

*Section 4*  
*System Programming*

## 4.1 Before System Programming

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**NOTE:**

**System data clear should be performed before System Programming.**

(☞ 2.21, Starting the System for the First Time)

### Default Setting

This system has factory default settings (☞ 5.1, Default Values). If any of the programming needs to be changed, you can change the setting by System Programming. **Default** shows you the factory default setting. Any required changes can be written in the Programming Tables listed in section 7, Programming Tables.

### Required Telephone Set

The following display proprietary telephone is required for System Programming.

- KX-T7130

Connect the telephone to the following.

- Port number 01

### Before entering the programming mode

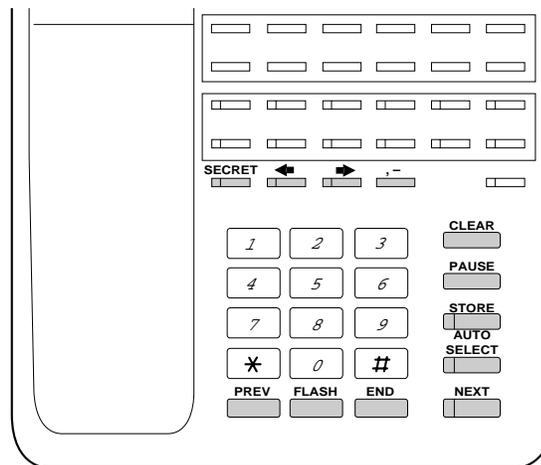
Before entering the programming mode, confirm that:

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

### Placing the Overlay on a Telephone

A programming overlay is packed with the telephone at the factory. This overlay should be used at all times during programming. The functions of the telephone keys change during programming as shown below.

#### Location of Controls with the Overlay

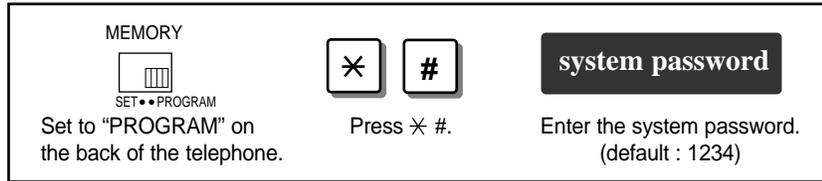


**KX-T7130**

## 4.1 Before System Programming

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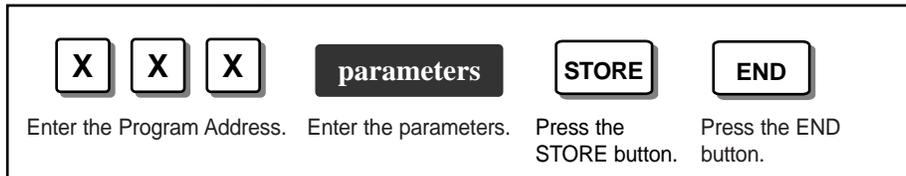
### To enter the programming mode



- ! The system password can be changed by program [002] "System Password".
- During the programming mode, your extension is treated as a busy extension.
- If you enter the wrong system password, you will hear an alarm tone (3 beeps). Try again.

### Programming sequence

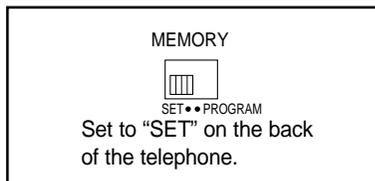
After entering the programming mode



After pressing the STORE button, you will hear one of the following tones.

- Confirmation tone (1 beep):** This informs you that storing is completed. You can continue programming by entering the same or another program address
- (2 beeps):** This informs you that the same parameter has already been stored.
- Alarm tone (3 beeps):** This informs you that the entry is invalid.

### To exit the programming mode



# 4.1 Before System Programming

## Programming example

The following programming instructions assume that you have already entered the programming mode.

Example: Program [404] “Trunk Group Assignment”

Program address

Program title

**[404] Trunk Group Assignment**

Program description

Assigns a maximum 6 trunk groups. Each exchange line must be assigned to a trunk group. For example, if there are multiple telephone service companies available, exchange lines can be grouped by company.

4

0

4

NEXT

exchange line no.<sup>\*1</sup>

trunk group no.<sup>\*2</sup>

STORE

END

NEXT or PREV

SELECT

(1..6/\*)

(1..6)

<sup>\*1</sup> Exchange line number: 1 through 6 / \* (All exchange lines)  
<sup>\*2</sup> Trunk (TRK) group number: 1 through 6

**Default** Exchange line 1 through 6 – Trunk group 1 through 6

- Each exchange line can only belong to one trunk group.
- **Feature Reference**  
Section 3, Features  
Outside Calling

Additional information

Provides the factory default setting. If you change the setting, write the programmed data in the programming table listed in section 7, Programming Tables.

**Program sequence:**

1. Enter program address “404”.
2. Press “NEXT”.
3. Enter the exchange line number (1 through 6) or press \* to select all exchange lines.
4. Enter the trunk group number (1 through 6).
5. Press “STORE”.
6. Press “END”.

To continue assigning another exchange line number, press “SELECT” instead of “END” and repeat from step 3.

You can also continue assigning by pressing “PREV” or “NEXT” instead of “END”.

