3.3 PT Programming

3.3.1 Programming Instructions

Required Telephone

PBX settings can be customised through system programming by using a proprietary telephone (PT) with a display, such as the KX-T7730. An authorised administrator or the manager extension connected to the extension jack 01 can access system programming.

Only one system programming session can be performed at a time; that is, only one user can access system programming at a time. This includes PC programming.

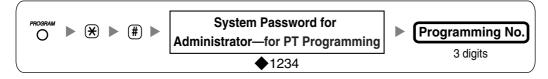
Buttons and Functions

Fixed Button (KX-T7730/KX-T7735)	Function
REDIAL	PREV (PREVIOUS)
SP-PHONE	NEXT
	◆
	◄ , -
MESSAGE	— , ■ ►
	SECRET
	STORE
Pause	PAUSE
PROGRAM	PROGRAM
HOLD	END
	SELECT

Fixed Button (KX-T7730/KX-T7735)	Function
FLASH/RECALL	FLASH
TRANSFER	CLEAR

Entering System Programming Mode

Using a PT to perform system programming allows an authorised administrator to set a wide range of PBX features and parameters. To enter system programming mode, the system password is required. With the system password, all system programming is accessible.



<u>Note</u>

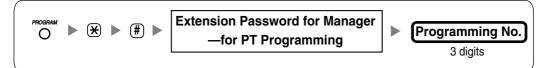
igoplus means default value throughout these programming instructions.

Entering Manager Programming Mode

Using a PT to perform manager programming allows the manager extension (extension jack 01) to set certain PBX features and parameters. To enter manager programming mode, the extension password for the manager (manager password) is required.

With the manager password, the following 4 system programming settings are accessible:

- System Speed Dialling Number [001]
- System Speed Dialling Name [011]
- DISA Security Code [512]
- DISA Security Code Digits [530]



Notes

- The system password may be entered instead of the manager password.
- With the manager password, the manager can also set a password to each extension, and print
 out call log information for each extension. For more information on how to assign a password to
 each extension including the manager password and to print out call log information for each
 extension, refer to the User Manual (→ 2.1.7 Changing System Settings Using Programming
 Mode, 3.2.2 Printing and Clearing Call Logs).

Entering Characters

The PT's dialling buttons can be used to enter characters when storing a name or message. The following tables depict the available characters:

Table 1 (Alphabet mode)/Table 2 (Numeral mode)

Times									Times	
Buttons	1	2	3	4	5	6	7	8	Buttons	1
1	!	?	"						1	1
2	А	В	С	a	b	С			2	2
3	D	Ε	F	d	e	f			3	3
4	G	Н	I	g	h	i			4	4
5	J	K	L	j	k	1			5	5
6	М	Ν	0	m	n	0			6	6
7	Р	Q	R	S	р	q	r	S	7	7
8	т	U	V	t	u	v			8	8
9	W	Х	Y	Z	W	x	У	z	9	9
0	(Space)	•	,	ı	:	;			0	0
×	1	+	_	=	<	>			*	*
Ξ	\$	olo	&	@	()			Ξ	Π

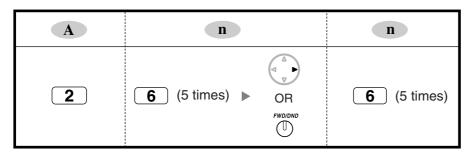
Times										
Buttons	1	2	3	4	5	6	7	8	9	10
1	Α	Б	В	!	?	* *				
2	Г	Д	Е	Ë						
3	Ж	3	И	Й						
4	K	Л	Μ							
5	Н	0	П							
6	Р	С	Т							
7	У	Φ	X							
8	Ц	Ч	Ш							
9	Щ	Ъ	Ы	Ь						
0	Э	Ю	Я	(Space)	•	,	۲	:	;	
×	1	+	_	=	<	>	г*	€*	Ι*	Ϊ*
Π	\$	00	&	@	()	€*	Ι*	ў*	

Table 3 (Cyrillic alphabet mode for RU [Russia]/UA [Ukraine] model)

* This character is only available for the KX-T7735RU.

[Example of Entering Characters]

To enter "Ann":



<u>Notes</u>

- To toggle between "Alphabet mode" and "Numeral mode" or between "Alphabet mode", "Cyrillic alphabet mode (assignable only in Extension Name in Cyrillic [616])", and "Numeral mode", press SELECT.
- To move the cursor right, press ➡.
- To delete all characters, press CLEAR. To delete a character, press

List of Abbreviations

Α	AA	\rightarrow	Automated Attendant
	APT	\rightarrow	Analogue Proprietary Telephone
	ARS	\rightarrow	Automatic Route Selection
В	BGM	\rightarrow	Background Music
	BV	\rightarrow	Built-in Voice Message
С	CO	\rightarrow	Outside (CO) Line
	COS	\rightarrow	Class of Service
	CPC	\rightarrow	Calling Party Control
D	DIL	\rightarrow	Direct In Line
	DISA	\rightarrow	Direct Inward System Access
	DND	\rightarrow	Do Not Disturb
	DRD	\rightarrow	Distinctive Ring Detection
	DSS	\rightarrow	Direct Station Selection
	DTMF	\rightarrow	Dual Tone Multi-Frequency
Е	EFA	\rightarrow	External Feature Access
G	GRP	\rightarrow	Group
I	IRNA	\rightarrow	Intercept Routing—No Answer
L	LCS	\rightarrow	Live Call Screening
0	OGM	\rightarrow	Outgoing Message
Ρ	PT	\rightarrow	Proprietary Telephone
S	SLT	\rightarrow	Single Line Telephone
	SMDR	\rightarrow	Station Message Detail Recording
	SMS	\rightarrow	Short Message Service
т	TRS	\rightarrow	Toll Restriction
	ТАМ	\rightarrow	Telephone Answering Machine
U	UCD	\rightarrow	Uniform Call Distribution
V	VM	\rightarrow	Voice Mail

3.3.2 Programming Procedures

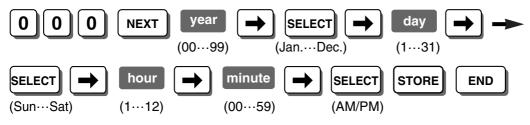
<u>Notes</u>

- • means default value throughout these programming instructions.
- X means to select "All" throughout these programming instructions.
- The following are displayed when you store a number, such as a telephone number, or feature number:

P: PAUSE; -: CONF; F: FLASH/RECALL; []: INTERCOM x: PAUSE (substitutes for any number [i.e., wild card])

- To return to the previous programming item, press •
- To correct a wrong entry, press CLEAR and then enter the new input.
- To delete a stored parameter, press CLEAR, enter the new input, and then press STORE.
- Press or to scroll the display.
- Some programmes cannot have a value left empty.

Date & Time [000]



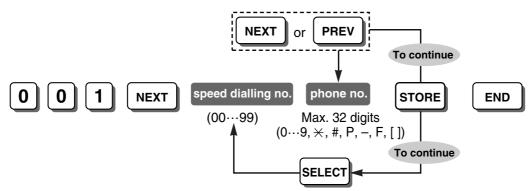
Notes

- The clock starts immediately after the STORE button is pressed.
- The PBX supports years from 2004 to 2099.

Feature & Programming References

1.20.1 Station Message Detail Recording (SMDR)

System Speed Dialling Number [001]



Notes

• An Outside (CO) Line Access number (9/0 [for New Zealand: 1 or 9], 81 through 88) should be included before the phone number.

 When storing an account code assigned in Account Code [310], enter ** and the account code after an Outside (CO) Line Access number.

Feature & Programming References

1.6.1 Memory Dialling Features

System Password [002]



WARNING

To maintain system security, a password is required to perform system programming. To avoid unauthorised access and possible fraudulent dialling, do not disclose the password.

Warning to the Administrator regarding the system password

- **1.** Please inform the customer of the importance of the password and the possible dangers if it becomes known to others.
- **2.** To avoid unauthorised access and possible fraudulent dialling, maintain the secrecy of the password.
- **3.** We strongly recommend that you change the default password value to something else for reasons of system security. It is best to use a password of 7 digits.
- 4. Please change the password periodically.
- 5. If a system password is forgotten, it can be found by loading a backup of the system data into a PC, and checking the password using the KX-TE Maintenance Console software. If you do not have a backup of the system data, you must reset the PBX to its factory defaults and reprogramme it. Therefore, we strongly recommend maintaining a backup of the system data. For more information on how to back up the system data, refer to the on-line help that appears by selecting the Help menu during PC programming. However, as system passwords can be extracted from backup copies of the system data file, do not allow unauthorised access to these files.

<u>Note</u>

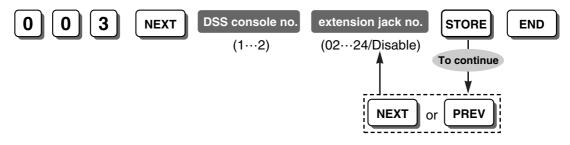
This PBX has only one system password. It can be changed by either PT programming or PC programming. For this reason, the password can consist of numerals only.

Feature & Programming References

2.3.1 PC Programming

2.3.2 PT Programming

DSS Console Jack Assignment [003]



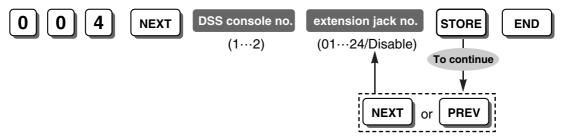
<u>Notes</u>

- To delete (disable) an extension jack number, press CLEAR in the extension jack number step.
- The same jack number cannot be assigned to 2 DSS Consoles.
- Do not assign extension jack 01 (manager extension) as the DSS Console jack.
- The extension jack number preassigned as a paired telephone in Console Paired Telephone [004] should not be assigned in this programme.

Feature & Programming References

- 1.18.1 Fixed Buttons
- 2.1.1 Extension Jack Configuration

Console Paired Telephone [004]



<u>Notes</u>

- To delete (disable) an extension jack number, press CLEAR in the extension jack number step.
- The extension jack number preassigned as a DSS Console in DSS Console Jack Assignment [003] should not be assigned in this programme.
- An SLT cannot be paired with the DSS Console.

Feature & Programming References

1.18.1 Fixed Buttons

2.1.1 Extension Jack Configuration

One-touch Transfer Using a DSS Button [005]



With Transfer: Press the DSS button to transfer an outside (CO) line call.

Without Transfer: Press the TRANSFER button, then the DSS button to transfer an outside (CO) line call.

