## Panasonic



## Digital Super Hybrid System <br> Programming Guide

KX-TD816 model KX-TD1232


## Introduction

## About this Programming Guide

This Programming Guide is designed to serve as an overall system programming reference for the Panasonic Digital Super Hybrid System, KX-TD816 / KX-TD1232.
This manual contains the following sections:
Section 1, General Programming Instructions
Provides information about what you need or what you should do before/during programming.
Section 2, General Programming
Provides details about the general system programmings.
Section 3, Default Values
Provides the list of default values for all programmings.
Section 4, Index
Provides the important words and phrases to help you access the required information easily.

## About the other manuals

Along with this Programming Guide, the following manuals are available to help you install, know the available features and use the KX-TD816 / KX-TD1232 system:

## Installation Manual

Provides instructions for installing the hardware and optional equipment.

## Features Guide

Provides information about the system features.

## User Manual

Provides operating instructions for the end users using proprietary telephones, single line telephones, consoles.

## Table of Contents

1 General Programming Instructions ..... 9
1.1 General Programming Instructions ..... 10
1.2 Using Proprietary Telephones ..... 11
1.3 Programming Methods ..... 15
1.4 Entering Characters ..... 17
1.5 User Programming Mode ..... 22
1.6 Programming Example ..... 23
2 General Programming ..... 27
2.1 Manager Programming ..... 28
[000] Date and Time Set ..... 28
[001] System Speed Dialing Number Set ..... 30
[002] System Speed Dialing Name Set ..... 32
[003] Extension Number Set ..... 34
[004] Extension Name Set ..... 36
[005] Flexible CO Button Assignment. ..... 38
[006] Operator / Manager Extension Assignment ..... 41
[007] DSS Console Port and Paired Telephone Assignment ..... 43
[008] Absent Messages ..... 45
[009] Quick Dial Number Set ..... 47
[012] ISDN Extension Number Set ..... 48
[013] ISDN Extension Name Set ..... 50
[014] VM Name Set ..... 52
[017] DISA User Codes ..... 53
2.2 System Programming. ..... 55
[100] Flexible Numbering ..... 55
[101] Day / Night Service Switching Mode ..... 60
[102] Day / Night Service Starting Time ..... 61
[103] Automatic Access Outside Line Assignment ..... 63
[105] Account Codes ..... 64
[106] Station Hunting Type ..... 66
[107] System Password ..... 68
[108] Automatic Hold by CO / DSS Button ..... 70
[109] Expansion Unit Type ..... 71
[110] Caller ID Code Set ..... 73
[111] Caller ID Name Set ..... 75
[112] Network Type Assignment ..... 77
[113] VM Status DTMF Set ..... 78
[114] VM Command DTMF Set ..... 80
[115] Adjust Time ..... 82
[116] ROM Version Display ..... 83
[117] Voice Mail Number Assignment ..... 84
[118] Voice Mail Extension Number Assignment ..... 86
[119] Voice Mail Extension Group Assignment ..... 88
[120] User Password ..... 90
[121] Walking COS Password ..... 92
[122] UCD Overflow ..... 93
[123] UCD Time Table ..... 95
[124] Phantom Extension Number Assignment ..... 97
[125] Area Code Assignment ..... 99
[126] Caller ID Modification for Local Call ..... 101
[127] Caller ID Modification for Long Distance Call ..... 103
[128] PBX Code ..... 104
[130] Message Waiting Control ..... 105
[131] Message Waiting Lamp Assignment ..... 107
[132] Message Waiting Port Set ..... 110
[133] Caller ID Extension Assignment ..... 112
[134] Hotel Application ..... 114
[135] DID Number Conversion Selection ..... 115
[136] DID Number Assignment ..... 116
[137-138] DID Extension - Day / Night ..... 118
[139] DID Extension Name Set ..... 120
[148] Off-Hook Monitor ..... 121
[150] Lunch Service Starting / Ending Time ..... 122
[151] Break Service Starting / Ending Time ..... 124
2.3 Timer Programming ..... 126
[200] Hold Recall Time ..... 126
[201] Transfer Recall Time. ..... 127
[202] Call Forwarding - No Answer Time ..... 128
[203] Intercept Time ..... 129
[204] Pickup Dial Waiting Time ..... 130
[205] Extension-to-Outside Line Call Duration Time. ..... 131
[206] Outside-to-Outside Line Call Duration Time ..... 132
[207] First Digit Time ..... 133
[208] Inter Digit Time ..... 134
[211] Dial Start Time. ..... 135
[212] Call Duration Count Start Time ..... 136
[213] DISA Delayed Answer Time ..... 137
[214] DISA Prolong Time ..... 138
[215] Outgoing Message Time ..... 139
[216] Message Waiting Ring Interval Time ..... 141
[217] Timed Reminder Alarm Ring Time ..... 142
[218] DISA AA Wait Time. ..... 143
[219] Call Park Recall Time ..... 144
[220] TIE First / Inter Digit Time ..... 145
2.4 TRS / ARS Programming ..... 146
[300] TRS Override for System Speed Dialing ..... 146
[301-305] TRS Denied Code Entry for Levels 2 through 6 ..... 147
[306-310] TRS Excepted Code Entry for Levels 2 through 6 ..... 149
[311] Special Carrier Access Codes ..... 151
[312] ARS Mode ..... 152
[313] ARS Time ..... 153
[314-321] ARS Leading Digit Entry for Plans 1 through 8 ..... 155
[322-329] ARS Routing Plans 1 through 8 ..... 157
[330] ARS Modify Removed Digit ..... 159
[331] ARS Modify Added Number ..... 160
[332] Extra Entry Table Selection ..... 161
[333] TRS Entry Code Assignment for Extra Table ..... 162
[334] Emergency Dial Number Set ..... 163
[340] TIE Line Routing Table ..... 164
[341] TIE Modify Removed / Added Digit. ..... 166
2.5 Outside Line Programming ..... 168
[400] Outside Line Connection Assignment ..... 168
[401] Outside Line Group Assignment ..... 170
[402] Dial Mode Selection ..... 172
[403] Pulse Speed Selection ..... 174
[404] DTMF Time ..... 176
[405] CPC Signal Detection Incoming Set ..... 178
[406] Caller ID Assignment ..... 180
[407-408] DIL 1:1 Extension - Day / Night ..... 182
[409-410] Intercept Extension - Day / Night ..... 184
[411] Host PBX Access Codes ..... 186
[412] Pause Time ..... 188
[413] Flash Time ..... 190
[414] Disconnect Time ..... 192
[415] CPC Signal Detection Outgoing Set ..... 194
[416] Reverse Circuit Assignment ..... 196
[417] Outside Line Name Assignment. ..... 197
[418] Outside Line Number Assignment for PRI CLIP ..... 199
[419] ISDN Outgoing CLIR Service Assignment ..... 201
[420] ISDN Ring Service Assignment ..... 203
[423] ISDN Port Type ..... 205
[424] ISDN Layer 1 Active Mode. ..... 207
[425] ISDN Configuration ..... 209
[426] ISDN Data Link Mode ..... 211
[427] ISDN TEI Mode ..... 213
[428] ISDN Extension Multiple Directory Number ..... 215
[429] ISDN Extension Progress Tone ..... 217
[430] DID / TIE Format Number Assignment ..... 219
[431] DID / TIE Incoming Assignment ..... 220
[432] DID / TIE Outgoing Assignment ..... 222
[433] DID / TIE Subscriber Number Removed Digit ..... 224
[434] DID / TIE Added Number ..... 226
[435] DID / TIE Wink Time Out Assignment ..... 228
[436] CO-to-TIE Transfer ..... 230
[437] TIE-to-CO Transfer ..... 231
[438] TIE-to-TIE Transfer ..... 232
[439] TIE Security Type ..... 233
[440] Line Hunting Sequence ..... 234
[453] SPID Assignment ..... 235
[454] DN Assignment ..... 237
[455-456] Extension Ringing Assignment - Day / Night for ISDN ..... 239
[457-458] DIL 1:1 - Lunch / Break Group ..... 241
[460] PRI Connection Assignment ..... 243
[461] PRI Line Coding Assignment ..... 244
[462] PRI Frame Sequence Assignment ..... 245
[463] PRI Timer 1 and Timer 2 Assignment ..... 246
[464] PRI Inter Digit Timer 1 Assignment ..... 248
[465] PRI Inter Digit Timer 2 Assignment ..... 249
[466] PRI Dial Counter for Inter Digit Timer 2 Assignment ..... 250
[467-468] DIL 1:1 Extension __ Lunch / Break ..... 251
2.6 COS Programming ..... 253
[500-501] Toll Restriction Level -_ Day / Night ..... 253
[502] Extension-to-Outside Line Call Duration Limit ..... 255
[503] Call Transfer to Outside Line. ..... 257
[504] Call Forwarding to Outside Line ..... 258
[505] Executive Busy Override ..... 259
[506] Executive Busy Override Deny ..... 260
[507] Do Not Disturb Override ..... 261
[508] Account Code Entry Mode ..... 262
[509] Off-Hook Call Announcement (OHCA) ..... 264
[510] Night Service Access ..... 265
[511] PITS Programming Level ..... 266
2.7 Extension Programming ..... 268
[600] EXtra Device Port. ..... 268
[601] Class of Service ..... 270
[602] Extension Group Assignment ..... 272
[603-604] DIL 1:N Extension and Delayed Ringing - Day / Night. ..... 274
[605-606] Outgoing Permitted Outside Line Assignment - Day / Night. ..... 276
[607-608] Doorphone Ringing Assignment - Day / Night ..... 278
[609] Voice Mail Access Codes. ..... 280
[610] Live Call Screening Recording Mode Assignment ..... 282
[613] ISDN Class of Service ..... 284
[614-615] Outgoing Permitted Outside Line Assignment —— Day / Night for ISDN Extension ..... 286
[619] Extension Call Forwarding - No Answer Time. ..... 288
[620] Lunch / Break Group Assignment ..... 289
[621] Cordless PITS Extension Port. ..... 291
[622] Extension CLIP Number Assignment ..... 293
[624] ISDN Extension CLIP Number Assignment ..... 295
2.8 T1 Programming ..... 297
[700] T1 Channel Assignment ..... 297
[701] T1 Dial Mode ..... 298
[702] T1 COT CPC (IN) ..... 299
[703] T1 DID CPC (IN) ..... 300
[704] T1 COT CPC (OUT) ..... 301
[705] T1 DID CPC (OUT) ..... 302
[706] T1 DID Receive Digits ..... 304
[707] T1 Clock Mode ..... 306
[708] T1 Line Coding ..... 307
[709] T1 Frame Sequence ..... 308
[710] T1 Frame Option ..... 309
[711] T1 First Dial Timer (CO) ..... 310
[712] T1 First Dial Timer (DID / TIE) ..... 311
[713] T1 \%Break ..... 312
[714] T1 Dial Click Tone ..... 313
[715] T1 Inter Digit Pause ..... 314
[716] T1 Flash Detection. ..... 315
[717] T1 Answer Decision Timer ..... 316
[718] T1 Break Detection ..... 317
[719] T1 Pulse Type ..... 318
[720] T1 TIE Ringing Service ..... 319
[721] T1 / PRI Reference CO ..... 321
[722] T1 Answer Wait Timer ..... 323
[723] T1 Sending TIE Caller ID ..... 325
[725] T1 Extension Number ..... 327
[726] T1 Extension Name ..... 328
[727] T1 Extension COS Number ..... 330
[728] T1 Extension Outgoing Permitted Outside Line Assignment - Day ..... 332
[729] T1 Extension Outgoing Permitted Outside Line Assignment - Night ..... 334
[730] T1 Extension Voice Mail Access Codes ..... 336
2.9 Resource Programming ..... 338
[800] SMDR Incoming / Outgoing Call Log Printout ..... 338
[801] SMDR Format ..... 340
[802] System Data Printout ..... 341
[803] Music Source Use ..... 343
[804] External Pager BGM ..... 345
[805] External Pager Confirmation Tone ..... 347
[806-807] Serial Interface (RS-232C) Parameters ..... 348
[809] DISA Security Type ..... 350
[810] DISA Tone Detection ..... 351
[812] DISA DTMF Repeat. ..... 352
[813] Floating Number Assignment ..... 353
[814] Modem Standard ..... 355
[815] DISA Built-in Auto Attendant ..... 356
[817] KX-TD197 / KX-TD198 Baud Rate Set ..... 357
[818] Doorphone Tone Frequency Selection. ..... 358
[820] Doorphone Ringing Time ..... 359
2.10 Optional Programming ..... 360
[990] System Additional Information ..... 360
[991] COS Additional Information ..... 372
3 Default Values ..... 377
4 Index ..... 389

## Section

## General Programming Instructions

### 1.1 General Programming Instructions

## Default Setting

This system has a default factory setting. If any of the programming needs to be changed, you will find the necessary information in the Features Guide. This makes the system very simple to install and customize as required by the customer. Any required changes can be written in "Programming Tables".

## Required Telephone Set

One of the following telephone sets is required for System Programming:

- Digital Proprietary Telephone (DPT):

KX-T7436, KX-T7433, KX-T7431, KX-T7235, KX-T7230

- Analog Proprietary Telephone (APT):

KX-T7335, KX-T7130, KX-T7135, KX-T7030

## Extensions Used for Programming

Connect one of the above-mentioned telephone sets to either of the following:

- Jack number 1
- Jack programmed as a manager extension

To assign the manager extension, see Section [006] Operator / Manager Extension Assignment.

## User Programming (Manager Programming)

Manager programming items are allowed for any display proprietary telephone user in the system. See Section 1.5 User Programming Mode.

### 1.2 Using Proprietary Telephones

## Soft Buttons and SHIFT Button on the Display DPT

Three soft buttons are provided just below the display on the display of Digital Proprietary Telephones (DPT), KX-T7433, KX-T7436, KX-T7230 and KX-T7235. The functions of these soft buttons vary as the programming procedures advance step by step. Those functions that are currently assigned to the buttons are shown on the lower line of the display. (See "Viewing the Display" in this section for more information on the display lines.)
If the SHIFT button indicator is on, two functions are available with each soft button. To alternate between the two functions, press the SHIFT button on the right side of the display.

## Soft button variations

Type 1


Type 3


Type 5


You can use either the soft buttons or the overlay buttons. (For overlay buttons, refer to "Using the Overlay" below.)
Throughout programming you will see instructions such as "Press PREV". If you use soft buttons, this means press SHIFT, release SHIFT and then press Soft 3. The (PREV) function is performed.

## Note

If you use soft buttons and if programming instructions tell you to press the following buttons, you may press soft buttons shown below.

| Instructions | Soft button |
| :---: | :---: |
| SELECT | SEL+,,SEL-,or SEL |
| CLEAR | CLR |

## Using the Overlay

A programming overlay is packed with the telephone at the factory. This overlay should be used at all times while in programming mode since the functions of the telephone keys change while in programming mode as follows: (The original functions are in parentheses.)

| During Normal Operation | During Programming |
| :---: | :---: |
| (PAUSE) | PAUSE / PROGRAM |
| (SP-PHONE) | NEXT |
| (REDIAL) | PREV (PREVIOUS) |
| (AUTO ANSWER / MUTE) | SELECT |
| (FLASH) | FLASH |
| (TRANSFER) | CLEAR |
| (FWD / DND) | $\boldsymbol{子}$ |
| (CONF) | $-/ \boldsymbol{u}$ |
| (INTERCOM) | SECRET |
| (AUTO DIAL / STORE) | STORE |
| (HOLD) | END |

## Location of Controls with the Overlay

The pictures below show the functions of the buttons of the KX-T7433, KX-T7436, KX-T7230 and KX-T7235 while in programming mode. KX-T7431 is the same as KX-T7433 except for the Soft and SHIFT buttons.


## Viewing the Display

The display gives you helpful information, such as what you should do now, what you have done, etc.
The KX-T7433, KX-T7436, KX-T7230 and the KX-T7235 utilize two information lines for programming. The upper line is called the Message Line and the lower one is called the Function Line.
The Message Line (upper) shows you what you should do or what you should select. It also allows you to confirm what you have just entered. The display capacity is 16 digits. If your entry exceeds the capacity, you can shift the display by pressing $\boldsymbol{\rightarrow}$ or button. The Function Line (lower) shows the current function of the soft buttons. These functions change with the programming procedures.



KX-T7436 / KX-T7235 Display

## Before entering the programming mode

Before entering programming mode, confirm that:

- Your telephone is on-hook.
- No calls are on hold at your telephone.


## Entering the programming mode

$$
\begin{aligned}
& \text { Press PROGRAM (or PAUSE) }+*+\text { \# and enter your System } \\
& \text { Password (default }=1234 \text { ). }
\end{aligned}
$$

- The display shows the Initial Message: SYS-PGM NO? $\rightarrow$


## Note

- If your telephone set does not have a PROGRAM button, substitute it with the PAUSE button.
- If nothing is entered in five seconds after the PROGRAM (or PAUSE ) button is pressed, it is canceled.
- The System Password entered is not shown on the display. The System Password can be changed by System Programming. Refer to Section [107] System Password.
- During the programming mode, your extension is treated as a busy extension.
- Only one proprietary telephone can be in programming mode at any one time.


### 1.3 Programming Methods

## Advancing to the next stage

When "SYS-PGM NO? $\rightarrow$ " is displayed, you can select one of the following:

- To go to program [000], press the NEXT button.
- To go to another program, enter the 3-digit program address.


## Rotation of jack number

Each jack of the Digital Super Hybrid System supports the connection of a digital proprietary telephone and a single line device with different extension numbers (eXtra Device Port: XDP function). To program this function it is necessary to assign two parts for each jack. The first part of jack one is $01-1$. The second part of jack one is $01-2$. The first part of jack two is $02-1$ and so on. The NEXT and PREV buttons can be used to move from jack to jack as required in programs [003], [004] and [601] through [610].

## Example



## Note

The first part of a jack is for a DPT of a XDP-assigned jack. The second part is for a single line device. Program [600] "EXtra Device Port" assigns which jacks are XDP.

## Storing your data

Press STORE to store your data.

- The STORE indicator lights red and a confirmation tone is emitted.


## * Confirmation tone (one beep)

After pressing STORE, you will hear a beep. This informs you that storage is completed.

## * Alarm tone (three beeps)

If you hear this alarm, your entry is not valid.

## Making another selection within the same program address

- To make the next higher selection, press NEXT.
- To make the previous selection, press PREV.
- To make a specific selection, press SELECT and then enter the number.


## Going to another program address

After pressing STORE, you can go to another program with either of the following two methods:
a) To go to the next larger program address:

Press Soft 1 (SKP+) or VOLUME $\vee($ DOWN $)$.
To go to the next smaller program address:
Press SHIFT + Soft 1 (SKP—) or VOLUME $\wedge$ (UP).
b) To go to a specific program address:

Press END, then enter the Program Address.
Method (1) is useful when you want to perform a series of programs consecutively. For example, to change the programming in addresses [000] to [008], use this method. You can move from [000] to [001], from [001] to [002], and so on by pressing the SKP+ or VOLUME $V$. You can move in reverse order from [008] to [007], etc. by pressing the SKP— or
VOLUMEA.
This method can also be used to move between neighboring program groups: For example, you can move between the program addresses [008] and [100], [116] and [200], and so on. Also, you can move between the smallest program address [000] and the largest one [991]. Method (2) is useful when you wish to jump to another program address. For example, you have just finished with program [006] and now you want to go to program [301]. Neither SKP+ / VOLUME $\vee$ nor $\mathbf{S K P}$ — / VOLUME $\wedge$ is convenient in this case. So you should press END and enter 301.

## Note

The following programming instructions assume that you have already entered the programming mode and that you will use Method (2).

## Confirming the entries

You may review the stored programming without making any changes.

## Going back to the operation mode

Two ways are available to go back to the operation mode:
a) Lift the handset while in programming mode.
b) When the Initial Message: SYS-PGM NO? is displayed, press the PROGRAM (or PAUSE) button. (To display the Initial Message, press END.)

### 1.4 Entering Characters

## Entering Characters

You can enter characters to store names or messages in the following programs by using the dialing key pad, buttons or the Jog Dial.
[002] System Speed Dialing Name Set
[004] Extension Name Set
[008] Absent Messages
[013] ISDN Extension Name Set
[014] VM Name Set
[111] Caller ID Name Set
[139] DID Extension Name Set
[417] Outside Line Name Assignment
[726] T1 Extension Name
See the Combination Tables below.

## Combination Tables

Combination Table a

| SHIFT \& Soft Combination |  | S1 | $\begin{gathered} \text { SHIFT } \\ + \text { S1 } \end{gathered}$ | S2 | $\begin{gathered} \text { SHIFT } \\ +\mathbf{S} 2 \end{gathered}$ | S3 | $\begin{gathered} \text { SHIFT } \\ + \text { S3 } \end{gathered}$ | $\begin{gathered} \text { SHIFT } \\ + \\ \text { SHIFT } \\ + \text { S1 } \end{gathered}$ | $\begin{array}{\|c} \hline \text { SHIFT } \\ + \\ \text { SHIFT } \\ + \text { S2 } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Pressing <br> SELECT <br> (Times) | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Keys |  |  |  |  |  |  |  |  |  |
| 1 | 1 | Q | q | Z | z | ! | ? |  |  |
| 2 | 2 | A | a | B | b | C | c |  |  |
| 3 | 3 | D | d | E | e | F | f |  |  |
| 4 | 4 | G | g | H | h | I | i |  |  |
| 5 | 5 | J | j | K | k | L | 1 |  |  |
| 6 | 6 | M | m | N | n | O | o |  |  |
| 7 | 7 | P | p | Q | q | R | r | S | s |
| 8 | 8 | T | t | U | u | V | v |  |  |
| 9 | 9 | W | w | X | x | Y | y | Z | z |
| 0 | 0 |  | . | , | ' | : | ; |  |  |
| * | * | / | + | - | = | $<$ | > |  |  |

## Combination Table a

|  <br> Soft <br> Combination | S1 | SHIFT <br> + S1 | S2 | SHIFT <br> + S2 | S3 | SHIFT <br> + S3 | SHIFT <br> + <br> SHIFT <br> + S1 | SHIFT <br> + <br> SHIFT <br> + S2 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Pressing <br> SELECT <br> (Times) | 0 | $\mathbf{1}$ | 2 | $\mathbf{3}$ | 4 | $\mathbf{5}$ | $\mathbf{6}$ | 7 | $\mathbf{8}$ |
| Keys |  |  |  |  |  |  |  |  |  |
| $\#$ | $\#$ | $\$$ | $\%$ | $\&$ | $@$ | $($ | $)$ |  |  |

Combination Table b

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

Note

- The alphabetical characters correspond to the letters shown on the twelve dialing keys on the proprietary telephone. (except symbols)
- In Combination Table a:

If your telephone is a KX-T7431, do not use the provided SELECT button. Use the AUTO ANSWER / MUTE button which becomes the SELECT button when using the overlay.

- In Combination Table b:

If you keep rotating the Jog Dial, all of the characters in the table will be displayed.

Please see the following example which shows how to select a desired character.
For example, to select the letter "M":
Select either of the following three methods:

1. Using the SHIFT and Soft buttons (for KX-T7433 / KX-T7436 / KX-T7230 / KX-T7235 only)

* See Combination Table a.
a) Press 6. ("M" belongs to "6".)
- The Function Line shows: M N O
b) Press the Soft 1 (M) button.
(Press SHIFT to display the lower case of the above letters.)

2. Using the SELECT button

* See Combination Table a.
a) Press 6. ("M" belongs to "6".)
b) Press the SELECT button once.
- Pressing the SELECT button an appropriate number of times gives you the desired letter. Pressing SELECT twice gives the letter " m ", pressing three times gives " N ", and so on.

3. Using the Jog Dial
(for KX-T7431 / KX-T7433 / KX-T7436 only)

* See Combination Table b.
a) Press 6. ("M" belongs to "6".)
b) Rotate the Jog Dial one pulse.
- Rotating the Jog Dial an appropriate number of pulses gives you the desired letter. Rotating the Jog Dial two pulses gives the letter " m ", rotating three pulses gives " N ", and so on.


## OR

a) Press any dialing keypad.
b) Rotate the Jog Dial until the desired character appears.

- If you keep rotating the Jog Dial, all of the characters will be displayed. For example, If you rotate the Jog Dial after pressing 2, characters will appear in the following order: A a B b $\cdots \cdot \mathrm{Z}$ z (space) ! ? . , ' ; ; $/+$ — = < > \# \$ \% \& @ ( ) A a B b $\cdots$


## Example of entering characters: to enter "Mike":

Using method (1)

* See Combination Table a.
a) Enter 6

|  |  | 6 |  |
| :--- | :--- | :--- | :--- |
| $M$ | $N$ | $O$ |  |

b) Press Soft 1 (M)

|  |  |  |  |
| :--- | :--- | :--- | :--- |
| M | M | O |  |

c) Enter 4

| M4 |  |  |
| :--- | :--- | :--- |
| $G$ | $H$ | I |

d) Press SHIFT.

|  | M4 |  |
| :--- | :--- | :--- |
| g | h | i |

e) Press Soft 3 (i)

| Mi |  |  |
| :--- | :--- | :--- |
| g | h | i |

f) Enter 5

| Mi5 |  |  |
| :---: | :---: | :---: |
| $j$ | $k$ | 1 |

g) Press Soft 2 (k)

| Mik |  |  |
| :---: | :---: | :---: |
| $j$ | $k$ |  |

h) Enter 3

|  | Mik3 |  |
| :--- | :--- | :--- |
| d | e |  |

i) Press Soft 2 (e)


Using method (2)

* See Combination Table a.

|  | The display shows: |
| :--- | :--- |
| 1. Enter $\mathbf{6}$. | 6 |
| 2. Press SELECT. | M |
| 3. Enter $\mathbf{4}$. | M 4 |
| 4. Press SELECT six times. | Mi |
| 5. Enter $\mathbf{5}$. | $\mathrm{Mi5}$ |
| 6. Press SELECT four times. | Mik |
| 7. Enter 3. | Mik3 |
| 8. Press SELECT four times. | Mike |

Using method (3)

* See Combination Table b.

|  | The display shows: |
| :--- | :--- |
| 1. Enter 6. | 6 |


|  | The display shows: |
| :--- | :--- |
| 2. Rotate Jog Dial one pulse. | M |
| 3. Enter 4. | M 4 |
| 4. Rotate Jog Dial six pulse. | Mi |
| 5. Enter 5. | Mi5 |
| 6. Rotate Jog Dial four pulses. | Mik |
| 7. Enter 3. | Mik3 |
| 8. Rotate Jog Dial four pulses. | Mike |

OR

|  | The display shows: |
| :--- | :--- |
| 1. Enter 2. | 2 |
| 2. Rotate Jog Dial until "M" appears. | M |
| 3. Enter 2. | M 2 |
| 4. Rotate Jog Dial until "i" appears. | Mi |
| 5. Enter 2. | Mi 2 |
| 6. Rotate Jog Dial until "k" appears. | Mik |
| 7. Enter 2. | Mik2 |
| 8. Rotate Jog Dial until "e" appears. | Mike |

## Note

- To erase all the letters, press CLEAR.
- To erase the last letter, press


### 1.5 User Programming Mode

## User Programming Mode

Some programming items are accessible by any display proprietary telephone user in the system.
The programming items are listed below:
[000] Date and Time Set
[001] System Speed Dialing Number Set
[002] System Speed Dialing Name Set
[003] Extension Number Set
[004] Extension Name Set
[005] Flexible CO Button Assignment
[006] Operator / Manager Extension Assignment
[007] DSS Console Port and Paired Telephone Assignment
[008] Absent Message
[009] Quick Dial Number Set
[012] ISDN Extension Number Set
[013] ISDN Extension Name Set
[014] VM Name Set
[017] DISA User Codes

## Entering the user programming mode

You can access these programs by entering the User Programming Mode as follows:
Before entering the mode, confirm that:

- Your telephone is on-hook.
- No calls are on hold at your telephone


## Press PROGRAM (or PAUSE) $+*+*$ and enter the User Password (default: 1234)

After entering the mode, perform the same programming steps as the system programming steps in each program address.

## Note

- If your telephone set does not have a PROGRAM button, substitute it with the PAUSE button.
- If nothing is entered in five seconds after the PROGRAM (or PAUSE) button is pressed, it is canceled.
- The User Password is not shown on the display. The password can be changed by system programming. Refer to Section [120] User Password.
- During the programming mode, your extension is treated as a busy extension.
- Only one proprietary telephone can be in programming mode at any one time.


### 1.6 Programming Example

## Programming Example

The following programming instructions assume that you have already entered the programming mode and that you will employ method (2) of "Going to another program address" in Section 1.2 Using Proprietary Telephones.
Example: Program [001] System Speed Dialing Number Set.

| Sample of Description | Explanation |
| :---: | :---: |
| [001] ${ }^{(1)}$ System Speed Dialing Number Set | (1) Program address: This address is printed at the top of every page to allow you to quickly find the desired program. |
| Description ${ }^{(3)}$ | (2) Program title. |
| Used to program the System Speed Dial numbers. These numbers are available to all extension users. There are 500 numbers available from 000 to 499 . | (3) Provides a more detailed description of the program. |
| Selection ${ }^{(4)}$ | (4) Shows you choices that you can assign. <br> (5) Shows you the default (factory setting). |
| - Speed dial number: 000 through 499 | (6) Shows you programming procedures step by step. |
| - Telephone number: 24 digits (max.) |  |
| Default ${ }^{(5)}$ | - Before starting to program, enter the |
| All speed dial numbers - Not stored | programming mode. (See "Entering the programming mode" in section 1.2 "Using |
| Programming ${ }^{(6)}$ | Proprietary Telephones"). <br> (7) Enter the program address. |
| 1. Enter 001. ${ }^{(7)}$ <br> Display: 001 SYS SPD DIAL ${ }^{(8)}$ <br> 2. Press NEXT. ${ }^{(9)}$ | (8) The display shows the program title. If your telephone has soft buttons, the lower line shows the functions that are currently assigned to them. |
| $\text { Display: SPD Code? } \rightarrow{ }^{(10)}$ <br> 3. Enter a speed dial number. | (9) Press either Soft 3 (NEXT) shown on the display or the NEXT shown on the overlay. |
| To enter speed dial number 000, you can also press NEXT. | (10) The message line advises you to enter a speed dial number. |
| Display example: 000:Not Stored | (11) If the telephone number has already been stored, the number is displayed. |
| 4. Enter a telephone number. ${ }^{(12)}$ | (12) Enter the telephone number that you want to store. |
| To delete the current entry, press CLEAR. ${ }^{(13)}$ | Your entry is displayed as you enter the digits. |
|  |  |
| To change the current entry, press CLEAR and the new number. | (14) Your entry is now store |
| 5. Press STORE. ${ }^{(14)}$ | The indicator lights red and a confirmation tone lets you know that storage is complete. |


| Sample of Description |  | Explanation |
| :---: | :---: | :---: |
| 6. To program another speed dial number, press NEXT or PREV, or SELECT and the desired speed dial number. ${ }^{(15)}$ <br> 7. Repeat steps 4 through 6. ${ }^{(16)}$ <br> 8. Press END. ${ }^{(17)}$ |  | (15) Select the best way for you to store another speed dial number. Pressing the NEXT / PREV allows you to select the next higher / lower speed dial number. You can also keep pressing them until the desired one is displayed. If you press SELECT and the desired speed dial number, the selected code is displayed. |
| Conditions ${ }^{(18)}$ • Each speed dial number has a maximum of 24 digits. The valid characters are $\mathbf{0}$ through 9 , the $*$ and \# keys, and the FLASH or FLASH / RCL, PAUSE, SECRET and (hyphen) buttons. |  | (16) You can continue to program another entry. <br> (17) After you have stored all your entries, finish this program by pressing END. After pressing END you can go to any program address you desire. You can return to the Initial Message mode any time by pressing END. <br> To go to the next lager program address, do not press END but press Soft 1 (SKP+) or VOLUME $\vee$. <br> To go to the next smaller program address, do not press END but press SHIFT + Soft 1 (SKP-) or VOLUME $\wedge$. <br> (18) Tells you what you should notice or consider when doing the programming. |
| Features Guide <br> Specia <br> Systen | eferences ${ }^{(19)}$ <br> Display Features - Call Directory <br> Speed Dialing | (19) Lists all of the features related to the programming. These features are described in Section 3. |

Programming Structure

| Program Address | Programming Group | Description |
| :---: | :--- | :--- |
| $[0 \mathrm{XX}]$ | Manager Programming | These programs may be accessed by the system <br> manager of the customer to meet frequent changes <br> requested by the customer. |
| $[1 \mathrm{XX}]$ | System Programming | Entire system programming. |
| $[2 \mathrm{XX}]$ | Timer Programming | Flexible system timer setting. |
| $[3 \mathrm{XX}]$ | TRS / ARS Programming | Assignment of Toll Restriction and Automatic <br> Route Selection (ARS). |
| $[4 \mathrm{XX}]$ | Outside Line Programming | Setting of outside line and outside line group values. |

Programming Structure

| Program Address | Programming Group | Description |
| :---: | :--- | :--- |
| $[5 \mathrm{XX}]$ | COS Programming | Setting of Class of Service (COS). |
| $[6 \mathrm{XX}]$ | Extension Programming | Setting of extension values. |
| $[7 \mathrm{XX}]$ | T1 Programming | Setting of T1 Line. |
| $[8 \mathrm{XX}]$ | Resource Programming | Assignment of customer-supplied peripherals <br> connected to the system. |
| $[9 \mathrm{XX}]$ | Option Programming | Used to answer the user's requirements or troubles, <br> if needed. |

## Section 2

## General Programming

### 2.1 Manager Programming

## [000] Date and Time Set

## NOTICE

It is assumed that you have read Section "General Programming Instructions". Soft button usage is explained in that section, therefore no references will be made to them in the following instructions. The soft buttons can be used in place of the overlay keys at any time.

## Description

Sets the current date and time. A 12 hour format or 24 hour format can be selected.

## Selection

- Year: $\mathbf{0 0}$ through 99
- Month: Jan. through Dec.
- Day: $\mathbf{1}$ through 31
- Day of the week: SUN / MON / TUE / WED / THU / FRI / SAT
- Hour: 1 through 12
- Minute: 00 through 59
- AM / PM
- Hour format: 12 or 24


## Default

'93 Jan. 1 FRI 12:00 AM 12

## Programming

1. Enter 000.

Display: 000 DATE / TIME
2. Press NEXT.

Display example: '93 Jan. 1 FRI
3. Enter the year.

To change the current entry, press CLEAR and enter the new year.
4. Press
5. Keep pressing SELECT until the desired month is displayed.
6. Press
7. Enter the day.

To change the current entry, press CLEAR and enter the new day.

## 8. Press

9. Keep pressing SELECT until the desired day of the week is displayed.
10.Press STORE.
11.Press NEXT.

Display example: 12:00 PM 24
12.Enter the hour.

To change the current entry, press CLEAR and enter the new hour.
13.Press
14.Enter the minute.

To change the current entry, press CLEAR and enter the new minute.
15.Press
16. Press SELECT for AM or PM.
17.Press
18.Press SELECT for 12 or 24 (hour format).
19.Press STORE.
20.Press END.

## Conditions

- After changing an entry, you can press STORE. You do not have to perform the rest of the steps.
- To return to a previous field, press $\boldsymbol{\operatorname { i n }}$ steps 4 through 9 and steps 13 through 18 .
- If you hear an alarm after pressing STORE, check that the date is valid.
- The clock starts immediately after the STORE button is pressed.
- You cannot leave an entry empty.
- Program [990] System Additional Information, Area 05 - Bit 1 is used to enable the automatic time adjustment by Caller ID information once a day.


## Features Guide References

Display, in Idle

## [001] System Speed Dialing Number Set

## Description

Used to program the System Speed Dial numbers. These numbers are available to all extension users. There are 500 numbers available from 000 to 499 .

## Selection

- Speed dial number: 000 through 499
- Telephone number: $\mathbf{2 4}$ digits (max.)


## Default

All speed dial numbers - Not stored

## Programming

1. Enter 001.

Display: 001 SYS SPD DIAL
2. Press NEXT.

Display: SPD Code? $\rightarrow$
3. Enter a speed dial number.

To enter speed dial number 000, you can also press NEXT.
Display example: 000:Not Stored
4. Enter a telephone number.

To delete the current entry, press CLEAR.
To change the current entry, press CLEAR and enter the new number.
5. Press STORE.
6. To program another speed dial number, press NEXT or PREV, or SELECT and the desired speed dial number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- Each speed dial number has a maximum of 24 digits. The valid characters are $\mathbf{0}$ through $\mathbf{9}$, the * and \# keys, and the FLASH or FLASH / RCL, PAUSE, SECRET and - (hyphen) buttons.
-To store a flash signal, press FLASH or FLASH/RCL.
Note:
The stored flash will only be effective during a call. (Refer to Section "External Feature Access" in the Features Guide.)
-To store a hyphen, press the "-" button.
-To store a pause, press PAUSE. (Refer to Section "Pause Insertion, Automatic" in the Features Guide.)
-To store a feature number to convert pulse signals to DTMF (Dual Tone Multi-Frequency) signals, press the * and \# keys. (Refer to Section "Pulse to Tone Conversion" in the Features Guide.)
-To prevent displaying of all or part of the number, press SECRET before and after the secret number, or your entry will not be stored. (Refer to Section "Secret Dialing" in the Features Guide.)
- If you are storing an external number, include the line access code (default: 9,81 through 88) before the number. When dialing, a pause is automatically inserted after the code.
- If you are storing an account code, enter the account code before the line access code. (Refer to Section "Account Code Entry" in the Features Guide.)
- A number consisting of 25 digits or more can be stored by storing it in two speed dial numbers. The line access code should be stored in the first speed dial number.
- To access another speed dial number in steps 3 through 6, press SELECT and start with step 3.
- To display parts of the number which have scrolled off the display, press $\boldsymbol{m}$ or
- Program [002] System Speed Dialing Name Set is used to name the speed dial numbers.


## Features Guide References

Special Display Features - Call Directory<br>System Speed Dialing

## [002] System Speed Dialing Name Set

## Description

Assigns names to the system speed dial numbers assigned in program [001] System Speed Dialing Number Set. KX-T7235, KX-T7431, KX-T7433, and KX-T7436 telephones can show the stored name during System Speed Dialing.

## Selection

- Speed dial number: 000 through 499
- Name: 10 characters (max.)


## Default

All speed dial numbers - Not stored

## Programming

1. Enter 002.

Display: 002 SYS SPD NAME
2. Press NEXT.

Display: SPD Code? $\rightarrow$
3. Enter a speed dial number.

To enter speed dial number 000, you can also press NEXT.
Display example: 000:Not Stored
4. Enter a name.

For entering characters, see Section 1.4 Entering Characters.
To delete the current entry, press CLEAR.
To change the current entry, press CLEAR and enter the new name.
5. Press STORE.
6. To program another speed dial number, press NEXT or PREV, or SELECT and the desired speed dial number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- Speed dial numbers are programmed in program [001] System Speed Dialing Number Set.
- Each name has a maximum of 10 characters.
- To go to another speed dial number in steps 3 through 6, press SELECT and start with step 3.


## Features Guide References

Special Display Features - Call Directory

## [003] Extension Number Set

## Description

Assigns an extension number to each extension.

## Note

This programming should be performed before you connect a Panasonic Voice Processing System (VPS) because the VPS can create mailboxes automatically based on your extension plan (extension number set).

## Selection

- Jack number:

KX-TD816-01 through 16 (-1 / -2)
KX-TD1232-01 through 64 (-1 / -2)
( $-1=$ first part, $-2=$ second part)

- Extension Number: 2 through 4 digits


## Default

KX-TD816
Jack 01-1 through 16-1 = 101 through 116;
Jack 01-2 through 16-2 $=201$ through 216
KX-TD1232
Jack 01-1 through 64-1 $=101$ through 164 ;
Jack 01-2 through 64-2 $=201$ through 264

## Programming

1. Enter 003.

Display: 003 EXT NUMBER
2. Press NEXT.

Display: Jack NO? $\rightarrow$
3. Enter a jack number.

To enter jack number 01, you can also press NEXT.
To select the second part (-2), press NEXT after entering the jack number.
Display: \#01-1:EXT101
4. Enter an extension number.

To change the current entry, press CLEAR and enter the new number.
5. Press STORE.
6. To program another jack, press NEXT or PREV, or SELECT and the desired jack number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- There is a maximum of 32 extension numbers for KX-TD816, and 128 extension numbers for KX-TD1232. Each extension number can be two, three, or four digits, consisting of $\mathbf{0}$ through 9. The * and \# keys cannot be used.
- For the KX-TD1232, jack numbers 01 through 32 are for the Master System and 33 through 64 are for the Slave, if available.
- An extension number is invalid if the first or second digits do not match with the program "[100] Flexible Numbering, (01) - (16) 1st through 16th hundred extension blocks" setting. If one digit is assigned as the leading digit, some extensions have two digits and some have three digits. If two digits are assigned, some have three digits and some have four digits.
- Two extension numbers can be assigned per jack. If eXtra Device Port (XDP) is disabled for the jack in program [600] EXtra Device Port, the extension number of the second part ( $\mathrm{XX}-2$ ) is not available. ( $\mathrm{XX}=\mathrm{jack}$ number)
- For an explanation of jack numbering, see "Rotation of jack number" in Section 1.3 Programming Methods.
- A double entry or incompatible entry is invalid including the program [012] ISDN Extension Number Set, [118] Voice Mail Extension Number Assignment, [124] Phantom Extension Number Assignment and [813] Floating Number Assignment. Valid entry examples are: 10 and 11; 10 and 110. Invalid entry examples are: 10 and 106; 210 and 21.
- Program [004] Extension Name Set is used to name the extension numbers.


## Features Guide References

Display, Call Information<br>EXtra Device Port (XDP)<br>Flexible Numbering<br>Intercom Calling<br>Special Display Features - Call Directory

## [004] Extension Name Set

## Description

Assigns names to the extension numbers programmed in program [003] Extension Number Set.

## Selection

- Jack number:

KX-TD816 - 01 through 16 (-1 / -2)
KX-TD1232 - 01 through 64 (-1/-2)
( $-1=$ first part, $-2=$ second part)

- Name:

10 characters (max.)

## Default

All jacks — Not stored

## Programming

1. Enter 004.

Display: 004 EXT NAME SET
2. Press NEXT.

Display: Jack NO? $\rightarrow$
3. Enter a jack number.

To enter jack number 01, you can also press NEXT.
To select the second part (-2), press NEXT after entering a jack number.
Display: \#01-1:Not Stored
4. Enter a name.

For entering characters, see Section 1.4 Entering Characters.
To delete the current entry, press CLEAR.
To change the current entry, press CLEAR and enter the new name.
5. Press STORE.
6. To program another jack, press NEXT or PREV, or SELECT and the desired jack number.
7. Repeat steps 4 through 6.
8. Press END.

## Conditions

- There is a maximum of 32 names for KX-TD816, and 128 names for KX-TD1232. Each name has a maximum of 10 characters.
- Program [003] Extension Number Set is used to assign extension numbers.
- For the KX-TD1232, jack numbers 01 through 32 are for the Master System and 33 through 64 are for the Slave, if available.
- For an explanation of jack numbering, see "Rotation of jack number" in section 1.3 Programming Methods.


## Features Guide References

Display, Call Information
Intercom Calling
Special Display Features - Call Directory

## [005] Flexible CO Button Assignment

## Description

Used to determine the use of the flexible CO buttons on proprietary telephones from a centralized telephone.

## Selection

- Jack number:

KX-TD816 - 01 through 16
KX-TD1232 - 01 through 64

- Button Code (plus parameter, if required):

| Button Code | Parameter |
| :--- | :--- |
| $\mathbf{0}$ (Single-CO) | KX-TD816-01 through 08 (Outside line number) <br> KX-TD1232 - 01 through 48 (Outside line number) |
| $\mathbf{1}$ (DSS) | 2 to 4 digits (Extension number) |
| $\mathbf{2}$ (One-Touch) | 16 digits max. (Telephone number) |
| $\mathbf{3}$ (Message Waiting) | None |
| $\mathbf{3}$ (Another Extension Message <br> Waiting / Phantom Extension <br> Message Waiting) | $\mathbf{2}$ to $\mathbf{4}$ digits (Another / Phantom Extension number) |
| $\mathbf{4}$ (FWD / DND) | None |
| $\mathbf{5}$ (Save) | None |
| $\mathbf{6}$ (Account) | None |
| $\mathbf{7 0}$ (Conference) | None |
| $\mathbf{7 1}$ (Log-In / Log-Out) | None |
| $\mathbf{7 2}$ (Phantom) | None $\mathbf{4}$ digits (Phantom extension number) |
| $\mathbf{7 3}$ (Night) | $\mathbf{2}$ to $\mathbf{4}$ digits (Voice Mail Extension number) |
| $\mathbf{8}$ (Voice Mail Transfer) | $\mathbf{2}$ to $\mathbf{4}$ digits (Voice Mail Extension number) |
| $\mathbf{9 0}$ (Two-Way Record)* | $\mathbf{2}$ to $\mathbf{4}$ digits (Voice Mail Extension number) |
| $\mathbf{9 1}$ (Two-Way Transfer)* | None |
| $\mathbf{9 2}$ (Live Call Screening)* | None |
| $\mathbf{9 3}$ (Live Call Screening Cancel)* | None |
| * (Loop-CO) | $\mathbf{1}$ through 8 (Outside line group number) |
| \# (Group-CO) | $\mathbf{1}$ through 8 (ring tone type number) |
| $\mathbf{C O}$ (ringer frequency) |  |

* Available when the Digital Super Hybrid System is connected to a Digital Proprietary Telephone capable Panasonic Voice Processing System (one that supports digital proprietary telephone integration; e.g., KX-TVS100).


