Return to Menu

Modular ICS 6.1 System Coordinator Guide

Norstar, Meridian and Companion are trademarks of Nortel Networks
© Nortel Networks 2003

1-800-4 NORTEL
www.nortel.com/norstar
P0603535 02
Printed in Canada

Table of Contents

Getting started with Norstar 13

Using this guide 13
Emergency 911 Dialing 13
Understanding programming 14
Before you start 15
What you need to do programming 15
Using Buttons 16
Using the buttons under the display 19
The programming overlay 19
A map for using programming 23
Starting and ending a session 27
Ending a session 27

Frequently used programming operations 29

Changing the display time & date 29
Adding or changing a system speed dial 31
Program a name for a speed dial 33
Changing the name of a telephone 34
Changing the name of a line 35
Making changes to Call Forward No Answer 37
Making changes to Call Forward on Busy 39
Making Changes to Do Not Disturb on Busy 40
What would you like to do next? 41

Answering calls 43

Answering calls in Hunt Groups 43
Answering an incoming call 43
Line buttons 44
Rings you may hear 45
Sorting calls by distinctive ring patterns 46
Answering calls at a prime telephone 47
Expanding telephone capacity 48
Using a CAP module 48
Using a KIM in a central answering position 50

Release button 55
Hearing aid compatibility 55
Viewing information about a call on the display 55
Using Call Information for a particular call 56
Displaying Call Information before or after answering 57
Displaying Call Information for a call on hold 57
Making Call Display information appear automatically 58
Changing which information is shown first about a call 58
Picking up a call ringing at another telephone 59
Answering ringing telephones using Directed Pickup 59
Answering any ringing telephone using Group Pickup 60
Changing a telephone pickup group 61
Trunk Answer 62
Answering a call using Trunk Answer 62
Answer DNs and Answer keys 63
Creating a Conference Call 64
Disconnecting one party 65
Independently holding two calls 65
Putting a conference on hold 66
Splitting a conference 66
Removing yourself from a conference 66
Listening to a call as a group 68
Canceling Group Listening 68
Using handsfree/mute 68
Answering calls without lifting the receiver 69
Making calls without lifting the receiver 70
Muting the set 70
Changing a regular call to handsfree 70
Changing a handsfree to a regular call 71
Using handsfree 71
Changing handsfree for a telephone 72
Handsfree Answerback 73
Turning Privacy on or off for a call 74
Creating a conference by releasing privacy 75
Making a call private 75
Checking call length using Call Duration Timer 75
Disconnecting by accident 76
Time 76

Making calls 77

Choosing a line using a line button 79
Line pools 80
Using a line pool to make a call 81
Programming a memory button with a line pool 81
Making calls from an ISDN terminal 82
Changing how you dial your calls 82
Using Standard dial 82
Using Automatic dial 82
Using Pre-dial 83
When the internal number you called is busy 83
Priority Call 83
Making a priority call 84
Giving a telephone the ability to make priority calls 84
Using Ring Again 85

Time savers for making calls 87

Storing a number on a memory button for Autodial 87
Adding an autodial button 87
Choosing a line for Autodial 88
Using intercom as the line for Autodial 88
Using Last Number Redial 90
Preventing a telephone from using Last Number Redial 90
Using Speed Dial 91
Making a speed dial call 92
Changing and adding System Speed Dials 92
Adding or changing User Speed Dial 92
Using Saved Number Redial 94
Dialing a saved number 94
Blocking Saved Number Redial 95

Handling many calls at once 97

Using Hold 97
Retrieving a held call 97
Holding automatically 97
Listening on hold 98
Holding a call exclusively 98
Using Call Queuing 99

Transferring calls 101

Using the transfer feature 101

Transferring a call 101
Transferring external calls 102
Canceling a transfer 103
Using Camp-on 104
Parking a call 106
Retrieving a parked call 106
Using Call Park 106
Using system-wide call appearance (SWCA) 108
Incoming calls 109
Outgoing calls 111
No free call keys 111
Using Callback 112

Forwarding your calls 113

Forwarding your calls to another Norstar telephone 113
Canceling Call Forward 113
Using Call Forward at your telephone 114
Overriding Call Forward 114
Changing the automatic Call Forward settings for a telephone 115
Changing Forward no answer 115
Changing the delay before a call is forwarded 115
Forward on busy 116
DND on Busy 116
Call Forward and Voice Mail 117
Line Redirection 118
Turning on Line Redirection 118
Canceling Line Redirection 119
Allowing a telephone to redirect calls 120
Turning the redirect ring for a telephone on or off 120
How Line Redirection is different from Call Forward 122
Using Line Redirection 123
Centralized voice mail and auto attendant 124
Using a centralized voice mail system 124

Communicating in the office 125

Paging 125
Making a page announcement 125
Activating and deactivating the ability to page 126
Creating page zones 126

Using Page with external paging equipment 128
Sending messages 128
Sending a message 128
Canceling a message you have sent 130
Viewing your messages 130
Replying to a message 130
Replying to a message using an analog telephone connected to an ASM 131
Removing items from your message list 132
Removing items from your message list using an analog telephone connected to an ASM 132
Viewing messages you have sent 133
Using Voice Call 134
Muting Voice Call tones 134
Answering a Voice Call with handsfree 135
Blocking Voice Calls using Voice Call Deny 135

Tracking your incoming calls 137

Using Call Log 137
Call Log options 138
Logging a call manually 138
Enabling and disabling autobumping 139
Viewing your Call Log 139
Viewing a Call Log item 139
Erasing log items 140
Making a call using Call Log 140
Creating a password to your Call Log 141
Changing your Call Log password 141
Deleting an assigned password 142
Programming a telephone to log calls automatically 142
Using external Voice mail 144

Customizing your telephone 145

Finding out what a button does using Button Inquiry 145
Changing the set display contrast 146
Changing the language on the display 146
Programming a feature code onto a memory button 147
Programming feature buttons 147
Erasing a feature button 147
Labeling your set 149

Applying button labelling 149
Business Series Terminals 149
Norstar button caps 150
Default button assignments 150
T7316E Business Series Terminal button defaults 151
T7316 Business Series Terminal button defaults 153
M7310 telephone button defaults 155
M7324 telephone button defaults 157
M7208 and T7208 button defaults 158
M7100 and T7100 button defaults 159
Rules of default button assignment 159
Moving line buttons 161
Changing the type of ring 162
Adjusting the Ring volume 162
Hiding the message or calls indication 162

User Preferences 163

Using User Preferences 163
Changing button programming 164
Changing User Speed Dial 165
Changing Call Log options 166
Changing how calls are dialed 166
Changing the language used on the display 167
Making the display lighter or darker 167
Changing the ring type 167

Programming Hunt Groups 169

Adding or removing members from a group 171
Moving members of a group 172
Assigning or unassigning lines to a group 173
Setting the distribution mode 174
Setting the hunt delay 175
Programming busy line setting 176
Programming the queue time-out 177
Programming the overflow set 177
Setting the name 178
Allowing/disallowing an auxiliary ringer 179
Assigning a distinctive ring pattern to a Hunt Group 179
Using Silent Monitor 180

Feature notes 183

Using the Hospitality features 185

Hospitality passwords 185
Room/desk information 187
Programming room information 187
Using the room/set programming 189
Programming the alarm feature 191
Using the Administration set to control alarms 192
Using the alarm 193
Canceling an alarm 194
Turning off an alarm 194

Telephone features 195

Installing Business Series Terminals 195
Installing Norstar telephones 197
Naming a telephone or a line 199
Moving telephones 199
Stopping calls from ringing at your telephone: Do Not Disturb (DND) 200
Stopping calls 200
Refusing to answer a call 200
Canceling Do Not Disturb 200
Using Do Not Disturb 200
Using Background Music 201
Turning Background Music off 201

ISDN PRI and BRI 203

ISDN PRI 203
ISDN PRI features 204
Network Name Display for PRI 204
Name and number blocking for PRI 205
Emergency 911 Dialing 205
Two-way DID 205
Call by Call service selection for PRI 206
Dialing Plan and PRI 207
ISDN BRI 208
Line access from an ISDN terminal 209
ISDN BRI features 209
Network Name Display for BRI 209

Name and number blocking for BRI 210
Service provider features 210
Call Forward 210
Canceling Call Forward 211
Calling the number your calls are forwarded to 211
Automatic Call Back 211
Automatic Recall 211
MCID (profile 2) 212
Network Call Diversion (profile 2) 213
Overlap dialing (profile 2) 213
ISDN BRI terminals 213
ISDN applications for BRI and PRI 213
Videoconferencing and video telephony 213
Desktop conferencing 214
File transfer 214
Telecommuting 214
Group 4 fax 214
Remote LAN access 214
Leased line backup 214
LAN to LAN bridging 215
Internet and database access 215

Using System features 217

Using alternate or scheduled services 217
Preventing certain calls from being made 217
Making additional telephones ring 217
Changing the lines used by outgoing calls 218
Turning Services on and off 218
An example of how to turn on a Service manually 219
Turning Services on and off 220
Viewing the active Services on a two-line display 221
Viewing the active Services on a one-line display 222
Using passwords 224
Using a Basic password 224
Registration password 225
Changing passwords 225
Clearing a Call Log password 226
Hospitality passwords 227
Silent Monitor password 228
Using special telephones 228

Direct-dial 228
Changing the direct-dial telephone assignments 229
Hotline 230
Bypassing a Hotline 230
Making a telephone a hotline telephone 230
Control telephone 231
SM Supervisor 232
Using Set lock 232
Changing Set Lock programming for a telephone 233
Using an auxiliary ringer 233
Turning the auxiliary ringer for a telephone on or off 233
Using Host System dialing signals 234
Link 234
Preventing a telephone from using Link 235
Pause 236
Long Tones 236
Programmed Release 237
Run/Stop 237
Wait for Dial Tone 238
Using tone dialing for a call 238
Using your Norstar system from an external location 239
Controlling access to your Norstar system 240
Direct inward system access (DISA) 240
Class of Service (COS) 240
Maintaining security 241
Accessing Norstar remotely over the public network 241
Tones 242
Using Class of Service (COS) passwords 242
Changing your Class of Service 243

General System features 245

Set profile 245
Line profile 245
Pulse or tone dialing 246
Disconnect supervision 246
Hunt Groups 246
Internal numbers 247
Line assignment 247
Target line 248

Line pools 249
Overflow call routing 249
M7100 and T7100 telephones 250
Memory buttons 250
One-line display 251
Prime line 251
Private lines 252
Volume bar 252

Troubleshooting 253

Using the alarm telephone 253
Reporting and recording alarm codes 253
Testing the telephone 254
Testing the telephone display 254
Testing the telephone buttons 255
Testing the speaker in the telephone handset 255
Testing the telephone headset 255
Testing the telephone speaker 256
Testing the power supply to a telephone 256

Common feature displays 257

Glossary 261

Index 279

Backup programming overlays 305

Getting started with Norstar

Your Norstar digital key system has many powerful features that can be customized to keep up with changes in your workplace.