Feature & Programming References

- 1.11.1 Call Transfer
- 1.18.1 Fixed Buttons

Time Service Switching Mode [006]

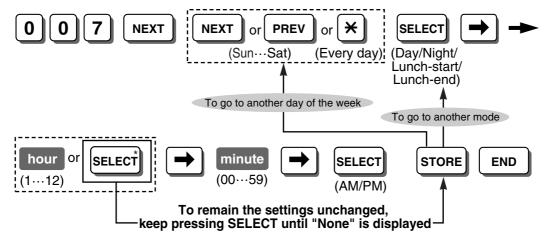


Feature & Programming References

2.2.3 Time Service

Time Service Start Time [007]

Time Service Start Time [007]



<u>Notes</u>

- This programme is available when switching mode is enabled in automatic mode in Time Service Switching Mode [006].
- * Pressing SELECT shows the previous entry. When the display shows "None", press SELECT to set the start time.

Feature & Programming References

2.2.3 Time Service

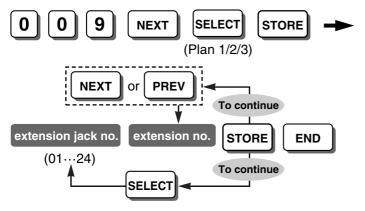


To delete (disable) an extension jack number, press CLEAR in the extension jack number step.

Feature & Programming References

2.2.4 Operator/Manager Features

Extension Number [009]



Notes

- Programmable extension numbers are as follows: Plan 1: 100–199; Plan 2: 100–499; Plan 3: 10–49 (for United Kingdom/New Zealand: Plan 1: 200–299; for New Zealand: Plan 2: 200–499, Plan 3: 20–49)
- The same extension jack number cannot be entered 2 times.

Feature & Programming References

- 1.5.1.1 Intercom Call
- 1.6.1.6 Quick Dialling
- 1.19.2 Voice Mail Inband (DTMF) Integration
- 2.3.4 Feature Numbering

LCD Time Display [010]



<u>Note</u>

The following settings and features use 12-hour format even if 24-hour format is assigned in this programme:

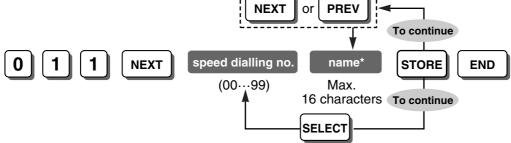
Date & Time [000]

Time Service Start Time [007]

1.20.1 Station Message Detail Recording (SMDR)

1.21.2 Timed Reminder

System Speed Dialling Name [011]



<u>Note</u>

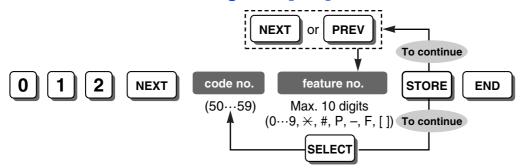
* A name can be stored using a PT's dialling buttons. The displayed character varies depending on the number of times that the dialling button is pressed. It is possible to toggle between "Alphabet mode" and "Numeral mode" by pressing SELECT.

Feature & Programming References

1.6.1.5 Speed Dialling—Personal/System

3.3.1 Programming Instructions—Entering Characters

Second Feature Numbering Plan [012]



<u>Note</u>

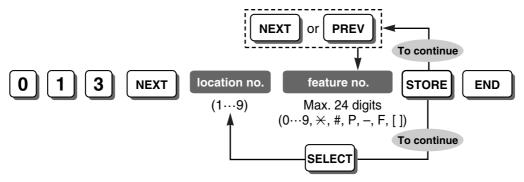
This programme is available only when "Plan 2" or "Plan 3" is selected in Extension Number [009].

Feature & Programming References

1.6.1.6 Quick Dialling

2.3.4 Feature Numbering

KX-T7710 One-touch Dialling [013]



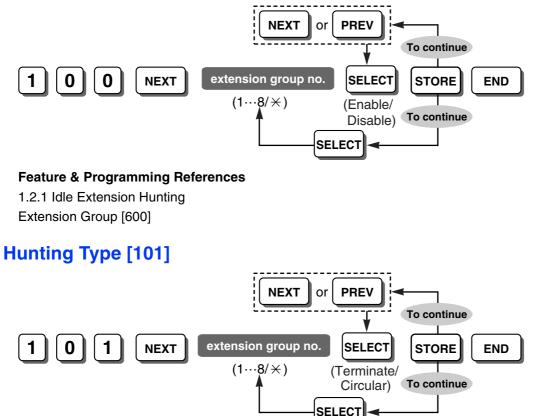
<u>Notes</u>

- Any feature number can be stored in a One-touch button. However, the feature numbers for Personal Speed Dialling, System Speed Dialling, and Quick Dialling do not function.
- This feature is not available when the KX-T7710 is connected in parallel with a PT.

Feature & Programming References

1.6.1.3 KX-T7710 One-touch Dialling

Hunting Group Set [100]

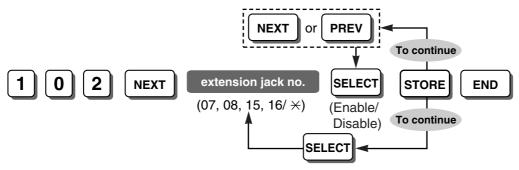


<u>Note</u>

This programme is available when the extension group is enabled in Hunting Group Set [100].

1.2.1 Idle Extension Hunting

DTMF Integration Port [102]



Feature & Programming References

1.19.2 Voice Mail Inband (DTMF) Integration

DTMF Integration [103]



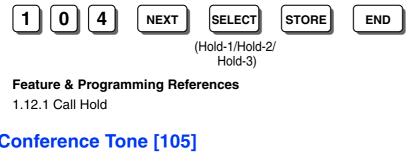
<u>Note</u>

When a KX-TVP series VPS is connected to the PBX, to enable Inband (DTMF) Integration between the VPS and the PBX, select "Plan 1" or "Plan 2" in Extension Number [009] and "Enable" in this programme.

Feature & Programming References

1.19.2 Voice Mail Inband (DTMF) Integration DTMF Integration Port [102]

SLT Hold Mode [104]



Conference Tone [105]



Feature & Programming References

1.7.2 Executive Busy Override

1.13.1.2 Conference

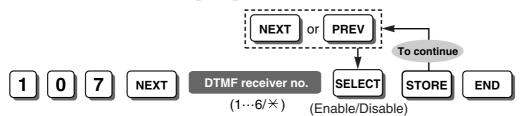
External Pager Access Tone [106]



Feature & Programming References

1.14.1 Paging

DTMF Receiver Check [107]



<u>Note</u>

This programme enables each DTMF receiver to check whether it is operating normally or not. **DTMF receiver number**:

1-2: checking extension jacks 01-08

3-4: checking extension jacks 09-16

5-6: checking extension jacks 17-24

Connection References

4.1.3 Operation

Flash/Recall Mode for a Locked Extension [108]



<u>Note</u>

This programme enables a locked extension to send a flash/recall signal during a conversation with an outside party.

CO Indicator [109]



<u>Note</u>

This programme is available for the extension(s) assigned not to ring in Flexible Ringing—Day/Night/ Lunch [408-410], to answer incoming outside (CO) line calls.

Flash/Recall Key Mode [110]



MODE2: Flash/Recall mode)

Feature & Programming References

- 1.10.6 Flash/Recall
- 1.10.7 External Feature Access (EFA)

Music on Hold [111]



<u>Note</u>

Selections vary depending on your country/area.

Feature & Programming References

- 1.12.4 Music on Hold
- 1.15.4 Background Music (BGM)

DSS Lamp Mode [112]



Note

Enable: FWD—Flashing slowly, DND—Flashing at moderate speed Disable: FWD—Off, DND—Off

Feature & Programming References

1.18.3 LED Indication

Automatic Redial Repeat Count [113]



Feature & Programming References

1.6.1.4 Redial

Automatic Redial Interval [114] 1 1 4 NEXT SELECT STORE END (40/60 s) **Feature & Programming References** 1.6.1.4 Redial **Extension Ring Tone Pattern [115]** STORE 5 NEXT SELECT END (Single/Double/ Triple) **Feature & Programming References** 1.1.3.3 Ring Tone Pattern Selection 1.5.1.1 Intercom Call 4.2.1 Tones/Ring Tones Conference Pattern [116]



<u>Note</u>

3-party C-0 E-3: No outside parties can attend a 3-party conference call.

3-party C-1 E-3: One outside party can attend a 3-party conference call.

3-party C-2 E-3: A maximum of 2 outside parties can attend a 3-party conference call.

5-party C-2 E-5: A maximum of 2 outside parties can attend a 3-party to 5-party conference call.

The PBX allows up to 2 outside parties to participate in a conference call. [C: CO, E: Extension]

Feature & Programming References

1.13.1.2 Conference

Call Pickup Tone [117]



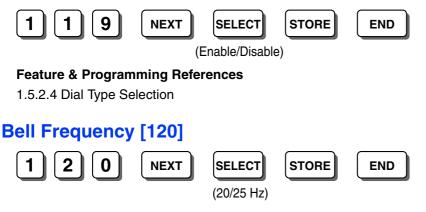
Feature & Programming References

1.4.1.3 Call Pickup



It is programmable whether pulse dialling is sent or not to the telephone company during a conversation with an outside party when "Pulse" or "Call Block" mode is enabled in Dial Mode [401].

Redialling after Pulse to Tone Conversion [119]



<u>Note</u>

This programme selects the bell frequency sent to an SLT.

Automatic Line Access [121]



<u>Note</u>

* For New Zealand: 1 or 9

Feature & Programming References

1.5.3.3 Outside (CO) Line Access

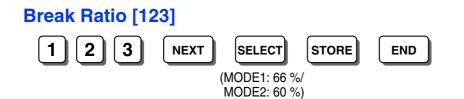
2.2.4 Operator/Manager Features

Automatic Rotation for CO Line Access [122]



Feature & Programming References

1.5.3.3 Outside (CO) Line Access



This programme selects the pulse break ratio (the ratio between the length of the pulse and the length of the pause) when a pulse is sent to the telephone company while dialling a telephone number.

TRS Check for * and # [125]



Feature & Programming References

1.8.1 Toll Restriction (TRS)

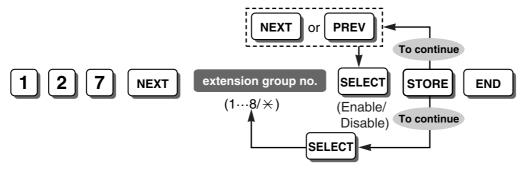
DSS Off-hook Mode [126]



Feature & Programming References

1.5.1.1 Intercom Call

Pickup Group [127]



Feature & Programming References

1.4.1.3 Call Pickup CO Indicator [109]

Ringback Tone Pattern [128]



Double 3 s/Double 5 s/

This programme selects the ringback tone pattern for outgoing intercom calls and for incoming outside (CO) line calls (including a DISA call).

Feature & Programming References

1.5.1.1 Intercom Call

- 1.15.6 Direct Inward System Access (DISA)
- 4.2.1 Tones/Ring Tones

VM 1 APT Port [130]



<u>Notes</u>

- To change the current setting (other than "Disable"), select "Disable", then select the desired setting.
- This programme is not available when "Enable" is selected in DTMF Integration [103].

