# Panasonic

### Digital Super Hybrid System **KX-TD816CE KX-TD1232CE**

## Added and Changed Features for Installation Manual and Programming Tables

Please read this manual first and then the Installation Manual. In this manual, the last letter "CE" of each model number is omitted.

#### Warning:

Static sensitive devices are used. To protect printed circuit boards from static electricity, do not touch connectors indicated below. To discharge body static, touch ground or wear a grounding strap.



## **Table of Contents**

### **Added Features**

Section 1.4, Options			
Pay Tone Card (KX-TD189)			
2-ISDN S0 Line Unit (KX-TD280)			
Section 2.4, Installation of Optional Cards and Units			
2-ISDN S0 Line Unit Connection			
Installing Expansion Unit (KX-TD280)			
Pay Tone Card (KX-TD189) Installation			
Section 3, Features			
Budget Management	12		
Calling Line Identification Restriction (CLIR)	12		
Charge Fee Reference	13		
CO Incoming Call Information Display	14		
CO Incoming Call Information Log	15		
Direct Dialing In (DDI)	16		
Emergency Call	17		
HOTEL APPLICATION	18		
Check-In / Check-Out	18		
Timed Reminder, Remote (Wake-Up Call)	19		
SMDR for Timed Reminder	20		
Section 4, System Programming			
[009] Emergency Dial Number Set	21		
[010] Budget Management	22		
[011] Charge Margin Rate	23		
[120] Charge Display Selection	24		
[121] Assignment of Denomination	25		
[122] Charge Verification Assignment	26		
[123] Charge Verification ID Code Set	27		
[124] Hotel Application	28		
[125] User Password	29		
[216] Message Waiting Ring Interval Time	30		
[217] Timed Reminder Alarm Repeat Times	31		
[218] Timed Reminder Alarm Interval Time	32		
[417] CO Line Name Assignment	33		
[418] ISDN Line Number Assignment	34		
[419] ISDN Outgoing CLIR Service Assignment	35		
[420] ISDN DDI Service Assignment	36		
[423] Pay-Tone Assignment	37		
[610] ISDN DDI Number / Extension Number Transformation			
[611] ISDN DDI Number / Floating Number Transformation			

# **Table of Contents**

[815]	SMDR Output Mode	40
[990]	System Additional Information, Fields (27) through (35)	41

# Changed Features

Section 3, Features	
Direct Inward System Access (DISA)	44
Display, Call Information	44, 46
Do Not Disturb (DND)	44
DSS Console (KX-T7240 / KX-T7040)	44
Message Waiting	44, 47
Operator	44
Station Message Detail Recording (SMDR)	44, 48
Section 4, System Programming	
[001] System Speed Dialing Number Set	44, 52
[002] System Speed Dialing Name Set	44, 54
[100] Flexible Numbering	44
[109] Expansion Unit Type	45, 55
[211] Dial Start Time	45
[412] Pause Time	45
[413] Flash Time	45
[601] Class of Service	45, 57
[990] System Additional Information, Fields (17) and (26)	45

### **Deleted Features**

Section 3, Features	
Caller ID	59
Calling Party Control (CPC) Signal Detection	59
Section 4, System Programming	
[110] Caller ID Code Set	59
[111] Caller ID Name Set	59
[405] CPC Signal Detection Incoming Set	59
[406] Caller ID Assignment	59
[415] CPC Signal Detection Outgoing Set	59

Programming	Tables	60
-------------	--------	----

# **Added Features**

### Pay Tone Card (KX-TD189)

Supports the Pay Tone service of the central office. While having a conversation with an outside party, your central office generates the pay tone so that the counting for fee starts for the call.

### 2-ISDN S0 Line Unit (KX-TD280)

One KX-TD280 can be installed per system.



-2 ISDN S0 lines can be added.



- 2 ISDN S0 lines can be added.

# 2.4 Installation of Optional Cards and Units

### **2-ISDN S0 Line Unit Connection**

To add two ISDN S0 lines, use the optional 2-ISDN S0 Line Unit (KX-TD280). This unit can be installed in any of the expansion areas provided on the front of the main unit.

The following procedures can be used to install the 2-ISDN S0 Line Unit (KX-TD280). System programming is required for unit location identification. **Default** KX-TD816: bottom = 4-CO Line Unit, top = 8-Station Line Unit KX-TD1232: bottom = 4-CO Line Unit, middle and top = 8-Station Line Unit

# **Installing Expansion Unit (KX-TD280)**

**1.** Loosen two screws on the cover plate. Insert fingers into the slits to remove the cover plate.



**Note** Any of the cover plates can be removed, as needed.

**2.** Connect the cabinet cord to the connector in the main unit firmly.



**3.** Hook the cabinet to the main unit and slide the cabinet to the left until it is secured.



**4.** Loosen the outside screw and slide the cover to the right.



5. Secure the inside screw (included) to fix the cabinet to the main unit.



- **Note** Be sure to fix the inside screw to the main unit, or the unit may not work properly.
- 6. Prepare the required plugs. Two 4-pin plugs are included in KX-TD280 to connect four CO lines.



# **Installing Expansion Unit (KX-TD280)**

7. Insert the plug into a jack on the unit. Connect an earth wire to the earth terminal on the extension expansion unit.



- 8. Tie all of the cords into a bundle. If other cords are exposed in the upper cabinets, tie them also.
- **9.** Close the cabinet cover and secure the outside screw.
- **10.** Cover the cords with the cord holder (included).



**11.** Fix the cords to the wall as shown so that the front cover can be opened.



- **Notes** The KX-TD1232 is illustrated as a main unit.
  - If two or three expansion units are installed, cut the cabinet covers on the lower cabinets to allow the cords from the upper cabinet to go down through the cabinet covers. To protect the cords, smooth the cut edges.



Programming References Section 4, System Programming, [109] Expansion Unit Type

# Pay Tone Card (KX-TD189) Installation

### (1) Installing to the Initial CO Line Card

- **1.** Loosen eight screws to open the inside cover of the main unit.
  - **Note** If any cards, units, or cords are installed in the main unit, remove them beforehand.
- Attach the Pay Tone Card(s) (KX-TD189) to the CO Line Card, with the spacers (Accessary included).
   One Pay Tone Card for KX-TD816, and up to two Pay Tone Cards for KX-TD1232 can be installed to the initial CO Line Card.



## Pay Tone Card (KX-TD189) Installation

#### KX-TD1232



- 3. Put the inside cover back on the main unit and secure the screws.
- **4.** If you do not cut the wire of the J200 in pay-tone card, the detected mode is 16 KHz. If you cut the wire of the J200 in Pay Tone Card (Open Mode), the detected mode is 12 KHz.
- **5.** After installing the Pay Tone Card, if you hear a noise of the paytone signal, cut the option Jumper Wires, OPJPA through OPJPH corresponds to CO1 through CO8 in the CO Card. (OPJPA corresponds to CO1, OPJPB to CO2, OPJPC to CO3, OPJPD to CO4, OPJPE to CO5, OPJPF to CO6, OPJPG to CO7, and OPJPH to CO8.)
- When you install the Pay Tone Card A, you will detect the pay-tone signal from CO1 - CO4, and cut the corresponding option Jumper Wires, if needed.
- When you install the Pay Tone Card B, you will detect the pay-tone signal from CO5 - CO8, and cut the corresponding option Jumper Wires, if needed.

# Pay Tone Card (KX-TD189) Installation

### (2) Installing to the Optional 4-CO Line Unit

The following procedures must be done before installing the 4-CO Line Unit (KX-TD180) to the main unit.

- **1.** Loosen five screws located on the rear of the 4-CO Line Unit.
- **2.** Remove the back plate and take out the P-board.
- 3. Attach the Pay Tone Card to the P-board, fitting the connectors.
- **4.** Put the P-board back into the cabinet and fix the rear plate with the five screws.
- **5.** If you do not cut the wire of the J200 in Pay Tone Card, the detected mode is 16 KHz. If you cut the wire of the J200 in paytone card (Open Mode), the detected mode is 12 KHz.



Note To install the 4-CO Line Unit to the main unit, refer to Section 2.4.4 "Installing Expansion Unit (KX-TD170 / KX-TD180)" in the Installation Manual.

Programming References	
	Section 4, System Programming,
	[423] Pay-Tone Assignment
Feature References	Section 3, Features,
	Display, Call Information (in this manual)
	HOTEL APPLICATION (in this manual)

### **B**udget Management

Description	Limits the telephone usage to a pre-assigned amount. For example, the limit may be the amount deposited at check-in of a hotel. If the pre-assigned limit is reached, the extension user cannot make further calls until he/she receives authorization from the operator.
Conditions	None
Programming Referen	<b>Ces</b> Section 4, System Programming, [010] Budget Management
Feature References	Section 3, Features, HOTEL APPLICATION
<b>Operation References</b>	Not applicable.

## Calling Line Identification Restriction (CLIR)

Description	Allows the extension user to restrict the presentation of the calling party's number to the called party when making a call. This is one of the ISDN services.	
Conditions	If the presentation is enabled, the called party can check the calling party's number before the called party is answered it (Calling Line Identification Presentation, CLIP).	
Programming References		
	Section 4, System Programming,	
	[418] ISDN Line Number Assignment	
	[419] ISDN Outgoing CLIR Service Assignment	
Feature References	None	
<b>Operation References</b>	Not applicable.	