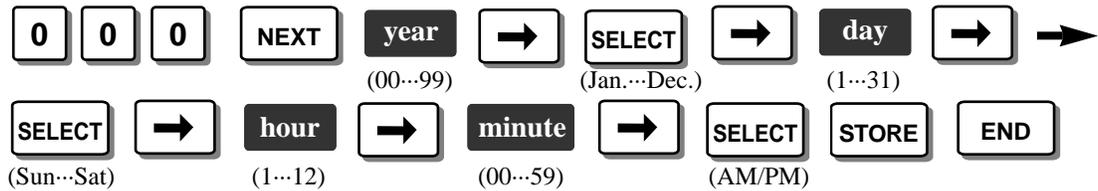
You can go to the previous or next exchange line and repeat from step 4.

## Additional Information

- When you press \*, for example in step 3 in program [404], if all exchange lines have been assigned as trunk group 1, “CO \* : TRK GRP – 1” will be displayed. If each exchange line has been assigned to a different trunk group, “CO \* : Mixed” will be displayed.
- You can press the SELECT button repeatedly to select the desired parameter, if available.
- You can use the or button to move to the next/previous step, if available.

## [000] Date and Time Setting

Sets the current date and time.



**Default** '98 Jan. 1 Thu 12:00 AM

- ! To return to the previous programming step, press .
- To correct a wrong entry for the year, day, hour or minute, press the CLEAR button and enter the new one in each step.
- After changing an entry, you can press the STORE button. You do not have to perform the rest of the steps.
- The clock starts immediately after the STORE button is pressed.
- The system supports years from 1998 to 2097.



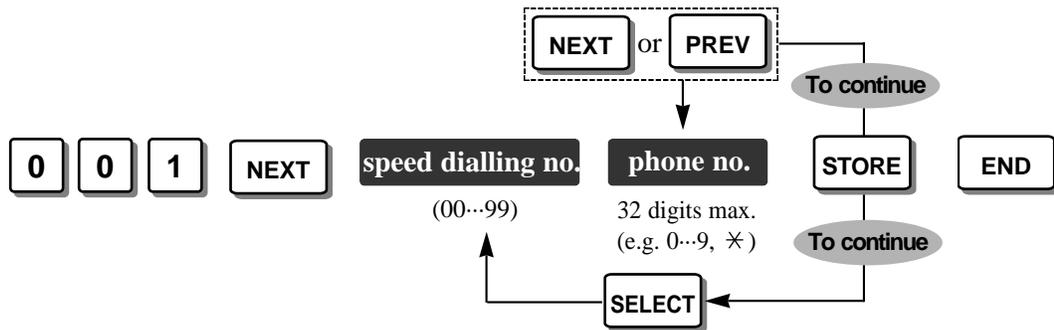
### Feature References

Section 3, Features

Date and Time Setting, Station Message Detail Recording (SMDR)

## [001] System Speed Dialling Entry

Assigns a maximum of 100 System Speed Dialling numbers. To delete a stored phone number, press the CLEAR and STORE buttons after entering the Speed Dialling number.



**Default** Not stored.

- ! To correct a wrong entry, press the CLEAR button and enter the new one.
- A line access number (9 or 0, 81 through 86) should be included before the phone number.

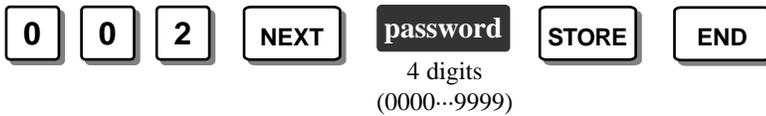
- Up to 32 digits, consisting of “0 through 9”, “\*,” “#”, “PAUSE”, “—”, “RECALL” and “ICM (Secret)” can be stored.
- If you are storing an account code assigned in [310] “Account Codes”, enter \*\* and the account code after a line access number.
- If you want to conceal all or part of a System Speed Dialling number on the display, enter “[” and “]” (press the ICM button) before and after the part you want to conceal. Do not press the ICM button before and after a line access number (9 or 0, 81 through 86) or an account code. “[” and “]” are counted as one digit.
- Press  or  to scroll the display



- **Feature References**  
Section 3, Features  
Secret Dialling, System Speed Dialling

**[002] System Password**

Assigns the password required for entering the System Programming mode. Also it is used to set an extension password.



**Default** 1234



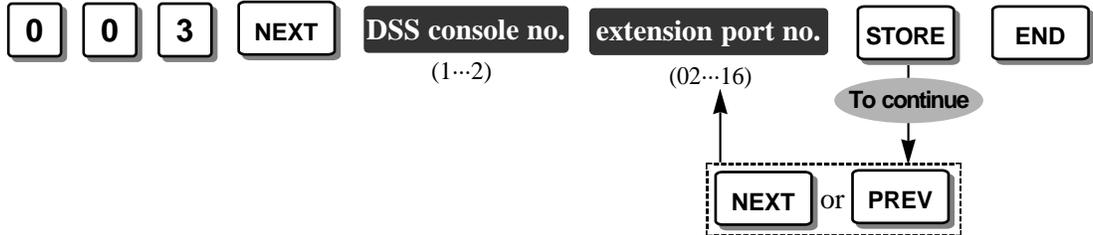
- To correct a wrong entry, press the CLEAR button and enter the new one.



- **Feature Reference**  
Section 3, Features  
Extension Password / System Password

**[003] DSS Console Port Assignment**

Assigns a maximum of 2 port numbers to connect the DSS console(s).