## Default

[KX-TD816]
All jacks - CO buttons 1 through $8=$ Single-CO 01 through 08; Ring tone type 2
Others $=$ Not stored
[KX-TD1232]
All jacks - CO buttons 1 through 48 = Single-CO 01 through 48; Ring tone type 2

## Programming

1. Enter 005.

Display: 005 FLEXIBLE CO
2. Press NEXT.

Display: Jack NO? $\rightarrow$
3. Enter a jack number.

To enter jack number 01, you can also press NEXT.
Display: PT-PGM Mode
4. Press the $\mathbf{C O}$ button which is changed to another button.

The display shows the contents pre-assigned to the button.
Display example: CO-O1
5. Enter a button code (plus parameter, if required).

To change the parameter, press CLEAR and enter the new parameter.
6. Press STORE.
7. To program another CO button of the same jack, repeat steps 4 through 6 . To program another jack, press SELECT and repeat steps 3 through 6.
8. Press END.

## Canceling

1. Perform the same procedures as steps 1 through 4 above.
2. Enter 2.
3. Press STORE.
4. Press END.

## Conditions

- A centralized telephone is a telephone connected to jack 01 or a jack programmed as a manager extension in program [006] Operator / Manager Extension Assignment.
- For the KX-TD1232, jack numbers 01 through 32 are for the Master System and 33 through 64 are for the Slave, if available. Jack numbers in the out-of-service system are unacceptable.
- The number of the CO buttons available depends on the telephone type. (Refer to Buttons on Proprietary Telephones in the Feature Guide.) To program 24 CO buttons, use the proprietary telephone, KX-T7425, KX-T7433, KX-T7436 or KX-T7230.
- If you press the same CO button again in step 5 , you can select a desired ringer frequency for the CO button from eight types of ring tones. When you enter the tone type number (1 through 8), you will hear the selected tone type until STORE is pressed. This selection is possible only for the CO buttons that have been assigned to Single-CO, Group-CO, or Loop-CO.


## Features Guide References

Button, Flexible
Buttons on Proprietary Telephones

## [006] Operator / Manager Extension Assignment

## Description

Assigns the jack number for a manager and/or operators. The manager extension can perform System Programming and manager services. The operators have the ability to perform operator services.

## Selection

- OPE-1 (operator 1) / OPE-2 (operator 2) /MNGER (manager)
- Jack number:

KX-TD816 - 01 through 16
KX-TD1232 - 01 through 64

## Default

Operator 1 - Jack 01;
Operator 2 and Manager - Not stored

## Programming

1. Enter006.

Display: 006 OP-1, 2, MGR
2. Press NEXT to program operator 1.

Display: OPE-1:Jack01
To program another item, you can also keep pressing NEXT or PREV until the desired one is displayed.
3. Enter a jack number.

To assign no operator or manager, press CLEAR.
To change the current entry, press CLEAR and enter the new jack number.
4. Press STORE.
5. To program another item, press NEXT or PREV.
6. Repeat steps 3 through 5.
7. Press END.

## Conditions

- Up to two operators and a manager can be programmed.
- For the KX-TD1232, jack numbers 01 through 32 are for the Master System and 33 through 64 are for the Slave, if available.
- The manager cannot be assigned the jack number of the DSS Console Port set in program [007] "DSS Console Port and Paired Telephone Assignment".
- If the assigned jack is in eXtra Device Port mode, the proprietary telephone jack is treated as the manager / operator extension.
- If there is no operator or manager, press CLEAR in step 3.


## Features Guide References

Manager Extension
Operator

## [007] DSS Console Port and Paired Telephone Assignment

## Description

Assigns the jack numbers for the DSS Console and the paired extension.

## Selection

- DSS Console number:

KX-TD816 - 1 through 4
KX-TD1232 - $\mathbf{1}$ through $\mathbf{4}$ (for Master), $\mathbf{5}$ through 8 (for Slave)

- Jack number for DSS Console:

KX-TD816 - 02 through 16
KX-TD1232 - $\mathbf{0 2}$ through $\mathbf{3 2}$ (for Master), $\mathbf{3 3}$ through $\mathbf{6 4}$ (for Slave)

- Jack number for paired extension:

KX-TD816 - 01 through 16
KX-TD1232 - 01 through 32 (for Master), 33 through 64 (for Slave)

## Default

All DSS Consoles - Not stored

## Programming

1. Enter 007.

Display: 007 DSS CONSOLE
2. Press NEXT.

Display: DSS NO? $\rightarrow$
3. Enter a DSS Console number.

To enter DSS Console number 1, you can also press NEXT.
Display example: DSS-1:\# P:\#
4. Enter a jack number for the console.

To delete the current entry, press CLEAR.
To change the current entry, press CLEAR and enter the new jack number.
5. Press
6. Enter a jack number for the paired extension.

To change the current entry, press CLEAR and enter the new jack number.
Display example: DSS-1:\#02 P:\#03
7. Press STORE.
8. To program another DSS Console, press NEXT or PREV, or SELECT and the desired DSS Console number.
9. Repeat steps 4 through 8 .
10.Press END.

## Conditions

- The jack number for the Console and that for the paired extension must be entered together.
- Multiple DSS Consoles cannot be assigned to the same DSS Console jack.
- Multiple DSS Consoles can be paired with the same proprietary telephone jack.
- A DSS Console jack cannot be assigned the jack 01 and the jack number of Manager set in program [006] Operator / Manager Extension Assignment.
- If all incoming outside calls are set to ring at the operator extension telephone in program [407-408] DIL 1:1 Extension - Day / Night, assigning a DSS Console to the operator extension makes the operator's job much easier.
- If a DSS Console - assigned jack is programmed for eXtra Device Port, a single line telephone can be connected to the jack in parallel with the console.
- If a single line telephone is assigned as the pair extension, the paired DSS Console will not function.


## Features Guide References

DSS Console

## [008] Absent Messages

## Description

Used to program the absent messages. An absent message, if set by the station user, is displayed on the calling extension's telephone to show the reason for the user's absence.

## Selection

- Message number: 1 through 9
- Message: 16 characters (max.)


## Default

1: Will Return Soon
2: Gone Home
3: At Ext \%\%\%
4: Back at \%\%:\%\%
5: Out Until \%\%/\%\%
6: In a Meeting
7 through 9: Blank (not stored)

## Programming

1. Enter 008.

Display: 008 ABSENT MSG.
2. Press NEXT.

Display: MSG NO? $\rightarrow$
3. Enter a message number.

To enter message number 1, you can also press NEXT.
Display example: MSG1:Will Return
4. Enter the message.

For entering characters, see Section 1.4 Entering Characters.
To delete the current entry, press CLEAR.
To change the current entry, press CLEAR and enter the new message.
5. Press STORE.
6. To program another message, press NEXT or PREV, or SELECT and the desired message number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- There is a maximum of nine messages. Messages 1 through 6 are programmed at the factory but can be changed. Each message has a maximum of 16 characters.
- You can enter a maximum of seven "\%" characters per message which can be programmed at each user's extension. The station user can enter $\mathbf{0}$ through 9 , * and \# for the \% characters. If the user enters digits less than the number of " $\%$ " characters, it is recommended to fill the remaining "\%" characters with "\#" or "* ".
- If there are 4-digit extension numbers available in your system, add one "\%" to Message 3.
- To display parts of the message which have scrolled off the display, press $\boldsymbol{\rightarrow}$ or


## Features Guide References

Absent Message Capability

## [009] Quick Dial Number Set

## Description

Stores up to eight quick dial numbers.

## Selection

- Location number: 1 through 8
- Desired number: 16 digits (max.)


## Default

All location numbers - Not stored

## Programming

1. Enter 009.

Display: 009 QUICK DIAL
2. Press NEXT.

Display: Location NO? $\rightarrow$
3. Enter a location number.

To enter location number 1, you can also press NEXT.
Display example: 1:Not Stored
4. Enter a desired number.

To delete the current entry, press CLEAR.
To change the current entry, press CLEAR and enter the new number.
5. Press STORE.
6. To program another location, press NEXT or PREV, or SELECT and the desired location number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- A maximum of sixteen digits, consisting of $\mathbf{0}$ through $\mathbf{9}$, can be assigned to a quick dial number.
- Before programming, assign a feature number for each location first in program [100] Flexible Numbering.


## Features Guide References

Quick Dialing

## [012] ISDN Extension Number Set

## Description

Assigns an extension number to each port which is connected to the ISDN unit.

## Selection

- Port number:

KX-TD816 - 01 through 04
KX-TD1232 - 01 through 12

- Extension Number:

2 or 3 digits

## Default

All ports — Not stored

## Programming

1. Enter 012.

Display: 012 ISDN EXT \#
2. Press NEXT.

Display: Port NO? $\rightarrow$
3. Enter a port number.

To enter a first port number, you can also press NEXT.
Display: \#01:Not Stored
4. Enter an extension number.

To change the current entry, press CLEAR and the new number.
5. Press STORE.
6. To program another port, press NEXT or PREV, or SELECT and the desired port number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- Each extension number can be two or three digits, consisting of $\mathbf{0}$ through 9. The * and \# keys cannot be used.
- A multiple directory number (MDN) is determined regarding to this assignment. A MDN consists of the assigned extension number and an additional digit, 0 through 9 . Example: If an ISDN extension number is assigned as " 3 ", 30 through 39 are effective as MDN's. The extension user can call any terminal equipment on the ISDN bus individually using MDN. Pressing " 30 " calls all extensions on the ISDN bus simultaneously.
- Port numbers 01 through 06 are for the Master System, and 07 through 12 are for the Slave, if available.
- An extension number is invalid if the first or second digit does not match with the setting in program [100] Flexible Numbering, 1st through 16th hundred extension blocks.
- A double entry or incompatible entry cannot be made with assignment programs [003] Extension Number Set, [118] Voice Mail Extension Number Assignment, [124] Phantom Extension Number Assignment and [813] Floating Number Assignment. Valid entry examples: 10 and 11; 10 and 110. Invalid entry examples: 10 and 106; 210 and 21.
- Program [013] ISDN Extension Name Set is used to give names to the extension numbers.


## Features Guide References

None

## [013] ISDN Extension Name Set

## Description

Assigns names to the ISDN extension numbers programmed in program [012] ISDN Extension Number Set.

## Selection

- Port number:

KX-TD816 - 01 through 04
KX-TD1232 - 01 through 12

- Name:

10 characters (max.)

## Default

All ports — Not stored

## Programming

1. Enter013.

Display: 013 ISDN NAME
2. Press NEXT.

Display: Port NO? $\rightarrow$
3. Enter a port number.

To enter the first port number, you can also press NEXT.
Display: \#01:Not Stored
4. Enter a name.

For entering characters, see Section 1.4 Entering Characters.
To delete the current entry, press CLEAR.
To change the current entry, press CLEAR and the new name.
5. Press STORE.
6. To program another port, press NEXT or PREV, or SELECT and the desired port number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- Port numbers 01 through 06 are for the Master System and 07 through 12 are for the Slave, if available.
- The ISDN port numbers correspond to the following jack numbers.

| ISDN Port No. |  | KX-TD816 |  |  | KX-TD1232 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { KX- } \\ \text { TD382 } \end{gathered}$ | $\begin{gathered} \text { KX- } \\ \text { TD384/ } \\ \text { KX- } \\ \text { TD284 } \end{gathered}$ | $\begin{gathered} \text { KX- } \\ \text { TD386 } \end{gathered}$ | $\begin{gathered} \text { KX- } \\ \text { TD382 } \end{gathered}$ | $\begin{gathered} \text { KX- } \\ \text { TD384/ } \\ \text { KX- } \\ \text { TD284 } \end{gathered}$ | KX- <br> TD386 |
| Master | Slave |  |  |  |  |  |  |
| 1 | 7 | - | Jack 1 | Jack 1 | - | - | Jack 1 |
| 2 | 8 | - | Jack 2 | Jack 2 | - | - | Jack 2 |
| 3 | 9 | Jack 1 | Jack 3 | Jack 3 | - | Jack 1 | Jack 3 |
| 4 | 10 | Jack 2 | Jack 4 | Jack 4 | - | Jack 2 | Jack 4 |
| 5 | 11 | - | - | - | Jack 1 | Jack 3 | Jack 5 |
| 6 | 12 | - | - | - | Jack 2 | Jack 4 | Jack 6 |

## Features Guide References

None

## [014] VM Name Set

## Description

Assigns a name for each voice mail port.

## Selection

- Voice Mail (VM) number: KX-TD816-01 through $\mathbf{1 2}$

KX-TD1232-01 through 24

- Name: 10 characters (max.)


## Default

All Voice Mails - V.Mailxx (xx=01 through 24)

## Programming

1. Enter 014.

Display: 014 VM PORT NAME
2. Press NEXT.

Display: VM NO? $\rightarrow$
3. Enter a VM number.

To enter VM number 01, you can also press NEXT.
Display example: VMO1:V.Mail 01
4. Enter a name.

For entering characters, see Section 1.4 Entering Characters.
To delete the current entry, press CLEAR.
To change the current entry, press CLEAR and enter the new name.
Display example: VMO1:Voice No. 1
5. Press STORE.
6. To program another voice mail port, press NEXT or PREV, or SELECT and the desired voice mail number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

None

## Features Guide References

Voice Mail Integration

## [017] DISA User Codes

## Description

Assigns the Direct Inward System Access (DISA) User Codes and a Class of Service (COS) to each code. The COS of the code determines the toll restriction level of the DISA caller. This program is available for the KX-TD1232 only.

## Note

Warning for the Direct Inward System Access Users When you enable the Outside - Outside Line Call feature of Direct Inward System Access (DISA) function, if a third party discovers the password (a DISA User Code) of the system, you have a risk that they will make illegal phone calls using your telephone line, and the cost may be charged to your account.

In order to avoid this problem, we strongly recommend the following points:

1. Carefully maintain the secrecy of the password.
2. Specify a complicated password as long and random as you can make it.
3. Change the password frequently.

## Selection

- DISA user code number: 01 through 32
- DISA user code: 4 through 10 digits
- COS number: 1 through 8


## Default

Code $01=$ Blank $-\operatorname{COS} 8$
Code 02=Blank — COS 8
:
Code 32=Blank — COS 8

## Programming

## 1. Enter 017.

```
Display: 017 USER CODES
```

2. Press NEXT.

Display: User Code NO? $\rightarrow$
3. Enter a DISA user code number.

To enter user code number 01, you can also press NEXT.
Display example: 01: C:8
4. Enter a DISA user code.

To change the current entry, enter the new code.
5. Press $\Rightarrow$ to program COS.
6. Enter a COS number.

To change the current entry, enter the new COS number.
7. Press STORE.
8. To program another user code, press NEXT or PREV, or SELECT and the desired DISA user code number.
9. Repeat steps 4 through 8 .
10.Press END.

## Conditions

- This setting is required if Trunk (Outside line) Security mode is selected in program [809] DISA Security Type.
- There are 32 programmable user codes. Each code should be unique and composed of four through ten numerical digits, 0 through 9.


## Features Guide References

Direct Inward System Access (DISA)

### 2.2 System Programming

## [100] Flexible Numbering

## Description

Assigns the leading digits of extension numbers and feature numbers for system features.
Feature Number List

| Number | Feature | Default |
| :---: | :--- | :---: |
| 01 | 1st hundred extension block | 1 |
| 02 | 2nd hundred extension block | 2 |
| $03-16$ | 3rd through 16th hundred extension block | None |
| 17 | Operator call | 0 |
| 18 | Automatic line access / ARS | 9 |
| 19 | Outside line group line access | 8 |
| 20 | System speed dialing | $*$ |
| 21 | Station speed dialing | $3 *$ |
| 22 | Station speed dialing programming | 30 |
| 23 | Doorphone call | 31 |
| 24 | Paging - external | 32 |
| 25 | Paging - external answer / TAFAS answer | 42 |
| 26 | Paging - group | 33 |
| 27 | Paging - group answer | 43 |
| 28 | Call pickup, outside line | $4 *$ |
| 29 | Call pickup, group | 40 |
| 30 | Call pickup, directed | 41 |
| 31 | Call hold | 50 |
| 32 | Call hold retrieve - intercom | 51 |
| 33 | Call hold retrieve - outside line | 53 |
| 34 | Last number redial | $\#$ |
| 35 | Call park / call park retrieve | 52 |
| 36 | Account code entry | 49 |
| 37 | Door opener |  |
|  |  |  |
| 20 |  |  |

Feature Number List

| Number | Feature | Default |
| :---: | :---: | :---: |
| 38 | External feature access | 6 |
| 39 | Station program clear | 790 |
| 40 | Message waiting | 70 |
| $41^{*}$ | Outgoing message | 36 |
| 42 | Call forwarding / do not disturb | 710 |
| 43 | Call pickup deny | 720 |
| 44 | Data line security | 730 |
| 45 | Call waiting / OHCA / whisper OHCA | 731 |
| 46 | Executive busy override deny | 733 |
| 47 | Pickup dialing | 74 |
| 48 | Absent message | 750 |
| 49 | Timed reminder | 76 |
| 50 | Electronic station lockout | 77 |
| 51 | Day / Lunch / Break / Night service mode | 78 |
| 52 | Parallel telephone mode | 39 |
| 53 | Background music - external | 35 |
| 54 | LCS password | 799 |
| 55 | Call log, incoming | 56 |
| 56 | Call log lock, incoming | 57 |
| 57 | Timed reminder, remote | 7* |
| 58 | Log-in / log-out | 45 |
| 59 | Automatic callback busy cancel | 46 |
| 60 | Walking COS | 47 |
| 61 | External modem control | 791 |
| 62 | System working report | 794 |
| 63-70 | Quick dial location numbers 1-8 | None |
| 71 | Gather | None |
| 72 | Reserved | - |
| $73^{*}$ | TIE Line access code | None |
| $74^{* 1}$ | Other PBX Extension 01 | None |
| $75^{*}$ | Other PBX Extension 02 | None |

Feature Number List

| Number | Feature | Default |
| :---: | :---: | :---: |
| $76^{*}$ | Other PBX Extension 03 | None |
| $77^{*}$ | Other PBX Extension 04 | None |
| $78^{*}$ | Other PBX Extension 05 | None |
| $79^{* 1}$ | Other PBX Extension 06 | None |
| $80^{* 1}$ | Other PBX Extension 07 | None |
| $81^{*}$ | Other PBX Extension 08 | None |
| $82^{*}$ | Other PBX Extension 09 | None |
| $83^{*}$ | Other PBX Extension 10 | None |
| $84^{*}$ | Other PBX Extension 11 | None |
| $85^{*}$ | Other PBX Extension 12 | None |
| $86^{*}$ | Other PBX Extension 13 | None |
| $87^{*}$ | Other PBX Extension 14 | None |
| $88^{* 1}$ | Other PBX Extension 15 | None |
| $89^{* 1}$ | Other PBX Extension 16 | None |
| 90 | Paging - deny | 721 |
| 91 | Hotel application - room status | 736 |
| $92^{*}$ | CLIP | 711 |
| 93 | CLIR | 59 |

* Available for the KX-TD 1232 only.


## Selection

- Selection number:

01 through 93 (See "Feature Number List" for the corresponding features.)

- Feature number:

1 or 2 digits (for selection numbers $01-16,74-89$ );
1 through 3 digits (for selection numbers $17-73$ and $90-93$ )

## Default

See "Feature Number List" above.

## Programming

1. Enter 100.
```
Display: 100 FLEX. NUMBER
```

2. Press NEXT.
```
Display: Select NO? }
```

3. Enter a selection number.

To enter selection number 01, you can also press NEXT.
Display example: 01. 1-EXT BL:1
4. Enter the feature number.

To delete the feature number, press CLEAR.
To change the current entry, press CLEAR and enter the new number.
5. Press STORE.
6. To program another selection, press NEXT or PREV, or SELECT and the desired selection number.
7. Repeat steps 4 through 6 .
8. Press END.

## To remove all the feature numbers except selection numbers (01) through (16) 1st through 16th extension blocks;

1. Enter 100.
2. Press NEXT.
3. Enter 00.
```
Display: All Feature CLR?
```

4. Press STORE.
5. Press END.

## Conditions

- Each extension block has one or two digits, consisting of $\mathbf{0}$ through 9. Assign the leading digits for extension numbers of the respective blocks.
- Assignment of extension blocks defines the limits for programs [003] Extension Number Set, [012] ISDN Extension Number Set, [118] Voice Mail Extension Number Assignment, [124] Phantom Extension Number Assignment and [813] Floating Number Assignment.
- Each feature number has one through three digits, consisting of $\mathbf{0}$ through $\mathbf{9}$, * , and \#.
- If $*$ or \# is included in a feature number, dial pulse telephone users cannot access the feature.
- Double entry and incompatible combinations are invalid. Valid entry examples: 30 and 31, 210 and 211. Invalid entry examples: 5 and 5, 30 and 301.
- If you delete a feature number, the feature cannot be used by dialing operation.
- You can remove all the feature numbers except selections (01) through (16).
- To clear an extension block (01) through (16), it is required to change the corresponding numbers assigned in program [003] Extension Number Set, [012] ISDN Extension Number Set, [118] Voice Mail Extension Number Assignment, [124] Phantom Extension Number Assignment and program [813] Floating Number Assignment.


## Features Guide References

Flexible Numbering

## [101] Day / Night Service Switching Mode

## Description

This program is used to determine if night mode is set automatically or manually.

## Selection

Manual / Auto (automatic)

## Default

Manual

## Programming

1. Enter 101.

Display: 101 DAY / NT AUTO
2. Press NEXT.

```
Display example: D / N Mode:Manual
```

3. Keep pressing SELECT until the desired selection is displayed.
4. Press STORE.
5. Press END.

## Conditions

- If automatic switching is assigned, day / night mode is switched at the time programmed in [102] Day / Night Service Starting Time.
- The operator and manager can switch the day / night mode at any time.


## Features Guide References

Night Service

## [102] Day / Night Service Starting Time

## Description

Sets the starting time on a day of the week basis, when automatic day / night switching is programmed in program [101] Day / Night Service Switching Mode.

## Selection

- Day of the week selection number: 1 (Sunday) / 2 (Monday) /3 (Tuesday) / 4 (Wednesday) / 5 (Thursday) / 6 (Friday) / 7 (Saturday) / * (every day of the week)
- Hour: 1 through 12 / Disable (no switching)
- Minute: $\mathbf{0}$ through 59
- AM / PM


## Default

Every day of the week - Day - 9:00 AM / Night - 5:00 PM

## Programming

1. Enter 102.

Display: 102 DAY/NT CLOCK
2. Press NEXT.

```
Display: Day of Week? }
```

3. Enter the day of the week selection number.

To select Sunday, you can also press NEXT.
Display example: Sun-Day: 9:00 AM
To select night mode, press NEXT.
Display example: Sun-Nig: 5:00 PM
4. Enter the hour.

To set no switching, keep pressing SELECT until "Disable" is displayed and go to step 9.

If SELECT is pressed, the display shows the previous entry. If the previous setting was "Disable", press SELECT to enter the starting time.
To change the current entry, press CLEAR and enter the new time.
5. Press
6. Enter the minute.

To change the current entry, press CLEAR and enter the new minutes.
7. Press
8. Press SELECT for AM or PM.
9. Press STORE.
10.To program another day / night mode or day of the week, press NEXT or PREV, or SELECT and the day of the week selection number.
11. Repeat steps 4 through 10.
12.Press END.

## Conditions

- To select the desired day, you may keep pressing NEXT in step 3. To assign every day of the week to one selection, press the $*$ key in step 3 . In this case, the display shows the contents programmed for Sunday.
- If day / night switching is not desired, select "Disable" in step 4.
- You cannot leave the entry empty.


## Features Guide References

Night Service

## [103] Automatic Access Outside Line Assignment

## Description

Assigns the sequence in which outside line groups will be accessed when in Automatic Line Access mode. When a user dials the feature number for automatic line access (default=9) or presses the Loop-CO button, an idle line is searched for in the programmed outside line group order.

## Selection

- Outside line group number: 1 through 8 in desired order


## Default

12345678

## Programming

1. Enter 103.

Display: 103 AUTO CO GRP
2. Press NEXT.

Display example: Access:12345678
3. Enter the outside line group numbers in priority from top to bottom.

To delete the current entry, press CLEAR.
To change the current entry, press CLEAR and enter the new order.
4. Press STORE.
5. Press END.

## Conditions

- The system supports a maximum of eight outside line groups.
- Automatic Line Access feature works only if the Automatic Route Selection mode is turned off in program [312] ARS Mode.


## Features Guide References

Line Access, Automatic
Line Access, Direct
Line Preference - Outgoing (Idle Line / No Line / Prime Line)

## [105] Account Codes

## Description

Assigns the account codes for Account Code Entry, Verified - All Calls and Verified - Toll Restriction Override modes. If Verified - All Calls is assigned in program [508] Account Code Entry Mode, an account code is required to make an outside call. If Verified - Toll Restriction Override is assigned, an account code is only required for a toll call and overrides toll restriction.

## Selection

- Location number: 001 through 128
- Account code: $\mathbf{1 0}$ digits (max.)


## Default

All locations - Not stored

## Programming

1. Enter 105.

Display: 105 ACCT CODES
2. Press NEXT.

Display: Location NO? $\rightarrow$
3. Enter a location number.

To enter location number 001, you can also press NEXT.
Display example: 001:Not Stored
4. Enter an account code.

To delete the current entry, press CLEAR.
To change the current entry, press CLEAR and enter the new account code.
5. Press STORE.
6. To program another location, press NEXT or PREV, or SELECT and the desired location number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- Each verifiable account code has a maximum of 10 digits, consisting of $\mathbf{0}$ through 9.
- Program [508] Account Code Entry Mode is used to select the Account Code Entry mode.
- Account codes having "99" in any part or ending with "9" are invalid, as " 99 " is used as a delimiter when entering an account code.


## Features Guide References

Account Code Entry
Toll Restriction Override by Account Code Entry

## [106] Station Hunting Type

## Description

Used to enable or disable hunting and set the Station Hunting type for each extension group. There are six Station Hunting types available: Circular, Terminating, Voice Mail (VM), Automated Attendant (AA), Ring Group and Uniform Call Distribution (UCD).
If circular hunting is assigned for a group, all of the extensions in the group are searched until an idle one is found. If terminating hunting is assigned, searching stops at the extension which has the largest jack number in the group. If VM hunting is assigned, all of the VM ports of an extension group are searched until an idle one is found which allows Voice Mail Service. If AA hunting is assigned, all of the AA ports of an extension group are searched until an idle one is found which allows AA Service. If Ring Group is assigned, all of the extensions in the ring group ring simultaneously. If UCD is assigned, group members are hunted in a circular way.

## Selection

- Extension group number: 1 through 8, *
( $*=$ all extension groups)
- Disable (no hunting) / Terminate (terminating) / Circular / VM (voice mail) / AA (automated attendant) / RING / UCD


## Default

All extension groups - Disable

## Programming

1. Enter 106.

Display: 106 STATION HUNT
2. Press NEXT.

Display: EXT GRP NO? $\rightarrow$
3. Enter an extension group number.

To enter extension group number 1 , you can also press NEXT.
Display example: Group1:Disable
4. Keep pressing SELECT until the desired selection is displayed.
5. Press STORE.
6. To program another extension group, press NEXT or PREV, or SELECT and the desired extension group number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- Program [602] Extension Group Assignment is used to assign the extension group members.
- The system supports a maximum of six jacks ( 12 jacks during System Connection ${ }^{* 1}$ ) for connection to a Voice Processing System as VM or AA ports.
- To assign all extension groups to one selection, press the $*$ key in step 3. In this case, the display shows the contents programmed for extension group 1.


## Features Guide References

Ring Group

Station Hunting
Uniform Call Distribution (UCD)
Voice Mail Integration

[^0]
## [107] System Password

## Description

Assigns the password required for entering System Programming mode and for maintenance from a personal computer.

## Warning

The dealer should take care with the system password:
a) Please thoroughly instruct the importance of the password and the dangers involved to the customer.
b) Please maintain the secrecy of the password.

If discovered by a "hacker", he can proceed to commit toll fraud with the PBX.
c) Please change the password often.
d) We strongly recommend that you set the system password to 7 digits for maximum protection against "hackers".
e) We strongly recommend that the dealer backs up the system data after the password is changed. In the event the password is forgotten, it can be recovered from the system data. If the system data is not available, regrettably, the system must be Default Cleared and the system must be programmed from scratch.

## Selection

## Password: $\mathbf{4}$ through 7 digits

## Default

1234

## Programming

1. Enter 107.

Display: 107 SYS PASSWORD
2. Press NEXT.

Display: Password:1234
3. Enter a password.

To change the current entry, press CLEAR and enter the new password.
4. Press STORE.
5. Press END.

## Conditions

- The password can be from four to seven digits long. The valid numbers are from $\mathbf{0}$ through 9.
- If less than four digits are entered, they are not stored.
- You cannot leave the entry empty.


## Features Guide References

System Programming and Diagnosis with Personal Computer
System Programming with Proprietary Telephone

## [108] Automatic Hold by CO / DSS Button

## Description

Enables or disables automatically holding an outside call when a DSS (Direct Station Selection) button on the DSS Console or proprietary telephone, or a CO button on a proprietary telephone is pressed. Through this assignment, each button acts as follows:
——Pressing the DSS button holds an outside call and quickly transfers it to an extension without pressing the TRANSFER button.
——Pressing another CO button holds the current outside call.

## Selection

- Button: DSS or CO
- Enable / Disable


## Default

DSS button - Enable, CO button - Disable

## Programming

1. Enter 108.

Display: 108 AUTO HOLD
2. Press NEXT to program the DSS button.

Display example: DSS XFER:Enable
3. Keep pressing SELECT until the desired selection is displayed.
4. Press NEXT to program the CO button.

Display example: CO Hold :Disable
5. Keep pressing SELECT until the desired selection is displayed.
6. Press STORE.
7. Press END.

## Conditions

This assignment applies to all DSS and CO buttons on all DSS Consoles and proprietary telephones in the system.

## Features Guide References

Automatic Hold by CO Button
One-Touch Transfer by DSS Button

## [109] Expansion Unit Type

## Description

Assigns the type of expansion units to be used in the system.
This allows the system to identify the unit in each expansion unit location.

## Selection

KX-TD816

- Areas 1; 2 = C / S2 / S4 / S6 / BD / E

KX-TD1232

- Master / Slave
- Areas 1; 2; 3 = C / S2 / S4 / S6 / PR / BD / T1 / E1 / E2
(C: 4-Outside lines / S2: 2-ISDN lines / S4: 4-ISDN lines /
S6: 6-ISDN lines / PR: 1 PRI line / BD: 4-DID lines / T1: 24-T1 lines / E, E1: 8-Extension lines 1 / E2: 8-Extension lines 2)


## Default

KX-TD816: C;E
KX-TD1232: Master and Slave - C;E1;E2

## Programming

## KX-TD816

1. Enter 109.
```
Display: 109 EXPAND C ,E1
```

2. Press NEXT.
```
Display example: Master:C ; E
```

3. Keep pressing SELECT until the desired selection in Area 1 is displayed.
4. Press $\boldsymbol{\rightarrow} \boldsymbol{\text { to program Area 2, if required. }}$
5. Keep pressing SELECT until the desired selection in the Area 2 is displayed.
6. Press STORE.
7. Press END.

## KX-TD1232

1. Enter 109.
```
Display: 109 EXPAND C ,E1
```

2. Press NEXT to program the Master System.

To program "Slave", press NEXT again.

Display example: Master:C ; E1;E2
3. Keep pressing SELECT until the desired selection in Area 1 is displayed.
4. Press $\boldsymbol{m}$ to program another Area, if required.
5. Keep pressing SELECT until the desired selection in the Area is displayed.
6. Repeat steps 4 and 5 until all the required entries are completed.
7. Press STORE.

If only one system is in operation, go to step 10.
8. Press NEXT to program the Slave System.

Display example: Slave :C ;E1;E2
9. Repeat steps 3 through 7 , if required.
10.Press END.

## Conditions

- The following units can be installed in the slots.
- C (4-Outside lines): 4-CO Line Unit
- S2 (2-ISDN lines): 2-ISDN U-point Line Unit
- S4 (4-ISDN lines): 4-ISDN U-point or S/T-point Line Unit
- S6 (6-ISDN lines): 6-ISDN U-point Line Unit
- PR (1 PRI (23 channels) line): Primary Rate Interface ISDN Unit
- T1 (1 T1 (24 channels) line): T1 Line Unit
- BD (4-DID lines): 4-DID Line Unit
- E, E1, E2 (8-Extension lines):

8-Station Line Unit or 8-Station Line Unit with SLT CID

- There are two expansion areas in the KX-TD816, areas 1 and 2 from bottom to top. One of 8-Station Line Unit or 8-Station Line Unit with SLT CID and one of 4-CO Line Unit, 2-/4-/6-ISDN Line Unit or 4-DID Line Unit can be installed.
- There are three expansion areas in each system for the KX-TD1232, areas 1, 2 and 3 from bottom to top. Up to two 8-Station Line Units or Extension Cards with SLT CID and one of 4-CO Line Unit, 2-/4-/6-BRI ISDN Line Unit, PRI ISDN Line Unit, T1 Line Unit or 4-DID Line Unit can be installed.
- An out-of-service system is unassignable. In this case, skip steps 8 and 9 for the KXTD1232.
- For the KX-TD1232, if only the Slave System is in operation, the display shows "Slave" in step 2.
- After changing the setting, turn the Power Switch off and on once. Otherwise, the previous setting will remain.


## Features Guide References

Module Expansion

## [110] Caller ID Code Set

## Description

Sets the identification code of the calling party (Caller ID Code) to utilize a Caller ID Service provided by a specific central office (CO). If an ID Code transmitted from the CO is found in the Caller ID Code Table, the caller's ID Code or name given to the code in program [111] Caller ID Name Set is displayed on the telephone. This allows the called party to recognize the caller.

## Selection

- Location number: 001 through 500
- Caller ID Code: 24 digits (max.)


## Default

All locations - Not stored

## Programming

1. Enter 110.

Display: 110 CALLER ID \#
2. Press NEXT.

Display: Location NO? $\rightarrow$
3. Enter a location number.

To enter location number 001, you can also press NEXT.
Display example: 001:Not Stored
4. Enter a Caller ID Code.

To delete the current entry, press CLEAR.
To change the current entry, press CLEAR and enter the new code.
5. Press STORE.
6. To program another location, press NEXT or PREV, or SELECT and the desired location number.
7. Repeat steps 4 through 6.
8. Press END.

## Conditions

- Each Caller ID Code has a maximum of 24 digits, consisting of $\mathbf{0}$ through 9.
- Program [111] Caller ID Name Set is used to give names to the Caller ID Codes. If an ID Code is assigned a name, the called party's telephone will show the name in place of the ID Code.
- Program [406] Caller ID Assignment is used to enable the Caller ID Service on an outside line basis.


## Features Guide References

Caller ID

## [111] Caller ID Name Set

## Description

With Caller ID Service, the calling party is displayed either by its ID Code or by its name. If the name display is required, use this program to give a name to a caller ID Code stored in program [110] Caller ID Code Set.

## Selection

- Location number: 001 through $\mathbf{5 0 0}$
- Caller ID Name: $\mathbf{1 5}$ characters (max.)


## Default

All locations - Not stored

## Programming

1. Enter 111.

Display: 111 CALLER NAME
2. Press NEXT.

Display: Location NO? $\rightarrow$
3. Enter a location number.

To enter location number 001, you can also press NEXT.
Display example: 001:Not Stored
4. Enter a Caller ID Name.

For entering characters, see Section 1.4 Entering Characters.
To delete the current entry, press CLEAR.
To change the current entry, press CLEAR and enter the new name.
5. Press STORE.
6. To program another location, press NEXT or PREV, or SELECT and the desired location number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- Caller ID Name corresponds to the Caller ID Codes stored in program [110] Caller ID Code Set.
- Each name has a maximum of 15 characters.


## Features Guide References

Caller ID

## [112] Network Type Assignment

## Description

Assigns the type of ISDN network.

## Selection

NI1 (National ISDN1) / ATT Custom

## Default

NII

## Programming

1. Enter 112.

$$
\text { Display: } 112 \text { SWITCH TYPE }
$$

2. Press NEXT.
```
Display example: NII
```

3. Keep pressing SELECT until the desired selection is displayed.
4. Press STORE.
5. Press END.

## Conditions

If the ISDN network type is ATT Custom, select "ATT Custom". If others, select "NI1".

## Features Guide References

None

## [113] VM Status DTMF Set

## Description

Sets the DTMF (Dual Tone Multi-Frequency) signals transmitted to your Voice Processing System (VPS) to inform the VPS of the VPS ports states quickly:
The following signals are sent to the VPS with the assigned DTMF signals:
RBT (ringback tone):
This signal is sent when calling an extension.
BT (busy tone):
This is sent when the called extension is busy.
ROT (reorder tone):
This is sent when the dialed number is invalid.
DND (DND tone):
This is sent when the other extension has DND assigned.
Answer:
This is sent when the other extension answers the call.
Disconnect:
This is sent when the other extension hangs up.
Confirm (confirmation tone) :
This is sent when the feature number for "Message Waiting Lamp" is valid.
FWD VM RBT (FWD to VM ringback tone) :
Not available (reserved).
FWD VM BT (FWD to VM busy tone) :
This is sent when the called extension has set Call Forwarding to VPS.
FWD EXT RBT (FWD to extension ringback tone) :
Not available (reserved).

## Selection

- RBT / BT / ROT / DND / Answer / Disconnect / Confirm / FWD VM RBT / FWD VM BT / FWD EXT RBT
- DTMF signal number: $\mathbf{3}$ digits (max.)


## Default

RBT — 1; BT — 2; ROT — 3; DND — 4; Answer - 5; Disconnect — \#9; Confirm —9; FWD VM RBT - 6; FWD VM BT - 7; FWD EXT RBT - 8

## Programming

1. Enter 113.

Display: 113 VM DTMF SET
2. Press NEXT to program ringback tone status.

To program another status, keep pressing NEXT until the desired status is displayed.

```
Display example: RBT :1
```

3. Enter a DTMF signal number.

To delete the current entry, press CLEAR.
To change the current entry, press CLEAR and enter the new number.
4. Press STORE.
5. To program another selection, keep pressing NEXT or PREV until the desired selection is displayed.
6. Repeat steps 3 through 5.
7. Press END.

## Conditions

- A DTMF signal number can have a maximum of three digits, consisting of $\mathbf{0}$ through $\mathbf{9}$, *, \# and PAUSE.
- The DTMF signals are sent to the extensions in the extension group that is assigned as "VM" or "AA" in program [106] Station Hunting Type.


## Features Guide References

Voice Mail Integration

## [114] VM Command DTMF Set

## Description

Sets the DTMF (Dual Tone Multi-Frequency) command signals transmitted to your Voice Processing System (VPS). There are four commands available: Leave Message; Get Message; Automated Attendant Service; Voice Mail Service. These commands are used in the following ways:
(A) If your VPS is used for Voice Mail (VM) Service
(1) Call Forwarding / Intercept Routing to Voice Mail

If a call is forwarded to the VPS, your system will send a mailbox number to the VM port. This allows the caller to leave a message without knowing the mailbox number.

- Required entries (selections):

LV-MSG (Leave Message): This command is transmitted to a VM port if a call is forwarded or intercepted and rerouted to the port.
AA-SVC (Automated Attendant Service): If AA Service is set to "Start" in program [990], Area 01 - Bit 16, the "AA-SVC" command is sent to a VM port if an incoming outside call is answered by the VM port.

- Other programming required (program addresses): [106]; [602]; [609]; [990], Area 01 Bit 16; [990], Area 02 - Bit 8
(2) Hearing the message at the extension

If the VPS receives a message and lights the MESSAGE button indicator of the dialed telephone, the telephone user can hear the message by pressing the MESSAGE button.

- Required entries (selections):

GETMSG (Get Message): This command is transmitted to a VM port when the message receiver presses the MESSAGE button.
VM-SVC (Voice Mail Service): The "VM-SVC" command is a code transmitted preceding the "GETMSG" command above.
This is effective to switch to VM port when an AA port lights the MESSAGE indicator.

- Other programming required (program addresses): [609]; [990], Area 02 - Bit 8
(B) If your VPS is used for Automated Attendant (AA) Service

An AA port answers an incoming outside call to provide AA services, such as call transfer, receiving a message.

- Required entries (selections):

VM-SVC (Voice Mail Service): The "VM-SVC" command is a code transmitted before the "LV-MSG" code if an operator transfers a call to an extension and then it is forwarded to an AA port so that the AA port can be switched to the VM port temporarily.

- Other programming required (program addresses): [106], [602]


## Selection

- LV-MSG / GETMSG / AA-SVC / VM-SVC
- DTMF signal number: $\mathbf{1 6}$ digits (max.)


## Default

LV-MSG — H; GETMSG — *H; AA-SVC — \#8 ; VM-SVC — \#6

## Programming

1. Enter 114.

Display: 114 VM DTMF CMD
2. Press NEXT to program the LV-MSG command.

To program another command, keep pressing NEXT until the desired command is displayed.

```
Display example: LV-MSG:H
```

3. Enter a DTMF signal number.

To delete the current entry, press CLEAR.
To change the current entry, press CLEAR and enter the new number.
4. Press STORE.
5. To program another selection, keep pressing NEXT or PREV until the desired selection is displayed.
6. Repeat steps 3 through 5.
7. Press END.

## Conditions

- A command signal number can have a maximum of 16 digits, consisting of $\mathbf{0}$ through $\mathbf{9}$, * ,\#, FLASH or FLASH/RCL and PAUSE.
- The FLASH or FLASH/RCL button is available only for LV-MSG and GETMSG commands to store "H" which means "Home Position".
- If "H" is stored for "LV-MSG", a mailbox number programmed in program [609] Voice Mail Access Codes or an extension number will be sent to the VM port (Follow On ID function). If certain codes are required before and after the ID code, insert " H " between the codes, as "aaaHbbb". If nothing is stored, it will operate as "H".
- If " $* \mathrm{H}$ " is stored for "GETMSG", a mailbox number programmed in program [609] Voice Mail Access Codes or an extension number will be sent to the port succeeding the " $*$ ".


## Features Guide References

Voice Mail Integration

## [115] Adjust Time

## Description

Used to adjust the time for checking the normality of system data. Every day at the programmed time, the data adjustment is performed.

## Selection

- Hour: 1 through 12
- Minute: 00 through 59
- AM / PM


## Default

1:00 AM

## Programming

1. Enter 115.

Display: 115 TIME ADJ M/S
2. Press NEXT to program hour.

Display example: 1:00 AM
3. Enter the hour.

To change the current entry, press CLEAR and enter the new hour.
4. Press $\boldsymbol{\square}$ to program minute.
5. Enter the Minute.

To change the current entry, enter the new minute.
6. Press $\boldsymbol{\square}$ to program AM / PM.
7. Press SELECT for AM or PM.
8. Press STORE.
9. Press END.

## Conditions

- You cannot leave the entry empty.
- Master and slave systems are synchronized with each other.


## Features Guide References

None

## [116] ROM Version Display

## Description

Confirms the version of ROM of the system.
Display example:


## Selection

System Number:
KX-TD816-0
KX-TD1232 - 0 (Master) / $\mathbf{1}$ (Slave)

## Default

Not applicable.

## Programming

1. Enter 116.

Display: 116 ROM VERSION
2. Press NEXT.

Display: System NO? $\rightarrow$
3. Enter the System Number.

The display shows the ROM version of the specified system.
4. To confirm the other system, press SELECT and enter the System Number.

The display shows the ROM version of the specified system.
5. Press END.

## Conditions

- The out-of-service system number is unacceptable.
- For KX-TD816, you can enter the system number 0 only. Skip step 4.


