Panasonic

Digital Super Hybrid System KX-TD816CE KX-TD1232CE

Added and Changed Features for Installation Manual and Programming Tables Vol. 4

In this manual, the last letters, "CE", of each model number are omitted.

ROM Version: KX-TD816CE — P341E, P342E or later KX-TD1232CE — P241E, P242E or later The ISDN Line Unit (KX-TD280 / KX-TD286) is in accordance with the European Telecommunication Standards (ETS).
 If your telephone company provides an ISDN service which follows standards other than ETS, some ISDN features may not work properly.
 (E.g. Charge Fee Reference, CLIP, COLP, etc.)

• To use the point-to-multi-point configuration with the KX-TD286, the number on the name plate, which is on the back of the unit, must be ④ or later.

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Additions to the KX-TD816/1232

The following Panasonic proprietary telephones have become available for the KX-TD816 and KX-TD1232.

Proprietary	Description
Telephone	
KX-T7425	Digital, jog dial, speakerphone,
	24 CO
KX-T7433	Digital, 3-line LCD, jog dial,
	speakerphone, 24 CO
KX-T7436	Digital, 6-line LCD, jog dial,
	speakerphone, 24 CO
KX-T7450	Digital, jog dial, monitor, 12 CO
KX-T7520	Digital, jog dial, speakerphone,
	12 CO
KX-T7531	Digital, 1-line LCD, jog dial,
	speakerphone, 12 CO
KX-T7533	Digital, 3-line LCD, jog dial,
	speakerphone, 12 CO
KX-T7536	Digital, 6-line LCD, jog dial,
	speakerphone, 12 CO
KX-T7550	Digital, jog dial, monitor, 12 CO

Message Unit (KX-TD190)*1

This unit requires using the Direct Inward System Access (DISA) feature and recording an Outgoing Message for the KX-TD816. DISA allows you to access a desired destination in the system directly from an external telephone. Once you have accessed the DISA line, just dial the extension number. If necessary, the Outgoing Messages (OGM) for external callers and /or an OGM for Timed Reminder can be recorded.



Remote Unit (KX-TD198)*1

The Remote unit allows system programming and maintenance from a remote location for the KX-TD816.



Primary Rate Interface ISDN Expansion Unit (KX-TD290)*2



The KX-TD290 Primary Rate Interface (PRI) ISDN Expansion Unit adds one PRI ISDN line. This unit can be only installed to the <u>KX-TD1232 Master</u> system. When this unit is installed, CO lines 13 through 24 will become unavailable if the Slave system is operating.

⁻¹ PRI ISDN line can be added.

Note This unit can be installed with the KX-TD280 or KX-TD286, but not with the KX-TD180 or KX-TD184.

Remote Card (KX-TD197)*2

The Remote card allows system programming and maintenance from a remote location for the KX-TD1232.



Personal Computer with Modem DSS Console (KX-T7440 / KX-T7441 / KX-T7540 / KX-T7541)



Note The KX-T7536 and KX-T7540 are illustrared as an example.

Add-on Key Module (KX-T7545)

Adds 12 CO buttons to a KX-T7500 series telephone.



Connection

KX-T7440 / KX-T7441 and KX-T7400 series telephones

You can attach a KX-T7440 Digital DSS Console or KX-T7441 Attendant Console and a KX-T7400 series telephone. Use the attached plate and screws.



KX-T7540 / KX-T7541 and KX-T7500 series telephones

You can attach a KX-T7540 Digital DSS Console or KX-T7541 Attendant Console and a KX-T7500 series telephone. Use the attached plate and screws.

1. Open the cover.





3. Attach the DSS console to your



- 2. Remove (A) and (B) as shown below.
- 4. Close the cover.





KX-T7545 and KX-T7500 series telephones

To use the KX-T7545 Add-on Key Module, you must connect it to a KX-T7500 series telephone. Use the attached screw.

1. Open the cover.



3. Insert the cable into the connector.



- 2. Attach the KX-T7545 to your telephone with the screw.
- 4. Close the cover.





2.4 **Optional Cards and Units Installation**

Primary Rate Interface ISDN Expansion Unit Connection

The KX-TD290 Primary Rate Interface (PRI) ISDN Expansion Unit adds one PRI ISDN line.

When this unit is installed to the system, the maximum number of available CO lines is limited to 42. CO lines 13 through 24 will become unavailable if the Slave system is operating. One PRI ISDN line adds 30 CO lines (CO 25 through CO 54) to the system.

This unit can be only installed to the <u>KX-TD1232 Master system</u>. The following procedures can be used to install either an 8-Station Line Unit (KX-TD170), 16 SLT Line Circuit Unit (KX-TD174), 4-CO Line Unit (KX-TD180), E&M (TIE) Line Unit (KX-TD184), ISDN 2-S0 Line Unit (KX-TD280), ISDN 6-S0 Line Unit (KX-TD286) or Primary Rate Interface ISDN Expansion Unit (KX-TD290). 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

Programming Reference

Section 4, System Programming — in this manual [109] Expansion Unit Type

Feature Reference

Section 3, Features — in this manual Module Expansion

2.4.1 Location of Optional Cards and Units

The locations of the optional units are shown below.

Precautions To protect the printed circuit boards (P-boards) from static electricity, do not touch parts on the P-boards in the main unit and on the optional units. ISDN unit (KX-TD280, KX-TD286, KX-TD290) installation; The ISDN unit should not be installed only to the Slave system.

Expansion Unit for KX-TD1232

A maximum of two 8-Station Line Units (KX-TD170) or 16 SLT Line Circuit Units and/or one CO Line/E&M (TIE) Line/ISDN Line Unit (KX-TD180, KX-TD184, KX-TD280, KX-TD286) can be installed to any expansion area. The PRI ISDN Line Unit (KX-TD290) can be installed with the KX-TD280 or KX-TD286, but not with the KX-TD180 or KX-TD184. You must use the KX-TD170/174-⁽²⁾ when you install the KX-TD290. The former KX-TD170/174 does not work properly with the KX-TD290. Please see the back of the unit and check "⁽²⁾" is marked.



- When starting the system for the first time or performing System Data Clear, the location application will use the actual installation settings instead of the system default settings.
 - System Programming is required for location identification. Refer to [109] "Expansion Card/Unit Type" in this manual. Default:
 - KX-TD1232:Area 1= 4-CO Line Unit, Area 2, 3= 8-Station Line Unit

Installing the Expansion Unit (KX-TD290)*

1. Loosen the two screws on the cover plate. Insert your 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 onto 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 attach the inside screw securely, or the unit will not work properly.
- **6.** Prepare the required plugs. Two 4-pin plugs are included with the KX-TD290.



*: Available for the KX-TD1232 Master system only.

Installing the Expansion Unit (KX-TD290)*

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 from 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 with the main unit).



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



Note • If two or three expansion units are installed, cut the cabinet covers on the lower cabinets to allow the cords from the upper cabinets to go down through the cabinet covers. To protect the cords, smooth the cut edges.



Programming Reference In this manual Section 4, System Programming [109] Expansion Unit Type

Installing the Message Unit (KX-TD190)*/ Remote Unit (KX-TD198)*

To install only the Message unit or Remote unit

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



Note There are two cover plates. Any of them can be removed, as needed.

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



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



To attach another expansion unit to the Message or Remote unit and install them to the system

1. Remove the front cover of the Message or Remote unit.



2. Attach the expansion unit to the Message or Remote unit as shown below. Be sure to connect the cabinet cords by inserting the expansion unit cabinet cord through the slot in the Message or Remote unit.



3. Remove the cover plate and connect the cabinet cord to the connector in the main unit firmly.



Installing the Message Unit (KX-TD190)* / Remote Unit (KX-TD198)*

4. Hook the cabinets onto the main unit and slide the cabinets to the left until they are secured.



5. Loosen the outside screw of the expansion unit and slide the cover to the right.



6. Secure the inside screw (included with the Message or Remote unit) to fix the cabinet to the main unit.



- 7. Tie all of the cords into a bundle. If other cords are exposed from the upper cabinets, tie them also.
- 8. Close the cabinet cover and secure the outside screw.
- **9.** Cover the cords with the cord holder. If two cabinets are connected together and attached to the main unit, use the cord holder included with the Message or Remote unit.
- **10.** Fix the cords to the wall as shown here, so that the front cover can be opened.



Remote Card (KX-TD197) Installation*

To perform system programming and maintenance from a remote location using a personal computer (PC), install the Remote card (KX-TD197).



- **1.** Open the front cover.
- 2. Insert the top side of the Remote card into the two hooks on the main unit.
- **3.** Press down on the two corners of the bottom side of the Remote card.
- **4.** Connect the cord to the Remote card connector.