# **Charge Fee Reference**

Description	Allows the pre-assigned display telephone user to view, clear charges and print out the data by SMDR. Charges are displayed per extension, CO line, account code, or the total of each can be referred to.
Conditions	<ul> <li>The allowed extension is determined by System Programming.</li> <li>The verification ID is required to perform this feature.</li> <li>A maximum of 999999 Meter can be collected. The existing call is not referred.</li> <li>It is programmable to select the first display, Meter or Charge by System Programming. This can be switched manually at each extension.</li> <li>Exchange rate between Meter or Charge is assigned by Station Programming.</li> </ul>
<b>Programming Referen</b>	ces
	Section 4, System Programming, [120] Charge Display Selection [122] Charge Verification Assignment [123] Charge Verification ID Code Set Station ProgrammingUser Manual, Charge Fee Reference
Feature References	None
<b>Operation References</b> —User Manual	<b>Station Programming,</b> Charge Fee Reference

# **CO** Incoming Call Information Display

Description	Provides the display proprietary telephone user with a preset CO line name if an incoming outside call is received. If the CO name is not assigned and the CO line is an ISDN line provided with CLIP (Calling Line Identification Presentation) feature, shows the caller's telephone number and name on the display.	
Conditions	<ul> <li>It is required to name CO lines by system programming.</li> <li>With the CLIP feature, the ISDN line informs the system of the caller's telephone number only. To display the name, the system compares the informed number with the System Speed Dialling Numbers stored in program [001] and if a match is found, decides the caller's name by using the System Speed Dialing Names stored in program [002].</li> <li>The CO line name display has precedence on the Operator's telephone.</li> <li>The display DPT (KX-T7230 or KX-T7235) user can record the information of the call received by CLIP feature (CO Incoming Call Information Log feature).</li> </ul>	
Connection References		
	Section 2, Installation,	
	2.4 Instantion of Optional Cards and Onits (in this manual)	
Programming Reference	ces	
	<ul> <li>Section 4, System Programming,</li> <li>[001] System Speed Dialing Number Set</li> <li>[002] System Speed Dialing Name Set</li> <li>[417] CO Line Name Assignment</li> <li>[418] ISDN Line Number Assignment</li> <li>[419] ISDN Outgoing CLIR Service Assignment</li> </ul>	
Feature References	Section 3, Features, CO Incoming Call Information Log	
<b>Operation Reference</b> —User Manual	<b>DPT Features,</b> CO Incoming Call Information Display	

## CO Incoming Call Information Log

Description	If the display digital proprietary telephone (KX-T7230 or KX- T7235) user cannot answer a call, the telephone automatically records the caller's telephone number, name and the time. The user can call back the caller by checking the call log. This is available if such a telephone receives incoming outside calls from the ISDN line provided with the CLIP (Calling Line Identification Presentation) feature. A maximum of 15 calls per telephone can be logged.	
Conditions	<ul> <li>The call log is registered at the time DPT finishes ringing. If a call is directed to multiple DPTs, the call log is registered at the DPT that has the smallest jack number of the ringing DPTs.</li> <li>Transferred call information is also recorded.</li> <li>If the DPT is in Call Forwarding – No Answer or IRNA is activated, the call log is registered at the original DPT but not at the destination DPT unless the destination party answers the call and record it manually.</li> <li>When the information area is full (i.e. more than 15 calls), the user can control the log mode at his / her extension (CO Incoming Call Information Log Mode). If the user sets this mode, new CO incoming call information is retained but old data is discarded. If the user cancels this mode, new CO incoming call information is not entered in the unit. To set or cancel the mode, a corresponding feature number is used.</li> <li>The telephone user can lock the display of the unit so that CO incoming call information is not shown on the display. A lock code is required to set or cancel this feature. Operator can cancel the lock in case the user forgets the lock code.</li> </ul>	
<b>Connection References</b>		
	<ul><li>2.4 Installation of Optional Cards and Units (in this manual)</li></ul>	
Programming References		
	Section 4, System Programming, [001] System Speed Dialing Number Set	
	[002] System Speed Dialing Name Set	
	[100] Flexible Numbering, CO incoming call information log mode/CO incoming call information log lock	
	[417] CO Line Name Assignment [418] ISDN Line Number Assignment	
	[419] ISDN Outgoing CLIR Service Assignment	

3

### Features

Feature References	Section 3, Features, CO Incoming Call Information Display
<b>Operation Reference</b>	DPT Features,
User Manual	CO Incoming Call Information Log Lock
	CO Incoming Call Information Log Mode
	<b>Operator Service Features,</b>
	CO Incoming Call Information Log Lock Clear

### **D**irect Dialing In (DDI)

#### Description

Provides an automatic direction of an incoming ISDN S0 line call to a specific extension. This requires a DDI number informed from the ISDN network. The DDI number is converted to a specific extension number by using a pre-programmed conversion table.



#### Section 2, Installation,

2.4 Installation of Optional Cards and Units (in this manual)

### **Programming References**

	Section 4, System Programming, [420] ISDN DDI Service Assignment [610] ISDN DDI Number / Extension Number Transformation [990] System Additional Information, Fields (31) and (32)
Feature References	None
<b>Operation References</b>	Not applicable.
<b>E</b> mergency Call	
Description	Allows the extension user to dial out a pre-assigned emergency number without seizing a CO line.
Conditions	<ul> <li>Emergency numbers are allowed even in the following cases: <ul> <li>in Account Code – Verified mode</li> <li>in any toll restriction level</li> <li>after the pre-assigned charge limit is reached</li> <li>in Electronic Station Lockout</li> </ul> </li> <li>A maximum of eight emergency numbers are assignable. An extension number can be stored as an emergency number to call service desk with 1 digit for HOTEL APPLICATION.</li> <li>[009] Emergency Dial Number Set — Emergency dial location number (1-8) corresponds to [100] Flexible Numbering — No. 55-62.</li> <li><example> <ul> <li>If you want to assign "110" as an emergency call, you need assign the following programming:</li> <li>— Assign [100] Flexible Numbering, Feature Number "55," Emergency call 1:110</li> </ul> </example></li> <li>— Assign [009] Emergency Dial Number Set, Location Number "1," 1:9110</li> </ul>
<b>Programming Referen</b>	ces
	Section 4, System Programming, [009] Emergency Dial Number Set [100] Flexible Numbering, Emergency call 1 through 8
Feature References	None
<b>Operation References</b> —User Manual	<b>DPT Features, SLT Features;</b> Emergency Call

Emergency Call

## HOTEL APPLICATION

### Description

Allows the operator to handle the front/operator services such as check-in / check-out, timed reminder (wake-up call). This operation is applicable to only the operator extension with a KX-T7235.

### Check-In / Check-Out

Description	Allows the operator to This feature can contro the Class of Service be and print out the teleph mini-bar charges).	o operate the check-in / check-out service. of the usage of an outside call by switching etween primary and secondary, and count hone charge and the other charges (such as
Conditions	<ul> <li>Hotel application must</li> <li>When the check-in is a primary one and the clout is assigned, the Clatotal telephone charge printed out.</li> <li>There are two types of or not). The check-ou status from check-in to check-out (not ready) from the room or by the The telephone charge pre-assigned margin rational when Hotel Application COS. After completing extension is set to the first the room status on the TD7235 is in HOTEL and room status are shown and the constatus are shown and the constatus are shown and the constatus on the telephone charge for the room status on the TD7235 is in HOTEL and room status are shown and the constatus on the telephone status are shown are shown as the status are shown as the</li></ul>	t be enabled by System Programming. assigned, the Class of Service is set to the harge counter will be cleared. When the check- ass of Service is set to secondary one and the and the other charge will be displayed and <sup>5</sup> check-out mode, ready or not ready (cleaned up t operation by the operator changes the room o check-out (not ready) mode. Changing from to check-out (ready) mode can be executed either he operator. can be added to the surcharge according to the ate. on is enabled, all extension is set to the primary a confirmation of check-in and check-out, the secondary COS. e paired DSS console, the operator can refer to DSS console while the display of paired KX- menu. The lightening patterns of DSS button own below:
	Lighting Pattern	Room Status
	Red on	Check-in
	Red flash	Check-out (not ready)
	Off	Check-out (ready)
	<ul> <li>It is possible to give a name or greeting or to personal computer.</li> <li>A new page is started if the start of the start of</li></ul>	header to the printed bill such as the hotel's assign the starting location of output data with a for each print-out.

\_\_\_\_\_

• It is possible to limit telephone usage to a pre-assigned amount by System Programming.

### **Programming References**

	Section 4, System Programmin	ng,
	[010] Budget Management	
	[011] Charge Margin Rate	
	[100] Flexible Numbering, Che	ck-out ready
	[124] Hotel Application	
	[423] Pay-Tone Assignment	
	[601] Class of Service	
Feature References	Section 3, Features,	
	Budget Management	Charge Fee Reference
<b>Operation References</b> —User Manual	<b>Operator Service Features,</b> Hotel Application	

# Timed Reminder, Remote (Wake-Up Call)

Description	Allows the operator to remotely set, cancel and confirm the wake- up call for an extension.
Conditions	<ul> <li>When either an operator or the extension sets a new time, the pre-set time is cleared.</li> <li>The Alert button on Operator 1's extension turns red if the guest does not respond to the alarm ringing. The Alert button can also be used to confirm the not responded room number or to call back the room.</li> <li>The Alert button can be assigned to a flexible CO button on Operator 1's extension only.</li> <li>SMDR records the detailed Timed Reminder information and prints it out automatically when the Timed Reminder starts and it is not answered. You can disable the printout by System Programming.</li> </ul>
<b>Programming Reference</b>	ces
0 0	Section 4, System Programming,
	[100] Flexible Numbering, Timed reminder, remote
	[217] Timed Reminder Alarm Repeat Times
	[990] System Additional Information, Field (36)
Feature References	Section 3, Features, SMDR for Timed Reminder
<b>Operation References</b> —User Manual	<b>Operator Service Features,</b> Hotel Application

### **SMDR** for Timed Reminder

### Description

Station Message Detail Recording (SMDR) automatically records detailed Timed Reminder information. It is printed out when the Timed Reminder starts and the alarm is not answered. To enable the printout, refer to the program [990] "System Additional Information, Field (36)," which allows you to print out the following records:

- Date
- Time
- Extension number
- Start / No Answer

#### An example of a printed Timed Reminder record:

Date	Time	Ext CO	Dial Number	Duration	Acc code	CD
06/24/96 06/24/96	10:03AM 10:04AM	103 103	Reminder / Start Reminder / No Answer			

#### Conditions

Connect a printer provided with an EIA (RS-232C) interface to the EIA (RS-232C) connector located on the main unit.

#### **Connection References**

**Section 2, Installation,** 2.3.10 Printer Connection

#### **Programming References**

	Section 4, System Programming, [801] SMDR Format [806]–[807] EIA (RS-232C) Parameters [990] System Additional Information, Field (36)
Feature References	Section 3, Features, Station Message Detail Recording (SMDR) Timed Reminder Timed Reminder, Remote (Wake-Up Call)
<b>Operation References</b>	Not applicable.