Feature & Programming References

1.19.1 Voice Mail APT Integration

VM 2 APT Port [131]



<u>Notes</u>

- To change the current setting (other than "Disable"), select "Disable", then select the desired setting.
- This programme is not available when "Enable" is selected in DTMF Integration [103].

Feature & Programming References

1.19.1 Voice Mail APT Integration

SLT Ring/Silence Ratio [142]



<u>Note</u>

This programme selects the ratio between the bell signals of an SLT (a set of bell-on and bell-off).

1.1.3.3 Ring Tone Pattern Selection

SLT Ring Bell-on Time [143]

SLT Ring Bell-on Time [143]



<u>Notes</u>

- This programme selects the length of the bell-on signal of an SLT. This determines the ring tone pattern for incoming calls to SLTs, combined with the setting in SLT Ring/Silence Ratio [142].
- This programme also determines the maximum number of digits of an SLT Caller ID number, when "DTMF1" or "DTMF2" is selected in SLT Caller ID Signalling Type [150].

Feature & Programming References

- 1.1.3.3 Ring Tone Pattern Selection
- 1.16.1 Caller ID

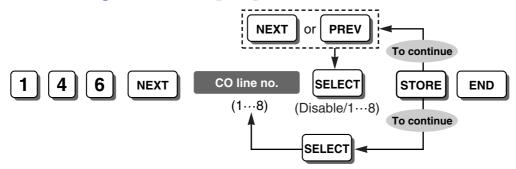
SMS Centre Number for Receiving [145]



Feature & Programming References

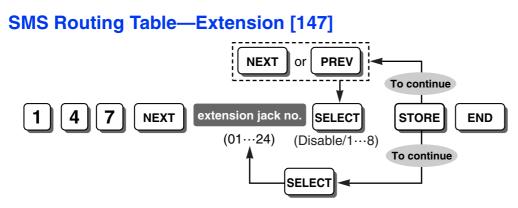
1.17.3 Fixed Line SMS Terminal Support

SMS Routing Table—CO [146]



Feature & Programming References

1.17.3 Fixed Line SMS Terminal Support

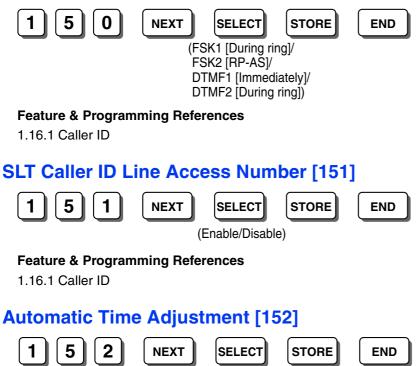


Each location 1-8 has a maximum of 8 extensions.

Feature & Programming References

1.17.3 Fixed Line SMS Terminal Support

SLT Caller ID Signalling Type [150]



(Enable/Disable)

Feature & Programming References

2.3.3 Automatic Time Adjustment

Incoming Reverse [153]



1.10.10 Calling Party Control (CPC) Signal Detection



Feature & Programming References

1.11.1 Call Transfer

Call Forwarding Start Time [202]



Feature & Programming References

1.3.1.2 Call Forwarding (FWD)

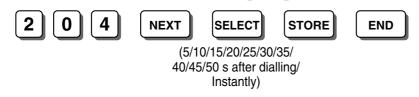
Hot Line Waiting Time [203]



Feature & Programming References

1.6.1.7 Hot Line

Call Duration Counter Start [204]



Feature & Programming References

1.5.2.5 Reverse Circuit

1.20.1 Station Message Detail Recording (SMDR)

Polarity Reverse Detection [424]

CO-to-CO Line Call Duration [205]



Feature & Programming References

1.10.8 Outside (CO) Line Call Limitation

Dialling Start Time [206]



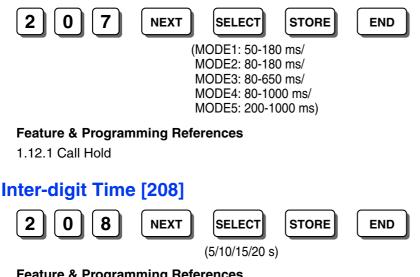
Note

* The minimum length of time that the PBX waits after seizing an outside (CO) line before dialling that can be selected depends on your country/area as follows: For Czech Republic: 0 ms, 250 ms, 500 ms, 750 ms, 1000 ms, 1250 ms, 3500 ms For Others: 0 ms, 250 ms, 500 ms, 750 ms, 1000 ms, 1250 ms, 1500 ms

Feature & Programming References

1.5.3.3 Outside (CO) Line Access

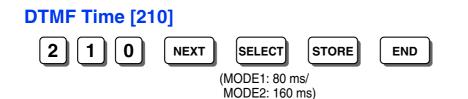
Hookswitch Flash Timing Range [207]



Feature & Programming References

1.8.1 Toll Restriction (TRS)

No Dial Disconnection [211]



Note

This programme selects the minimum duration of the DTMF signal sent to outside (CO) lines that have been set to "DTMF" in Dial Mode [401].

Feature & Programming References

1.5.2.4 Dial Type Selection





(Enable/Disable)

Feature & Programming References

1.8.1 Toll Restriction (TRS) Inter-digit Time [208]

Extension-to-CO Line Call Duration [212]



<u>Note</u>

This programme is available for the extension(s) enabled in CO Line Call Duration Limitation [613].

Feature & Programming References

1.10.8 Outside (CO) Line Call Limitation

Bell-off Detection [213]



<u>Note</u>

This programme selects the minimum time required by the PBX to confirm that the bell signal is no longer being sent from the telephone company, before the PBX acknowledges that the call is lost.

BV Recording Time [214]



1.15.7 Built-in Voice Message (BV)

Common/Personal BV OGM Recording Time [215]



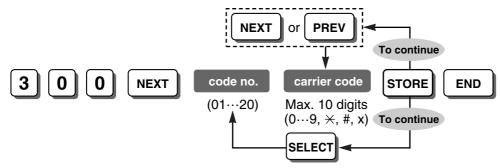
<u>Note</u>

This programme selects the maximum recording time for each personal/common BV OGM.

Feature & Programming References

1.15.7 Built-in Voice Message (BV)

Carrier Exception Code [300]



Feature & Programming References

- 1.8.1 Toll Restriction (TRS)
- 1.9.1 Automatic Route Selection (ARS)

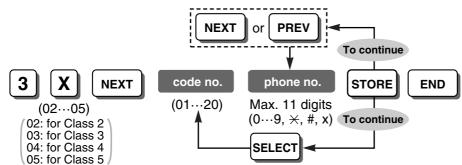
TRS—System Speed Dialling Class [301]



Feature & Programming References

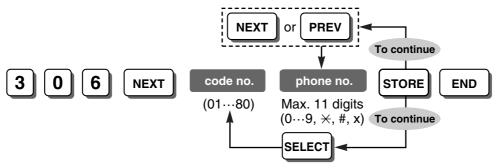
- 1.6.1.5 Speed Dialling—Personal/System
- 1.8.1 Toll Restriction (TRS)

TRS—COS 2-5 Denied Code [302-305]



1.8.1 Toll Restriction (TRS)

TRS—Exception Code [306]

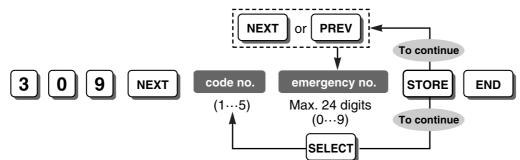


Feature & Programming References

1.8.1 Toll Restriction (TRS)

TRS-COS 2-5 Denied Code [302-305]

Emergency Number [309]

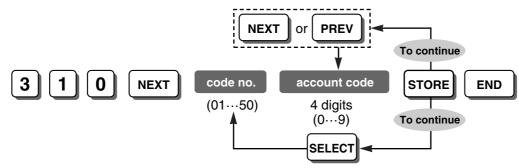


Feature & Programming References

1.5.2.2 Emergency Call

1.8.1 Toll Restriction (TRS)

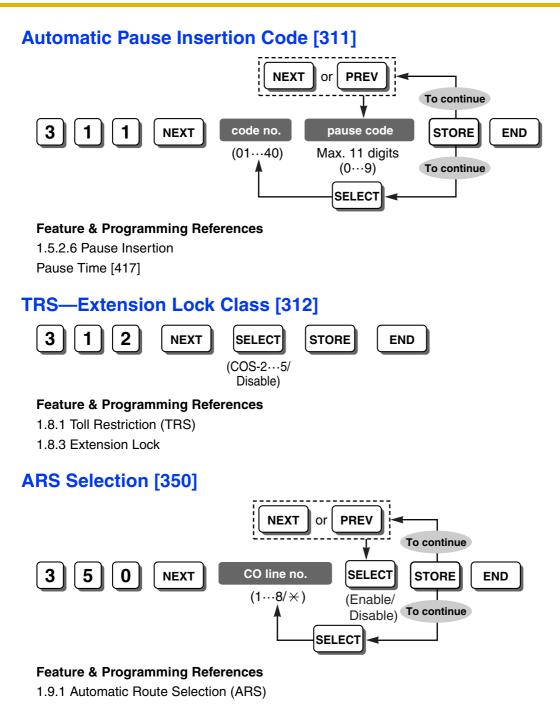
Account Code [310]



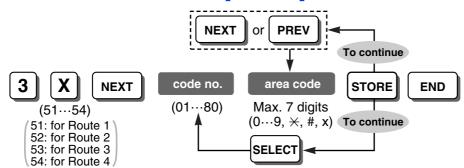
Feature & Programming References

- 1.5.2.3 Account Code Entry
- 1.8.2 Toll Restriction (TRS) Override by Account Code

Account Code Mode [605]

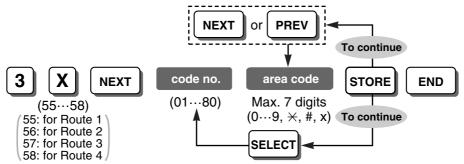


Route 1-4 Selection Code [351-354]



1.9.1 Automatic Route Selection (ARS)

Route 1-4 Exception Code [355-358]



Feature & Programming References

1.9.1 Automatic Route Selection (ARS)

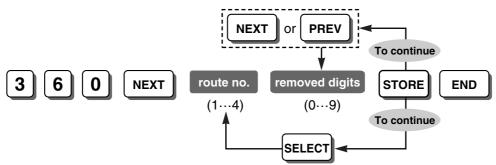
1st Carrier Selection Code [359]



Feature & Programming References

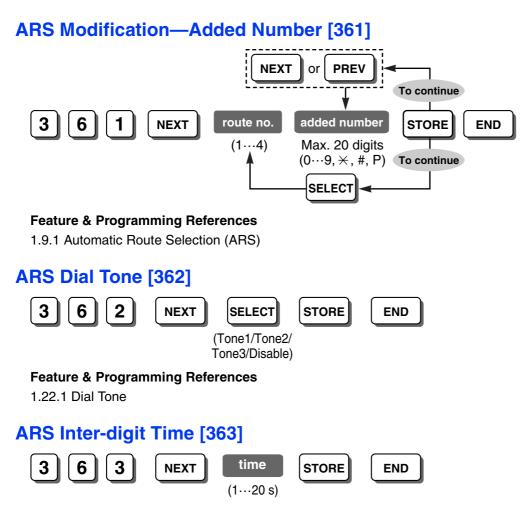
1.9.1 Automatic Route Selection (ARS)

ARS Modification—Removed Digits [360]



Feature & Programming References

1.9.1 Automatic Route Selection (ARS)

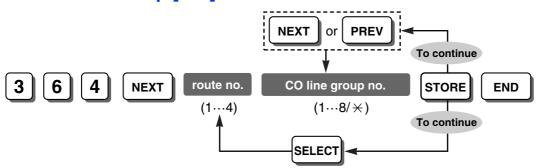


This assignment should be the same as the inter-digit timer assigned in Inter-digit Time [208].