Programming Reference

Section 4,	System Programming – in this manual	
[817] KX	TD197 Baud Rate Setting	

Feature Reference

Section 3, Features – in this manual System Programming and Diagnosis with Personal Computer

$Calling \ / \ Connected \ Line \ Identification \ Presentation \ (CLIP \ / \ COLP)$

Description	Calling Line Identification Presentation (CLIP) enables showing the calling party's number on the display of the called party's telephone when a call is received. Connected Line Identification Presentation (COLP) enables showing the called party's number on the display of the calling party's telephone when the called party answers a call. These features are one of ISDN's services. To use the CLIP or COLP service, number assignments are required as follows: • CLIP/COLP number for each outside line • CLIP/COLP number for each extension
Conditions	 The CLIP service for outgoing CO calls can be restricted by System Programming (CLIR: Calling Line Identification Restriction). The number actually sent to the calling or called party may be different from the system programmed number. It depends on the contract with your ISDN supplier.
Programming Referen	ces
	 Section 4, System Programming Added and Changed Features for Installation Manual and Programming Tables [418] ISDN Line Number Assignment [419] ISDN Outgoing CLIR Service Assignment — In this manual [617] CLIP / COLP Number Assignment for Extension [618] CLIP / COLP Number Assignment for ISDN Extension [990] System Additional Information, Field (46)
Feature References	 Section 3, Features Added and Changed Features for Installation Manual and Programming Tables Calling Line Identification Restriction (CLIR) In this manual Connected Line Identification Restriction (COLR)
Operation Reference —Added and Changed Features for User Manual Vol. 5	DPT Features Calling / Connected Line Identification Presentation (CLIP / COLP)

3 Features

Connected Line Identification Restriction (COLR)

Description	Allows the extension user to restrict displaying the called party's number to the calling party when the calling party is making a call. This feature is one of ISDN services.		
Conditions	If displaying is enabled, the calling party can check the called party's number before the called party answers it (Connected Line Identification Presentation).		
Programming References			
	Section 4, System Programming		
	— Added and Changed Features for Installation Manual and Programming Tables		
	[418] ISDN Line Number Assignment		
	— In this manual		
	[617] CLIP / COLP Number Assignment for Extension		
	[618] CLIP / COLP Number Assignment for ISDN Extension		
	[990] System Additional Information, Field (46)		
Feature Reference	Section 3, Features — in this manual Calling / Connected Line Identification Presentation (CLIP/COLP)		
Operation Reference	Not applicable.		

Integrated Services Digital Network (ISDN)

Description

The system can manage a call received from the ISDN line by point-to-point or point-to-multi-point configuration. An optional ISDN Line Unit, KX-TD280, KX-TD286, or KX-TD290 is required. The KX-TD290 can only use "point-to point" configuration.

Point-to-point

A call received through one ISDN port is sent directly to a specific extension using a Direct Dialling In (DDI) service.

Point-to-multi-point

One ISDN port can support a maximum of ten Multiple Subscriber Numbers (MSN). A call received through an ISDN port is sent directly to the pre-assigned extension if the dialled number matches the stored MSN.

Flow chart of required programs for ISDN



Conditions

- If "Disable"is assigned in programs [452]-[453] "ISDN Ring Service Assignment — Day / Night" and an extension is not assigned in programs [407]-[408] "DIL 1:1 Extension — Day / Night", the call will be received by DIL 1:N.
- If the destination is in the Do Not Disturb mode, or has disabled the Call Waiting mode and is busy, the following may occur:
 - 1) The call is sent to the IRNA destination.
 - 2) The call is received only at a flashing corresponding CO button. (Default)
 - 3) The system sends a busy tone to the network.

Connection References

Section 2, Installation

— Added and Changed Features for Installation Manual and Programming Tables ISDN 2-S0 Line Unit Connection —

— Added and Changed Features for Installation Manual and Programming Tables Vol. 2 ISDN 6-S0 Line Unit Connection

- In this manual

Primary Rate Interface ISDN Expansion Unit Connection

Programming References

Section 4, System Programming

- Installation Manual

[407]–[408] DIL 1:1 Extension – Day / Night

- Added and Changed Features for Installation Manual and Programming Tables Vol. 2

[424] ISDN Port Type

[425] ISDN Layer 1 Active Mode

- [426] ISDN Configuration
- [427] ISDN Data Link Mode
- [428] ISDN TEI Mode
- [429] ISDN Extension Multiple Subscriber Number

— In this manual

[150] ISDN DDI Translation Table

[151]-[152] ISDN DDI Ringing Assignment — Day / Night

[421] ISDN DDI / MSN Removed Digit / Added Number Assignment

[447] MSN Assignment

[448]-[449] Extension Ringing Assignment — Day / Night for ISDN

[452]-[453] ISDN Ring Service Assignment — Day / Night

[990] System Additional Information, Fields (31), (32)

• The recommended parameter combinations are listed below. The underlined selections are recommended. The selections marked with "*" are activated automatically, regardless of the assignment.

3

	[424] ISDN	[425] ISDN	[426] ISDN	[427] ISDN	[428] ISDN
Program	Port Type	Layer 1 Active	Configuration	Data Link	TEI Mode
U		Mode		Mode	
		Dermanant	P–P	Dormonant	<u>Fixed</u> /
Parameter	СО	I crinaliciti		I effiaitent	Automatic
		Call	P–M (not available)	Call	Automatic
	Extension	Call/ <u>Permanent</u>	P–P	Call/ <u>Permanent</u>	Fixed*
		<u>Call/</u> Permanent	P–M	Call*	Automatic*

Feature References

Section 3, Features — in this manual Direct Dialling In (DDI)

Multiple Subscriber Number (MSN) Ringing Service

Operation Reference Not Applicable.

Multiple Subscriber Number (MSN) Ringing Service

Description

Provides automatic direction of an incoming ISDN line call to a pre-assigned extension. One ISDN port can support a maximum of ten Multiple Subscriber Numbers (MSN). Assignable destinations are: (1) Operator, (2) extension, (3) Hunting Group, (4) TAFAS, (5) DISA (6) modem, (7) Phantom extension, (8) Voice Mail extension, and (9) ISDN extension. The extensions which are assigned in programs [448]–[449] "Extension Ringing Assignment – Day / Night for ISDN" receive a call if the dialled number matches the stored MSN. <Example>

ISDN Port No.	Location No.	[447] MSN Assignment	[448] Extension Ringing Assignment – Day for ISDN	[449] Extension Ringing Assignment – Night for ISDN
1	-1	2011111	101	201
	-2	2012222	102	202
	:			
	-10			

Conditions

- An incoming MSN number is converted as programmed in [421] ISDN DDI / MSN Removed Digit / Added Number Assignment.
- To use the MSN ringing service, "MSN" must be selected in program [452]-[453] "ISDN Ring Service Assignment Day / Night".
- If an MSN number through the ISDN line does not match the number assigned in program [447] "MSN Assignment", the call will not be received. If no MSN numbers are assigned in program [447], the call will be sent to an extension according to DIL 1:1 or DIL 1:N.
- When using point-to-multi-point configuration with a Basic Rate Interface (BRI), we recommend not connecting another ISDN equipment in parallel with your system. As only two channels can be used at one time with the BRI, other ISDN equipment may monopolize the channels.

Programming References

	Section 4, System Programming [407]–[408] DIL 1:1 Extension – Day / Night — Installation Manual — in this manual [421] ISDN DDI / MSN Removed Digit / Added Number Assignment [447] MSN Assignment [448]–[449] Extension Ringing Assignment — Day / Night for ISDN [452]–[453] ISDN Ring Service Assignment — Day / Night [990] System Additional Information, Fields (31), (32)
Feature Reference	Section 3, Features — in this manual Integrated Services Digital Network (ISDN)
Operation Reference	Not Applicable.

Features

Off-Hook Monitor

Description	Allows KX-T7433, KX-T7436, KX-T7531, KX-T7533, and KX-T7536 digital proprietary telephone users to let other users listen to the conversation through the built-in speaker, while continuing the same call using the handset.		
Condition	This is effective for a handset conversation.		
Programming Referen	ce Section 4, System Programming — in this manual [148] Off-Hook Monitor		
Feature References	None		
Operation Reference —Added and Changed Features for User Manual Vol. 5	DPT Features Off-Hook Monitor		

Ring Group

Description	All extensions in a ring group ring floating number of the extension gr Station Hunting type.	simultaneously by dialling the coup. A ring group can be a
Conditions	 Types of calls whose destination can Outside calls – Direct Dialling I Direct Inward Sy Intercept Routin Uniform Call Di Intercom calls – Extension; Tran The floating number of the extension types, Circular, Termination, Voice N (AA) and Uniform Call Distribution 	h be the ring group are: In (DDI); Direct In Lines (DIL) 1:1; ystem Access (DISA); g – No Answer (IRNA); istribution (UCD)-Overflow nsfer n group is used for all other hunting Mail (VM), Automated Attendant (UCD).
Programming Reference	ces	
0 0	Section 4, System Programming	
	— Installation Manual [602] Extension Group Assignment	
	— In this manual	
	[106] Station Hunting Type	
	[813] Floating Number Assignment	
Feature References	Section 3, Features — in this manual Floating Station	Station Hunting
Operation Reference	Not applicable.	