# 4.2 Manager Programming

009

### **Emergency Dial Number Set**

Description	Assigns emergency call numbers.	
Selection	<ul> <li>Emergency dial location number: 1 through 8</li> <li>Telephone number: 16 digits (max.)</li> </ul>	
Default	All	locations – Not stored
Programming	1.	Enter <b>009</b> .
		Display:Emergency Call
	2.	Press <b>NEXT</b> .
		Display:Emergency NO? $\rightarrow$
	3.	Enter an <b>emergency dial location number</b> .
		To enter emergency number 1, you can also press <b>NEXT</b> . Display example: 1:9110
	4.	Enter a <b>telephone number</b> .
		To delete the current entry, press <b>CLEAR</b> . To change the current entry, press <b>CLEAR</b> and the new number.
	5.	Press STORE.
	6.	To program another emergency dial number, press <b>NEXT</b> or <b>PREV</b> , or <b>SELECT</b> and the desired <b>emergency dial location number</b> .
	7.	Repeat steps 4 through 6.
	8.	Press END.
Conditions	<ul> <li>The has performed performed performance perfo</li></ul>	here is a maximum of eight emergency call numbers. Each number s a maximum of 16 digits, consisting of 0 through 9, $*$ , #, F (Flash), (Pause) and – (hyphen). o restriction is applied to emergency call numbers. or outside calls, enter a line access code (9, 81 through 88) before the none number. mergency dial location number (1-8) corresponds to [100] Flexible numbering — No. 55-62.
Feature References	Sect Eme	ion 3, Features, ergency Call

# 4.2 Manager Programming

### **Budget Management**

Description	Assigns the charge limitation of a call on an extension basis.	
Selection	• Jao	ck number: KX-TD816 – <b>01 through 16</b> , <b>*</b> (-1 / -2), KX-TD1232 – <b>01 through 64</b> , <b>*</b> (-1 / -2), (*=all jacks, -1 = first part, -2 = second part) harge limitation : <b>0 through 59999</b>
Default	All j	jacks – 0
Programming	1.	Enter <b>010</b> .
		Display:Charge Limit
	2.	Press <b>NEXT</b> .
		Display:Jack NO? $\rightarrow$
	3.	Enter a <b>jack number</b> .
		To enter jack number 01, you can also press NEXT.
		Display example: #01-1: 0
	4.	Enter a charge limitation.
		To delete the charge limitation, press CLEAR.
	5.	Press <b>STORE</b> .
	6.	To program another jack, press <b>NEXT</b> or <b>PREV</b> , or <b>SELECT</b> and the desired <b>jack number</b> .
	7.	Press <b>END</b> .
Conditions	• If t • To In	the charge limitation is set to "0," no restriction is applied. assign all jack number to one selection, press the $\star$ key in step 3. this case, the display shows the contents programmed for Jack 01.
Feature References	Sect Budg	<b>ion 3, Features,</b> get Management

# 4.2 Manager Programming

### Charge Margin Rate

Description	Assigns the margin rate of a telephone charge.	
Selection	Margin (%): 0 through 999	
Default	0%	
Programming	1.	Enter 011. Display: Charge Margin
	2.	Press NEXT. Display: Margin: 0%
	3.	Enter a <b>charge margin rate</b> . To delete the charge limitation, press <b>CLEAR</b> .
	4.	Press STORE.
	5.	Press <b>END</b> .
Conditions	Telej	phone charge = Real charge x $(\frac{100 + \text{ rate}}{100})$
	The	telephone charge will be printed out when checking out.
Feature References	Sect HOT	ion 3, Features, TEL APPLICATION – Check-In / Check-Out

*011* 

### Charge Display Selection

Description	Assigns the initial display format of charge fee on a display telephone.	
Selection	in N	/leter / in Charge
Default	in N	leter
Programming	1.	Enter <b>120</b> . Display: Charge Meter
	2.	Press NEXT. Display example: in Meter
	3.	Keep pressing <b>SELECT</b> until the desired selection is displayed.
	4.	Press STORE.
	5.	Press END.
Conditions	<ul> <li>Th Ou</li> <li>Th ch</li> </ul>	his programming is only effective when you select for charge (SMDR atput) by Program [815] "SMDR Output Mode." his programming will also determine the print-out format of the arge fee reference.
Feature References	<b>Sect</b> Cha Disp Stati	tion 3, Features, rge Fee Reference blay, Call Information ion Message Detail Recording (SMDR)

Description	Ass	Assigns the Denomination required for your country.		
Selection	2 cł	2 characters (Max.)		
Default	non	e		
Programming	1.	Enter <b>121</b> . Display: Denomination		
	2.	Press NEXT. Display example: Denomi.: KC		
	3.	Enter a 0-9, ★, #, SELECT, CLEAR, ← or none. To change the current entry, press CLEAR and the new characters To enter characters, see Section 4.1.3 "Entering Characters."		
	4.	Press STORE.		
	5.	Press <b>END</b> .		
Conditions	• If	more than two digits are entered, they are ignored.		
Feature References	Sect Disp	tion 3, Features, play, Call Information		

*121* 

### Charge Verification Assignment

Description	Assi info	gns the extension which is allowed to refer or clear for the call rmation on the extension, CO line, account code, and the total.
Selection	• Jao • Er	ck number: KX-TD816 – <b>01 through 16</b> , <b>*</b> ( <b>*</b> =all jacks) KX-TD1232 – <b>01 through 64</b> , <b>*</b> ( <b>*</b> =all jacks) hable / Disable
Default	All jacks – Enable	
Programming	1.	Enter 122. Display:Charge Refer Ext
	2.	Press NEXT. Display:Jack NO?→
	3.	Enter a <b>jack number</b> . To enter jack number 01, you can also press <b>NEXT</b> . Display example: #01:Enable
	4.	Keep pressing <b>SELECT</b> until the desired selection is displayed.
	5.	Press STORE.
	6.	To program another jack, press <b>NEXT</b> or <b>PREV</b> , or <b>SELECT</b> and the desired <b>jack number</b> .
	7.	Press END.
Conditions	<ul> <li>In Ma</li> <li>To In</li> </ul>	the case of KX-TD1232, Jack numbers 01 through 32 are for the aster System and 33 through 64 are for the slave. assign all jack numbers to one selection, press the <b>*</b> key in step 3. this case, the display shows the contents programmed for Jack 01.
Feature Reference	Sect Char	ion 3, Features, ge Fee Reference

Charge Verification ID Code Set

Description	Assigns an ID code required to refer the charge information.	
Selection	4 dig	its (0000 through 9999)
Default	1234	
Programming	1.	Enter 123. Display: Charge ID Code
	2.	Press NEXT. Display example: Code: 1234
	3.	Enter an <b>ID code</b> . To delete the current entry, press <b>CLEAR</b> .
	4.	Press STORE.
	5.	Press END.
Conditions	None	
Feature Reference	Section Charger	on 3, Features, ge Fee Reference

### Hotel Application

Description	Ass	Assigns whether the hotel application is enabled or disabled.	
Selection	Disable / Enable		
Default	Disable		
Programming	1.	Enter 124. Display: Hotel Apply Asn	
	2.	Press NEXT. Display example: Hotel : Disable	
	3.	Keep pressing <b>SELECT</b> until the desired selection is displayed.	
	4.	Press STORE.	
	5.	Press END.	
Conditions	If "H exte avai	Enable" is selected, the menu "Hotel" is displayed on the operator nsion's KX-T7235 and the "Check–In / Check–Out" feature is lable.	
Feature Reference	Sect HO	tion 3, Features, TEL APPLICATION	