## Features Guide References

## None

## [117] Voice Mail Number Assignment

## Description

Assigns the jack number corresponding to the voice mail port for data transmission to the Voice Processing System. The voice mail port is expandable to six ports ( 12 ports during System Connection for KX-TD1232).

## Selection

## KX-TD816

- Jack number: 02 through 16


## KX-TD1232

- Master / Slave
- Jack number: 02 through 32 / Master; 33 through 64 / Slave


## Default

All jacks - Blank

## Programming

## KX-TD816

1. Enter 117.

Display: 117 VMS PORT ASN
2. Press NEXT.

Display example: Mast1:\# \# \#
3. Enter a jack number.

To delete the current entry, press CLEAR.
To change the current entry, press CLEAR and enter the new jack number.
4. Press $\boldsymbol{\rightarrow}$ to enter another jack number.
5. Repeat steps 3 through 4 to enter another jack number.
6. Press STORE.
7. Press NEXT to program another jack number.

Display example: Mast2:\# \# \#
8. Repeat steps 3 through 5 to enter another jack number.
9. Press STORE.
10.Press END.

## KX-TD1232

1. Enter 117.

Display: 117 VMS PORT ASN
2. Press NEXT to program the Master System.

Display example: Mast1:\# \# \#
3. Enter a jack number.

To delete the current entry, press CLEAR.
To change the current entry, press CLEAR and enter the new jack number.
4. Press $\boldsymbol{D}$ to enter another jack number.
5. Repeat steps 3 through 4 to enter another jack number.
6. Press STORE.
7. Press NEXT to program another jack number.

Display example: Mast2:\# \# \#
8. Repeat steps 3 through 5 to enter another jack number.
9. Press STORE.
10.Press NEXT to program the Slave System.

Display example: Slav1:\# \# \#
11.Repeat steps 3 through 5 to enter another jack number.
12.Press STORE.
13. Press NEXT to program another jack number.

Display example: Slav2:\# \# \#
14.Repeat steps 3 through 5 to enter other jack numbers.
15.Press STORE.
16.Press END.

## Conditions

- Neither jack number 01 nor the manager extension can be assigned as a voice mail port jack.
- The jack numbers correspond to the voice mail port in numerical order.

Example: Stored jack numbers: Jacks $02,03,05,08,11,13$
Jack $02=$ Voice mail numbers 01,02 ; Jack $03=$ Voice mail numbers 03 , 04 ; Jack $05=$ Voice mail numbers 05 , 06 ; Jack $08=$ Voice mail numbers 07,08 ; Jack $11=$ Voice mail numbers 09,10 ; Jack $13=$ Voice mail numbers 11,12

- This program is for DPT Integration only. Do not use it for Inband Integration.


## Features Guide References

Voice Mail Integration for Digital Proprietary Telephones

## [118] Voice Mail Extension Number Assignment

## Description

Assigns the extension number for the voice mail number. These numbers can be used the same way extension numbers are used for station access.

## Selection

- Voice mail number (VM):

KX-TD816 - 01 through 12
KX-TD1232 - 01 through 24

- Extension Number:

2 to 4 digits

## Default

$$
\begin{aligned}
& \text { KX-TD } 816- \\
& \text { VM- } 01=165, \mathrm{VM}-02=166, \mathrm{VM}-03=167, \mathrm{VM}-04=168, \mathrm{VM}-05=169, \mathrm{VM}-06=170, \mathrm{VM}- \\
& 07=177, \mathrm{VM}-08=178, \mathrm{VM}-09=181, \mathrm{VM}-10=182, \mathrm{VM}-11=183, \mathrm{VM}-12=184 \\
& \text { KX-TD1232 - } \\
& \text { VM-01=165, VM- } 02=166, \mathrm{VM}-03=167, \mathrm{VM}-04=168, \mathrm{VM}-05=169, \mathrm{VM}-06=170, \mathrm{VM}- \\
& 07=177, \mathrm{VM}-08=178, \mathrm{VM}-09=181, \mathrm{VM}-10=182, \mathrm{VM}-11=183, \mathrm{VM}-12=184, \mathrm{VM}-13=171, \\
& \mathrm{VM}-14=172, \mathrm{VM}-15=173, \mathrm{VM}-16=174, \mathrm{VM}-17=175, \mathrm{VM}-18=176, \mathrm{VM}-19=179, \mathrm{VM}- \\
& 20=180, \mathrm{VM}-21=185, \mathrm{VM}-22=186, \mathrm{VM}-23=187, \mathrm{VM}-24=188
\end{aligned}
$$

## Programming

1. Enter 118.

Display: 118 VM EXT \#
2. Press NEXT.

Display: VM NO? $\rightarrow$
3. Enter a voice mail number.

To enter voice mail number 01, you can also press NEXT.
Display: VM-01:\#02-1:165
4. Enter an extension number.

To change the current entry, press CLEAR and enter the new number.
5. Press STORE.
6. To program another voice mail number, press NEXT or PREV, or SELECT and the desired voice mail number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- For the KX-TD1232, VM-01 through VM-12 are for the Master system and VM-13 through VM-24 are for the Slave system, if available.
- You cannot leave an entry empty.
- Double entry and incompatible entry for these numbers are invalid. Valid entry example: 10 and 11,10 and 110. Invalid entry example: 10 and 106,210 and 21.
To avoid making an invalid entry, check the other extension numbers in programs [003] Extension Number Set, [012] ISDN Extension Number Set, [124] Phantom Extension Number Assignment and [813] Floating Number Assignment.
- The display shows "VM-XX:\#YY-1:ZZZ" in step 3. "XX" means the voice mail number. "YY" means the jack number of the voice mail port programmed in [117] Voice Mail Number Assignment.
"-1" of YY-1 means the first part of the jack number in digital line.
YY-2 means the second number of the jack number in digital line.


## Features Guide References

Voice Mail Integration for Digital Proprietary Telephones

## [119] Voice Mail Extension Group Assignment

## Description

Assigns each voice mail number to a voice mail extension group number.

## Selection

- Voice mail number (VM):

KX-TD816 - 01 through 12,*
KX-TD1232 - 01 through 24,*
( $*=$ all voice mail numbers)

- Voice mail extension group number (EXG) $=\mathbf{1}$ through 8


## Default

All voice mail numbers $=$ EXG 1

## Programming

1. Enter 119.

Display: 119 VM EXT GROUP
2. Press NEXT.

Display: VM NO? $\rightarrow$
3. Enter a voice mail number.

To enter voice mail number 01, you can also press NEXT.
Display example: VM-01 : \#02-1 : EXG1
4. Enter the voice mail extension group number.

To delete the current entry, press CLEAR.
To change the current entry, enter the new number.
5. Press STORE.
6. To program another voice mail number, press NEXT or PREV, or SELECT and the desired voice mail number.
7. Repeat steps 4 through 6.
8. Press END.

## Conditions

- For the KX-TD1232, VM-01 through VM-12 are for the Master system and VM-13 through VM-24 are for the Slave system, if available.
- The display shows "VM-XX:\#YY-1:EXG Z" in step 3. "XX" means a voice mail number. "YY" means the jack number of the voice mail port programmed in [117] Voice Mail Number Assignment.
"-1" of YY-1 means the first part of the jack number in digital line.
"YY-2" means the second part of the jack number in digital line.
- To assign all voice mail numbers to one selection, press the $*$ key in step 3 . In this case, the display shows the contents programmed for voice mail number 01 .


## Features Guide References

Voice Mail Integration for Digital Proprietary Telephones

## [120] User Password

## Description

Assigns the password required for entering the User Programming mode.
In the User Programming Mode, any display digital proprietary telephone user in the system can set the following programs:
[000] Date and Time Set
[001] System Speed Dialing Number Set
[002] System Speed Dialing Name Set
[003] Extension Number Set
[004] Extension Name Set
[005] Flexible CO Button Assignment
[006] Operator / Manager Extension Assignment
[007] DSS Console Port and Paired Telephone Assignment
[008] Absent Messages
[009] Quick Dial Number Set
[012] ISDN Extension Number Set
[013] ISDN Extension Name Set
[017] DISA User Codes

## Selection

- Password: 4 through 7 digits

Default
1234

## Programming

1. Enter 120.

Display: 120 USR PASSWORD
2. Press NEXT.

Display example: Password:1234
3. Enter a password.

To change the current entry, press CLEAR and enter the new password.
4. Press STORE.
5. Press END.

## Conditions

- The password can be from four to seven digits long. Valid numbers are from $\mathbf{0}$ to 9 .
- If less than four digits are entered, they will not be stored.
- You cannot leave the entry empty.


## Features Guide References

User Programming (Manager Programming)

## [121] Walking COS Password

## Description

Assigns the password required for Walking COS.

## Selection

Password: $\mathbf{4}$ through 7 digits

## Default

1234

## Programming

1. Enter 121.

Display: 121 COS PASSWORD
2. Press NEXT.

Display example: Password:1234
3. Enter a password.

To change the current entry, press CLEAR and enter the new password.
4. Press STORE.
5. Press END.

## Conditions

- The password can be from four to seven digits long. Valid numbers are from $\mathbf{0}$ to 9 .
- If less than four digits are entered, they will not be stored.
- You cannot leave the entry empty.


## Features Guide References

Walking COS

## [122] UCD Overflow

## Description

Assigns the destination where the call is transferred to when all extensions in the Uniform Call Distribution (UCD) group are busy. The Time Table number of the overflow extension must also be assigned.

## Selection

- UCD group number: 1 through 8
- Overflow extension number: 2 to $\mathbf{4}$ digits
- Time Table number: $\mathbf{1}$ through 4


## Default

All UCD groups - Not stored

## Programming

1. Enter 122.

$$
\text { Display: } 122 \text { UCD OVERFLOW }
$$

2. Press NEXT.
```
Display: UCD NO? }
```

3. Enter a UCD group number.

To enter UCD group number 1, you can also press NEXT .
Display example: UCD1: , TT:
4. Enter a overflow extension number.

Display example: UCD1:102, TT:
5. Press
6. Enter a Time Table number.

Display example: UCD1:102, TT:1
7. Press STORE.
8. Press END.

## Conditions

If the overflow extension or Time Table number is not assigned, the system will not answer the call and waits for any extension to become idle. In this case, Intercept Routing - No Answer (IRNA) will be employed.

## Features Guide References

Uniform Call Distribution (UCD)

## [123] UCD Time Table

## Description

Assigns the queuing sequence in the Uniform Call Distribution (UCD) Time Table. The queuing sequences are as follows:
${ }^{*}$ IS1: Sends DISA (Direct Inward System Access) outgoing message 1.
${ }^{*}$ S2: Sends DISA outgoing message 2.
${ }^{*}$ S3: Sends DISA outgoing message 3.
${ }^{*}$ S4: Sends DISA outgoing message 4.
TR: Transfers to the overflow extension.
RT: Returns to the top/second ${ }^{* 2}$ of the sequence.
Blank: Disconnects.
1T: Timer - 16 seconds
2T: Timer - 32 seconds
3T: Timer - 48 seconds
4T: Timer - 64 seconds

## Selection

- Time Table number: 1 to 4
- S1 / S2 / S3 / S4 / TR / RT / 1T / 2T / 3T / 4T / Blank


## Default

All time tables — Not stored

## Programming

1. Enter 123.
```
Display: 123 UCD T.TABLE
```

2. Press NEXT.

Display: Table NO? $\rightarrow$
3. Enter a Time Table number.

To enter Time Table number 1, you can also press NEXT.
Display example: 1: $\rightarrow \rightarrow \rightarrow$
4. Keep pressing SELECT until the desired selection is displayed.

Display example: 1:S4 $\rightarrow \rightarrow \rightarrow$
5. Pres
6. Repeat steps 4 and 5.

[^1]7. Press STORE.
8. Press END.

## Conditions

- "Sx" can be assigned to a space other than the first only when another "Sx" is assigned in the first space.
- An assignment after "TR", "RT" or "Blank" is not available.


## Features Guide References

Ring Group
Uniform Call Distribution (UCD)

## [124] Phantom Extension Number Assignment

## Description

Assigns the phantom extension numbers. Each number will be assigned to a flexible CO or DSS (Direct Station Selection) button and used as a Phantom Extension button.

## Selection

- Location number: 001 through 128
- Phantom extension number: 2 to $\mathbf{4}$ digits


## Default

All locations - Not stored

## Programming

1. Enter 124.

Display: 124 PhANTOM \#
2. Press NEXT.

Display: Location NO? $\rightarrow$
3. Enter a location number.

To enter location number 001, you can also press NEXT.
Display example: 001:Not Stored
4. Enter a phantom number.

To delete the current entry, press CLEAR.
To change the current entry, press CLEAR and enter the new number.
5. Press STORE.
6. To program another location, press NEXT or PREV, or SELECT and the desired location number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- Each phantom number has two to four digits, consisting of numbers $\mathbf{0}$ through 9.
- The first one or two digits of the phantom extension numbers are subject to program [100] Flexible Numbering, (01) through (16) 1st through 16th hundred extension blocks.
- Phantom extension numbers and other extension numbers should be unique. Double entry and incompatible entry for these numbers are invalid. Valid entry example: 10 and 11, 10 and 110. Invalid entry example: 10 and 106,210 and 21.
To avoid making an invalid entry, check the other extension numbers in programs
[003] Extension Number Set, [012] ISDN Extension Number Set, [118] Voice Mail Extension Number Assignment and [813] Floating Number Assignment.


## Features Guide References

Phantom Extension

## [125] Area Code Assignment

## Description

Assigns up to ten area codes which are necessary when using the Caller ID feature. By assigning your area code, the system records the caller's phone number modified by programs [126] Caller ID Modification for Local Call and [127] Caller ID Modification for Long Distance Call.

## Selection

- Location number: 01 through 10
- Area code: $\mathbf{1}$ through $\mathbf{6}$ digits


## Default

All locations - Blank

## Programming

1. Enter 125.

Display: 125 AREA CODE
2. Press NEXT.

Display: Location NO? $\rightarrow$
3. Enter a location number.

To enter location number 01, you can also press NEXT.
Display example: 01:
4. Enter an area code.

To change the current entry, press CLEAR and enter the new area code.
5. Press STORE.
6. To program another location number, press NEXT or PREV, or SELECT and the desired location number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- The area code can be six digits long. Valid numbers are from $\mathbf{0}$ to 9.
- The location numbers used in this program corresponds to those in program [126] Caller ID Modification for Local Call.


## Features Guide References

Caller ID

Call Log, Incoming

## [126] Caller ID Modification for Local Call

## Description

Assigns removed digits from the received caller's number of a local call, and adds number to make the final number which serves as the Caller ID number. The system records the modified caller's number to the incoming call log list so that the extension user can call back the caller. Digits are removed from or added to the beginning of the received digits.

## Selection

- Location number: 01 through 10
- Number of digits to be deleted: $\mathbf{0}$ through 9 ( $0=$ no deletion $)$
- Number to be added: 4 digits (max.)


## Default

All locations - Deleted number of digits $=3$, Added number $=$ blank

## Programming

1. Enter 126.

Display: 126 CID LOCAL
2. Press NEXT.

Display: Location NO? $\rightarrow$
3. Enter a location number.

To enter location number 01, you can also press NEXT.
Display example: 01:Del3,Add
4. Enter the number of digits to be deleted.

To change the current entry, press CLEAR and enter the new number.
5. Press $\boldsymbol{\rightarrow}$ to program the number to be added, if required.
6. Enter the number to be added.

To change the current entry, press CLEAR and enter the new number.
7. Press STORE.
8. To program another location number, press NEXT or PREV, or SELECT and the desired location number.
9. Repeat steps 4 through 8 .
10.Press END.

## Conditions

- The added number has a maximum of 4 digits, consisting of $\mathbf{0}$ through $\mathbf{9}, *$ and $\#$.
- There are ten location numbers for modified numbers, which corresponds to those in program [125] Area Code Assignment.


## Features Guide References

## Caller ID

Call Log, Incoming

## [127] Caller ID Modification for Long Distance Call

## Description

Assigns removed digits from the received caller's number of a long distance call, and adds number to make the final number which serves as the Caller ID number. The system records the modified caller's number to the incoming call log list so that the extension user can call back the caller.
Digits are removed from or added to the beginning of the received digits.

## Selection

- Number of digits to be deleted: $\mathbf{0}$ through 9 ( $0=$ no deletion)
- Number to be added: $\mathbf{4}$ digits (max.)


## Default

Deleted number of digits - 0 ; Added number - 1

## Programming

1. Enter 127.

Display: 127 CID LD
2. Press NEXT.

Display example: Del,Add:0,1
3. Enter the number of digits to be deleted.

To change the current entry, press CLEAR and enter the new number.
4. Press $\boldsymbol{\square}$ to program the number to be added, if required.
5. Enter the number to be added.

To change the current entry, press CLEAR and enter the new number.
6. Press STORE.
7. Press END.

## Conditions

- The added number has a maximum of 4 digits, consisting of $\mathbf{0}$ through $\mathbf{9}$, $*$ and $\#$.


## Features Guide References

Caller ID
Call Log, Incoming

## [128] PBX Code

## Description

Assigns the PBX Code as your location number if the "PBX Code method" is employed for Tie Line Network calling.

## Selection

- PBX Code: 1 to 3 digits


## Default

Not Stored

## Programming

1. Enter 128.

Display: 128 PBX CODE
2. Press NEXT.

Display: Code:
3. Enter a PBX Code.

To change the current entry, press CLEAR and enter the new code.
4. Press STORE.
5. Press END.

## Conditions

- Valid numbers for the PBX Code are $\mathbf{0}$ through 9.
- The PBX Code method is: PBX Code + Extension number.


## Features Guide References

T1 Line
TIE Line Service

## [130] Message Waiting Control

## Description

Assigns the data ports which communicate with the message waiting lamp adaptor (KXTD194).

## Selection

- Unit (TD194) number:

KX-TD816 - 1
KX-TD1232 - 1 or 2 (for Master), 4 or 5 (for Slave)

- Jack number:

KX-TD816 - 02 through 16
KX-TD1232 - $\mathbf{0 2}$ through 64

## Default

All units — Not stored

## Programming

1. Enter 130 .

Display: 130 MW CONTROL
2. Press NEXT.

Display: MW UNIT NO? $\rightarrow$
3. Enter a unit number.

To enter unit number 1 , you can also press NEXT.
Display example: Unit:1 Jack
4. Enter a jack number.

Display example: Unit:1 Jack:05
5. Press STORE.
6. To program another unit, press NEXT or PREV, or SELECT and the desired unit number.
7. Repeat steps 4 and 5.
8. Press END.

## Conditions

- The following jacks are not available for this assignment.

Jack 01
The jack for the manager extension
Jacks assigned to voice mail ports
Jacks assigned to DSS consoles and paired telephones
Jacks already assigned to the message waiting adaptor unit

If the unit is connected to a port which is not assigned as the data port, a clicking sound may be heard from the unit.
Please make sure that the unit is connected to the assigned port.

- When the data port is assigned properly and the unit is connected to the assigned port, the unit power indicator lights red. If the assignment and connection are wrong, the power indicator will flash.
- For the KX-TD1232, unit numbers 1 and 2 are for the Master system, and 4 and 5 are for the Slave system. Jack numbers 02 through 32 are for the Master system and 33 through 64 are for the Slave system.
- After this assignment, the message waiting ring tone will not be sent to single line telephone users.


## Features Guide References

Message Waiting

## [131] Message Waiting Lamp Assignment

## Description

Assigns the message waiting light pattern.

## Selection

- Message waiting light pattern number: 1 through 12


## Default

1

## Programming

1. Enter 131.

$$
\text { Display: } 131 \text { MW LAMP }
$$

2. Press NEXT.
Display: MW LAMP NO:1
3. Enter a message waiting light number.
Display example: MW LAMP NO:12
4. Press STORE.
5. Press END.

## Conditions

- The available message waiting light patterns are as follows.



## Features Guide References

Message Waiting

## [132] Message Waiting Port Set

## Description

Assigns which single line telephone port is connected to the KX-TD194 port.

## Selection

- Unit (TD194) number:

KX-TD816 - 1
KX-TD1232 - 1 or 2 (for Master), 4 or 5 (for Slave)

- Message waiting port number:

01 through 16

- Single line telephone jack number:

KX-TD816 - 01 through 16,
KX-TD1232 - 01 through 64

- Sub port number:

1 or 2 ( 1 = main port, 2 =XDP single line telephone port)

## Default

All units - all message waiting ports - not stored

## Programming

1. Enter 132.

Display: 132 MW PORT SET
2. Press NEXT.

Display: MW UNIT NO? $\rightarrow$
3. Enter a unit number.

To enter unit number 1, you can also press NEXT.
Display example: U1 MW: J: -
4. Enter a message waiting port number.

Display example: U1 MW:01J: -
5. Press
6. Enter a single line telephone jack number.

```
Display example: U1 MW:01J:15-
```

7. Press
8. Enter a sub port number.

Display example: U1 MW:01J:15-2
9. Press STORE.
10.To program another message waiting port, press NEXT or PREV, or SELECT and the desired message waiting port number.
11.Repeat steps 5 through 9
12.Press END.

## Conditions

- To program another unit, start from step 1.
- For the KX-TD1232, the unit numbers 1 and 2 are for the Master system and 4 and 5 are for the Slave system, and jack numbers 01 through 32 are for Master system and 33 through 64 are for Slave system.
- For the KX-TD1232, single line telephone jacks connected to the KX-TD194 must belong to the same system as the data port assigned in program [130].
For example, if the assigned data port is one of the extension jacks in the master system, the KX-TD194 must be connected to jacks 01 through 32.
On the other hand, if the assigned data port is one of the extension jacks in the slave system, the KX-TD194 must be connected to jacks 33 through 64.
Programming example for the KX-TD1232
Unit 1
Data port $=$ jack 02
MW port 1 = single line telephone jack 01-2
MW port $3=$ single line telephone jack 05-2
Unit 4
Data port $=$ jack 33
MW port 2 = single line telephone jack 34-2
MW port $6=$ single line telephone jack 35-1
- A single line telephone jack cannot be assigned to more than one unit.


## Features Guide References

Message Waiting

## [133] Caller ID Extension Assignment

## Description

Assigns which KX-TD171 port receives Caller ID information.

## Selection

- Unit (TD171) number:

KX-TD816 - 1
KX-TD1232 - $\mathbf{1}$ through 4

- Port number:

1 or 2

## Default

Not stored

## Programming

1. Enter 133.

Display: 133 EXT CALL ID
2. Press NEXT.

Display example: EXP NO? $\rightarrow$
3. Enter a unit number.

To enter unit number 1, you can also press NEXT.
Display example: E1:Not Stored
4. Enter a port number.

Display example: E1:Port1
5. Press STORE.
6. To program another unit, press NEXT or PREV, or SELECT and the desired unit number.
7. Repeat steps 4 and 5.
8. Press END.

## Conditions

- For the KX-TD1232, unit numbers 1 and 2 are for the Master system and 3 and 4 are for the Slave system.
- The Caller ID information can only be sent to port 1 or 2 on the unit.
- A single line telephone, connected in parallel with a digital proprietary telephone using the XDP feature, can receive Caller ID information. But one connected in parallel with an analog proprietary telephone cannot receive the information.
- Caller ID information is for outside calls only. Call information transferred by the Call Forwarding, IRNA, and Station Hunting features can be sent to the destination extension.

Call information transferred by the Call Transfer, Screened - to Extension feature cannot be sent. However, when a call is transferred by the Call Transfer, Unscreened feature, the information can be sent to the destination extension.

- When several incoming outside calls reach an extension and another extension user picks up one of the calls, Caller ID information can be sent to the extension. However, whether Caller ID information can be received or not depends on the type of single line telephone you have.


## Features Guide References

Caller ID

## [134] Hotel Application

## Description

Assigns whether the hotel application is enabled or disabled.

## Selection

ON / OFF

## Default

OFF

## Programming

1. Enter 134.

Display: 134 HOTEL ON / OFF
2. Press NEXT.

Display example: HOTEL:OFF
3. Keep pressing SELECT until the desired selection is displayed.
4. Press STORE.
5. Press END.

## Conditions

If "ON" is selected, the "Hotel" menu is displayed on the operator extension's KX-T7436 or KX-T7235, and the "Room Status" feature is available.

## Features Guide References

Hotel Application - Room Status

## [135] DID Number Conversion Selection

## Description

Selects whether the Direct Inward Dialing (DID) number is allocated as an extension number or is converted using the Transfer Table.

## Selection

- EXT Number / Transfer Table


## Default

Transfer Table

## Programming

1. Enter 135.

$$
\text { Display: } 135 \text { DID SELECT }
$$

2. Press NEXT.
```
Display: Transfer Table
```

3. Keep pressing SELECT until the desired selection is displayed.
4. Press STORE.
5. Press END.

## Conditions

If "Transfer Table" is selected, the DID number will be assigned in program [136] DID Number Assignment.

## Features Guide References

Direct Inward Dialing (DID)

## [136] DID Number Assignment

## Description

Assigns the Direct Inward Dialing (DID) number which is converted from the DID subscriber number using the programs [433] DID / TIE Subscriber Number Removed Digit and [434] DID / TIE Added Number. If the converted number matches the number assigned in this program, it reaches the destination assigned in program [137-138] DID Extension Day / Night.

## Selection

- Location number: 001 through 200
- DID Number: 16 digits (max.)


## Default

All locations - Not Stored

## Programming

1. Enter 136.

Display: 136 DID NUMBER
2. Press NEXT.

Display: Location NO? $\rightarrow$
3. Enter a location number.

To enter location number 001, you can also press NEXT.
Display example: \#001:Not Stored
4. Enter a DID number.

To delete the current entry, press CLEAR and enter the new number.
To assign no number, press CLEAR.
5. Press STORE.
6. To program another location, press NEXT or PREV, or SELECT and the desired location number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- There is a maximum of 200 DID numbers. Each DID number can be one through 16 digits, consisting of $\mathbf{0}$ through 9 and $*$ (wild card).
- If the same DID number is assigned to different locations, only the number at the lowest location number becomes available. The others are disregarded.
- To use this program, "Transfer Table" must be selected beforehand in program [135] DID Number Conversion Selection.


## Features Guide References

Direct Inward Dialing (DID)

## [137-138] DID Extension - Day / Night

## Description

Determines the extension which receive a Direct Inward Dialing (DID) call in both the day and night modes.

## Selection

- Location number: 001 through 200
- Extension number: $\mathbf{2}$ to $\mathbf{4}$ digits / 0 (operator)


## Default

All locations - Not Stored

## Programming

1. Enter a program address ( $\mathbf{1 3 7}$ for day or $\mathbf{1 3 8}$ for night).

Display: 137 DID NUM DAY
2. Press NEXT.

Display: Location NO? $\rightarrow$
3. Enter a location number.

To enter location number 001, you can also press NEXT.
Display example: \#001:Not Stored
4. Enter an extension number.

To change the current entry, press CLEAR and enter the new number
To disable the DID, press CLEAR.
5. Press STORE.
6. To program another location, press NEXT or PREV, or SELECT and the desired location number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- Assignable numbers are programmed in the following programs. Extension numbers - [003] Extension Number Set ISDN extension numbers - [012] ISDN Extension Number Set Voice Mail numbers - [118] Voice Mail Extension Number Assignment Phantom numbers - [124] Phantom Extension Number Assignment Floating numbers - [813] Floating Number Assignment (except the DISA floating numbers)
- To use this program, "Transfer Table" must be selected first in program [135] DID Number Conversion Selection, and then the DID number must be assigned in program [136] DID Number Assignment.


## Features Guide References

Direct Inward Dialing (DID)
Night Service

## [139] DID Extension Name Set

## Description

Assigns names to the DID extension assigned in program [136] DID Number Assignment.

## Selection

- Location number: 001 through 200
- Extension number: 10 characters (max.)


## Default

All locations - Not Stored

## Programming

1. Enter 139.

Display: 139 DID NAME
2. Press NEXT.

Display: Location NO? $\rightarrow$
3. Enter a location number.

To enter location number 001, you can also press NEXT.
Display example: 001:Not Stored
4. Enter a name.

For entering characters, see Section 1.4 Entering Characters.
To delete the current entry, press CLEAR.
To change the current entry, press CLEAR and enter the new name.
5. Press STORE.
6. To program another location, press NEXT or PREV, or SELECT and the desired location number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- A DID extension name is displayed only when the Transfer Table is used.
- You can program the initial display as the DID extension name in Station Programming.


## Features Guide References

Direct Inward Dialing (DID)

## [148] Off-Hook Monitor

## Description

Enables or disables to perform the Off-Hook Monitor.

## Selection

- Enable / Disable


## Default

Enable

## Programming

1. Enter 148.

Display: 148 HOOK MONITOR
2. Press NEXT.

```
Display example: Monitor:Enable
```

3. Keep pressing SELECT until the desired selection is displayed.
4. Press STORE.
5. Press END.

## Conditions

Off-Hook Monitor is only available for the KX-T7431, KX-T7433 and KX-T7436 telephone users.

## Features Guide References

Off-Hook Monitor

## [150] Lunch Service Starting / Ending Time

## Description

Sets the Lunch starting and ending time for each day of the week.

## Selection

- Day of the week selection number:
$\mathbf{1}$ (Sunday) / $\mathbf{2}$ (Monday) / $\mathbf{3}$ (Tuesday) / $\mathbf{4}$ (Wednesday) / $\mathbf{5}$ (Thursday) / 6 (Friday) / $\mathbf{7}$ (Saturday) / * (every day of the week)
- Hour: 1 through 12
- Minute: 0 through 59
- AM / PM


## Default

Every day of the week - 12:00-12:59 PM

## Programming

1. Enter 150.

Display: 150 LUNCH TIME
2. Press NEXT.

Display: Day of Week? $\rightarrow$
3. Enter the day of the week selection number.

To select Sunday, you can also press NEXT.
Display example: Sun-BGN:12:00PM
4. Enter the hour of starting time.
5. Press
6. Enter the minute.

To change the current entry, press CLEAR and enter the new minutes.
7. Press
8. Press SELECT for AM or PM.
9. Press STORE.
10.To program another lunch mode or day of the week, press NEXT or PREV, or SELECT and the day of the week selection number.
11.Repeat steps 4 through 10.
12.Press END.

## Conditions

- This programming can only be used if "Auto (automatic)" is selected in program [101] Day / Night Service Switching Mode.
- Lunch service ends at the assigned time.

For example:
If Lunch service is 11:30 AM - 1:00 PM, Day mode starts at 1:01 PM.
If Lunch service is 11:30 AM - 12:59 PM, Day mode starts at 1:00 PM.

## Features Guide References

Lunch / Break Service
Night Service

## [151] Break Service Starting / Ending Time

## Description

Sets the Break starting and ending time for each day of the week.

## Selection

- Day of the week selection number:
$\mathbf{1}$ (Sunday) / $\mathbf{2}$ (Monday) / $\mathbf{3}$ (Tuesday) / $\mathbf{4}$ (Wednesday) / $\mathbf{5}$ (Thursday) / 6 (Friday) / $\mathbf{7}$ (Saturday) / * (every day of the week)
- Hour: 1 through 12
- Minute: $\mathbf{0}$ through 59
- AM / PM


## Default

Every day of the week - 3:00-3:29 PM

## Programming

1. Enter 150.

Display: 151 BREAK TIME
2. Press NEXT.

Display: Day of Week? $\rightarrow$
3. Enter the day of the week selection number.

To select Sunday, you can also press NEXT.
Display example: Sun-BGN: 3:00PM
4. Enter the hour of starting time.

To change the current entry, press CLEAR and enter the new time.
5. Press
6. Enter the minute.

To change the current entry, press CLEAR and enter the new minutes.
7. Press
8. Press SELECT for AM or PM.
9. Press STORE.
10.To program another break mode or day of the week, press NEXT or PREV, or SELECT and the day of the week selection number.
11. Repeat steps 4 through 10 .
12. Press END.

## Conditions

- This feature can only be used if "Auto (automatic)" is selected in program [101] Day / Night Service Switching Mode.
- Break service ends at the assigned time.

For example:
If Break service is 3:00-4:00 PM, Day mode starts at 4:01 PM.
If Break service is 3:00-3:59 PM, Day mode starts at 4:00 PM.

## Features Guide References

Lunch / Break Service
Night Service

### 2.3 Timer Programming <br> [200] Hold Recall Time

## Description

Assigns the length of the hold recall timer. This timer is used to alert an extension that a call has been held for an extended period of time.

## Selection

Time (seconds): $\mathbf{0}$ through 240 ( $0=$ Hold Recall disabled)

## Default

60 sec

## Programming

1. Enter 200.

Display: 200 HOLD RECALL
2. Press NEXT.

Display example: Time: 60 sec
3. Enter the time.

To change the current entry, press CLEAR and enter the new time.
4. Press STORE.
5. Press END.

## Conditions

- Select " 0 " if Hold Recall is not required.
- You cannot leave the entry empty.


## Features Guide References

Hold Recall

## [201] Transfer Recall Time

## Description

Sets the number of rings before transfer recall occurs. If a transferred call is not answered after the programmed number of rings, the call returns to the original caller.

## Selection

Number of rings: $\mathbf{0}$ through 48 ( $0=$ Transfer Recall disabled)

## Default

12 rings

## Programming

1. Enter 201.

Display: 201 TRAN RECALL
2. Press NEXT.

Display example: Time:12 rings
3. Enter the number of rings.

To change the current entry, press CLEAR and enter the new number of rings.
4. Press STORE.
5. Press END.

## Conditions

- Select "0" if Transfer Recall is not required.
- One ring is equivalent to five seconds.
- You cannot leave the entry empty.


## Features Guide References

Call Transfer, Unscreened - to Extension

## [202] Call Forwarding - No Answer Time

## Description

Sets the number of rings for Call Forwarding - No Answer feature. If a call is not answered after the programmed number of rings, the call is forwarded to the destination.

## Selection

Number of rings: 1 through 12

## Default

3 rings

## Programming

1. Enter 202.

Display: 202 CALL FWD-NA
2. Press NEXT.

Display example: Time: 3 rings
3. Enter the number of rings.

To change the current entry, press CLEAR and enter the new number of rings.
4. Press STORE.
5. Press END.

## Conditions

- One ring is equivalent to five seconds.
- This timer is also used for Intercept Routing. If an incoming DISA (Direct Inward System Access)* call to the Intercept Routing destination is not answered before this timer expires, the call will be disconnected.
- You cannot leave the entry empty.


## Features Guide References

Call Forwarding - Busy / No Answer
Call Forwarding - No Answer

## [203] Intercept Time

## Description

Sets the number of rings for Intercept Routing - No Answer (IRNA) feature. If a call is not answered after the programmed number of rings, the call is redirected to the programmed station.

## Selection

Number of rings: $\mathbf{3}$ through 48

## Default

12 rings

## Programming

1. Enter 203.

Display: 203 INTERCEPT
2. Press NEXT.

Display example: Time:12 rings
3. Enter the number of rings.

To change the current entry, press CLEAR and enter the new number of rings.
4. Press STORE.
5. Press END.

## Conditions

- One ring is equivalent to five seconds.
- Programs [409-410] Intercept Extension —— Day / Night are used to program the destination of Intercept Routing on an outside line group basis in day and night modes.
- If the original extension has set Call Forwarding - No Answer, Intercept Timer starts after Call Forwarding.
- You cannot leave the entry empty.


## Features Guide References

Intercept Routing

## [204] Pickup Dial Waiting Time

## Description

Sets the number of seconds for Pickup Dialing. If the telephone user lifts the handset, the programmed party is called when the time expires.

## Selection

Time (seconds): 1 through 5

## Default

1 sec

## Programming

1. Enter 204.

Display: 204 PICKUP DIAL
2. Press NEXT.

Display example: Time:1 sec
3. Enter the time.

To change the current entry, enter the new time.
4. Press STORE.
5. Press END.

## Conditions

- This time gives the user an opportunity to dial digits before the automatic dialing process takes place.


## Features Guide References

Pickup Dialing

## [205] Extension-to-Outside Line Call Duration Time

## Description

Sets the maximum time allowed for a conversation with an outside party. If an outside call is originated or answered by a programmed extension user and the timer expires, the call is disconnected.

## Selection

Time (minutes): $\mathbf{1}$ through 64

## Default

10 min

## Programming

1. Enter 205.

Display: 205 EXT-CO TIME
2. Press NEXT.

Display example: Time:10 min
3. Enter the time.

To change the current entry, press CLEAR and enter the new time.
4. Press STORE.
5. Press END.

## Conditions

- This time-out applies to extensions to which Limited Call Duration is assigned by program [502] Extension-to-Outside Line Call Duration Limit.
- This time cannot be set to zero or be left empty.


## Features Guide References

Limited Call Duration

## [206] Outside-to-Outside Line Call Duration Time

## Description

Sets the maximum time allowed for a conversation between two outside parties. When the timer expires, the Outside-to-Outside Line call is disconnected.

## Selection

Time (minutes): $\mathbf{1}$ through 64

## Default

10 min

## Programming

1. Enter 206.

Display: 206 CO-CO TIME
2. Press NEXT.

Display example: Time:10 min
3. Enter the time.

To change the current entry, press CLEAR and enter the new time.
4. Press STORE.
5. Press END.

## Conditions

- You cannot leave the entry empty.


## Features Guide References

Call Forwarding - to Outside Line
Call Transfer, Screened - to Outside Line
Conference, Unattended
Direct Inward System Access (DISA)

## [207] First Digit Time

## Description

Sets the maximum time allowed between the start of an outside dial tone and the first digit dialed on an outgoing outside call. If an extension user fails to dial any digits during this time, the DTMF (Dual Tone Multi-Frequency) receiver is released.

## Selection

Time (seconds): $\mathbf{5}$ through 120

## Default

10 sec

## Programming

1. Enter 207.

Display: 207 1ST DIGIT T
2. Press NEXT.

Display example: Time: 10 sec
3. Enter the time.

To change the current entry, press CLEAR and enter the new time.
4. Press STORE.
5. Press END.

## Conditions

- This timer is used for toll restriction checking.
- You cannot leave the entry empty.


## Features Guide References

Toll Restriction

## [208] Inter Digit Time

## Description

Assigns the maximum time allowed between digits on an outgoing toll call. If an extension user fails to dial any digits during this time, the DTMF (Dual Tone Multi-Frequency) receiver is released. This timer applies until the Toll Restriction check is completed.

## Selection

Time (seconds): 5 through 30

## Default

10 sec

## Programming

1. Enter 208.

Display: 208 INTER DIGIT
2. Press NEXT.

Display example: Time:10 sec
3. Enter the time.

To change the current entry, press CLEAR and enter the new time.
4. Press STORE.
5. Press END.

## Conditions

- This timer is used for toll restriction checking.
- You cannot leave the entry empty.


## Features Guide References

Toll Restriction

## [211] Dial Start Time

## Description

Sets the number of milliseconds the system waits before dialing after an outside line is seized.

## Selection

Time (milliseconds): $\mathbf{0}$ through $\mathbf{4 0}$ ( $\times 100$ is the actual time)

## Default

500 msec

## Programming

1. Enter 211.

Display: 211 DIAL START
2. Press NEXT.

Display example: Time: 500 msec
3. Enter the time.

To change the current entry, press CLEAR and enter the new time.
4. Press STORE.
5. Press END.

## Conditions

- You enter a number from 0 through 40. The actual time is a 100 times your input.
- You cannot leave the entry empty.


## Features Guide References

Line Access, Automatic
Line Access, Direct
Line Access, Individual
Line Access, Outside Line Group

## [212] Call Duration Count Start Time

## Description

Sets the number of seconds the system waits between the end of dialing and the start of the Station Message Detail Recording (SMDR) timer for outgoing toll calls. When the system has sent out all the digits to the central office and this timer expires, the system starts counting the call. A display telephone shows the elapsed time of the call. The starting time and the duration of a call are recorded in the SMDR record.

## Selection

Time (seconds): $\mathbf{0}$ through 60

## Default

0 sec

## Programming

1. Enter 212.

Display: 212 CALL TIMER
2. Press NEXT.

Display example: Time: 0 sec
3. Enter the time.

To change the current entry, press CLEAR and enter the new time.
4. Press STORE.
5. Press END.

## Conditions

- The timer starts counting after all the digits are dialed. This timer does not apply to incoming calls. The timer for incoming calls starts immediately.
- You cannot leave the entry empty.


## Features Guide References

Display, Call Information

Station Message Detail Recording (SMDR)

## [213] DISA Delayed Answer Time

## Description

Assigns the number of rings between a call received and the answer by the Direct Inward System Access (DISA) feature.
This programming is available for the KX-TD1232 only.

## Selection

Number of rings: $\mathbf{0}$ through 6

## Default

1 ring

## Programming

1. Enter 213.

Display: 213 DISA ANSWER
2. Press NEXT.

Display example: Time:1 rings
3. Enter the number of rings.

To change the current entry, enter the new number of rings.
4. Press STORE.
5. Press END.

## Conditions

- One ring is equivalent to five seconds.
- You cannot leave the entry empty.


## Features Guide References

Direct Inward System Access (DISA)

## [214] DISA Prolong Time

## Description

Sets the maximum allowable prolonged time for an outside-to-outside line call via the Direct Inward System Access (DISA) feature. An outside-to-outside line call is initially limited by the "Outside-to-Outside Line Call Duration Time" (Program [206]). However, the DISA caller can prolong the call after hearing the warning tones by pressing any key (except the $*$ key). This parameter, the "DISA Prolong Time", sets the duration of these extended periods.
This programming is available for the KX-TD1232 only.

## Selection

Time (minutes): $\mathbf{0}$ through 7 ( $0=$ no prolonging)

## Default

3 min

## Programming

1. Enter 214.

Display: 214 DISA PROLONG
2. Press NEXT.

Display example: Time:3 min
3. Enter the time.

To change the current entry, enter the new time.
4. Press STORE.
5. Press END.

## Conditions

- Do not confuse this parameter with the "Outside-to-Outside Line Call Duration Time" (Program [206]) parameter.
- Program [206] Outside-to-Outside Line Call Duration Time is used to set the duration time allowed for an outside-to-outside line call.
- You cannot leave the entry empty.


## Features Guide References

Direct Inward System Access (DISA)

## [215] Outgoing Message Time

## Description

Sets the maximum allowable recording time for outgoing messages (OGM).
This programming is available for the KX-TD1232 only.

## Selection

Time (seconds): $\mathbf{0}$ / 16 / 32 / 64 ( $0=$ no recording)

## Default

$32,0,32,0$ (for OGM 1 through 4 from left to right)

## Programming

1. Enter 215.

$$
\text { Display: } 215 \text { OGM MSG TIME }
$$

2. Press NEXT to program the time for OGM 1.
```
Display example: OGM:32, 0,32, 0
```

3. Keep pressing SELECT until the desired selection is displayed.
4. Press $\boldsymbol{b}$ to program the time for OGM 2.
5. Keep pressing SELECT until the desired selection is displayed.
6. Repeat steps 4 and 5 to program the time for OGM's 3 and 4.
7. Press STORE.
8. Press END.

## Conditions

- There are three messages available:

OGM 1: used for DISA (Direct Inward System Access) message 1 or UCD (Uniform Call Distribution) message 1
OGM 2:
used for DISA message 2 or UCD message 2
OGM 3:
used for Timed Reminder or UCD message 3
OGM 4:
used for UCD message 4

- Enter the times starting from the left for OGM 1 to OGM 4.
- The total time of the outgoing messages cannot exceed 64 seconds.


## Features Guide References

Direct Inward System Access (DISA)
Outgoing Message (OGM)
Timed Reminder
Uniform Call Distribution (UCD)

## [216] Message Waiting Ring Interval Time

## Description

Sets the Message Waiting ring interval time for a single line telephone.

## Selection

Time (minutes): $\mathbf{0}$ through 64

## Default

0 min (no ring)

## Programming

1. Enter 216.

Display: 216 MW RING TIME
2. Press NEXT.

Display example: Interval: 0 min
3. Enter the time.

To change the current entry, press CLEAR and enter the new time.
4. Press STORE.
5. Press END.

## Conditions

When the interval time is set to " 0 ", the telephone does not ring for Message Waiting notification.
Selecting the message waiting ring type, 3 quick rings or 2 normal rings, in program [990] System Additional Information, Area 05 - Bit 11 is available. If you prefer soft ringing, select " 3 quick rings". In this case, there may be some kinds of telephones which do not ring.

## Features Guide References

Message Waiting

## [217] Timed Reminder Alarm Ring Time

## Description

Sets the number of seconds the Timed Reminder alarm rings.

## Selection

Time (seconds): $\mathbf{3 0}$ through 240

## Default

30 sec

## Programming

1. Enter 217.

Display: 217 TIMED REMIND
2. Press NEXT.

Display example: Reminder: 30sec
3. Enter the time.

To change the current entry, enter the new time.
4. Press STORE.
5. Press END.