4.3 System Programming

Off-Hook Monitor

Description	Enables or disables the Off-Hook Monitor.		
Selection	Enable / Disable		
Default	Enab	le	
Programming	1.	Enter 148. Display: Off-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.	
Condition	The C KX-T	Off-Hook Monitor is only available for KX-T7433, KX-T7436, 7531, KX-T7533 and KX-T7536 telephone users.	
Feature Reference	Section 3, Features Off-Hook Monitor		

4.3 System Programming

ISDN DDI Translation Table

Description	Assign Incon locat	gns a destination location of incoming DDI numbers. ming DDI numbers are received at extensions assigned to each ion number.
Selection	• Lo • DE	cation number: 000 through 399 DI number: 16 digits max.
Default	All l	ocations – Not stored
Programming	1.	Enter 150. Display: DDI Assign
	2.	Press NEXT. Display: Location No?→
	3.	Enter a location number.
		To enter location number 000, you can also press NEXT.
		Display example: 000:Not Stored
	4.	Enter a DDI 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	 The Val Pro Nig day Thi [45] 	e DDI number can be a maximum of 16 digits. id numbers are from 0 to 9 . ograms [151]-[152] "ISDN DDI Ringing Assignment — Day / ght" are used to assign an extension to each location number in the and night modes. is program becomes available when "DDI" is selected in program 2]-[453] "ISDN Ring Service Assignment — Day / Night".
Feature References	Secti Direc Integ	on 3, Features — in this manual et Dialling In (DDI) rated Services Digital Network (ISDN)

151-1524.3System ProgrammingISDN DDI Ringing Assignment — Day / Night

Description	Ass mod	igns the destination of each DDI number in the day and night des.
Selection	• Lo • Ez	ocation number: 000 through 399 xtension number: 2 to 4 digits / 0 (the same as [990] fields (31) and (32) assignments)
Default	All	locations – Not stored
Programming	1.	Enter a program address (151 for day or 152 for night). Display example: DDI Ring Day
	2.	Press NEXT. Display: Location No?→
	3.	Enter a location number . To enter location number 000, you can also press NEXT . Display example: 000:Not Stored
	4.	Enter an extension number or 0 . Display example:000:EXT 201 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	• Ea • W de Fi • Tl [4	ach extension number can be 2 to 4 digits, consisting of 0 through 9 . Then "0" is assigned, the incoming DDI number is sent to the estination assigned in program [990] "System Additional Information, elds (31) and (32). These programs become available when "DDI" is selected in program 52]-[453] "ISDN Ring Service Assignment — Day / Night".

4.3System Programming151-152

ISDN DDI Ringing Assignment — Day / Night (contd.)

 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 – [130] "Phantom Extension Number Assignment" Floating numbers – [813] "Floating Number Assignment"
 Feature References Section 3, Features — in this manual Direct Dialling In (DDI) Integrated Services Digital Network (ISDN) 4214.6CO Line ProgrammingISDN DDI / MSN Removed Digit / Added Number Assignment

Description	Assi num	gns the removed digits and added number to a subscriber's ber, and a DDI number sent from the network.
Selection	• ISI • Re	DN port number: KX-TD816 – 01 through 04 , * KX-TD1232 – 01 through 12 , * (*=all ISDN ports) moved digits: 0 to 16 (0=no deleting)
	• Ad	ded number: 4 digits (max.)
Default	All I	SDN ports – Removed digit=0; Added number=Not stored
Programming	1.	Enter 421 .
		Display: DDI/MSN RMV/Add
	2.	Press NEXT.
		Display: Port NO? \rightarrow
	3.	Enter an ISDN port number.
		To enter ISDN port number 01, you can also press NEXT.
		Display example: 01: 0,
	4.	Enter the digit (s) to be deleted.
		To change the current entry, press CLEAR and enter the new number.
	5.	Press 🏴 .
		Display example: 01: 3,
	6.	Enter the number (s) to be added.
		To change the current entry, press CLEAR and enter the new number.
	7.	To program another port, press NEXT or PREV , or SELECT and the desired CO line number .
	8.	Press STORE.
	9.	Press END.
Conditions	 For System Eact 0 the second se	the KX-TD1232, port numbers 01 through 06 are for the Master stem and port numbers 07 through 12 are for the Slave, if available. ch added number has a maximum of four digits, consisting of hrough 9 .

4.6 CO Line Programming

ISDN DDI / MSN Removed Digit / Added Number Assignment (contd.)

	 To assign all ISDN ports to the same number, press the × key in step 3. In this case, the display will show the contents programmed for Port 01. Example: If the removed digits are assigned as "6" and the added number is assigned as "2", the number sent from the network will be changed as follows: <u>854926</u>03 Six digits are deleted and "2" is added, and the number becomes "203".
Feature References	Section 3, Features — in this manual Direct Dialling In (DDI)

Multiple Subscriber Number (MSN)

4.6 CO Line Programming

MSN Assignment

Description	Assi an IS	gns a maximum of ten Multiple Subscriber Numbers (MSN) on SDN port basis.
Selection	• Po • Lo • MS	rt number: KX-TD816 – 01 through 04 KX-TD1232 – 01 through 12 cation number: 1 through 10 SN: 16 digits (max.)
Default	All p	ports – All locations – Not stored
Programming	1.	Enter 447 . Display: MSN Assign
	2.	Press NEXT. Display: Port NO?→
	3.	Enter a port number . To enter port number 01, you can also press NEXT . Display example: <u>01:01</u> :Not Stored Location number Port number
	4.	Enter a MSN. 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	 Eac For System This [45] 	ch MSN can be 16 digits, consisting of 0 through 9 . r the KX-TD1232, port numbers 01 through 06 are for the Master stem and 07 through 12 are for the Slave, if available. is program becomes available when "MSN" is selected in program 52]-[453] "ISDN Ring Service Assignment — Day / Night".
Feature Reference	Secti Integ Mult	ion 3, Features — in this manual grated Services Digital Network (ISDN) iple Subscriber Number (MSN)

4.6 CO Line Programming

448-449

Extension Ringing Assignment — Day / Night for ISDN

Description	Dete ISDI	rmines which extension receives a call on a MSN basis for the N port in both the day and night modes.
Selection	 Po: Lo Ex 	rt number: KX-TD816 – 01 through 04 KX-TD1232 – 01 through 12 cation number: 1 through 10 tension number: 2 to 4 digits / 0 (the same as [990] fields (31) and (32) assignments) / Disable
Default	All p	ports – All locations – Disable – Day / Night
Programming	1.	Enter a program address (448 for day or 449 for night) . Display example: MSN Ring Day
	2.	Press NEXT. Display: Port NO?→
	3.	Enter a port number . To enter port number 01, you can also press NEXT . Display example: <u>01:01</u> :Disable Location number Port number
	4.	Enter an extension number or 0 . 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	 Eac Where the second seco	ch extension number can be 2 to 4 digits, consisting of 0 through 9 . nen "0" is assigned, the incoming MSN number is sent to the stination assigned in program [990] "System Additional Information, Ids (31) and (32).

448-4494.6CO Line Programming

Extension Ringing Assignment — Day / Night for ISDN (contd.)

	 For the KX-TD1232, port numbers 01 through 06 are for the Master System and 07 through 12 are for the Slave, if available. These programs become available when "MSN" is selected in program [452]-[453] "ISDN Ring Service Assignment — Day / Night". 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 – [130] "Phantom Extension Number Assignment" Floating numbers – [813] "Floating Number Assignment"
Feature References	Section 3, Features — in this manual Integrated Services Digital Network (ISDN) Multiple Subscriber Number (MSN)
PRI Configuration*

Description	Assigns the number of B channels which are actually used out of the 30 PRI line channels. The CRC4 mode can be also assigned.		
Selection	 B channel number: 0 through 30 CRC4: Disable/Enable 		
Default	B channel number – 0 line/CRC4 – Enable		
Programming	1.	Enter 450.	
	2.	Press NEXT .	
	3.	Display example:Use: 0 Line Enter the number of B channels.	
	4.	Press STORE.	
	5.	Press NEXT to assign the CRC4 mode.	
		Display example:CRC4:Disable	
	6.	Keep pressing SELECT until the desired selection is displayed.	
	7.	Press STORE.	
	8.	Press END.	
Condition	If the available number of B channels are not assigned as "0 Line", CO 13 through 24 will become "No Connect", and the assigned B channel numbers of CO lines starting from CO 25 will become "Connect" automatically in program [400] "CO Line Connection Assignment". For example, if the B channel number is assigned as "3", CO 25 through 27 will become "Connect".		
Feature References	Non	e	

PRI Reference CO*

Description	Assig excep • [40] • [412 • [412 • [412 • [402 • [402 • [402 • [402 • [402 • [402 • [402 • [602 • [602 • [614	 igns which CO line number system data each PRI line uses ept for the following programs: 01] CO Line Group Assignment 17] CO Line Name Assignment 18] ISDN Line Number Assignment er assigning this program, the following program data will ome available for PRI lines CO 25 through 54. 07]-[408] DIL 1:1 Extension — Day / Night 19] ISDN Outgoing CLIR Service Assignment 21] ISDN DDI / MSN Removed Digit / Added Number Assignment 52]-[453] ISDN Ring Service Assignment — Day / Night 03]-[604] DIL 1:N Extension and Delayed ringing — Day / Night 05]-[606] Outgoing Permitted CO Line Assignment 14]-[615] Outgoing Permitted CO Line Assignment 		
	— Day / Night for ISDN Extension			
Selection	 PRI CO line number: 25 through 54, * (*=all CO lines) CO line number: 01 through 24 			
Default	All C	O lines (PRI line) – CO 13		
Programming	1.	Enter 451 . Display: PRI Reference CO		
	2.	Press NEXT. Display: CO NO?->		
	3.	Enter the PRI CO line number (25 through 54). Display example:CO25 : CO 13		
	4.	Enter the desired CO line number (01 through 24).		
	5.	Press STORE.		
Conditions	 For and CO expansion 	the KX-TD1232, CO 01 through CO 12 are for the Master system CO 13 through CO 24 are for the Slave, if available. 25 through CO 54 become available when the KX-TD290 ansion unit is installed in the Master System.		