Feature & Programming References

1.9.1 Automatic Route Selection (ARS)

ARS CO Line Group [364]

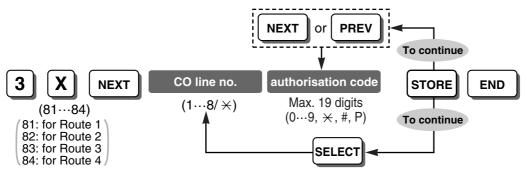


<u>Note</u>

The assignments in Route 1-4 Selection Code [351-354] are effective for this programme.

1.9.1 Automatic Route Selection (ARS)

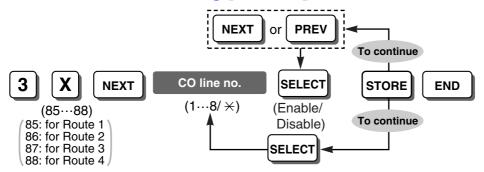
Route 1-4 Authorisation Code [381-384]



Feature & Programming References

1.9.1 Automatic Route Selection (ARS)

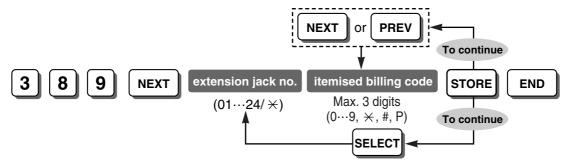
Route 1-4 Itemised Billing [385-388]



Feature & Programming References

1.9.1 Automatic Route Selection (ARS)

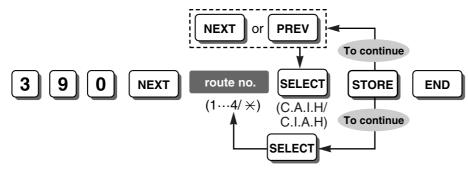
Itemised Billing Code [389]



Feature & Programming References

1.9.1 Automatic Route Selection (ARS)

Authorisation and Itemised Billing Code Order [390]



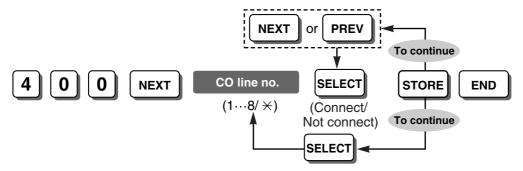
<u>Note</u>

C: Carrier Access Code; A: Authorisation Code; I: Itemised Billing Code; H: Telephone Number

Feature & Programming References

1.9.1 Automatic Route Selection (ARS)

CO Line Connection [400]

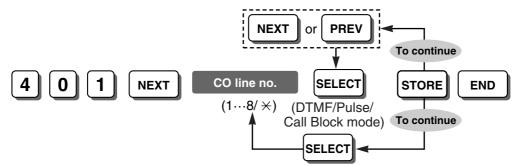


Feature & Programming References

1.5.3.2 Line Preference—Outgoing

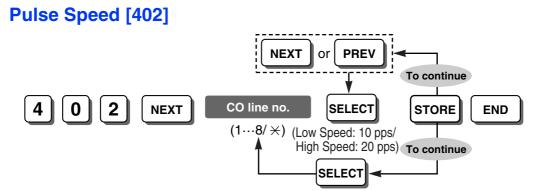
1.5.3.3 Outside (CO) Line Access

Dial Mode [401]



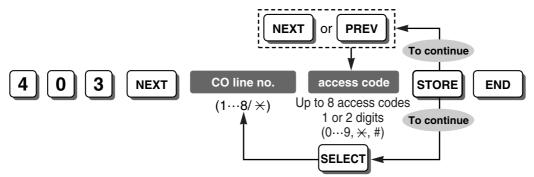
Feature & Programming References

1.5.2.4 Dial Type Selection



1.5.2.4 Dial Type Selection Dial Mode [401]

Host PBX Access Code [403]



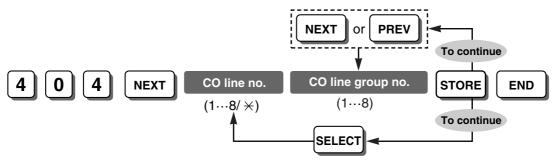
<u>Note</u>

Insert "," (CONF/MESSAGE button) between each access code using the comma button on the overlay. For example, to store access codes 81 and 82 on outside (CO) line 1, programme as follows: 403 NEXT 1 81,82 STORE END

Feature & Programming References

1.5.2.7 Host PBX Access Code (Access Code to the Telephone Company from a Host PBX) Pause Time [417]

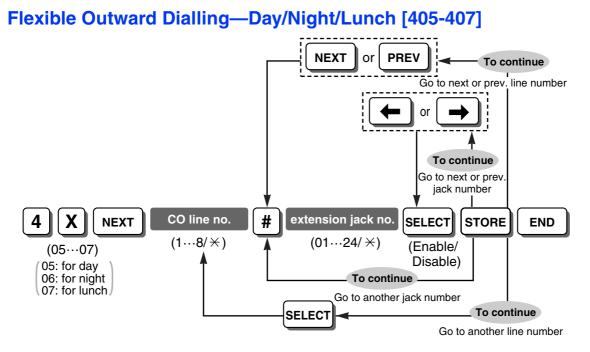
CO Line Group Number [404]



Feature & Programming References

1.5.3.3 Outside (CO) Line Access

2.2.2 Group



<u>Note</u>

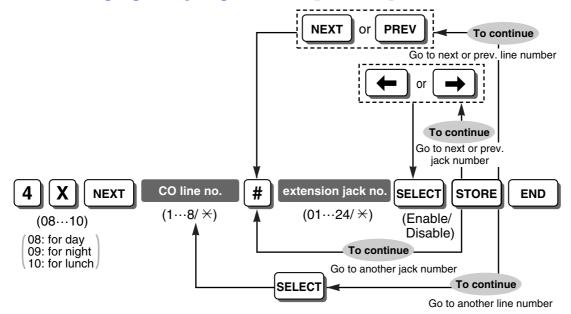
It is impossible to disable all extensions for all outside (CO) lines in each time service mode (day/night/ lunch). In each mode, at least one extension must be allowed to make an outside (CO) line call.

Feature & Programming References

1.5.3.2 Line Preference—Outgoing

1.5.3.3 Outside (CO) Line Access

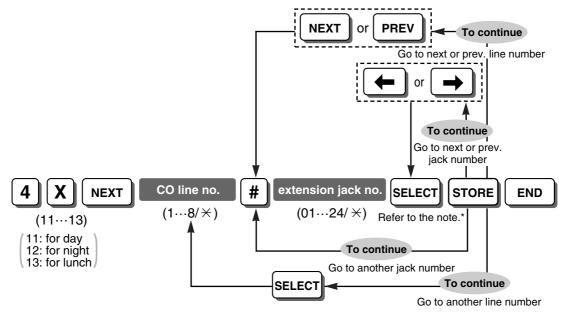
Flexible Ringing—Day/Night/Lunch [408-410]



1.1.3.2 Outside (CO) Line Ringing Selection

1.4.1.2 Line Preference—Incoming

Delayed Ringing—Day/Night/Lunch [411-413]



<u>Note</u>

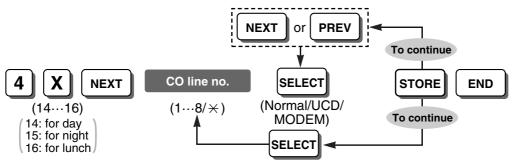
* The ringing start time that can be selected for extension(s) selected in Flexible Ringing—Day/Night/ Lunch [408-410] depends on your country/area as follows: For United Kingdom: Immediately, 10 s, 20 s, 30 s For Others: Immediately, 5 s, 10 s, 15 s

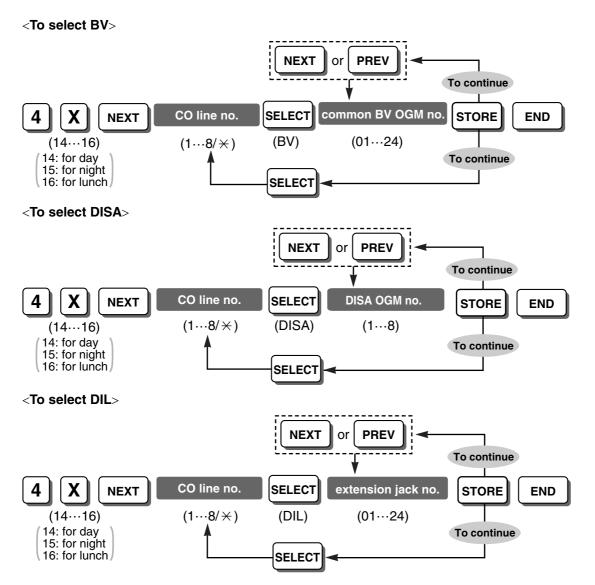
Feature & Programming References

- 1.2.3 Direct Inward System Access (DISA) Ring
- 1.4.1.2 Line Preference—Incoming

CO Line Mode—Day/Night/Lunch [414-416]

<To select Normal, UCD, and/or MODEM>





- When you select "UCD", it is necessary to assign an extension group as the UCD group in UCD Group [520].
- After you select "BV", do not change Operator Assignment [008].