## Conditions

> None

## Features Guide References

Timed Reminder

Timed Reminder, Remote (Wake-Up Call)

## [218] DISA AA Wait Time

## Description

Sets the number of seconds the system waits for a second digit entry. If the timer expires, the system assumes that the first digit is a DISA (Direct Inward System Access) built-in auto attendant number if assigned in program [815] DISA Built-in Auto Attendant. This programming is available for the KX-TD1232 only.

## Selection

Time (seconds): 1 through 5

## Default

1 sec

## Programming

1. Enter 218.

Display: 218 DISA AA WAIT
2. Press NEXT.

Display example: Time:1 sec
3. Enter the time.

To change the current entry, enter the new time.
4. Press STORE.
5. Press END.

## Conditions

None

## Features Guide References

Direct Inward System Access (DISA)

## [219] Call Park Recall Time

## Description

Sets the number of rings before Call Park Recall occurs. Call Park Recall is used to alert an extension that a call has been parked for an extended period of time.

## Selection

Number of rings: $\mathbf{0}$ through 48 ( $0=$ Call Park Recall disabled)

## Default

12 rings

## Programming

1. Enter 219.

Display: 219 PARK RECALL
2. Press NEXT.

Display example: Time:12 rings
3. Enter the number of rings.

To change the current entry, press CLEAR and enter the new number of rings.
4. Press STORE.
5. Press END.

## Conditions

- One ring is equivalent to five seconds.
- Select "0" if Call Park Recall is not required.
- You cannot leave the entry empty.


## Features Guide References

Call Park

## [220] TIE First / Inter Digit Time

## Description

Assigns the maximum time allowed between the start of the dial tone and the first digit dialed (First Digit Time), and between digits (Inter Digit Time) on a TIE call. If an extension user fails to dial any digits during this time, the DTMF receiver is released. This timer applies until the Toll Restriction check is completed.

## Selection

Time (seconds): $\mathbf{3}$ to 30

## Default

5 sec

## Programming

1. Enter 220.

Display: 220 TIE TIMER
2. Press NEXT.

Display example: Time:5 sec
3. Enter the time.

To change the current entry, press CLEAR and enter the new time.
4. Press STORE.
5. Press END.

## Conditions

- This timer is used for toll restriction checking.
- You cannot leave the entry empty.


## Features Guide References

T1 Line

TIE Line Service
Toll Restriction

### 2.4 TRS / ARS Programming <br> [300] TRS Override for System Speed Dialing

## Description

Allows you to enable toll restriction override for System Speed Dial Numbers. If this is enabled, all extension users can make System Speed Dialing calls with no restriction.

## Selection

Enable / Disable

## Default

Disable

## Programming

1. Enter 300.

Display: 300 TRS SPEED DL
2. Press NEXT.

Display example: Override:Disable
3. Keep pressing SELECT until the desired selection is displayed.
4. Press STORE.
5. Press END.

## Conditions

Select "Enable" for toll restriction override; Select "Disable" for toll restriction.

## Features Guide References

Toll Restriction Override for System Speed Dialing

## [301-305] TRS Denied Code Entry for Levels 2 through 6

## Description

These allow you to specify the numbers which are toll-restricted for each toll restriction level as follows:
Program [301]: restricts levels 2 through 6
Program [302]: restricts levels 3 through 6
Program [303]: restricts levels 4 through 6
Program [304]: restricts levels 5 through 6
Program [305]: restricts level 6

## Selection

Location number: 01 through 20
Toll call number: 10 digits (max.)

## Default

All locations - Not stored

## Programming

1. Enter a program address ( $\mathbf{3 0 1}$ through 305).
```
Display example: 301 TRS DENY L-2
```

2. Press NEXT.

Display: Location NO? $\rightarrow$
3. Enter a location number.

To enter location number 01, you can also press NEXT.
Display example: 01:Not Stored
4. Enter a toll call number.

To delete the current entry, press CLEAR.
To change the current entry, press CLEAR and enter the new number.
5. Press STORE.
6. To program another location, press NEXT or PREV, or SELECT and the desired location number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- There is a maximum of 20 toll call numbers which can be restricted for each program. Each number has a maximum of ten digits, consisting of $\mathbf{0}$ through 9 , and $*$. The character " $*$ " can be used as a wild card character.
- Programs [306-310] TRS Excepted Code Entry for Levels 2 through 6 are used to assign exceptions to these numbers. Programs [500-501] Toll Restriction Level —— Day / Night are used to set the toll restriction value for each COS.


## Features Guide References

Toll Restriction

## [306-310] TRS Excepted Code Entry for Levels 2 through 6

## Description

> These allow you to assign numbers which are exceptions to the toll restriction specified in programs [301] through [305] as follows:
> Program [306]: applies to level 2
> Program [307]: applies to levels 2 through 3
> Program [308]: applies to levels 2 through 4
> Program [309]: applies to levels 2 through 5
> Program [310]: applies to levels 2 through 6

Note
Store your emergency numbers in program [310].

## Selection

- Location number: 1 through 5
- Exceptional number: 10 digits (max.)


## Default

All locations - Not stored

## Programming

1. Enter a program address ( $\mathbf{3 0 6}$ through 310).

Display example: 306 TRS ALLOW 2
2. Press NEXT.

Display: Location NO? $\rightarrow$
3. Enter a location number.

To enter location number 1, you can also press NEXT.
Display example: 1:Not Stored
4. Enter an exceptional number.

To delete the current entry, press CLEAR.
To change the current entry, press CLEAR and enter the new number.
5. Press STORE.
6. To program another location, press NEXT or PREV, or SELECT and the desired location number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

There is a maximum of five numbers for each program. Each number has a maximum of ten digits, consisting of $\mathbf{0}$ through $\mathbf{9}$, and $\boldsymbol{*}$. The character " $*$ " can be used as a wild card character.

## Features Guide References

Toll Restriction

## [311] Special Carrier Access Codes

## Description

Assigns special carrier numbers. This allows the system to recognize the user-dialed special carrier number in order to insert the required pause and apply toll restriction.

## Selection

- Location number: 01 through 20
- Special carrier number: 7 digits (max.)


## Default

All locations - Not stored

## Programming

1. Enter 311.
```
Display: 311 CARRIER #
```

2. Press NEXT.

Display: Location NO? $\rightarrow$
3. Enter a location number.

To enter location number 01, you can also press NEXT.
Display example: 01:Not Stored
4. Enter a special carrier number.

To delete the current entry, press CLEAR.
To change the current entry, press CLEAR and enter the new number.
5. Press STORE.
6. To program another location, press NEXT or PREV, or SELECT and the desired location number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

There is a maximum of 20 special carrier numbers. Each carrier number has a maximum of seven digits, consisting of $\mathbf{0}$ through $\mathbf{9}$,* , and \#. You can also use the PAUSE button to enter a wild card character. It will be displayed as " X ".

## Features Guide References

Pause Insertion, Automatic
Toll Restriction for Special Carrier Access

## [312] ARS Mode

## Description

Allows you to turn on or off the Automatic Route Selection (ARS) mode. ARS, if enabled, selects the least expensive route to be used for an outside call.

## Selection

On / Off

## Default

Off

## Programming

1. Enter 312.

Display: 312 ARS MODE SET
2. Press NEXT.

Display example: ARS:Off
3. Press SELECT until the desired selection is displayed.
4. Press STORE.
5. Press END.

## Conditions

- If "Off" is selected, the Automatic Line Access feature functions instead of ARS.
- Programs [313] through [331] are used to program ARS.


## Features Guide References

Automatic Route Selection (ARS)
Line Access, Automatic

## [313] ARS Time

## Description

Assigns times for the four Automatic Route Selection (ARS) time schedules. It is possible to split a day into four time zones (maximum) so that the least expensive line is selected for that time. According to the service hours and charges offered by your carriers, enter the starting time of each zone.

## Selection

- Day of the week:
$\mathbf{1}$ (Mon) / $\mathbf{2}$ (Tue) / $\mathbf{3}$ (Wed) / $\mathbf{4}$ (Thu) / $\mathbf{5}$ (Fri) / $\mathbf{6}$ (Sat) / $\mathbf{7}$ (Sun) / * (all days)
- Time schedule:

A/B/C/D

- Time (hour) :

1 through 12 / Disable (no schedule)

- AM / PM


## Default

All days of the week :
A - 8:00 AM; B - 5:00 PM; C - 9:00 PM; D - Disable

## Programming

1. Enter 313.

Display: 313 ARS TIME SET
2. Press NEXT.

Display: Day of week?
3. Enter the day of the week.

```
Display example: MON-A: 8:00 AM
```

To program another time schedule, keep pressing NEXT or PREV until the desired time schedule is displayed.
4. Enter the hour.

To set no schedule (Disable), press SELECT and go to step 6.
If "Disable" is selected, pressing SELECT shows the previous stored hour.
To change the current entry, press CLEAR and enter the new hour.
5. Press $\boldsymbol{m}$ to select AM / PM.
6. Press SELECT for AM or PM.
7. Press STORE.
8. To program another time schedule, keep pressing NEXT or PREV until the desired time schedule is displayed.
9. Repeat steps 4 through 8 .
10.Press END.

## Conditions

- Enter a starting time for each time schedule. Select "Disable" for idle schedules.
- You cannot leave an entry empty.
- To assign all days of the week, press the $*$ key in step 3 . In this case, the display shows the contents programmed for Monday.


## Features Guide References

Automatic Route Selection (ARS)

## [314-321] ARS Leading Digit Entry for Plans 1 through 8

## Description

By entering numbers into each leading digit plan (programs below) you are starting the process to determine which outside line group will be used to route the call.

| Program | $[314]$ | $[315]$ | $[316]$ | $[317]$ | $[318]$ | $[319]$ | $[320]$ | $[321]$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Plan | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

These eight plans are used to analyze the number which the user dials and decide the route plan for the call. If the user-dialed number is registered in Plan 1, then Routing Plan 1 is selected for the call. Automatic Route Selection (ARS) Leading Digit Entry for Plans 1 through 8 match ARS Routing Plans 1 through 8 (programs [322] through [329]) respectively.

## Selection

- Location number: 001 through 100
- Leading digit number: 10 digits (max.)


## Default

All locations - Not stored.

## Programming

1. Enter a program address ( $\mathbf{3 1 4}$ through 321).

Display example: 314 ARS LEAD D-1
2. Press NEXT.

Display: Location NO? $\rightarrow$
3. Enter a location number.

To enter location number 001, you can also press NEXT.
Display example: 001:Not Stored
4. Enter a leading digit number.

To delete the current entry, press CLEAR.
To change the current entry, press CLEAR and enter the new number.
5. Press STORE.
6. To program another location, press NEXT or PREV, or SELECT and the desired location number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

Each number has a maximum of ten digits, consisting of $\mathbf{0}$ through $\mathbf{9}$, and *. The character " $*$ " can be used as a wild card character (i.e., "do not care" digit). The system scans all the ARS Leading Digit Plans simultaneously from left to right. The scan ends as soon as the dialed number matches a table entry. When using a wild card character, it is important to use one in each digit position that must be scanned. For example, to differentiate local and long distance calls with the same leading digits: Plan 1) $1-* * *$; Plan 2) 1-215. Note that three wild card digits were used to ensure that the system scanned the first four digits. A shorter string of " $*$ "s would send all the calls to the Plan 1 carrier.

## Features Guide References

Automatic Route Selection (ARS)

## [322-329] ARS Routing Plans 1 through 8

## Description

Assigns the outside line group and modification plan to be used for each route plan and time schedule.

| Program | $[322]$ | $[323]$ | $[324]$ | $[325]$ | $[326]$ | $[327]$ | $[328]$ | $[329]$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Plan | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

## Selection

- Time schedule: A / B / C / D
- Outside line group number: 1 through 8
- Modification table number: 1 through 8


## Default

All time schedules - Not stored

## Programming

1. Enter a program address ( $\mathbf{3 2 2}$ through 329).

Display example: 322 ARS ROUTE 1
2. Press NEXT to program time schedule A.

To program another time schedule, keep pressing NEXT or PREV until the desired time schedule is displayed.
Display example: A:G M , G M ,G M
3. Enter an outside line group number.

To delete the current entry, press CLEAR.
To change the current entry, enter the new number.
4. Press $\square$ to enter the paired modification table number.
5. Enter a modification table number.

To delete the current entry, press CLEAR.
To change the current entry, enter the new modification table number.
6. Press $\boldsymbol{\Delta}$ to enter the next priority outside line group number.
7. Repeat steps 3 through 6 to enter other outside line group numbers and modification table numbers.
8. Press STORE.
9. To program another time schedule, keep pressing NEXT or PREV until the desired time schedule is displayed.
10.Repeat steps 3 through 9 .

## 11.Press END.

## Conditions

- Up to three outside line groups and modification plans can be assigned for each time schedule. The outside line group number and modification table number must be entered together. The highest priority outside line group number and modification table number is entered first (left to right).
- Programs [330] ARS Modify Removed Digit and [331] ARS Modify Added Number are used to make up the eight Modification Tables.


## Features Guide References

Automatic Route Selection (ARS)

## [330] ARS Modify Removed Digit

## Description

Determines how the dialed number should be modified before transmitting to the central office. You can delete the digits from the beginning of the dialed number.

## Selection

- Modification table number: 1 through 8
- Number of digits to be deleted: $\mathbf{0}$ through 9 ( $0=$ no deletion)


## Default

All modification tables - 0 (digit)

## Programming

1. Enter 330.
```
Display: 330 ARS REMOVE
```

2. Press NEXT.
```
Display: Modify Table? }
```

3. Enter a modification table number.

To enter table number 1, you can also press NEXT.
Display example: 1:0
4. Enter the number of digits to be deleted.

To change the current entry, enter the new number.
5. Press STORE.
6. To program another modification table, press NEXT or PREV, or SELECT and the desired modification table number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

There is a maximum of eight Modification Tables. You can only delete 1 digit of a number in each table.

## Features Guide References

Automatic Route Selection (ARS)

## [331] ARS Modify Added Number

## Description

Determines how the dialed number should be modified before transmitting to the central office. Assigned numbers are added to the beginning of the dialed number.

## Selection

- Modification table number: 1 through 8
- Number to be added: 20 digits (max.)


## Default

All modification tables — Not stored

## Programming

1. Enter 331.

Display: 331 ARS ADD \#'S
2. Press NEXT.

Display: Modify Table? $\rightarrow$
3. Enter a modification table number.

To enter table number 1, you can also press NEXT.
Display example: 1:
4. Enter the number to be added.

To delete the current entry, press CLEAR.
To change the current entry, press CLEAR and enter the new number.
5. Press STORE.
6. To program another modification table, press NEXT or PREV, or SELECT and the desired modification table number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- There is a maximum of eight Modification Tables, each of which can be given a number to be added.
- Each number has a maximum of 20 digits, consisting of $\mathbf{0}$ through 9 , *, \#, and PAUSE.


## Features Guide References

Automatic Route Selection (ARS)

## [332] Extra Entry Table Selection

## Description

Selects the code table which enables an extra 400 entries within Denied or Except Code Table.

## Selection

- Deny / Except
- Level number: $\mathbf{2}$ through 6


## Default

Except - 2

## Programming

1. Enter 332.

Display: 332 TRS EXTRA +
2. Press NEXT.

Display example: Table:Except-2
3. Keep pressing SELECT until the desired selection is displayed.
4. Press $\Rightarrow$ to enter a level number.
5. Enter a level number.

Display example: Table:Except-3
6. Press STORE.
7. Press END.

## Conditions

There is a maximum of either 420 toll call numbers for Denied Code Table or a maximum of 405 toll call numbers for Excepted Code Table.

## Features Guide References

Toll Restriction

## [333] TRS Entry Code Assignment for Extra Table

## Description

This program allows you to specify the numbers for extra Denied or Excepted Code Table for expansion.

## Selection

- Location number: 001 through 400
- Toll call number: 10 digits (max.)


## Default

All locations - Not stored

## Programming

1. Enter 333.

Display: 333 TRS EXTRA -
2. Press NEXT.

Display: Location NO? $\rightarrow$
3. Enter a location number.

To enter location number 001, you can also press NEXT.
Display example: 001:Not Stored
4. Enter a toll call number.

To delete the current entry, press CLEAR.
To change the current entry, press CLEAR and enter the new number.
5. Press STORE.
6. To program another location number, press NEXT or PREV, or SELECT and the desired location number.
7. Repeat steps 4 through 6.
8. Press END.

## Conditions

There is a maximum of either 420 toll call numbers for Denied Code Table or a maximum of 405 toll call numbers for Excepted Code Table. Each number has a maximum of ten digits, consisting of $\mathbf{0}$ through $\mathbf{9}$, and $*$. The character " $*$ " can be used as a wild card character.

## Features Guide References

Toll Restriction

## [334] Emergency Dial Number Set

## Description

Stores up to ten emergency call numbers.
Emergency numbers are not subject to toll restriction, Account Code - Verified mode and Electronic Station Lockout.

## Selection

- Location number: 01 through 10
- Emergency number: $\mathbf{2 4}$ digits (max.)


## Default

Location $01=911$, Other location $=$ Not stored

## Programming

1. Enter 334.

Display: 334 EMERGENCY \#
2. Press NEXT.

Display: Location NO? $\rightarrow$
3. Enter a location number.

To enter location number 01, you can also press NEXT.
Display example: 01:911
4. Enter an emergency number.

To delete the current entry, press CLEAR.
To change the current entry, press CLEAR and enter the new number.
5. Press STORE.
6. To program another location, press NEXT or PREV, or SELECT and the desired location number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

Each emergency number has a maximum of 24 digits, consisting of $\mathbf{0}$ through 9.

## Features Guide References

Automatic Route Selection (ARS)
Toll Restriction

## [340] TIE Line Routing Table

## Description

The TIE line routing table can be programmed. This table is referenced by the system to identify the outside (CO) line route, when an extension user makes a TIE call.
A routing pattern appropriate for each call is decided by the first three digits (except the TIE line access code) of the dialed number. This program assigns the TIE line access code and outside line group hunt sequence.

## Selection

- Location number: 01 through 32
- TIE line access code: 1 to $\mathbf{3}$ digits
- Outside line group hunt sequence number: 1 through 8 (5 entry max.)


## Default

All locations - Not stored

## Programming

1. Enter 340.

Display example: 340 TIE ROUTE
2. Press NEXT.

Display: Location NO? $\rightarrow$
3. Enter a location number.

To enter location number 01, you can also press NEXT.
Display example: 01:
4. Enter a TIE line access code.

To delete the current entry, press CLEAR.
To change the current entry, press CLEAR and enter the new number.
5. Press $\boldsymbol{\rightarrow} \boldsymbol{t}$ to program the outside line group hunt sequence number.
6. Enter an outside line group hunt sequence number.

To delete the current entry, press CLEAR.
To change the current entry, press CLEAR and enter the new number.
7. Press STORE.
8. To program another location, press NEXT or PREV, or SELECT and the desired location number.
9. Repeat steps 4 through 8 .
10.Press END.

## Conditions

Each TIE line access code has a maximum of three digits, consisting of $\mathbf{0}$ through $\mathbf{9}$ and $\boldsymbol{*}$. The character "*" can be used as a wild card character.
Program [341] TIE Modify Removed / Added Digit is used to modify the TIE line access code.

## Features Guide References

## T1 Line

TIE Line Service

## [341] TIE Modify Removed / Added Digit

## Description

Assigns the removed and added digits of the TIE call received digits. Digits are removed and added from the beginning of the dialed digits.

## Selection

- Location number: 01 through 32
- Number of digits to be deleted: 0 to 4 ( $0=$ no deletion)
- Number to be added: $\mathbf{4}$ digits (max.)


## Default

All locations - Deleted digit: 0, Added digit: Blank

## Programming

1. Enter 341.
```
    Display example: 341 TIE MODIFY
```

2. Press NEXT.

Display: Location NO? $\rightarrow$
3. Enter a location number.

To enter location number 01, you can also press NEXT.
Display example: 01:0,
4. Enter the number of digits to be deleted.

To change the current entry, press CLEAR and enter the new number.
5. Press $\boldsymbol{m}$ to program the number to be added.
6. Enter the number to be added.

To change the current entry, press CLEAR and enter the new number.
7. Press STORE.
8. To program another location, press NEXT or PREV, or SELECT and the desired location number.
9. Repeat steps 4 through 8 .
10.Press END.

## Conditions

Each added number has a maximum of 4 digits, consisting of $\mathbf{0}$ through 9.

## Features Guide References

## T1 Line

TIE Line Service
Programming Guide ..... 167

### 2.5 Outside Line Programming

## [400] Outside Line Connection Assignment

## Description

Used to identify the outside lines which are connected to the system(s). This prevents users from originating a call to a line which is not connected.

## Selection

- Outside line (CO) number: KX-TD816 - 01 through 08,* KX-TD1232 - 01 through 48,* ( $*=$ all outside lines) (25-47: for PRI ISDN line / 25-48: for T1 line)
- Connect / No Connect


## Default

All outside lines - Connect

## Programming

1. Enter 400.

Display: 400 CO CONNECT
2. Press NEXT.

Display: CO Line NO? $\rightarrow$
3. Enter an outside line number.

To enter outside line number 01, you can also press NEXT.
Display example: COO1:Connect
4. Keep pressing SELECT until the desired selection is displayed.
5. Press STORE.
6. To program another outside line, press NEXT or PREV, or SELECT and the desired outside line number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- For the KX-TD1232, outside lines 01 through 12 are for the Master System and outside lines 13 through 24 are for the Slave, if available.
- Outside lines 25 through 48 become available for the T1 line when the KX-TD187 expansion unit is installed in the Master System of the KX-TD1232.

Outside lines 25 through 47 become available for the PRI ISDN line when the KX-TD290 expansion unit is installed in the Master System of the KX-TD1232.

- To assign all outside lines to one selection, press the $*$ key in step 3. In this case, the display shows the contents programmed for outside line 01 .


## Features Guide References

Integrated Services Digital Network (ISDN) — Primary Rate Interface (PRI)
Outside Line Connection Assignment
T1 Line

## [401] Outside Line Group Assignment

## Description

Each outside line must be assigned to an outside line group. This program defines the outside line group assignment for each outside line. For example, if there are multiple telephone service companies available, the outside lines can be grouped by company.

## Selection

- Outside line (CO) number:

KX-TD816 - 01 through 08, $*$ ( $*=$ all outside lines)
KX-TD1232 - 01 through 48, $*$ ( $*=$ all outside lines $)$
(25-47: for PRI ISDN line / 25-48: for T1 line)

- Outside line group (TRG) number:

1 through 8

## Default

CO01 - TRG 1;
CO02 - TRG 2;
CO03 - TRG 3;
CO04 - TRG 4;
CO05 - TRG 5;
CO06 - TRG 6;
CO07 - TRG 7;
CO08 - TRG 8 (for KX-TD816)
CO08 through CO48 - TRG 8 (for KX-TD1232)

## Programming

1. Enter 401.

Display: 401 CO GROUP 1-8
2. Press NEXT.

Display: CO Line NO? $\rightarrow$
3. Enter an outside line number.

To enter outside line number 01 , you can also press NEXT.
Display example: COO1:TRG1
4. Enter the outside line group number.

To change the current entry, enter the new outside line group number.
5. Press STORE.
6. To program another outside line, press NEXT or PREV, or SELECT and the desired outside line number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- For the KX-TD1232, outside lines 01 through 12 are for the Master System and outside lines 13 through 24 are for the Slave, if available.
- Outside lines 25 through 48 become available for the T1 line when the KX-TD187 expansion unit is installed in the Master System of the KX-TD1232. Outside lines 25 through 47 become available for the PRI ISDN line when the KX-TD290 expansion unit is installed in the Master System of the KX-TD1232.
- To assign all outside lines to one outside line group, press the * key in step 3. In this case, the display shows the contents programmed for outside line 01.


## Features Guide References

Integrated Services Digital Network (ISDN) - Basic Rate Interface (BRI)
Integrated Services Digital Network (ISDN) - Primary Rate Interface (PRI)
Outside Line Group
T1 Line

## [402] Dial Mode Selection

## Description

Each outside line can be programmed for DTMF (Dual Tone Multi-Frequency), pulse (rotary) or call blocking. This program assigns your choice to each line.
DTMF:
The dialing signals from an extension, either tone or pulse, are converted to tone signals and transmitted to the outside line.
Pulse:
The dialing signals from an extension, either tone or pulse, are converted to pulse signals and transmitted to the outside line.
Call blocking:
If your central office can receive both DTMF and pulse signals but you are contracted for pulse, select this mode. When dialing on the line with a touch tone telephone, only the pulse signals are sent to the outside line.

## Selection

- Outside line (CO) number:

KX-TD816-01 through 08, *
KX-TD1232 - 01 through 24, *
( $*=$ all outside lines)

- DTMF / Pulse / C. Block (call blocking)


## Default

All outside lines - DTMF

## Programming

1. Enter 402.
```
Display: 402 DIAL MODE
```

2. Press NEXT.

Display: CO Line NO? $\rightarrow$
3. Enter an outside line number.

To enter outside line number 01 , you can also press NEXT.
Display example: COO1:DTMF
4. Keep pressing SELECT until the desired selection is displayed.
5. Press STORE.
6. To program another outside line, press NEXT or PREV, or SELECT and the desired outside line number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- For the KX-TD1232, outside lines 01 through 12 are for the Master System and outside lines 13 through 24 are for the Slave, if available.
- To assign all lines to one selection, press the $*$ key in step 3. In this case, the display shows the contents programmed for outside line 01 .
- If DTMF is assigned, set the DTMF time of the line in program [404] DTMF Time.
- If pulse or call blocking is assigned, set the pulse speed of the line in program [403] Pulse Speed Selection, and set the pulse break ratio and inter-digit pause in program [990] System Additional Information, Area 02 - Bit 7 and in Area 02 - Bit 12, 11, if necessary.


## Features Guide References

Dial Type Selection

## [403] Pulse Speed Selection

## Description

An outside line set for pulse or call blocking mode in program [402] Dial Mode Selection can have two pulse rates, 10 pps (low) and 20 pps (high). This program sets the pulse speed for each outside line set to pulse or call blocking mode.

## Selection

- Outside line (CO) number:

KX-TD816 - 01 through 08,*
KX-TD1232 - 01 through 24, *
( $*=$ all outside lines)

- 10 pps / 20 pps


## Default

All outside lines - 10 pps

## Programming

1. Enter 403.

Display: 403 PULSE SPEED
2. Press NEXT.

Display: CO Line NO? $\rightarrow$
3. Enter an outside line number.

To enter outside line number 01 , you can also press NEXT.
Display example: CO01:10pps
4. Keep pressing SELECT until the desired selection is displayed.
5. Press STORE.
6. To program another outside line, press NEXT or PREV, or SELECT and the desired outside line number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- For the KX-TD1232, outside lines 01 through 12 are for the Master System and outside lines 13 through 24 are for the Slave, if available.
- To assign all outside lines to one selection, press the $*$ key in step 3 . In this case, the display shows the contents programmed for outside line 01.
- The pulse speed required is determined by the outside or PBX line.
- Program [990] System Additional Information, Area 02 - Bit 7 and 12, 11 are used to select a pulse break ratio and inter-digit pause, if needed.


## Features Guide References

Dial Type Selection

## [404] DTMF Time

## Description

An outside line set to DTMF (Dual Tone Multi-Frequency) mode in program [402] Dial Mode Selection can have two settings. This program sets the duration of the DTMF signals sent to an outside line to DTMF mode.

## Selection

- Outside line (CO) number:

KX-TD816 - 01 through 08, *
KX-TD1232 - 01 through 24, *
( $*=$ all outside lines)

- Time (milliseconds):
$80 / 160$


## Default

All outside lines - 80 msec

## Programming

1. Enter 404.

Display: 404 DTMF TIME
2. Press NEXT.

Display: CO Line NO? $\rightarrow$
3. Enter an outside line number.

To enter outside line number 01, you can also press NEXT.
Display example: COO1: 80msec
4. Keep pressing SELECT until the desired selection is displayed.
5. Press STORE.
6. To program another outside line, press NEXT or PREV, or SELECT and the desired outside line number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- For the KX-TD1232, outside lines 01 through 12 are for the Master System and outside lines 13 through 24 are for the Slave, if available.
- To assign all outside lines to one selection, press the $*$ key in step 3. In this case, the display shows the contents programmed for outside line 01 .
- The DTMF time required is determined by the outside line or PBX line.


## Features Guide References

## Dial Type Selection

## [405] CPC Signal Detection Incoming Set

## Description

Assigns the expected minimum duration of the Calling Party Control (CPC) Signal on incoming outside calls. If this is programmed, the system disconnects the line when the CPC Signal is detected.

## Selection

- Outside line (CO) number:

KX-TD816 - 01 through 08, *
KX-TD1232-01 through 24, *
( $*=$ all outside lines)

- Time (milliseconds):

Disable (no detection) / 100 / 200 / 300 / 400 / 500 / 600

## Default

All outside lines - 400 msec

## Programming

1. Enter 405.
```
Display: 405 CPC INCOMING
```

2. Press NEXT.
```
Display: CO Line NO? }
```

3. Enter an outside line number.

To enter outside line number 01, you can also press NEXT.
Display example: CO01:400msec
4. Keep pressing SELECT until the desired time is displayed.
5. Press STORE.
6. To program another outside line, press NEXT or PREV, or SELECT and the desired outside line number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- For the KX-TD1232, outside lines 01 through 12 are for the Master System and outside lines 13 through 24 are for the Slave, if available.
- To assign all outside lines to one selection, press the $*$ key in step 3. In this case, the display shows the contents programmed for outside line 01.
- You may disable CPC Signal Detection for an outside line.
- Program [415] CPC Signal Detection Outgoing Set is used to program CPC Signal Detection for outgoing outside calls.


## Features Guide References

Calling Party Control (CPC) Signal Detection<br>Direct Inward System Access (DISA)

## [406] Caller ID Assignment

## Description

Enables the Caller ID feature for the outside lines to which a Caller ID Service is offered by a Central Office by contract.

## Selection

- Outside line (CO) number:

KX-TD816 - 01 through 08, *
KX-TD1232 - 01 through 24, *
( $*=$ all outside lines)

- Enable / Disable


## Default

All outside lines - Disable

## Programming

1. Enter 406.

Display: 406 CALLER ID CO
2. Press NEXT.

Display: CO Line NO? $\rightarrow$
3. Enter an outside line number.

To enter outside line number 01, you can also press NEXT.
Display example: COO1:Disable
4. Keep pressing SELECT until the desired selection is displayed.
5. Press STORE.
6. To program another outside line, press NEXT or PREV, or SELECT and the desired outside line number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- For the KX-TD1232, outside lines 01 through 12 are for the Master System and outside lines 13 through 24 are for the Slave, if available.
- To assign all outside lines to one selection, press the $*$ key in step 3 . In this case, the display shows the contents programmed for outside line 01 .
- The following programs are used to program Caller ID feature: [110] Caller ID Code Set and [111] Caller ID Name Set.


## Features Guide References

Caller ID

## [407-408] DIL 1:1 Extension —— Day / Night

## Description

The Direct In Lines (DIL) 1:1 feature allows incoming outside calls to be directed to a specific extension. When an outside line is assigned as DIL 1:1, it is necessary to assign the destination. These programs specify the extension number for day or night mode.

## Selection

- Outside line (CO) number:

KX-TD816 - 01 through 08, *
KX-TD1232 - 01 through 24, *
( $*=$ all outside lines)

- Extension number:

2 through 4 digits / Disable (no DIL 1:1)

## Default

All outside lines — Disable —— Day / Night

## Programming

1. Enter a program address ( $\mathbf{4 0 7}$ for day or $\mathbf{4 0 8}$ for night).
```
Display example: 407 DIL 1:1 DAY
```

2. Press NEXT.
```
Display: CO Line NO? }
```

3. Enter an outside line number.

To enter outside line number 01, you can also press NEXT.
Display example: COO1:Disable
4. Enter an extension number.

To change the current entry, press CLEAR and enter the new number.
To disable DIL 1:1, press CLEAR.
5. Press STORE.
6. To program another outside line, press NEXT or PREV, or SELECT and the desired outside line number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- For the KX-TD1232, outside lines 01 through 12 are for the Master System and outside lines 13 through 24 are for the Slave, if available. Outside line numbers in the out-of-service system are unacceptable.
- To assign all outside lines to one selection, press the $*$ key in step 3 . In this case, the display shows the contents programmed for outside line 01.
- You set the extension numbers in program [003] Extension Number Set, ISDN extension numbers in program [012] ISDN Extension Number Set, voice mail extension numbers in program [118] Voice Mail Extension Number Assignment, phantom extension numbers in program [124] Phantom Extension Number Assignment or floating numbers of pager(s), DISA (Direct Inward System Access) ${ }^{* 1}$ message(s), extension group(s) and the modem* in program [813] Floating Number Assignment.
- If an outside line is also programmed for DIL 1:N in programs [603-604] DIL 1:N Extension and Delayed Ringing - Day / Night, it is regarded as a DIL 1:1 line.
- For ISDN lines, the outside lines which correspond to the ISDN port number should have the same DIL 1:1 destination.
<Example>
When a KX-TD386 is installed, outside line numbers 1 and 2 which correspond to ISDN port number 1 should have the same DIL 1:1 destination.

|  |  | KX-TD816 |  |  | KX-TD1232 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Outside <br> Line <br> No. | ISDN Port No. |  | KX- <br> TD382 | KX- <br> TD384 / <br> KX- <br> TD284 | KX- <br> TD386 | KX- <br> TD382 | KX- <br> TD384 / <br> KX- <br> TD284 | KX- <br> TD386 |
|  | 1 | 7 | - | Jack 1 | Jack 1 | - | - | Jack 1 |
| 3,4 | 2 | 8 | - | Jack 2 | Jack 2 | - | - | Jack 2 |
| 5,6 | 3 | 9 | Jack 1 | Jack 3 | Jack 3 | - | Jack 1 | Jack 3 |
| 7,8 | 4 | 10 | Jack 2 | Jack 4 | Jack 4 | - | Jack 2 | Jack 4 |
| 9,10 | 5 | 11 | - | - | - | Jack 1 | Jack 3 | Jack 5 |
| 11,12 | 6 | 12 | - | - | - | Jack 2 | Jack 4 | Jack 6 |

## Features Guide References

Direct In Lines (DIL)
Direct Inward System Access (DISA)
Night Service

[^2]
## [409-410] Intercept Extension - Day / Night

## Description

Intercept Routing provides an automatic re-direction of calls which cannot or have not been answered (IRNA: Intercept Routing - No Answer). These programs set the destination in both day and night modes for each outside line group.

## Selection

- Outside line group (TRG) number:


## 1 through 8, *

( $*=$ all outside line groups)

- Extension number:

2 through 4 digits / Disable (no Intercept Routing)

## Default

All outside line groups — Disable —— Day / Night

## Programming

1. Enter a program address ( $\mathbf{4 0 9}$ for day or $\mathbf{4 1 0}$ for night).

Display example: 409 INTERCEP DAY
2. Press NEXT.

```
Display: TRK GRP NO? }
```

3. Enter the outside line group number.

To enter outside line group number 1 , you can also press NEXT.
Display example: TRG1:Disable
4. Enter an extension number.

To change the current entry, press CLEAR and enter the new number.
To disable Intercept Routing, press CLEAR.
5. Press STORE.
6. To program another outside line group, press NEXT or PREV, or SELECT and the desired outside line group number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- You set the extension numbers in program [003] Extension Number Set, voice mail extension numbers in program [118] Voice Mail Extension Number Assignment, phantom extensions in program [124] Phantom Extension Number Assignment or floating numbers of pager(s), DISA (Direct Inward System Access) *|message(s) and
extension group(s) in program [813] Floating Number Assignment. You cannot assign the floating number of the modem.
- To assign all outside line groups to one selection, press the $*$ key in step 3. In this case, the display shows the contents programmed for outside line group 1.
- Program [401] Outside Line Group Assignment is used to assign each outside line to an outside line group.
- For ISDN lines, the outside lines which correspond to the ISDN port number should have the same IRNA destination.
<Example>
When a KX-TD386 is installed, outside line numbers 1 and 2 which correspond to ISDN port number 1 should have the same IRNA destination.

|  |  | KX-TD816 |  |  | KX-TD1232 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Outside <br> Line <br> No. | ISDN Port No. |  | KX- <br> TD382 | KX- <br> TD384 / <br> KX- <br> TD284 | KX- <br> TD386 | KX- <br> TD382 | KX- <br> TD384 / <br> KX- <br> TD284 | KX- <br> TD386 |
|  | 1 | 7 | - | Jack 1 | Jack 1 | - | - | Jack 1 |
| 3,4 | 2 | 8 | - | Jack 2 | Jack 2 | - | - | Jack 2 |
| 5,6 | 3 | 9 | Jack 1 | Jack 3 | Jack 3 | - | Jack 1 | Jack 3 |
| 7,8 | 4 | 10 | Jack 2 | Jack 4 | Jack 4 | - | Jack 2 | Jack 4 |
| 9,10 | 5 | 11 | - | - | - | Jack 1 | Jack 3 | Jack 5 |
| 11,12 | 6 | 12 | - | - | - | Jack 2 | Jack 4 | Jack 6 |

## Features Guide References

Intercept Routing

[^3]
## [411] Host PBX Access Codes

## Description

Assigns Host PBX or Centrex access codes. If the system is installed behind a host PBX or a Centrex system, an access code is required to make an outside / Centrex call or to access Centrex features. Up to four codes can be stored for an outside line group assigned to the line.

## Selection

- Outside line group (TRG) number:


## 1 through 8, *

( $*=$ all outside line groups)

- Access code:

1 or $\mathbf{2}$ digits, four different entries (max.)

## Default

All outside line groups - Not stored

## Programming

1. Enter 411.

Display: 411 HOST PBX \#'S
2. Press NEXT.

Display: TRK GRP NO? $\rightarrow$
3. Enter an outside line group number.

To enter outside line group number 1, you can also press NEXT.
Display example: TRG1: , ,
4. Enter an access code.

To delete the current entry, press CLEAR.
To change the current entry, press CLEAR and enter the new access code.

```
Display example: TRG1:01, , ,
```

5. To enter more access codes for the same outside line group, press $\boldsymbol{\square}$ and enter the access codes until all the required entries are completed.
```
Display example: TRG1:01,08,10,22
```

6. Press STORE.
7. To program another outside line group, press NEXT or PREV, or SELECT and the desired outside line group number.
8. Repeat steps 4 through 7.
9. Press END.

## Conditions

- This program is only required if a host PBX or Centrex line is connected to the system. Program [401] Outside Line Group Assignment is used to assign the line to an outside line group.
- There is a maximum of four access codes per outside line group. Each code has one or two digits, consisting of $\mathbf{0}$ through 9 , and $*$.
- If conflicting access codes (such as 8 and 81 ) are stored for the same outside line group, the 1-digit code (8) only will be in effect.
- When the programmed codes are dialed, Automatic Pause Insertion and Toll Restriction are applied to the calls. The programmed pause time (in program [412] Pause Time) is automatically inserted after the access code.
- To assign all outside line groups to one selection, press the $*$ key in step 3. In this case, the display shows the contents programmed for outside line group 1.


## Features Guide References

External Feature Access

Host PBX Access
Pause Insertion, Automatic

## [412] Pause Time

## Description

Assigns the length of the pause time. The programmed pause time is automatically inserted after a line access code or a host PBX access code programmed in program [411] Host PBX Access Codes or manually inserted if the PAUSE button is pressed by the user.

## Selection

- Outside line group (TRG) number:


## 1 through 8, *

( $*=$ all outside line groups)

- Time (seconds):
1.5 / 2.5 / 3.5 / 4.5


## Default

All outside line groups - 1.5 sec

## Programming

1. Enter 412.

Display: 412 PAUSE TIME
2. Press NEXT.

```
Display: TRK GRP NO? }
```

3. Enter an outside line group number.

To enter outside line group number 1, you can also press NEXT.
Display example: TRG1:1.5sec
4. Keep pressing SELECT until the desired time is displayed.
5. Press STORE.
6. To program another outside line group, press NEXT or PREV, or SELECT and the desired outside line group number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- To assign all outside line groups to one selection, press the $*$ key in step 3. In this case, the display shows the contents programmed for outside line group 1.
- Program [401] Outside Line Group Assignment is used to assign each outside line to an outside line group.


## Features Guide References

Host PBX Access
Pause Insertion, Automatic

## [413] Flash Time

## Description

Assigns the length of the flash time. If your system is installed behind a host PBX or Centrex line, External Feature Access (EFA) is necessary to obtain their services. To enable it, select a required hooking signal sending time for the outside line group.

## Selection

- Outside line group (TRG) number:


## 1 through 8, *

( $*=$ all outside line groups)

- Time (milliseconds):
 / 1200


## Default

All outside line groups - 600 msec

## Programming

1. Enter 413.

Display: 413 FLASH TIME
2. Press NEXT.

```
Display: TRK GRP NO? }
```

3. Enter an outside line group number.

To enter outside line group number 1, you can also press NEXT.
Display example: TRG1: 600msec
4. Keep pressing SELECT until the desired time is displayed.
5. Press STORE.
6. To program another outside line group, press NEXT or PREV, or SELECT and the desired outside line group number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- You may disable EFA, if not required. The Flash feature will be in effect in place of EFA. Program [414] Disconnect Time is used to select the time required for the Flash feature.
- The flash time required is determined by the central office or the host PBX lines.
- To assign all outside line groups to one selection, press the $*$ key in step 3. In this case, the display shows the contents programmed for outside line group 1 .
- Program [401] Outside Line Group Assignment is used to assign each outside line to an outside line group.


## Features Guide References

External Feature Access

## [414] Disconnect Time

## Description

Determines the amount of time between successive accesses to the same outside line.

## Selection

- Outside line group (TRG) number:

1 through 8, *
( $*=$ all outside line groups)

- Time (seconds):
1.5 / 4.0


## Default

All outside line groups - 1.5 sec

## Programming

1. Enter 414.

Display: 414 DISCONNECT
2. Press NEXT.

Display: TRK GRP NO? $\rightarrow$
3. Enter an outside line group number.

To program outside line group number 1, you can also press NEXT.
Display example: TRG1:1.5sec
4. Keep pressing SELECT until the desired time is displayed.
5. Press STORE.
6. To program another outside line group, press NEXT or PREV, or SELECT and the desired outside line group number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- The disconnect time must be longer than the requirements of the central office or the host PBX.
- To assign all outside line groups to one selection, press the * key in step 3. In this case, the display shows the contents programmed for outside line group 1.
- Program [401] Outside Line Group Assignment is used to assign each outside line to an outside line group.


## Features Guide References

Flash

## [415] CPC Signal Detection Outgoing Set

## Description

Enables or disables Calling Party Control (CPC) Signal Detection during the time between the originated outside call and the established outside call. If this is enabled, the system disconnects the line with the time set in program [405] CPC Signal Detection Incoming Set when the CPC Signal is detected.

## Selection

- Outside line (CO) number:

KX-TD816 - 01 through 08, *
KX-TD1232 - 01 through 24, *
( $*=$ all outside lines)

- Enable (detection) / Disable (no detection)


## Default

Disable

## Programming

1. Enter 415.
```
Display: 415 CPC OUTGOING
```

2. Press NEXT.
```
Display: CO Line NO? }
```

3. Enter an outside line number.

To enter outside line number 01, you can also press NEXT.
Display example: COO1:Disable
4. Keep pressing SELECT until the desired selection is displayed.
5. Press STORE.
6. To program another outside line, press NEXT or PREV, or SELECT and the desired outside line number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- Some central offices (CO) may send CPC-like signals during the dialing sequence and an attempt to make a call may be terminated. If your CO is such a type, select "Disable".
- Program [405] CPC Signal Detection Incoming Set is used to set CPC Signal Detection Time.
- For the KX-TD1232, outside lines 01 through 12 are for the Master System and outside lines 13 through 24 are for the Slave, if available.
- To assign all outside lines to one selection, press the $*$ key in step 3 . In this case, the display shows the contents programmed for outside line 01 .


## Features Guide References

Calling Party Control (CPC) Signal Detection
Direct Inward System Access (DISA)

## [416] Reverse Circuit Assignment

## Description

Enables or disables Reverse Circuit detection.

## Selection

- Outside line (CO) number: KX-TD816-01 through 08, * KX-TD1232 - 01 through 24, * ( $*=$ all outside lines)
- Regular (no detection) / Reverse (detection)


## Default

Regular

## Programming

1. Enter 416.

Display: 416 REV. CURRENT
2. Press NEXT.

```
Display: CO Line NO? }
```

3. Enter an outside line number.

To enter outside line number 01, you can also press NEXT.
Display example: COO1:Regular
4. Keep pressing SELECT until the desired selection is displayed.
5. Press STORE.
6. To program another outside line, press NEXT or PREV, or SELECT and the desired outside line number.
7. Repeat steps 4 through 6.
8. Press END.