PRI Reference CO* (contd.)

• To assign all CO lines to the same selection, press the × key in step 3. In this case, the display shows the contents programmed for CO 25.

Feature References None

*: Available for KX-TD1232 only.

452-453 4.6 CO Line Programming

ISDN Ring Service Assignment — Day / Night

Description	Assigns the ISDN service type for each ISDN port.		
Selection	 Port number: KX-TD816 – 01 through 04, * KX-TD1232 – 01 through 12, * (* =all ISDN ports) DDI / MSN / Disable 		
Default	All ports – Disable – Day / Night		
Programming	1.	Enter a program address (452 for day or 453 for night) . Display example: ISDN Ring Day	
	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 SELECT and the desired port number .	
	7.	Repeat steps 4 through 6.	
	8.	Press END.	
Conditions	 This assignment depends on the contract with your ISDN supplier. For the KX-TD1232, port numbers 01 through 06 are for the Master System and 07 through 12 are for the Slave, if available. To assign all ISDN ports to the same number, press the × key in step 3 In this case, the display shows the contents programmed for Port 01. 		
Feature References	Section 3, Features — in this manual Direct Dialling In (DDI) Multiple Subscriber Number (MSN)		

4.7 COS Programming

Off-Hook Call Announcement (OHCA)

Description	Enables or disables 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: OHCA
	2.	Press NEXT. Display: COS NO?→
	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 case Process 	assign all COS to one selection, press the \times key in step 3. In this se, the display shows the contents programmed for COS 1. ogram [601] "Class of Service" assigns a Class of Service to each tension.
Feature References	Section 3, Features — in this manual Off-hook Call Announcement (OHCA) Whisper OHCA	

CLIP / COLP Number Assignment for Extension

Description	Assigns a CLIP/COLP number for 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) CLIP/COLP number: 16 digits max. 	
Default	All jacks – Not stored	
Programming	1.	Enter 617. Display: CLIP for EXT
	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 a CLIP/COLP 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	 A CLIP/COLP number consists of a maximum of sixteen digits, 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 assign all jacks to the same selection, press the × key in step 3. In this case, the display shows the contents programmed for Jack 01. 	
Feature Reference	Sect Adde Call In th Call Con	tion 3, Features ed and Changed Features for the Installation Manual and Programming Tables ing Line Identification Restriction (CLIR) his manual ing / Connected Line Identification Presentation (CLIP / COLP) nected Line Identification Restriction (COLR)

4.8 Extension Programming

CLIP / COLP Number Assignment for ISDN Extension

Description	Assigns a CLIP/COLP number for an ISDN extension.	
Selection	 Port number: KX-TD816 – 01 through 06, * KX-TD1232 – 01 through 12, * (*=all ISDN ports) CLIP/COLP number: 16 digits max. 	
Default	All ports – Not stored	
Programming	1.	Enter 618. Display: CLIP for I-EXT
	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:Not Stored
	4.	Enter a CLIP/COLP number . To change the current entry, press CLEAR and 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	 A CLIP/COLP number consists of a maximum of sixteen digits, 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. To assign all ISDN ports to the same number, press the × key in step 3. In this case, the display will show the contents programmed for Port 01. 	
Feature Reference	Section 3, Features Added and Changed Features for the Installation Manual and Programming Tables Calling Line Identification Restriction (CLIR) In this manual Calling / Connected Line Identification Presentation (CLIP / COLP) Connected Line Identification Restriction (COLR)	

KX-TD197 Baud Rate Setting

Description	Assigns the KX-TD197 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. Display: TD197 TYPE
	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.	
Feature Reference	Section 3, Features — in this manual System Programming and Diagnosis with Personal Computer	

Changes

FEATURE TITLE	Manual Section	REVISION
2.4.9 System Connection	(Installation Manual) Section 2	 The first note has been changed as follows. System Connection may take a while (5 to 15 minutes depending on your software version) to be completed after the power is turned on. Confirm the connection between the systems by making a call from a Master Unit Ext. to a Slave Unit Ext.
Automatic Route Selection (ARS)	(Installation Manual) Section 3	 The following condition has been added. ARS with DTMF: When making a call to an ISDN line using the memory dialing, and the number has a pause in it, the number after the pause will be sent to the line as DTMF signals. This function is useful when accessing a special network service which can be accessed only by the DTMF signaling. This function is enabled or disabled in program [990], "System Additional Information, Field (42)."
Call Forwarding – to CO Line	(Installation Manual) Section 3	 The first condition has been changed as follows: Types of calls which are forwarded by this function are: CO calls – DIL 1:1; DISA; Intercept Intercom calls – Extension; Transfer
Call Transfer; Unscreened – to Extension	(Installation Manual) Section 3	 The following condition has been added to the Conditions section. An outside call can be transferred directly to a Uniform Call Distribution (UCD) group so that an idle extension is automatically hunted by UCD. If all extensions in a UCD group are busy, the incoming outside call will be handled by the UCD Time Table.
Direct Dialling In (DDI)	(Installation Manual) Section 3	This feature has been changed to the new one. See page 49.
Direct Inward System Access (DISA)	(Installation Manual) Section 3	This feature has become available for KX-TD816 users. Please ignore "*: Available for the KX-TD1232 only" marked for "DISA", "modem" and other related items in
		 the main Installation Manual and other additional manuals. In the Conditions section, the sixth condition has been changed as follows. This system can store up to 32 programmable DISA user codes. Each code should be unique. It is possible to assign a Class of Service number to each code. The Class of Service of the code defines Toll Restriction level.

FEATURE TITLE	Manual Section	REVISION	
Flexible Numbering	(Installation Manual) Section 3	The following number has been added to the table. Flexible Feature Numbers	
		NumberFeatureDefault87CLIP/COLP711	
Floating Station	(Installation Manual) Section 3	This feature has been changed to a new one. See pages 50 and 51.	
Module Expansion	(Installation Manual) Section 3	The Description section has been changed to a new one. See page 52.	
Outgoing Message (OGM)	(Installation Manual) Section 3 This feature has been become available for KX-TD816 users. Please ignore "*: Available for the KX-TD1232 only" marked for "Outgoing Message" in the main Installation Manual and other additional manuals.		
Station Hunting	(Installation Manual) Section 3	The Description section has been changed to a new one. See page 53.	
Station Message Detail Recording (SMDR)	(Installation Manual) Section 3In the Example of SMDR printout format: Explanation section, "(8) CD (Condition Code)" ha been changed as shown below. (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 DIS. D1 through D32: DISA User Codes 1 through 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".		
System Programming and Diagnosis with Personal Computer	(Installation Manual) Section 3	The Remote Programming has become available for the KX-TD816. The following program has been added to the Programming References section. Section 4, System Programming [817] KX-TD197 Baud Rate Setting	
Entering Characters	(Installation Manual) Section 4	This section has been changed as shown on pages 54 to 57.	

FEATURE TITLE	Manual Section	REVISION		
[005] Flexible CO Button Assignment	(Installation Manual) The Selection section has been changed as she page 58.			
[100] Flexible Numbering	(Installation Manual) Section 4	Feature Number List — Additional numbers Number Feature Default 87 CLIP/COLP 711		
[106] Station Hunting Type	(Installation Manual) Section 4	This program has been changed as shown on pages 59 to 60.		
[109] Expansion Unit Type	(Installation Manual) Section 4	This program has been changed as shown on pages 61 to 62.		
[401] CO Line Group Assignment	(Installation Manual) Section 4	This program has been changed as shown on page 63.		
[417] CO Line Name Assignment	(Installation Manual) Section 4	This program has been changed as shown on page 64.		
[418] ISDN Line Number Assignment	(Installation Manual) Section 4	This program has been changed as shown on pages 65 to 66.		
Programs [131], [420], [610], and [611]	(Installation Manual) Section 4	These programs have become <u>unavailable</u> . Please disregard any descriptions about them.		
Programs [127], [213]-[215], [809]-[812], and [814]	(Installation Manual) Section 4	These programs have become available for KX-TD816 users.		
[813] Floating Number Assignment	(Installation Manual) Section 4	This program has been changed as shown on pages 67 to 68.		
[990] System Additional Information	(Installation Manual) Section 4	This program has been changed as shown on pages 69 to 76.		

