num- ber (Maximum of 26 digits)</li> </ol>		
CM52	Assign the Data Hotline pairs.	• YY = 00-99 (Hotline Pair No.)		
END		<ul> <li>To assign calling station <ol> <li>0</li> <li>Calling Data Station No.</li> </ol> </li> <li>To assign called outside party <ol> <li>1</li> <li>01<u>XX</u></li> <li>*a</li> </ol> </li> </ul> <li>*a: Abbreviated No. given by CM71</li>		

## DATA HUNTING

#### PROGRAMMING

In addition to the programming of Asynchronous/Synchronous Data Switching, do the following programming to the required Data Stations.

To assign Station Hunting-Circular:



# DATA HUNTING

To assign Station Hunting-Terminal:

<u>START</u>		DESCRIPTION		DATA	
CM18	CM18To set up each Hunting Group, assign data station numbers, one by one, as shown below.1st Operation $[(1)$ Station A(2) Station B2nd Operation $[(1)$ Station B(2) Station C		<ul> <li>Y = 0</li> <li>(1) X-XXXX (Data Station No. to be included in the Hunting Group)</li> <li>(2) X-XXXX (Another Data Station No. to be included in the Same Hunting Group)</li> </ul>		
	Assign the Pilot Station to required data sta- tion number within the Hunting Group. For the Member Data Stations, set the data to "0".		• (1) (2)	Y = 1 X-XXXX (Data Station No.) 1 : Pilot Data Station 0◀ : Member Data Station	
	<b>Note:</b> The maximum number of data stations that can be included on one Hunting group is 60, including the pilot data station. There is no limit to the number of Terminal Hunting groups within the system.				

# DATA INTERFACE-AUTOMATIC ANSWER

### PROGRAMMING

<u>START</u>	DESCRIPTION	DATA		
CM90	Assign the Data Interface-Automatic Answer key to a line key on the Multiline Terminal.	<ul> <li>YY = 00</li> <li>(1) Primary Extension Number + + Key No.</li> <li>(2) F2001: <u>AUTO/DISP</u> or F2003: <u>AUTO</u></li> </ul>		
CMA1 END	Assign the attribute data for each data terminal.	<ul> <li>YY = 01 (Automatic Answer) (1)X-XXXX (Data Station No.)</li> <li>(2) 0 : Automatic Answer 1 ◀ : Manual/Automatic Answer (Selectable by <u>AUTO/DISP</u>/<u>AUTO</u>)</li> </ul>		

# DO NOT DISTURB-DATA LINE

## PROGRAMMING

To provide Do Not Disturb-Data Line key to the required data stations:

<u>START</u>	DESCRIPTION	DATA		
CM90	Assign the Do Not Disturb-Data Line key to a line key on the Multiline Terminal.	<ul> <li>YY = 00</li> <li>(1) Primary Extension No. + + Key No.</li> <li>(2) F2005: DATA DND</li> </ul>		
END				

## NAILED-DOWN CONNECTION

# PROGRAMMING

In addition to the programming of Asynchronous/Synchronous Data Switching, do the following programming to the required data stations.

<u>START</u>	DES	CRIPTION			DATA		
CM35	Specify the connecting digital trunks in inter- office digital data transmission via DDI/CCIS.			• (1) (2)	<ul> <li>YY = 92</li> <li>(1) Trunk Route Number</li> <li>(2) 0 : 48 kbps (Digital Data) 1 : 56 kbps (Digital Data) 2 : 64 kbps (Transparent Digital Data) 7◀ : Analog Data (Modem)</li> </ul>		
CMA5	Assign Nailed-Down Connection pattern be- tween data terminal and DTI for digital data transfer.		• (1) (2)	YY = 00-99 (Memory Block) X-XXXX (Data Station Number A) X-XXXX (Data Station Number B)			
	Connection Pattern	1st Data	2nd Data				
	Data STA-Data STA	X-XXXX	X-XXXX				
	Data STA-Data TRK	X-XXXX	X-XXXX				
	Data TRK-Data TRK	DXXX	DXXX				
END							

CHAPTER 2 Page 442 Revision 2.0

## SYNCHRONOUS DATA SWITCHING

#### PROGRAMMING



# SYNCHRONOUS DATA SWITCHING

A	DESCRIPTION	DATA		
CMA1	Set up detection of DTR signal from the Data Terminal.	• (1) (2)	YY = 00 Data Station Number $0 : Not to be detected$ $1 \blacktriangleleft : To be detected$	
	Select Automatic Answer.	• (1) (2)	YY = 01 Data Station Number 0 : Automatic answer 1	
	Determine Data Speed.	• (1) (2)	YY = 04 Data Station Number 07 : 1200 bps 08 : 2400 bps 09 : 4800 bps 10 : 9600 bps 11 : 19.2 Kbps 12 : 48 Kbps 13 : 56 Kbps 31 $\triangleleft$ : 1200 bps	
	Select transmission format of Synchronous or Asynchronous.	• (1) (2)	<ul> <li>YY = 06</li> <li>Data Station Number</li> <li>0 : Synchronous transmission by internal clock (PBX clock)</li> <li>1 : Synchronous transmission by external clock (PBX clock)</li> <li>2 : Synchronous transmission by external clock (ST1 clock)</li> <li>3 : Synchronous transmission by external clock (ST2 clock)</li> <li>7 ◀ : Asynchronous transmission</li> </ul>	
B	Assign Half/Full Duplex.	• (1) (2)	YY = 07 Data Station Number 0 : Half-Duplex 1◀ : Full-Duplex	

## SYNCHRONOUS DATA SWITCHING

В	DESCRIPTION	DATA		
CMA1	Assign Character Code.	• $YY = 09$ (1) Data Stat: (2) 00 : AS 01 : 02 : 03 : 04 : 05 : 06 : 07 : 15 $\triangleleft$ :	ion Number SCII (7 bit) + even parity ASCII (7 bit) + odd parity ASCII (7bit) + parity (0) ASCII (7bit) + parity (1) JIS (7bit) + even parity JIS (7bit) + odd parity JIS (8 bit) EBCDIC (8 bit) Non character (binary data)	
	Assign the attribute data for the Data Adapter in accordance with the specification of the DTE connected.	<ul> <li>YY = 13</li> <li>(1) Data Stat</li> <li>(2) 1 : 2 se</li> <li>2 : 1 se</li> <li>3 ◀ : Con (Us)</li> </ul>	(RI signal sent to DTE) ion No. (X-XXXX) oc. ON, 4 sec. OFF oc. ON, 2 sec. OFF atinuous Signal ually set to "1")	
		• $YY = 14$ rec (1) Data Stat (2) 01 : 0 r 02 : 30 03 : 60 04 : 12 05 : 24 06 : 36 07 : 72 08 : 10 15 $\triangleleft$ : 60	(CTS signal delay timing after ceiving RTS signal from DTE) ion No. (X-XXXX) ns ms 0 ms 0 ms 0 ms 0 ms 0 ms 80 ms 80 ms ms	
END		<ul> <li>YY = 21</li> <li>(1) Data Stati</li> <li>(2) 00 : PR</li> <li>04 : V.</li> <li>15◀ : No</li> </ul>	(Rate Adaptation) ion No. (X-XXXX) COTIMS 11 ot used	

#### HARDWARE REQUIRED

ETJ-8-1/ETJ-16DC-1/ETJ-16DD-1/ETJ-24DS-1 and PN-2DLCB/4DLCA card SN1152 DTAM-A Data Adapter DTE

ND-45670 (E)

## TERMINAL ATTRIBUTE DATA ASSIGNMENT

#### PROGRAMMING