## Conditions

To assign all outside lines to one selection, press the $*$ key in step 3 . In this case, the display shows the contents programmed for outside line 01 .

## Features Guide References

Reverse Circuit

## [417] Outside Line Name Assignment

## Description

Assigns names of the company or customer to each outside line so that the operator or extension user can find the destination which the caller is trying to reach before answering. If Caller ID is assigned, each extension can select either the initial display, Caller ID or line name.

## Selection

- Outside line (CO) number:

KX-TD816 - 01 through 08, *
KX-TD1232 - 01 through 48, $*$ ( $*=$ all outside lines $)$
(25-47: for PRI ISDN line / 25-48: for T1 line)

- Name:

10 characters (max.)

## Default

All outside lines - Not stored

## Programming

1. Enter 417.

Display: 417 CO LINE NAME
2. Press NEXT.

Display: CO Line NO? $\rightarrow$
3. Enter an outside line number.

To enter outside line number 01, you can also press NEXT.
Display example: COO1:Not Stored
4. Enter a name.

For entering characters, see Section 1.4 Entering Characters.
To delete the current entry, press CLEAR.
To change the current entry, press CLEAR and enter the new name.
5. Press STORE.
6. To program another outside line, press NEXT or PREV, or SELECT and the desired outside line number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- For the KX-TD1232, outside lines 01 through 12 are for the Master System and outside lines 13 through 24 are for the Slave, if available.
- Outside lines 25 through 48 become available for the T1 line when the KX-TD187 expansion unit is installed in the Master System of the KX-TD1232.
Outside lines 25 through 47 become available for the PRI ISDN line when the KX-TD290 expansion unit is installed in the Master System of the KX-TD1232.
- There is a maximum of 48 names for T1 line or 47 names for PRI ISDN line. Each name has a maximum of 10 characters.
- To assign all outside lines to one selection, press the $*$ key in step 3 . In this case, the display shows the contents programmed for outside line 01 .
- You can select the initial display, Caller ID or outside line name, by Station Programming.


## Features Guide References

Display, Call Information
Integrated Services Digital Network (ISDN) - Basic Rate Interface (BRI)
Integrated Services Digital Network (ISDN) - Primary Rate Interface (PRI)
T1 Line

## [418] Outside Line Number Assignment for PRI CLIP

## Description

Assigns your ISDN network telephone number.
Your ISDN network telephone number is sent to the called party with the CLIP (Calling Line Identification Presentation) feature offered by the PRI ISDN network service.

## Selection

- Outside line (CO) number: KX-TD1232 - 25 through 47
- Telephone number: $\mathbf{1 6}$ digits (max.)


## Default

All outside lines - Not stored

## Programming

1. Enter 418.

Display: 418 CO LINE \#
2. Press NEXT.

Display: CO Line NO? $\rightarrow$
3. Enter an outside line number.

To enter outside line number 25 , you can also press NEXT.
Display example: CO25:Not Stored
4. Enter a telephone number.

To delete the current entry, press CLEAR.
To change the current entry, press CLEAR and enter the new number.
5. Press STORE.
6. To program another outside line, press NEXT or PREV, or SELECT and the desired outside line number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- Each number has a maximum of 16 digits, consisting of $\mathbf{0}$ through 9 .
- To display parts of the number which have scrolled off the display, press $\boldsymbol{\square}$ or
- Outside lines 25 through 47 become available for the PRI ISDN line when the KX-TD290 expansion unit is installed in the Master System of the KX-TD1232.
- Your telephone number will be informed to the called party if the outgoing CLIR feature is disabled for the ISDN line in program [419] ISDN Outgoing CLIR Service Assignment.


## Features Guide References

Calling Line Identification Presentation (CLIP)<br>Calling Line Identification Restriction (CLIR)<br>Display, Call Information<br>Integrated Services Digital Network (ISDN) - Primary Rate Interface (PRI)

## [419] ISDN Outgoing CLIR Service Assignment

## Description

Assigns whether ISDN CLIR (Calling Line Identification Restriction) service is enabled or disabled for outgoing outside calls. If disabled, the subscriber's number of your system is sent to the called party.

## Selection

- Outside line (CO) number:

KX-TD816 - 01 through 08, *
KX-TD1232 - 01 through 24, *
( $*=$ all outside lines)

- Enable / Disable


## Default

All outside lines - Disable

## Programming

1. Enter 419.

Display: 419 ISDN CLIR
2. Press NEXT.

Display: CO Line NO? $\rightarrow$
3. Enter an outside line number.

To enter outside line number 01, you can also press NEXT.
Display example: COO1:Disable
4. Keep pressing SELECT until the desired selection is displayed.
5. Press STORE.
6. To program another outside line, press NEXT or PREV, or SELECT and the desired outside line number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- For the KX-TD1232, outside lines 01 through 12 are for the Master System and outside lines 13 through 24 are for the Slave, if available.
- To assign all outside lines to the same selection, press the $*$ key in step 3 . In this case, the display shows the contents programmed for outside line 01.
- Program [454] DN Assignment is used to store the directory number of your system that is sent to the called party.
- The outside line number available for the PRI ISDN line is referred to program [721] T1 / PRI Reference CO.


## Features Guide References

Calling Line Identification Restriction (CLIR)

## [420] ISDN Ring Service Assignment

## Description

Assigns the ISDN ring service for each outside line.
If "ISDN" is selected, the extensions which are assigned in programs [137-138] DID
Extension ——Day / Night for ISDN (PRI) and [455-456] Extension Ringing Assignment
——Day / Night for ISDN (BRI) receive a call.
If "Regular" is selected, the extensions which are assigned in program [407-408] DIL 1:1
Extension —— Day / Night receive a call.

## Selection

- Outside line (CO) number:

KX-TD816 - 01 through 08, *
KX-TD1232 - 01 through 24, *
( $*=$ all outside lines)

- ISDN / Regular


## Default

All outside lines - Regular

## Programming

1. Enter 420.

Display: 420 ISDN RING
2. Press NEXT.

Display: CO Line NO? $\rightarrow$
3. Enter an outside line number.

To enter outside line number 01, you can also press NEXT.
Display example: COO1:Regular
4. Keep pressing SELECT until the desired selection is displayed.
5. Press STORE.
6. To program another outside line, press NEXT or PREV, or SELECT and the desired outside line number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- For the KX-TD1232, outside lines 01 through 12 are for the Master System and outside lines 13 through 24 are for the Slave, if available.
- To assign all outside lines to one selection, press the * key in step 3. In this case, the display shows the contents programmed for outside line 01.
- Lunch / break mode will only work when "Regular" is assigned in this program.
- The outside line number available for the PRI ISDN line is referred to program [721] T1 / PRI Reference CO.


## Features Guide References

Integrated Services Digital Network (ISDN) - Basic Rate Interface (BRI)
Integrated Services Digital Network (ISDN) - Primary Rate Interface (PRI)

## [423] ISDN Port Type

## Description

Assigns the type of each port to either outside line or extension line on an ISDN port basis.

## Selection

- Port number:

KX-TD816 - 01 through 04, * ( $*=$ all ports)
KX-TD1232 - $\mathbf{0 1}$ through 12, * ( $*=$ all ports $)$

- CO (outside line)/ Extension


## Default

All ports - CO

## Programming

1. Enter 423.

Display: 423 ISDN TYPE
2. Press NEXT.

Display: Port NO? $\rightarrow$
3. Enter a port number.

To enter port number 01, you can also press NEXT.
Display example: \#01:CO
4. Keep pressing SELECT until the desired selection is displayed.
5. Press STORE.
6. To program another port, press NEXT or PREV, or SELECT and the desired port number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- For the KX-TD1232, port numbers 01 through 06 are for the Master System and 07 through 12 are for the Slave, if available.
- The ISDN port numbers correspond to the following jack numbers.

|  |  | KX-TD816 |  |  | KX-TD1232 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ISDN Port No. |  | KX- <br> TD382 | KX- <br> TD384 / <br> KX- <br> TD284 | KX- <br> TD386 | KX- <br> TD382 | KX- <br> TD384 / <br> KX- <br> TD284 | KX- <br> TD386 |
| 1 | 7 | - | Jack 1 | Jack 1 | - | - | Jack 1 |
| 2 | 8 | - | Jack 2 | Jack 2 | - | - | Jack 2 |
| 3 | 9 | Jack 1 | Jack 3 | Jack 3 | - | Jack 1 | Jack 3 |
| 4 | 10 | Jack 2 | Jack 4 | Jack 4 | - | Jack 2 | Jack 4 |
| 5 | 11 | - | - | - | Jack 1 | Jack 3 | Jack 5 |
| 6 | 12 | - | - | - | Jack 2 | Jack 4 | Jack 6 |

- To assign all ports to one selection, press the $*$ key in step 3. In this case, the display shows the contents programmed for Port 01.
- After this assignment, you should reset the system so that this assignment is activated.


## Features Guide References

None

## [424] ISDN Layer 1 Active Mode

## Description

Assigns the active mode of Layer 1 on an ISDN port basis.

## Selection

- Port number:

KX-TD816 - 01 through 04, * ( $*=$ all ports)
KX-TD1232 - $\mathbf{0 1}$ through 12, * ( $*=$ all ports $)$

- Permanent / Call


## Default

All ports - Permanent

## Programming

1. Enter 424.

Display: 424 LAYER1 MODE
2. Press NEXT.

```
Display: Port NO? }
```

3. Enter a port number.

To enter port number 01, you can also press NEXT.
Display example: \#01:Permanent
4. Keep pressing SELECT until the desired selection is displayed.
5. Press STORE.
6. To program another port, press NEXT or PREV, or SELECT and the desired port number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- For the KX-TD1232, port numbers 01 through 06 are for the Master System and 07 through 12 are for the Slave, if available.
- Refer to program [423] for the list of the ISDN port numbers and their corresponding jack numbers.
- To assign all ports to one selection, press the $*$ key in step 3. In this case, the display shows the contents programmed for Port 01.
- After this assignment, you should reset the system so that this assignment is activated.


## Features Guide References

None

## [425] ISDN Configuration

## Description

Assigns the configuration on an ISDN port basis. This program is available for ISDN extensions only.

## Selection

- Port number:

KX-TD816 - 01 through 04, * ( $*=$ all ports)
KX-TD1232 - 01 through 12, $*$ ( $*=$ all ports $)$

- Point (point to point) / Multipoint (point to multipoint)


## Default

All ports - Multipoint

## Programming

1. Enter 425.

Display: 425 ACCESS MODE
2. Press NEXT.

Display: Port NO? $\rightarrow$
3. Enter a port number.

To enter port number 01, you can also press NEXT.
Display example: \#01:Multipoint
4. Keep pressing SELECT until the desired selection is displayed.
5. Press STORE.
6. To program another port, press NEXT or PREV, or SELECT and the desired port number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- For the KX-TD1232, port numbers 01 through 06 are for the Master System and 07 through 12 are for the Slave, if available.
- Refer to program [423] for the list of the ISDN port numbers and their corresponding jack numbers.
- If one equipment is connected to the ISDN port, select "Point". If multiple equipment are connected, select "Multipoint".
- To assign all ports to one selection, press the $*$ key in step 3. In this case, the display shows the contents programmed for Port 01.
- After this assignment, you should reset the system so that this assignment is activated.


## Features Guide References

None

## [426] ISDN Data Link Mode

## Description

Assigns the data link mode on an ISDN port basis.

## Selection

- Port number:

KX-TD816 - 01 through 04, * ( $*=$ all ports $)$
KX-TD1232 - $\mathbf{0 1}$ through 12, * ( $*=$ all ports $)$

- Permanent / Call


## Default

All ports - Permanent

## Programming

1. Enter 426.

Display: 426 LAYER2 MODE
2. Press NEXT.

```
Display: Port NO? }
```

3. Enter a port number.

To enter port number 01, you can also press NEXT.
Display example: \#01:Permanent
4. Keep pressing SELECT until the desired selection is displayed.
5. Press STORE.
6. To program another port, press NEXT or PREV, or SELECT and the desired port number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- For the KX-TD1232, port numbers 01 through 06 are for the Master System and 07 through 12 are for the Slave, if available.
- Refer to program [423] for the list of the ISDN port numbers and their corresponding jack numbers.
- To assign all ports to one selection, press the $*$ key in step 3. In this case, the display shows the contents programmed for Port 01.
- After this assignment, you should reset the system so that this assignment is activated.


## Features Guide References

None

## [427] ISDN TEI Mode

## Description

Assigns the Terminal Endpoint Identifier (TEI) mode on an ISDN port basis.

## Selection

- Port number:

KX-TD816 - 01 through 04, $*$ ( $*=$ all ports $)$
KX-TD1232 - 01 through 12, $*$ ( $*=$ all ports $)$

- Fix 0 through 63 / Automatic


## Default

All ports - Automatic

## Programming

1. Enter 427.

Display: 427 TEI ASSIGN
2. Press NEXT.

Display: Port NO? $\rightarrow$
3. Enter a port number.

To enter port number 01, you can also press NEXT.
Display example: \#01:Automatic
4. Enter the TEI.

To change the current entry, press CLEAR and enter the new number. If you do not enter a number, "Automatic" is assigned.
5. Press STORE.
6. To program another port, press NEXT or PREV, or SELECT and the desired port number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- For the KX-TD1232, port numbers 01 through 06 are for the Master System and 07 through 12 are for the Slave, if available.
- Refer to program [423] for the list of the ISDN port numbers and their corresponding jack numbers.
- If "Point" is selected in program [425], assign the fixed TEI. If "Multipoint" is selected, assign "Automatic".
- To assign all ports to one selection, press the * key in step 3. In this case, the display shows the contents programmed for Port 01.
- After this assignment, you should reset the system so that this assignment is activated.


## Features Guide References

None

## [428] ISDN Extension Multiple Directory Number

## Description

Selects whether the Multiple Directory Number is allocated to each terminal equipment (e.g., ISDN telephone) on the ISDN bus or not on an ISDN port basis.

## Selection

- Port number:

KX-TD816 - 01 through 04, * ( $*=$ all ports $)$
KX-TD1232 - 01 through 12, $*$ ( $*=$ all ports $)$

- Enable / Disable (no number)


## Default

All ports - Disable

## Programming

1. Enter 428.

Display: 428 MDN SERVICE
2. Press NEXT.

Display: Port NO? $\rightarrow$
3. Enter a port number.

To enter port number 01, you can also press NEXT.
Display example: \#01:Disable
4. Keep pressing SELECT until the desired selection is displayed.
5. Press STORE.
6. To program another port, press NEXT or PREV, or SELECT and the desired port number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- For the KX-TD1232, port numbers 01 through 06 are for the Master System and 07 through 12 are for the Slave, if available.
- Refer to program [423] for the list of the ISDN port numbers and their corresponding jack numbers.
- To assign all ports to one selection, press the $*$ key in step 3. In this case, the display shows the contents programmed for Port 01.
- You must assign on extension number to the ISDN terminal beforehand. For details, refer to your terminal's manual.


## Features Guide References

None

## [429] ISDN Extension Progress Tone

## Description

Enables or disables to send the progress tone to ISDN extension on ISDN port basis.

## Selection

- Port number:

KX-TD816 - 01 through 04, $*$ ( $*=$ all ports $)$
KX-TD1232 - $\mathbf{0 1}$ through 12, * ( $*=$ all ports $)$

- Enable / Disable (no tone)


## Default

All ports - Disable

## Programming

1. Enter 429.

Display: 429 ISDN TONE
2. Press NEXT.

```
Display: Port NO? }
```

3. Enter a port number.

To enter port number 01, you can also press NEXT.
Display example: \#01:Disable
4. Keep pressing SELECT until the desired selection is displayed.
5. Press STORE.
6. To program another port, press NEXT or PREV, or SELECT and the desired port number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- For the KX-TD1232, port numbers 01 through 06 are for the Master System and 07 through 12 are for the Slave, if available.
- Refer to program [423] for the list of the ISDN port numbers and their corresponding jack numbers.
- To assign all ports to one selection, press the $*$ key in step 3. In this case, the display shows the contents programmed for Port 01.


## Features Guide References

None

## [430] DID / TIE Format Number Assignment

## Description

Assigns a Direct Inward Dialing (DID) and TIE format number to each outside line group.

## Selection

- Outside line group (TRG) number: 1 through 8, * ( $*=$ all outside line groups)
- DID / TIE format number:

1 to 8

## Default

All outside line groups - Not stored

## Programming

1. Enter 430.

Display: 430 MODIFY FORM
2. Press NEXT.

Display: TRK GRP NO? $\rightarrow$
3. Enter an outside line group number.

To enter outside line group number 1, you can also press NEXT.
Display example: TRG1:Not Stored
4. Enter a DID / TIE format number.

To change the current entry, press CLEAR and enter the new number.
5. Press STORE.
6. To program another outside line group, press NEXT or PREV, or SELECT and the desired outside line group number.
7. Repeat steps 4 through 6.
8. Press END.

## Conditions

This is the first and basic programming for the DID / TIE feature. If this assignment is changed, it will affect other programming ([431] through [435]).

## Features Guide References

Direct Inward Dialing (DID)
T1 Line
TIE Line Service

## [431] DID / TIE Incoming Assignment

## Description

Assigns a DID / TIE incoming method, immediate or wink, to each DID / TIE format according to your central office service.
Immediate: Incoming DID and TIE calls can be received right after the receiving signal arrives.
Wink: Incoming DID and TIE calls can be received after the wink signal is transmitted to the central office (after the receiving signal arrives).

## Selection

- DID / TIE format number:

1 to $8, *$ ( $*=$ all DID / TIE formats)

- Immediate / Wink


## Default

All DID / TIE formats - Wink

## Programming

1. Enter 431.

Display: 431 SIGNAL IN
2. Press NEXT.

Display: Format NO? $\rightarrow$
3. Enter a DID / TIE format number.

To enter DID / TIE format number 1, you can also press NEXT.
Display example: 1:Wink
4. Keep pressing SELECT until the desired selection is displayed.
5. Press STORE.
6. To program another DID / TIE format, press NEXT or PREV, or SELECT and the desired DID / TIE format number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

To assign all DID / TIE formats to one selection, press the * key in step 3. In this case, the display shows the contents programmed for DID / TIE format number 1.

## Features Guide References

Direct Inward Dialing (DID)
T1 Line

## [432] DID / TIE Outgoing Assignment

## Description

Assigns a DID and TIE outgoing method, immediate or wink, to each DID / TIE format according to your central office service.
Immediate: Outgoing DID and TIE numbers can be transmitted right after seizing the outside line.
Wink: Outgoing DID and TIE numbers can be transmitted after receiving the wink signal from the central office after seizing the outside line.

## Selection

- DID / TIE format number:

1 to $8, *$ ( $*=$ all DID / TIE formats)

- Immediate / Wink


## Default

All DID / TIE formats - Wink

## Programming

1. Enter 432.

Display: 432 SIGNAL OUT
2. Press NEXT.

Display: Format NO? $\rightarrow$
3. Enter a DID / TIE format number.

To enter DID / TIE format number 1, you can also press NEXT.
Display example: 1:Wink
4. Keep pressing SELECT until the desired selection is displayed.
5. Press STORE.
6. To program another DID / TIE format, press NEXT or PREV, or SELECT and the desired DID / TIE format number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- The time the system waits for the confirmation wink signal can be programmed in program [435] DID / TIE Wink Time Out Assignment.
The system disconnects the outside line when the time-out time expires.
- To assign all DID / TIE formats to one selection, press the $*$ key in step 3. In this case, the display shows the contents programmed for DID / TIE format number 1.


## Features Guide References

Direct Inward Dialing (DID)
T1 Line

## [433] DID / TIE Subscriber Number Removed Digit

## Description

Assigns the removed digits of received a DID and TIE subscriber number for each DID / TIE format. In this case, digits are removed from the beginning of the received digits.

## Selection

- DID / TIE format number:

1 to 8

- Number of digits to be deleted (RMV):

0 to 6 ( $0=$ no deletion)

## Default

All DID / TIE formats - RMV:0

## Programming

1. Enter 433.

Display: 433 REMOVE DIAL
2. Press NEXT.

Display: Format NO? $\rightarrow$
3. Enter a DID / TIE format number.

To enter DID / TIE format number 1, you can also press NEXT.
Display example: 1:0
4. Enter the number of digits to be deleted.

To change the current entry, press CLEAR and enter the new number.
5. Press STORE.
6. To program another DID / TIE format, press NEXT or PREV, or SELECT and the desired DID / TIE format number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- You cannot leave the entry empty.
- You must confirm with CO regarding the number of digits being sent.


## Features Guide References

Direct Inward Dialing (DID)
T1 Line

TIE Line ServiceProgramming Guide225

## [434] DID / TIE Added Number

## Description

Assigns the added number to the DID and TIE subscriber number which is determined in program [433] DID / TIE Subscriber Number Removed Digit. This makes the final number which serves as the extension number. Note that digits are inserted at the beginning of the number.

## Selection

- DID / TIE format number:

1 to 8

- Number to be added:

4 digits (max.)

## Default

All DID / TIE formats — Blank

## Programming

1. Enter 434.

Display: 434 ADD DIAL
2. Press NEXT.

Display: DID Format NO? $\rightarrow$
3. Enter a DID / TIE format number.

To enter DID format number 1, you can also press NEXT.
Display example: 1:
4. Enter the number to be added.

To change the current entry, press CLEAR and enter the new number.
5. Press STORE.
6. To program another DID / TIE format, press NEXT or PREV, or SELECT and the desired DID / TIE format number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- Each added number has a maximum of 4 digits, consisting of $\mathbf{0}$ through 9.


## Features Guide References

Direct Inward Dialing (DID)

T1 Line
TIE Line Service

## [435] DID / TIE Wink Time Out Assignment

## Description

The DID / TIE outgoing method can be set to the wink mode in program [432] DID / TIE Outgoing Assignment. This program sets the time the system waits for the confirmation wink signal after an outside line is seized according to your central office service.

## Selection

- DID / TIE format number:

1 to $8, *$ ( $*=$ all DID / TIE formats $)$

- Time:

1 through 127 ( $\times 64$ milliseconds is the actual time)

## Default

All DID / TIE formats - 16

## Programming

1. Enter 435.

Display: 435 WINK TIMEOUT
2. Press NEXT.

Display: Format NO? $\rightarrow$
3. Enter a DID / TIE format number.

To enter DID / TIE format number 1, you can also press NEXT.
Display example: 1:16
4. Enter the time.

To change the current entry, press CLEAR and enter the new number.
5. Press STORE.
6. To program another DID / TIE format, press NEXT or PREV, or SELECT and the desired DID / TIE format number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- You cannot leave the entry empty.
- To assign all DID / TIE formats to one selection, press the $*$ key in step 3. In this case, the display shows the contents programmed for DID / TIE format number 1.


## Features Guide References

Direct Inward Dialing (DID)
T1 Line
TIE Line Service

## [436] CO-to-TIE Transfer

## Description

Enables or disables transferring an incoming outside call to the TIE line on an Outside (CO) line group basis. This restriction applies to the following: 1) Call Forwarding to a TIE line 2) Call Transfer to a TIE line.

## Selection

- Outside line group (TRG) number:

1 through 8, $*$ ( $*=$ all CO line groups)

- Enable / Disable


## Default

All outside line groups - Disable

## Programming

1. Enter 436.

Display: 436 CO-TIE XFER
2. Press NEXT.

Display: TRK GRP NO? $\rightarrow$
3. Enter an outside line group number.

To enter outside line group number 1, you can also press NEXT.
Display example: TRG1:Disable
4. Keep pressing SELECT until the desired selection is displayed.
5. Press STORE.
6. To program another outside line group, press NEXT or PREV, or SELECT and the desired outside line group number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

None

## Features Guide References

T1 Line
TIE Line Service

## [437] TIE-to-CO Transfer

## Description

Enables or disables transferring TIE calls to an outside line on an outside line group basis. This restriction applies to the following: 1) An outside call through another PBX 2) Call Forwarding to an outside line 3) Call Transfer to an outside line.

## Selection

- Outside line group (TRG) number:

1 through 8, * ( $*=$ all outside line groups)

- Enable / Disable


## Default

All outside line groups - Disable

## Programming

1. Enter 437.

$$
\text { Display: } 437 \text { TIE-CO XFER }
$$

2. Press NEXT.

Display: TRK GRP NO? $\rightarrow$
3. Enter an outside line group number.

To enter outside line group number 1 , you can also press NEXT.
Display example: TRG1:Disable
4. Keep pressing SELECT until the desired selection is displayed.
5. Press STORE.
6. To program another outside line group, press NEXT or PREV, or SELECT and the desired outside line group number.
7. Repeat steps 4 through 6.
8. Press END.

## Conditions

None

## Features Guide References

T1 Line
TIE Line Service

## [438] TIE-to-TIE Transfer

## Description

Enables or disables transferring TIE calls to a TIE line on an outside line group basis. This restriction applies to the following: 1) A TIE call through another PBX 2) Call Forwarding to a TIE line 3) Call Transfer to a TIE line.

## Selection

- Outside line group (TRG) number:

1 through 8, * ( $*=$ all outside line groups)

- Enable / Disable


## Default

All outside line groups - Enable

## Programming

1. Enter 438.

Display: 438 TIE-TIE XFER
2. Press NEXT.

```
Display: TRK GRP NO? }
```

3. Enter an outside line group number.

To enter outside line group number 1, you can also press NEXT.
Display example: TRG1:Enable
4. Keep pressing SELECT until the desired selection is displayed.
5. Press STORE.
6. To program another outside line group, press NEXT or PREV, or SELECT and the desired outside line group number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

None

## Features Guide References

T1 Line
TIE Line Service

## [439] TIE Security Type

## Description

Assigns the security mode for TIE calls. There are two modes, Non Security and Trunk Security (Outside line security). Non Security mode allows the caller to access an outside line without dialing a TIE user code. Trunk Security mode requires the caller to enter a TIE User Code assigned in program [017] DISA User Codes before making a TIE call.

## Selection

- Outside line group (TRG) number:

1 to $\mathbf{8 ,} *$ ( $*=$ all outside line groups)

- Non (non security) / Trunk (trunk security)


## Default

Non

## Programming

1. Enter 439.

Display: 439 TIE SECURITY
2. Press NEXT.

Display: TRK GRP NO? $\rightarrow$
3. Enter an outside line group number.

To enter outside line group number 1, you can also press NEXT.
Display example: TRG1:Non
4. Keep pressing SELECT until the desired selection is displayed.
5. Press STORE.
6. Press END.

## Conditions

None

## Features Guide References

T1 Line
TIE Line Service

## [440] Line Hunting Sequence

## Description

Assigns the hunting sequence of idle lines, seizing from the smallest to the largest line number or vice versa in an outside line group, on an outside line group basis.

## Selection

- Outside line group (TRG) number:

1 through 8, * ( $*=$ all outside line groups)

- Small $\rightarrow$ Large / Large $\rightarrow$ Small


## Default

All outside line groups - from Large to Small

## Programming

1. Enter 440.

Display: 440 LINE HUNT
2. Press NEXT.

Display: TRK GRP NO? $\rightarrow$
3. Enter an outside line group number.

To enter outside line group number 1 , you can also press NEXT.
Display example: TRG1: Large > Small
4. Keep pressing SELECT until the desired selection is displayed.
5. Press STORE.
6. To program another outside line group, press NEXT or PREV, or SELECT and the desired outside line group number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

The default setting (Large $\rightarrow$ Small) may often cause a busy situation between two PBXs, as the same line may be seized by both sides simultaneously. In this case, we recommend changing the setting of either PBX to Small $\rightarrow$ Large.

## Features Guide References

None

## [453] SPID Assignment

## Description

Assigns a maximum of eight Service Profile Identifiers (SPID) on an ISDN port basis.

## Selection

- Port number:

KX-TD816 - 01 through 04
KX-TD1232 - 01 through 12

- Location number: 1 through 8
- SPID: 20 digits (max.)


## Default

All ports - All locations - Not stored

## Programming

1. Enter 453.

Display: 453 SPID ASSIGN
2. Press NEXT.

Display: Port NO? $\rightarrow$
3. Enter a port number.

To enter port number 01, you can also press NEXT.
Display example: 01-1 : Not Stored Location number Port number
4. Enter a SPID.

To delete the current entry, press CLEAR.
To change the current entry, press CLEAR and enter the new number.
5. Press STORE.
6. To program another location, press NEXT or PREV.
7. Repeat steps 4 through 6.
8. To program another port, press SELECT and the desired port number.
9. Repeat steps 4 through 8.
10.Press END.

## Conditions

- Each SPID can be 20 digits, consisting of $\mathbf{0}$ through 9, *, \# and PAUSE.
- For the KX-TD1232, port numbers 01 through 06 are for the Master System and 07 through 12 are for the Slave, if available.
- Refer to program [423] for the list of the ISDN port numbers and their corresponding jack numbers.


## Features Guide References

Integrated Services Digital Network (ISDN) - Basic Rate Interface (BRI)

## [454] DN Assignment

## Description

Assigns a maximum of eight Directory Numbers (DN) on an ISDN port basis.

## Selection

- Port number:

KX-TD816 - 01 through 04
KX-TD1232 - 01 through 12

- Location number: 1 through 8
- DN: 20 digits (max.)


## Default

All ports - All locations - Not stored

## Programming

1. Enter 454.

Display: 454 DN ASSIGN
2. Press NEXT.

Display: Port NO? $\rightarrow$
3. Enter a port number.

To enter port number 01, you can also press NEXT.
Display example: 01-1 : Not Stored Location number Port number
4. Enter a DN.

To delete the current entry, press CLEAR.
To change the current entry, press CLEAR and enter the new number.
5. Press STORE.
6. To program another location, press NEXT or PREV.
7. Repeat steps 4 through 6.
8. To program another port, press SELECT and the desired port number.
9. Repeat steps 4 through 8 .
10.Press END.

## Conditions

- Each DN can be 20 digits, consisting of $\mathbf{0}$ through 9 , *, \# and PAUSE.
- For the KX-TD1232, port numbers 01 through 06 are for the Master System and 07 through 12 are for the Slave, if available.
- Refer to program [423] for the list of the ISDN port numbers and their corresponding jack numbers.


## Features Guide References

Integrated Services Digital Network (ISDN) - Basic Rate Interface (BRI)

## [455-456] Extension Ringing Assignment —— Day / Night for ISDN

## Description

Determines which extension receives a call on a DN basis of the ISDN port in both the day and night modes.

## Selection

- Port number:

KX-TD816 - 01 through 04
KX-TD1232 - 01 through 12

- Location number: 1 through 8
- Extension number: $\mathbf{2}$ to $\mathbf{4}$ digits / $\mathbf{0}$ (operator) / Disable


## Default

All ports - All locations - Disable — Day / Night

## Programming

1. Enter a program address ( $\mathbf{4 5 5}$ for day or $\mathbf{4 5 6}$ for night).
```
Display: 455 DN RING DAY
```

2. Press NEXT.

Display: Port NO? $\rightarrow$
3. Enter a port number.

To enter port number 01, you can also press NEXT.


Port number
4. Enter an extension number.

To change the current entry, press CLEAR and the new number.
To select "Disable", press CLEAR.
5. Press STORE.
6. To program another location, press NEXT or PREV.
7. Repeat steps 4 through 6 .
8. To program another port, press SELECT and the desired port number.
9. Repeat steps 4 through 8 .
10.Press END.

## Conditions

- Each extension number can be 2 to 4 digits, consisting of $\mathbf{0}$ through 9 .
- For the KX-TD1232, port numbers 01 through 06 are for the Master System and 07 through 12 are for the Slave, if available.
- Refer to program [423] for the list of the ISDN port numbers and their corresponding jack numbers.
- Assignable numbers are programmed in the following programs. Extension numbers - [003] Extension Number Set ISDN extension numbers - [012] ISDN Extension Number Set Voice Mail numbers - [117] Voice Mail Number Assignment Phantom numbers - [124] Phantom Extension Number Assignment Floating numbers - [813] Floating Number Assignment
- You can assign a MDN as a destination extension. In this case, add one digit to the ISDN extension number.


## Features Guide References

Integrated Services Digital Network (ISDN) — Basic Rate Interface (BRI)

## [457-458] DIL 1:1 - Lunch / Break Group

## Description

Assigns a lunch / break group to each DIL1:1 destination.

## Selection

- Outside (CO) line number:

KX-TD816 - 01 through 08
KX-TD1232 - 01 through 24

- Group number: $\mathbf{1}$ through 8


## Default

All outside lines - Blank

## Programming

## For Lunch

1. Enter 457.

Display: 457 DIL 1:1 LUN
2. Press NEXT.

Display: CO Line NO? $\rightarrow$
3. Enter an outside line number.

To enter outside line number 01, you can also press NEXT.
Display example: COO1:
4. Enter a group number.

To change the current entry, press CLEAR and the new number.
Display example: COO1:1
5. Press STORE.
6. To program another location, press NEXT or PREV.
7. Repeat steps 4 through 6 .
8. To program another outside line, press SELECT and the desired outside line number.
9. Repeat steps 4 through 8 .
10.Press END.

## For Break

1. Enter 458.

Display: 458 DIL 1:1 BRK
2. Press NEXT.

```
Display: CO Line NO? }
```

3. Enter an outside line number.

To enter outside line number 01, you can also press NEXT.
Display example: COO1:
4. Enter a group number.

To change the current entry, press CLEAR and the new number.
Display example: CO01:1
5. Press STORE.
6. To program another location, press NEXT or PREV.
7. Repeat steps 4 through 6 .
8. To program another outside line, press SELECT and the desired outside line number.
9. Repeat steps 4 through 8 .
10.Press END.

## Conditions

- If a destination for this programming is not assigned, the assignment for DIL 1:1 (Day) / DIL 1:N performs in day mode as usual.


## Features Guide References

Lunch / Break Service
Night Service

## [460] PRI Connection Assignment

## Description

Assigns the number of B channels which are actually used out of the 23 PRI line channels. This program is only available for the KX-TD1232 with the Primary Rate Interface ISDN Expansion Unit (KX-TD290).

## Selection

- B channel number: 01 through 23 ( $0=$ no use)


## Default

B channel number - 0

## Programming

1. Enter 460.

Display: 460 PRI CONNECT
2. Press NEXT.

Display example: 0
3. Enter the number of $\mathbf{B}$ channels.
4. Press STORE.
5. Press END.

## Conditions

- If the available number of B channels are not assigned as " 0 ", outside lines 9 through 24 will become "No Connect", and the assigned B channel numbers of outside lines starting from outside line 25 will become "Connect" automatically in program [400] Outside Line Connection Assignment.
For example, if the B channel number is assigned as " 3 ", outside lines 25 through 27 will become "Connect".


## Features Guide References

Integrated Services Digital Network (ISDN) — Primary Rate Interface (PRI)

## [461] PRI Line Coding Assignment

## Description

Sets a line coding for the PRI ISDN line.
This program is only available for the KX-TD1232 with the Primary Rate Interface ISDN Expansion Unit (KX-TD290).

## Selection

- B8ZS / AMI


## Default

B8ZS

## Programming

1. Enter 461.

Display: 461 LINE CODING
2. Press NEXT.

Display: B8zS
3. Keep pressing SELECT until the desired selection is displayed.

Display example: AMI
4. Press STORE.
5. Press END.

## Conditions

- Adjust to a setting of the connected telephone company.


## Features Guide References

Integrated Services Digital Network (ISDN) — Primary Rate Interface (PRI)

## [462] PRI Frame Sequence Assignment

## Description

Sets a frame format for the PRI ISDN line.
This program is only available for the KX-TD1232 with the Primary Rate Interface ISDN Expansion Unit (KX-TD290).

## Selection

- ESF (Extend Multiframe) / F4 (4-Frame Multiframe) / F12 (12-Frame Multiframe) / F72 (Remote Switch)


## Default

ESF

## Programming

1. Enter 462.
```
    Display: 462 FRAME SEQ
```

2. Press NEXT.

Display: ESF
3. Keep pressing SELECT until the desired selection is displayed.

Display example: F4
4. Press STORE.
5. Press END.

## Conditions

- Adjust to a setting of the connected telephone company.


## Features Guide References

Integrated Services Digital Network (ISDN) — Primary Rate Interface (PRI)

## [463] PRI Timer 1 and Timer 2 Assignment

## Description

This PBX employs en-bloc dialing so that dialed digits are not transmitted to the Central Office until all digits have been entered into the PBX. This assignment selects whether timers and a counter (PRI Dial Counter) are used to determine end of dialing. If "Effective" is selected, inter-digit timing is used to determine the end of dialing. If the counter is set to 7 digits (default), then Timer 1 is used for the first 7 digits of dialing and Timer 2 is used for any digits dialed after the first 7 digits.
If "Not Effective" is selected, the counter and timers are not used. In this case, the timer assigned in program [208] Inter Digit Time is used.
This program is only available for the KX-TD1232 with the Primary Rate Interface ISDN Expansion Unit (KX-TD290).

## Selection

- Outside line (CO) number:

KX-TD1232 - $\mathbf{2 5}$ through 47, $*$ ( $*=$ all outside lines from 25 to 47)

- Effective / Not Effective


## Default

All outside lines - Effective

## Programming

1. Enter 463.

Display: 463 PRI TIMER
2. Press NEXT.

Display: CO Line NO? $\rightarrow$
3. Enter an outside line number.

To enter outside line number 25 , you can also press NEXT.
Display example: CO25:Effective
4. Keep pressing SELECT until the desired selection is displayed.
5. Press STORE.
6. To program another outside line, press NEXT or PREV, or SELECT and the desired outside line number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- To assign all outside lines to one selection, press the * key in step 3. In this case, the display shows the contents programmed for outside line 25 .


## Features Guide References

Integrated Services Digital Network (ISDN) - Primary Rate Interface (PRI)

## [464] PRI Inter Digit Timer 1 Assignment

## Description

Assigns inter-digit timeout for Timer 1. For details, please see "Description" of [463] PRI Timer 1 and Timer 2 Assignment.
This program is only available for the KX-TD1232 with the Primary Rate Interface ISDN Expansion Unit (KX-TD290).

## Selection

Time (seconds): $\mathbf{1}$ through 30

## Default

5 sec

## Programming

1. Enter 464.

Display: 464 PRI DGT TM1
2. Press NEXT.

Display example: Timer1: 5sec
3. Enter the time.

To change the current entry, press CLEAR and enter the new time.
4. Press STORE.
5. Press END.

## Conditions

- You cannot leave the entry empty.


## Features Guide References

Integrated Services Digital Network (ISDN) — Primary Rate Interface (PRI)

## [465] PRI Inter Digit Timer 2 Assignment

## Description

Assigns inter-digit timeout for Timer 2. For details, please see "Description" of [463] PRI Timer 1 and Timer 2 Assignment.
This program is only available for the KX-TD1232 with the Primary Rate Interface ISDN Expansion Unit (KX-TD290).

## Selection

Time (seconds): $\mathbf{1}$ through 30

## Default

3 sec

## Programming

1. Enter 465.

$$
\text { Display: } 465 \text { PRI DGT TM2 }
$$

2. Press NEXT.

Display example: Timer2: 3sec
3. Enter the time.

To change the current entry, press CLEAR and enter the new time.
4. Press STORE.
5. Press END.

## Conditions

- You cannot leave the entry empty.


## Features Guide References

Integrated Services Digital Network (ISDN) — Primary Rate Interface (PRI)

## [466] PRI Dial Counter for Inter Digit Timer 2 Assignment

## Description

Assigns counter value of dialed digits. Before this value, Timer 1 is used. After this value, Timer 2 is used. For details, please see "Description" of [463] PRI Timer 1 and Timer 2 Assignment.
This program is only available for the KX-TD1232 with the Primary Rate Interface ISDN Expansion Unit (KX-TD290).

## Selection

Digit number: $\mathbf{0}$ through 24 digits

## Default

7digit

## Programming

1. Enter 466.

Display: 466 PRI DGT CNT
2. Press NEXT.

Display example: Counter: 7digit
3. Enter the digit.

To change the current entry, press CLEAR and enter the new digit.
4. Press STORE.
5. Press END.

## Conditions

- You cannot leave the entry empty.


## Features Guide References

Integrated Services Digital Network (ISDN) — Primary Rate Interface (PRI)

## [467-468] DIL 1:1 Extension —— Lunch / Break

## Description

The DIL 1:1 feature allows incoming outside calls to be directed to a specific extension. These programs specify the extension number for lunch or break mode. If this program has been assigned to "Disable", the system selects the destination assigned in the program [457458] DIL 1:1 - Lunch / Break Group.

## Selection

- Outside line (CO) number:

KX-TD816 - 01 through 08, *
KX-TD1232 - 01 through 24, *
( $*=$ all outside lines)

- Extension number: 2 through 4 digits / Disable (no DIL 1:1)


## Default

All outside lines — Disable __ Lunch / Break

## Programming

1. Enter a program address ( $\mathbf{4 6 7}$ for lunch or $\mathbf{4 6 8}$ for break).
```
Display example: 467 1:1 LUN EXT
```

2. Press NEXT.
```
Display: CO Line NO? }
```

3. Enter an outside line number.

To enter outside line number 01, you can also press NEXT.
Display example: CO01:Disable
4. Enter an extension number.

To change the current entry, press CLEAR and enter the new number.
To disable DIL 1:1, press CLEAR.
5. Press STORE.
6. To program another outside line, press NEXT or PREV, or SELECT and the desired outside line number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- To assign all outside lines to one selection, press the $*$ key in step 3 . In this case, the display shows the contents programmed for outside line 01 .
- You set the extension numbers in program [003] Extension Number Set, voice mail extension numbers in program [118] Voice Mail Extension Number Assignment, phantom extension numbers in program [124] Phantom Extension Number Assignment or floating numbers, DISA (Direct Inward System Access) and extension group in program [813] Floating Number Assignment.


## Features Guide References

## Direct In Lines (DIL)

Direct Inward System Access (DISA)
Lunch / Break Service
Night Service

### 2.6 COS Programming

## [500-501] Toll Restriction Level - Day / Night

## Description

Each extension must be assigned a Class of Service (COS). These programs set the toll restriction value for each COS in day or night mode.

## Selection

- COS number: 1 through 8, * ( $*=$ all COS $)$
- Level number: $\mathbf{1}$ through 8


## Default

COS 1 through 7 — Level 1 —— Day / Night;
COS 8 — Level 7 ——Day / Night

## Programming

1. Enter a program address ( $\mathbf{5 0 0}$ for day or $\mathbf{5 0 1}$ for night).

Display example: 500 TRS DAY LVL
2. Press NEXT.

Display: COS NO? $\rightarrow$
3. Enter a COS number.

To enter COS number 1, you can also press NEXT.
Display example: COS1:1
4. Enter a level number.

To change the current entry, press CLEAR and enter the new number.
5. Press STORE.
6. To program another COS, press NEXT or PREV, or SELECT and the desired COS number.
7. Repeat steps 4 through 6.
8. Press END.

## Conditions

- To assign all COS to one selection, press the * key in step 3. In this case, the display shows the contents programmed for COS 1.
- Program [601] Class of Service is used to assign a Class of Service to each extension.


## Features Guide References

Night Service
Toll Restriction

## [502] Extension-to-Outside Line Call Duration Limit

## Description

This program allows you to restrict the duration of outside calls on a Class of Service (COS) basis.

## Selection

- COS number:

1 through 8, * ( $*=$ all COS)

- Disable (no limit) / Enable (limit)


## Default

All COS - Disable

## Programming

1. Enter 502.

$$
\text { Display: } 502 \text { EXT-CO TIMER }
$$

2. Press NEXT.
3. Display: COS NO? $\rightarrow$
4. Enter a COS number.

To enter COS number 1, you can also press NEXT.
Display example: COS1:Disable
5. Keep pressing SELECT until the desired selection is displayed.
6. Press STORE.
7. To program another COS, press NEXT or PREV, or SELECT and the desired COS number.
8. Repeat steps 4 through 6 .
9. Press END.

## Conditions

- An outside call originated or answered by the programmed extension user is disconnected when the time specified in program [205] Extension-to-Outside Line Call Duration Time expires.
- Extensions in limited classes cannot establish an outside-to-outside call, that is, cannot transfer / forward an outside call to another CO line or perform an Unattended Conference.
- To assign all COS to one selection, press the $*$ key in step 3. In this case, the display shows the contents programmed for COS 1.
- Program [601] Class of Service is used to assign a Class of Service to each extension.
- Program [990] System Additional Information, Area 02 - Bit 2 is used to program Limited Call Duration to be done for outgoing calls only.


## Features Guide References

## Call Forwarding - to Outside Line

Call Transfer, Screened - to Outside Line
Conference, Unattended
Limited Call Duration

## [503] Call Transfer to Outside Line

## Description

This program determines which Classes of Services (COS) are allowed to perform the Call Transfer to Outside Line function.