Direct Dialling In (DDI)

Description

Provides automatic direction of an incoming ISDN line call to a specific extension. Assignable destinations are: Assignable destinations are: (1) Operator, (2) extension, (3) Hunting Group, (4) TAFAS, (5) DISA (6) modem, (7) Phantom extension, (8) Voice Mail extension, and (9) ISDN extension. This requires a number received from the ISDN network. The number is converted to a specific extension number by using a pre-programmed conversion table.

Location No.	[150] ISDN DDI Translation Table	[151] ISDN DDI Ringing Assignment — Day	[152] ISDN DDI Ringing Assignment — Night
000	2011111	101	201
001	2012222	102	202
:		:	
399	2019999	109	109

Conditions

- To use the DDI service, "DDI" must be selected in program [452]-[453] "ISDN Ringing Service Assignment Day / Night".
- An incoming DDI call is converted as programmed in [421] "ISDN DDI / MSN Removed Digit / Added Number Assignment".
- If an incoming DDI call cannot be sent to a specific extension, it will be sent to an operator or extension according to DIL 1:N. Selecting an operator or extension depends on program [990] "System Additional Information, Fields (31), (32)".

Programming References

Section 4, System Programming — in this manual
[150] ISDN DDI Translation Table
[151]-[152] ISDN DDI Ringing Assignment — Day / Night
[421] ISDN DDI / MSN Removed Digit / Added Number Assignment
[452]-[453] ISDN Ring Service Assignment — Day / Night
[990] System Additional Information, Fields (31), (32)

- Feature ReferenceSection 3, Features in this manual
Integrated Services Digital Network (ISDN)
- **Operation References** Not applicable.

3

Floating Station

Description	 You can assign virtual extension numbers for items to make them appear to be extensions. These numbers are defined as floating numbers (FN). The following items can have floating numbers: (1) External paging instruments: used for the TAFAS feature. One FN is available for the KX-TD816. Four FNs are available for the KX-TD1232. These FNs can be assigned as: a) DIL 1:1 destination b) DISA destination c) Intercept Routing destination (2) DISA messages: used for the DISA feature. Two FNs are available. These FNs can be assigned as: a) DIL 1:1 destination b) Intercept Routing destination (2) DISA messages: used for the DISA feature. Two FNs are available. These FNs can be assigned as: a) DIL 1:1 destination b) Intercept Routing destination (3) Modem: used for system administration. One FN is available. This can be assigned as a) DIL 1:1 destination b) DISA destination can also be used as an extension number to call the modem. (4) Extension group: used for the Station Hunting feature. Eight FNs are available. These FNs can be assigned as : a) DIL 1:1 destination b) Extension c) Intercept Routing destination 			
Conditions	Floating numbers cannot be used for setting a feature such as Call Forwarding, etc.			
Connection Refere	ences			
	Section 2, Installation			
	— Installation Manual			
	2.4.5 DISA Card Installation*			
	2.4.6 Remote Card Installation*			
	— In this manual			
	Installing the Message Unit (KX-TD190) / Remote Unit (KX-TD198)			

Programming References

	Section 4, System Programming — Installation Manual [100] Flexible Numbering, 1st through 16th hundred extension blocks — In this manual [813] Floating Number Assignment
Feature References	None
Operation Reference	Not applicable.

Features

3

$Module \ Expansion$

Description Th Th Th Th Th Th Th Th Th Th Li Uh Th Li SI Li Pr to Li	he KX-TD816 starts with 4 CO line and 8 extension jacks. he KX-TD1232 starts with 8 CO line and 16 extension jacks. hey can be expanded by installing optional units. An 8-Station Line Unit adds 8 extension jacks. A 16-SLT Line Circuit Unit adds 8 extension jacks containing two single line telephones. A 4-CO Line Unit adds 4 CO line jacks. An E&M (TIE) Line Unit adds 4 E&M (TIE) lines. An ISDN 2-S0 Line Unit adds 2 ISDN S0 lines. An ISDN 6-S0 Line Unit adds 6 ISDN S0 lines. A Primary Rate Interface (PRI) ISDN Expansion Unit adds one PRI ISDN line. he KX-TD816 can have either one 8-Station Line Unit or 16-SLT ne Circuit Unit, and either one 4-CO Line Unit, E&M (TIE) Line hit, 2-ISDN S0 Line Unit or 6-ISDN S0 Line Unit. The KX- D1232 can have a maximum of two 8-Station Line Units or 16- LT Line Circuit Units, and either one 4-CO Line Unit, E&M (TIE) ne Unit, 2-ISDN S0 Line Unit or 6-ISDN S0 Line Unit. One imary Rate Interface (PRI) ISDN Expansion Unit adds one mary Rate Interface (PRI) ISDN S0 Line Unit S0 Line Unit or 16-JSDN S0 Line Unit or 6-ISDN S0 Line Unit. S0 Line Unit D1232 can have a maximum of two 8-Station Line Unit S0 16- LT Line Circuit Units, and either one 4-CO Line Unit, E&M (TIE) ne Unit, 2-ISDN S0 Line Unit or 6-ISDN S0 Line Unit. S0 Line Unit One imary Rate Interface (PRI) ISDN Expansion Unit can be installed the Master system with a 2-ISDN S0 Line Unit or 6-ISDN S0 Line Unit or 6-ISDN S0 pe Unit, or individually.
Conditions • 7	The number of extension jacks may be different from the number of elephones if the Paralleled Telephone or the eXtra Device port feature is enabled. These features allow one extension jack to have two elephones. When an expansion unit is installed, the unit identification is set by System Programming.
Connection References	
Se 2.4 2.4 2.4 2.4 6-1 6-1 Pr	 ction 2, Installation Installation Manual 4.2 4-CO Line Unit Connection 4.3 8-Station Line Unit Connection Added and Changed Features for Installation Manual and Programming Tables ISDN S0 Line Connection Added and Changed Features for Installation Manual and Programming Tables Vol. 2 ISDN S0 Line Connection In this manual imary Rate Interface ISDN Expansion Unit Connection
Programming References	ction 4, System Programming — in this manual
Feature References Se	U9] Expansion Unit Type ction 3, Features — Installation Manual Ktra Device Port (XDP) Paralleled Telephone
Operation Reference No	ot applicable.

Station Hunting

Description	 If a called extension is busy, Station Hunting redirects the incoming call to an idle member of the extension group. Idle extensions are automatically hunted according to the programmed type. There are six hunting types available – Circular, Termination, Voice Mail (VM), Automated Attendant (AA), Ring Group, and UCD (Uniform Call Distribution). Circular hunting: The extensions are hunted until an idle one is found, regardless of jack number. Termination hunting: The extensions are hunted until an extension which has the highest jack number in the group is reached. VM hunting: All the VM ports are hunted until an idle one which allows VM Service is found. AA hunting: All the AA ports are hunted until an idle one which allows AA Service is found. UCD: Refer to "Uniform Call Distribution (UCD)" in the Added and Changed Features for Installation Manual and Programming Tables Vol. 3. Ring Group: All extensions in a ring group ring simultaneously. One hunting type is selected for each extension group. To leave the hunting group temporarily, use the Log-Out function. To re-join, use the Log-In function.
Conditions	 If all the searched extensions are busy, a busy tone is sent to the caller. If the called extension has set Do Not Disturb or Call Forwarding, Station Hunting skips the extension.
Programming Reference	ces
	Section 4, System Programming — Installation Manual [602] Extension Group Assignment — In this manual [106] Station Hunting Type
Feature Reference	Section 3, Features — Installation Manual Extension Group Voice Mail Integration — Added and Changed Features for Installation Manual and Programming Tables Vol. 3 Log-In / Log-Out Uniform Call Distribution (UCD) — In this manual Ring Group
Operation Reference	Not Applicable.

You can enter characters to store names or messages in the following programs by using the dial key pad, buttons or the Jog Dial. [002] System Speed Dialling Name Set [013] ISDN Extension Name Set

[004] Extension Name Set[417] CO Line Name Assignment[008] Absent Message

See the Combination Tables below.