**Default** All DSS consoles – Disable (Not stored)

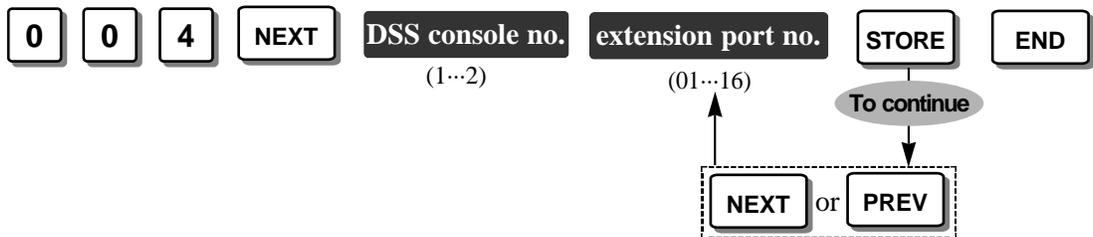
- ! • Two DSS consoles cannot be assigned to the same port number.
- ! • Extension port 01 is the manager extension. So please do not assign extension port 01 as the DSS console port.
- ! • To not assign an extension port number, press the CLEAR button in the extension port number step.
- ! • The extension port number which has already been assigned as a paired telephone in program [004] “Paired Telephone Assignment for DSS Console” is not available in this program.



- **Feature Reference**  
Section 3, Features  
DSS Console

**[004] Paired Telephone Assignment for DSS Console**

Assigns a port number for an extension paired with the DSS console.



**Default** Extension port number paired with DSS console 1 – Disable (Not stored)  
Extension port number paired with DSS console 2 – Disable (Not stored)

- ! • A single line telephone (SLT) cannot be paired with the DSS console.
- ! • To not assign an extension port number, press the CLEAR button in the extension port number step.
- ! • The extension port number which has already been assigned as a DSS console in program [003] “DSS Console Port Assignment” is not available in this program.



- **Feature Reference**  
Section 3, Features  
DSS Console

**[005] One-Touch Transfer Using a DSS Button**

Selects how an outside call is transferred to any extension using the DSS button.

**With Transfer:** Press the DSS button to transfer an outside call.

**Without Transfer:** Press the TRANSFER button then the DSS button to transfer an outside call.



(With Transfer/  
Without Transfer)

**Default**      With Transfer



- This program is effective for 2 kinds of DSS buttons. One is on the DSS console, and the other is flexible line key on your proprietary telephone assigned as a DSS button.



- **Operating Instructions References**
  - 1.2 Proprietary Telephone Settings, “Customising the Buttons on Your Telephone”, DSS (Direct Station Selection) Button
  - 1.9 DSS Console Features, “Initial Settings”, One-Touch Dialling Assignment

**[006] Time (Day/Night/Lunch) Service Changing Mode**

Selects changing the day, night and lunch service manually or automatically. For manual changing, refer to the Operating Instructions. For automatic changing, set the next program [007] “Time (Day/Night/Lunch) Service Start Time”.



(Man/Auto)

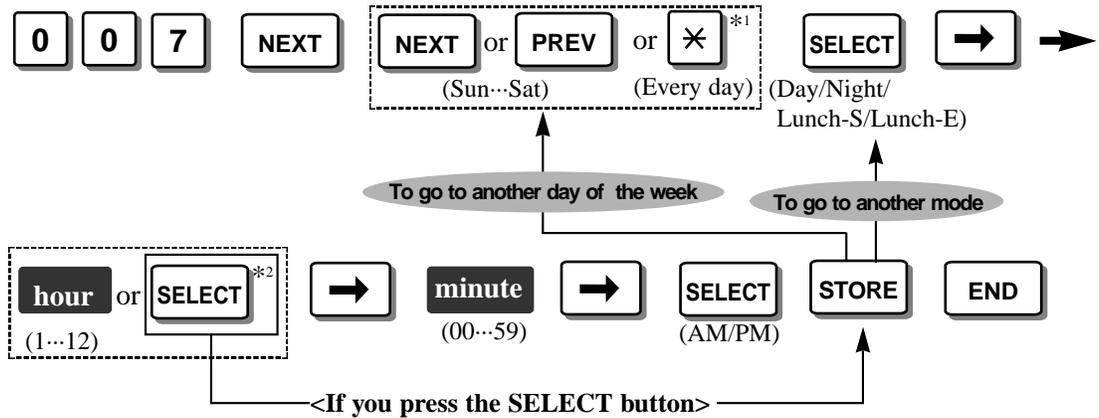
**Default**      Manual



- **Feature Reference**
  - Section 3, Features
  - Time (Day/Night/Lunch) Service

## [007] Time (Day/Night/Lunch) Service Start Time

Sets the starting time on a week day basis, when “Automatic” is selected in program [006] “Time (Day/Night/Lunch) Service Changing Mode”.



\*1 To assign every day of the week to one selection, press the \* button.

\*2 If the SELECT button is pressed, the display will show the previous entry. If the previous setting was “None”, press the SELECT button to enter the starting time. If you do not need to change the time service, keep pressing the SELECT button until “None” is displayed. For example, if Monday’s day mode is set to “None”, the day mode will not be turned on Monday.

**Default**      Everyday – Day – 9:00 AM / Night – 5:30 PM /  
 Lunch-S (starting) – None / Lunch-E (ending) – None



- **Feature Reference**  
 Section 3, Features  
 Time (Day/Night/Lunch) Service

## [008] Operator Assignment

Assigns an extension port number for the operator.