### User Password

Description	Assi mod	gns the password required for entering the User Programming e.
	In th	e User Programming Mode, any display proprietary telephone in the system can set the following programs:
	usei	[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] Elevible CO Button Assignment
		[006] Operator / Manager Extension Assignment
		[007] DSS Console Port and Paired Telephone Assignment
		[008] Absent Messages
		[009] Emergency Dial Number Set
		[010] Budget Management
		[011] Charge Margin Rate
Selection	Pass	word: 4 through 7 digits
Default	1234	Ļ
Programming	1.	Enter <b>125</b> .
		Display: User Password
	2.	Press <b>NEXT</b> .
		Display example: Password:1234
	3.	Enter a <b>password</b> .
		To change the current entry, press <b>CLEAR</b> and enter the new password.
	4.	Press STORE.
	5.	Press END.
Conditions	• The password can be from four to seven digits long. Valid nur from 0 to 9.	
	<ul><li> If 1</li><li> You</li></ul>	ess than four digits are entered, they will not be stored. a cannot leave the entry empty.
<b>Feature Reference</b> —User Manual	<b>Secti</b> User	on 3, Features, Programming Mode
~~~~	2.501	

Message Waiting Ring Interval Time

Description	Sets the Message Waiting ring interval time for a single line telephone.		
Selection	Time (minutes) : 0 through 64		
Default	10 min		
Programming	1.	Enter <b>216</b> . Display: MW Ring Time	
	2.	Press NEXT. Display example: Interval: 10 min	
	3.	Enter the <b>time</b> . To change the current entry, press <b>CLEAR</b> and enter the new time.	
	4.	Press <b>STORE</b> .	
	5.	Press <b>END</b> .	
Conditions	Whe Mes	en the interval time is set to "0," the telephone does not ring for sage Waiting notification.	
Feature References	Sect Mes	ion 3, Features, sage Waiting	

# 4.4 Timer Programming

### Timed Reminder Alarm Repeat Times

Description	Sets the number of times Timed Reminder alarm is tried.	
Selection	Number of times : 1 through 5	
Default	3 times	
Programming	1.	Enter 217. Display: Alarm Times
	2.	Press NEXT. Display example: Attempt:3
	3.	Enter the <b>time</b> . To change the current entry, press <b>CLEAR</b> and enter the new time.
	4.	Press STORE.
	5.	Press END.
Conditions	One a	attempt is equivalent to 30 seconds.
Feature References	Section 3, Features, Timed Reminder	

# 4.4 Timer Programming

### Timed Reminder Alarm Interval Time

Description	Sets the Timed Reminder alarm interval time.		
Selection	Time (seconds) : 30 through 240		
Default	60 sec		
Programming	1.	Enter 218. Display: Alarm Interval	
	2.	Press NEXT. Display example: Interval: 60 sec	
	3.	Enter the <b>time</b> . To change the current entry, press <b>CLEAR</b> and enter the new time.	
	4.	Press STORE.	
	5.	Press END.	
Conditions	None		
Feature References	Section 3, Features, Timed Reminder		

# 4.6 CO Line Programming

### CO Line Name Assignment

Description	Used prop the te	to name CO lines. The preset name is shown on a display rietary telephone when an incoming outside call is placed to elephone.
Selection	• CC	) line number: KX-TD816 – <b>01 through 08</b> , <b>*</b> ( <b>*</b> =all CO lines) KX-TD1232 – <b>01 through 24</b> , <b>*</b> ( <b>*</b> =all CO lines) me: <b>10 characters (max.)</b>
Default	All C	CO lines – Not stored
Programming	1.	Enter <b>417</b> . Display: CO Line Name
	2.	Press NEXT. Display: CO Line NO? $\rightarrow$
	3.	Enter a <b>CO line number</b> . To enter CO line number 01, you can also press <b>NEXT</b> . Display example: CO01:Not Stored
	4.	Enter a <b>name</b> .
		For entering characters, see Section 4.1.3 "Entering Characters." To delete the current entry, press <b>CLEAR</b> . To change the current entry, press <b>CLEAR</b> and enter the new name.
	5.	Press STORE.
	6.	To program another CO line, press <b>NEXT</b> or <b>PREV</b> , or <b>SELECT</b> and the desired <b>CO line number</b> .
	7.	Repeat steps 4 through 6.
	8.	Press END.
Conditions	<ul> <li>In t Sys</li> <li>The cha</li> <li>To this</li> </ul>	the case of KX-TD1232, CO01 through CO12 are for the Master stem and CO13 through CO24 are for the Slave, if available. ere is a maximum of 24 names. Each name has a maximum of 10 aracters. assign all CO lines to one selection, press the × key in step 3. In s case, the display shows the contents programmed for CO01.
Feature References	<b>Secti</b> CO I Displ	on 3, Features, ncoming Call Information Display lay, Call Information

### ISDN Line Number Assignment

Description	Assigns your telephone number of the ISDN network line. Your telephone number is informed to the called party with the CLIP (Calling Line Identification Presentation) feature offered by the ISDN network service.		
Selection	<ul> <li>CO line number: KX-TD816 – 05 through 08 KX-TD1232 – 09 through 12, 21 through 24</li> <li>Telephone number: 16 digits (max.)</li> </ul>		
Default	All CO lines – Not stored		
Programming	1.	Enter 418. Display: ISDN CO NO.	
	2.	Press NEXT. Display: CO Line NO? $\rightarrow$	
	3.	Enter a <b>CO line number</b> . To enter CO line number 05 for KX-TD816 or 09 for KX-TD1232, you can also press <b>NEXT</b> . Display example: CO09:Not Stored	
	4.	Enter the <b>telephone number</b> . To delete the current entry, press <b>CLEAR</b> . To change the current entry, press <b>CLEAR</b> and the new number.	
	5.	Press STORE.	
	6.	To program another CO line, press <b>NEXT</b> or <b>PREV</b> , or <b>SELECT</b> and the desired <b>CO line number</b> .	
	7.	Repeat steps 4 through 6.	
	8.	Press END.	
Conditions	<ul> <li>In System</li> <li>To present the system</li> <li>Yo feat CL</li> </ul>	the case of KX-TD1232, CO09 through CO12 are for the Master stem and CO21 through CO24 are for the Slave, if available. display parts of the number which have scrolled off the display, ess → or ← . ur telephone number is informed to the called party if outgoing CLIR ture is disabled for the ISDN line by program [419] "ISDN Outgoing JR Service Assignment."	
Feature References	Secti CO CO Dire	ion 3, Features, Incoming Call Information Display Incoming Call Information Log ect Dialing In (DDI)	

## 4.6 CO Line Programming

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 informed to the called party.		
Selection	<ul> <li>CO line number: KX-TD816 – 05 through 08, * (*=all CO lines) KX-TD1232 – 09 through 12, 21 through 24, * (*=all CO lines)</li> <li>Enable / Disable</li> </ul>		
Default	All CO lines – Enable		
Programming	1.	Enter <b>419</b> . Display: ISDN CLIR Send	
	2.	Press NEXT. Display: CO Line NO? $\rightarrow$	
	3.	Enter a <b>CO line number</b> . To enter CO line number 05 for KX-TD816 or 09 for KX-TD1232, you can also press <b>NEXT</b> . Display example: CO09:Enable	
	4.	Keep pressing <b>SELECT</b> until the desired selection is displayed.	
	5.	Press <b>STORE</b> .	
	6.	To program another CO line, press <b>NEXT</b> or <b>PREV</b> , or <b>SELECT</b> and the desired <b>CO line number</b> .	
	7.	Repeat steps 4 through 6.	
	8.	Press END.	
Conditions	<ul> <li>In Sy</li> <li>To thi KX</li> <li>Prosult</li> </ul>	the case of KX-TD1232, CO09 through CO12 are for the Master stem and CO21 through CO24 are for the Slave, if available. assign all CO lines to one selection, press the <b>*</b> key in step 3. In s case, the display shows the contents programmed for CO05 (for K-TD816) or CO09 (for KX-TD1232). ogram [418] "ISDN Line Number Assignment" is used to store the oscriber's number of your system that is informed to the called party.	
Feature References	<b>Sect</b> Calli CO I	ion 3, Features, ing Line Identification Restriction (CLIR) Incoming Call Information Display	

# 4.6 CO Line Programming

ISDN DDI Service Assignment

Description	Enables or disables ISDN DDI service per CO line.	
Selection	<ul> <li>CO line number: KX-TD816 – 05 through 08, * (*=all CO lines) KX-TD1232 – 09 through 12, 21 through 24, * (*=all CO lines)</li> <li>Enable / Disable</li> </ul>	
Default	All CO lines – Disable	
Programming	1.	Enter 420. Display: ISDN DDI
	2.	Press NEXT. Display: CO Line NO? $\rightarrow$
	3.	Enter a <b>CO line number</b> . To enter CO line number 05 for KX-TD816 or 09 for KX-TD1232, you can also press <b>NEXT</b> .
		Display example: CO09:Disable
	4.	Keep pressing <b>SELECT</b> until the desired selection is displayed.
	5.	Press STORE.
	6.	To program another CO line, press <b>NEXT</b> or <b>PREV</b> , or <b>SELECT</b> and the desired <b>CO line number</b> .
	7.	Repeat steps 4 through 6.
	8.	Press END.
Conditions	<ul> <li>In the system of the</li></ul>	he case of KX-TD1232, CO09 through CO12 are for the Master tem and CO21 through CO24 are for the Slave, if available. assign all CO lines to one selection, press the <b>*</b> key in step 3. In case, the display shows the contents programmed for CO05 (for -TD816) or CO09 (for KX-TD1232).
Feature References	Section Direc	on 3, Features, t Dialling In (DDI)
## 4.6 CO Line Programming

Description	Enables Pay-Tone for the CO lines.	
Selection	<ul> <li>CO line number: KX-TD816 – 01 through 08, * (*=all CO lines) KX-TD1232 – 01 through 24, * (*=all CO lines)</li> <li>Enable / Disable</li> </ul>	
Default	All (	CO lines – Disable
Programming	1.	Enter <b>423</b> . Display: Pay-Tone Asn
	2.	Press NEXT. Display: CO Line NO? $\rightarrow$
	3.	Enter a <b>CO line number</b> . To enter CO line number 01, you can also press <b>NEXT</b> . Display example: CO01:Disable
	4.	Keep pressing <b>SELECT</b> until the desired selection is displayed.
	5.	Press STORE.
	6.	To program another CO line, press <b>NEXT</b> or <b>PREV</b> , or <b>SELECT</b> and the desired <b>CO line number</b> .
	7.	Repeat steps 4 through 6.
	8.	Press <b>END</b> .
Conditions	<ul> <li>An boa</li> <li>In t System</li> <li>To this</li> </ul>	a optional Pay Tone Card (KX-TD189) must be installed on CO ard to receive the Pay-Tone. the case of KX-TD1232, CO01 through CO12 are for the Master stem and CO13 through CO24 are for the Slave. assign all CO lines to one selection, press the <b>*</b> key in step 3. In s case, the display shows the contents programmed for CO01.
Feature References	<b>Sect</b> i Disp HOT	<b>ion 3, Features,</b> lay, Call Information TEL APPLICATION