Combination Tables

SHIFT & Soft Combination		S1	SHIFT + S1	S2	SHIFT + S2	S 3	SHIFT + S3	SHIFT + SHIFT +S1	SHIFT + SHIFT +S2
Pressing SELECT (Times)									
Keys	0	1	2	3	4	5	6	7	8
1	1	Q	q	Z	Z	!	?		
2	2	А	a	В	b	С	с		
3	3	D	d	Е	e	F	f		
4	4	G	g	Н	h	Ι	i		
5	5	J	j	K	k	L	1		
6	6	М	m	N	n	0	0		
7	7	Р	р	Q	q	R	r	S	S
8	8	Т	t	U	u	V	v		
9	9	W	W	Х	Х	Y	у	Z	Z
0	0			,	,	:	;		
*	*	/	+	_	=	<	>		
#	#	\$	%	&	@	()		

Combination Table 1

0								
U	1	2	3	4	5	6	7	8
1	Q	q	R	r	S	S	Т	t
2	Α	а	В	b	C	с	D	d
3	D	d	E	e	F	f	G	g
4	G	g	Η	h	Ι	i	J	j
5	J	j	K	k	L	1	Μ	m
6	Μ	m	N	n	0	0	Р	р
7	Р	р	Q	q	R	r	S	S
8	Т	t	U	u	V	v	W	W
9	W	W	X	х	Y	у	Ζ	Z
0		!	?		,	,	:	;
*	/	+	_	=	<	>	#	\$
#	\$	%	&	@	()	А	а
	1 2 3 4 5 6 7 7 8 8 9 9 0 8 * #	1 Q 2 A 3 D 4 G 5 J 6 M 7 P 8 T 9 W 0	1 Q q 2 A a 3 D d 4 G g 5 J j 6 M m 7 P p 8 T t 9 W w 0 ! * / # \$ %	1 Q q K 2 A a B 3 D d E 4 G g H 5 J j K 6 M m N 7 P p Q 8 T t U 9 W w X 0 ! ? * / + - # \$ % &	1 Q q K r 2 A a B b 3 D d E e 4 G g H h 5 J j K k 6 M m N n 7 P p Q q 8 T t U u 9 W w X x 0 ! ? . * / + - = # \$ % & @	1 Q q K r S 2 A a B b C 3 D d E e F 4 G g H h I 5 J j K k L 6 M m N n O 7 P p Q q R 8 T t U u V 9 W w X x Y 0 ! ? . , * / + - = < # % % @ (Combination Table 2	1 Q q R r S s 2 A a B b C c 3 D d E e F f 4 G g H h I i 5 J j K k L 1 6 M m N n O o 7 P p Q q R r 8 T t U u V v 9 W w X x Y y 0 ! ? . , ' $* / + - = < > # % % @ ()) $	1 Q q K r S s 1 2 A a B b C c D 3 D d E e F f G 4 G g H h I i J 5 J j K k L 1 M 6 M m N n O o P 7 P p Q q R r S 8 T t U u V v W 9 W w X x Y y Z 0 ! ? . , ? : * / + - = < > # # % & @ () A

Note • The alphabet characters correspond to the letters shown on the twelve dial keys on a proprietary telephone (except symbols).

- In Combination Table 1: If your telephone is a KX-T7531, do not use the SELECT button. Use the AUTO ANSWER/MUTE button which becomes the SELECT button when using the overlay.
- In Combination Table 2: If you continue rotating the Jog Dial, all of the characters in the table will be displayed.

4.1.3 Entering Characters

The following example 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-T7533 / KX-T7536 / KX-T7230 / KX-T7235 only)
* See Combination Table 1.
1. Press 6. ("M" is "6".)
• The Function Line shows: M N O
2. Press the Soft 1 (M) button.

(Press **SHIFT** to display the lower case letters.)

(2) Using the **SELECT** button

* See Combination Table 1.

- **1.** Press **6**. ("M" is "6".)
- 2. Press the **SELECT** button once.
 - Pressing the **SELECT** button the appropriate number of times displays you the desired letter. Pressing **SELECT** twice displays the letter "m", pressing three times displays "N", and so on.
- (3) Using the Jog Dial (for KX T7433 / KX T7436

(for KX-T7433 / KX-T7436 / KX-T7531 / KX-T7533 / KX-T7536 only)

- * See Combination Table 2.
- **1.** Press **6**. ("M" is "6".)
- 2. Rotate the Jog Dial one pulse.
 - Rotating the **Jog Dial** the appropriate number of pulses displays you the desired letter. Rotating the **Jog Dial** two pulses displays the letter "m", rotating three pulses displays "N", and so on.

OR

- 1. Press any dial key pad.
- 2. 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 … Z z (space) ! ? . , ' : ; * / + – = < > # \$ % & @ () A a B b …

To enter "Mike":

Using method (1)

* See Combination Table 1.

1.	Enter 6.
2.	Press Soft 1 (M).
3.	Enter 4.
4.	Press SHIFT.
5.	Press Soft 3 (i).
6.	Enter 5.
7.	Press Soft 2 (k).
8.	Enter 3 .
9.	Press Soft 2 (e).

The disp	olay sh	ows:
М	D.T.	б
M	IN	0
	I	M
М	Ν	0
	M	4
G	Н	I
	M	1
q	h	ı i
	M	i.
g	h	1
	Mi	5
j	k	1
	Mil	<i>c</i>
j	k	1
4	Mik	3
d	е	L
	Mike	е
d	е	f

Using method (2)

* See Combination Table 2.

	The display shows:
1. Enter 6 .	б
2. Press SELECT.	М
3. Enter 4 .	M4
4. Press SELECT six times.	Mi
5. Enter 5 .	Mi5
6. Press SELECT four times.	Mik
7. Enter 3 .	Mik3
8. Press SELECT four times.	Mike

Using	method	(3)
-------	--------	-----

* See Combination Table 2.

	The display shows:
1. Enter 6 .	6
2. Rotate the Jog Dial one pulse.	М
3. Enter 4 .	M4
4. Rotate the Jog Dial six pulses.	Mi
5. Enter 5 .	Mi5
6. Rotate the Jog Dial four pulses.	Mik
7. Enter 3 .	Mik3
8. Rotate the Jog Dial four pulses.	Mike

OR

1.	Enter 2.	2
2.	Rotate the Jog Dial until "M" appears.	М
3.	Enter 2.	M2
4.	Rotate the Jog Dial until "i" appears.	Mi
5.	Enter 2.	Mi2
6.	Rotate the Jog Dial until "k" appears.	Mik
7.	Enter 2.	Mik2
8.	Rotate the Jog Dial until "e" appears.	Mike

- Note
- To erase all of the letters, press **CLEAR**.
 - To erase the last letter, press <-

4.2 Manager Programming

Flexible CO Button Assignment

Selection

• Jack number: **KX-TD816 – 01 through 16 KX-TD1232 – 01 through 64**

• Button Code (plus parameter, if required):

Button Code	Parameter
0 (Single-CO)	KX-TD816: 01 through 08 (CO line number)
	KX-TD1232: 01 through 54 (CO line number)
1 (DSS)	2 to 4 digits (Extension number)
2 (One-Touch)	16 digits max. (Telephone number)
3 (Message Waiting)	None
4 (FWD/DND)	None
5 (Save)	None
6 (Account)	None
7 (Conference)	None
80 (Log-In/Log-Out)	None
82 (Voice Mail Transfer)	2 to 4 digits (Extension number)
83 (Two-Way Record) [†]	2 to 4 digits (Extension number)
84 (Two-Way Transfer) [†]	2 to 4 digits (Extension number)
85 (Live Call Screening) [†]	None
86 (Live Call Screening Cancel) [†]	None
87 (Alert)	None
88 (Phantom)	2 to 4 digits (Phantom extension number)
★ (Loop-CO)	None
# (Group-CO)	1 through 8 (CO line group number)
CO (ringer frequency)	1 through 8 (ring tone type number)

For more information about this programming, refer to program [005] "Flexible CO Button Assignment" in the main Installation Manual.

4.3 System Programming

Station Hunting Type

Description	Used for ea avails Atter If circ the g hunti large the V found all of one is all of is ass	d to enable or disable hunting and set the Station Hunting type each extension group. There are six Station Hunting types lable: Circular, Terminating, Voice Mail (VM), Automated ndant (AA), Ring Group and Uniform Call Distribution (UCD). rcular hunting is assigned for a group, all of the extensions in group are searched until an idle one is found. If terminating ing is assigned, searching stops at the extension which has the est jack number in the group. If VM hunting is assigned, all of VM ports in an extension group are searched until an idle one is ad which allows Voice Mail Service. If AA hunting is assigned, of the AA ports of an extension group are searched until an idle is found which allows AA Service. If Ring Group is assigned, of the extensions in the ring group ring simultaneously. If UCD assigned, group members are hunted in a circular way.		
Selection	 Ext Dis (vo 	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: Call Hunting		
	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.		

Station Hunting Type (contd.)

Conditions	 Program [602] "Extension Group Assignment" assigns the extension group members. The system supports a maximum of eight jacks (16 jacks during System Connection*) to connect 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.
Feature References	Section 3, Features Ring Group — in this manual Station Hunting — in this manual Uniform Call Distribution (UCD) — Added and Changed Features for Installation Manual Vol. 3 Voice Mail Integration— Installation Manual

4.3 System Programming

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. KX-TD816 • Areas 1; 2 = C (4 CO) / S1 (2 S0) / S2 (6 S0) / EM(4 E&M) / E (EXT) / A (16 SLT) KX-TD1232 • Master / Slave • Areas 1; 2; 3 = C (4 CO) / S1 (2 S0) / S2 (6 S0) / S3 (1 PRI) / EM(4 E&M) / E1 (EXT1) / E2 (EXT2) / A1 (16 SLT1) /A2 (16 SLT2) S3 is for the Master system only.		
Selection			
Default	KX-TD816: C;E KX-TD1232: Master and Slave – C;E1;E2		
Programming	KX-TD816 1. Enter 109 . Display: Expansion Card		
	2. Press NEXT. Display example: Master:C ;E		
	3. Keep pressing SELECT until the desired selection of Area 1 is displayed.		
	4. Press ➡ to program Area 2, if required.		
	5. Keep pressing SELECT until the desired selection of Area 2 is displayed.		
	6. Press STORE.		
	7. Press END.		
	 KX-TD1232 1. Enter 109. Display: Expansion Card 2. Press NEXT to program the Master System. To program the "Slave", press NEXT again. 		