**Default**      Jack-01



- **Feature References**  
 Section 3, Features  
 Operator / Manager Extension, Operator Call

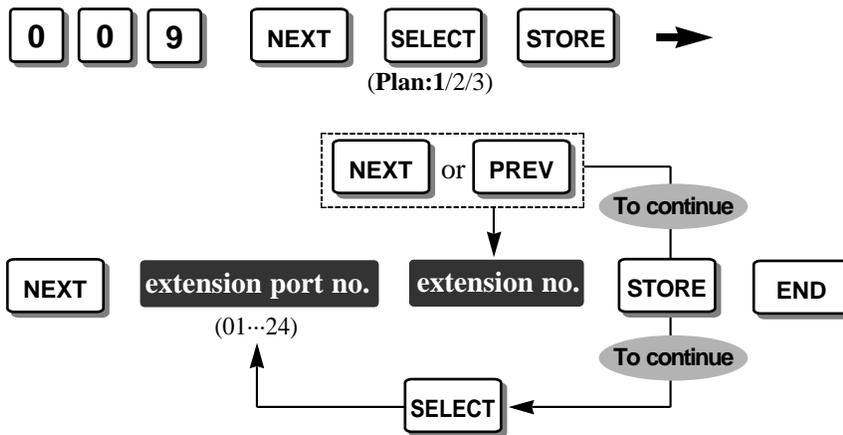
### [009] Extension Number Assignment

Selects an extension numbering plan, **Plan 1**, **Plan 2** or **Plan 3**, and assigns an extension number to each extension.

**Plan 1:** Available extension numbers are 200 through 299.

**Plan 2:** Available extension numbers are 100 through 499.

**Plan 3:** Available extension numbers are 10 through 49.



**Default** Plan 1: extension ports 01 through 24 – extension numbers 201 through 224



- If the selected extension numbering plan is the same as the previously stored one, 2 beeps will be heard.
- If “Plan 2” or “Plan 3” is selected, the default extension numbers will change automatically as follows.
  - Plan 2: extension ports 01 through 24 – extension numbers 201 through 224
  - Plan 3: extension ports 01 through 24 – extension numbers 21 through 44
- If “Plan 2” or “Plan 3” is selected, some feature numbers will also change. Refer to the attached leaflet for details.
- A double entry of the extension number is invalid. If the programmed extension number is the same as a previously stored one, 2 beeps will be heard when the STORE button is pressed. When extension number 203 has already been assigned to port number 03, to assign extension number 203 to the port number 05, change the extension number of port number 03 to another one. Then assign extension number 203 to port number 05.
- If a Voice Processing System (VPS) is connected to the system, select “Plan 1” or “Plan 2” in this program and “Enable” in [103] “DTMF Integration”, so that the DTMF integration between VPS and the system can be enabled.
- If a rotary telephone is used at any extension, select “Plan 1” in this program.



- **Feature Reference**
  - Section 3, Features
  - Intercom Calling

### [010] LCD Time Display Selection

Selects how the current time and date will be displayed on a proprietary telephone while idle. Either 12 hour or 24 hour (military time) can be selected.



**Display example:**

When “12 HOUR” is selected: Jan 1 11:20PM

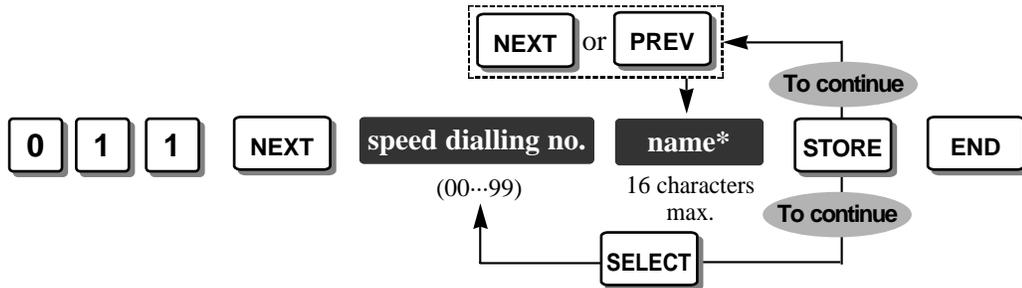
When “24 HOUR” is selected: 1 Jan 23:20

**Default** 12 HOUR

- !** Programs [000] “Date and Time Setting” and [007] “Time (Day/Night/ Lunch) Service Start Time”, and the Timed Reminder feature are assigned using 12-hour time regardless of this program. The SMDR printout is also printed using 12-hour time.

[011] System Speed Dialling Name Setting

Assigns a name to each System Speed Dialling number. The name will be displayed when making a call by using the System Speed Dialling feature. It will also be used for the Caller ID feature.



\* Name:  
Combination Table

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

<Example>

— To enter “Mike;

1. Press 6 and then press the SELECT button once to enter “M”.
2. Press 4 and then press the SELECT button 6 times to enter “i”.
3. Press 5 and then press the SELECT button 4 times to enter “k”.
4. Press 3 and then press the SELECT button 4 times to enter “e”.

**Default** All System Speed Dialling numbers – Not stored.



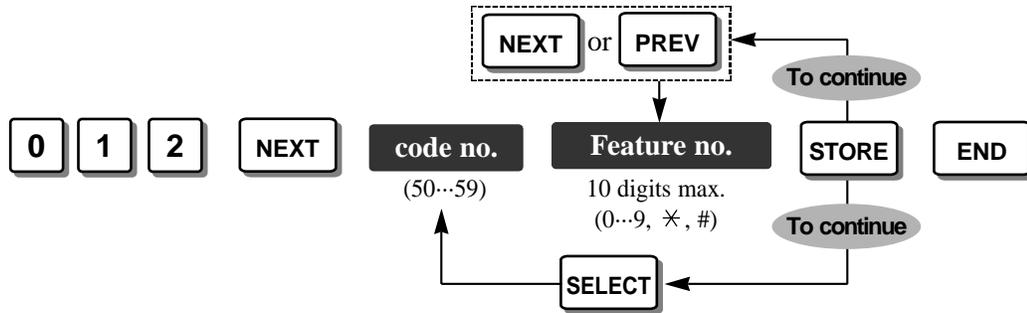
- To erase all letters, press the CLEAR button. To erase 1 letter, press .
- Each name has a maximum of 16 characters.
- Press to scroll the display to the right side.