Feature & Programming References

- 1.1.1.1 Direct In Line (DIL)
- 1.2.2 Uniform Call Distribution (UCD)
- 1.15.6 Direct Inward System Access (DISA)
- 1.15.7 Built-in Voice Message (BV)
- 2.3.1 PC Programming
- Flexible Ringing—Day/Night/Lunch [408-410]

Pause Time [417] NEXT or PREV To continue CO line no. SELECT 7 NEXT STORE END 4 1 $(1\cdots 8/\times)$ (1.5/2.5/ 3.5/4.5 s) To continue SELECT

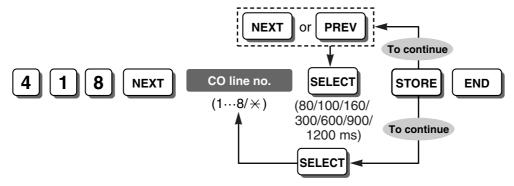
Feature & Programming References

1.5.2.6 Pause Insertion

1.5.2.7 Host PBX Access Code (Access Code to the Telephone Company from a Host PBX) Automatic Pause Insertion Code [311]

Host PBX Access Code [403]

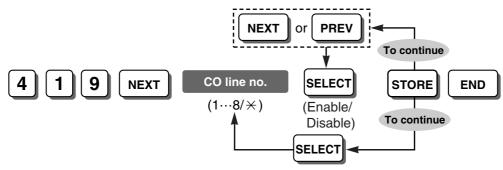
Flash/Recall Time [418]



Feature & Programming References

- 1.10.6 Flash/Recall
- 1.10.7 External Feature Access (EFA)

Automatic Designated Line Access [419]



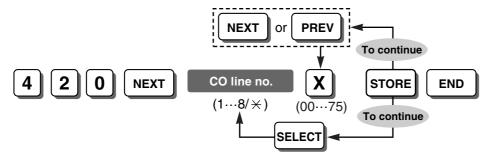
Feature & Programming References

1.5.3.2 Line Preference—Outgoing

1.5.3.3 Outside (CO) Line Access

Automatic Line Access [121]

CPC Signal Detection—Incoming [420]



<u>Note</u>

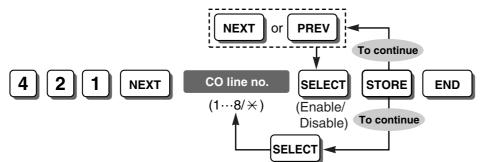
CPC signal detect time selection number:

00: Disable; 01-75: 22-614 ms (detect time: 8 ms increments)

Feature & Programming References

1.10.10 Calling Party Control (CPC) Signal Detection

CPC Signal Detection—Outgoing [421]



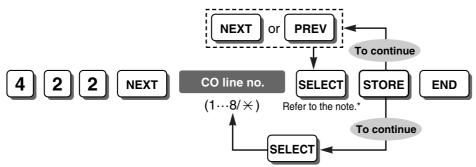
<u>Note</u>

When this programme is disabled, CPC Signal Detection is only activated during an incoming outside (CO) line call.

Feature & Programming References

1.10.10 Calling Party Control (CPC) Signal Detection

Disconnect Time [422]

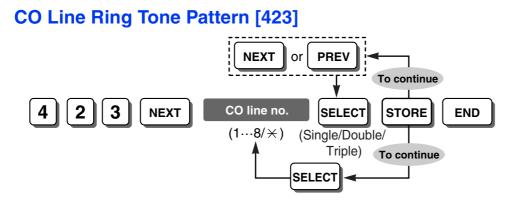


<u>Notes</u>

- * The disconnect signal lengths that can be selected depend on your country/area as follows: For United Kingdom: 0.5 s, 2.0 s, 4.0 s
 For South Africa: 0.8 s, 1.5 s, 4.0 s
 For Others: 0.5 s, 1.5 s, 4.0 s
- The time you select must be longer than the requirements of your telephone company or host PBX.

Feature & Programming References

1.10.6 Flash/Recall



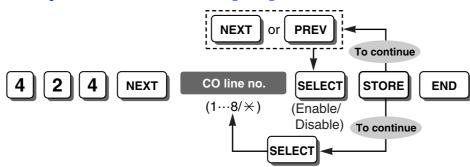
<u>Note</u>

It is recommended that you set a different ring tone pattern from the ring tone patterns specified in Extension Ring Tone Pattern [115] and Doorphone Ring Tone Pattern [706].

Feature & Programming References

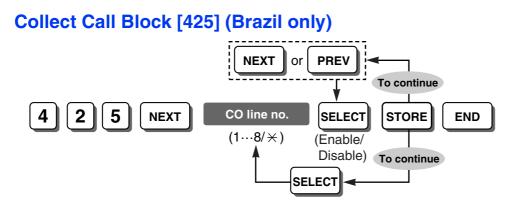
1.1.3.3 Ring Tone Pattern Selection

Polarity Reverse Detection [424]



Feature & Programming References

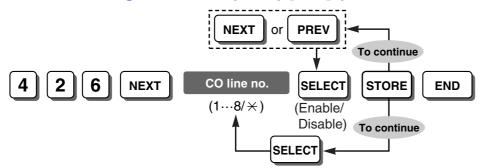
1.5.2.5 Reverse Circuit



<u>Note</u>

This programme enables the PBX to automatically reject collect calls from the telephone company.

Distinctive Ring Detection (DRD) [426] (New Zealand only)

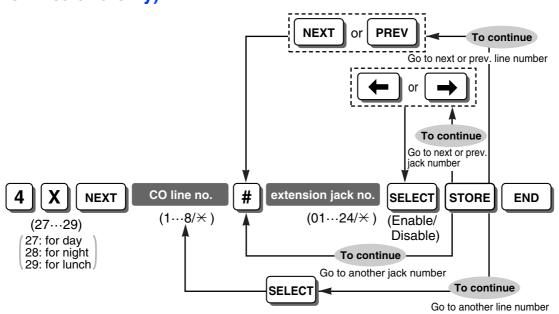


Feature & Programming References

1.1.3.4 Distinctive Ring Detection (DRD) for New Zealand

DRD Ring Pattern 2 Extension Assignment—Day/Night/Lunch [427-429] (New Zealand only)

DRD Ring Pattern 3 Extension Assignment—Day/Night/Lunch [430-432] (New Zealand only)



DRD Ring Pattern 2 Extension Assignment—Day/Night/Lunch [427-429] (New Zealand only)

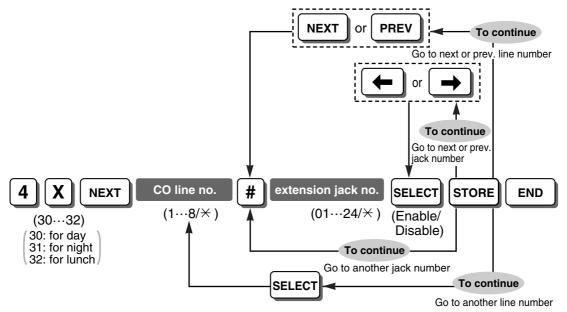
<u>Note</u>

This is effective only when the DRD feature is enabled in Distinctive Ring Detection (DRD) [426] (New Zealand only).

Feature & Programming References

1.1.3.4 Distinctive Ring Detection (DRD) for New Zealand

DRD Ring Pattern 3 Extension Assignment—Day/Night/Lunch [430-432] (New Zealand only)



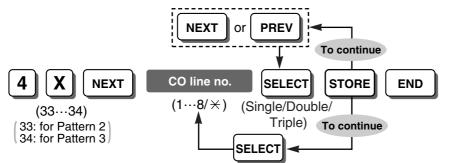
<u>Note</u>

This is effective only when the DRD feature is enabled in Distinctive Ring Detection (DRD) [426] (New Zealand only).

Feature & Programming References

1.1.3.4 Distinctive Ring Detection (DRD) for New Zealand

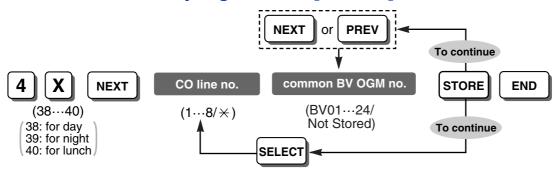
DRD Pattern 2 and 3 Ring Tone [433-434] (New Zealand only)



Feature & Programming References

1.1.3.4 Distinctive Ring Detection (DRD) for New Zealand

DISA IRNA to BV—Day/Night/Lunch [438-440]



Feature & Programming References

1.15.7 Built-in Voice Message (BV)

DISA Incoming Call Dial Mode [500]



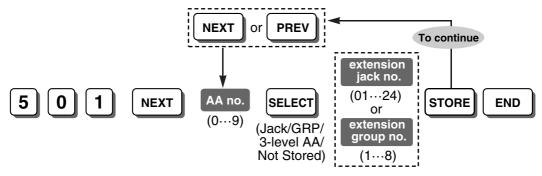
<u>Note</u>

Without AA: Available destinations are extension numbers assigned in Extension Number [009], Outside (CO) Line Access numbers (9/0 [for New Zealand: 1 or 9], 81 through 88), and the Operator Call number (0 or 9)

With AA: Available destinations are numbers available in "Without AA" mode and numbers (0 through 9) assigned in DISA Built-in AA [501]

1.15.6 Direct Inward System Access (DISA)

DISA Built-in AA [501]



<u>Note</u>

If you would like to use the Automatic Line Access number (9/0 [for New Zealand: 1 or 9]) and/or Operator Call number in AA mode, do not assign AA number(s) that correspond to Automatic Line Access or Operator Call numbers (9 and/or 0).

Feature & Programming References

1.15.6 Direct Inward System Access (DISA)

FAX Connection [503]



<u>Notes</u>

- To delete (disable) an extension jack number, press CLEAR in the extension jack number step.
- The assigned extension will automatically have the Data Line Security feature set.

Feature & Programming References

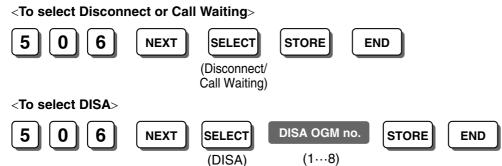
1.15.6 Direct Inward System Access (DISA)

DISA Delayed Answer Time [504] 5 0 4 NEXT SELECT STORE END (0/3/6/12 s) Feature & Programming References 1.15.6 Direct Inward System Access (DISA) DISA Wait Time after OGM [505]



1.15.6 Direct Inward System Access (DISA)

DISA Busy Mode [506]



Feature & Programming References

1.15.5 Outgoing Message (OGM) for DISA/UCD

1.15.6 Direct Inward System Access (DISA)

DISA Intercept Mode [507]



Feature & Programming References

- 1.1.1.2 Intercept Routing
- 1.15.6 Direct Inward System Access (DISA)
- 1.19 Voice Mail Features

DISA Ring Time before Intercept [508]



Feature & Programming References

- 1.1.1.2 Intercept Routing
- 1.15.6 Direct Inward System Access (DISA)

DISA Intercept Mode [507]

DISA Ring Time after Intercept [509]



Feature & Programming References

1.1.1.2 Intercept Routing

1.15.6 Direct Inward System Access (DISA)

DISA Intercept Mode [507] DISA Ring Time before Intercept [508]

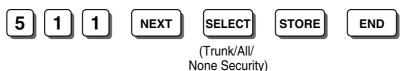
DISA No Dial Mode [510]



Feature & Programming References

1.15.6 Direct Inward System Access (DISA)

DISA Security Mode [511]



Note

Trunk Security: Requires the caller to enter a DISA security code assigned in DISA Security Code [512] before making an outside (CO) line call.