## Selection

- COS number: 1 through 8, * ( $*=$ all COS $)$
- Enable / Disable


## Default

All COS — Disable

## Programming

1. Enter 503.

$$
\text { Display: } 503 \text { CALL XFER CO }
$$

2. Press NEXT.

Display: COS NO? $\rightarrow$
3. Enter a COS number.

To enter COS number 1, you can also press NEXT.
Display example: COS1:Disable
4. Keep pressing SELECT until the desired selection is displayed.
5. Press STORE.
6. To program another COS, press NEXT or PREV, or SELECT and the desired COS number.
7. Repeat steps 4 through 6.
8. Press END.

## Conditions

- To assign all COS to one selection, press the $*$ key in step 3. In this case, the display shows the contents programmed for COS 1.
- Program [601] Class of Service is used to assign a Class of Service to each extension.


## Features Guide References

Call Transfer, Screened - to Outside Line

## [504] Call Forwarding to Outside Line

## Description

This program determines which Classes of Services (COS) are allowed to perform the Call Forwarding to Outside Line function.

## Selection

- COS number: 1 through 8, * ( $*=$ all $\operatorname{COS}$ )
- Disable / Enable


## Default

All COS — Disable

## Programming

1. Enter 504.

Display: 504 CALL FWD CO
2. Press NEXT.

Display: COS NO? $\rightarrow$
3. Enter a COS number.

To enter COS number 1, you can also press NEXT.
Display example: COS1:Disable
4. Keep pressing SELECT until the desired selection is displayed.
5. Press STORE.
6. To program another COS, press NEXT or PREV, or SELECT and the desired COS number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- To assign all COS to one selection, press the $*$ key in step 3. In this case, the display shows the contents programmed for COS 1.
- Program [601] Class of Service is used to assign a Class of Service to each extension.


## Features Guide References

Call Forwarding - to Outside Line

## [505] Executive Busy Override

## Description

Determines which Classes of Services (COS) are allowed to perform Executive Busy Override - Extension / Outside Line. Executive Busy Override allows the user to interrupt an established call.

## Selection

- COS number: 1 through 8, * ( $*=$ all $\operatorname{COS}$ )
- Disable / Enable


## Default

All COS - Disable

## Programming

1. Enter 505.

$$
\text { Display: } 505 \text { EXEC BSY OR }
$$

2. Press NEXT.

Display: COS NO? $\rightarrow$
3. Enter a COS number.

To enter COS number 1, you can also press NEXT.
Display example: COS1:Disable
4. Keep pressing SELECT until the desired selection is displayed.
5. Press STORE.
6. To program another COS, press NEXT or PREV, or SELECT and the desired COS number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- To assign all COS to one selection, press the $*$ key in step 3. In this case, the display shows the contents programmed for COS 1.
- Program [601] Class of Service is used to assign a Class of Service to each extension.


## Features Guide References

Executive Busy Override - Extension
Executive Busy Override - Outside Line

## [506] Executive Busy Override Deny

## Description

This program is used to determine which Classes of Services (COS) are allowed to deny Executive Busy Override. Executive Busy Override Deny allows the user to prevent Executive Busy Override - Extension / Outside Line from being executed by another extension user.

## Selection

- COS number: 1 through 8, * ( $*=$ all $\operatorname{COS}$ )
- Disable / Enable


## Default

All COS - Enable

## Programming

1. Enter 506.

Display: 506 EXEC BSY DNY
2. Press NEXT.

Display: COS NO? $\rightarrow$
3. Enter a COS number.

To enter COS number 1, you can also press NEXT.
Display example: COS1:Enable
4. Keep pressing SELECT until the desired selection is displayed.
5. Press STORE.
6. To program another COS, press NEXT or PREV, or SELECT and the desired COS number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- To assign all COS to one selection, press the $*$ key in step 3. In this case, the display shows the contents programmed for COS 1.
- Program [601] Class of Service is used to assign a Class of Service to each extension.


## Features Guide References

Executive Busy Override - Extension
Executive Busy Override - Outside Line

## [507] Do Not Disturb Override

## Description

This program determines which Classes of Services (COS) are allowed to perform Do Not Disturb (DND) Override.

## Selection

- COS number: 1 through 8, * ( $*=$ all COS $)$
- Disable / Enable


## Default

All COS — Disable

## Programming

1. Enter 507.

$$
\text { Display: } 507 \text { DND OVERRIDE }
$$

2. Press NEXT.

Display: COS NO? $\rightarrow$
3. Enter a COS number.

To enter COS number 1, you can also press NEXT.
Display example: COS1:Disable
4. Keep pressing SELECT until the desired selection is displayed.
5. Press STORE.
6. To program another COS, press NEXT or PREV, or SELECT and the desired COS number.
7. Repeat steps 4 through 6.
8. Press END.

## Conditions

- To assign all COS to one selection, press the $*$ key in step 3. In this case, the display shows the contents programmed for COS 1.
- Program [601] Class of Service is used to assign a Class of Service to each extension.


## Features Guide References

Do Not Disturb (DND) Override

## [508] Account Code Entry Mode

## Description

```
There are three account code modes: Option, Verified-All Calls and Verified-Toll Restriction Override. This program determines the mode to be used by each Class of Service (COS).
Option mode:
The user can enter any account code, if needed.
Verified - All Calls mode:
The user must always enter a pre-assigned account code to make an outside call.
Verified - Toll Restriction Override mode:
The user must enter a pre-assigned account code when the user needs to override toll restriction.
```


## Selection

- COS number: 1 through 8, * ( $*=$ all COS $)$
- Option / Verify - All (Verified-All Calls) / Verify — Toll (Verified-Toll Restriction Override)


## Default

All COS — Option

## Programming

1. Enter 508.

Display: 508 ACC CODE OPT
2. Press NEXT.

Display: COS NO? $\rightarrow$
3. Enter a COS number.

To enter COS number 1, you can also press NEXT.
Display example: CoS1:Option
4. Keep pressing SELECT until the desired selection is displayed.
5. Press STORE.
6. To program another COS, press NEXT or PREV, or SELECT and the desired COS number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- To assign all COS to one selection, press the $*$ key in step 3. In this case, the display shows the contents programmed for COS 1.
- Program [105] Account Codes is used to define the Account Codes for the Verified modes.
- Program [601] Class of Service is used to assign a Class of Service to each extension.


## Features Guide References

## Account Code Entry

Toll Restriction Override by Account Code Entry

## [509] Off-Hook Call Announcement (OHCA)

## Description

Enables or disables to perform the Off-Hook Call Announcement (OHCA) on a Class of Service (COS) basis.

## Selection

- COS number: 1 through 8, * ( $*=$ all COS $)$
- Enable / Disable


## Default

All COS - Enable

## Programming

1. Enter 509.

Display: 509 OHCA
2. Press NEXT.

Display: COS NO? $\rightarrow$
3. Enter a COS number.

To enter COS number 1, you can also press NEXT.
Display example: COS1:Enable
4. Keep pressing SELECT until the desired selection is displayed.
5. Press STORE.
6. To program another COS, press NEXT or PREV, or SELECT and the desired COS number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- To assign all COS to one selection, press the * key in step 3. In this case, the display shows the contents programmed for COS 1.
- Program [601] Class of Service is used to assign a Class of Service to each extension.


## Features Guide References

Off-Hook Call Announcement (OHCA)
Whisper OHCA

## [510] Night Service Access

## Description

Enables or disables switching the Day / Night service on a Class of Service (COS) basis.

## Selection

- COS number: 1 through 8, * ( $*=$ all COS $)$
- Enable / Disable


## Default

All COS - Disable

## Programming

1. Enter 510.

Display: 510 NITE SERVICE
2. Press NEXT.

Display: COS NO? $\rightarrow$
3. Enter a COS number.

To enter COS number 1, you can also press NEXT.
Display example: COS1: Disable
4. Keep pressing SELECT until the desired selection is displayed.
5. Press STORE.
6. To program another COS, press NEXT or PREV, or SELECT and the desired COS number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- To assign all COS to one selection, press the $*$ key in step 3. In this case, the display shows the contents programmed for COS 1.
- The operator extension can switch the mode regardless of setting.
- Program [601] Class of Service is used to assign a Class of Service to each extension.


## Features Guide References

Night Service

## [511] PITS Programming Level

## Description

Regulates station programming, depending on the COS. This programming has two levels as follows.
Level 1: enables all station programming.
Level 2: disables CO button programming in station programming.

## Selection

- COS number: 1 through 8, * ( $*=$ all COS)
- LVL 1 / LVL 2


## Default

All COS - LVL1

## Programming

1. Enter 511.

Display: 511 PITS PGM LVL
2. Press NEXT.

Display: COS NO? $\rightarrow$
3. Enter a COS number.

To enter COS number 1, you can also press NEXT.
Display example: COS1:LVL1
4. Keep pressing SELECT until the desired selection is displayed.

```
Display example: COS1:LVL2
```

5. Press STORE.
6. To program another COS, press NEXT or PREV, or SELECT and the desired COS number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- The programmings assigned on level 1 have been kept even on level 2 .
- If CO buttons are assigned on level 2 in station programming, the warning tone is heard, the programming initial display appears.
- A tone pattern of CO received calls cannot be also changed on level 2.
- The programming assigned on [005] Flexible CO Button Assignment can be overwritten, regardless of this programming.


## Features Guide References

None

### 2.7 Extension Programming <br> [600] EXtra Device Port

## Description

EXtra Device Port (XDP) allows a single line telephone to be connected to the same jack as a digital proprietary telephone (DPT). This program assigns which jacks are XDP. The single line telephone and DPT of the programmed jack work as independent extensions.

## Selection

- Jack number:

KX-TD816 - 01 through 16, * ( $*=$ all jacks $)$
KX-TD1232-01 through 64, * ( $*=$ all jacks $)$

- Disable / Enable


## Default

All jacks — Disable

## Programming

1. Enter 600.

Display: 600 XDP PORT
2. Press NEXT.

Display: Jack NO? $\rightarrow$
3. Enter a jack number.

To enter jack number 01, you can also press NEXT.
Display example: \#01:Disable
4. Keep pressing SELECT until the desired selection is displayed.
5. Press STORE.
6. To program another jack, press NEXT or PREV, or SELECT and the desired jack number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- The eXtra Device Port feature must be assigned "Disable" for Direct Station Selection (DSS) Console ports.
- For the KX-TD1232, jack numbers 01 through 32 are for the Master System and 33 through 64 are for the Slave, if available.
- To assign all jacks to one selection, press the * key in step 3. In this case, the display shows the contents programmed for Jack 01.
- Immediately after changing your assignment, the changed setting may not work for a maximum of eight seconds.


## Features Guide References

## EXtra Device Port (XDP)

## [601] Class of Service

## Description

Programs each extension for Class of Service (COS). The COS determines the call handling abilities of each extension.

## Selection

- Jack number:

KX-TD816-01 through 16, *(-1/-2),
KX-TD1232 - 01 through 64, $*(-1 /-2)$,
( $*=$ all jacks, $-1=$ first part, $-2=$ second part)

- COS number: 1 through 8


## Default

All jacks-1/2 - COS 1

## Programming

1. Enter 601.

Display: 601 CoS \#
2. Press NEXT.

Display: Jack NO? $\rightarrow$
3. Enter a jack number.

To enter jack number 01, you can also press NEXT.
To select the second part (-2), press NEXT after entering a jack number.
Display example: \#01-1:COS1
4. Enter a COS number.

To change the current entry, enter the new number.
5. Press STORE.
6. To program another jack, press NEXT or PREV, or SELECT and the desired jack number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- There is a maximum of eight Classes of Service. Every extension must be assigned to a Class of Service and is subject to the COS Programming of programs [500] through [510] and [991].
- For the KX-TD1232, jack numbers 01 through 32 are for the Master System and 33 through 64 are for the Slave, if available. Jack numbers in the out-of-service system are unacceptable.
- For an explanation of jack numbering, see "Rotation of jack number" in Section 1.3 Programming Methods.
- To assign all jacks to one COS, press the * key in step 3. In this case, the display shows the contents programmed for Jack 01.
- *Program [017] DISA User Codes is also used to assign a Class of Service to a DISA (Direct Inward System Access) User Code.


## Features Guide References

## Class of Service (COS)

[^4]
## [602] Extension Group Assignment

## Description

Assigns each extension to an extension group. Extension groups are used for Group Call Pickup, Station Hunting, and Paging - Group.

## Selection

- Jack number:

KX-TD816-01 through 16, * (-1 / -2),
KX-TD1232 - 01 through 64, * (-1/-2),
( $*=$ all jacks, $-1=$ first part, $-2=$ second part)

- Extension group number:

1 through 8

## Default

All jacks-1/2 - Extension group 1

## Programming

1. Enter 602.

Display: 602 EXT GROUP \#
2. Press NEXT.

Display: Jack NO? $\rightarrow$
3. Enter a jack number.

To enter jack number 01, you can also press NEXT.
To select the second part (-2), press NEXT after entering the jack number.
Display example: \#01-1:EXG1
4. Enter the extension group number.

To change the current entry, enter the new extension group number.
5. Press STORE.
6. To program another jack, press NEXT or PREV, or SELECT and the desired jack number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- There is a maximum of eight extension groups. Each extension can only belong to one group.
- For the KX-TD1232, jack numbers 01 through 32 are for the Master System and 33 through 64 are for the Slave, if available.
- For an explanation of jack numbering, see "Rotation of jack number" in Section 1.3 Programming Methods.
- To assign all jacks to one extension group, press the $*$ key in step 3 . In this case, the display shows the contents programmed for Jack 01.


## Features Guide References

Call Pickup, Group<br>Extension Group<br>Paging - Group<br>Station Hunting

## [603-604] DIL 1:N Extension and Delayed Ringing __ Day / Night

## Description

The Direct In Lines (DIL) 1:N feature can be assigned to ring more than one extension. All incoming calls from the programmed outside lines are directed to the specified extensions. These programs assign the extensions and the notification method for each outside line in both day and night modes.

## Selection

- Jack number:

KX-TD816-01 through 16, * (-1 / -2),
KX-TD1232 - 01 through 64, * (-1/-2),
( $*=$ all jacks, $-1=$ first part, $-2=$ second part)

- Outside line (CO) number:

KX-TD816-01 through 08, *
KX-TD1232 - 01 through 24, *
( $*=$ all outside lines)

- Disab (disable) / Immdt (immediate ringing) / 1RNG (1 ring delay) / 3RNG (3 ring delay) / 6RNG (6 ring delay) / NoRNG (no ring)


## Default

All jacks-1/2 — all outside lines — Immediate ringing —— Day / Night

## Programming

1. Enter a program address ( $\mathbf{6 0 3}$ for day or $\mathbf{6 0 4}$ for night).

Display example: 603 DIL 1:N DAY
2. Press NEXT.

Display: Jack NO? $\rightarrow$
3. Enter a jack number.

To enter jack number 01, you can also press NEXT.
To select the second part ( -2 ), press NEXT after entering the jack number.
Display example: \#01-1:CO01:Immdt
4. Enter the outside line number.

You can also keep pressing or $\boldsymbol{\sim}$ until the desired outside line number is displayed.
5. Keep pressing SELECT until the desired selection is displayed.
6. Press STORE.
7. To program another jack, press NEXT or PREV, or SELECT and the desired jack number.
8. Repeat steps 4 through 7 .

## 9. Press END.

## Conditions

- An extension can be assigned as the destination of as many outside lines as required.
- For the KX-TD1232, jack numbers 01 through 32 are for the Master System and 33 through 64 are for the Slave, if available. Jack numbers in the out-of-service system are unacceptable.
- For an explanation of jack numbering, see "Rotation of jack number" in Section 1.3 Programming Methods.
- To assign all jacks or all outside lines to one selection, press the $*$ key in step 3 or step 4 . In these cases, the display shows the contents programmed for Jack 01 or for outside line 01.
- There are six notification methods:
a) Immediate ringing: rings immediately
b) 1 ring delay
c) 3 ring delay
d) 6 ring delay
e) No ring: only the indicator flashes
f) Disable: no incoming call
- When you change the jack number by pressing NEXT or PREV, the outside line number is not changed. Example \#03-1:CO06.....Press NEXT.....\#03-2:CO06


## Features Guide References

Direct In Lines (DIL)
Night Service
Ringing, Delayed

## [605-606] Outgoing Permitted Outside Line Assignment ———Day / Night

## Description

Determines the outside lines which can be accessed by an extension in both day and night modes. The extension users can make outgoing outside calls using the assigned outside lines.

## Selection

- Jack number:

KX-TD816-01 through 16, * (-1 / -2),
KX-TD1232 - 01 through 64, * (-1/-2),
( $*=$ all jacks, $-1=$ first part, $-2=$ second part)

- Outside line (CO) number:

KX-TD816-01 through 08, *
KX-TD1232 - 01 through 24, *
( $*=$ all outside lines)

- Enabl (enable) / Disab (disable)


## Default

All jacks-1/2 — all outside lines — Enable —— Day / Night

## Programming

1. Enter a program address ( $\mathbf{6 0 5}$ for day or $\mathbf{6 0 6}$ for night).

Display example: 605 CO DAY OUT
2. Press NEXT.

Display: Jack NO? $\rightarrow$
3. Enter a jack number.

To enter jack number 01, you can also press NEXT.
To select the second part (-2), press NEXT after entering a jack number.
Display example: \#01-1:CO01:Enabl
4. Enter the desired outside line number, or keep pressing $\boldsymbol{\rightarrow} \boldsymbol{\square}$ or until the desired outside line is displayed.

To change the current entry, enter the new number.
5. Keep pressing SELECT until the desired selection is displayed.
6. Press STORE.
7. To program another jack, press NEXT or PREV, or SELECT and the desired jack number.
8. Repeat steps 4 through 7 .
9. Press END.

## Conditions

- For the KX-TD1232, jack numbers 01 through 32 are for the Master System and 33 through 64 are for the Slave, if available. Jack numbers in the out-of-service system are unacceptable.
- For an explanation of jack numbering, see "Rotation of jack number" in Section 1.3 Programming Methods.
- To assign all jacks or all outside lines to one selection, press the $*$ key in step 3 or 4 . In these cases, the display shows the contents programmed for Jack 01 or outside line 01.
- To assign no outside line for an extension, press CLEAR in step 4.


## Features Guide References

Outside Line Connection Assignment - Outgoing
Night Service

## [607-608] Doorphone Ringing Assignment -_ Day / Night

## Description

These programs assign the extensions which will ring when a doorphone call is received during the day and night modes. Programmed extensions are also allowed to open the door.

## Selection

- Jack number:

KX-TD816-01 through 16, * (-1/-2),
KX-TD1232 - 01 through 64, * (-1/-2),
( $*=$ all jacks,,$-1=$ first part, $-2=$ second part)

- Doorphone number:

KX-TD816 - $\mathbf{1}$ through 4, four entries (max.)
KX-TD1232 - $\mathbf{1}$ through 8, eight entries (max.)

## Default

Jack 01-1— All doorphones; Other jacks - no doorphone - — Day / Night

## Programming

1. Enter a program address ( $\mathbf{6 0 7}$ for day or $\mathbf{6 0 8}$ for night).

Display example: 607 DOOR SET DAY
2. Press NEXT.

Display: Jack NO? $\rightarrow$
3. Enter a jack number.

To enter jack number 01, you can also press NEXT.
To select the second part (-2), press NEXT after entering a jack number.
Display example: \#01-1:12345678
4. Enter the doorphone numbers.

To assign no doorphone, press CLEAR.
To change the current entry, press CLEAR and enter the new doorphone numbers.
5. Press STORE.
6. To program another jack, press NEXT or PREV, or SELECT and the desired jack number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- For the KX-TD1232, jack numbers 01 through 32 are for the Master System and 33 through 64 are for the Slave, if available.
- For an explanation of jack numbering, see "Rotation of jack number" in Section 1.3 Programming Methods.
- To assign all jacks to one selection, press the * key in step 3. In this case, the display shows the contents programmed for Jack 01.
- Four doorphones can be installed.
- The following table shows how the System Connection provides doorphone and door opener numbers depending on installing a Doorphone Card for the KX-TD1232.

| Master system | Doorphone Card | KX-TD160 | KX-TD160 | KX-TD161 | KX-TD161 |
| :--- | :--- | :---: | :---: | :---: | :---: |
|  | Doorphone \& Door | $\mathbf{1 , 2}$ | $\mathbf{1 , 2}$ | $\mathbf{1 , 2 , 3 , 4}$ | $\mathbf{1 , 2 , 3 , 4}$ |
|  |  |  |  |  |  |

- You can enter up to four (for KX-TD816) or eight (for KX-TD1232) doorphone numbers for each extension.


## Features Guide References

Door Opener
Doorphone Call
Night Service

## [609] Voice Mail Access Codes

## Description

Assigns a mailbox number for each extension, only if program [990] System Additional Information, Area 02 - Bit 8 is set to "free".

## Selection

- Jack number:

KX-TD816-01 through 16, (-1 / -2),
KX-TD1232 - 01 through 64, (-1/-2),
( $-1=$ first part,,$-2=$ second part)

- Mailbox number:

16 digits (max.)

## Default

All jacks — Not stored

## Programming

1. Enter 609.

Display: 609 V-MAIL CODES
2. Press NEXT.

Display: Jack NO? $\rightarrow$
3. Enter a jack number.

To enter jack number 01, you can also press NEXT.
To select the second part (-2), press NEXT after entering a jack number.
Display example: \#01-1:Not Stored
4. Enter a mailbox number.

To delete the current entry, press CLEAR.
To change the current entry, press CLEAR and enter the new number.
5. Press STORE.
6. To program another jack, press NEXT or PREV, or SELECT and the desired jack number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- For the KX-TD1232, jack numbers 01 through 32 are for the Master System and 33 through 64 are for the Slave, if available. Jack numbers in the out-of-service system are unacceptable.
- For an explanation of jack numbering, see "Rotation of jack number" in Section 1.3 Programming Methods.
- The system supports a maximum of eight jacks (16 jacks during System Connection*) for connection to a Voice Processing System as the Voice Mail or Automated Attendant ports.
- Each mailbox number has a maximum of 16 digits, consisting of $\mathbf{0}$ through 9 , * , \# and PAUSE.
- To display parts of the mailbox number which have scrolled off the display, press or


## Features Guide References

Voice Mail Integration

[^5]
## [610] Live Call Screening Recording Mode Assignment

## Description

- Assigns whether to close the mailbox or keep recording the conversation after a call is intercepted.
- This program is available when the Digital Super Hybrid System is connected to a Digital Proprietary Telephone capable Panasonic Voice Processing System (one that supports digital proprietary telephone integration; e.g., KX-TVS100).


## Selection

- Jack number:

KX-TD816 - 01 through 16, * ( $*=$ all jacks)
KX-TD1232 - 01 through 64, * ( $*=$ all jacks $)$

- Stop Rec / Keep Rec


## Default

All jacks - Stop Rec (Stop recording)

## Programming

1. Enter 610.

Display: 610 LCS REC.MODE
2. Press NEXT.

Display: Jack NO? $\rightarrow$
3. Enter a jack number.

To enter jack number 01, you can also press NEXT.
Display example: \#01:Stop Rec
4. Keep pressing SELECT until the desired selection is displayed.
5. Press STORE.
6. To program another jack number, press NEXT or PREV, or SELECT and the desired jack number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- In case of the KX-TD1232, jack numbers 01 through 32 are for the Master System and 33 through 64 are for the Slave, if available.
- For an explanation of jack numbering, see "Rotation of jack number" in Section 1.3 Programming Methods.
- To assign all jacks to one selection, press the * key in step 3. In this case, the display shows the contents programmed for jack 01.


## Features Guide References

## Live Call Screening (LCS)

Voice Mail Integration for Digital Proprietary Telephones

## [613] ISDN Class of Service

## Description

Programs a Class of Service (COS) number for each ISDN extension port. The COS determines the call handling abilities of each port.

## Selection

- Port number:

KX-TD816 - 01 through 04, * ( $*=$ all ports $)$
KX-TD1232 - $\mathbf{0 1}$ through 12, * ( $*=$ all ports $)$

- COS number: $\mathbf{1}$ through 8


## Default

All ports - COS 1

## Programming

1. Enter 613.

Display: 613 ISDN COS \#
2. Press NEXT.

Display: Port NO? $\rightarrow$
3. Enter a port number.

To enter port number 01, you can also press NEXT.
Display example: \#01:COS1
4. Enter a COS number.

To change the current entry, enter the new number.
5. Press STORE.
6. To program another port, press NEXT or PREV, or SELECT and the desired port number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- Port numbers 01 through 06 are for the Master System and 07 through 12 are for the Slave, if available.
- Refer to program [423] for the list of the ISDN port numbers and their corresponding jack numbers.
- There is a maximum of eight Classes of Services. Each ISDN extension must be assigned to a Class of Service and is subject to the COS Programming for programs [500] through [510] and [991].
- To assign all ports to one selection, press the * key in step 3. In this case, the display shows the contents programmed for Port 01.


## Features Guide References

Class of Service (COS)

## [614-615] Outgoing Permitted Outside Line Assignment -_ Day / Night for ISDN Extension

## Description

Determines which outside lines can be accessed by an ISDN extension in both the day and night modes. The extension users can make outgoing outside calls using the assigned outside lines.

## Selection

- Port number:

KX-TD816 - 01 through 06, * ( $*=$ all ports)
KX-TD1232 - $\mathbf{0 1}$ through 12, * ( $*=$ all ports $)$

- Outside line (CO) number:

KX-TD816 - 01 through 08, *
KX-TD1232 - 01 through 24, *
( $*=$ all outside lines)

- Enabl (enable) / Disab (disable)


## Default

All ports — all outside lines — Enable —— Day / Night

## Programming

1. Enter a program address ( $\mathbf{6 1 4}$ for day or $\mathbf{6 1 5}$ for night).

Display example: 614 ISDN DAY OUT
2. Press NEXT.

Display: Port NO? $\rightarrow$
3. Enter a port number.

To enter port number 01, you can also press NEXT.
Display example: \#01:CO01:Enabl
4. Enter the desired outside line number, or keep pressing $\boldsymbol{\rightarrow} \boldsymbol{\square}$ or until the desired outside line is displayed.

To change the current entry, enter the new number.
5. Keep pressing SELECT until the desired selection is displayed.
6. Press STORE.
7. To program another jack, press NEXT or PREV, or SELECT and the desired port number.
8. Repeat steps 4 through 7.
9. Press END.

## Conditions

- Port numbers 01 through 06 are for the Master System and 07 through 12 are for the Slave, if available.
- Refer to program [423] for the list of the ISDN port numbers and their corresponding jack numbers.
- To assign all ports to one selection, press the $*$ key in step 3. In this case, the display shows the contents programmed for Port 01 .
- To assign all outside lines to one selection, press the $*$ key in step 4. In this case, the display shows the contents programmed for CO 01.
- When you change a port number by pressing NEXT or PREV, the outside line number is not changed.
Example \#03:CO02.......Pressing NEXT....\#04:CO02


## Features Guide References

Night Service
Outside Line Connection Assignment - Outgoing

## [619] Extension Call Forwarding - No Answer Time

## Description

Sets a Call Forwarding - No Answer Time for each extension.

## Selection

- Jack number:

KX-TD816 - 01 through 16 (-1/-2), *
KX-TD1232 - 01 through 64 (-1/-2), *
( $-1=$ first part, $-2=$ second part, $*=$ all jacks $)$

- Number of rings: 0 through 12


## Default

All jacks - 0

## Programming

1. Enter 619.

Display: 619 EXT FWD TIME
2. Press NEXT.

Display: Jack NO? $\rightarrow$
3. Enter a jack number.

To enter jack number 01, you can also press NEXT.
Display example: \#01-1: 0
4. Enter the number of rings.

```
Display example: #01-1: 6
```

5. Press STORE.
6. To program another jack, press NEXT or PREV, or SELECT and the desired jack number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- If the number of rings is not changed in this programming, the time assigned on program [202] Call Forwarding - No Answer Time will be used.
- As an extension timer on ISDN line or T1 line cannot be assigned on this programming, the time assigned on program [202] Call Forwarding - No Answer Time will be used.


## Features Guide References

Call Forwarding - No Answer

## [620] Lunch / Break Group Assignment

## Description

Assigns extensions for a lunch / break group.
A lunch / break group can be assigned to up to 8 extensions (PT / SLT).

## Selection

- Group number: 1 through 8
- Location number: 1 through 8
- Extension number: $\mathbf{2}$ to $\mathbf{4}$ digits


## Default

All groups - Blank

## Programming

1. Enter 620.

Display example: 620 LUN/BRK EXT
2. Press NEXT.

Display: Group NO? $\rightarrow$
3. Enter a group number.

To enter group number 01, you can also press NEXT.
Display example: \#1-1:
4. Enter the desired extension number.

To change the current entry, enter the new number.
Display example: \#1-1:101
5. Press STORE.
6. To program another location, press NEXT or PREV, or SELECT and the desired group number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- This programming is only meaningful in conjunction with program [457-458] DIL 1:1 Lunch / Break Group.
- ISDN extensions, OPX extensions, phantom extensions, floating numbers and voice mail extensions cannot be assigned to a lunch / break group.


## Features Guide References

Lunch / Break Service
Night Service

## [621] Cordless PITS Extension Port

## Description

Prevents the cordless PITS speakerphone functions from working in the following cases, if connected to extension ports such as KX-T7890;

1. BGM: start or end the BGM.
2. LCS: work on the private mode even if the hands-free mode is set.
3. A voice calling: using a voice calling.

Only Ring-calling can be used.
4. Paging: using the paging features.

## Selection

- Jack number:

KX-TD816 - 01 through 16, *
KX-TD1232 - 01 through 64, *
( $*=$ all jacks)

- Yes (prevent) / No (allow)


## Default

All jacks - all outside lines - No

## Programming

1. Enter a 621.
```
Display example: }621\mathrm{ CORDLESS EXT
```

2. Press NEXT.

Display: Jack NO? $\rightarrow$
3. Enter a jack number.

To enter jack number 01, you can also press NEXT.
Display example: \#O1:No
4. Keep pressing SELECT until the desired selection is displayed.

Display example: \#01:Yes
5. Press STORE.
6. To program another jack, press NEXT or PREV, or SELECT and the desired jack number.
7. Repeat steps 4 through 7.
8. Press END.

## Conditions

- If "Yes" is selected for a jack for wired PITS, the speakerphone functions written in the description do not work. Connect a cordless PITS if "Yes" is selected.


## Features Guide References

None

## [622] Extension CLIP Number Assignment

## Description

Assigns the identification number of the calling party to each extension in order to utilize the Calling Line Identification Presentation (CLIP) feature provided by the ISDN line service. This program is only available for the KX-TD1232 with the Primary Rate Interface ISDN Expansion Unit (KX-TD290).

## Selection

- Jack number:

KX-TD1232 - 01 through 64, * (-1/-2),
( $*=$ all jacks, $-1=$ first part, $-2=$ second part)

- CLIP number: 16 digits (max.)


## Default

All jacks-1/2 — Not stored

## Programming

1. Enter 622.
```
Display: 622 EXT CLIP NO
```

2. Press NEXT.

Display: Jack NO? $\rightarrow$
3. Enter a jack number.

To enter jack number 01, you can also press NEXT.
To select the second part ( -2 ), press NEXT after entering the jack number.
Display example: \#01-1:Not Stored
4. Enter the CLIP number.

To change the current entry, enter the new number.
5. Press STORE.
6. To program another jack, press NEXT or PREV, or SELECT and the desired jack number.
7. Repeat steps 4 through 6.
8. Press END.

## Conditions

- Each number has a maximum of 16 digits, consisting of $\mathbf{0}$ through 9 .
- For the KX-TD1232, jack numbers 01 through 32 are for the Master System and 33 through 64 are for the Slave, if available.
- To display parts of the number which have scrolled off the display or
- For an explanation of jack numbering, see "Rotation of jack number" in Section 1.3 Programming Methods.
- To assign all jacks to one extension group, press the $*$ key in step 3. In this case, the display shows the contents programmed for Jack 01.


## Features Guide References

Integrated Services Digital Network (ISDN) — Primary Rate Interface (PRI)

## [624] ISDN Extension CLIP Number Assignment

## Description

Assigns the identification number of the calling party to each ISDN extension in order to utilize the Calling Line Identification Presentation (CLIP) feature provided by the ISDN line service. This program is only available for the KX-TD1232 with the Primary Rate Interface ISDN Expansion Unit (KX-TD290).

## Selection

- Port number:

KX-TD1232-07 through 12, $*$ ( $*=$ all ports from 07 to 12 )

- CLIP number: 16 digits (max.)


## Default

All ports — Not stored

## Programming

1. Enter 624.

Display: 624 ISDN CLIP NO
2. Press NEXT.

Display: Port NO? $\rightarrow$
3. Enter a port number.

To enter port number 07, you can also press NEXT.
Display example: \#07:Not Stored
4. Enter a CLIP number.

To change the current entry, enter the new number.
5. Press STORE.
6. To program another port, press NEXT or PREV, or SELECT and the desired port number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- Each number has a maximum of 16 digits, consisting of $\mathbf{0}$ through 9 .
- Refer to program [423] for the list of the ISDN port numbers and their corresponding jack numbers.
- To display parts of the number which have scrolled off the display or
- To assign all ports to one selection, press the * key in step 3. In this case, the display shows the contents programmed for port 07 .


## Features Guide References

Integrated Services Digital Network (ISDN) — Primary Rate Interface (PRI)

### 2.8 T1 Programming

## [700] T1 Channel Assignment

## Description

Assigns a channel type to each T1 channel.
This program is available for the KX-TD1232 only.

## Selection

- T1 channel number: 01 through $\mathbf{2 4}, *$ ( $*=$ All T1 channels)
- Channel type: LCOT / GCOT / DID / TIE / OPX / Disable


## Default

All T1 channels - Disable

## Programming

1. Enter 700.
```
Display: 700 T1 CH ASSIGN
```

2. Press NEXT.
```
Display: CH NO? }
```

3. Enter a channel number.

To enter a channel number 01, you can also press NEXT.
Display example: CHO1:Disable
4. Keep pressing SELECT until the desired selection is displayed.
5. Press STORE.
6. To program another channel, press NEXT or PREV, or SELECT and the desired channel number.
7. Repeat steps 4 through 6.
8. Press END.

## Conditions

None

## Features Guide References

T1 Line

## [701] T1 Dial Mode

## Description

Assigns a signal type to each T1 channel.
This program is available for the KX-TD1232 only.

## Selection

- T1 channel number: 01 through 24, $*$ ( $*=$ All T1 channels)
- Signal type: Pulse-10 / Pulse-20 / DTMF-80 / DTMF-160


## Default

All T1 channels - DTMF-80

## Programming

1. Enter 701.

Display: 701 T1 DIAL MODE
2. Press NEXT.

Display: CH NO? $\rightarrow$
3. Enter a channel number.

To enter a channel number 01, you can also press NEXT.
Display example: CH01:DTMF-80
4. Keep pressing SELECT until the desired selection is displayed.
5. Press STORE.
6. To program another channel, press NEXT or PREV, or SELECT and the desired channel number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

Adjust to a setting of the connected telephone company.

## Features Guide References

T1 Line

## [702] T1 COT CPC (IN)

## Description

Sets a CPC signal detection time to each T1 channel, assigned COT, on receiving a call.
This program is available for the KX-TD1232 only.

## Selection

- T1 channel number:

01 through 24, * ( $*=$ All T1 channels)

- Time:

00 through 75 ( $\times 8$ milliseconds is the actual time)

## Default

All T1 channels - 50

## Programming

1. Enter 702.

$$
\text { Display: } 702 \text { COT CPC IN }
$$

2. Press NEXT.

Display: CH NO? $\rightarrow$
3. Enter a channel number.

To enter a channel number 01, you can also press NEXT.
Display example: CH01:50
4. Enter the time.

To assign no time, press CLEAR.
To change the current entry, press CLEAR and enter the new time.
Display example: CH01:70
5. Press STORE.
6. To program another channel, press NEXT or PREV, or SELECT and the desired channel number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

Adjust to a setting of the connected telephone company.

## Features Guide References

T1 Line

## [703] T1 DID CPC (IN)

## Description

Sets a CPC signal detection time to each T1 channel, assigned DID, on receiving a call. This program is available for the KX-TD1232 only.

## Selection

- T1 channel number:

01 through 24, * ( $*=$ All T1 channels)

- Time:

00 through 15 ( $\times 80$ milliseconds is the actual time)

## Default

All T1 channels - 02

## Programming

1. Enter 703.

Display: 703 DID CPC IN
2. Press NEXT.

Display: CH NO? $\rightarrow$
3. Enter a channel number.

To enter a channel number 01, you can also press NEXT.
Display example: CH01:02
4. Enter a time.

To assign no time, press CLEAR.
To change the current entry, press CLEAR and enter the new time.
Display example: CH01:10
5. Press STORE.
6. To program another channel, press NEXT or PREV, or SELECT and the desired channel number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

Adjust to a setting of the connected telephone company.

## Features Guide References

T1 Line

## [704] T1 COT CPC (OUT)

## Description

Sets a CPC signal detection time to each T1 channel, assigned COT, on making a call.
This program is available for the KX-TD1232 only.

## Selection

- T1 channel number:

01 through 24, * ( $*=$ All T1 channels)

- Time:

00 through 75 ( $\times 80$ milliseconds is the actual time)

## Default

All T1 channels - 00

## Programming

1. Enter 704.

Display: 704 COT CPC OUT
2. Press NEXT.

Display: CH NO? $\rightarrow$
3. Enter a channel number.

To enter a channel number 01, you can also press NEXT.
Display example: CH01:00
4. Enter a time.

To assign no time, press CLEAR.
To change the current entry, press CLEAR and enter the new time.
Display example: CH01:70
5. Press STORE.
6. To program another channel, press NEXT or PREV, or SELECT and the desired channel number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

Adjust to a setting of the connected telephone company.

## Features Guide References

T1 Line

## [705] T1 DID CPC (OUT)

## Description

Sets a CPC signal detection time to each T1 channel, assigned DID, on making a call. This program is available for the KX-TD1232 only.

## Selection

- T1 channel number:

01 through 24, * ( $*=$ All T1 channels)

- Time:

00 through 15 ( $\times 80$ milliseconds is the actual time)

## Default

All T1 channels - 02

## Programming

1. Enter 705.

Display: 705 DID CPC OUT
2. Press NEXT.

Display: CH NO? $\rightarrow$
3. Enter a channel number.

To enter a channel number 01, you can also press NEXT.
Display example: CHO1:02
4. Enter a time.

To assign no time, press CLEAR.
To change the current entry, press CLEAR and enter the new time.
Display example: CH01:10
5. Press STORE.
6. To program another channel, press NEXT or PREV, or SELECT and the desired channel number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

Adjust to a setting of the connected telephone company.

## Features Guide References

Direct Inward Dialing (DID)

T1 Line

## [706] T1 DID Receive Digits

## Description

Sets a maximum number of the received dial digits for each T1 channel assigned DID. This program is available for the KX-TD1232 only.

## Selection

- T1 channel number:

01 through 24, * ( $*=$ All T1 channels)

- Digits:

1 through 7

## Default

All T1 channels - 4

## Programming

1. Enter 706.

Display: 706 DID DIGITS
2. Press NEXT.

Display: CH NO? $\rightarrow$
3. Enter a channel number.

To enter a channel number 01, you can also press NEXT.
Display: CH01:4
4. Enter a digit.

To assign no time, press CLEAR.
To change the current entry, press CLEAR and enter the new time.
Display example: CH01:7
5. Press STORE.
6. To program another channel, press NEXT or PREV, or SELECT and the desired channel number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- A dial has over 8 digits cannot be received.
- Adjust to a setting of the connected telephone company.


## Features Guide References

Direct Inward Dialing (DID)
T1 Line

## [707] T1 Clock Mode

## Description

Assigns a clock mode for the T1 line.
This program is available for the KX-TD1232 only.

## Selection

- Internal / External


## Default

External

## Programming

1. Enter 707.

Display: 707 CLOCK MODE
2. Press NEXT.

Display: External
3. Keep pressing SELECT until the desired selection is displayed.

Display example: Internal
4. Press STORE.
5. Press END.

## Conditions

None

## Features Guide References

T1 Line

## [708] T1 Line Coding

## Description

Sets a line coding for the T1 line.
This program is available for the KX-TD1232 only.

## Selection

- B8ZS / AMI


## Default

B8ZS

## Programming

1. Enter 708.

Display: 708 LINE CODING
2. Press NEXT.

Display: B8ZS
3. Keep pressing SELECT until the desired selection is displayed.

Display example: AMI
4. Press STORE.
5. Press END.

## Conditions

Adjust to a setting of the connected telephone company.

## Features Guide References

T1 Line

## [709] T1 Frame Sequence

## Description

Sets a frame format for the T 1 line.
This program is available for the KX-TD1232 only.

## Selection

- ESF / D4


## Default

ESF

## Programming

1. Enter 709.

Display: 709 FRAME SEQ
2. Press NEXT.

Display: ESF
3. Keep pressing SELECT until the desired selection is displayed.

Display example: D4
4. Press STORE.
5. Press END.

## Conditions

Adjust to a setting of the connected telephone company.

## Features Guide References

T1 Line

## [710] T1 Frame Option

## Description

Assigns an ESF frame option for the T1 line. This is only available when the ESF is selected on the frame sequence.
This program is available for the KX-TD1232 only.

## Selection

- $\mathrm{C}=\mathrm{A}, \mathrm{D}=\mathrm{B} / \mathrm{C}=0, \mathrm{D}=0 / \mathrm{C}=1, \mathrm{D}=0 / \mathrm{C}=0, \mathrm{D}=1 / \mathrm{C}=1, \mathrm{D}=1$


## Default

$\mathrm{C}=\mathrm{A}, \mathrm{D}=\mathrm{B}$

## Programming

1. Enter $7 \mathbf{1 0}$.

Display: 710 FRAME OPTION
2. Press NEXT.

Display: C=A,D=B
3. Keep pressing SELECT until the desired selection is displayed.

Display example: C=0,D=0
4. Press STORE.
5. Press END.

## Conditions

Adjust to a setting of the connected telephone company.

## Features Guide References

T1 Line

## [711] T1 First Dial Timer (CO)

## Description

Sets a timer to prevent a first dial being sent too early on the T1 channels assigned COT. This program is available for the KX-TD1232 only.

## Selection

- Time:
$01-16(\times 0.5$ seconds is the actual time)


## Default

02

## Programming

1. Enter 711.

Display: 711 1ST DIAL CO
2. Press NEXT.

Display: 1st Timer1:02
3. Keep pressing SELECT until the desired selection is displayed.

Display example: 1st timer1:10
4. Press STORE.
5. Press END.

## Conditions

Adjust to a setting of the connected telephone company.
Features Guide References
T1 Line

## [712] T1 First Dial Timer (DID / TIE)

## Description

Sets a timer to prevent the first dial being sent too early on the T1 channels assigned DID and TIE.
This program is available for the KX-TD1232 only.

## Selection

- Time:

001 - 255 ( $\times 32$ milliseconds is the actual time)

## Default

002

## Programming

1. Enter 712.

Display: 712 1ST DIAL D/T
2. Press NEXT.

```
Display: 1st Timer2:002
```

3. Keep pressing SELECT until the desired selection is displayed.

Display example: 1st Timer2:010
4. Press STORE.
5. Press END.

## Conditions

Adjust to a setting of the connected telephone company.

## Features Guide References

Direct Inward Dialing (DID)
T1 Line
TIE Line Service

## [713] T1 \%Break

## Description

Sets a "\%Break" for the T1 line assigned Pulse.
This program is available for the KX-TD1232 only.

## Selection

- 60\% / 67\%


## Default

60\%

## Programming

1. Enter 713.

Display: 713 T1 \%BREAK
2. Press NEXT.

Display: T1 \%Break:60\%
3. Keep pressing SELECT until the desired selection is displayed.

Display example: T1 \%Break:67\%
4. Press STORE.
5. Press END.

## Conditions

Adjust to a setting of the connected telephone company.

## Features Guide References

T1 Line

## [714] T1 Dial Click Tone

## Description

Sets to send a dial click tone of the T1 line.
This program is available for the KX-TD1232 only.

## Selection

- Yes (to send) / No (not to send)


## Default

Yes

## Programming

1. Enter 714.

Display: 714 CLICK TONE
2. Press NEXT.

Display: T1 CLICK:Yes
3. Keep pressing SELECT until the desired selection is displayed.

Display example: T1 CLICK:No
4. Press STORE.
5. Press END.

## Conditions

None

## Features Guide References

T1 Line

## [715] T1 Inter Digit Pause

## Description

Sets a time of the inter digit pause for the T1 line.
This program is available for the KX-TD1232 only.

## Selection

- $630 \mathrm{msec} / 830 \mathrm{msec} / 1030 \mathrm{msec}$


## Default

830 msec

## Programming

1. Enter 715.

Display: 715 DIGIT PAUSE
2. Press NEXT.