*423* 

610 4.8 Extension Programming ISDN DDI Number / Extension Number Transformation

Description	Used to convert a DDI number to an extension number in order to put an incoming DDI call to a specific extension.		
Selection	<ul> <li>Jack number: KX-TD816 – 01 through 16 (-1 / -2), KX-TD1232 – 01 through 64 (-1 / -2), (-1 = first part, -2 = second part)</li> <li>DDI Number: 1 through 6 digits</li> </ul>		
Default	All jacks – Not stored		
Programming	1.	• Enter 610. Display: EXT. DDI NO.	
	2.	Press NEXT.	
		Display: Jack NO? $\rightarrow$	
	3. Enter a jack number.		
		To enter jack number 01, you can also press <b>NEXT</b> . To select the second part (-2), press <b>NEXT</b> after entering a jack number.	
		Display: #01-1:001	
	4.	Enter a <b>DDI number</b> .	
		To delete the current entry, press <b>CLEAR</b> .	
	5.	Press <b>STORE</b> .	
	6.	To program another jack, press <b>NEXT</b> or <b>PREV</b> , or <b>SELECT</b> and the desired <b>jack number</b> .	
	7.	Repeat steps 4 through 6.	
	8.	Press END.	
Conditions	<ul> <li>The one</li> <li>In t Ma</li> <li>For on j</li> </ul>	ere is a maximum of 128 DDI numbers. Each DDI number can be e through six digits, consisting of <b>0 through 9</b> . the case of KX-TD1232, jack numbers 01 through 32 are for the ester System and 33 through 64 are for the Slave, if available. an explanation of jack numbering, see "Rotation of jack number" page 4-7 of the Installation Manual.	
Feature References	Section 3, Features, Direct Dialing In (DDI)		

## 4.8 Extension Programming

ISDN DDI Number / Floating Number Transformation

Description	Used to convert a DDI number to an floating number in order to put an incoming DDI call to a specific floating station.	
Selection	• Flo	ating Station : KX-TD816 – <b>Operator / Pager 1</b> KX-TD1232 – <b>Operator / Pager 1 / Pager 2 /</b> <b>Pager 3 / Pager 4 / DISA 1/</b> <b>DISA 2 / MODEM</b> DI Number : <b>1 through 6 digits</b>
Default	All f	loating stations – Not stored
Programming	1.	Enter 611. Display: F.EXT. DDI NO.
	2.	Press <b>NEXT</b> to program the operator. Display: Operator:
	3.	Enter a <b>DDI number</b> . To delete the current entry, press <b>CLEAR</b> .
	4.	Press STORE.
	5.	To program another floating station, press <b>NEXT</b> or <b>PREV</b> until and the desired floating station is displayed.
	6.	Repeat steps 3 through 5.
	7.	Press END.
Conditions	Each 9.	DDI number can be one through six digits, consisting of <b>0 through</b>
Feature References	Secti Direc	ton 3, Features, et Dialing In (DDI)

## 4.9 **Resource Programming**

### SMDR Output Mode

Description	Assigns the SMDR Output Mode. There are two standards available – Regular and Charge.		
Selection	Regular / Charge		
Default	Regular		
Programming	1.	Enter <b>815</b> .	
		Display: SMDR Output Mode	
	2.	Press NEXT.	
		Display example: SMDR:Regular	
	3.	Keep pressing <b>SELECT</b> until the desired selection is displayed.	
	4.	Press STORE.	
	5.	Press END.	
Conditions	<ul> <li>Sele</li> <li>If y three</li> </ul>	ect the Output Mode used by your SMDR. ou assign for Charge, you can select the display in Meter / in Charge ough Program [120] "Charge Display Selection."	
Feature References	<b>Sectio</b> Statio	on <b>3, Features,</b> on Message Detail Recording (SMDR)	

## 4.10 Option Programming



System Additional Information

Description	Field (27) is added to Area 4, (28) through (33) are added to Area 5 and (35) is added to Area 6.	
Area 4	KX-TD12	232 – [17] through [24] below match CO lines 17 through 24:
	Display example	11111100000000
	CO number	$\overline{\downarrow} \overline{\downarrow} \overline{\downarrow} \overline{\downarrow} \overline{\downarrow} \overline{\downarrow} \overline{\downarrow} \overline{\downarrow} $
	Field number	$\downarrow \qquad \downarrow \qquad$
Area 5	Display example	
	Field number	unused $(36)(33)(32)(31)_{used}^{un-}(34)_{used}^{un-}(30)(29)(28)_{used}^{un-}(30)(29)(28)$
Area 6		
	Display example	
	Field number	

### **Explanation for Area 4**

Field	Description	Selection	Default	References
(27)	Enables or disables the CO pulse feedback tone when a dialed number is sent to the line.	0 : disable 1 : enable	1	None

### System Additional Information (contd.)

#### **Explanation for Area 5 and 6**

Field	Description	Selection	Default	Reference
(28)	ISDN Layer 1 active mode	<b>0</b> : By call <b>1</b> : Permanent	1	None
(29)	ISDN Data Link mode	<b>0</b> : By call <b>1</b> : Permanent	1	None
(30)	ISDN TEI mode	<b>0</b> : Fix (0) <b>1</b> : Automatic	0	None
(31)	In the day mode, selects the destination when the incoming DDI number is a floating number of the operator.	<b>0</b> : DIL 1:N <b>1</b> : Operator	1	Direct Dial In (DDI)
(32)	In the night mode, selects the destination when the incoming DDI number is a floating number of the operator.	<b>0</b> : DIL 1:N <b>1</b> : Operator	1	Direct Dial In (DDI)
(33)	Assigns whether the new page is ejected or not when the Hotel Application is printed out by SMDR.	<b>0</b> : Disable <b>1</b> : Enable	0	Hotel Application
(34)	Assigns the reference mode whether the DDI call number of ISDN shows the whole number or one digit at a time.	0 : whole number 1 : one digit at a time	0	Direct Dial In (DDI)
(35)	Sets the time after terminating the OGM.	<b>0</b> : 0 sec. <b>1</b> : 5 sec.	1	DISA OGM
(36)	Enables or disables the SMDR printout for Timed Reminder when it starts and it is not answered.	<b>0</b> : Disable <b>1</b> : Enable	1	SMDR for Timed Reminder

### Selection

- Area code: 01 (area 1) / 02 (area 2) / 03 (area 3) / 04 (area 4) / 05 (area 5) / 06 (area 6) / 07 through 12 are reserved
- Field number : 01 through 36
- Selection: See "Selection" shown above and on pages 4-127 through 4-129 in the main Installation Manual.

### Default

See "**Default**" shown above and on pages 4-127 through 4-129 in the main Installation Manual.

For programming instruction, please refer to the program [990] "System Additional Information" in the main Installation Manual.

## **Changed Features**

FEATURE TITLE	SECTION OF THE MANUAL	REVISION	
Direct Inward System Access (DISA)	Section 3	Disconnected after <u>5 seconds</u> .	
		This timer can be changed to 0 second by program [990] "System Additional Information, Field (35)."	
Display, Call Information	Section 3	This feature has been replaced with a new one. For details, refer to page 46.	
Do Not Disturb (DND)	Section 3	<ul><li>Conditions</li><li>• DND also works for doorphone calls.</li></ul>	
DSS Console (KX- T7240 / KX-T7040)	Section 3	If a port connected to a DSS Console is programmed as a XDP jack, a SLT can be connected to the port in parallel.	
Message Waiting	Section 3	This feature has been replaced with a new one. For details, refer to page 47.	
Operator	Section 3	Both operators (1 and 2) have the ability to perform all operator service features.	
Station Message Detail Recording (SMDR)	Section 3	This feature has been replaced with a new one. For details, refer to page 48.	
[001] System Speed Dialing Number Set	Section 4	These programs have been replaced with new ones. For details, refer to pages 52 through 54.	
[002] System Speed Dialing Name Set	Section 4		
[100] Flexible Numbering	Section 4	Feature Number List — Additional numbers	
6		Number Feature Default	
		54 Reserved	
		55-62 Emergency call 1 through 8 none	
		6.3 Timed reminder, remote 7 × 6.4 CO incoming call information log mode 5.6	
		65 CO incoming call information log lock 57	
		66Check-out ready736	

FEATURE TITLE	SECTION OF THE MANUAL	REVISION
[109] Expansion Unit Type	Section 4	This program has been replaced with a new one. For details, refer to page 55.
[211] Dial Start Time	Section 4	<b>Default</b> 500 ms
[412] Pause Time	Section 4	<b>Default</b> All CO line groups — $4.5 \text{ sec}$
[413] Flash Time	Section 4	<b>Default</b> All CO line groups — <u>96 ms</u>
[601] Class of Service	Section 4	This program has been replaced with a new one. For detail, refer to page 57.
[990] System Additional Information	Section 4	<b>Default</b> Field (17) — $\underline{0}$
		<b>Default</b> Field (26) — $\underline{0}$

3

## **D**isplay, Call Information

Description	A display-type proprietary telephone shows the user the following
	call information:
	Extension number and name
	These are shown when calling or when called by an
	extension user and during an established intercom call.
	A display example: 123: Smith
	Dialed telephone number
	This is shown when dialing the telephone number.
	A display example: 91234567890
	Number or name of the caller
	These are shown when receiving an incoming outside call on ISDN network.
	Display examples: 0712225555
	JOHN WHITE
	CO line number and name
	This is shown when receiving an outside call.
	A display example: CO03:AB COMPANY
	Charge Meter
	This is shown during an established call.
	A display example: CO01:00005
	Charge Fee
	This is shown during an established call.
	A display example: CO01:00001.15KC
	Call duration
	This is shown during an established outside call. The display remains for five seconds after the call is finished. A display example: CO 02 0:02'28
Conditions	<ul> <li>Extension numbers and names, and CO line names are programmable. If no name is stored, only the number is displayed.</li> <li>The display shows no intercom call duration</li> </ul>
	<ul> <li>The outgoing outside call duration starts when the programmable timer expires.</li> </ul>
	• It is programmable to select the first display, meter or charge, by system programming. To alternate the display, press the FWD/DND button.
Programming Refe	Prences Section 4 System Programming
	[003] Extension Number Set
	[004] Extension Name Set
	[120] Charge Display Selection

	[121] Assignment of Denomination	
	[212] Call Duration Count Start Time	
	[417] CO Line Name Assignment	
	[423] Pay-Tone Assignment	
	Station ProgrammingUser Manua	ıl
	Charge Fee Reference – New Rate Set	
Feature References	Section 3, Features,	
	Charge Fee Reference	
<b>Operation References</b>	DPT Features,	
–User Manual	Display Call Information	