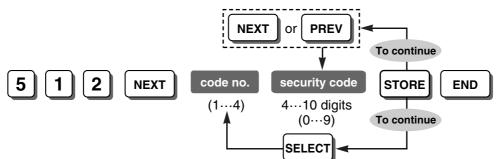
All Security: Requires the caller to enter a DISA security code before making either an outside (CO) line or intercom call.

No Security: Allows the caller to make either an outside (CO) line or intercom call without entering a DISA security code.

Feature & Programming References

1.15.6 Direct Inward System Access (DISA)

DISA Security Code [512]



WARNING

There is a risk that fraudulent telephone calls will be made using the Outside-to-Outside (CO-to-CO) Line Call feature of DISA.

The cost of such calls will be billed to the owner/renter of the PBX.

To protect the PBX from this kind of fraudulent use, we strongly recommend:

- a) Enabling DISA security (Trunk Security or All Security).
- b) Maintaining the secrecy of passwords.
- c) Selecting passwords that are complex and random, so that they cannot be easily guessed.

d) Changing passwords regularly.

Note

The number of digits for DISA security codes is selected in DISA Security Code Digits [530].

Feature & Programming References

1.15.6 Direct Inward System Access (DISA) DISA Security Mode [511]

Cyclic Tone Detection [513]



Feature & Programming References

1.2.2 Uniform Call Distribution (UCD)

1.15.6 Direct Inward System Access (DISA)

FAX Tone Detection [514]



Feature & Programming References

1.15.6 Direct Inward System Access (DISA) FAX Connection [503]

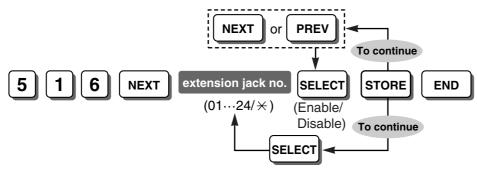
Intercept Time for Internal DISA [515]



Feature & Programming References

1.15.6 Direct Inward System Access (DISA) DISA No Dial Mode [510]

DISA Incoming Assignment [516]



1.15.6 Direct Inward System Access (DISA)

DISA AA Wait Time [517] 5 1 7 NEXT SELECT STORE

Feature & Programming References

1.15.6 Direct Inward System Access (DISA) DISA Built-in AA [501]

DISA Tone after Security Code [518]



(1...5 s)

END

Feature & Programming References

1.15.6 Direct Inward System Access (DISA) DISA Security Code [512]

OGM Mute Time [519]



Feature & Programming References

1.15.6 Direct Inward System Access (DISA)

UCD Group [520]



Feature & Programming References

1.2.2 Uniform Call Distribution (UCD) 2.2.2 Group

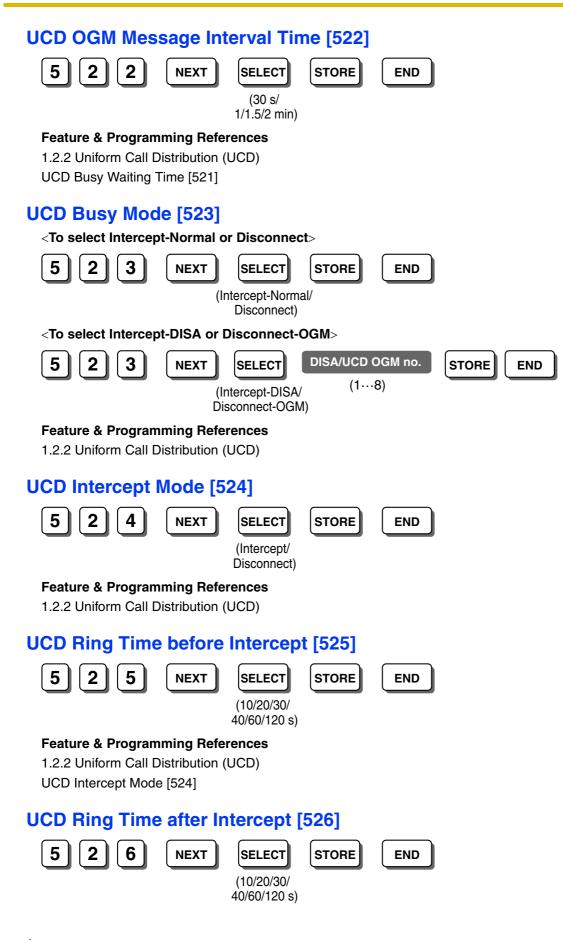
UCD Busy Waiting Time [521]



Feature & Programming References

1.2.2 Uniform Call Distribution (UCD)

UCD Busy Mode [523]



1.2.2 Uniform Call Distribution (UCD) UCD Intercept Mode [524]



Feature & Programming References

1.2.2 Uniform Call Distribution (UCD)

1.15.5 Outgoing Message (OGM) for DISA/UCD

DISA Security Code Digits [530]



<u>Note</u>

When this setting is changed, DISA security codes that have already been assigned in DISA Security Code [512] will be cleared.

Feature & Programming References

1.15.6 Direct Inward System Access (DISA)

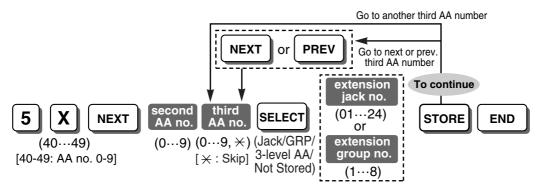
DISA Ringback Tone [531]



Feature & Programming References

1.15.6 Direct Inward System Access (DISA)

3-level AA Assignment [540-549]



<u>Notes</u>

- This programme is available only when "3-level AA" is selected for each AA number in DISA Builtin AA [501].
- Only when you select "*" as the third AA number, you can select "3-level AA" in the next step.

Feature & Programming References

1.15.6 Direct Inward System Access (DISA)

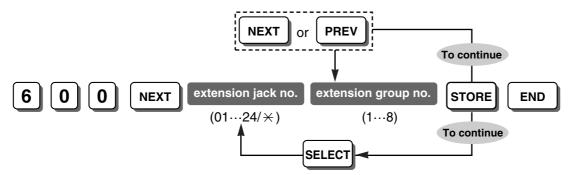
Clear All OGMs of DISA/UCD [599]



Feature & Programming References

1.15.5 Outgoing Message (OGM) for DISA/UCD

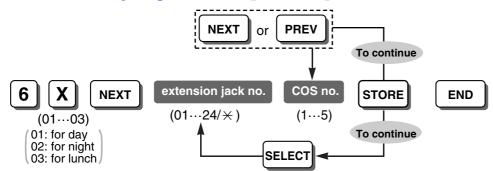
Extension Group [600]



Feature & Programming References

- 1.2.1 Idle Extension Hunting
- 2.2.2 Group

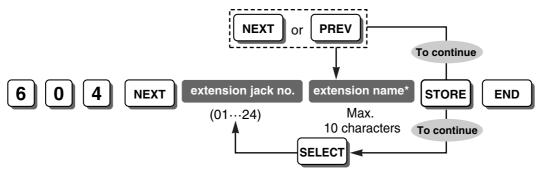
TRS-COS—Day/Night/Lunch [601-603]



Feature & Programming References

- 1.8.1 Toll Restriction (TRS)
- 2.2.1 Class of Service (COS)

Extension Name [604]



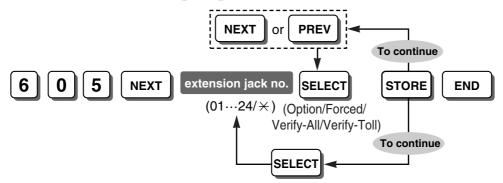
<u>Note</u>

* An extension name can be stored using a PT's dialling buttons. The displayed character varies depending on the number of times that the dialling button is pressed. It is possible to toggle between "Alphabet mode" and "Numeral mode" by pressing SELECT.

Feature & Programming References

- 1.5.1.1 Intercom Call
- 3.3.1 Programming Instructions—Entering Characters

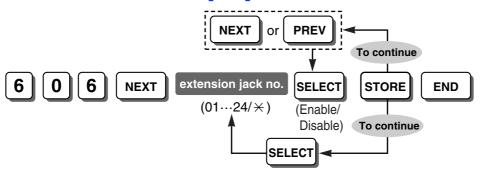
Account Code Mode [605]



Feature & Programming References

- 1.5.2.3 Account Code Entry
- 1.8.2 Toll Restriction (TRS) Override by Account Code Account Code [310]

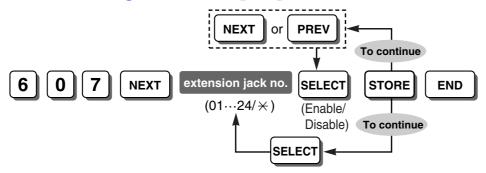
Call Transfer to CO Line [606]



1.11.1 Call Transfer

1.13.1.2 Conference

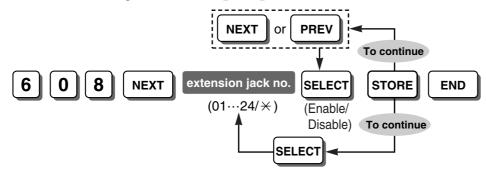
Call Forwarding to CO Line [607]



Feature & Programming References

1.3.1.2 Call Forwarding (FWD)

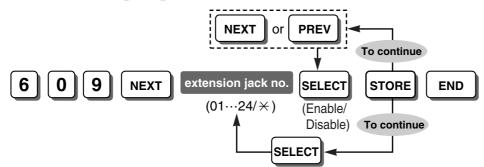
Executive Busy Override [608]



Feature & Programming References

1.7.2 Executive Busy Override

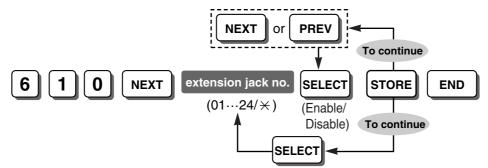
DND Override [609]



Feature & Programming References

1.3.1.3 Do Not Disturb (DND)

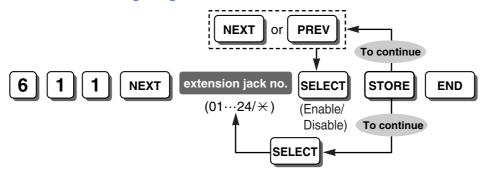
Parallelled Telephone [610]



Feature & Programming References

1.10.9 Parallelled Telephone

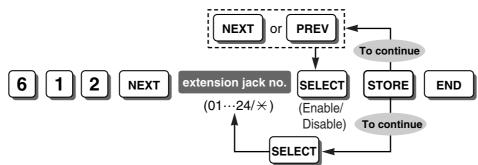
TAM Extension [611]