Display: Pause:830msec
3. Keep pressing SELECT until the desired selection is displayed.

Display example: Pause:1030msec
4. Press STORE.
5. Press END.

## Conditions

Adjust to a setting of the connected telephone company.

## Features Guide References

T1 Line

## [716] T1 Flash Detection

## Description

Sets a flash detection time for the T1 line.
This program is available for the KX-TD1232 only.

## Selection

- Disable / 208-1016 msec / 80-1016 msec / 208-1544 msec / 80-1544 msec


## Default

Disable

## Programming

1. Enter 716.

Display: 716 FLASH TIME
2. Press NEXT.

Display: Flash:Disable
3. Keep pressing SELECT until the desired selection is displayed.

Display example: Flash:208-1544
4. Press STORE.
5. Press END.

## Conditions

Adjust to a setting of the connected telephone company.

## Features Guide References

T1 Line

## [717] T1 Answer Decision Timer

## Description

Sets an answering detection time for the T 1 line.
This program is available for the KX-TD1232 only.

## Selection

- Time:

001 through 255 ( $\times 32$ milliseconds is the actual time)

## Default

001

## Programming

1. Enter 717.

Display: 717 ANSWER TIME
2. Press NEXT.

Display: ANSWER TIME:001
3. Enter a number for an answering detection time.

To enter number 001, you can also press NEXT.
Display: ANSWER TIME:010
4. Press STORE.
5. Press END.

## Conditions

Adjust to a setting of the connected telephone company.

## Features Guide References

T1 Line

## [718] T1 Break Detection

## Description

Sets a break detection time for the T1 extension.
This program is available for the KX-TD1232 only.

## Selection

- Time:

16 - 96 ms / 16 - 136 ms

## Default

$16-96 \mathrm{~ms}$

## Programming

1. Enter 718.

Display: 718 BREAK LENGTH
2. Press NEXT.

Display: Break:16-96
3. Keep pressing SELECT until the desired selection is displayed.

Display example:Break:16-136
4. Press STORE.
5. Press END.

## Conditions

Adjust to a setting of the connected telephone company.

## Features Guide References

T1 Line

## [719] T1 Pulse Type

## Description

Sets a dialing pulse type for the T 1 line.
This program is available for the KX-TD1232 only.

## Selection

- TYPE-A / TYPE-B / TYPE-C


## Default

TYPE-A

## Programming

1. Enter 719.

Display: 719 PULSE TYPE
2. Press NEXT.

Display: TYPE-A
3. Keep pressing SELECT until the desired selection is displayed.

Display example: TYPE-B
4. Press STORE.
5. Press END.

## Conditions

Adjust to a setting of the connected telephone company.

## Features Guide References

T1 Line

## [720] T1 TIE Ringing Service

## Description

Sets a type to receive a call in the T1 channels assigned TIE/DID. If "DIL" is selected, DIL 1:1 or DIL 1:N will perform.
This program is available for the KX-TD1232 only.

## Selection

- Outside (CO) line number: $\mathbf{2 5}$ through 48, * ( $*=$ all outside lines from 25 to 48)
- Type: TIE / DIL (When you make the DID function perform, select "TIE".)


## Default

All outside lines - TIE mode

## Programming

1. Enter 720.

Display: 720 TIE RING
2. Press NEXT.

Display: CO Line NO? $\rightarrow$
3. Enter an outside line number.

To enter an outside line number 25 , you can also press NEXT.
Display example: CO Line NO? $\rightarrow 25$
4. Press NEXT.

Display example: CO25:TIE
5. Keep pressing SELECT until the desired selection is displayed.

Display example: CO25:DIL
6. Press STORE.
7. To program another outside line, press NEXT or PREV, or SELECT and the desired outside line number.
8. Repeat steps 4 through 6 .
9. Press END.

## Conditions

None

## Features Guide References

T1 Line

TIE Line Service

## [721] T1 / PRI Reference CO

## Description

Assigns a reference outside (CO) line number when T1 channel or PRI ISDN channel is used as an outside line.
This program is available for the KX-TD1232 only.

## Selection

- Outside (CO) line number:

25 through 48, * ( $*=$ all outside lines from 25 to 48)
(25-47: for PRI ISDN line / 25-48: for T1 line)

- Reference outside line number:

01 through 24

## Default

All outside lines - 09

## Programming

1. Enter 721.

Display: 721 REFERENCE CO
2. Press NEXT.

Display: CO Line NO? $\rightarrow$
3. Enter an outside line number.

To enter an outside line number 25 , you can also press NEXT.
Display example: CO25:09
4. Enter a reference outside line number.

To assign no time, press CLEAR.
To change the current entry, press CLEAR and enter the new time.
Display example: CO25:10
5. Press STORE.
6. To program another outside line, press NEXT or PREV, or SELECT and the desired outside line number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- Refer the data assigned in the programs as follows.
[407-408] DIL 1:1 Extension - Day / Night
[419] ISDN Outgoing CLIR Service Assignment
[420] ISDN Ring Service Assignment
[457-458] DIL 1:1 - Lunch / Break Group
[467-468] DIL 1:1 Extension - Lunch / Break
[603-604] DIL 1:N Extension and Delayed Ringing - Day / Night
[605-606] Outgoing Permitted Outside Line Assignment - Day / Night
[614-615] Outgoing Permitted Outside Line Assignment - Day / Night for ISDN
Extension
[728] T1 Extension Outgoing Permitted Outside Line Assignment - Day
[729] T1 Extension Outgoing Permitted Outside Line Assignment - Night
- Outside lines 25 through 48 become available for the T1 line when the KX-TD187 expansion unit is installed in the Master System of the KX-TD1232.
Outside lines 25 through 47 become available for the PRI ISDN line when the KX-TD290 expansion unit is installed in the Master System of the KX-TD1232.


## Features Guide References

Integrated Services Digital Network (ISDN) - Primary Rate Interface (PRI)
T1 Line

## [722] T1 Answer Wait Timer

## Description

Assigns an automatic disconnect timer to stop making a call on TIE / DID line, if the called party does not answer.
This program is available for the KX-TD1232 only.

## Selection

- Outside (CO) line number:

25 through 48, * ( $*=$ all outside lines from 25 to 48)

- 0 / 1 / 2 / 3 / 4 (minutes)


## Default

All outside lines - 1 min

## Programming

1. Enter 722.

$$
\text { Display: } 722 \text { ANSWER WAIT }
$$

2. Press NEXT.

Display: CO Line NO? $\rightarrow$
3. Enter an outside line number.

To enter an outside line number 25 , you can also press NEXT.
Display example: CO Line NO? $\rightarrow 25$
4. Press NEXT.

Display example: CO25:1min
5. Keep pressing SELECT until the desired selection is displayed.

Display example: CO25:3min
6. Press STORE.
7. To program another outside line, press NEXT or PREV, or SELECT and the desired outside line number.
8. Repeat steps 4 through 6 .
9. Press END.

## Conditions

Available for a channel assigned TIE / DID in program [700] T1 Channel Assignment

## Features Guide References

Direct Inward Dialing (DID)

## T1 Line

## TIE Line Service

## [723] T1 Sending TIE Caller ID

## Description

Sends a caller ID on the DTMF (Dual Tone Multi-Frequency) signaling on the T1 channels assigned TIE.
This program is available for the KX-TD1232 only.

## Selection

- Outside (CO) line number:

25 through 48, * ( $*=$ all outside lines from 25 to 48)

- Yes (to send) / No (not to send)


## Default

All outside lines - No

## Programming

1. Enter 723.

Display: 723 TIE CALL ID
2. Press NEXT.

Display: CO Line NO? $\rightarrow$
3. Enter an outside line number.

To enter an outside line number 25 , you can also press NEXT.
Display example: CO Line NO? $\rightarrow 25$
4. Press NEXT.

Display example: CO25:No
5. Keep pressing SELECT until the desired selection is displayed.

Display example: CO25:Yes
6. Press STORE.
7. To program another outside line, press NEXT or PREV, or SELECT and the desired outside line number.
8. Repeat steps 4 through 6 .
9. Press END.

## Conditions

Available for only a PBX supports a Caller ID on the DTMF.

## Features Guide References

T1 Line

TIE Line Service

## [725] T1 Extension Number

## Description

Assigns an extension number of the T1 channels set OPX.
This program is available for the KX-TD1232 only.

## Selection

- Port number: 01 through 24,
- Extension number: 2 or 4 digits


## Default

All ports — Not stored

## Programming

1. Enter 725.

Display: 725 T1 EXT NO.
2. Press NEXT.

Display: Port NO? $\rightarrow$
3. Enter a port number.

To enter a port number 01, you can also press NEXT.
Display example: 01:Not STORED
4. Enter an extension number.

To change the current entry, press CLEAR and enter the new time.
Display example: 01:180
5. Press STORE.
6. To program another outside line, press NEXT or PREV, or SELECT and the desired outside line number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

None

## Features Guide References

T1 Line

## [726] T1 Extension Name

## Description

Assigns names to the extension numbers of T1 channel set OPX, programmed in [725] T1 Extension Number.
This program is available for the KX-TD1232 only.

## Selection

- Port number:

01 through 24, * ( $*=$ all ports)

- Name:

10 characters (max.)

## Default

All ports - Not stored

## Programming

1. Enter 726.

Display: 726 T1 EXT NAME
2. Press NEXT.

Display: Port NO? $\rightarrow$
3. Enter a port number.

To enter a port number 01, you can also press NEXT.
Display example: 01:Not STORED
4. Enter a name.

For entering characters, see Section 4.1.3 "Entering Characters".
To delete the current entry, press CLEAR.
To change the current entry, press CLEAR and enter the new name.
5. Press STORE.
6. To program another outside line, press NEXT or PREV, or SELECT and the desired port number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

None

## Features Guide References

Display, Call Information<br>Intercom Calling<br>T1 Line

## [727] T1 Extension COS Number

## Description

Assigns a "Class of Service (COS)" to each extension of T1 channels. This program is available for the KX-TD1232 only.

## Selection

- Port number:

01 through 24, * ( $*=$ all ports)

- COS number:

1 through 8

## Default

All ports - COS 1

## Programming

1. Enter 727.

Display: 727 T1 EXT COS
2. Press NEXT.

Display: Port NO? $\rightarrow$
3. Enter a port number.

To enter a port number 01, you can also press NEXT.
Display example: 01:COS1
4. Enter a COS number.

To assign no time, press CLEAR.
To change the current entry, press CLEAR and enter the new time.
Display example: 01:COS7
5. Press STORE.
6. To program another outside line, press NEXT or PREV, or SELECT and the desired outside line number.
7. Repeat steps 3 through 5.
8. Press END.

## Conditions

None

## Features Guide References

Class of Service (COS)

T1 Line

## [728] T1 Extension Outgoing Permitted Outside Line Assignment Day

## Description

Determines the outside lines which can be accessed by an extension on the T 1 line in day mode. The extension user on the T1 line can make outgoing outside line calls using the assigned outside lines.
This program is available for the KX-TD1232 only.

## Selection

- Port number:

01 through 24, $*$ ( $*=$ all ports)

- Outside line number:

01 through 24, *
( $*=$ all outside lines)

- Enable (to allow) / Disable (not to allow)


## Default

All ports - Enable

## Programming

1. Enter 728.

Display: 728 T1 DAY OUT
2. Press NEXT.

Display: Port NO? $\rightarrow$
3. Enter a port number.

To enter a port number 01, you can also press NEXT.
Display example: 01:C001:Enable
4. Enter the desired outside line number, or keep pressing $\boldsymbol{\rightarrow} \boldsymbol{\sim}$ or until the desired outside line is displayed.

To change the current entry, enter the new number.
5. Keep pressing SELECT until the desired selection is displayed.

```
Display example: 01:CO01:Disable
```

6. Press STORE.
7. To program another outside line, press NEXT or PREV, or SELECT and the desired port line number.
8. Repeat steps 4 through 6 .
9. Press END.

## Conditions

None

## Features Guide References

Outside Line Connection Assignment - Outgoing
Night Service
T1 Line

## [729] T1 Extension Outgoing Permitted Outside Line Assignment Night

## Description

Determines the outside lines which can be accessed by an extension on the T 1 line in night mode. The extension user on the T1 line can make outgoing outside line calls using the assigned outside lines.
This program is available for the KX-TD1232 only.

## Selection

- Port number:

01 through 24, $*$ ( $*=$ all ports)

- Outside line number:

01 through 24, *
( $*=$ all outside lines)

- Enable (to allow) / Disable (not to allow)


## Default

All ports - Enable

## Programming

1. Enter 729.

Display: 729 T1 NIGHT OUT
2. Press NEXT.

Display: Port NO? $\rightarrow$
3. Enter a port number.

To enter a port number 01, you can also press NEXT.
Display example: 01:C001:Enable
4. Enter the desired outside line number, or keep pressing $\boldsymbol{\rightarrow} \boldsymbol{\sim}$ or until the desired outside line is displayed.

To change the current entry, enter the new number.
5. Keep pressing SELECT until the desired selection is displayed.

```
Display example: 01:CO01:Disable
```

6. Press STORE.
7. To program another port, press NEXT or PREV, or SELECT and the desired port line number.
8. Repeat steps 4 through 6 .
9. Press END.

## Conditions

None

## Features Guide References

Night Service
T1 Line

## [730] T1 Extension Voice Mail Access Codes

## Description

Assigns a mailbox number for each extension on the T1 line, "[990] System Additional Information, Area 02 - Bit 8 " is set to free.
This program is available for the KX-TD1232 only.

## Selection

- Port number:

01 through 24

- Access code:

16 digits (max.)

## Default

All ports — Not stored

## Programming

1. Enter 730.

Display: 730 OPX VM CODE
2. Press NEXT.

Display: Port NO? $\rightarrow$
3. Enter a port number.

To enter a port number 01, you can also press NEXT.
Display: 01:Not Stored
4. Enter a name.

For entering characters, see Section 4.1.3 "Entering Characters".
To delete the current entry, press CLEAR.
To change the current entry, press CLEAR and enter the new name
Display: 01:123456789
5. Press STORE.
6. To program another port, press NEXT or PREV, or SELECT and the desired port number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

- Each mailbox number has a maximum of 16 digits, consisting of $\mathbf{0}$ through $9, *$, \# and PAUSE.
- To display parts of the mailbox number which have scrolled off the display, press $\boldsymbol{\rightarrow}$ or 4


## Features Guide References

T1 Line
Voice Mail Integration

### 2.9 Resource Programming

## [800] SMDR Incoming / Outgoing Call Log Printout

## Description

Used to determine which calls will produce a Station Message Detail Recording (SMDR) printout.

## Selection

- Outgoing calls:

All (all calls) / Toll (toll calls only) / Off (no printing)

- Incoming calls:

On (all calls) / Off (no printing)

## Default

Outgoing calls - All; Incoming calls - On

## Programming

1. Enter 800.
```
Display: 800 SMDR IN/OUT
```

2. Press NEXT to program outgoing calls.

Display: Outgoing:All
3. Keep pressing SELECT until the desired selection is displayed.
4. Press STORE.
5. Press NEXT to program incoming calls.

Display: Incoming:On
6. Keep pressing SELECT until the desired selection is displayed.
7. Press STORE.
8. Press END.

## Conditions

- It is necessary to connect a printer to the Serial Interface (RS-232C) port provided on the system.
- After connecting a printer, do not press the RETURN key, if provided on the printer, within 10 seconds. Otherwise, the usage of the Serial Interface port is changed to system programming and printing will not occur.
- If "Toll" is selected, the system will print out all the calls starting from the numbers stored in programs [301-305] TRS Denied Code Entry for Levels 2 through 6.


## Features Guide References

## Station Message Detail Recording (SMDR)

## [801] SMDR Format

## Description

Used to match the SMDR output to the paper size being used in the printer. Page length determines the number of lines per page. Skip perforation determines the number of lines to be skipped at the end of every page.

## Selection

- Page length (lines): $\mathbf{4}$ through 99
- Skip perforation (lines): $\mathbf{0}$ through 95


## Default

Page length - 66; Skip perforation - 0

## Programming

1. Enter 801.
```
Display: 801 SMDR FORMAT
```

2. Press NEXT to program page length.

Display example: Page Length:66
3. Enter the page length.

To change the current entry, press CLEAR and enter the new page length.
4. Press STORE.
5. Press NEXT to program skip perforation.

Display example: Skip Perf: 0
6. Enter the skip perforation.

To change the current entry, press CLEAR and enter the new skip perforation.
7. Press STORE.
8. Press END.

## Conditions

- The page length should be four lines or more longer than the skip perforation length.
- A title is positioned on the first three lines on every page.
- The programmed format becomes valid only if the Serial Interface (RS-232C) cable is connected. If a printer is already connected, disconnect it and connect again. Otherwise the former format becomes valid.


## Features Guide References

Station Message Detail Recording (SMDR)

## [802] System Data Printout

## Description

```
Starts or stops printing the system data. All or a specific range of the current systemprogrammed data is printed out. The ranges are as follows:
Manager:
Manager Programming [000] through [017]
System:
System Programming [100] through [151]
Timers:
Timer Programming [200] through [220]
TRS / ARS:
TRS / ARS Programming [300] through [341]
Outside line:
CO Line Programming [400] through [468]
COS:
COS Programming [500] through [511]
Extension:
Extension Programming [600] through [624]
T1:
T1 Programming [700] through [730]
Resource:
Resource Programming [800] through [820]
Option:
Option Programming [990] through [991]
```


## Selection

- Printout range number:
* (All) / $\mathbf{0}$ (Manager) / $\mathbf{1}$ (System) / $\mathbf{2}$ (Timer) / $\mathbf{3}$ (TRS/ARS) / $\mathbf{4}$ (Outside line) / 5 (COS) / 6 (Extension) / 7 (T1) / 8 (Resource) / 9 (Option)
- Start / Stop


## Default

Not applicable.

## Programming

1. Enter 802.

Display: 802 SYSTEM DATA
2. Press NEXT.

Display: Enter Range? $\rightarrow$
3. Enter a printout range number or $*$ for "All".

Display: Print-Out:Start
4. Press STORE to start printing.

Printing starts.
To stop printing, press SELECT and go to step 4.
When printing is completed, the display shows:
Display: Print-Out:Finish
5. Press STORE.

```
Display: Print-Out:Stop
```

6. Press END.

## Conditions

- It is necessary to connect a printer to the Serial Interface (RS-232C) port provided on the system.
- You may stop printing by pressing the END button while records are being printed out.
- You cannot restart the printout while records are being output.


## Features Guide References

Station Message Detail Recording (SMDR)

## [803] Music Source Use

## Description

Assigns the music source to be used for Music on Hold and Background Music (BGM).

## Selection

## - Hold / BGM

- Music source number:

KX-TD816-1/ No Use
KX-TD1232 - $\mathbf{1}$ through 4 / No Use

## Default

Hold and BGM - Music 1

## Programming

1. Enter 803.
```
Display: 803 MUSIC SOURCE
```

2. Press NEXT to program Music on Hold.

Display example: Hold:Music1
3. Enter a music source number.

To select no music source, press CLEAR.
To change the current entry, enter the new music source number.
4. Press STORE.
5. Press NEXT to program BGM.

Display example: BGM :Musicl
6. Enter a music source number.

To select no music source, press CLEAR.
To change the current entry, enter the new music source number.
7. Press STORE.
8. Press END.

## Conditions

- The music source is a user-supplied item. For KX-TD816, one music source can be installed, for KX-TD1232, two music sources can be installed per system. Music sources 1 and 2 are connected to the Master System, 3 and 4 are to the Slave, if available. Any music source can be used by either system.
- To disable music, press CLEAR in steps 3 and 6.
- Program [804] External Pager BGM is used to enable / disable BGM for each external pager.


## Features Guide References

Background Music (BGM)
Background Music (BGM) - External
Music on Hold

## [804] External Pager BGM

## Description

Used to determine which external pagers will receive Background Music (BGM). BGM External is turned on and off by the operator or manager.

## Selection

- External pager number:

KX-TD816-1
KX-TD1232 - 1 through 4

- Disable (sends no BGM) / Enable (sends BGM)


## Default

All external pagers - Disable

## Programming

1. Enter 804.

Display: 804 EXTERNAL BGM
2. Press NEXT.

Display: Pager NO? $\rightarrow$
3. Enter an external pager number.

To enter pager number 1, you can also press NEXT.
Display example: Pager1:Disable
4. Keep pressing SELECT until the desired selection is displayed.
5. Press STORE.
6. To program another pager, press NEXT or PREV, or SELECT and the desired external pager number.
7. Repeat steps 4 through 6.
8. Press END.

## Conditions

- The external pager is a user-supplied item. One external pager can be installed for KXTD816, and two external pagers can be installed for KX-TD1232.
- In the case of KX-TD816, please skip steps 6 and 7.
- For the KX-TD1232, external pagers 1 and 2 are installed in the Master System, 3 and 4 in the Slave, if available.
- Program [006] Operator / Manager Extension Assignment is used to assign an extension as Operator 1.
- Program [803] Music Source Use is used to select the music source to be used for BGM.


## Features Guide References

Background Music (BGM) — External

## [805] External Pager Confirmation Tone

## Description

Used to remove the confirmation tone for external pagers. The default setting sends confirmation tone 2 to the external pagers before paging is broadcast. This programming applies to all the external pagers.

## Selection

On / Off

## Default

On

## Programming

1. Enter 805.
```
    Display: 805 EX PAGE TONE
```

2. Press NEXT.

Display example: Tone:On
3. Keep pressing SELECT until the desired selection is displayed.
4. Press STORE.
5. Press END.

## Conditions

The external pager is a user-supplied item. For KX-TD816, one external pager can be installed, for KX-TD1232, two external pagers can be installed per system. External pagers 1 and 2 are installed in the Master System, 3 and 4 in the Slave, if available.

## Features Guide References

Confirmation Tone
Paging - All
Paging - External

## [806-807] Serial Interface (RS-232C) Parameters

## Description

Assigns the communication parameters for the Serial Interface (RS-232C) interface for Port 1 (for KX-TD816 and Master System of KX-TD1232) or Port 2 (for Slave System of KXTD1232).
New line code:
Select the code for your printer or personal computer. If your printer or personal computer automatically feeds lines with a carriage return, select "CR". If not, select "CR+LF".
Baud rate:
A baud rate code indicates the data transmission speed from the system to the printer or personal computer.
Word length:
A word length code indicates how many bits compose a character.

## Parity:

A parity code indicates what type of parity is used to detect an error in the string of bits composing a character. Make an appropriate selection depending on the requirements of your printer or personal computer.

## Stop bit:

A stop bit code indicates the end of a bit string which composes a character. Select an appropriate value depending on the requirements of your printer or personal computer.

## Selection

- New line code: $\mathbf{C R + L F} / \mathbf{C R}$
(CR=Carriage Return, LF=Line Feed)
- Baud rate (baud): $\mathbf{1 5 0 / 3 0 0 / 6 0 0 / 1 2 0 0 / 2 4 0 0 / 4 8 0 0 / 9 6 0 0}$
- Word length (bits): 7 / 8
- Parity bit: None / Mark / Space / Even / Odd
- Stop bit length (bits): $\mathbf{1 / 2}$


## Default

New line code $=$ CR+LF; Baud rate $=9600$; Word length $=8$;
Parity bit $=$ Mark; Stop bit $=1-$ Port $1 /$ Port 2

## Programming

1. Enter a program address ( $\mathbf{8 0 6}$ for Port $\mathbf{1}$ or $\mathbf{8 0 7}$ for Port 2).

Display example: 806 RS232 PORT 1
2. Press NEXT to program new line code.

```
Display example: NL-Code:CR+LF
```

3. Keep pressing SELECT until the desired selection is displayed.
4. Press STORE.
5. Press NEXT to program baud rate.
```
Display example: Baud Rate:9600
```

6. Keep pressing SELECT until the desired selection is displayed.
7. Press STORE.
8. Press NEXT to program word length.
```
Display example: Word Lengt:8bits
```

9. Keep pressing SELECT until the desired selection is displayed.
10.Press STORE.
11.Press NEXT to program parity bit.
```
Display example: Parity:Mark
```

12.Keep pressing SELECT until the desired selection is displayed.
13.Press STORE.
14. Press NEXT to program stop bit.

Display example: Stop Bit:1bit
15. Keep pressing SELECT until the desired selection is displayed.
16.Press STORE.
17.Press END.

## Conditions

- The following combinations are invalid.

| Parity | Word Length | Stop Bit |
| :---: | :---: | :---: |
| Mark | 8 | 2 |
| Space | 8 | 1 |
| Space | 8 | 2 |

- The program address of the out-of-service system port is unacceptable.


## Features Guide References

Station Message Detail Recording (SMDR)

## [809] DISA Security Type

## Description

Assigns the security mode for outside calls attempted by the DISA (Direct Inward System Access) caller. There are three modes: Non Security, Trunk Security (outside line security), and All Security. Non Security mode allows the caller to access an outside line without dialing a DISA user code. Trunk Security mode requires the caller to enter a DISA User Code before making an outside call. All Security mode requires the caller to enter a DISA user code before making both an outside call and an intercom call.
This program is available for the KX-TD1232 only.

## Selection

Non (non security) / Trunk (trunk security) / All (all security)

## Default

Trunk (Outside Line) Security

## Programming

1. Enter 809.

Display: 809 DISA SECURE
2. Press NEXT.

Display example: Security:Trunk
3. Keep pressing SELECT until the desired selection is displayed.
4. Press STORE.
5. Press END.

## Conditions

Program [017] DISA User Codes is used to program DISA User Codes.

## Features Guide References

Direct Inward System Access (DISA)

## [810] DISA Tone Detection

## Description

Enables or disables Tone Detection for outside-to-outside line calls via the Direct Inward System Access (DISA) feature. Enabling tone detection allows the system to detect the end of the call.
This program is available for the KX-TD1232 only.

## Selection

Enable / Disable

## Default

Enable

## Programming

1. Enter 810.

$$
\text { Display: } 810 \text { DISA TONE }
$$

2. Press NEXT.

Display: Tone DTC:Enable
3. Keep pressing SELECT until the desired selection is displayed.
4. Press STORE.
5. Press END.

## Conditions

None

## Features Guide References

Direct Inward System Access (DISA)

## [812] DISA DTMF Repeat

## Description

Selects whether the system transmits DTMF (Dual Tone Multi-Frequency) signals directly to the central office (CO) or if the system repeats the DTMF signals to CO in order to adjust gain. This can be done for an outside-to-outside line call via the Direct Inward System Access (DISA) feature during dialing and / or during an established call.
This program is available for the KX-TD1232 only.

## Selection

- Dial (during dialing) / Call (during an established call)
- Mode: Repeat / Through


## Default

Dial and Call - Repeat

## Programming

1. Enter 812.

Display: 812 DISA DTMF
2. Press NEXT to program the mode during dialing.

To program the mode during an established call, press NEXT again.
Display example: Dial:Repeat
3. Keep pressing SELECT until the desired selection is displayed.
4. Press STORE.
5. Press NEXT to program the mode during an established call.

Display example: Call:Repeat
6. Keep pressing SELECT until the desired selection is displayed.
7. Press STORE.
8. Press END.

## Conditions

None

## Features Guide References

Direct Inward System Access (DISA)

## [813] Floating Number Assignment

## Description

Assigns the floating numbers for External Pagers, DISA (Direct Inward System Access)* ${ }^{*}$ messages, modem and extension groups. These numbers can be used the same way extension numbers are used for station access.

## Selection

- Floating station:

KX-TD816 - Pager 1 / E-Group 1 through 8 / MODEM
KX-TD1232 - Pager 1 through 4 / DISA1 / DISA2 / MODEM / E-Group 1 through 8

- Floating number:

2 to 4 digits

## Default

KX-TD816 -
Pager 1=196; E-Group 1=191; E-Group 2=192; E-Group 3=193; E-Group 4=194; E-Group 5=291; E-Group 6=292; E-Group 7=293; E-Group 8=294; MODEM=299
KX-TD1232 -
Pager 1=196; Pager 2=197; Pager 3=296; Pager 4=297; DISA 1=198; DISA 2=298;
MODEM=299; E-Group 1=191; E-Group 2=192; E-Group 3=193; E-Group 4=194; E-Group 5=291; E-Group 6=292; E-Group 7=293; E-Group 8=294

## Programming

1. Enter 813.
```
Display: 813 FLOATING #
```

2. Press NEXT to program Pager 1.

Display example: Pager1 :EXT196
To program another floating station, keep pressing NEXT or PREV until the desired floating station is displayed.
3. Enter a floating number.

To change the current entry, press CLEAR and enter the new floating number.
4. Press STORE.
5. To program another floating station, keep pressing NEXT or PREV until the desired floating station is displayed.
6. Repeat steps 3 through 5 .
7. Press END.

[^6]
## Conditions

- A floating number is composed of two to four numerical digits, $\mathbf{0}$ through 9.
- The first one or two digits of the floating numbers are subject to program [100] Flexible Numbering, (01) through (16) 1st through 16th hundred extension blocks.
- Floating numbers and extension numbers should be unique. Double entry and incompatible entry for these numbers are invalid. Valid entry example: 10 and 11, 10 and 110. Invalid entry example: 10 and 106, 210 and 21.
To avoid making an invalid entry, check the other extension numbers in programs [003] Extension Number Set, [012] ISDN Extension Number Set, [118] Voice Mail Extension Number Assignment and [124] Phantom Extension Number Assignment. The default of each extension number is as follows:
[003] Extension Number Set
KX-TD816 - 101 through 116, 201 through 216
KX-TD1232 - 101 through 164, 201 through 264
[012] ISDN Extension Number Set
Not assigned.
[118] VM Extension Number Assignment
KX-TD816 - 165 through 184
KX-TD1232 - 165 through 188
[124] Phantom Extension Number Assignment
Not assigned.
- You cannot leave an entry empty.


## Features Guide References

Floating Station

## [814] Modem Standard

## Description

Assigns the modem standard. There are two standards available - BELL and CCITT.

## Selection

BELL / CCITT

## Default

BELL

## Programming

1. Enter 814.

$$
\text { Display: } 814 \text { MODEM TYPE }
$$

2. Press NEXT.
```
Display example: MODEM:BELL
```

3. Keep pressing SELECT until the desired selection is displayed.
4. Press STORE.
5. Press END.

## Conditions

Select the standard used by your modem.

## Features Guide References

System Programming and Diagnosis with Personal Computer

## [815] DISA Built-in Auto Attendant

## Description

Assigns the DISA (Direct Inward System Access) built-in auto attendant number. The extension number and the floating number can be assigned as a one digit number and used as a DISA built-in auto attendant number.

## Selection

- DISA built-in auto attendant number: $\mathbf{0}$ through 9
- Extension number / Floating number: $\mathbf{2}$ through $\mathbf{4}$ digits


## Default

Disable

## Programming

1. Enter 815.

Display: 815 DISA AA
2. Press NEXT.

Display example: Dial NO? $\rightarrow$
3. Enter a DISA built-in auto attendant number.

To enter DISA AA number 0 , you can also press NEXT.
Display example: Dial 0:Disable
4. Enter an extension or floating number.

To change the current entry, press CLEAR and enter the new floating number.
Display example: Dial 0:EXT112
5. Press STORE.
6. To program another DISA AA number, press NEXT or PREV, or SELECT and the desired DISA AA number.
7. Repeat steps 3 through 6 .
8. Press END.

## Conditions

This system can store up to ten programmable DISA built-in auto attendant numbers.

## Features Guide References

Direct Inward System Access (DISA)

## [817] KX-TD197 / KX-TD198 Baud Rate Set

## Description

Assigns the KX-TD197 / KX-TD198 standard. There are two standards available - BELL and CCITT-V. 34 .

## Selection

BELL / V.34-9600 / V.34-14400 / V.34-19200 / V.34-28800 / V.34-33600

## Default

V.34-33600

## Programming

1. Enter 817.

$$
\begin{array}{r}
\text { Display: } 817 \text { TD197 TYPE (for KX-TD1232) } \\
817 \text { TD198 TYPE (for KX-TD816) }
\end{array}
$$

2. Press NEXT.
```
Display example: Mast.:V.34-33600
```

3. Keep pressing SELECT until the desired selection is displayed.
4. Press NEXT.
```
Display example: Slave:V.34-33600
```

5. Keep pressing SELECT until the desired selection is displayed.
6. Press STORE.
7. Press END.

## Conditions

- Select the standard used by your modem.
- This assignment is effective for both the Master and Slave systems.


## Features Guide References

System Programming and Diagnosis with Personal Computer

## [818] Doorphone Tone Frequency Selection

## Description

Assigns a ringer frequency to each doorphone. There are eight tone types.

## Selection

- Doorphone number:

KX-TD816 - 1 through 4, $*$ ( $*=$ all doorphones $)$
KX-TD1232 - $\mathbf{1}$ through 8, $*$ ( $*=$ all doorphones $)$

- Type1 / Type2 / Type3 / Type4 / Type5 / Type6 / Type7 / Type8


## Default

All doorphones - Type2

## Programming

1. Enter 818.

Display: 818 R-TONE
2. Press NEXT.

Display: Door NO? $\rightarrow$
3. Enter a doorphone number.

To enter doorphone number 1, you can also press NEXT.
Display example: DP1 :Type2
4. Keep pressing SELECT until the desired selection is displayed.
5. Press STORE.
6. To program another doorphone, press NEXT or PREV, or SELECT and the desired doorphone number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

None

## Features Guide References

Doorphone Call

## [820] Doorphone Ringing Time

## Description

Selects the doorphone ringing time.

## Selection

- Doorphone number:

KX-TD816 - 1 through 4, $*$ ( $*=$ all doorphones $)$
KX-TD1232 $-\mathbf{1}$ through 8, $*$ ( $*=$ all doorphones $)$

- 15sec / 30sec (seconds)


## Default

All doorphones - 30sec

## Programming

1. Enter 820.

$$
\text { Display: } 820 \text { R-TIME }
$$

2. Press NEXT.
```
Display: Door NO? }
```

3. Enter a doorphone number.

To enter doorphone number 1, you can also press NEXT.
Display example: DP1 :30sec
4. Keep pressing SELECT until the desired selection is displayed.
5. Press STORE.
6. To program another doorphone, press NEXT or PREV, or SELECT and the desired doorphone number.
7. Repeat steps 4 through 6 .
8. Press END.

## Conditions

None

## Features Guide References

Doorphone Call

### 2.10 Optional Programming

## [990] System Additional Information

## Description

Allows the following programming items to be changed, if required. Each bit in each Area represents a programming item.

Chart for the Areas and Bits

|  |  | Bit Number |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 16 |  |  | 13 | 12 | 11 | 10 | 9 | 8 |  |  |  |  | 4 |  |  |  |
| Display Example | Area 01 | O | O | 1 | O | 1 | O | O | O | 1 | 1 | O | O | O | O | O | O | 1 |
|  | Area 02 | 1 | 1 | 1 | O | O | 1 | 1 | O | 0 | O | 1 | O | 0 | 1 | 1 | 0 | O |
|  | Area 03 | O | 0 | O | O | 0 | O | O | O | 0 | O | O | O | 0 | O | O | 0 | O |
|  | Area 04 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | O | O | O | O | O | O | O | O | O |
|  | Area 05 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|  | Area 06 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  | 1 | 1 | 1 | 1 | 1 |
|  | Area 07 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  | 11 | 1 | 1 | 1 | 1 |
|  | Area 08 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  | 11 | 1 | 1 | 1 | 1 |
|  | Area 09 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  | 11 | 1 | 1 | 1 | 1 |
|  | Area 10 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  | 11 | 1 | 1 | 1 | 1 |

## Explanation

| Area | Bit | Description | Selection | Default | References |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 01 | 1 | Sound source during transfer. | 0 : ringback tone <br> 1 : Music on Hold | 1 | - CALL <br> TRANSFER <br> FEATURES <br> - Music on Hold |
|  | 2 | Result of pressing the hookswitch lightly and then replacing the handset (during a CO line call (single line telephones only)). | 0 : Consultation Hold <br> 1 : disconnection | 0 | Consultation <br> Hold |
|  | 3 | Result of pressing the FLASH or FLASH / RCL button on proprietary telephones (during an outside call). However, External Feature Access is not available with ISDN. | 0 : disconnection signal <br> 1 : External Feature Access | 0 | - External Feature Access <br> - Flash |
|  | 4-7 | Unused |  |  |  |
|  | 8 | Enables or disables the dial tone between obtaining a CO line and dialing the phone number when using the onetouch dial, redial or speed dial function. | 0 : disable <br> 1 : enable | 1 | None |
|  | 9 | Result of pressing the hookswitch lightly (single line telephones only). | 0 : Consultation Hold <br> 1 : disconnection | 0 | Consultation <br> Hold |
|  | 10 | Sets the duration of the DTMF signals sent to the Voice Processing System (VPS) ports. | $\left\lvert\, \begin{aligned} & \mathbf{0}: 80 \mathrm{~ms} \\ & \mathbf{1}: 160 \mathrm{~ms} \end{aligned}\right.$ | 0 | Voice Mail Integration |
|  | 12,11 | Sets the time the system waits before sending DTMF signals (such as a mailbox number) to the VPS after the VPS answers a call. | $\begin{aligned} & \mathbf{0 0}: 0.5 \mathrm{~s} \\ & \mathbf{0 1}: 1.0 \mathrm{~s} \\ & \mathbf{1 0}: 1.5 \mathrm{~s} \\ & \mathbf{1 1}: 2.0 \mathrm{~s} \end{aligned}$ | 10 | Voice Mail Integration |
|  | 14,13 | Sets the time the system waits before sending DTMF signals (programmed in [113]) to the VPS after the VPS calls an extension. | $\begin{aligned} & \hline \mathbf{0 0}: 0.5 \mathrm{~s} \\ & \mathbf{0 1}: 1.0 \mathrm{~s} \\ & \mathbf{1 0}: 1.5 \mathrm{~s} \\ & \mathbf{1 1}: 2.0 \mathrm{~s} \end{aligned}$ | 10 | Voice Mail <br> Integration |
|  | 15 | Assigns whether the system or the VPS turns off the message Waiting lamp when the user hears a message recorded in a mailbox. | 0 : system <br> 1 : VPS | 0 | - Message Waiting <br> - Voice Mail Integration |
|  | 16 | Unused |  |  |  |

Explanation

| Area | Bit | Description | Selection | Default | References |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 02 | 1 | If an outside party is transferred and unanswered, assigns whether Transfer Recall occurs at the originating transfer extension or at the Operator 1. | 0 : initiating extension <br> 1 : Operator 1 | 0 | Call Transfer, Unscreened - to Extension |
|  | 2 | If Limited CAll Duration is enabled in program [502] Extension-to-Outside Line Call Duration Limit, assigns if Limited Call Duration is done for both outgoing and incoming calls or for outgoing calls only. | 0 : both calls <br> 1 : outgoing calls only | 0 | Limited Call <br> Duration |
|  | 3 | Allows you to remove confirmation tone 4. By default, a beep tone sounds when a three-party conference is started / ended. | 0 : disable <br> 1 : enable | 1 | Confirmation Tone |
|  | 4 | Determines if the dialed "*" and "\#" will be checked by Toll Restriction. This assignment is required for certain central offices (CO) to prevent toll fraud. Some COs ignore the user-dialed "*" and "\#". If your CO is such a type, select "0" (no check). | 0 : no check <br> 1 : check | 1 | Toll Restriction |
|  | 5 | Unused |  |  |  |
|  | 6 | Allows you to remove Confirmation Tone 3. This tone is sent when a conversation is established just after dialing the feature number for accessing the following : Call Pickup, Paging, Paging Answer, Trunk (Outside Line) Answer From Any Station (TAFAS), Hold Retrieve and Call Park Retrieve. | 0 : disable <br> 1 : enable | 0 | Confirmation Tone |

## Explanation

| Area | Bit | Description | Selection | Default | References |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 02 | 7 | An outside line set to pulse or call blocking mode in program [402] Dial Mode Selection can have two settings. This assigns the pulse break ratio during dial pulsing. Select an an appropriate ratio depending on the standard in your country. | $\begin{aligned} & \mathbf{0}: 60 \% \\ & \mathbf{1}: 67 \% \end{aligned}$ | 0 | Dial Type Selection |
|  | 8 | Assigns if an extension's mailbox number is substituted by the extension number or it is programmable (free). If a call is forwarded or rerouted to the Voice Processing System (VPS), this system automatically transmits the mailbox number to the VPS to specify the user's mailbox. To make it programmable, select " 1 (free)," then assign the number in program [609] Voice Mail Access Codes. | 0 : extension number <br> 1 : free | 0 | Voice Mail Integration |
|  | 9 | Determines the initial display of a digital display proprietary telephone (KX-T7431/KX-T7433/KX-T436/KXT7235) in Station Speed Dialing. | 0 : names <br> 1 : numbers | 0 | Special Display Features - Station Speed Dialing |
|  | 10 | Determines the source of Music Source <br> 1 for Music on Hold and BGM. | 0 : internal music source <br> 1 : external music source | 1 | - Background Music (BGM) <br> - Background Music (BGM) - External <br> - Music on Hold |
|  | 11-12 | Selects inter-digit pause for pulse dialing. | $\begin{aligned} & \mathbf{0 0}: 630 \mathrm{~ms} \\ & \mathbf{0 1}: 830 \mathrm{~ms} \\ & \mathbf{1 0}: 1030 \mathrm{~ms} \end{aligned}$ | 01 | None |
|  | 13 | Selects the intercom dial tone frequency. | 0 : normal <br> 1 : distinctive | 0 | None |
|  | 14 | Selects the extension-hooking signal detection time. | 0: 84-1000 ms <br> 1: 200-1000 ms | 1 | None |
|  | 16, 15 | Unused |  |  |  |

## Explanation

| Area | Bit | Description | Selection | Default | References |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 03 | 1-16 | This bit is provided to assign PAD | 0 : 0 dB | 0 | None |
| 04 | 1-8 | Switch Control (volume control of received calls on an outside line). This can be assigned per outside line. The outside line numbers [1] through [8] correspond to outside lines 1 through 8 for KX-TD816, and outside line numbers [1] through [24] correspond to outside line numbers [1] through [24] correspond to outside lines 1 through 24 for KX-TD1232. | 1: -3 dB |  |  |
|  | 9 | Prevents or allows a call originated by an Automated Attendant (AA) port of Voice Processing System (VPS) to another AA port. | 0 : prevent <br> 1 : allow | 1 | Voice Mail Integration |
|  | 10 | Prevents or allows sending pulse dialing signals during an outside call. | 0 : prevent <br> 1 : allow | 1 | None |
|  | 12, 11 | Unused |  |  |  |
|  | 13 | Enables or disables a pulse feedback sound when a dialed number is sent to an outside line. | 0 : disable <br> 1 : enable | 1 | None |
|  | 14-16 | Unused |  |  |  |

Explanation

| Area | Bit | Description | Selection | Default | References |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 05 | 1 | Enables or disables the automatic time adjustment by Caller ID information once a day by the first call received after 3:00AM. | 0 : enable <br> 1 : disable | 1 | Caller ID |
|  | 2 | An outside-to-outside DISA call can be prolonged many times. This bit specifies how many times is possible. | 0 : 10 times <br> 1 : no limitation | 1 | Direct Inward System Access (DISA) |
|  | 3 | Enables or disables retry by dialing " $*$ " during DISA outside call. | 0 : disable <br> 1 : enable | 1 | DISA |
|  | 4 | Unused |  |  |  |
|  | 5 | Sets the time the system waits for IRNA after the OGM. | 0 : immediately <br> 1 : after 5 seconds | 1 | Outgoing Message (OGM) |
|  | 6 | Selects the result when an outside call is routed by Call Forwarding to a voice mail port which is in Automated Attendant (AA) service mode. [For both Inband and Digital Proprietary Telephone (DPT) Integration] disable: AA service mode enable: The mode will change to the Voice Mail (VM) service mode and a Follow-On ID is sent. When the voice mail port is in VM service mode, this program is not affected. | 0 : disable <br> 1 : enable | 1 | Voice Mail Integration |
|  | 7 | Selects the result when an outside call is routed to a voice mail port by IRNA. <br> [For both Inband and DPT Integration] <br> When the voice mail port is in VM service mode: <br> enable: VM service mode <br> disable: The mode will change to the <br> AA service mode. [Only when <br> Inband] <br> When the voice mail port is in AA service mode: <br> enable: The mode will change to the VM service mode and a Follow- <br> On ID is sent. <br> disable: AA service mode | 0 : enable <br> 1 : disable | 1 | Voice Mail Integration |