Using this guide

The person who is responsible for adding or moving telephones or making changes to the system is called the system coordinator. This guide is designed to give the system coordinator all the information he or she needs to carry out these kinds of jobs.

The first section contains step-by-step instructions about changing the time and date, deciding how many rings it takes before a call is forwarded, and other day-to-day programming. Once you understand these basic steps, you can move on to the many other features described in the second section of the guide, and refer to the first section only from time to time.

You can look at the contents page for an overview of the features that are available, or check the index for specific features or messages displayed on your telephone.

Emergency 911 Dialing

Emergency 911 Dialing is the capability to access a public emergency response system by dialing the digits 9 1 1.

Emergency 911 Dialing

State and local requirements for support of Emergency 911 Dialing service by Customer Premises Equipment vary. Consult your local telecommunications service provider regarding compliance with applicable laws and regulations.

Understanding programming

When your system is installed, your installer or customer service representative programs it to work with your telephone lines, with your private network, if you have one, and with optional equipment. They customize the system for your office. All programming is recorded in the *Modular ICS 6.1 Programming Record*.

You may want to further customize your system. For example, you can change how some features work, or adapt the system to changes in your office. Programming allows you to change settings that probably need to be updated regularly because of staff turnover or new business contacts. You can also assign features and program buttons on individual telephones.

There are four ways to customize and maintain your Norstar system:

- Initial programming is performed for you by your installer or customer service representative. It deals mostly with how the system interacts with lines, telephones, and other equipment.
- Your programming as a system coordinator changes how features work for the system, as needed. It requires a System Coordinator password.
- A Basic programming password is available to allow individuals other than the system coordinator to make changes without giving access to sensitive programming capabilities.
- Personal programming is available to anyone through the Feature button on their Norstar telephone. It allows individuals to change how their telephone works to suit themselves.

Before you start

Before you begin programming, plan what changes you want to make. Record the changes in the *Norstar Programming Record* so that you have the information at hand. For example, if you are going to program system speed dial numbers, fill out the page in the *Norstar Programming Record* so that you have all the numbers and codes handy once you start programming.

What you need to do programming

Programming is performed using a telephone that can show two lines of information on its display. Examples of telephones with two-line displays are shown on page 16.

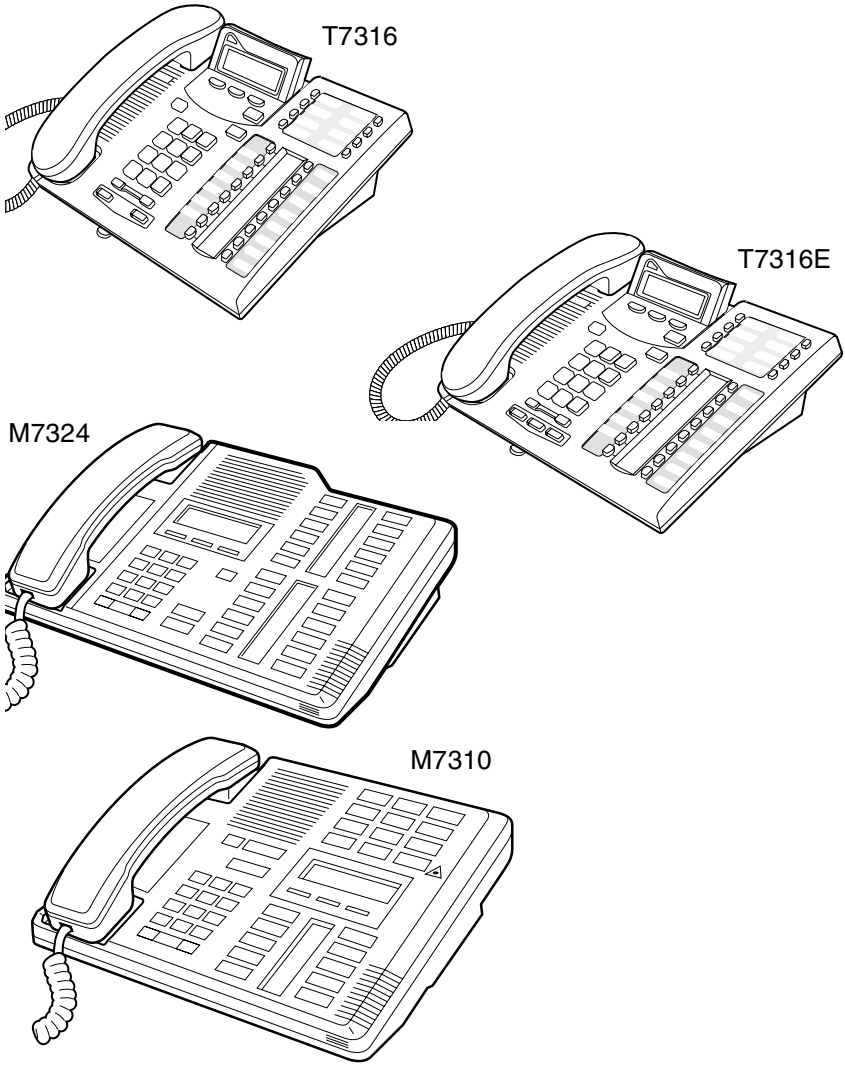
You need a programming overlay to show which buttons to press when you are performing programming. See *The programming overlay* on page 19.

When you use a telephone for programming, it is taken out of service. This means it is unable to receive or make calls, and the call forward features do not work. Do not use the main reception telephone for programming because you may lose incoming calls.

Using Buttons

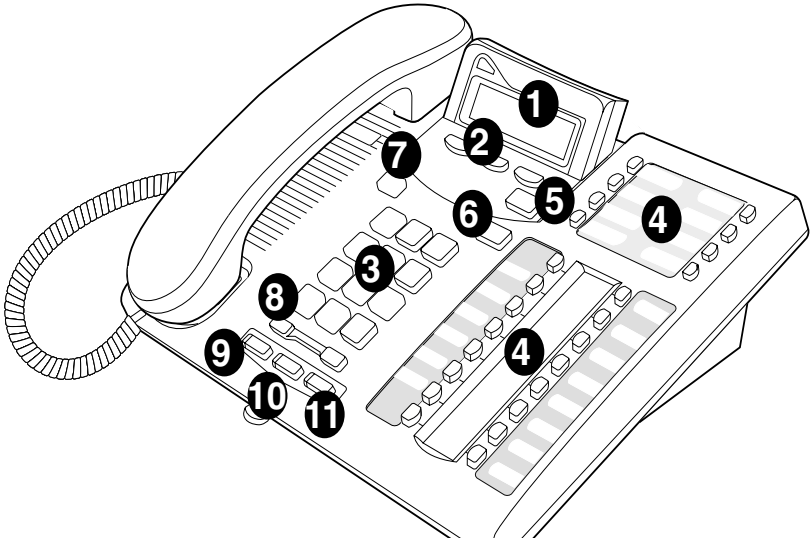
The two-line telephone you use for everyday calling can be used for changes and maintenance. Examples of telephones with two-line displays are shown in the illustration.

Sets used for programming and maintenance



The next illustration numbers the buttons that are used for both day-to-day communication and programming on the T7316 set. The following table describes what each numbered area is used for.

Business Series Terminal programming buttons

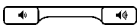
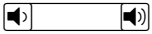


❶ Display	Shows instructions for everyday calling as well as for programming.
❷ Display buttons	Have a variety of uses. The current use is shown on the display above each button.
❸ Dialpad	Used for dialing numbers when you are making calls. For programming, the dialpad is also used for entering numbers and letters
❹ Memory buttons	Dial a number or feature code stored on the button.
❺ Feature button	Allows you to enter a feature code while using or programming the telephone.
❻ Hold button	Puts an active call on hold.
❼ Release button	Hangs up an active call or ends programming.

❽ Volume rocker switch	Turns the volume you hear through the handset up or down. During programming this switch is used to adjust settings, such as for the display contrast.
❾ Mute	Mutes the transmitter in the handset.
❿ Handsfree	Allows you to speak to and hear a call without using the handset or headphones.
⓫ Headset	Activates the headset feature.

This guide uses the icons for Business Series Terminal T7316E buttons in feature code examples. Your telephone may have different labels, or the buttons may be in slightly different locations. Refer to the table below for comparable Norstar icons

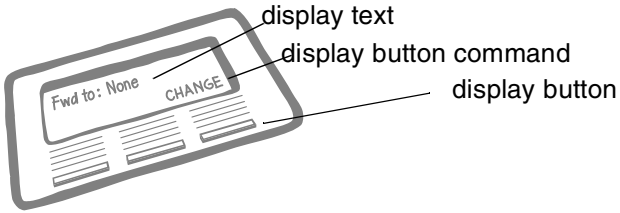
Telephone buttons

Business Series Terminals T7316 and T7316E	**Button description**	**Norstar sets** M7310, M7324
	Feature	Feature
Handsfree: (T7316E) Mute:	**Handsfree/Mute**	Handsfree Mute
	Hold	Hold
	**Volume Control**	
	Release	Rls

Using the buttons under the display

The three display buttons are used both for telephone features and programming. What each button does depends on what the display shows. Some display instructions that you may see when making changes on the system include OK, CHANGE, or COPY. In this guide, display button instructions are underlined.