## Message Waiting

Description	The system supports the ability to inform the called party of a waiting message. The user, with a MESSAGE button, knows there is a message if the LED of the MESSAGE button is lit red. Even if the button is not provided nor assigned, the called party hears a special dial tone, when he / she goes off-hook. Pressing the lit MESSAGE button also means to call back the extension that left the message or listen to the messages which are stored in the mailbox of a Voice Processing System.
Conditions	<ul> <li>For a proprietary telephone which is not provided with a MESSAGE button, a flexible CO button can be assigned as the MESSAGE button either by System or Station Programming.</li> <li>Cancelling a message can be performed from the extension setting it or from the extension receiving it.</li> <li>The system supports a maximum of 128 simultaneous messages.</li> <li>Messages are always left on the original extension. It is not sent to a Call Forwarding or Station Hunting destination.</li> <li>A single line telephone or KX-T7052 user will hear the ring tone as a notification, if he / she receives a message. It is programmable to set the interval of a ring tone by System Programming.</li> </ul>
Programming Reference	ces
	Section 4, System Programming, [005] Flexible CO Button Assignment [100] Flexible Numbering, Message [216] Message Waiting Ring Interval Time [990] System Additional Information, Field (9) Station ProgrammingUser Manual, Flexible Button Assignment – Message Waiting (MESSAGE) Button

Features

Feature References	Section 3, Features, Dial Tone, Distinctive	Voice Mail Integration
<b>Operation References</b> —User Manual	<b>DPT Features, SLT Features;</b> Message Waiting	

### Station Message Detail Recording (SMDR)

**Description** Station Message Detail Recording (SMDR) automatically records detailed call information for outside calls. A printer connected to the EIA (RS-232C) port can be used to print incoming and outgoing outside calls as well as print a hard copy of System Programming. To print the call records, use the program [800] "SMDR Incoming / Outgoing Call Log Printout," which allows you to print out the following records:

• Records of all outgoing outside calls or outgoing toll calls.

3

• Record of incoming outside calls.

There are three types of the call record, which are the regular call record, the charge call record and the meter call record.

**An example of a printed regular call record:** When selected for the regular display by Program [815] "SMDR Output Mode."

Date	Time	Ext	СО	Dial Number	Duration	Acc code	CD
06/24/96	10:03AM	101	01	123456789012345678901234567890	00:05'12	123456789	 0
06/24/96	10:07AM	103	20	<incoming></incoming>	00:00'56		
06/24/96	10:08AM	104	10	<incoming></incoming>	00:00'20	431211	
06/24/96	10:08AM	105	10	<incoming></incoming>	00:10'01	431211	TR
06/24/96	10:09AM	280	14	10222P1-202-346-7890	00:09'18	001	FW
06/24/96	10:10AM	103	20	<incoming></incoming>	00:01'24		
06/24/96	10:11AM	280	12	<incoming></incoming>	00:00'24		
06/24/96	10:11AM	280	22	0924312111	00:03'02		D1
06/24/96	10:20AM	120	13	<incoming></incoming>	00:21'46		RM
•	•	•	•		•	•	•
•	•	•	•	•	•	•	•
•	•	•	•	•	•	• (7)	• (0)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)

An example of a printed charge call record: When selected for charge by Program [815] "SMDR Output mode" and selected for charge display by program [120] "Charge Display Selection."

Date	Time	Ext	CO	Dial Number	Duration	Cost	Acc code	e CD
06/24/96	10:03AM	101	01	12345678901234567890	00:05'12	00382.81KC	1234567	890
06/24/96	10:07AM	103	20	<i></i>	00:00'56	00000.00KC		
06/24/96	10:08AM	104	10	<i></i>	00:00'20	00000.00KC	431211	
06/24/96	10:08AM	105	10	<i></i>	00:10'01	00000.00KC	431211	TR
06/24/96	10:09AM	280	14	10222P1-202-346-7890	00:09'18	00560.00KC	001	FW
06/24/96	10:10AM	103	20	<i></i>	00:01'24	00000.00KC		
06/24/96	10:11AM	280	12	<i></i>	00:00'24	00000.00KC		
06/24/96	10:11AM	280	22	0924312111	00:03'02	00128.00KC		D1
06/24/96	10:20AM	120	13	<i></i>	00:21'46	00000.00KC		
•	•	•	•		•	•	•	•
•	•	•	•	•	•	•	•	•
• (1)	• (2)	•(3)	• (4)	• (5)	• (6)	• (9)	• (7)	• (8)

An example of a printed meter call record: When selected for charge by Program [815] "SMDR Output Mode" and selected for meter display by Program [120] "Charge Display Selection."

Date	Time	Ext	CO	Dial Number	Duration	Cost	Acc code	CD
06/24/96	10:03AM	101	01	12345678901234567890	00:05'12	00015	12345678	390
06/24/96	10:07AM	103	20	<i></i>	00:00'56	00000		
06/24/96	10:08AM	104	10	<i></i>	00:00'20	00000	431211	
06/24/96	10:08AM	105	10	<i></i>	00:10'01	00000	431211	TR
06/24/96	10:09AM	280	14	10222P1-202-346-7890	00:09'18	00520	001	FW
06/24/96	10:10AM	103	20	<i></i>	00:01'24	00000		
06/24/96	10:11AM	280	12	<i></i>	00:00'24	00000		
06/24/96	10:11AM	280	22	0924312111	00:03'02	00000		D1
06/24/96	10:20AM	120	13	<i></i>	00:21'46	01040		RM
•	•	•	•		•	•	•	•
•	•	•	•	•	•	•	•	•
• (1)	• (2)	•(3)	• (4)	• (5)	• (6)	• (10)	• (7)	• (8)

#### **Example of SMDR printout format:**

#### Explanation

(1) Date : shows the date of the call as Day / Month / Year.

3

- (2) Time : shows the end time of a call as Hour:Minute / AM or PM.
- (3) Ext : shows the extension number, floating number, etc. that engaged in a call.
- (4) CO : shows the CO line number used for the call.
- (5) Dial Number

**Outgoing call:** shows the other party's telephone number (Regular call record : Max. 30 digits, Charge or Meter call record : Max. 20 digits). Valid digits are 0 through 9,  $\times$ , #, P (if PAUSE button is pressed), or the mark "=" (if a host PBX access code is entered). **Received call:** shows <INCOMING> and <I>.

- (6) Duration : shows the duration of the call as Hours / Minutes / Seconds.
- (7) Acc Code (Account Code): shows the account code appended to the call.
- (8) CD (Condition Code): shows call handling type with the following codes:

TR: Transfer

FW: Call Forwarding to CO Line

- \*D0: Non Security CO Line Access using DISA
- \*D1 through D4: DISA User Codes 1 through 4
- RM: Remote access to a modem

To print out the record of System Programming items that have been assigned, use the program [802] "System Data Printout."

- (9) Cost : shows the charge.
- (10) Cost : shows the meter.

#### Conditions

- Connect a printer provided with an EIA (RS-232C) interface to the EIA (RS-232C) connector located on the main unit.
- When programmed for outgoing toll calls only, printing occurs only for calls which start with the numbers stored in any Denied Code Table from levels 2 to 6. If ARS is employed, not the user-dialed but the modified number is checked against these tables.
- This system can store information up to 100 calls. If more calls are originated or received, previous records are deleted starting from the oldest one.

• This data is not deleted when you reset the system.

- If the system clock is not set by System Programming or if the calendar IC is out of order, the date and time is not printed out.
- If FLASH Signal is manually sent out during a conversation, the call record is printed and a new record is started.

#### **Connection References**

#### Section 2, Installation,

2.3.10 Printer Connection

#### **Programming References**

#### Section 4, System Programming,

- [000] Date and Time Set
- [120] Charge Display Selection
- [212] Call Duration Count Start Time
- [800] SMDR Incoming / Outgoing Call Log Printout
- [801] SMDR Format
- [802] System Data Printout
- [806]–[807] EIA (RS-232C) Parameters
- [815] SMDR Out put Mode

#### Feature References None

**Operation References** Not applicable.

## System Speed Dialing Number Set

Description	Used to program the System Speed Dial numbers. These number are available to all extension users. There are 500 numbers, from 000 to 499.		
Selection	<ul> <li>Speed dial number: 000 through 499</li> <li>Telephone number: 24 digits (max.)</li> </ul>		
Default	All speed dial numbers – Not stored		
Programming	1. Enter 001. Display: SPD Number Set		
	2. Press NEXT. Display: SPD Code?→		
	3. Enter a speed dial number. To enter speed dial number 000, you can also press NEXT. Display example: 000: Not Stored		
	<ul> <li>Enter a telephone number.</li> <li>To delete the current entry, press CLEAR.</li> <li>To change the current entry, press CLEAR and the new number.</li> </ul>		
	5. Press STORE.		
	6. To program another speed dial number, press <b>NEXT</b> or <b>PREV</b> , or <b>SELECT</b> and the desired speed dial number.		
	7. Repeat steps 4 through 6.		
	8. Press END.		
Conditions	<ul> <li>There is a maximum of 500 speed dial numbers. Each speed dial number has a maximum of 24 digits. The valid characters are 0 through 9, *, and # keys, FLASH, PAUSE, SECRET and – (hyphen) buttons.</li> <li>To store the flash signal, press FLASH.</li> <li>Note: The stored flash will be in effect only during an established call. (Refer to Section 3 "External Feature Access.")</li> <li>To store a hyphen, press the "-" button.</li> </ul>		

## 4.2 Manager Programming

System Speed Dialing Number Set (contd.)

	– To store a pause, press <b>PAUSE</b> .
	(Refer to Section 3 "Pause Insertion, Automatic.")
	- To store the feature number to convert pulse signals to DTMF
	signals, press the $\star$ # keys.
	(Refer to Section 3 "Pulse to Tone Conversion.")
	– To prevent the display of all or part of the number, press SECRET before and after confidential parts of the number. The SECRET
	button must always be entered in a pair, or your entry is not stored.
	(Refer to Section 3 "Secret Dialing.")
	• If you are storing an external number, include the line access code
	(default=9, 81 through 88) before the number. When dialing, 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 3 "Account Code Entry.")
	• If you are storing a number for CO Incoming Call Information Display
	with name, enter "-" (hyphen) after the line access code. The system
	starts to compare the calling party's number with the System Speed
	Dialing Number stored after "" Example : 9-12345678
	(Refer to Section 3 "CO Incoming Call Information Display.")