- **Feature References**  
Section 3, Features  
System Speed Dialling

**[012] Alternative Feature Numbering Plan**

Replaces any feature number with a code number 50 through 59. This is useful when selecting “Plan 2” or “Plan 3” in program [009] “Extension Number Assignment” as some feature numbers change for Plan 2 and Plan 3 and they might be difficult to remember. (Refer to the attached leaflet “Notice for the Feature Numbers”.) All extension users can dial these assigned codes instead of feature numbers.



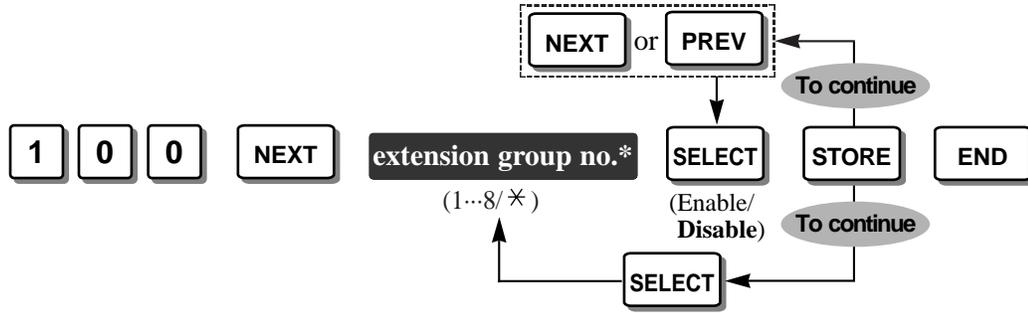
**Default** All codes – Not stored.



- This is not possible when “Plan 1” has been selected in program [009].

**[100] Hunting Group Set**

Enables or disables automatically locating an idle extension in the same extension group as the dialled extension, when the called extension is busy. If “Enable” is selected, assign the next program [101] “Hunting Type”. Extension groups are defined in program [600] “Extension Group Assignment”.



\* Extension group number: 1 through 8 / ※ (all extension groups)

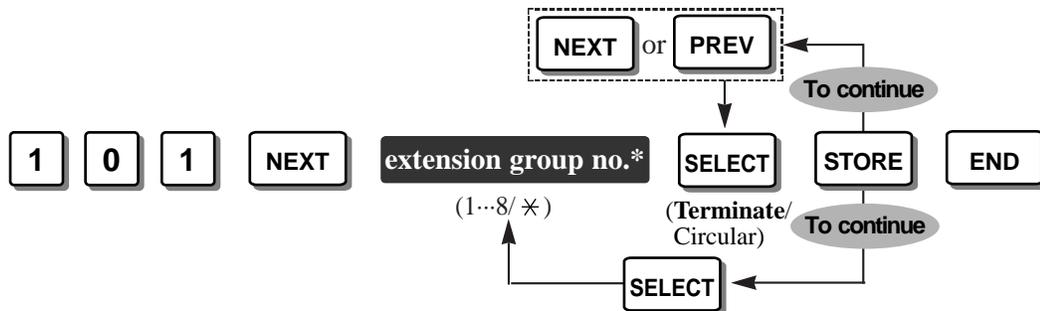
**Default** All extension groups – Disable



- **Feature Reference**  
Section 3, Features  
Extension Hunting

**[101] Hunting Type**

Assigns the hunting type, **Terminate** or **Circular**, to each extension group when a hunting group is enabled in program [100] “Hunting Group Set”.



\* Extension group number: 1 through 8 / ※ (all extension groups)

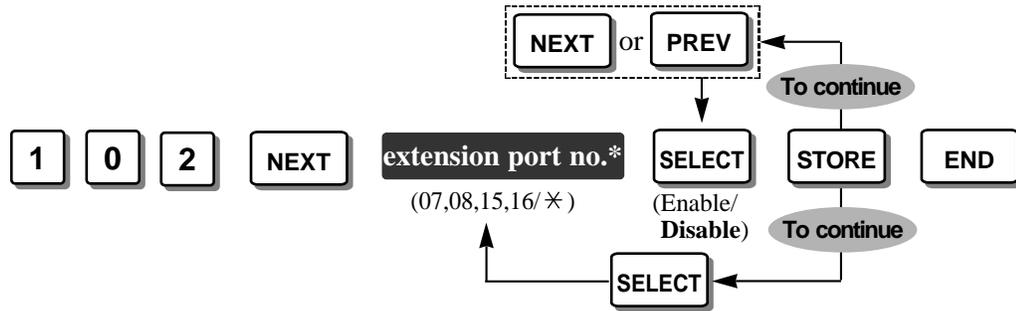
**Default** All extension groups – Terminate



- **Feature Reference**  
Section 3, Features  
Extension Hunting

**[102] Voice Mail Port for KX-TVP100**

Assigns the extension port number(s) connected to a Panasonic Voice Processing System (VPS) equipment (KX-TVP100). Only extension ports 07, 08, 15 and 16 are available.