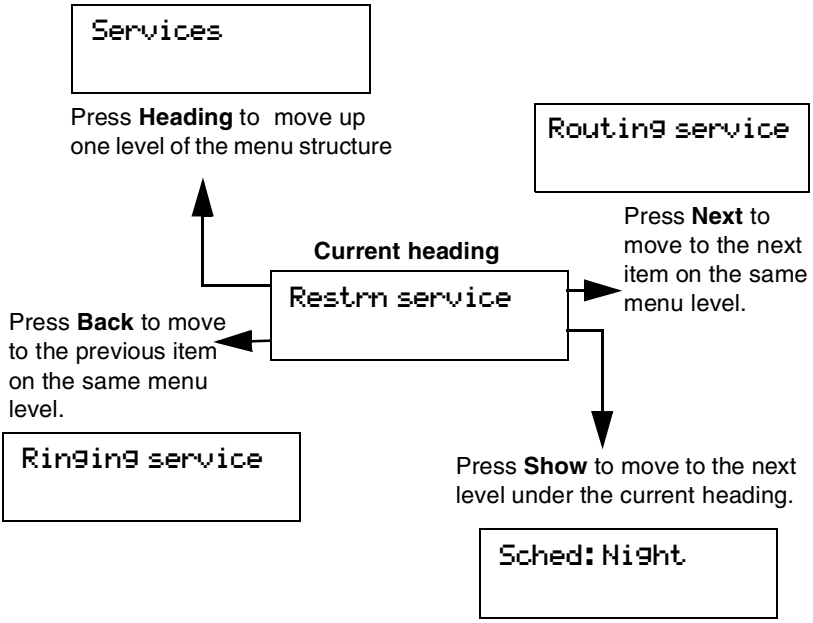
Display buttons



The programming overlay

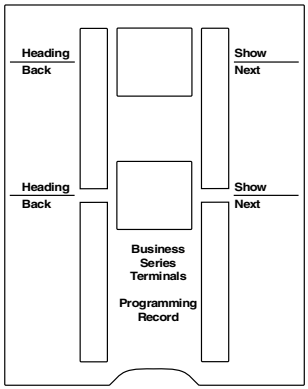
When you begin programming, a group of buttons on the telephone become the buttons for moving through programming headings and settings. The programming overlay is a paper cutout that is included with the Programming record. It relabels the four buttons to name the actions you use during programming. If you lose the overlay, there is an extra overlay included in the back of this book that can be printed and cut out.

The diagram below shows how the headings are used to navigate the programming menus.



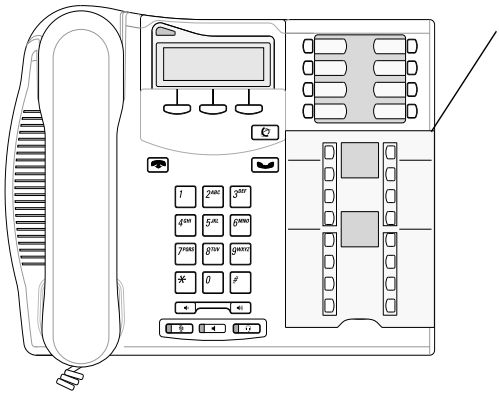
Programming buttons are active or inactive at different stages of programming. A button is active (meaning you can use that option), when the indicator next to it is lit (◀ or ▶).

Business Series Terminal programming overlay



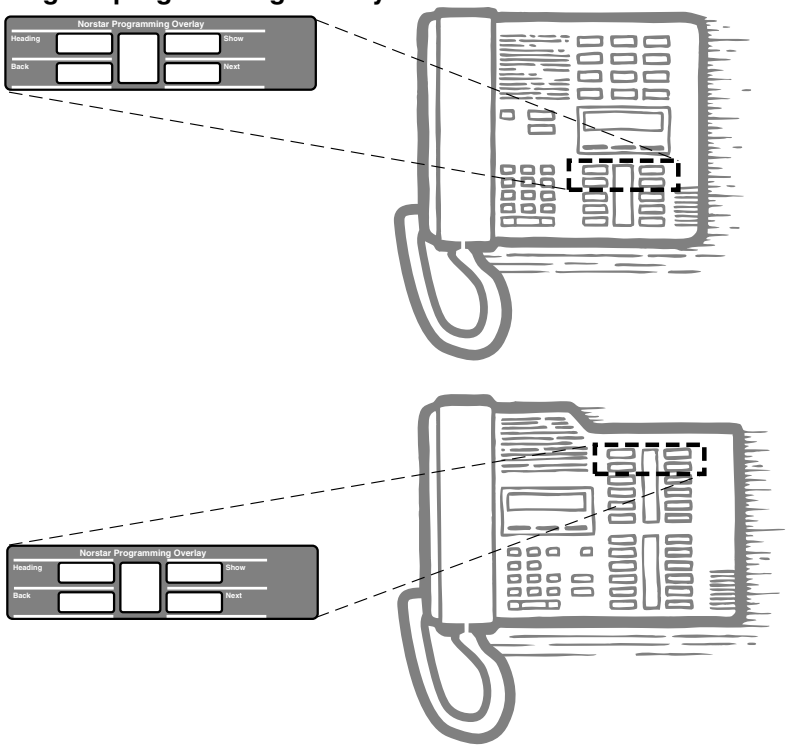
T7316E programming set

T7316 programming set



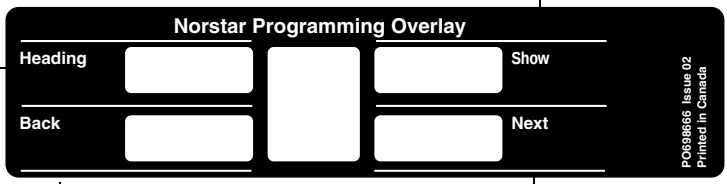
Overlay placed over keys with indicators

Placing the programming overlay on Norstar sets



Displays the heading for the current level

Displays the first setting within a menu level



Moves back one item on the current level

Moves display one item forward on the current menu level

A map for using programming

The tables on the following three pages show the headings that display when you move through the display menu after pressing [✆] [*] [*] [C] [O] [N] [F] [I] [G] and entering the password (the default password is [A] [D] [M] [I] [N] or [2] [3] [6] [4] [6]).

The default Basic password ([B] [A] [S] [I] [C] or [2] [2] [7] [4] [2]) can be used with a limited number of feature codes, including [*] [*] [T] [I] [M] [E] and the codes for turning call services on and off. For more information, see *Using passwords* on page 224.

Terminals&Sets	Customize each telephone on the system. You can change where a call is forwarded, give a telephone a name, or allow certain features to be used at a telephone. You can change the button programming on any telephone on the system.
Lines	Show the active lines. Coordinator can rename lines.
Services	Turn services on or off: Ringing service, Restriction service, and Routing Service.
Sys speed dial	Program up to 255 different telephone numbers so internal users can dial them with a three-digit code (001-255).
Passwords	Change or erase the password you use for programming, or the one you use for Call log. On an XC system, you can change the Companion portable telephone registration password.
Time&Date	Change the time, date, or both.
System prgrming	Access the headings that define Hunt Groups, Hospitality services. Enter the BusName, which displays on caller ID lines. On a MICS-XC system, access registration records for Companion portable telephones so you can disable or enable the sets.

System Coordinator user interface

Terminals & Sets	Show set Enter digits or press LIST.	Capabilities	Fwd no answer	Fwd to Fwd delay
			Fwd on busy	Fwd to
			DND on busy	
			Handsfree	
			HF answer back	
			Pickup grp	
			Page zone	
			Paging	
			D-Dial	
			Priority call	
			Hotline	Intrn # Extrnl# .... Use prime line
			Aux. ringer	
			Allow redirect	
			Redirect ring	
			ATA settings	ATA ans timer Msg Indicate
		Name		
		User preferences	Model	
			Button progrming	# of buttons B01 ... BXX CLR TEL# FEATR
				KIM X or CAP X
			User speed dial	# of speed dialers Spd # 255-279
			Call log opt'ns	No one answered Unanswered by me Log all calls No autologging
			Dialing opt'ns	Standard dial Pre-dial Automatic dial
			Language	
			Display cntrst	
			Ring type	
			Voice path	Dflt: Handsfree Headset
		Restrictions	Set restrictions	Set lock (Partial, Full, None)
				Allow last no
				Allow saved no
				Allow link
		Telco features	1st Display	
			Called ID	

Note: Some headings will only show if required by the selected options for the previous heading.

Lines	**Show lines** ___ Enter digits or press LIST	**Name**	
Services	**Ringing service**	**Sched: Night** **Evening** **Lunch** **Sched 4** **Sched 5** **Sched 6**	**Off, Manual, Auto**
	Restrn services	**Sched: Night** **Evening** **Lunch** **Sched 4** **Sched 5** **Sched 6**	**Off, Manual, Auto**
	Routing service	**Sched: Night** **Evening** **Lunch** **Sched 4** **Sched 5** **Sched 6**	**Off, Manual, Auto**
Sys speed dial **(001-255)**	**Speed dial #** Enter digits or press LIST	**add/change tel #**	
		Use prime line	
		Display digits	
		Name	
Passwords	**Call Log pswds**	**Show set**	**Log pswd**
	Progrming pswds	**Sys admin: 23646**	
		Basic: 22742	
	Reg. pswd (MICS-IX, only)		
	Hospitality	**Desk pswd: 4677**	
		Cond pswd:None	
	SM pswd: 745368		
Time&Date	**Hour**		
	Minutes		
	Year		
	Month		
	Day		

System Prgrming	Hunt Group	Show Group	Member DNs	
			Line assignment	Show line ___ Unassigned/ Assigned
			Mode	Broadcast Sequential Rotary
			Hunt Delay	
			If Busy	BusyTone/Queue
			Q Timeout	
			Overflow	
			Name	
			Aux. Ringer	
			Distnct ring	
	Companion (MICS-XC only)	Registration	Registration	
			Portable DNs	Show DN Available/ unavailable
		Radio data	Re-evaluation	Status
			Radios	Cell Assignment/ Show radio Assigned/ unassigned
			Cells	Show Cell Cell radios/Cell nghbrs/ Cell rad nghbrs
	BusName			
	Hospitality	Room/desk info	Show set	Room #
				Adm pwd req'd
		Service time	Hour	
			Minutes	
		Alarm	Attn attempts	
			Retry intrvl	
			Attn duration	
			Time format	12 hr/24 hr
			Expired alarms	Notify set
				Use tone

Starting and ending a session

As system coordinator the first steps in making any change to the Norstar system are always the same.