	• It is possible to store a number consisting of 25 digits or more by
	storing it in two speed dial numbers. A line access code should not be
	stored in the second speed dial number.
	• To go to another speed dial number in steps 3 through 6, press
	<b>SELECT</b> and start with step 3.
	• To display parts of the number which have scrolled off the display,
	press $\clubsuit$ or $\blacklozenge$ .
	• Program [002] "System Speed Dialing Name Set" is used to give names to speed dial numbers.
Feature References	Section 3. Features.
	Special Display Features for KX-T7235 — System Speed Dialing
	System Speed Dialing

System Speed Dialing Name Set

Description	Assigns names to the system speed dial numbers assigned in program [001] "System Speed Dialing Number Set." The large display telephone (KX-T7235) shows the stored name when performing System Speed Dialing.	
Selection	• Sp • Na	beed dial number: <b>000 through 499</b> ame: <b>10 characters (max.)</b>
Default	All	speed dial numbers – Not stored
Programming	1.	Enter 002. Display: SPD Name Set
	2.	Press NEXT. Display: SPD Code?→
	3.	Enter a <b>speed dial number</b> . To enter speed dial number 000, you can also press <b>NEXT</b> . Display example: 000: Not Stored
	4.	Enter a <b>name</b> . For entering characters, see Section 4.1.3 "Entering Characters." To delete the current entry, press <b>CLEAR</b> . To change the current entry, press <b>CLEAR</b> and the new name.
	5.	Press STORE.
	6.	To program another speed dial number, press <b>NEXT</b> or <b>PREV</b> , or <b>SELECT</b> and the desired <b>speed dial number</b> .
	7.	Repeat steps 4 through 6.
	8.	Press END.
Conditions	<ul> <li>Sp</li> <li>Sp</li> <li>Th</li> <li>ch</li> <li>To</li> <li>SF</li> </ul>	beed dial numbers are programmed in program [001] "System beed Dialing Number Set." here is a maximum of 500 names. Each name has a maximum of 10 aracters. be go to another speed dial number at steps 3 through 6, press <b>CLECT</b> and start with step 3.
Feature References	Sect Spec	<b>ion 3, Features,</b> cial Display Features for KX-T7235 — System Speed Dialing

## 4.3 System Programming

### Expansion Unit Type

Description	Ass: allo	igns the type of expansion units to be used in the system. This ws the system to identify the unit in each expansion location.
Selection	KX- • Ai KX- • <b>M</b> • Ai	-TD816 reas 1; 2 = C (4CO) / S (2S0) / E (EXT) -TD1232 faster / Slave reas 1; 2; 3 = C (4CO) / S (2S0) / E1 (EXT1) / E2 (EXT2)
Default	KX- KX-	-TD816: C; E -TD1232: Master and Slave — C; E1; E2
Programming	KX 1.	-TD816 Enter 109. Display: Expansion Card
	2.	Press <b>NEXT</b> .
	3.	Keep pressing <b>SELECT</b> until the desired selection is displayed.
	4.	Press 🌩 .
	5.	Keep pressing <b>SELECT</b> until the desired selection is displayed.
	6.	Press STORE.
	7.	Press END.
	KX 1.	-TD1232 Enter 109. Display: Expansion Card
	2.	Press <b>NEXT</b> to program the Master System. To program "Slave," press <b>NEXT</b> twice. Display example: Master.: C; E1; E2
	3.	Keep pressing <b>SELECT</b> until the desired selection is displayed.
	4.	Press -
	5.	Keep pressing <b>SELECT</b> until the desired selection is displayed.
	6.	Repeat steps 4 and 5 until all the required entries are completed.

## 4.3 System Programming

### Expansion Unit Type (contd.)

If only one system is in operation, go to step 8. 8. Press NEXT to program the Slave System. Display example: Slave: C; E1; E2 9. Repeat steps 3 through 7. 10. Press END.	
<ol> <li>Press NEXT to program the Slave System. Display example: Slave: C; E1; E2</li> <li>Repeat steps 3 through 7.</li> <li>Press END.</li> </ol>	
<ul> <li>Display example: Slave: C; E1; E2</li> <li>9. Repeat steps 3 through 7.</li> <li>10. Press END.</li> </ul>	
<ul><li>9. Repeat steps 3 through 7.</li><li>10. Press END.</li></ul>	
<b>10.</b> Press <b>END</b> .	
<ul> <li>Conditions</li> <li>There are two expansion areas in KX-TD816, areas 1 and 2 from bottom to top. One 8-Station Line Unit and either one 4-CO Line U or 2-ISDN S0 Line Unit can be installed.</li> <li>There are three expansion areas in each system for KX-TD1232, are 1, 2 and 3 from bottom to top. Up to two 8-Station Line Units and either one 4-CO Line Unit or 2-ISDN S0 Line Unit can be installed each system.</li> <li>In case of starting the system for the first time or System Data Clear application for location will adapt the practical installation instead o system default setting.</li> <li>If the Slave System is out-of-service of KX-TD1232, skip steps 8 and After changing the setting, unplug the system once and plug it in aga Otherwise, the previous setting will remain.</li> </ul>	Jnit eas in r, the of nd 9. gain.
Feature ReferencesSection 3, Features, Module Expansion	

## 4.8 Extension Programming

### Class of Service

Description	Programs each extension for a Class of Service (COS). The COS determines the call handling abilities of an extension. Primary as secondary COS numbers can be assigned per extension.		
Selection	<ul><li>Jac</li><li>CC</li></ul>	k number : KX-TD816 – <b>01 through 16</b> , <b>*</b> (-1 / -2), KX-TD1232 – <b>01 through 64</b> , <b>*</b> (-1 / -2), (* = all jacks, -1 = first part, -2 = second part) OS number: <b>1 through 8</b>	
Default	All ja	acks-1/2 – COS 1, COS 1	
Programming	1.	Enter <b>601</b> . Display: COS Assign	
	2.	Press NEXT. Display: Jack NO?→	
	3.	Enter a <b>jack number</b> . To enter jack number 01, you can also press <b>NEXT</b> . To select the second part (-2), press <b>NEXT</b> after entering a jack number. Display example: #01-1:COS <u>1</u> , COS1	
		• The Primary COS is blinking on the displays. To change the Primary COS number, dial the number (1 - 8).	
	4.	<ul> <li>Press  <ul> <li>Display example: #01-1:COS1, COS1</li> </ul> </li> <li>The Secondary COS is blinking on the displays. To change the Secondary COS number, dial the number (1 - 8).</li> </ul>	
	5.	Enter a <b>COS number</b> . To change the current entry, enter the new number.	
	6.	Press STORE.	
	7.	To program another jack, press <b>NEXT</b> or <b>PREV</b> , or <b>SELECT</b> and the desired <b>jack number</b> .	
	8.	Repeat steps 4 through 6.	
	9.	Press END.	

# 4.8 Extension Programming

### Class of Service (contd.)

Conditions	<ul> <li>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 programs [500] through [508] and [991].</li> <li>In the case of 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.</li> <li>For an explanation of jack numbering, see "Rotation of jack number" on page 4-7.</li> <li>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.</li> <li>Program [811] "DISA User Codes" is also used to assign a Class of Service to a DISA User Code.</li> </ul>
Feature References	Section 3, Features, Class of Service (COS) HOTEL APPLICATION — Check-in / Check-out

## **Deleted Features**

FEATURE TITLE	SECTION OF THE MANUAL
Caller ID	3 Features
Calling Party Control (CPC) Signal Detection	3 Features
[110] Caller ID Code Set	4.3 System Programming
[111] Caller ID Name Set	4.3 System Programming
[405] CPC Signal Detection Incoming Set	4.5 CO Line Programming
[406] Caller ID Assignment	4.5 CO Line Programming
[415] CPC Signal Detection Outgoing Set	4.5 CO Line Programming

[001] - [002] System Speed Dialing Number / Name Set					
Item : SPD No.	Parameter for [001]: Telephone number (24 digits max.)	Parameter for [002]: Name (10 characters max.)	Item : SPD No.	Parameter for [001]: Telephone number	Parameter for [002]: Name
Default	All : No	ot stored			
000			036		
001			037		
002			038		
003			039		
004			040		
005			041		
006			042		
007			043		
008			044		
009			045		
010			046		
011			047		
012			048		
013			049		
014			050		
015			051		
016			052		
017			053		
018			054		
019			055		
020			056		
021			057		
022			058		
023			059		
024			060		
025			061		
026			062		
027			063		
028			064		
029			065		
030			066		
031			067		
032			068		
033			069		
034			070		
035			071		

	[001] - [002] System Speed Dialing Number / Name Set				
Item : SPD No.	Parameter for [001]: Telephone number (24 digits max.)	Parameter for [002]: Name (10 characters max.)	Item : SPD No.	Parameter for [001]: Telephone number	Parameter for [002]: Name
Default	All : No	ot stored			
072			108		
073			109		
074			110		
075			111		
076			112		
077			113		
078			114		
079			115		
080			116		
081			117		
082			118		
083			119		
084			120		
085			121		
086			122		
087			123		
088			124		
089			125		
090			126		
091			127		
092			128		
093			129		
094			130		
095			131		
096			132		
097			133		
098			134		
099			135		
100			136		
101			137		
102			138		
103			139		
104			140		
105			141		
106			142		
107			143		

[001] - [002] System Speed Dialing Number / Name Set					
Item : SPD No.	Parameter for [001]: Telephone number (24 digits max.)	Parameter for [002]: Name (10 characters max.)	Item : SPD No.	Parameter for [001]: Telephone number	Parameter for [002]: Name
Default	All : No	ot stored			
144			180		
145			181		
146			182		
147			183		
148			184		
149			185		
150			186		
151			187		
152			188		
153			189		
154			190		
155			191		
156			192		
157			193		
158			194		
159			195		
160			196		
161			197		
162			198		
163			199		
164			200		
165			201		
166			202		
167			203		
168			204		
169			205		
170			206		
171			207		
172			208		
173			209		
174			210		
175			211		
176			212		
177			213		
178			214		
179			215		

	[001] - [002] System Speed Dialing Number / Name Set				
Item : SPD No. Default	Parameter for [001]: Telephone number (24 digits max.) All : No	Parameter for [002]: Name (10 characters max.) ot stored	Item : SPD No.	Parameter for [001]: Telephone number	Parameter for [002]: Name
216			252		
210			252		
217			255		
219			255		
220			256		
221			257		
222			258		
223			259		
224			260		
225			261		
226			262		
227			263		
228			264		
229			265		
230			266		
231			267		
232			268		
233			269		
234			270		
235			271		
236			272		
237			273		
238			274		
239			275		
240			270		
242			278		
243			279		
244			280		
245			281		
246			282		
247			283		
248			284		
249			285		
250			286		
251			287		