Feature & Programming References

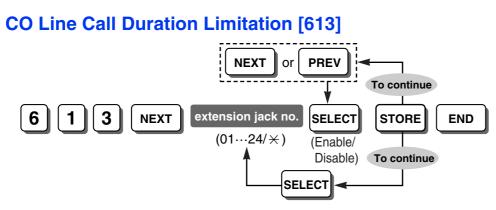
1.4.1.3 Call Pickup

Room Monitor [612]



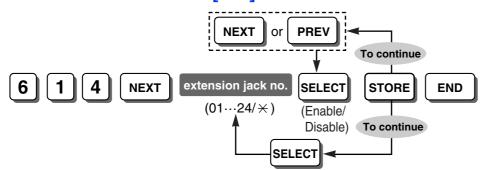
Feature & Programming References

1.10.2 Room Monitor



1.10.8 Outside (CO) Line Call Limitation Extension-to-CO Line Call Duration [212]

Internal Pulse Detection [614]

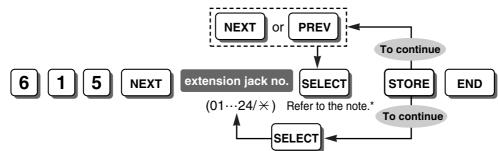


Feature & Programming References

1.12.1 Call Hold

Hookswitch Flash Timing Range [207]

LCD Language [615]



<u>Notes</u>

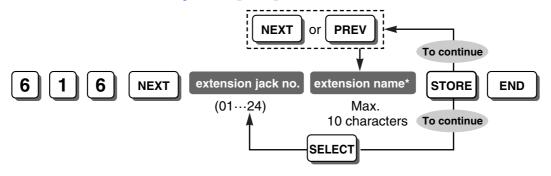
 * The following languages are available for the LCD: English; Spanish; Portuguese; Russian; Greek; Czech; Hungarian; Slovak; Polish; Italian; Ukrainian

Selections vary depending on your country/area.

- Russian display is only available for the KX-T7730/KX-T7735RU.
- When "Russian" or "Ukrainian" is selected in this programme, during intercom calls, the calling extension's name assigned in Extension Name in Cyrillic [616] is displayed at the called extension.

When another language is selected, the calling extension's name assigned in Extension Name [604] is displayed.

Extension Name in Cyrillic [616]



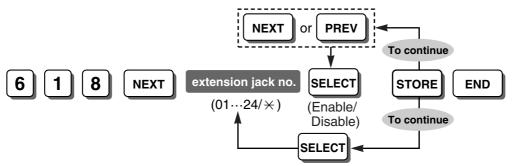
<u>Notes</u>

- * An extension name can be stored using a PT's dialling buttons. The displayed character varies depending on the number of times that the dialling button is pressed. It is possible to toggle between "Alphabet mode", "Cyrillic alphabet mode", and "Numeral mode" by pressing SELECT.
- Russian display is only available for the KX-T7730/KX-T7735RU.

Feature & Programming References

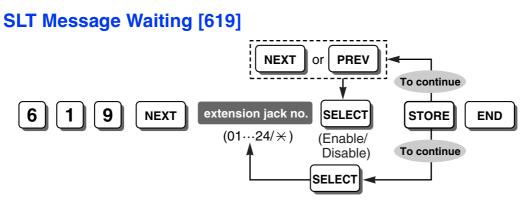
- 1.5.1.1 Intercom Call
- 3.3.1 Programming Instructions—Entering Characters
- LCD Language [615]

Message Waiting for Another Extension [618]



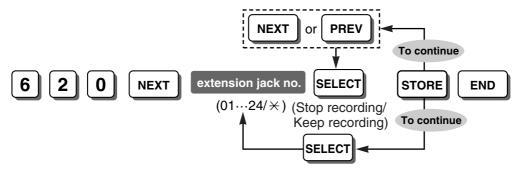
Feature & Programming References

1.17.1 Message Waiting



1.17.1 Message Waiting

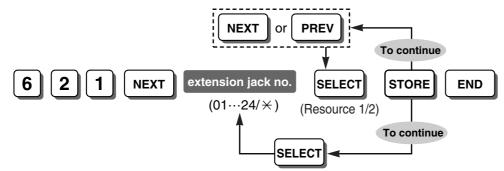
LCS Recording Mode Set [620]



Feature & Programming References

1.19.1 Voice Mail APT Integration

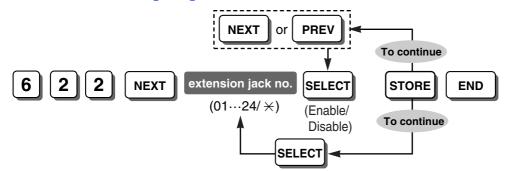
BV Resource [621]



Feature & Programming References

1.15.7 Built-in Voice Message (BV)

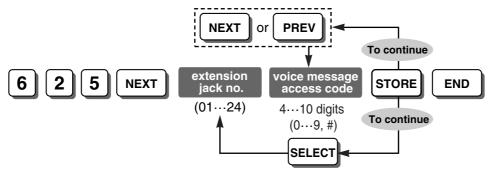
BV for Extension [622]



Feature & Programming References

1.15.7 Built-in Voice Message (BV)

BV Access Code through CO Line [625]



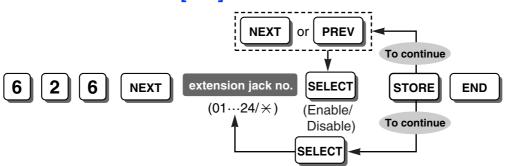
Notes

- A voice message access code should be different from the corresponding extension number. If the voice message access code is the same as an extension number, dialling that number will access the extension, not the voice message area.
- A code that starts with a number already assigned as another code cannot be used. For example, if you assign the codes "1234" and "12345", "12345" cannot be selected since "1234" will be recognised first.

Feature & Programming References

1.15.7 Built-in Voice Message (BV)

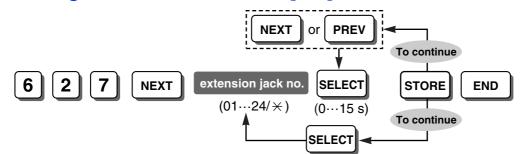
BGM Control for APT [626]



Feature & Programming References

1.15.4 Background Music (BGM)

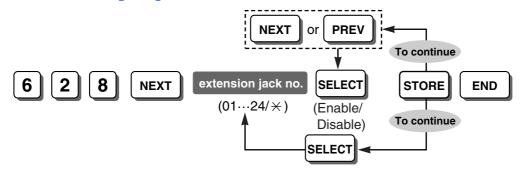
SLT Ring Wait Time for New Call [627]



Feature & Programming References

1.16.1 Caller ID

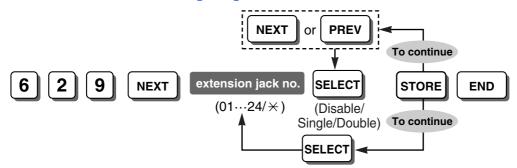
SLT Caller ID [628]



Feature & Programming References

1.16.1 Caller ID

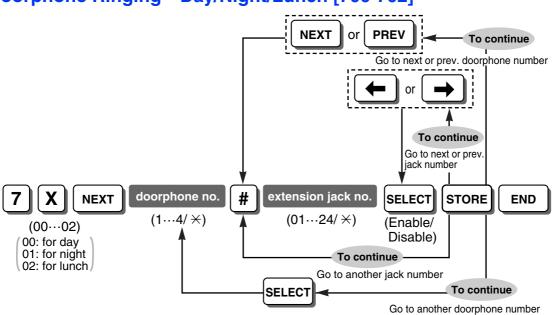
SLT Fixed Bell Pattern [629]



Feature & Programming References

1.1.3.3 Ring Tone Pattern Selection

1.16.1 Caller ID

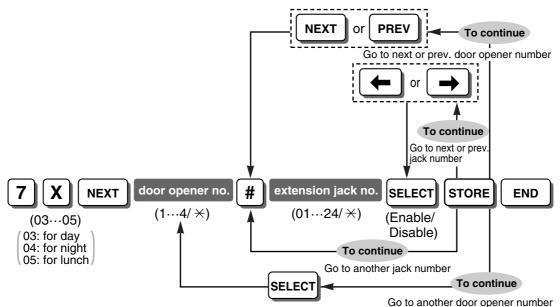


Doorphone Ringing—Day/Night/Lunch [700-702]

Feature & Programming References

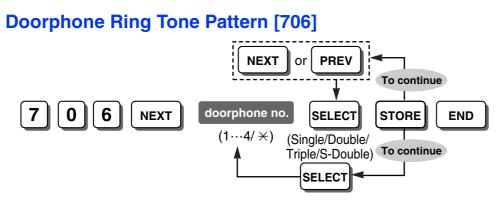
1.15.1 Doorphone Call

Door Opener—Day/Night/Lunch [703-705]



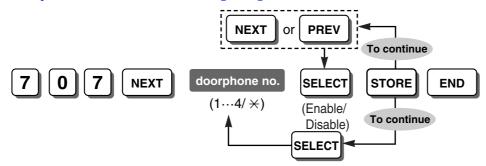
Feature & Programming References

1.15.2 Door Open



- 1.1.3.3 Ring Tone Pattern Selection
- 1.15.1 Doorphone Call

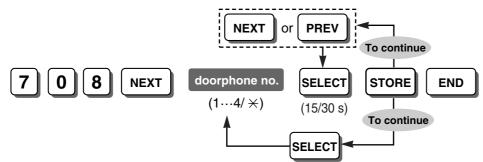
Doorphone Access Tone [707]



Feature & Programming References

- 1.10.2 Room Monitor
- 1.15.1 Doorphone Call

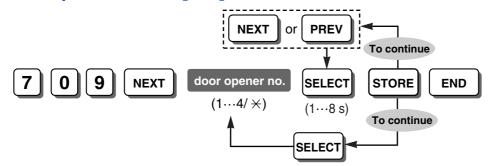
Doorphone Ring Time [708]



Feature & Programming References

1.15.1 Doorphone Call

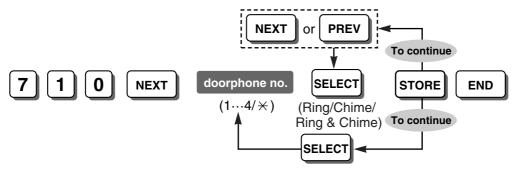
Door Open Duration [709]



Feature & Programming References

1.15.2 Door Open

Doorphone Ring/Chime [710]

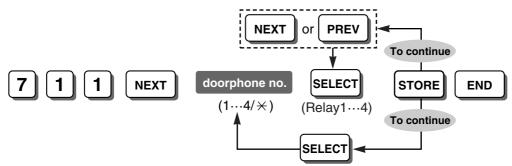


Feature & Programming References

1.15.3 Doorbell/Door Chime

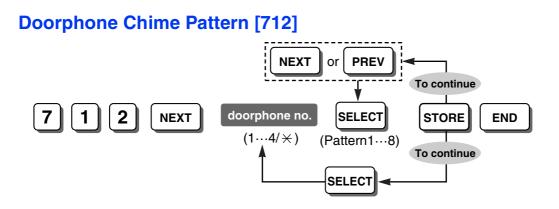
Doorphone Ringing—Day/Night/Lunch [700-702]

Doorphone Chime Assignment [711]



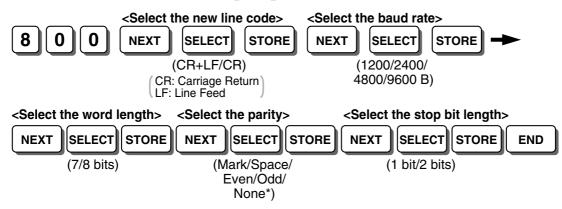
Feature & Programming References

1.15.3 Doorbell/Door Chime Doorphone Ring/Chime [710]



- 1.15.3 Doorbell/Door Chime
- 4.2.1 Tones/Ring Tones

SMDR RS-232C Parameter [800]



Notes

- * Select "None" when the printer does not require error checking.
- The following combinations are invalid.