Jan 1 12:00pm	Press [↺].
Feature:	Press [*] [*] [C] [O] [N] [F] [I] [G]. This is the same as pressing [*] [*] [2] [6] [6] [3] [4] [4].
Password: RETRY	Press [A] [D] [M] [I] [N]. This is the same as pressing [2] [3] [6] [4] [6]. Press RETRY to re-enter the password if you enter an incorrect character.
Terminals&Sets	The display shows the first of the seven headings available for administration programming.

[A] [D] [M] [I] [N] is the password, unless the password has been changed. Check the Programming Record for the most recent password.

Ending a session

Display digits:Y CHANGE	Press [☎] to end the session.
End of session	After a few seconds, the time and date reappears on the display.

The system makes any changes you indicated in programming as soon as you move away from a setting, either by using the navigation buttons or by pressing [☎].

You can see if the changes you made to telephone programming have taken effect by pressing the UPDATE display key. The display shows you how many telephones have not been updated.

Press DNs to see the specific extensions where programming changes have not taken effect yet. Items disappear from the list as they are updated.

Record any changes you make in the *Modular ICS 6.1 Programming Record*. If there is a problem with the system, the installer needs to see a history of the changes you have made.

Remember to inform people in your office of any changes you have made that affect them. For example, you may change system speed dial codes or change the number of rings before an unanswered telephone is forwarded.

Frequently used programming operations

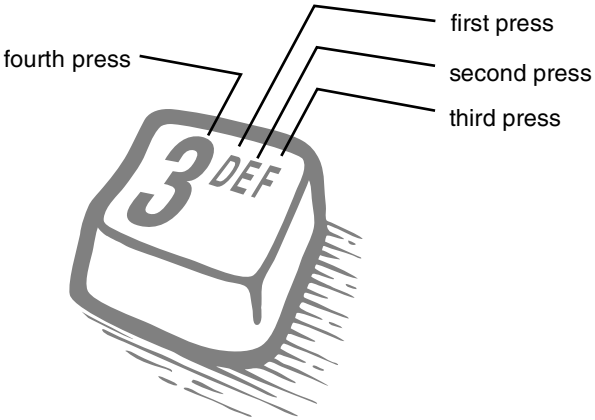
The following sections highlight the most frequently used programming operations. To consult these or other programming operations, see either the Table of Contents or the Index.

Changing the display time & date

`Jan 1  12:00PM`	Press [✆].
`Feature:`	Press [*] [*] [8] [4] [6] [3] (which is the same as [*] [*] [T] [I] [M] [E]).
`Password:` `RETRY`	Press [2] [2] [7] [4] [2] ([B] [A] [S] [I] [C]) or [2] [3] [6] [4] [6] ([A] [D] [M] [I] [N])

The passwords can be changed. See *Using passwords* on page 224 for more information.

Entering letters and numbers using the dialpad



In this example, you are changing the time to 1:30 p.m.

Hour:01 NEXT CHANGE	Press CHANGE.
Hour:_ CANCL	Press the dialpad buttons to enter the hour. Use two digits for all hours. The clock on the display shows either one or two digits.
AM OK CHANGE	The display prompts you to choose a.m. or p.m. Press CHANGE and OK to select p.m.
Hour:01 NEXT CHANGE	Press NEXT.
Minutes:00 NEXT CHANGE	Press CHANGE.
Minutes:_ CANCL	Press the dialpad buttons to enter the minutes.

If you are only changing the time and not the date, press ☎ to end your session.

In this example, you are changing the date to July 15, 1998.

Minutes:30 NEXT CHANGE	Press NEXT.
Year:01 NEXT CHANGE	Press CHANGE.
Year:_ CANCL	Press the dialpad buttons to enter the year.
Year:02 NEXT CHANGE	Press NEXT.
Month:01 NEXT CHANGE	Press CHANGE.
Month:_ CANCL	Press the dialpad buttons to enter the month.

Use numbers for the months: 01 is January; 12 is December.

Month:07 NEXT CHANGE	Press NEXT.

Day:01 NEXT CHANGE	Press CHANGE.
Day:_ CANCL	Press the dialpad buttons to enter the day.
Day:15 CANCL	Press ☎ to end your session.
End of session	

The clock controls the schedules used for services such as ringing and routing services.

After a power failure, the clock is behind by the length of time power was lost. For example, if the power is out for two minutes, the clock is two minutes behind.

Adding or changing a system speed dial

You program a speed dial on your Norstar so that anyone in your office can dial a frequently used number using a three-digit code (001-255).

To change a speed dial that already exists, follow the same steps. The new programming overwrites the previous number and settings.

Begin the programming session

Jan 1 12:00pm	Press ✆.
Feature:	Press * * 2 6 6 3 4 4.
Password: RETRY	Press 2 3 6 4 6.

Choose a speed dial code

`Terminals&Sets▶`	Press Next three times.
`Sys Speed Dial▶`	Press Show.
`Speed dial #:_` `LIST`	Press 0 0 1.

You can pick any system speed dial code between 001 and 255.

`Speed dial #:001▶` `FIND`	Press Show.

Add or change the telephone number

`001:No number` `CHANGE`	Press CHANGE.
`001:_` `CANCL OK`	Use the dialpad to program the telephone number that you want to add. The telephone number can be up to 24 digits long.
`001:nnnnnnnn_` `CANCL BKSP OK`	Your display shows the telephone number, which is represented by the row of n-characters shown here. Press OK.

Select a line for the speed dial code

`001:nnnnnnnn` `CLR CHANGE`	Press Next.
`Use prime line` `CHANGE`	Press CHANGE to see your options: `Use prime line`, a specific line (for example `Use line: 01`), a line pool (for example `Pool code:71`), or `Use routing tbl`.

Stop pressing CHANGE when the display shows the prime line again.

`Use prime line` `CHANGE`	In this example, the system selects the prime line automatically to dial speed dial code 001. This is the most common choice.

If you assign a specific line to a system speed dial number, only telephones with an appearance of that line can use the speed dial number.

Choose what shows up on the display

Use prime line CHANGE	Press Next.
Display digits:Y CHANGE	Your choices are Yes and No. Yes means the display shows the telephone number. Press CHANGE.
Display digits:N CHANGE	No means the display shows a name for the code.

Program a name for a speed dial

The system has a standard name to display, so it is not necessary for you to program one. However, if you have chosen not to display the telephone number, you may want a specific name.

Alpha tagging feature: This feature offers name display for calls coming in over lines that offer number-only display services.

If you specify a name for a speed dial, and that person calls in on an external line, the speed dial name you specify acts as the name display for the call if the call number matches the number in the speed dial list. If the telephone has also been configured to display Caller ID (Caller ID set) with the name of a caller first (1st display), then the name you program for the speed dial code is the name that displays.

For example: If you create a speed dial for the courier company you use, and assign the name Courier with the following process, when that company calls you, Courier would appear on the display for the call.

Display digits:N CHANGE	Press Next.
Name:Sys Spd Di... CHANGE	Press Show.
...al 001 ... CHANGE	This is the name the display shows if youdo not change it. Press CHANGE.
Name:_ -->	Decide the name you want to give to the speed dial code.

Press the dialpad button that has the first letter of the name until the display shows the letter you want.

Name:S BKSP -->	Press -->.

```
Name:S_
<--      BKSP     -->
```

Use the dialpad and --> until you have the entire name.

The name can be up to 16 characters long, including spaces.
Press # on the numeric dialpad to add spaces.

```
Name:SAVINGS BANK
<--      BKSP     -->
```

Press Next.

```
Name:SAVINGS BA...
CLR              CHANGE
```

Press ☎ to end your session.

Or you can press Heading, then Next to program another speed dial number.

```
End of session
```

Changing the name of a telephone

Begin the programming session

```
Jan 1   12:00PM
```

Press ↺.

```
Feature:
```

Press * * 2 6 6 3 4 4.

```
Password:
                 RETRY
```

Press 2 3 6 4 6.

Change the name of a telephone

```
Terminals&Sets▶
```

Press Show.

```
Show set:_
                  LIST
```

Enter the internal number (DN) of the telephone or voice mail extension. In this example, the DN is 221.

If the set has already been given a name, it appears after DN: on the display.

```
221:221▶
                  FIND
```

Press Show then Next.

```
Name:221
                CHANGE
```

This is the name the display shows if you do not change it. Press CHANGE.

Decide what name you want to give to the telephone number.

```
Name:_
                    -->
```

Press the numeric dialpad button that has the first letter of the name until the display shows the letter you want.

```
Name:J
        BKSP    -->
```

Press -->.

```
Name:J_
<--     BKSP    -->
```

Use the dialpad and --> until you have the entire name.

```
Name:JEAN B
<--     BKSP    -->
```

Press [Next] to use the name you have entered.

The name can be up to seven characters long, including spaces.

```
Name:JEAN B
CLR             CHANGE
```

Press [☎] to end your session.

You can press [Heading] once to continue programming this telephone, or press [Heading] twice to return to the Terminals&Sets heading.

```
End of session
```

Changing the name of a line

Begin the programming session

```
Jan 1  12:00pm
```

Press [✿].

```
Feature:
```

Press [*] [*] [2] [6] [6] [3] [4] [4].

```
Password:
                RETRY
```

Press [2] [3] [6] [4] [6].

Change the name of a line

```
Terminals&Sets▶
```

Press [Next].

```
Lines▶
```

Press [Show].

```
Show line:___
              LIST
```

Enter the three-digit number of the line you want to name. In this example, the line is 002.

This is the name the display shows if you don't change it.

```
Line002:Line002▶
              FIND
```

Press Show.

```
Name:Line002
           CHANGE
```

Press CHANGE.

Decide what name you want to give to the line.

```
Name:_
              -->
```

Press the dialpad button that has the first letter of the name, until the display shows the letter you want.

```
Name:L
      BKSP    -->
```

Press -->.

```
Name:L__
<--   BKSP    -->
```

Use the dialpad and --> until you have the entire name.

The name can be up to seven characters long, including spaces.

```
Name:LOCAL
<--   BKSP    -->
```

Press Next to use the name you entered.

```
Name:LOCAL
CLR         CHANGE
```

Press ☎ to end your session.