Explanation

| Area | Bit | Description | Selection | Default | References |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 05 | 8 | Unused |  |  |  |
|  | 9 | Enables or disables dial tone 2 when an extension sets programmable extension features such as Call Waiting. | 0 : disable <br> 1 : enable | 1 | None |
|  | 10 | Determines the result when pressing the FLASH or FLASH / RCL button during an outside call (When Area 01 - Bit $3=0$ ). <br> Flash: Disconnects and accesses the same outside line. <br> Terminate: Terminates the outside line and accesses the intercom. It is convenient to route the outside call according to Automatic Route Selection (ARS) if ARS is active. | 0 : Terminate <br> 1 : Flash | 1 | Flash |
|  | 11 | Selects the message waiting ring type: 3 quick rings or 2 normal rings, for single line telephones. | $\begin{gathered} \mathbf{0}: 3 \text { times by } \\ 40 \mathrm{~ms} \\ \mathbf{1}: 2 \text { times by } \\ 280 \mathrm{~ms} \end{gathered}$ | 1 | Message Waiting |
|  | 12 | Selects the SMDR format for an incoming call with Caller ID. The caller's number only or caller's number only or caller's number and name is selected. | $\begin{aligned} & 0: \\ & \text { caller no. } \\ & \text { calleming }>+ \\ & 1:<\text { I }>+ \text { caller no. } \\ &+ \text { name } \end{aligned}$ | 1 | Station Message Detail Recording (SMDR) |
|  | 13 | Enables or disables the SMDR printout for RC (when an incoming call occurs) and AN (when an incoming call is answered). | 0 : enable <br> 1 : disable | 1 | None |
|  | 14 | Selects the result when a call from DISA (Direct Inward System Access) is invalid. | 0 : IRNA <br> 1 : reorder tone is sent | 1 | None |
|  | 15 | Selects the result of pressing " 0 " (default); calls operators 1 and 2 at the same time or Operator 1 first and then Operator 2 if Operator 1 is busy. | 0 : Operators 1 and 2 simultaneously <br> 1 : Operator 1 first and then Operator 2 | 1 | Operator Call |
|  | 16 | Enables or disables the SMDR printout when the Timed Reminder starts and the alarm is not answered. | 0 : enable <br> 1 : disable | 1 | Timed Reminder |

Explanation

| Area | Bit | Description | Selection | Default | References |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 06 | 1 | Determines whether the account code is printed out or not (shown in dot) in the SMDR. | 0: not printed out <br> 1: printed out | 1 | Account Code Entry |
|  | 3, 2 | Reserved |  |  |  |
|  | 4 | Enables or disables sending outside (CO) line access code " 9 " to a TIE line. When you dial outside line access code " 9 " and the outside line is busy, the system can automatically send outside line access code "9" to a TIE line so that you can access the outside line through another PBX. | 0 : enable <br> 1 : disable | 1 |  |
|  | 5 | Determines whether to printout the last entered or the first entered account code in the SMDR. | 0 : first entered code <br> 1 : last entered code | 1 | Account Code Entry |
|  | 6 | When an incoming call is received in a Hunting group (Ring, UCD, Circular, Terminate), this program determines whether the extension where the Do Not Disturb feature is set receives the call or not. | 0 : receive <br> 1 : not receive | 1 | None |
|  | 7 | When an incoming call is received in a Hunting group (Ring, UCD, Circular, Terminate), this program determines whether the extension where the Call Forwarding feature is set receives the call or not. | 0 : receive <br> 1 : not receive | 1 | None |
|  | 8 | Enables or disables Circular and Terminate Hunting. | 0 : disable <br> 1 : enable | 1 | Station Hunting |
|  | 13-9 | Unused |  |  |  |
|  | 14 | Allows or prevents dialing " 0 " when the MDN number is " 0 ". | 0 : allow <br> 1 : prevent | 1 | None |
|  | 16, 15 | Unused |  |  |  |

Explanation

| Area | Bit | Description | Selection | Default | References |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 07 | 1 | Enables or disables the DTMF signal to the ISDN line. | 0 : enable <br> 1 : disable | 1 | Direct Inward System Access (DISA) |
|  | 2-4 | Unused |  |  |  |
|  | 5 | Enables or disables the hooking signal when the reverse signal does not return. | 0 : disable <br> 1 : enable | 1 | None |
|  | 6 | Reserved |  |  |  |
|  | 7 | Allows a beep in Music on Hold. | 0 : beep <br> 1 : usual music source | 1 | Music on Hold |
|  | 9, 8 | Determines how the call is treated when a call from DISA arrives at a Do Not Disturb (DND) extension or busy extension which has disabled Call Waiting. | 01 : IRNA <br> (Intercept <br> Routing - No <br> Answer) <br> 10 / 11 : receive at the CO button (only flashes) <br> 00 : busy tone is sent | 11 | Direct Inward System Access (DISA) |
|  | 11, 10 | Determines how the call is treated when a call from DID arrives at a Do Not Disturb (DND) extension or busy extension which has disabled Call Waiting. If "IRNA" whose destination is DISA is selected, a reorder tone is sent. | $\left\lvert\, \begin{array}{c\|} \mathbf{0 1}: \text { IRNA } \\ \mathbf{1 0} / \mathbf{1 1} \text { : receive at } \\ \text { the CO button } \\ \quad \text { (only flashes) } \\ \mathbf{0 0}: \begin{array}{l} \text { busy tone is } \\ \text { sent } \end{array} \end{array}\right.$ | 11 | Direct Inward Dialing (DID) |
|  | 13, 12 | Determines how the call is treated when a call from ISDN line arrives at a Do Not Disturb (DND) extension or busy extension which has disabled Call Waiting. | $\left\lvert\, \begin{gathered} \mathbf{0 1}: \text { IRNA } \\ \mathbf{1 0} / \mathbf{1 1}: \text { receive at } \\ \text { the CO button } \\ \text { (only flashes) } \\ \mathbf{0 0}: \text { busy tone is } \\ \text { sent } \end{gathered}\right.$ | 11 | Integrated Services Digital Network (ISDN) |
|  | 15, 14 | Determines how the call is treated when a call from TIE line arrives at a Do Not Disturb (DND) extension or busy extension which has disabled Call Waiting. If "IRNA" whose destination is DISA is selected, a reorder tone is sent. | 01 : IRNA <br> 10 / 11 : receive at the CO button (only flashes) <br> 00 : busy tone is sent | 11 | TIE Line Service |
|  | 16 | Enables or disables the SMDR printout for DID subscriber number. A DID subscriber number replaces a Caller ID number. | 0 : enable <br> 1 : disable | 1 | Station message Detail Recording (SMDR) |

Explanation

| Area | Bit | Description | Selection | Default | References |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 08 | 1 | Sends a dial tone to another system when a channel assigned on TIE is captured. | $\begin{aligned} & \mathbf{0}: \text { send } \\ & \mathbf{1}: \text { not send } \end{aligned}$ | 1 | TIE Line Service |
|  | 2 | Unused |  |  |  |
|  | 3 | Sends a dial tone to extensions when a TIE line access code is dialed. | $\begin{aligned} & \mathbf{0}: \text { send } \\ & \mathbf{1}: \text { not send } \end{aligned}$ | 1 | TIE Line Service |
|  | 4-16 | Unused |  |  |  |
| 09 | 2, 1 | Unused |  |  |  |
|  | 4,3 | Assigns the display of FWD/DND on LED. <br> Resets the system to function this assignment. | 11 : Red Flashing Red On <br> 10 : Red On / Red On <br> 01 : Red On / Red Flashing <br> 00 : Red Flashing Red Flashing | 11 | - Call Forwarding <br> - Do Not Disturb (DND) |
|  | 5-8 | Unused |  |  |  |
|  | 9 | Allows the calling party's number and name to remain on the display of the call. | 0 : remains the current display <br> 1 : Call duration | 1 | Caller ID |
|  | 11, 10 | Unused |  |  |  |
|  | 12 | Permits or disallows the last extension in a group to log-out. | 0 : permit <br> 1 : disallow | 1 | Log-in / Log-out |
|  | 13-16 | Unused |  |  |  |

## Explanation

| Area | Bit | Description | Selection | Default | References |
| :---: | :---: | :--- | :--- | :--- | :--- |
| 10 | $1-8$ | Sends a dial tone to the extension when <br> a CO button or the line access <br> (Automatic or Outside Line Group) <br> code is pressed. This programming <br> allows each outside line group (TRG) to <br> work as follows. <br> Bit 1-TRG 1, Bit 2-TRG 2, Bit 3-TRG 3, <br> Bit 4-TRG 4, Bit 5-TRG 5, Bit 6-TRG 6, <br> Bit 7-TRG 7, Bit 8-TRG 8 | $\mathbf{1}:$ not send | 1 | T1 Line |
| 10,9 | Unused | ( |  |  |  |

## Selection

- Area code: 01 through 10
- Selection: See "Selection" shown in the lists for each area.


## Default

See "Default" shown in the lists.

## Programming

1. Enter 990.

Display: 990 SYS ADD DATA
2. Press NEXT.

```
Display: Area NO? }
```

3. Enter an area code.

## Display example: 0010100011111001

4. Keep pressing $\leftarrow$ or $\rightarrow$ to move the cursor to the desired bit.
5. Enter your selection.

To change the current entry, press STORE and the new selection.
6. To program another bit, repeat steps 4 and 5 .
7. Press STORE.
8. To program another area, press SELECT and the desired area code.
9. Repeat steps 4 through 8 .
10.Press END.

## Conditions

None

## Features Guide References

None

## [991] COS Additional Information

## Description

Adds the following programming items on a Class of Service (COS) basis, if required.
Bits 1-8: COS Additional Information
Bits 9-16: System Additional Information

COS 1-8 There are 8 bits available in Bit 1-8 as follows:


Explanation for Bits 1 through 8

| Bit | Description | Selection | Default | Features Guide References |
| :---: | :---: | :---: | :---: | :---: |
| 1-4 | Sets the number of digits allowed to dial out during an analog outside call on a Class of Service (COS) basis. If an outside party hangs up and the extension user tries to dial out still on the outside line, the system will disconnect the line at the time the assigned number of digits are dialed. This program can be added if the Calling Party Control (CPC) Signal Detection is not provided by the outside line. | 0000 : no limit 0001 : 1 digit 0010 : 2 digits 0011 : 3 digits 0100 : 4 digits 0101: 5 digits 0110 : 6 digits 0111: 7 digits 1000:8 digits 1001 : 9 digits 1010 : 10 digits 1011: 11 digits 1100: 12 digits 1101: 13 digits 1110 : 14 digits 1111: 15 digits | 0000 | Class of Service (COS) |
| 5 | Enables or disables the Call Forwarding - Follow Me feature on a COS basis. | $\begin{aligned} & \mathbf{0} \text { : disable } \\ & \mathbf{1} \text { : enable } \end{aligned}$ | 1 | Call Forwarding |
| 6-8 | Unused |  |  |  |

## System Additional Information 2

COS 3-6 There are 8 bits available in System Additional Information Area as follows:


Explanation for COS 3

| Bit | Description | Selection | Default | Features Guide References |
| :---: | :---: | :---: | :---: | :---: |
| 10, 9 | When an incoming call reaches an extension in the Station Hunting type (UCD and Ring Group) directly, this program determines the time that the call activates the UCD (Ring Group) Time Table or not to activate at all. | 00 : after 5 s <br> 01 : after 10 s <br> 10 : after 15 s <br> 11 : not activate | 11 | - Ring Group <br> - Uniform Call Distribution (UCD) |
| 11 | Selects to send a caller Music on Hold/ringback tone or keep an outgoing message when an idle extension in the Station Hunting type (UCD/Ring Group) receives a queuing call. And either Music on Hold or ringback tone can be selected by program [990] Area 01Bit 1. | 0 : keep outgoing message <br> 1 : Music on Hold/ ringback tone | 1 | - Ring Group <br> - Uniform Call Distribution (UCD) |
| 12 | Determines where "RT" of the sequence returns in the UCD (Ring Group) Time Table 1. | $\begin{aligned} & \mathbf{0}: \text { second } \\ & \mathbf{1}: \text { top } \end{aligned}$ | 1 | - Ring Group <br> - Uniform Call Distribution (UCD) |
| 13 | Determines where "RT" of the sequence returns in the UCD (Ring Group) Time Table 2. | $\begin{aligned} & \hline \mathbf{0}: \text { second } \\ & \mathbf{1}: \text { top } \end{aligned}$ | 1 | - Ring Group <br> - Uniform Call Distribution (UCD) |
| 14 | Determines where "RT" of the sequence returns in the UCD (Ring Group) Time Table 3. | $\begin{aligned} & \mathbf{0}: \text { second } \\ & \mathbf{1}: \text { top } \end{aligned}$ | 1 | - Ring Group <br> - Uniform Call Distribution (UCD) |

Explanation for COS 3

| Bit | Description | Selection | Default | Features Guide <br> References |
| :---: | :--- | :--- | :---: | :---: |
| 15 | Determines where "RT" of the <br> sequence returns in the UCD (Ring <br> Group) Time Table 4. | $\mathbf{0}$ : second <br> $\mathbf{1}:$ top | 1 | - Ring Group <br> • |
| 16 | Uniform Call |  |  |  |
| Distribution |  |  |  |  |
| (UCD) |  |  |  |  |$|$

## Explanation for COS 4

| Bit | Description | Selection | Default | Features Guide <br> References |
| :---: | :--- | :--- | :---: | :--- |
| 9 | Selects extensions that can monitor <br> the information of incoming <br> outside calls to the Station Hunting <br> (UCD/Ring Group). These <br> extensions should be connected to <br> the Master system. [KX-T7436 and <br> KX-T7235 only] <br> specific : extensions assigned COS <br> 1 : none | 1 | Call Monitoring <br> in Station <br> Hunting |  |
| none : no extension |  | 1 | Call Monitoring <br> in Station <br> Hunting |  |
| 10 | Clears "Total Call" in all Station <br> Hunting (UCD/Ring Group) at the <br> monitoring display or not, when the <br> night mode is switched to the day <br> mode. | $\mathbf{0}$ : clear <br> $\mathbf{1}$ do not clear |  |  |
| $11-$ | Unused <br> 16 |  |  |  |

## Explanation for COS 5

| Bit | Description | Selection | Default | Features Guide <br> References |
| :---: | :--- | :---: | :---: | :--- |
| 9 | Unused |  |  |  |
| 10 | Determines which ringback tone to <br> send a caller when an incoming <br> outside call from an ISDN line <br> arrives. | $\mathbf{0}$ : ringback tone 2 <br> $\mathbf{1}$ : ringback tone 1 | 1 | Integrated <br> Service Digital <br> Network(ISDN) <br> - Primary Rate <br> Interface (PRI) |
| 11 | Unused |  |  |  |

## Explanation for COS 5

| Bit | Description | Selection | Default | Features Guide References |
| :---: | :---: | :---: | :---: | :---: |
| 12 | Determines the destination when an incoming call arrives at Voice Mail, if all VM ports are busy. <br> Wait: <br> The call waits until a VM port becomes free. <br> IRNA destination: <br> The call is forwarded to the IRNA destination immediately. | 0 : Wait <br> 1 : IRNA destination | 1 | Voice Mail Integration |
| $\begin{aligned} & 14, \\ & 13 \end{aligned}$ | [Microsoft ${ }^{\circledR}{ }^{\circledR 1}$ Windows ${ }^{\circledR} 2000 /$ Windows XP users only] When using the PC programming software with Microsoft Windows 2000/Windows XP, the data transmission may take longer or may not work well. <br> Changes the default values to the proper numeric values. <br> (In this case, if the system is not responsive by changing from the default values, please try other values-firstly to " 01 ", secondly to "10".) | $\begin{aligned} & \mathbf{0 0}: 64 \mathrm{~ms} \times 2 \\ & \mathbf{0 1}: 64 \mathrm{~ms} \mathrm{x} 3 \\ & \mathbf{1 0}: 64 \mathrm{~ms} \mathrm{x} 4 \\ & \mathbf{1 1}: 64 \mathrm{~ms} \mathrm{x} 1 \end{aligned}$ | 00 | None |
| $\begin{gathered} 15- \\ 16 \end{gathered}$ | Unused |  |  |  |

*1 Microsoft and Windows are either registered trademarks or trademarks of Microsoft Corporation in the United States.

Explanation for COS 6

| Bit | Description | Selection | Default | Features Guide References |
| :---: | :---: | :---: | :---: | :---: |
| 9 | Unused |  |  |  |
| 10 | Determines how to handle an incoming outside call received with DIL 1:1, when all extensions in an UCD group have logged out. <br> IRNA: <br> IRNA feature will work. <br> Time Table: <br> The call is handled by the UCD Time Table. | 0 : IRNA <br> 1 : Time Table | 1 | - Log-In/LogOut <br> - Uniform Call Distribution (UCD) |

## Explanation for COS 6

| Bit | Description | Selection | Default | Features Guide <br> References |
| :---: | :---: | :---: | :---: | :---: |
| $11-$ <br> 16 | Unused |  |  |  |

## Selection

- COS number: 1 through 8, $*$ ( $*=$ all COS $)$
- Selection : See "Selection" shown in the lists.


## Default

See "Default" shown in the lists.

## Programming

1. Enter 991.

Display: 991 COS ADD DATA
2. Press NEXT.

Display: COS NO? $\rightarrow$
3. Enter a COS number.

Display example: 1111111111110000
4. Keep pressing $\leftarrow$ or $\rightarrow$ to move the cursor to the desired bit.
5. Enter your selection (0 or 1).

To change the current entry, press STORE and the new selection.
6. To program another bit, repeat steps 4 and 5 .
7. Press STORE.
8. To program another COS, press SELECT and the desired COS number.
9. Repeat steps 4 through 8 .
10.Press END.

## Conditions

None

## Features Guide References

None

## Section 3

## Default Values

## 2 General Programming

| Program | Default |
| :---: | :---: |
| [000] Date and Time Set | '93 Jan. 1 FRI 12:00 AM 12 |
| [001] System Speed Dialing Number Set | All speed dial numbers - Not stored |
| [002] System Speed Dialing Name Set | All speed dial numbers - Not stored |
| [003] Extension Number Set | KX-TD816 <br> Jack 01-1 through 16-1 = 101 through 116; Jack 01-2 through 16-2 = 201 through 216 KX-TD1232 <br> Jack 01-1 through 64-1 = 101 through 164; Jack 01-2 through 64-2 $=201$ through 264 |
| [004] Extension Name Set | All jacks - Not stored |
| [005] Flexible CO Button Assignment | [KX-TD816] <br> All jacks - CO buttons 1 through 8 = Single-CO 01 through 08 ; Ring tone type 2 <br> Others $=$ Not stored <br> [KX-TD1232] <br> All jacks — CO buttons 1 through $48=$ Single-CO 01 through 48; Ring tone type 2 |
| [006] Operator / Manager Extension Assignment | Operator 1 - Jack 01; <br> Operator 2 and Manager - Not stored |
| [007] DSS Console Port and Paired Telephone Assignment | All DSS Consoles - Not stored |
| [008] Absent Messages | 1: Will Return Soon <br> 2: Gone Home <br> 3: At Ext \% \% \% <br> 4: Back at $\% \%: \% \%$ <br> 5: Out Until \%\%/\%\% <br> 6: In a Meeting <br> 7 through 9: Blank (not stored) |
| [009] Quick Dial Number Set | All location numbers - Not stored |
| [012] ISDN Extension Number Set | All ports - Not stored |
| [013] ISDN Extension Name Set | All ports - Not stored |
| [014] VM Name Set | All Voice Mails - V.Mailxx (xx=01 through 24) |



| Program | Default |
| :---: | :---: |
| [118] Voice Mail Extension Number Assignment | KX-TD816 - <br> VM- $01=165, \mathrm{VM}-02=166, \mathrm{VM}-03=167$, VM$04=168, \mathrm{VM}-05=169, \mathrm{VM}-06=170, \mathrm{VM}-07=177$, VM-08=178, VM-09=181, VM-10=182, VM$11=183, \mathrm{VM}-12=184$ <br> KX-TD1232 - <br> VM- $01=165, \mathrm{VM}-02=166$, VM- $03=167$, VM$04=168, \mathrm{VM}-05=169, \mathrm{VM}-06=170, \mathrm{VM}-07=177$, VM-08 $=178$, VM- $09=181$, VM-10 $=182$, VM$11=183, \mathrm{VM}-12=184, \mathrm{VM}-13=171, \mathrm{VM}-14=172$, VM-15=173, VM-16=174, VM-17=175, VM$18=176, \mathrm{VM}-19=179, \mathrm{VM}-20=180, \mathrm{VM}-21=185$, VM-22 $=186, \mathrm{VM}-23=187, \mathrm{VM}-24=188$ |
| [119] Voice Mail Extension Group Assignment | All voice mail numbers $=$ EXG 1 |
| [120] User Password | 1234 |
| [121] Walking COS Password | 1234 |
| [122] UCD Overflow | All UCD groups - Not stored |
| [123] UCD Time Table | All time tables - Not stored |
| [124] Phantom Extension Number Assignment | All locations - Not stored |
| [125] Area Code Assignment | All locations - Blank |
| [126] Caller ID Modification for Local Call | All locations - Deleted number of digits $=3$, Added number $=$ blank |
| [127] Caller ID Modification for Long Distance Call | Deleted number of digits - 0 ; Added number - 1 |
| [128] PBX Code | Not Stored |
| [130] Message Waiting Control | All units - Not stored |
| [131] Message Waiting Lamp Assignment | 1 |
| [132] Message Waiting Port Set | All units - all message waiting ports - not stored |
| [133] Caller ID Extension Assignment | Not stored |
| [134] Hotel Application | OFF |
| [135] DID Number Conversion Selection | Transfer Table |


| Program | Default |
| :---: | :---: |
| [136] DID Number Assignment | All locations - Not Stored |
| [137-138] DID Extension - Day / Night | All locations - Not Stored |
| [139] DID Extension Name Set | All locations - Not Stored |
| [148] Off-Hook Monitor | Enable |
| [150] Lunch Service Starting / Ending Time | Every day of the week - 12:00-12:59 PM |
| [151] Break Service Starting / Ending Time | Every day of the week - 3:00-3:29 PM |
| [200] Hold Recall Time | 60 sec |
| [201] Transfer Recall Time | 12 rings |
| [202] Call Forwarding - No Answer Time | 3 rings |
| [203] Intercept Time | 12 rings |
| [204] Pickup Dial Waiting Time | 1 sec |
| [205] Extension-to-Outside Line Call Duration Time | 10 min |
| [206] Outside-to-Outside Line Call Duration Time | 10 min |
| [207] First Digit Time | 10 sec |
| [208] Inter Digit Time | 10 sec |
| [211] Dial Start Time | 500 msec |
| [212] Call Duration Count Start Time | 0 sec |
| [213] DISA Delayed Answer Time | 1 ring |
| [214] DISA Prolong Time | 3 min |
| [215] Outgoing Message Time | $32,0,32,0$ (for OGM 1 through 4 from left to right) |
| [216] Message Waiting Ring Interval Time | 0 min (no ring) |
| [217] Timed Reminder Alarm Ring Time | 30 sec |
| [218] DISA AA Wait Time | 1 sec |


| Program | Default |
| :---: | :---: |
| [219] Call Park Recall Time | 12 rings |
| [220] TIE First / Inter Digit Time | 5 sec |
| [300] TRS Override for System Speed Dialing | Disable |
| [301-305] TRS Denied Code Entry for Levels 2 through 6 | All locations - Not stored |
| [306-310] TRS Excepted Code Entry for Levels 2 through 6 | All locations - Not stored |
| [311] Special Carrier Access Codes | All locations - Not stored |
| [312] ARS Mode | Off |
| [313] ARS Time | All days of the week : <br> A - 8:00 AM; B - 5:00 PM; C - 9:00 PM; D Disable |
| [314-321] ARS Leading Digit Entry for Plans 1 through 8 | All locations - Not stored. |
| [322-329] ARS Routing Plans 1 through 8 | All time schedules - Not stored |
| [330] ARS Modify Removed Digit | All modification tables - 0 (digit) |
| [331] ARS Modify Added Number | All modification tables - Not stored |
| [332] Extra Entry Table Selection | Except - 2 |
| [333] TRS Entry Code Assignment for Extra Table | All locations - Not stored |
| [334] Emergency Dial Number Set | Location $01=911$, Other location $=$ Not stored |
| [340] TIE Line Routing Table | All locations - Not stored |
| [341] TIE Modify Removed / Added Digit | All locations - Deleted digit: 0, Added digit: Blank |
| [400] Outside Line Connection Assignment | All outside lines - Connect |


| Program | Default |
| :---: | :---: |
| [401] Outside Line Group Assignment | CO01-TRG 1; <br> CO02 - TRG 2; <br> CO03 - TRG 3; <br> CO04 - TRG 4; <br> CO05 - TRG 5; <br> CO06 - TRG 6; <br> CO07 - TRG 7; <br> CO08 - TRG 8 (for KX-TD816) <br> CO08 through CO48 - TRG 8 (for KX-TD1232) |
| [402] Dial Mode Selection | All outside lines - DTMF |
| [403] Pulse Speed Selection | All outside lines - 10 pps |
| [404] DTMF Time | All outside lines - 80 msec |
| [405] CPC Signal Detection Incoming Set | All outside lines - 400 msec |
| [406] Caller ID Assignment | All outside lines - Disable |
| [407-408] DIL 1:1 Extension - Day / Night | All outside lines - Disable - Day / Night |
| [409-410] Intercept Extension - Day / Night | All outside line groups - Disable - Day / Night |
| [411] Host PBX Access Codes | All outside line groups - Not stored |
| [412] Pause Time | All outside line groups - 1.5 sec |
| [413] Flash Time | All outside line groups - 600 msec |
| [414] Disconnect Time | All outside line groups - 1.5 sec |
| [415] CPC Signal Detection Outgoing Set | Disable |
| [416] Reverse Circuit Assignment | Regular |
| [417] Outside Line Name Assignment | All outside lines - Not stored |
| [418] Outside Line Number Assignment for PRI CLIP | All outside lines - Not stored |
| [419] ISDN Outgoing CLIR Service Assignment | All outside lines - Disable |
| [420] ISDN Ring Service Assignment | All outside lines - Regular |
| [423] ISDN Port Type | All ports - CO |


| Program | Default |
| :---: | :---: |
| [424] ISDN Layer 1 Active Mode | All ports - Permanent |
| [425] ISDN Configuration | All ports - Multipoint |
| [426] ISDN Data Link Mode | All ports - Permanent |
| [427] ISDN TEI Mode | All ports - Automatic |
| [428] ISDN Extension Multiple Directory Number | All ports - Disable |
| [429] ISDN Extension Progress Tone | All ports - Disable |
| [430] DID / TIE Format Number Assignment | All outside line groups - Not stored |
| [431] DID / TIE Incoming Assignment | All DID / TIE formats - Wink |
| [432] DID / TIE Outgoing Assignment | All DID / TIE formats - Wink |
| [433] DID / TIE Subscriber Number Removed Digit | All DID / TIE formats - RMV:0 |
| [434] DID / TIE Added Number | All DID / TIE formats - Blank |
| [435] DID / TIE Wink Time Out Assignment | All DID / TIE formats - 16 |
| [436] CO-to-TIE Transfer | All outside line groups - Disable |
| [437] TIE-to-CO Transfer | All outside line groups - Disable |
| [438] TIE-to-TIE Transfer | All outside line groups - Enable |
| [439] TIE Security Type | Non |
| [440] Line Hunting Sequence | All outside line groups - from Large to Small |
| [453] SPID Assignment | All ports - All locations - Not stored |
| [454] DN Assignment | All ports - All locations - Not stored |
| [455-456] Extension Ringing Assignment Day / Night for ISDN | All ports - All locations - Disable - Day / Night |
| [457-458] DIL 1:1 - Lunch / Break Group | All outside lines - Blank |
| [460] PRI Connection Assignment | B channel number - 0 |
| [461] PRI Line Coding Assignment | B8ZS |


| Program | Default |
| :---: | :---: |
| [462] PRI Frame Sequence Assignment | ESF |
| [463] PRI Timer 1 and Timer 2 Assignment | All outside lines - Effective |
| [464] PRI Inter Digit Timer 1 Assignment | 5 sec |
| [465] PRI Inter Digit Timer 2 Assignment | 3 sec |
| [466] PRI Dial Counter for Inter Digit Timer 2 Assignment | 7digit |
| [467-468] DIL 1:1 Extension - Lunch / Break | All outside lines - Disable - Lunch / Break |
| [500-501] Toll Restriction Level - Day / Night | COS 1 through 7 - Level 1 ——Day / Night; COS 8 — Level 7 —— Day / Night |
| [502] Extension-to-Outside Line Call Duration Limit | All COS - Disable |
| [503] Call Transfer to Outside Line | All COS - Disable |
| [504] Call Forwarding to Outside Line | All COS - Disable |
| [505] Executive Busy Override | All COS - Disable |
| [506] Executive Busy Override Deny | All COS - Enable |
| [507] Do Not Disturb Override | All COS - Disable |
| [508] Account Code Entry Mode | All COS - Option |
| [509] Off-Hook Call Announcement (OHCA) | All COS - Enable |
| [510] Night Service Access | All COS - Disable |
| [511] PITS Programming Level | All COS - LVL1 |
| [600] EXtra Device Port | All jacks - Disable |
| [601] Class of Service | All jacks-1/2 - COS 1 |
| [602] Extension Group Assignment | All jacks-1/2 - Extension group 1 |
| [603-604] DIL 1:N Extension and Delayed Ringing ——Day / Night | All jacks-1/2 - all outside lines - Immediate ringing —— Day / Night |


| Program | Default |
| :---: | :---: |
| [605-606] Outgoing Permitted Outside Line Assignment —— Day / Night | All jacks-1/2 - all outside lines - Enable - Day / Night |
| [607-608] Doorphone Ringing Assignment -- Day / Night | Jack 01-1- All doorphones; Other jacks - no doorphone - Day / Night |
| [609] Voice Mail Access Codes | All jacks - Not stored |
| [610] Live Call Screening Recording Mode Assignment | All jacks - Stop Rec (Stop recording) |
| [613] ISDN Class of Service | All ports - COS 1 |
| [614-615] Outgoing Permitted Outside Line Assignment ——Day / Night for ISDN Extension | $\begin{aligned} & \text { All ports — all outside lines — Enable —— Day / } \\ & \text { Night } \end{aligned}$ |
| [619] Extension Call Forwarding - No Answer Time | All jacks - 0 |
| [620] Lunch / Break Group Assignment | All groups - Blank |
| [621] Cordless PITS Extension Port | All jacks - all outside lines - No |
| [622] Extension CLIP Number Assignment | All jacks-1/2 - Not stored |
| [624] ISDN Extension CLIP Number Assignment | All ports - Not stored |
| [700] T1 Channel Assignment | All T1 channels - Disable |
| [701] T1 Dial Mode | All T1 channels - DTMF-80 |
| [702] T1 COT CPC (IN) | All T1 channels - 50 |
| [703] T1 DID CPC (IN) | All T1 channels - 02 |
| [704] T1 COT CPC (OUT) | All T1 channels - 00 |
| [705] T1 DID CPC (OUT) | All T1 channels - 02 |
| [706] T1 DID Receive Digits | All T1 channels - 4 |
| [707] T1 Clock Mode | External |
| [708] T1 Line Coding | B8ZS |
| [709] T1 Frame Sequence | ESF |


| Program | Default |
| :---: | :---: |
| [710] T1 Frame Option | $\mathrm{C}=\mathrm{A}, \mathrm{D}=\mathrm{B}$ |
| [711] T1 First Dial Timer (CO) | 02 |
| [712] T1 First Dial Timer (DID / TIE) | 002 |
| [713] T1 \%Break | 60\% |
| [714] T1 Dial Click Tone | Yes |
| [715] T1 Inter Digit Pause | 830 msec |
| [716] T1 Flash Detection | Disable |
| [717] T1 Answer Decision Timer | 001 |
| [718] T1 Break Detection | $16-96 \mathrm{~ms}$ |
| [719] T1 Pulse Type | TYPE-A |
| [720] T1 TIE Ringing Service | All outside lines - TIE mode |
| [721] T1 / PRI Reference CO | All outside lines - 09 |
| [722] T1 Answer Wait Timer | All outside lines - 1 min |
| [723] T1 Sending TIE Caller ID | All outside lines - No |
| [725] T1 Extension Number | All ports - Not stored |
| [726] T1 Extension Name | All ports - Not stored |
| [727] T1 Extension COS Number | All ports - COS 1 |
| [728] T1 Extension Outgoing Permitted Outside Line Assignment - Day | All ports - Enable |
| [729] T1 Extension Outgoing Permitted Outside Line Assignment - Night | All ports - Enable |
| [730] T1 Extension Voice Mail Access Codes | All ports - Not stored |
| [800] SMDR Incoming / Outgoing Call Log Printout | Outgoing calls - All; Incoming calls - On |
| [801] SMDR Format | Page length -66 ; Skip perforation -0 |
| [802] System Data Printout | Not applicable. |

Programming Guide ..... 387

| Program | Default |
| :---: | :---: |
| [803] Music Source Use | Hold and BGM - Music 1 |
| [804] External Pager BGM | All external pagers - Disable |
| [805] External Pager Confirmation Tone | On |
| [806-807] Parameters | New line code $=C R+L F ;$ Baud rate $=9600$; Word length $=8$; <br> Parity bit $=$ Mark; Stop bit $=1-$ Port $1 /$ Port 2 |
| [809] DISA Security Type | Trunk (Outside Line) Security |
| [810] DISA Tone Detection | Enable |
| [812] DISA DTMF Repeat | Dial and Call - Repeat |
| [813] Floating Number Assignment | KX-TD816 - <br> Pager 1=196; E-Group 1=191; E-Group 2=192; E- <br> Group 3=193; E-Group 4=194; E-Group 5=291; E- <br> Group 6=292; E-Group 7=293; E-Group 8=294; <br> MODEM=299 <br> KX-TD1232 - <br> Pager 1=196; Pager 2=197; Pager 3=296; Pager <br> 4=297; DISA $1=198$; DISA $2=298$; MODEM $=299$; <br> E-Group 1=191; E-Group 2=192; E-Group 3=193; E- <br> Group 4=194; E-Group 5=291; E-Group 6=292; E- <br> Group 7=293; E-Group 8=294 |
| [814] Modem Standard | BELL |
| [815] DISA Built-in Auto Attendant | Disable |
| [817] KX-TD197 / KX-TD198 Baud Rate Set | V.34-33600 |
| [818] Doorphone Tone Frequency Selection | All doorphones - Type2 |
| [820] Doorphone Ringing Time | All doorphones - 30sec |
| [990] System Additional Information | See "Default" shown in the lists. |
| [991] COS Additional Information | See "Default" shown in the lists. |

Section 4
Index

## A

Absent Messages ..... 45
Account Code Entry Mode ..... 262
Account Codes ..... 64
Adjust Time ..... 82
Area Code Assignment ..... 99
ARS Leading Digit Entry for Plans 1 through 8155
ARS Mode ..... 152
ARS Modify Added Number ..... 160
ARS Modify Removed Digit ..... 159
ARS Routing Plans 1 through 8 ..... 157
ARS Time 153
Automatic Access Outside Line Assignment ..... 63
Automatic Hold by CO / DSS Button ..... 70
B
Break Service Starting / Ending Time ..... 124
C
Call Duration Count Start Time ..... 136
Call Forwarding to Outside Line 258
Call Forwarding - No Answer Time ..... 128
Call Park Recall Time ..... 144
Call Transfer to Outside Line ..... 257
Caller ID Assignment 180
Caller ID Code Set 73
Caller ID Extension Assignment ..... 112
Caller ID Modification for Local Call ..... 101
Caller ID Modification for Long Distance Call 103
Caller ID Name Set ..... 75
Class of Service ..... 270
Cordless PITS Extension Port ..... 291
COS Additional Information ..... 372
CO-to-TIE Transfer ..... 230
CPC Signal Detection Incoming Set ..... 178
CPC Signal Detection Outgoing Set ..... 194
D
Date and Time Set ..... 28
Day / Night Service Starting Time ..... 61
Day / Night Service Switching Mode ..... 60
Dial Mode Selection ..... 172
Dial Start Time ..... 135
DID / TIE Added Number ..... 226
DID / TIE Format Number Assignment ..... 219
DID / TIE Incoming Assignment ..... 220
DID / TIE Outgoing Assignment ..... 222
DID / TIE Subscriber Number Removed Digit 224
DID / TIE Wink Time Out Assignment ..... 228
DID Extension Name Set ..... 120
DID Extension - — Day / Night ..... 118
DID Number Assignment ..... 116
DID Number Conversion Selection ..... 115
DIL 1:1 Extension - Day / Night ..... 182
DIL 1:1 Extension Lunch / Break ..... 251
DIL 1:1 - Lunch / Break Group ..... 241
DIL 1:N Extension and Delayed Ringing - Day
/ Night ..... 274
DISA AA Wait Time ..... 143
DISA Built-in Auto Attendant ..... 356
DISA Delayed Answer Time ..... 137
DISA DTMF Repeat ..... 352
DISA Prolong Time ..... 138
DISA Security Type ..... 350
DISA Tone Detection ..... 351
DISA User Codes ..... 53
Disconnect Time ..... 192
DN Assignment ..... 237
Do Not Disturb Override ..... 261
Doorphone Ringing Assignment ..... Day /
Night 278
Doorphone Ringing Time ..... 359
Doorphone Tone Frequency Selection ..... 358
DSS Console Port and Paired Telephone ..... 43
Assignment
Assignment
DTMF Time ..... 176
E
Emergency Dial Number Set ..... 163
Executive Busy Override ..... 259
Executive Busy Override Deny ..... 260
Expansion Unit Type ..... 71
Extension Call Forwarding - No Answer Time288
Extension CLIP Number Assignment ..... 293
Extension Group Assignment ..... 272
Extension Name Set ..... 36
Extension Number Set ..... 34
Extension Ringing Assignment —— Day / Nightfor ISDN 239
Extension-to-Outside Line Call Duration Limit255
Extension-to-Outside Line Call Duration Time131
External Pager BGM ..... 345
External Pager Confirmation Tone ..... 347
EXtra Device Port ..... 268
Extra Entry Table Selection ..... 161
F
First Digit Time ..... 133
Flash Time ..... 190
Flexible CO Button Assignment ..... 38
Flexible Numbering ..... 55
Floating Number Assignment ..... 353
H
Hold Recall Time ..... 126
Host PBX Access Codes ..... 186
Hotel Application ..... 114
I
Inter Digit Time ..... 134
Intercept Extension —— Day / Night ..... 184
Intercept Time ..... 129
ISDN Class of Service ..... 284
ISDN Configuration ..... 209
ISDN Data Link Mode ..... 211
ISDN Extension CLIP Number Assignment ..... 295
ISDN Extension Multiple Directory Number ..... 215
ISDN Extension Name Set ..... 50
ISDN Extension Number Set ..... 48
ISDN Extension Progress Tone ..... 217
ISDN Layer 1 Active Mode ..... 207
ISDN Outgoing CLIR Service Assignment ..... 201
ISDN Port Type ..... 205
ISDN Ring Service Assignment ..... 203
ISDN TEI Mode ..... 213
K
KX-TD197 / KX-TD198 Baud Rate Set ..... 357
L
Line Hunting Sequence ..... 234
Live Call Screening Recording Mode
Assignment ..... 282
Lunch / Break Group Assignment ..... 289
Lunch Service Starting / Ending Time ..... 122
M
Message Waiting Control ..... 105
Message Waiting Lamp Assignment ..... 107
Message Waiting Port Set ..... 110
Message Waiting Ring Interval Time ..... 141
Modem Standard ..... 355
Music Source Use ..... 343
N
Network Type Assignment ..... 77
Night Service Access ..... 265
O
Off-Hook Call Announcement (OHCA) ..... 264
Off-Hook Monitor ..... 121
Operator / Manager Extension Assignment ..... 41
Outgoing Message Time ..... 139
Outgoing Permitted Outside Line Assignment ..... ——
Day / Night ..... 276
Outgoing Permitted Outside Line Assignment ..... t-
Day / Night for ISDN Extension ..... 286
Outside Line Connection Assignment ..... 168
Outside Line Group Assignment ..... 170
Outside Line Name Assignment ..... 197
Outside Line Number Assignment for PRI CLIP ..... 199
Outside-to-Outside Line Call Duration Time ..... 132
P
Pause Time ..... 188
PBX Code ..... 104
Phantom Extension Number Assignment ..... 97
Pickup Dial Waiting Time ..... 130
PITS Programming Level ..... 266
PRI Connection Assignment ..... 243
PRI Dial Counter for Inter Digit Timer 2Assignment250
PRI Frame Sequence Assignment ..... 245
PRI Inter Digit Timer 1 Assignment ..... 248
PRI Inter Digit Timer 2 Assignment ..... 249
PRI Line Coding Assignment 244
PRI Timer 1 and Timer 2 Assignment ..... 246
Pulse Speed Selection ..... 174
QQuick Dial Number Set 47
R
Reverse Circuit Assignment ..... 196
ROM Version Display ..... 83
S
Serial Interface (RS-232C) Parameters ..... 348
SMDR Format ..... 340
SMDR Incoming / Outgoing Call Log Printout338
Special Carrier Access Codes ..... 151
SPID Assignment ..... 235
Station Hunting Type ..... 66
System Additional Information ..... 360
System Data Printout ..... 341
System Password ..... 68
System Speed Dialing Name Set ..... 32
System Speed Dialing Number Set ..... 30
T
T1 \%Break ..... 312
T1 / PRI Reference CO ..... 321
T1 Answer Decision Timer ..... 316
T1 Answer Wait Timer ..... 323
T1 Break Detection ..... 317
T1 Channel Assignment ..... 297
T1 Clock Mode ..... 306
T1 COT CPC (IN) ..... 299
T1 COT CPC (OUT) ..... 301
T1 Dial Click Tone ..... 313
T1 Dial Mode ..... 298
T1 DID CPC (IN) ..... 300
T1 DID CPC (OUT) ..... 302
T1 DID Receive Digits ..... 304
T1 Extension COS Number ..... 330
T1 Extension Name ..... 328
T1 Extension Number ..... 327
T1 Extension Outgoing Permitted Outside Line As- signment - Day ..... 332
T1 Extension Outgoing Permitted Outside Line As- signment - Night ..... 334
T1 Extension Voice Mail Access Codes ..... 336
T1 First Dial Timer (CO) ..... 310
T1 First Dial Timer (DID / TIE) ..... 311
T1 Flash Detection ..... 315
T1 Frame Option ..... 309
T1 Frame Sequence ..... 308
T1 Inter Digit Pause ..... 314
T1 Line Coding ..... 307
T1 Pulse Type ..... 318
T1 Sending TIE Caller ID ..... 325
T1 TIE Ringing Service ..... 319
TIE First / Inter Digit Time ..... 145
TIE Line Routing Table ..... 164
TIE Modify Removed / Added Digit ..... 166
TIE Security Type ..... 233
TIE-to-CO Transfer ..... 231
TIE-to-TIE Transfer ..... 232
Timed Reminder Alarm Ring Time ..... 142
Toll Restriction Level - Day / Night ..... 253
Transfer Recall Time ..... 127
TRS Denied Code Entry for Levels 2 through 6147
TRS Entry Code Assignment for Extra Table162
TRS Excepted Code Entry for Levels 2 through 6149
TRS Override for System Speed Dialing ..... 146
U
UCD Overflow ..... 93
UCD Time Table ..... 95
User Password ..... 90
V
VM Command DTMF Set ..... 80
VM Name Set ..... 52
VM Status DTMF Set ..... 78
Voice Mail Access Codes ..... 280
Voice Mail Extension Group Assignment ..... 88
Voice Mail Extension Number Assignment ..... 86
Voice Mail Number Assignment ..... 84
W
Walking COS Password ..... 92

| Panasonic Consumer Electronics | Panasonic Sales Company ("PSC"), |
| :--- | :--- |
| Company, Division of Matsushita | Division of Matsushita Electric of |
| Electric Corporation of America | Puerto Rico, Inc. |
| One Panasonic Way, Secaucus, | Ave. 65 de Infantería, Km. 9.5, |
| New Jersey 07094 | San Gabriel Industrial Park, Carolina, |
| www.panasonic.com | Puerto Rico 00985 |

## Copyright:

This manual is copyrighted by Kyushu Matsushita Electric Co., Ltd. (KME). Under the applicable copyright laws, this manual may not be reproduced in any form, in whole or part, without the prior written consent of KME and its licensee.
© 2001 Kyushu Matsushita Electric Co., Ltd. All Rights Reserved.


[^0]:    * Available for the KX-TD1232 only.

[^1]:    * Available for the KX-TD1232 only.
    *2 Top or second can be selected by program [991] COS Additional Information, COS 3-Bit 12-15.

[^2]:    ${ }^{* 1}$ Available for the KX-TD1232 only.

[^3]:    * Available for the KX-TD1232 only.

[^4]:    * Available for the KX-TD1232 only.

[^5]:    * Available for the KX-TD1232 only.

[^6]:    * Available for the KX-TD1232 only.