[001] - [002] System Speed Dialing Number / Name Set					
Item : SPD No.	Parameter for [001]: Telephone number (24 digits max.)	Parameter for [002]: Name (10 characters max.)	Item : SPD No.	Parameter for [001]: Telephone number	Parameter for [002]: Name
Default	All : No	ot stored			
288			324		
289			325		
290			326		
291			327		
292			328		
293			329		
294			330		
295			331		
296			332		
297			333		
298			334		
299			335		
300			336		
301			337		
302			338		
303			339		
304			340		
305			341		
306			342		
307			343		
308			344		
309			345		
310			346		
311			347		
312			348		
313			349		
314			350		
315			351		
316			352		
317			353		
318			354		
319			355		
320			356		
321			357		
322			358		
323			359		

	[001] - [002] System Speed Dialing Number / Name Set				
Item : SPD No.	Parameter for [001]: Telephone number (24 digits max.) All : No	Parameter for [002]: Name (10 characters max.)	Item : SPD No.	Parameter for [001]: Telephone number	Parameter for [002]: Name
260			206		
261			207		
262			208		
363			390		
364			400		
365			401		
366			402		
367			403		
368			404		
369			405		
370			406		
371			407		
372			408		
373			409		
374			410		
375			411		
376			412		
377			413		
378			414		
379			415		
380			416		
381			417		
382			418		
383			419		
384			420		
385			421		
380			422		
200			425		
380			424		
307			125		
390			420		
397			428		
393			429		
394			430		
395			431		
575					

[001] - [002] System Speed Dialing Number / Name Set					
Item : SPD No.	Parameter for [001]: Telephone number (24 digits max.)	Parameter for [002]: Name (10 characters max.)	Item : SPD No.	Parameter for [001]: Telephone number	Parameter for [002]: Name
Default	All : No	ot stored			
432			466		
433			467		
434			468		
435			469		
436			470		
437			471		
438			472		
439			473		
440			474		
441			475		
442			476		
443			477		
444			478		
445			479		
446			480		
447			481		
448			482		
449			483		
450			484		
451			485		
452			486		
453			487		
454			488		
455			489		
456			490		
457			491		
458			492		
459			493		
460			494		
461			495		
462			496		
463			497		
464			498		
465			499		

	[010] Budget Management							
Item : Jack No.	Sele	ction	Item : Jack No.	Sele	ction	Item : Jack No.	Sele	ction
(01-22)-1 -2	Enable	Disable	(22-44)-1 -2	Enable	Disable	(45-64)-1 -2	Enable	Disable
Default: all		~	22-1		   	44-1		1
all jacks		1	22-2		   	44-2		1
01-1		1	23-1		1	45-1		
01-2		1	23-2			45-2		1
02-1		1	24-1		   	46-1		
02-2		 	24-2		1	46-2		1
03-1			25-1		   	47-1		1
03-2		1	25-2		1	47-2		1
04-1			26-1		I   	48-1		1
04-2			26-2		1	48-2		1
05-1		1	27-1		1	49-1		1
05-2		1	27-2		   	49-2		I
06-1		 	28-1			50-1		1
06-2		1	28-2		 	50-2		I I
07-1		1	29-1			51-1		1
07-2			29-2		1 1 1	51-2		1 1 1
08-1			30-1			52-1		1
08-2			30-2			52-2		1
09-1			31-1		1	53-1		I I
09-2		1	31-2		 	53-2		1
10-1			32-1		-   	54-1		, , ,
10-2		1	32-2			54-2		1
11-1			33-1		1   	55-1		1 1 1
11-2		 	33-2		 	55-2		1
12-1		1	34-1		1   	56-1		   
12-2		1	34-2		 	56-2		1
13-1			35-1		1 	57-1		   
13-2			35-2		 	57-2		1 1
14-1		 	36-1		1 	58-1		   
14-2		i 	36-2		 	58-2		
15-1		1	37-1		1 	59-1		   
15-2		i I	37-2		 	59-2		i 
16-1		1	38-1		 	60-1		 
16-2		1	38-2		 	60-2		
17-1		1	39-1		 	61-1		1
17-2		1	39-2		 	61-2		1 1 1
18-1		1	40-1		 	62-1		I I
18-2		 	40-2		1 	62-2		I I I
19-1		i 	41-1			63-1		 
19-2			41-2		 	63-2		 
20-1			42-1			64-1		I <del>I</del>
20-2			42-2		 	64-2		 
21-1			43-1		 			,   
21-2		1	43-2		l I			1

[009] En	[009] Emergency Dial Number Set				
Item : Location	Parameter : 16 digits max., consisting of $0 - 9$				
No.	Default : all - Not Stored				
1					
2					
3					
4					
5					
6					
7					
8					

[011]	Charge Margin Rate
Default	Parameter : 0 through 999
0%	%

[100] Flexible Numbering					
	Feature	Default	Parameter		
54	Reserved				
55	Emergency dial number 1	—			
56	Emergency dial number 2	—			
57	Emergency dial number 3	—			
58	Emergency dial number 4	—			
59	Emergency dial number 5	—			
60	Emergency dial number 6				
61	Emergency dial number 7	—			
62	Emergency dial number 8	—			
63	Timed reminder, remote	7 <del>X</del>			
64	CO incoming call information log mode	56			
65	CO incoming call information log lock	57			
66	Check-out ready	736			
(Selection) 1 - 3 digits, (Valid Entries) 0 - 9, ×, #					

[109] Expansion Unit Type (KX-TD816)				
Default	Parameter : C, S, E			
C ; E				

[109] Expansion Unit Type (KX-TD1232)				
Default (Both)	Parameter: C, S, E1, E2			
	Master	Slave		
C ; E1 ; E2				

[120] Charge Display Selection							
Default Selection							
in Meter	~						
in Charge							

[121] Assignment	of Denomination
[Imi] instantione	or Demonnation

L ]	
Default	Parameter : 2 characters (max.)
Not Stored	

<							
	[122] Charge Verification Assignment						
Item :	Sele	Selection		Selection			
(01 - 31)	Enable	Disable	(32-64)	Enable	Disable		
Default: all	~		32				
all jacks			33				
01			34				
02		1	35				
03		1	36		   		
04			37		1		
05		1	38		   		
06		1	39				
07		   	40				
08			41		   		
09			42				
10			43				
11			44				
12			45				
13			46				
14			47				
15			48				
16			49				
17			50				
18			51				
19			52		   		
20			53				
21			54				
22			55		   		
23			56		 		
24			57				
25			58				
26			59				
27		1	60				
28			61				
29			62				
30		   	63				
31		   	64				

[123] Charge Verification ID Code Set				
	Default			Parameter: 4 digits (0000 through 9999)
1	2	3	4	

[124] Hotel Application						
Default Selection						
in Meter						
in Charge 🖌						

[125] User Password					
Default			Parameter : $4 - 7$ digits, consisting of $0 - 9$		
1 2	3	4			

[216] Message Waiting Ring Interval Time			
Default	Parameter: Minute (0 – 64)		
10 min.	min.		

[217] Timed Reminder Alarm Repeat Times			
Default	Parameter: Number of times (1 – 5)		
3 times	times		

[218] Timed Reminder Alarm			
Default	Parameter: Second (30 – 240)		
60 sec	sec		

	[417] CO Line Name Assignment	[423] Pay-Tone Assignment		[418] ISDN Line Number Assignment	[419] Out <sub>3</sub> CLIR Assig	ISDN going Service nment	[420] ISDN DDI Service Assignment		
Item :	Parameter : Name	Sele	ction	Parameter : Telephone	Sele	Selection		Selection	
CO Line No.	(10 characters max.)	Enable	Disable	No. (16 digits max.)	Enable	Disable	Enable	Disable	
Default : all	Not Stored		~	Not Stored	~	   		~	
all CO Lines			 			   		   	
01			1			   		1	
02			1			1			
03			1					1   	
04			   			   			
05			1			   			
06			1			 		1	
07			1			1		1	
08			1			   			
09			   			   		   	
10			1			1   		   	
11			1			1 1		1 1 1	
12			1			 			
13						1			
14			1			1   		1   	
15			1			   		1 1 1	
16			I I I		$\left  \right $	   		   	
17			i I			1		1 1	
18									
19			I I I			1			
20			   			   			
21						   			
22						 		   	
23			1			T		1	
24			1 1 1			I I		 	

CO line no. for program [428], [419] and [420]: KX-TD816 – 05 through 08 KX-TD1232 – 09 through 12, 21 through 24

	[601] Class of Service									
Item : Jack No.	Parameter Secondary (	: Primary /	Item : Jack No	Parameter : Primary /		Item : Jack No	Parameter : Primary / Secondary COS no (1-8)			
(01-22)-1	Primary	Secondary	(22-44)-1	Primary	Secondary	(45-64)-1	Primary	Secondary		
Default: all	1	¦ 1	22-1		   	44-1		   		
all jacks		1	22-2			44-2		1		
01-1		1	23-1			45-1		   		
01-2		1	23-2			45-2		1		
02-1			24-1			46-1		1		
02-2		1	24-2		1	46-2		1		
03-1			25-1			47-1		1		
03-2		1	25-2		1	47-2		1		
04-1			26-1			48-1		1		
04-2		1	26-2		1	48-2		1		
05-1		1	27-1		1	49-1		1		
05-2		1	27-2		1	49-2		 		
06-1		1	28-1		1	50-1		1		
06-2			28-2			50-2		1		
07-1		1	29-1			51-1				
07-2			29-2		1	51-2		1		
08-1		1	30-1			52-1		1		
08-2			30-2			52-2		i +		
09-1		1	31-1			53-1		 		
09-2			31-2			53-2		1		
10-1			32-1			54-1		 		
10-2		1	32-2			54-2		1		
11-1			33-1			55-1		 		
11-2		1	33-2		1	55-2		1		
12-1			34-1			56-1		1		
12-2		1	25 1		1	50-2		i I		
13-1			25.2			57-1		1		
13-2		1	35-2		1	59.1		1		
14-1		1	36.2			58.2				
14-2			37-1			50.1		1		
15-2		1	37-2			59_2		1		
16-1			38-1			<u> </u>				
16-2		1	38-2			60-2		1		
17-1			39-1			61-1		1		
17-2		1	39-2			61-2		   		
18-1		1	40-1			62-1				
18-2		1	40-2			62-2		   		
19-1		1	41-1		1	63-1				
19-2			41-2			63-2		1		
20-1		   	42-1		1	64-1				
20-2			42-2			64-2				
21-1			43-1					   		
21-2		   	43-2							

	[610] ISDN DDI Number / Extension Number Transformation								
Item : Jack No.	Parameter : DDI No. (1-6 digits)	Item : Jack No.	Parameter : DDI No. (1-6 digits)	Item : Jack No.	Parameter : DDI No. (1-6 digits)				
(01-22)-1	Default : all - Not Stored	(22-44)-1	Default : all - Not Stored	(45-64)-1	Default : all - Not Stored				
-2	Change	-2	Change	-2	Change				
01-1		23-1		45-1					
01-2		23-2		45-2					
02-1		24-1		46-1					
02-2		24-2		46-2					
03-1		25-1		47-1					
03-2		25-2		47-2					
04-1		26-1		48-1					
04-2		26-2		48-2					
05-1		27-1		49-1					
05-2		27-2		49-2					
06-1		28-1		50-1					
06-2		28-2		50-2					
07-1		29-1		51-1					
07-2		29-2		51-2					
08-1		30-1		52-1					
08-2		30-2		52-2					
09-1		31-1		53-1					
09-2		31-2		53-2					
10-1		32-1		54-1					
10-2		32-2		54-2					
11-1		33-1		55-1					
11-2		33-2		55-2					
12-1		34-1		56-1					
12-2		34-2		56-2					
13-1		35-1		57-1					
13-2		35-2		57-2					
14-1		30-1		58-1					
14-2		36-2		58-2					
15-1		37-1		59-1					
15-2		37-Z 20.1		59-2					
10-1		28.2		60-1					
10-2		20.1		00-2					
17-1		39-1		61.2					
17-2		40.1		62.1					
18-1		40-1		62.2					
10-2		40-2		63.1					
10_2		41_2		62.2					
20-1		42-1		6/ 1					
20-1		42-1		6/ 2					
21-1		43-1		04-2					
21-1		43-2							
22-1		44-1							
22-2		44-2							
22-2		44-2							
[611] ISDN DDI Number / Floating Number Transformation									
-----------------------------------------------------------	-------------------------------------	--							
Item :	Parameter : DDI No. (1-6 digits)								
Floating Station	Default : all - Not Stored								
	Change								
Operator									
Pager 1									
Pager 2									
Pager 3									
Pager 4									
DISA 1									
DISA 2									
MODEM									

	Default	Selection
Regular	~	
Charge		

## Matsushita Electric of Industrial Co., Ltd.

Central P.O. Box 288, Osaka 530-91, Japan