You can press Heading once to continue programming this line, or press Heading twice to return to the Lines heading.

```
End of session
```

Making changes to Call Forward No Answer

Begin the programming session

Jan 1 12:00pm	Press ↺.
Feature:	Press * * 2 6 6 3 4 4.
Password: RETRY	Press 2 3 6 4 6.

Change where a call goes when there is no answer

Terminals&Sets▶	Press Show.
Show set:_ LIST	Enter the internal number (DN) of the telephone or voice mail extension. In this example the DN is 225.

If the set has been given a name, it appears on the display.

225:225 FIND	Press Show.
Capabilities▶	Press Show.
Fwd no answer▶	Press Show.
Fwd to:None CHANGE	Press CHANGE and enter the internal number where you want the calls to be sent. In this example the internal number is 221.

You can press CLR to change the destination back to None.

Change the number of times the telephone rings before it is forwarded

```
Fwd to:221
CLR          CHANGE
```

Press Next.

```
Forward delay:4
             CHANGE
```

Use the CHANGE button to choose the number of times the telephone rings before it is forwarded.

Your choices are 2, 3, 4, 6 and 10 rings.

```
Forward delay:3
             CHANGE
```

Press ☎ to end your session.

You can press Heading to continue programming capabilities for this telephone, or press Heading four times to return to the Terminals and Sets heading.

```
End of session
```

Tip - If the Norstar set is a member of a Hunt Group, the Call Forward no answer feature is overridden and the Hunt Group call continues to ring until the hunt time has expired. For more information about Hunt Groups, see *Programming Hunt Groups* on page 169.

Making changes to Call Forward on Busy

Begin the programming session

Jan 1 12:00pm	Press ↺.
Feature:	Press * * 2 6 6 3 4 4.
Password: RETRY	Press 2 3 6 4 6.

Change where a call goes when a telephone is busy

Terminals&Sets▸	Press Show.
Show set:_ LIST	Enter the internal number, which gets assigned as the intercom number, of the telephone extension. In this example, the intercom number is 225.

If the set has been given a name, it appears on the display.

225:225 FIND	Press Show.
Capabilities▸	Press Show.
Fwd no answer▸	Press Next.
Fwd on busy...	Press Show.
Fwd to:None CHANGE	Press CHANGE and enter the internal number where you want the calls to be sent. In this example, the internal number is 221.

You can press CLR to change the destination back to None.

Fwd to:221 CLR CHANGE	Press ☎ to end your session.

You can press [Next] to continue programming capabilities for this telephone, or press [Heading] three times to return to the Terminals and Sets heading.

```
End of session
```

Tip - If the Norstar set is a member of a Hunt Group, the Call Forward on busy feature is overridden and the Hunt Group call continues to ring until the hunt time has expired. For more information about Hunt Groups, see *Programming Hunt Groups* on page 169.

Making Changes to Do Not Disturb on Busy

When you are on a call and a second call comes in, your telephone rings softly to alert you to the second call. You can turn this feature on or off for each telephone.

Begin the programming session

`Jan 1  12:00pm`	Press [↻].
`Feature:`	Press [*] [*] [2] [6] [6] [3] [4] [4].
`Password:` `RETRY`	Press [2] [3] [6] [4] [6].

Change Do Not Disturb on Busy

`Terminals&Sets▸`	Press [Show].
`Show set:_` `LIST`	Enter the internal number of the telephone extension. This becomes the number for the intercom button. In this example, number is 225.

If the set has been given a name, it appears on the display.

225:225 FIND	Press Show.
Capabilities▶	Press Show.
Fwd no answer▶	Press Next twice.
DND on Busy:N CHANGE	Press CHANGE to turn the feature on.
DND on Busy:Y CHANGE	A second press turns it off again. Press ☎ to end your session.

Press Next to continue programming capabilities for this telephone, or press Heading three times to return to the Terminals and Sets heading.

End of session

For more information about Call Forward and similar settings, see *Forwarding your calls to another Norstar telephone* on page 113.

What would you like to do next?

Some of the most common programming tasks are listed below. For a comprehensive list of settings and instructions, see either the Table of Contents or the Index.

Redirect calls coming in on a line.	See *Turning on Line Redirection* on page 118.
Allow individuals to answer calls that are ringing at another telephone.	See *Picking up a call ringing at another telephone* on page 59.
Assign telephones to different zones for paging.	See *Paging* on page 125.
Turn the night service on and off.	See *Making additional telephones ring* on page 217.

Use a Basic password so others can take care of programming such as changing user speed dials, changing names, and changing the time and date.	See *Using passwords* on page 224.

Answering calls

Answering calls in Hunt Groups

Your Norstar system now allows you to establish Hunt Groups in your system. Hunt Groups are a group of Norstar set DNs that can be called by a single directory number. The Hunt Groups feature ensures calls are easily routed to the appropriate people. You can program:

- the members for a Hunt Group
- member position within a Hunt Group
- how calls are distributed
- how long a call spends looking for available members
- what happens if all members are busy

For more information about Hunt Groups see *Programming Hunt Groups* on page 169.

Answering an incoming call

There are three indications of an incoming call: ringing, a line button flashing, and a message on the display. You do not necessarily receive all three indications for any particular call. For example, you may have a line that has been set up not to ring at your telephone. If so, you see only a flashing line button. There are many possible combinations, depending on how your system is set up. See *Choosing a line using a line button* on page 79 for more information on the use of lines.

If you receive a priority call and your telephone has no free internal line buttons, you cannot transfer the priority call, you must accept or release it.

Line buttons

One line button for each line is assigned to your telephone. Press the line button to select the line you want to answer or use to make a call. Having several line buttons gives you immediate access to more than one line.

The M7100 or T7100 sets have two intercom paths which are used instead of line buttons to answer and make calls. Each set can be assigned two lines. You can press [ ] to switch between two calls, one active and one on hold.

What line indicators mean

▶	Flashing on and off for equal lengths of time	There is an incoming call on the line
▶	Flashing on and off more quickly	You have placed a call on hold
▶	Flashing on for longer than off	Someone else has put a call on hold on that line
▶	On, not flashing	You are connected to the call on that line or the line is in use elsewhere
	Off	The line is free

The **T7316E telephone** displays a set of icons in place of flashing arrows when it is connected to a system with version 6.1 or newer software. If you connect a T7316E telephone to a system that is running version 6.0 or previous versions, the standard line indicators display.

The **KIM** also displays some of these icons. Note that this piece of hardware is only supported by version 6.1 and later software.

	Active call	The line is active and/or you are connected to this telephone.
	Ringing	A call is coming into this line.
	Hold	The call on this line is on Hold at this telephone.

	Call forward	The call on this line has been forwarded.
▲	Active button	The feature assigned to this button is active.

Flash rate indicators for T7316E and KIM icons

On, not flashing	You are connected to the call on that line or the line is in use elsewhere or the service indicated is active
Off	The line is free
Flashing on and off for equal lengths of time	Existing alert rate
Flashing on and off more quickly (twinkle)	I-hold
Flashing on for longer than off (blink)	U-hold

Rings you may hear

A double beep every 10 seconds	A call has been camped to your telephone.
A long single ring	There is an external call on the line for you.
A shorter double ring	There is an internal call on the line for you or a call is being transferred to you.
A brief single ring	A call is being redirected on one of your redirected lines. You cannot answer this call.
Three beeps descending in tone	You are receiving a priority call.

Sorting calls by distinctive ring patterns

When lines, telephones and Hunt groups are configured on your system, they can be assigned one of four distinctive ring patterns (DRP). The default for all telephones is 1 and the default for lines and Hunt groups is None, which is the lowest priority. The highest priority is 4.

Call ringing: When multiple calls are presented to the telephone, the call with the highest priority DRP setting will be the call that rings at the telephone.

Call answering: When multiple calls are presented to a telephone, and the user picks up the handset, the call with the highest priority DRP setting is the call that is presented.

Note: External calls always have a higher priority than internal calls.

Note: If the ring type is changed on a telephone after the DRPs are set on the line, the line DRPs are overwritten by the telephone settings. If the DRPs are set for a line after telephone programming, then the telephone ring programming is overridden by the line DRP program. Refer to the *Modular ICS 6.1 Installation Guide* for information about setting distinctive ring for lines. If the call is to a Hunt group, and the Hunt group DRP is higher than the line DRP, the Hunt group DRP will take precedence within the Hunt group. Refer to *Assigning a distinctive ring pattern to a Hunt Group* on page 179.

Answering calls at a prime telephone

Each line in a Norstar system can be assigned a prime telephone. Calls not answered at their normal destinations are transferred to the prime telephone. The prime telephone is usually the attendant's telephone. The installer or customer service representative programs a prime telephone for a line.

Displays

DND from 221	The person at telephone 221 has forwarded a call to you using Do Not Disturb.
DND transfer	The system has transferred a call to you from a telephone with Do Not Disturb turned on.
DRT Line001	Nobody answered this call so the system transferred it to you.
Line001 callback CALLBACK	Someone has camped, parked or transferred a call on line 001, but no one has answered it. Press CALLBACK or the line button to connect to the call.
Line001 to prime	There is no telephone that can receive a call on line 001 so the system has transferred it to you.
Line002>Line157	The call coming in on line 002 was intended for target line 157. Line 157 is busy, so the call has come to you.

For other displays, see *Common feature displays* on page 257.

Expanding telephone capacity

You can add additional memory buttons to M7324 telephones using a CAP module and to T7316E telephones using a KIM (T24 key indicator module). If you add the modules without identifying them as CAPs (central answering positions) in programming, the user can program the module buttons as an expanded memory button set.

However, if you want to designate one or more users to be central answering positions for your system, you can program the modules to support lines, and, in the case of the KIM, also multiple target lines and Hunt group appearances. This configuration of the KIM is called an eKIM.

Both systems provide similar features and are programmed using the same headings. These configurations are briefly described in this section. For details about configuring the KIM as an eKIM, refer to the *Modular ICS 6.1 Installer Guide*.