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Expansion Unit Type (contd.)

	3.	Keep pressing SELECT until the desired selection of Area 1 is displayed.		
	4.	Press \blacktriangleright to program another Area, if required.		
	5.	Keep pressing SELECT until the desired selection of the Area is displayed.		
	6.	Repeat steps 4 and 5 until all of the required entries are completed, if required.		
	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	 Ea The bore it is in the iteration of t	 Each parameter corresponds to an expansion unit as follows: C=KX-TD180, S1=KX-TD280, S2=KX-TD286, S3=KX-TD290 E, E1 and E2=KX-TD170, A, A1 and A2=KX-TD174, EM=KX-TD184 There are two expansion areas in the KX-TD816, areas 1 and 2 from bottom to top. Either one 8-Station Line Unit or 16-SLT Line Unit and either one 4-CO Line Unit, 4-E&M Line Unit, 2-ISDN S0 Line Unit or 6-ISDN S0 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. Either up to two 8-Station Line Units or 16-SLT Line Units and either one 4-CO Line Unit, 4-E&M Line Unit, 2-ISDN S0 Line Unit or 6-ISDN S0 Line Unit can be installed in each system. The PRI ISDN Expansion Unit can be installed with the 2-ISDN S0 Line Unit or 6-ISDN S0 Line Unit or individually. An out-of-service system is unassignable. In this case, skip steps 8 and 9 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. 		
Feature References	es Section 3, Features — in this manual Module Expansion			

Description	Each CO line must be assigned to a CO line group. This program defines the CO line group assignment for each CO line. For example, if there are multiple telephone service companies available, the CO lines can be grouped by company.				
Selection	 CO line number: KX-TD816 – 01 through 08, * KX-TD1232 – 01 through 54, * (* =all CO lines)) CO line group (TRG) number: 1 through 8 				
Default	CO01 – TRG 1; CO05 – TRG 5; (for KX-TD816/1232) CO02 – TRG 2; CO06 – TRG 6; (for KX-TD816/1232) CO03 – TRG 3; CO07 – TRG 7; (for KX-TD816/1232) CO04 – TRG 4; CO08 – TRG 8; (for KX-TD816) CO08 through CO54 – TRG 8 (for KX-TD1232)				
Programming	1.	• Enter 401 .			
	2.	Press NEXT. Display: CO Line NO?->			
	3.	Enter a CO line number .			
		To enter CO line number 01, you can also press NEXT . Display example: CO01:TRG1			
	4.	Enter the CO line group number.			
		To change the current entry, enter the new CO line group number.			
	5.	Press STORE.			
	6.	To program another CO line, press NEXT or PREV , or SELECT and the desired CO line number .			
	7.	Repeat steps 4 through 6.			
	8.	Press END .			
Conditions	 For and CO expanded To a step CO 	For the KX-TD1232, CO 01 through CO 12 are for the Master system and CO 13 through CO 24 are for the Slave, if available. CO 25 through CO 54 become available when the KX-TD290 expansion unit is installed in the KX-TD1232. To assign all CO lines to the same CO line group, press the \star key in step 3. In this case, the display shows the contents programmed for CO 01.			
Feature Reference	Section 3, Features — Installation Manual CO Line Group				

CO Line Name Assignment

Description	Assigns company or customer names to each CO line so that the operator or extension user can view the destination the caller is trying to reach before answering.				
Selection	• CO • Nai	 CO line number: KX-TD816 – 01 through 08, * KX-TD1232 – 01 through 54, * (*=all CO lines) Name: 10 characters (max.) 			
Default	All CO lines – Not Stored				
Programming	1.	Enter 417 . Display: CO Line Name			
	2.	Press NEXT. Display: CO Line NO? \rightarrow			
	3.	Enter a CO line number . To enter CO line number 01, you can also press NEXT . Display example: CO01:Not Stored			
	4.	 Enter a name. For entering characters, see Section 4.1.3 "Entering Characters" in this manual. 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 CO line, press NEXT or PREV , or SELECT and the desired CO line number .			
	7.	Repeat steps 4 through 6.			
	8.	Press END.			
Conditions	 For the KX-TD1232, CO 01 through CO 12 are for the Master System and CO 13 through CO 24 are for the Slave, if available. CO 25 through CO 54 become available when the KX-TD290 expansion unit is installed in the KX-TD1232. To assign all CO lines to the same selection, press the * key in step 3. In this case, the display shows the contents programmed for CO 01. 				
Feature References	Section 3, Features — Added and Changed Features for Installation Manual CO Incoming Call Information Display Display, Call Information				

ISDN Line Number Assignment

Description	Assigns your ISDN network line telephone number. Your telephone number is sent to the called party with the CLIP (Calling Line Identification Presentation) feature and to the calling party with the COLP (Connected Line Identification Presentation) feature offered by the ISDN network service.				
Selection	 CO line number: KX-TD816 – 01 through 08 KX-TD1232 – 01 through 54 Telephone number: 16 digits (max.) 				
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 CO line number . To enter CO line number 01, you can also press NEXT . Display example: CO01: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 CO line, press NEXT or PREV , or SELECT and the desired CO line number .			
	7.	Repeat steps 4 through 6.			
	8.	Press END.			
Conditions	 Each number has a maximum of 16 digits, consisting of 0 through 9. For the KX-TD1232, CO 01 through CO 12 are for the Master System and CO 13 through CO 24 are for the Slave, if available. To display parts of the number which have scrolled off the display, press → or <. CO 25 through CO 54 become available when the KX-TD290 expansion unit is installed in 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". 				

ISDN Line Number Assignment (contd.)

• Your telephone number will be informed to the calling party if the COLR feature is disabled for the ISDN line in program [990] "System Additional Information, Field (46)."

Programming Tables CO Incoming Call Information Display CO Incoming Call Information Log Calling Line Identification Restriction (CLIR) In this manual
In this manual Calling / Connected Line Identification Presentation (CLIP / COLP) Connected Line Identification Restriction (COLR)

4.9 **Resource Programming**

Floating Number Assignment

Description	Ass mod sam	Assigns the floating numbers for External Pagers, DISA messages, modem and extension groups. These numbers can be used in the same way extension numbers are used for station access.			
Selection	• F1	oating station: KX-TD816 – Pager1 / DISA1 / DISA2 / MODEM / DTA / EXT Grp 1 through 8 KX-TD1232 – Pager1 through 4 / DISA1 / DISA2 / MODEM / DTA / EXT Grp 1 through 8 oating number: 2 to 4 digits			
Default	KX-	 TD816 - Pager 1=196; DISA 1=198; DISA 2=298; MODEM=299; DTA=199; EXT Grp 1=191; EXT Grp 2=192; EXT Grp 3=193; EXT Grp 4=194; EXT Grp 5=291; EXT Grp 6=292; EXT Grp 7=293; EXT Grp 8=294; TD1232 - Pager 1=196; Pager 2=197; Pager 3=296; Pager 4=297; DISA 1=198; DISA 2=298; MODEM=299; DTA=199; EXT Grp 1=191; EXT Grp 2=192; EXT Grp 3=193; EXT Grp 4=194; EXT Grp 5=291; EXT Grp 6=292; EXT Grp 7=293; EXT Grp 8=294; 			
Programming	1.	Enter 813. Display: FLT EXT NO.			
	2.	Press NEXT to program Pager 1. Display example: Pager1:EXT196 To program another floating station for the KX-TD1232, 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.			

4.9 **Resource Programming**

Floating Number Assignment (contd.)

	6.	Repeat steps 3 through 5.				
	7.	Press END.				
Conditions	 A floating number is composed of two to four numerical digits, 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 different. 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. In order not to make an invalid entry, check the other extension numbers in programs [003] "Extension Number Set," [012] "ISDN Extension Number Set, [118] "VM Extension Number Assignment" and [130] "Phantom Extension Number Assignment." The default of each extension number 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 stored				
		[118] VM Extension Number Assignment 165 through 180				
	 You Flow ring 	[130] Phantom Extension Number Assignment Not stored a cannot leave an entry empty. ating numbers of extension groups are available for the UCD and g group features.				
Feature Reference	Section Float	on 3, Features — in this manual ing Station				

4.10 **Option Programming**

System Additional Information



*: CO numbers [9] through [24] in the field number (23) are available for the KX-TD1232 only.

4.10 **Option Programming**

System Additional Information

Area 05

Display example	111111011101011
Field number	$\frac{1}{10000000000000000000000000000000000$
Area 06	
Display example	111110011111111
1	$\boxed{\begin{array}{c} \hline \hline \downarrow $
Field number	reserved unused $(45)(44)$ unused $(43)(42)(41)(40)(39)$ unused $(38)(35)$

4.10 **Option Programming**

System Additional Information (contd.)