\* Extension port number: 07, 08, 15 and/or 16 / \* (All 4 extension ports)

**Default** All 4 extension ports – Disable



• **Feature Reference**

Section 3, Features

Voice Mail Integration for KX-TVP100

**[103] DTMF Integration for KX-TVP100**

Enables or disables the system to send codes (DTMF signals) to the extension(s) assigned as the Voice Mail Port in program [102] “Voice Mail Port”. These DTMF signals indicate the state of the call (busy, answered, ringing, disconnected, etc.) in addition to the normal call tones. They also enable the Panasonic Voice Processing System (VPS) equipment (KX-TVP100) to immediately recognise the current state of the call and speed up the call handling.



(Enable/Disable)

**Default**    Disable

- The table on next page describes the codes (DTMF signals), call state and conditions for the DTMF integration operation.
- Select “Plan 1” or “Plan 2” in program [009] “Extension Number Assignment”, and select “Enable” in this program to enable the DTMF integration.
- This feature greatly improves the performance of the Panasonic KX-TVP100: Voice Processing Systems which have been programmed for Inband Signalling. For more information about Inband Signalling, refer to your Voice Processing System manual.



- **Feature Reference**

Section 3, Features

Voice Mail Integration for KX-TVP100

*DTMF signals*

Code	Call State	Conditions
1	Ringback Tone	When an extension a VPS has dialled is ringing.
2	Busy Tone	When an extension a VPS has dialled is busy.
3	Reorder Tone	When a VPS dials an invalid extension number or when a VPS is accidentally connected to another Voice Mail Port.
4	DND	When an extension a VPS has dialled sets the DND (Do Not Disturb) feature.
5	Answer	When an extension which a VPS has dialled answers the call.
6	Forwarded to Voice Processing System (Ringing)	When a called extension is forwarded to a VPS, the call can be forwarded to another available VPS. In this way, the first VPS, typically an Auto-Attendant, can release the call to another VPS and receive another incoming call.
7	Forwarded to Voice Mail (Busy)	When a called extension is forwarded to a VPS and no VPSs are available to receive the call.
8	Forwarded to Extension	When a called extension is forwarded to another, non-VPS extension.
9	Confirmation Tone	When a VPS has successfully turned a message waiting lamp on or a message waiting lamp off.
#9	Disconnect	When the calling party disconnects.

**[104] *Hold Mode Selection***

You can select how to hold a line and transfer a call to another extension with a single line telephone (SLT), **Hold-1**, **Hold-2** or **Hold-3**. If the following occurs frequently with an SLT, select “Hold-2” or “Hold-3”.

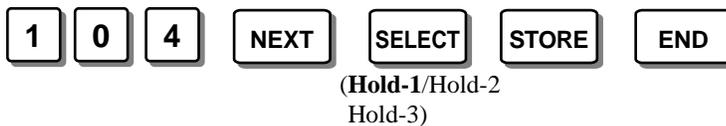
- Nobody answers when a call is received.
- A busy tone is heard even though nobody is using the exchange line.

If a call is not terminated after going on-hook, the above cases occur. To avoid these problems, select “Hold-2” or “Hold-3”. Every call will be terminated unless 50 is dialed after pressing the Recall button in the Hold-2 and Hold-3 modes.

**Hold-1:** To hold a line or transfer a call, press the Recall button.

**Hold-2:** To hold a line, press the Recall button and dial 50. To transfer a call, press the Recall button.

**Hold-3:** To hold a line or transfer a call, press the Recall button and dial 50.



**Default** Hold-1



- **Feature Reference**  
Section 3, Features  
Hold

**[105] *Conference Tone***

Enables or disables the confirmation tone before starting or ending a conference call established by the Conference feature or Executive Busy Override feature.



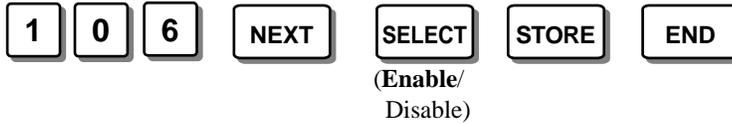
**Default** Enable



- **Feature References**  
Section 3, Features  
Conference (3-party), Conference (5-party), Executive Busy Override

**[106] External Paging Access Tone**

Enables or disables the splash tone before paging is sent over the external pager.



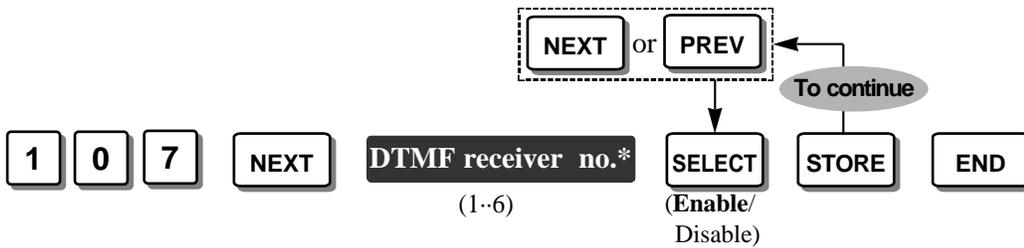
**Default** Enable



- **Feature Reference**  
Section 3, Features  
Paging

**[107] DTMF Receiver Check**

Enables or disables the 6 DTMF receivers to check whether the DTMF receivers are activated normally or not. Refer to the Section 6 Troubleshooting, “While Operating” for further information on checking the DTMF receivers.



- \* DTMF receiver number: 1 and 2 (for checking extension ports 01 through 08)/  
3 and 4 (for checking extension ports 09 through 16)/  
5 and 6 (for checking extension ports 17 through 24)

**Default** All DTMF receivers – Enable

**[108] Recall Mode for a Locked Extension**

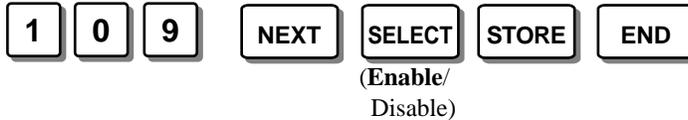
Enables or disables a locked extension to send a recall signal during a conversation with an external party.