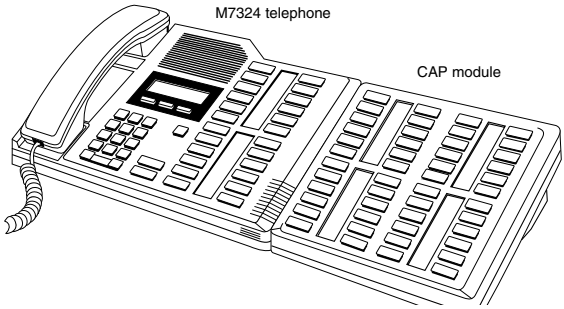
Using a CAP module

A central answering position that uses a Norstar M7324 telephone and a CAP module is programmed as a CAP by your installer or customer service representative. You can have five CAPs in a Norstar Modular system. It is best if the CAP is the prime telephone and direct-dial telephone for the lines and telephones it serves.

A CAP module is an add-on device that provides 48 extra memory or line buttons. You can connect one or two Norstar CAP modules to the telephone to increase the number of lines it can handle.

When a CAP module is first plugged into your telephone, some of the module buttons are already programmed to dial an internal number.

Norstar M7324 set with added CAP module



Customizing your CAP module

If your installer has programmed the CAP module to be the central answering position for your system, you can move external lines onto the CAP module by using [Feature] [*] [8] [1]. See *Moving line buttons* on page 161.

Any of the buttons on your CAP module that do not select lines can be programmed to dial internal or external numbers automatically. You can program features onto CAP module buttons. See *Time savers for making calls* on page 87 and *Customizing your telephone* on page 145 for information on programming memory buttons.

Buttons on a CAP module cannot be assigned as answer buttons.

Monitoring telephones with the CAP module

The indicators ▸ beside internal autodial buttons on your CAP module show the status of Norstar telephones.

The indicator is on when the telephone has:

- an active call
- Do Not Disturb turned on

The indicator is off when a telephone has:

- no active call
- a call on hold and no other active call

Tip - *You can send up to 30 messages from a CAP.*

Using a KIM in a central answering position

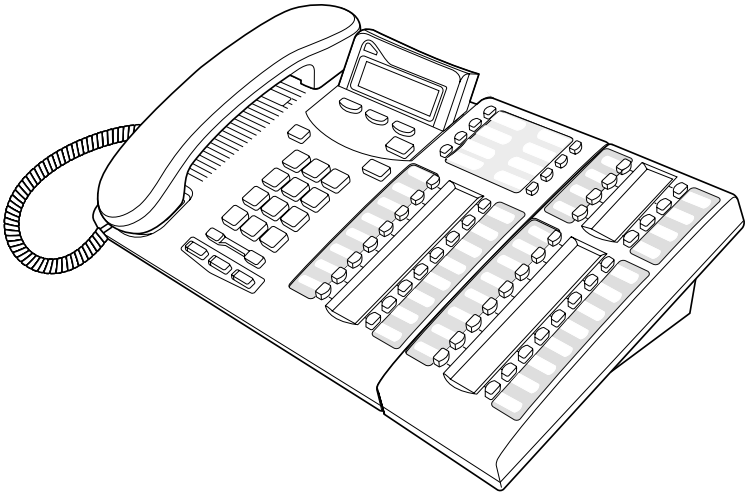
When you deploy a CAP consisting of a T7316E telephone and one or more KIMs, the modules can be configured as eKIMs by your installer. If you do not need lines or hunt group appearances on the KIMs, there is no requirement for any system configuration. This configuration of the KIM is called an ordinary KIM (OKIM) and you can install up to nine modules on a T7316.

On all KIMs, at each telephone you can use the memory programming feature to:

- provide feature access (Refer to *Programming a feature code onto a memory button* on page 147)
- provide access to line pools (Refer to *Programming a memory button with a line pool* on page 81)

- provide one-press external autodial (Refer to *Storing a number on a memory button for Autodial* on page 87)
- configure system-wide call appearances (SWCA) by assigning SWCA feature codes

Norstar T7316E telephone with added KIM



An extended KIM (eKIM) provides the same functionality as the OKIM plus the ability to support multiple lines, target lines and Hunt groups. A T7316E can support a maximum of four eKIMs. Your system can support a maximum of five CAPS using eKIMs. Note that this total includes any T7324 CAPs.

Cold starting the KIM

If your KIM fails, or if you want to erase programming on the KIM, there are two types of cold start.

TIPs - *If you are cold starting an eKIM that has line or Hunt group assignments, the cold start will erase current programming, and insert the line appearances, starting with the top, left button. After all the line appearances are assigned to lines, the system adds target line or Hunt Group appearances. If any buttons are left, the system will populate the buttons with autodialer assignments.*

Use [⇦] [*] [0] to view button assignments after a cold start.

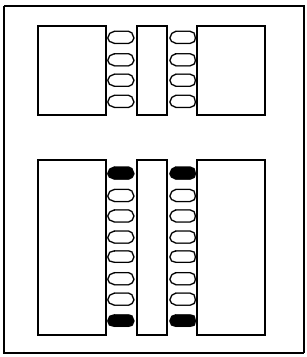
For both types of cold starts:

1. Unplug and replug the T7316E line cable.

   The telephone will restart and all the icons will flash. When the telephone icons stop flashing, the KIM module icons start flashing.

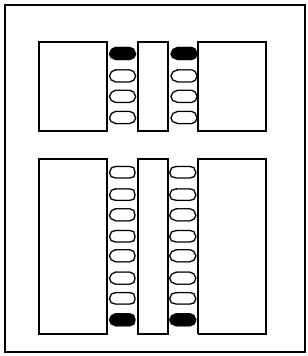
2. At this point, do one of the following:

- **KIM single-module cold start**



If you just want to cold start an individual module, on that module, simultaneously press the two top and two bottom buttons on the lower button set, as shown in the following diagram. The KIM displays a random pattern of icons as the KIM resets.

- **KIM multi-module cold start**
  If you want to cold start all the KIMs attached to your telephone, simultaneously press the top two buttons on the upper button set, and the bottom two buttons on the lower button set, as shown in the following diagram.



Customizing your KIM module

You can move external lines, target lines or hunt group appearances onto the eKIM by using [✆] [*] [8] [1]. See *Moving line buttons* on page 161.

Any of the buttons on your KIM that do not select lines can be programmed to dial internal or external numbers automatically. You also still can program features directly onto KIM buttons. Refer to *Time savers for making calls* on page 87 and *Customizing your telephone* on page 145 for information about programming memory buttons.

eKIM button programming for CAP

Any lines and target lines assigned to the T7316E, which overflow to the eKIM, must be assigned by your installer. You can, however, use the Coordinator password to assign the telephone to the hunt groups for which you want to provide an appearance. Refer to *Programming Hunt Groups* on page 169 for information about programming hunt group appearances.

Designating features or autodial numbers to the eKIM buttons, can be programmed using the `Button progrmng`, which is found under `User Preferences` under `Terminals&Sets`.

You need the programming template found at the front of this guide. See *A map for using programming on page 23* for more information.

1. Press [⏻] [*] [*] [2] [6] [6] [3] [4] [4].
2. Press [2] [3] [6] [4] [6] (the default System Coordinator password). `Terminals&Sets` displays.
3. Press [Show]. `Show set:` displays.
4. Enter the DN number of the T7316E which is attached to the eKIM you want to program, then press `OK`.
5. Press [Show]. `Capabilities` displays.
6. Press [Next] two times until the display shows `User preferences`.
7. Press [Show]. `Model` displays (7316E+<n>KIM).
8. Press [Next]. `Button progrming` displays.
9. Press the `KIM` softkey for the KIM for which you want to program buttons.

Note: If no KIM softkeys appear, it means the KIM was not configured as a CAP in programming.

10. Press [Next] until you find the button you want to program.
11. Press `TEL#` to enter an autodial number, or press `FEATR` to enter a feature code and feature programming. To make the button blank, press `CLR`.

Monitoring telephones from the KIM

The indicator icons beside the buttons on your KIM show the status of system telephones or lines assigned to the KIM. Refer to *What line indicators mean* on page 44 for a description of the T7316E and KIM icons.

Release button

Pressing [↶] ends a call. You do not have to put the receiver down. [↶] also ends feature programming.

While you are on a call, do not press [↶] to end a feature you are using. If you do, you disconnect the call. Use [✆] instead.

Hearing aid compatibility

The receivers on all Norstar telephones and Business Series Terminals are compatible with hearing aids as defined in the FCC rules, Part 68, section 68.316. Not all hearing aids are optimized for use with a telephone.

Viewing information about a call on the display

If you subscribe to Call Display services from your local telephone company, one line of information about an external caller is displayed after you answer. Depending on the setting, and the external information available, either the caller's name or telephone number is displayed.

When you transfer an external call to another Norstar user, this information is displayed on the target telephone.

Call Display information becomes available between the first and second ring of an incoming call. If you answer before the Call Display information is available on your display, and you press [✆] [8] [1] [1], you see only the line number or line name.

To use logging features with Call Display, see *Using Call Log* on page 137.

Using Call Information for a particular call

[ ] [8] [1] [1]

Call Information allows you to see information about incoming calls. This information is more detailed than the Call Display information you can receive automatically. For external calls, you can display the name of the called-party telephone, telephone number, and the line name. For an internal call, you can display the name of the called-party telephone and the internal number of that telephone. You can see information for ringing, answered, or held calls.

Call Information is available for calls even if they have been transferred, forwarded or rerouted in some way.

Names and numbers for external calls are displayed only if you have subscribed to Call Display services from your telephone company.

Tip - *Call Log displays the same information as Call Information, along with the date and time of the call, and the number of times the caller called.*

Once you answer a call, new calls coming in on lines configured with CLID to telephones with CLID allowed, present the prompt: `LineXXX Calling` for two rings, and then the CLID of the caller will display for three seconds (`XXXXX`).

If the call is being forwarded, the CLID will also display the number from which the call was forwarded (`XXXXX>YYY`).

This transient prompt will disappear if you press a programmed feature key, external autodialer, answer key, feature key, line key, intercom key, any dialpad key, shift key (M7310), or handsfree key. As well, an incoming Priority call or Voice call will clear the display and display the information for the Priority or Voice call.

Displaying Call Information before or after answering

To find out who is calling or to display information about your current call:

1. Press [✆] [8] [1] [1].
2. Press [#] or VIEW to display more information about an external call.

Call Display information becomes available between the first and second ring of an incoming call. If you answer before the Call Display information is available on your display, and you press [✆] [8] [1] [1], you see only the line number or line name.

Displaying Call Information for a call on hold

1. Press [✆] [8] [1] [1]. The display reads ▶Select a call.
2. Select the line on hold. Information about the call is displayed.
3. Press [#] or VIEW to display more information about an external call.