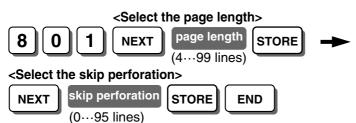
Parity	Word length	Stop bit length
Mark	8	2
Space	8	1
Space	8	2

If any of the above invalid combinations are selected, an alarm tone will be heard.

Feature & Programming References

1.20.1 Station Message Detail Recording (SMDR)

SMDR Parameter [801]



Feature & Programming References

1.20.1 Station Message Detail Recording (SMDR)

Incoming/Outgoing Call Selection for Printing [802]



<u>Note</u>

Outgoing Call: On (Print all calls)/Off (No printing)/Toll (Print toll calls only) Incoming Call: On (Print all calls)/Off (No printing)

Feature & Programming References

1.20.1 Station Message Detail Recording (SMDR) TRS—COS 2-5 Denied Code [302-305]

Secret Number SMDR Print Suppression [803]

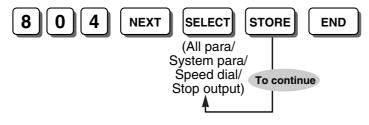


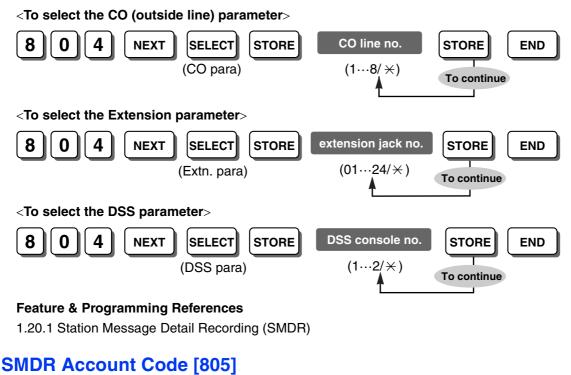
Feature & Programming References

1.20.1 Station Message Detail Recording (SMDR) System Speed Dialling Number [001]

System Data Dump [804]

<To select All parameters, System parameter, Speed dial, and/or Stop output>







1.8.2 Toll Restriction (TRS) Override by Account Code1.20.1 Station Message Detail Recording (SMDR)Account Code [310]Account Code Mode [605]

SMDR Language [806]



<u>Note</u>

* The following languages are available for SMDR: English; Spanish; Portuguese; Greek; Czech; Hungarian; Slovak; Polish; Italian Selections vary depending on your country/area.

Feature & Programming References

1.20.1 Station Message Detail Recording (SMDR)

BV Total Recording Time [807]



<u>Note</u>

The recording quality depends on the setting time. 20 (min): High; 30: Normal; 60: Low

Feature & Programming References

1.15.7 Built-in Voice Message (BV)

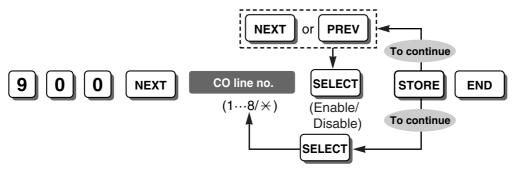
BV Card Initialisation [808]



Feature & Programming References

1.15.7 Built-in Voice Message (BV)

Caller ID [900]



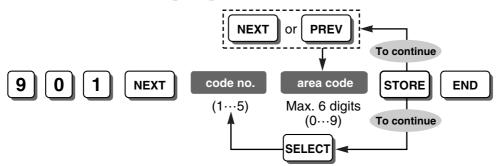
<u>Note</u>

The DISA Delayed Answer Time for the outside (CO) lines enabled here will always be 6 seconds even if "0 s" or "3 s" is selected in DISA Delayed Answer Time [504].

Feature & Programming References

1.16.1 Caller ID

Caller ID Area Code [901]

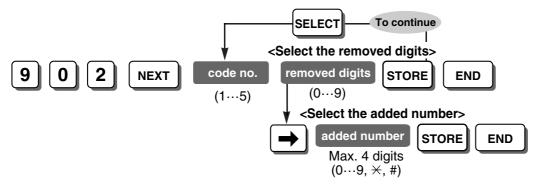


Feature & Programming References

- 1.16.1 Caller ID
- 1.16.2 Incoming Call Log

Caller ID Modification for Local Calls [902]

Caller ID Modification for Local Calls [902]



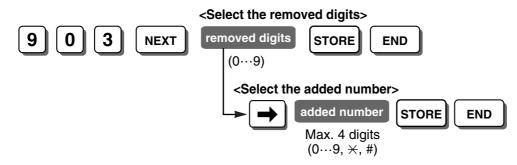
Feature & Programming References

1.16.1 Caller ID

1.16.2 Incoming Call Log

Caller ID Area Code [901]

Caller ID Modification for Long-distance Calls [903]

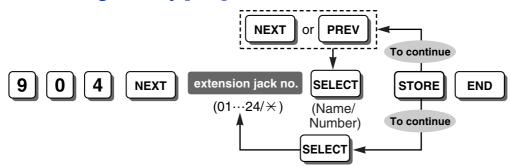


Feature & Programming References

1.16.1 Caller ID

1.16.2 Incoming Call Log

Caller ID Log Priority [904]



<u>Note</u>

This programme is available when the Caller ID service provides both a name and a number. If only the number is provided, this programme is not necessary.

Feature & Programming References

1.16.2 Incoming Call Log

1.18.4 Display Information

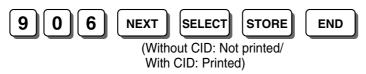
Caller ID Automatic 0 Addition [905]



Feature & Programming References

1.16.1 Caller ID

Caller ID SMDR Format [906]



<u>Note</u>

Even if a name is also sent by the Caller ID service, only the number is printed.

Feature & Programming References

1.20.1 Station Message Detail Recording (SMDR)

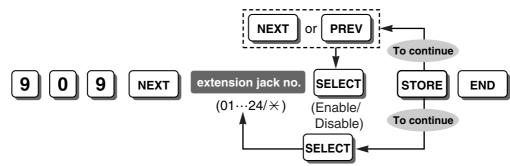
Caller ID SMDR Printout [907]



Feature & Programming References

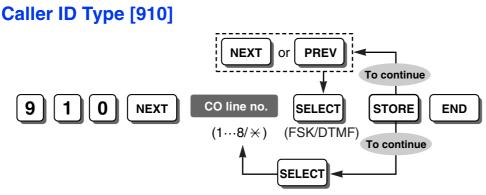
1.20.1 Station Message Detail Recording (SMDR)

Common Area Call Log Check [909]



Feature & Programming References

1.16.2 Incoming Call Log



1.16.1 Caller ID

Call Log Next Page [927]



<u>Note</u>

This programme enables the PBX to include page breaks when printing out call logs for each extension.

SMDR Mode for Printing [929]



<u>Note</u>

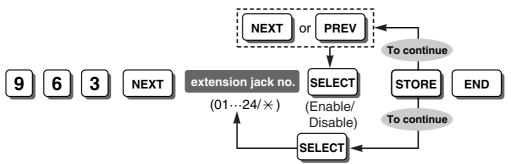
Even if "On" (outgoing/incoming call) or "Toll" (outgoing call) is selected in Incoming/Outgoing Call Selection for Printing [802], when "MODE 2" is selected in this programme, the call log information is not displayed by SMDR, but the information for each extension is displayed by Call Log Printout.

Feature & Programming References

1.20.1 Station Message Detail Recording (SMDR)

1.20.2 Call Log Printout for Each Extension

Call Forwarding Selection [963]



1.3.1.2 Call Forwarding (FWD)

CO Line Mode—Day/Night/Lunch [414-416]

TRS Check after Answering [966]



<u>Note</u>

This programme specifies whether the PBX checks DTMF signals when answering calls or not.

TRS Check Time after Answering [967]



<u>Note</u>

This programme specifies the length of time that the DTMF signal is checked when "Enable" is selected in TRS Check after Answering [966].

KX-T7700 Series Incoming Lamp Control [968]



Feature & Programming References

1.17.1 Message Waiting

Country [995]



Notes

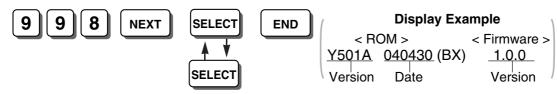
- This programme specifies your country/area when the suffix of the PBX is "NE" or "CE". For more information, please consult your dealer.
- When the country code is changed, all system data is initialised.

Feature & Programming References

2.3.6 Country Setting

3.3 PT Programming

Firmware Version [998]



<u>Note</u>

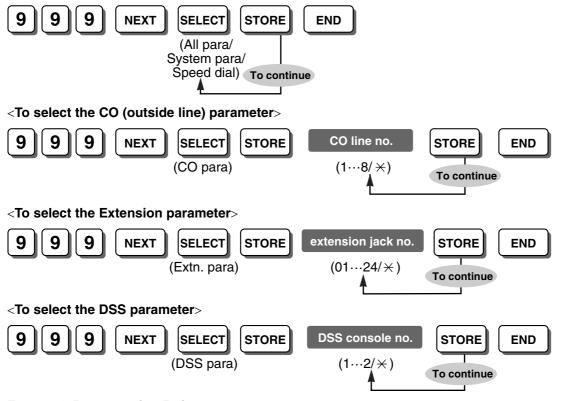
You can confirm the ROM and the firmware version of the PBX alternately by pressing SELECT.

Feature & Programming References

2.3.7 Firmware Upgrade

System Data Clear [999]





Feature & Programming References

2.3.2 PT Programming