**Default** Disable

**[109] *CO Indicator Assignment***

Enables or disables an extension which was assigned not to ring in programs [408]-[410] “Flexible Ringing Assignment” to answer an incoming outside call. The line key indicator will flash when an outside call is received. If enabled, an extension user can answer the call by pressing the flashing line key. If disabled, the user cannot answer the call even if they press the line key.



**Default** Enable



- The extension must be a proprietary telephone with a line key and indicator.

**[110] *Recall Key Mode***

Assigns the sending of the recall signal mode, **MODE 1** or **MODE 2**, when the RECALL button on a proprietary telephone is pressed.

**MODE 1:** The recall signal is sent during the programmed time in [418] “Recall Time”.

**MODE 2:** The recall signal is sent while the RECALL button is pressed if the time the RECALL button was pressed is more than the programmed time in [418]. This will be useful to disconnect the current call and make another call without hanging up. If the time the RECALL button was pressed is less than the programmed time in [418], the recall signal will be sent during the programmed time.



**Default** MODE 1



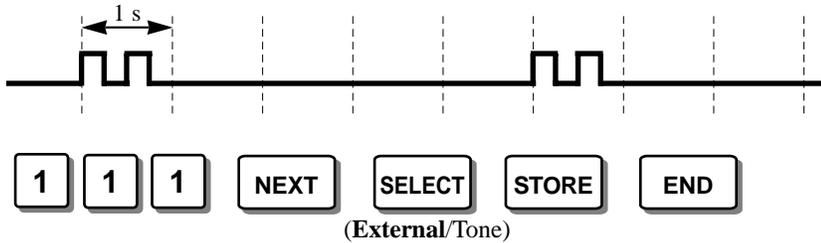
- **Feature Reference**  
Section 3, Features  
Recall

**[111] Hold Music Selection**

Selects the music source, **External** or **Tone**, which an external party will hear when an outside call is on hold.

**External** : Uses an external music source, such as a radio.

**Tone** : Uses the cyclic tone below equipped with the system.



**Default** External



- The music source can also be used for BGM.



- **Feature Reference**  
Section 3, Features  
Music on Hold / Background Music (BGM)

**[112] DSS Console Indication Mode**

Enables or disables the Busy Lamp Field (BLF) on the DSS button to indicate the status, Forward (FWD) or Do Not Disturb (DND), of corresponding extensions.



- \* Enable: FWD – Flashing slowly, DND – Flashing moderately  
Disable: FWD – Off, DND – Off

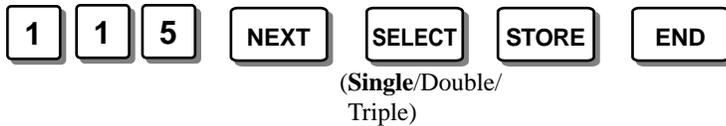
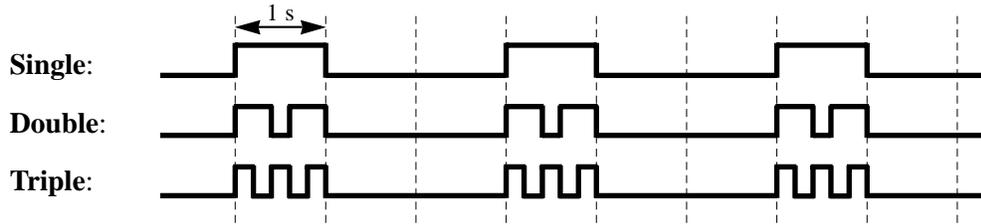
**Default** Enable



- **Feature Reference**  
Section 3, Features  
DSS Console

**[115] Extension Ringing Pattern Selection**

Selects the extension ringing pattern when an intercom call received, either **Single**, **Double** or **Triple**.



**Default** Single

- ! • The length of the ring cycle for a single line telephone (SLT) is determined in program [124] “SLT Ringing Mode Selection”.
- The extension ringback pattern is determined at the same time.

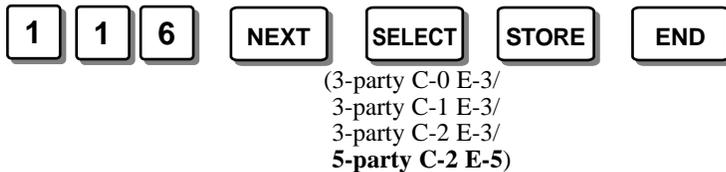


- **Feature Reference**  
Section 3, Features  
Ringing Pattern Selection

**[116] Conference Pattern Selection**

Selects the maximum number of external parties which can attend a conference. The maximum number of conference parties is 5.

- 3-party C-0 E-3:** No external parties can attend a 3-party conference.
- 3-party C-1 E-3:** One external party can attend a 3-party conference.
- 3-party C-2 E-3:** A maximum of 2 external parties can attend a 3-party conference.
- 5-party C-2 E-5:** A maximum of 2 external parties can attend a 5-party conference.



**Default** 5-party C-2 E-5



- **Feature References**  
Section 3, Features  
Conference (3-Party), Conference (5-Party)

**[117] Call Pickup Tone**

Enables or disables the confirmation tone when the Call Pickup feature is activated.