Tip - *If your telephone automatically displays Call Display information for a call, you still need to press* [✆] [8] [1] [1] *before you can press* [#] *or* VIEW *to display more information about the call.*

Making Call Display information appear automatically

Each telephone that rings for an external line can display Call Display information for that line. After the call is answered, Call Display information is always shown at the telephone that answered the call. Your installer or customer service representative can program telephones to have automatic Call Display.

This feature is not available to ISDN terminals.

Changing which information is shown first about a call

Depending on the services you subscribe to, Call Display information may contain up to three parts:

- the name of the caller
- the number of the caller
- the name of the line in your system that the call is on.

For each telephone, you can determine which information is displayed first.

You need the programming template found at the front of this guide. See *Getting started with Norstar* on page 13 for more information.

1. Press [↻] [*] [*] [2] [6] [6] [3] [4] [4].
2. Press [2] [3] [6] [4] [6] (the default System Coordinator password).
3. Press [Show] and enter the internal number of the telephone you want to program.
4. Press [Show].

5. Press [Next] four times.
6. Press [Show].
7. Choose a setting at 1stDisplay: using the CHANGE button. The choices are Name, Numbr or Line.

You may see Unknown name or Unknown number on the display if the information is not available from your telephone company. You may see Private name or Private number on the display if the caller blocks that information.

Picking up a call ringing at another telephone

You can pick up a call ringing at another telephone by using Directed Pickup or Group Pickup.

Answering ringing telephones using Directed Pickup

You can answer any telephone that is ringing in your Norstar system, except private lines.

1. Press [ ] [7] [6].
2. Enter the internal number of the ringing telephone.

To use Call Pickup (Directed Pickup), the telephone must be ringing. If, for example, the auxiliary ringer is ringing, but the call is not ringing at a telephone, the call cannot be answered using Directed Pickup. It must be answered normally at a telephone that has a flashing indicator for the call, or by using Trunk Answer. You can answer a call that is ringing because someone has transferred the call to a telephone and the call is ringing on an intercom button.

Tip - *Directed pickup can retrieve calls that are ringing on an Answer DN. While you may enter the internal number of the telephone you hear ringing, it may be calls from another telephone you are answering.*

Privacy issue

Target lines can be designated as Private (default is Public), however, such features as Call Pickup can still answer these lines at remote telephones. Only physical, analog lines set to Private are blocked from Call Pickup.

Answering any ringing telephone using Group Pickup

Your Norstar system can be divided into nine pickup groups. If you are a member of a pickup group, you can pick up a call that is ringing at any telephone in your pickup group.

1. Press [✆] [7] [5].

Group Pickup cannot be used to retrieve a camped call.

If there is more than one incoming call at a telephone in a pickup group, a call ringing on an external line is answered first, followed by calls on the prime line and, finally, calls on internal lines.

Tip - *A Hunt Group call ringing at a Norstar set DN that is also a member of a call pickup group can be picked up by any Norstar set in that call pickup group. For more information about Hunt Groups, see Programming Hunt Groups on page 169.*

Changing a telephone pickup group

Telephones can be put into and taken out of pickup groups.

You need the programming template found at the front of this guide. See *Getting started with Norstar* on page 13 for more information.

1. Press [Feature] [*] [*] [2] [6] [6] [3] [4] [4].
2. Press [2] [3] [6] [4] [6] (the default System Coordinator password).
3. Press [Show] and enter the internal number of the telephone you want to program.
4. Press [Show] twice.
5. Press [Next] five times.
6. Press CHANGE at Pickup Grp: to assign the telephone to pickup group (1-9) or remove it from a pickup group (None).

Displays

Already joined	You are already connected to the telephone that made the call you are trying to pick up. This can happen if you are on a call to a co-worker and your co-worker dials the number of a telephone in your pickup group, and you attempt to pick up that call.
Pickup denied	There is no call that you can pick up or the ringing call was answered. You have tried to pick up a call on someone else's private line.
Pickup:	Enter the internal number of the telephone that is ringing. (You may use an internal autodial button to do this.) If you decide not to answer a ringing call after activating Directed Pickup, press [Drop].

Trunk Answer

The Trunk Answer feature allows you to answer a ringing call anywhere in the system from any telephone in the system. The line you are answering does not have to appear or ring at the telephone you are using.

Trunk Answer works only with calls that are ringing on lines for which a Ringing Service schedule is active and if Trunk Answer is enabled by your installer or customer service representative.

Answering a call using Trunk Answer

Press [ ] 8 0 0 .

Tip - *If there is more than one incoming call on lines in a Ringing Service, the Trunk Answer feature picks up the external call that has been ringing the longest.*

Displays

`Line denied`	You have tried to pick up a call on someone else's private line.
`Pickup denied`	The call that is ringing is on a line that is not in a Ringing Service.

Answer DNs and Answer keys

You can use an Answer DN button to monitor calls on another telephone. The calls that come to the monitored telephone that provide an appearance on the Answer DN button are determined by the system-wide Anskey setting.

Answer DN buttons are useful for attendants who monitor incoming calls for one or several other people. For example, a secretary may have appearances for three different bosses on her answer buttons. Once a call for boss A is answered by the secretary, the appearance stops at that set. This allows for another (simultaneous) call to come in on the same line. The same is true for boss B and boss C. When incoming call traffic becomes high, the calls can then be routed to a Hunt Group to optimize call handling. For more information about Hunt Groups, see *Programming Hunt Groups* on page 169.

Answer DNs are assigned under `Terminals&Sets` under `Lines, Line Assgn`. This setting assigns the DN of another telephone to one of your telephone buttons.

Answer keys are assigned under `System prgrming, Featr settings`. This setting determines which calls will appear at the bottom. There are three levels: Basic, Enhanced, and Extended.

You need an Installer password to do this programming. See the *Modular ICS 6.1 Installer Guide* for more information.

- ISDN terminals cannot be assigned Answer DNs to monitor other telephones, but ISDN terminals can be monitored.
- You cannot make calls using Answer DNs.

If more than one call is ringing at a telephone, the first call appears on the attendant Answer DN button. Any subsequent calls appear on intercom buttons, if they are available.

Tip - *More than one attendant may have an Answer DN button for the same telephone. This allows two or more attendants to handle calls for a busy person.*

Each telephone can handle calls for up to eight other people using a separate Answer DN button for each person.

Creating a Conference Call

You can talk to two people at once.

1. Make sure you have two calls, one active and one on hold.
2. Press [✆] [3].
3. Press the appropriate button to retrieve the held call.

   This is automatic on the M7100 and T7100 telephones.

You can create a conference when you are on a call.

1. Make a second call.
2. Press [✆] [3].
3. Press the button where the first call is on hold to create a conference.

Only the person who established the conference can process the conference by using the procedures described in this section.

Tip - *You can create a conference by releasing privacy on a call. See Turning Privacy on or off for a call on page 74.*

Disconnecting one party

You can disconnect one party from a conference and continue talking to the other.

You can activate this feature on all Norstar and Business Series terminals except for M7100 or T7100 models.

1. Press the line button of the call that you want to disconnect. The call that you want to keep is automatically put on hold.
2. Press [ ]. The call is disconnected.
3. Press the line button of the held call to speak to the remaining person.

On a T7100 or on an M7100 set:

1. Press [ ] [#] [3], to place one caller on hold. Press [ ] again, to put the caller you want to keep on hold.
2. Press [ ]. The call is disconnected.
3. Press [ ] to speak to the remaining party.

Independently holding two calls

For all telephones except the M7100 and T7100 sets, you can put the two people in a conference call on hold independently so that they cannot talk to each other.

1. Press the line button of one person. The other person is automatically put on hold.
2. Press [ ]. The second person is put on hold.

You can re-establish the conference.

1. Take one call off hold.
2. Press [ ] [3].
3. Take the other call off hold.

Putting a conference on hold

You can put a conference on hold, allowing the other two people to continue speaking to each other by pressing [↩].

You can reconnect to the conference by pressing either of the held line buttons. For the M7100 telephone, press [↩].

Splitting a conference

You can talk with one person while the other person is on hold.

You can activate this feature on all Norstar and Business Series terminals except for M7100 or T7100 models.

1. Press the line button of the person you want to speak to. The other person is automatically put on hold.

On an M7100 or a T7100 set:

1. Press [✆] [#] [3]. The first party is on hold.
2. Press [↩], if necessary, to switch parties.

You can re-establish the conference.

1. Press [✆] [3].
2. Take the held call off hold. This is not necessary.

Removing yourself from a conference

You can remove yourself from a conference, and connect the other two callers through your Norstar system.

1. Enter the Transfer feature code [✆] [7] [0].

When you remove yourself from a conference using the Transfer feature, and both callers are from outside your system, one of the callers must have called you on a disconnect supervised line, or the call is be disconnected.

Displays

`3 parties only`	You are trying to add a fourth party to your conference call, or to join two conferences together. Release one call from the conference before adding another, or keep the two conferences separate.
`Conf. on hold`	You have put a conference call on hold.
`Conference busy`	You have tried to make a conference call, but your system is already handling its maximum number of conference calls.
`Line001 221` `TRANSFER`	You are on a conference with the two lines or telephones shown. You can drop out of the conference and leave the other two parties connected (Unsupervised Conference) by pressing TRANSFER or by entering the Transfer feature code.
`Press held line`	You have activated the Conference feature with one call active and another on hold. Press the line button for the call on hold to bring that person into the conference.

For other displays, see *Common feature displays* on page 257.

Listening to a call as a group

To allow people in your office to listen in on a call using Group Listening, press [✆] [8] [0] [2].

You hear the voice of the caller through the speaker of your telephone. Continue to speak to the caller through the telephone receiver. The microphone of your set is off, so the caller does not hear people in your office.

Canceling Group Listening

Group Listening is canceled automatically when you hang up or when you press [✆] [#] [8] [0] [2].

Tip - *Keep the receiver away from the speaker, or you may hear feedback. The higher the volume, the more the feedback. Press* [☎] *to prevent feedback when hanging up.*

Using handsfree/mute

The ability to use handsfree must be turned on or off for each telephone. The type of handsfree can be changed. Refer to *Changing handsfree for a telephone* on page 72.