Explanation for Areas 01 and 02

Field	Description	Selection	Default	Reference
(1)	Sound source during transfer.	0 : ringback tone 1 : Music on Hold	1	 CALL TRANSFER FEATURES 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 Hold1 : disconnection	0	Consultation Hold
(3)	Result of pressing the FLASH button on proprietary telephones (during a CO line call).	 0 : disconnection signal 1 : External Feature Access 	0	 External Feature Access Flash
(4)	Enables or disables the dial tone between obtaining a CO line and dialling the phone number when using the one-touch dial, redial or speed dial function.	0 : disable 1 : enable	1	None
(5)	Result of pressing the hookswitch lightly (single line telephones only).	0 : Consultation Hold1 : disconnection	0	Consultation Hold
(6)	Sets the duration of the DTMF signals sent to the Voice Processing System (VPS) ports.	0 : 80 ms 1 : 160 ms	0	Voice Mail Integration
(7)	Sets the time the system waits before sending DTMF signals (such as a mailbox number) to the VPS after the VPS answers a call.	00 : 0.5 s 01 : 1.0 s 10 : 1.5 s 11 : 2.0 s	10	Voice Mail Integration
(8)	Sets the time the system waits before sending DTMF signals (programmed in [113]) to the VPS after the VPS calls an extension.	00 : 0.5 s 01 : 1.0 s 10 : 1.5 s 11 : 2.0 s	10	Voice Mail Integration
(9)	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 1 : VPS	0	 Message Waiting Voice Mail Integration
(10)	Unused			

System Additional Information (contd.)

Field	Description	Selection	Default	Reference
(11)	If an outside party is transferred and not answered, assigns whether Transfer Recall occurs at the originating transfer extension or at Operator 1.	0 : extension 1 : Operator 1	0	Call Transfer, Unscreened – to Extension
(12)	If Limited Call Duration is enabled in program [502] "Extension-to-CO Line Call Duration Limit," assigns if Limited Call Duration is done for both outgoing and incoming calls or outgoing calls only.	0 : both calls 1 : outgoing calls only	0	Limited Call Duration
(13)	Allows you to remove confirmation tone 4. By default, a beep tone sounds when a three-party conference is started / ended.	0 : disable 1 : enable	1	Confirmation Tone
(14)	Determines if the dialled " * " 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-dialled " * " and "#". If your CO is such a type, select "0" (no check).	0 : no check 1 : check	1	Toll Restriction
(15)	Enables or disables the Flash function when a CO call is received at a locked or toll- restricted station. Flash, if enabled, allows the user to make a CO call using the same line. If "0" (disconnection signal) is selected in field (3) above, this is also allowed for those extensions that have the Account Code – Verified – All Calls mode assigned.	0 : disable 1 : enable	0	Flash
(16)	Allows you to remove Confirmation Tone 3. This tone is sent when a conversation is established just after dialling the feature number for accessing one of the following features: Call Pickup, Paging, Paging Answer, TAFAS Answer, Hold Retrieve and Call Park Retrieve.	0 : disable 1 : enable	1	Confirmation Tone
(17)	A CO 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 appropriate ratio depending on the standard in your country.	0 : 60 % 1 : 67 %	0	Dial Type Selection
4.10 Option Programming

System Additional Information (contd.)

Field	Description	Selection	Default	Reference
(18)	Assigns if an extension's mailbox number is substituted by the extension number or is programmable (free). If a call is forwarded or rerouted to the 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 1 : free	0	Voice Mail Integration
(19)	Assigns the first display of a digital display proprietary telephone (except for KX- T7230) in Station Speed Dialling.	0 : names 1 : numbers	0	Special Features for KX-T7235 — Station Speed Dialling
(20)	Unused			
(21)	Selects the inter-digit pause for pulse dialling.	00 : 630 ms 01 : 830 ms 10 : 1030 ms	01	None
(22)	Selects intercom dial tone frequency.	0 : normal 1 : distinctive	0	None
(26)	Unused			
(37)	Sets the maximum time for detecting a hooking signal from an SLT.	0 : 1000ms 1 : 136ms	0	None

Explanation for Areas 03 and 04

Field	Description	Selection	Default	Reference
(23)	This field is provided to assign the PAD Switch Control (volume control of received calls on a CO line). This can be assigned per CO line. The CO numbers [1] through [8] correspond to CO lines 1 through 8 for the KX-TD816, and CO numbers [1] through [24] correspond to CO lines 1 through 24 for the KX-TD1232 respectively.	0 : 0 dB 1 : -3 dB	0	None
(24)	Prevents or allows a call originated by a VPS AA port to another AA port.	0 : prevent 1 : allow	1	Voice Mail Integration
(25)	Prevents or allows sending pulse dialling signals during a CO call.	0 : prevent 1 : allow	1	None
(27)	Enables or disables the pulse feedback sound when a dialled number is sent to a CO line.	0 : disable 1 : enable	1	None

System Additional Information (contd.)

Explanation for Area 05

Field	Description	Selection	Default	Reference
(28)	Unused			
(29)	Unused			
(30)	Unused			
(31)	In the day mode, selects the destination of incoming DDI numbers or MSN numbers when "0" is assigned in programs [151]-[152] and [448]-[449].	0 : DIL 1:N 1 : Operator	1	 Direct Dialling In (DDI) Multiple Subscriber Number (MSN) Ringing Service
(32)	In the night mode, selects the destination of incoming DDI numbers or MSN numbers when "0" is assigned in programs [151]-[152] and [448]-[449].	0 : DIL 1:N 1 : Operator	1	 Direct Dialling In (DDI) Multiple Subscriber Number (MSN) Ringing Service
(33)	Assigns whether a new page is ejected or not when the Hotel Application is printed out by SMDR.	0 : Disable 1 : Enable	0	Hotel Application
(34)	Unused			
(36)	When Timed Reminder starts and is not answered, this program enables or disables the SMDR printout for Timed Reminder.	0 : Disable 1 : Enable	1	SMDR for Timed Reminder
(46)	Enables or disables to send a COLP number.	0 : Enable 1 : Disable	1	CLIP/COLP COLR

Explanation for Area 06

Field	Description	Selection	Default	Reference
(35)	Sets the time after terminating the OGM.	0 : 0 sec.	1	DISA
		1 : 5 sec.		OGM
(38)	Programs whether or not the account code is	0 : not printed out	1	SMDR
	printed out on the SMDR.	1 : printed out		
(39)	Selects the result when a CO call is routed	0 : Disable	1	Voice Mail
	by Call Forwarding to a voice mail port which is in the AA service mode. (For both	1 : Enable		Integration
	Inband and DPT Integration)			
	disable: AA service mode			
	enable: The mode will change to the VM service mode and a Follow-On ID is sent.			
	When the voice mail port is in the VM service mode, this program will not be affected.			

4.10 Option Programming

System Additional Information (contd.)

Field	Description	Selection	Default	Reference
(40)	Selects the result when a CO call is routed to a voice mail port by IRNA (For both Inband and DPT Integration). When the voice mail port is in the VM service mode;	0 : Enable 1 : Disable	1	Voice Mail Integration
	enable: VM service mode			
	disable: The mode will change to the AA service mode (Only when Inband).			
	When the voice mail port is in the AA service mode;			
	enable: The mode will change to the VM service mode and a Follow-On ID is sent.			
	disable: AA service mode			
(41)	Enables or disables sending CO line access code "9" to a TIE line. When you dial CO line access code "9" and the CO line is busy, the system can automatically send CO line access code "9" to a TIE line so that you can access the CO line through another PBX.	0 : Enable 1 : Disable	1	None
(42)	Enables or disables the ARS with DTMF function.	0 : Enable 1 : Disable	1	Automatic Route Selection (ARS)
(43)	Assigns the source of Music Source 1 for Music on Hold and BGM.	 00: internal music source 01: external music source 11: tone 	00	 Background Music (BGM) Background Music (BGM) — External Music on Hold
(44)	Enables or disables dial tone 2 when an extension sets programmable extension features such as Call Waiting.	0 : Disable 1 : Enable	1	None
(45)	Enables or disables the Whisper OHCA feature.	0 : any telephone 1 : KX-T7500 series telephones only	1	Whisper OHCA

4.10 **Option Programming**

System Additional Information (contd.)

Selection	 Area code: 01 through 06 Field number : 1 through 46 Selection: See "Selection" shown for each field in the corresponding area explanation table. 		
Default	See " Default " shown for each field in the corresponding area explanation table.		
Programming	1.	Enter 990 .	
		Display: System Add Inf.	
	2.	Press NEXT.	
		Display: Area NO? \rightarrow	
	3.	Enter an area code (01 through 06).	
		Display example: 0010100011000001	
	4.	Keep pressing \blacktriangleright or \blacklozenge to move the cursor to the desired field.	
	5.	Enter your selection (0 or 1).	
		To change the current entry, press STORE and the new selection.	
	6.	To program another field, 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		
Feature References	See " Reference " shown for each field in the corresponding area explanation table.		