**1** **1** **7** **NEXT** **SELECT** **STORE** **END**

(Enable/  
Disable)

**Default** Enable



• **Feature Reference**

Section 3, Features

Call Pickup

**[118] Pulse Restriction**

Enables or disables sending pulse dialling to the Local Exchange during a conversation with an external party when “Pulse Mode” or “Call Block Mode” is selected in program [401] “Dial Mode”.

**1** **1** **8** **NEXT** **SELECT** **STORE** **END**

(Enable/  
Disable)

**Default** Enable

**[119] Redialling after Pulse to Tone Conversion**

Enables or disables sending tone dialling to the Local Exchange when an extension user redials after changing the pulse mode into tone mode by pressing \* and #.

**1** **1** **9** **NEXT** **SELECT** **STORE** **END**

(Enable/  
Disable)

**Default** Disable



• **Feature Reference**

Section 3, Features

Pulse to Tone Conversion

**[120] *Bell Frequency***

Selects the bell frequency sent to a single line telephone (SLT).



**Default** 25 Hz

**[121] *Automatic Exchange Line Access Number Selection***

Selects the Automatic Exchange Line Access number ( 0 or 9).



**Default** Dial 9



- If you select “0”, the operator call will automatically be “9”. If you select “9”, the operator call will automatically be “0”



- **Feature References**

Section 3, Features

Automatic Exchange Line Access Number, Operator Call

**[122] *Automatic Rotation for Exchange Line Access***

Enables or disables the rotation of exchange lines seized for “Automatic Exchange Line Access”.



**Default** Disable (Does not rotate.)



- **Feature Reference**

Section 3, Features

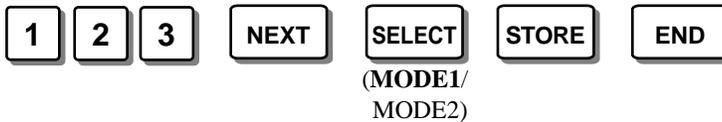
Automatic Exchange Line Access Number

**[123] Break Ratio**

Selects the pulse break rate, **MODE1** or **MODE 2**, when a Pulse is sent to the Local Exchange during a conversation.

**MODE 1:** 66 %

**MODE 2:** 60 %



**Default** MODE 1

**[124] SLT Ringing Mode Selection**

Selects the length of the ring cycle for a single line telephone (SLT).

**MODE 1:** 5 second cycle

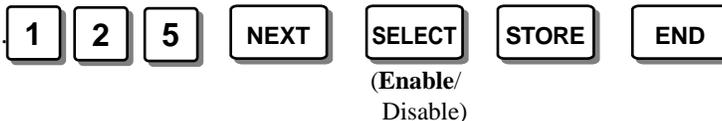
**MODE 2:** 3 second cycle



**Default** MODE 2

**[125] Call Barring Check for \* and #**

Assigns whether the entered “\*” and “#” are checked by call barring or not. This assignment is required for certain Local Exchanges to prevent toll fraud. Some Central Offices ignore the user-dialled “\*” and “#”. If your Local Exchange ignores these symbols, select “Disable”.



**Default** Enable



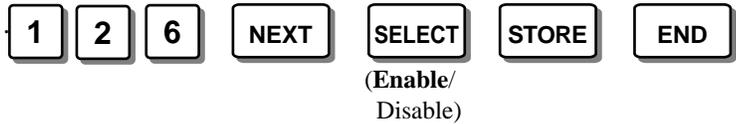
• **Feature Reference**

Section 3, Features

Call Barring

**[126] DSS Off-Hook Mode**

Enables or disables making an intercom call just by pressing a DSS button on a DSS Console. If enabled, going off-hook is not needed.



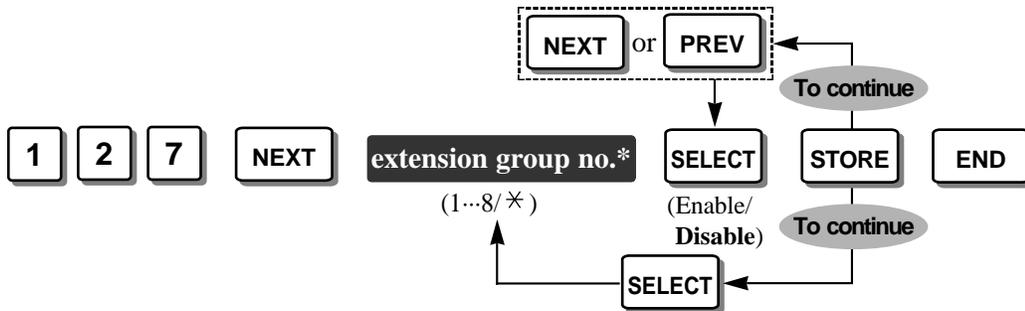
**Default** Enable

**!** • This assignment is also effective for a flexible line key on a proprietary telephone assigned as a DSS button.

**• Feature Reference**  
 Section 3, Features  
 Intercom Calling

**[127] Pickup Group Set**

Enables or disables the ability of an extension to pickup a call ringing at another extension (if it is in the same extension group) by just going off-hook. If enabled, the feature number (40) is not needed to pickup the call.



\* Extension group number: 1 through 8 / \* (all extension groups)

**Default** All extension groups – Disable (the feature number (40) is required to pickup the call)

**!** • To prevent other extensions in the same extension group from picking up outside calls by just going off-hook, select “Disable” in program [109] “CO Indicator Assignment”. Then even though “Enable” is selected in this program [127], outside calls cannot be picked up by others by just going off-hook.

**• Feature Reference**  
 Section 3, Features  
 Call Pickup