Handsfree must be set to Std or Auto in system programming for a telephone to be able to use a headset. This programming is performed by someone with the Installer password.

If the telephone is set to Auto, the next incoming call defaults to the voice path used by the last call. For instance, if you answered your last call using the headset button, the next call will automatically default to the headset if you do not make any changes before answering the call. If you plug in a

headset, the telephone will automatically switch the voice path to headset. This will not change the mute status of the call. You can also change the voice path by choosing either the handsfree or headset key.

T7316E voice path features: The T7316E telephone must be set to Auto to allow activate the handsfree, which is located under the dial pad, beside the mute and headset keys.

Answering calls without lifting the receiver

1. Press the line button for the ringing call.
   This step is not necessary if you have a prime line assigned to your telephone.
2. Press the handsfree button. The internal microphone and speaker of the telephone automatically turn on.

Note: The T7316E telephone has a handsfree button located below the dialpad. This button only works if the telephone is wired to a system running version 6.1 or newer software, and Handsfree is set to Auto.

Handsfree is not available for M7100 or T7100 telephones.

Tip - *Direct your voice toward the telephone. The closer you are to the telephone, the easier it is for the microphone to transmit your voice clearly to your listener.*

Making calls without lifting the receiver

1. Press the handsfree/mute button. If you do not have a prime line assigned to your telephone, press a line button. The internal microphone and speaker of the set are automatically turned on.

Note: The T7316E telephone has a handsfree button located below the dialpad. This button only works if the telephone is wired to a system running version 6.1 or newer software, and Handsfree is set to Auto.

2. Dial your call.
3. Speak normally.

Muting the set

1. Press the handsfree/mute button to switch off the telephone microphone so that you can speak privately to someone in your office while you are on a handsfree call.
2. Press the button labeled handsfree/mute to turn the microphone back on again and continue your call.

Note: The T7316 and T7316E telephones have a mute button located below the dialpad. Refer to the T7316 and T716E user cards for specifics about using this button.

Changing a regular call to handsfree

1. Press the handsfree/mute button.

Note: The T7316E telephone has a handsfree button located below the dialpad. This button only works if the telephone is wired to a system running version 6.1 or newer software.

2. Hang up the receiver.

Changing a handsfree to a regular call

Lift the receiver.

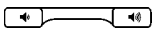
Using handsfree

On models with separate handsfree and mute buttons:

- The indicator next to the handsfree button is solid when you handsfree is active and off when the telephone is set to handset or headset.
- The indicator next to the Mute button blinks when you mute the microphoneand turns off when the microphone is open.

Note: Other models of telephones have only one button for both functions. In this case, when the telephone is on handsfree and the microphone is on, the light is solid. If the telephone is on handsfree and the microphone is off (mute), the light flashes.

Wait for your caller to finish speaking before you speak. The microphone and speaker cannot both be on at once. The voice of your caller may be cut off if you both speak at the same time. Noises such as a tapping pencil could be loud enough to turn on your microphone and cut off the incoming sounds.

To prevent a possible echo, keep the area around your telephone free of paper and other objects that might screen your microphone. Turning down the microphone volume — press the left end of  while speaking — prevents echoes. When you change the volume level, both the microphone and speaker volume are adjusted. This is needed in order to prevent feedback problems.

Place the telephone so that any unavoidable local noise, such as an air conditioner, is behind it. This limits the amount of disruptive background noise.

Tip - *In open-concept environments, use the receiver when handsfree communication is not necessary or when you need privacy during a call. Another option is to use a headset.*

Changing handsfree for a telephone

You can program the type of handsfree used with each telephone or activate handsfree answerback.

You need the programming template found at the front of this guide. See *Getting started with Norstar* on page 13 for more information.

1. Press [✆] [*] [*] [2] [6] [6] [3] [4] [4].
2. Press [2] [3] [6] [4] [6] (the default System Coordinator password).
3. Press [Show] and enter the internal number of the telephone you want to program.
4. Press [Show] twice.
5. Press [Next] three times.
6. Choose a setting at **Handsfree:** using the **CHANGE** button.

There are three ways to set handsfree for a telephone:

Handsfree:None **CHANGE**	Handsfree is not available to the telephone.
Handsfree:Std **CHANGE**	A standard version of handsfree described *Using handsfree/mute* on page 68. Not available for T7316E telephones.

Need Handsfree	This prompt appears if you attempt to use handsfree or headset and the telephone not been configured with Auto under Handsfree.
Handsfree:Auto CHANGE	You can make or answer a call without having to pick up the receiver or press the button marked handsfree/mute. The internal microphone of the telephone and the speaker turn on automatically when you press a line or intercom button to make or answer a call.

For other displays, see *Common feature displays* on page 257.

Both Auto and Standard handsfree allow you to use a headset with a Norstar telephone or a Business Series Terminal.

A handsfree/mute button is automatically assigned to a Norstar telephone that is programmed with handsfree and is always located in the lower right-hand corner of the numeric dialpad.

For T7208 and T7316 telephones, this button is a handsfree-only button. The mute button is located under the dial pad.

The handsfree setting for T7316E only displays Auto or None. The handsfree button on this telephone is located under the dialpad. If Handsfree is set to None, the handsfree button does not function. Also, if the T7316E is attached to a system with software older than version 6.1, it acts like the T7316 telephone, and the handsfree button is not active.

Handsfree Answerback

Handsfree Answerback allows you to answer a voice call without lifting the receiver.

This feature is always turned off for M7100 or T7100 telephones.

You can turn handsfree answerback on or off for a telephone that is programmed to use handsfree.

You need the programming template found at the front of this guide. See *Getting started with Norstar* on page 13 for more information.

1. Press [✆] [*] [*] [2] [6] [6] [3] [4] [4].
2. Press [2] [3] [6] [4] [6] (the default System Coordinator password).
3. Press [Show] and enter the internal number of the telephone you want to program.
4. Press [Show] twice.
5. Press [Next] four times.
6. Choose a setting (Yes or No) at `HF answerback:` using the CHANGE button.

Turning Privacy on or off for a call

[✆] [8] [3]

Lines in your system can be configured to have automatic privacy. If a line is not programmed with privacy, anyone with the line assigned to their telephone can join your call by pressing the line button. If a line is programmed with privacy, only one person at a time can use the line.

Privacy control cannot be used on internal or conference calls.

When another telephone joins a call, the participants on the call hear a tone, and a message appears on the Norstar display. You cannot join a call without this tone being heard.

Creating a conference by releasing privacy

If a line is programmed with privacy, you can turn privacy off to allow another person with the same line to join in your conversation and form a conference. All the rules applicable to a conference apply except there is only one line in use, instead of the usual two. This means that you cannot split a conference set up using Privacy.

1. Press [Feature] [8] [3].
2. Tell the other person to press the line button and join your conversation.

Only two Norstar or Business Series Terminal telephones, in addition to the external caller, can take part in this kind of conference.

Making a call private

[Feature] [8] [3]

If a line is programmed not to have privacy, you can turn privacy on for a call, preventing other people with the same line from joining your conversation.

Checking call length using Call Duration Timer

[Feature] [7] [7]

With this feature you can see how long you spent on your last call, or how long you have been on your present call.

Displays

`221 02:47`	The display shows the last call you made, or the current call, and the total elapsed time.

`Line001 01:45`	You parked your last call. The display shows the period the call was parked. This display only shows when the call is active at, or has just been released by, your telephone.

Disconnecting by accident

If you accidentally drop the receiver back into the telephone cradle while answering a call, you can quickly retrieve the call.

Pick up the receiver again or press the button labeled handsfree/mute within one second to be reconnected to your call.

Time

[ ] 8 0 3

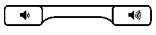
Use this feature to display the current date and time while you are on a call.

Making calls

There are many ways to make a call, depending on the programming and the type of call, as follows:

- Pick up the receiver and dial. The Norstar system supports three methods of dialing. See *Changing how you dial your calls* on page 82.
- Pick up the receiver, press a line button, and dial (if the call is not on your prime line).
- Press the button labeled handsfree/mute and dial to talk without using the receiver. See *Using handsfree/mute* on page 68.
- Press the button labeled handsfree/mute, then press a line button, and dial to talk without the receiver if the call is not on your prime line.
- Press a line button and dial to talk without the receiver if Automatic handsfree is assigned to your telephone.
- Use one of the features that make dialing easier. See *Time savers for making calls* on page 87.

Displays

221 busy PRIORITY LATER	The telephone you have called has no internal lines available. Press LATER to use the Ring Again or Message features or press PRIORITY to make a priority call.
9_ QUIT BKSP	You are dialing using Pre-dial. To erase an incorrect digit, press the left end of  or BKSP. When the number is complete, select a line or lift the receiver.
95551234 TRANSFER	This prompt remains on your display as long as you are on a call you have dialed. To transfer the call, press TRANSFER.

Already joined	Your telephone is already connected to the telephone you are trying to call. Check your active line buttons, and return to that call.
Calling 221 PRIORITY LATER	Wait for the telephone to be answered. If no one answers, press LATER to use the Ring Again (page 85) or Message (page 128) feature, or press PRIORITY to make a priority call.
Can't ring again	You cannot use Ring Again on your current call. You can only use Ring Again while you have a busy signal on an internal call or line pool request or while an internal call is ringing.
Do not disturb PRIORITY LATER	The telephone you are calling has Do Not Disturb turned on. Press LATER to use the Ring Again or Messages features, or press PRIORITY to make a priority call.
Expensive route	You have dialed a number, but the least expensive route that the system is programmed to use is busy. Unless you release the call, it goes through on a more expensive route.
Hidden number	The last number you dialed or the number you saved for Saved Number Redial was a speed dial number that displayed a name rather than the number. The number is dialed correctly, but you cannot see it.
Line denied	You have attempted to use the private line assigned to another user.
Line001 TRANSFER	Enter the digits of the number you want to dial.
No last number	You have not dialed an external telephone number since the last power interruption or system reset.
No line selected	Either you have no prime line or your prime line is busy. Select a line manually before dialing.
Not in service	You have entered the number of a telephone that is not in service.

On another call LATER	The telephone you have called is on another call. Press LATER to use the Ring Again or Message features.
Restricted call	The call you are trying to make has been restricted in programming. A possible reason is time-of-day restrictions on certain calls.
Ring Again? YES NO EXIT	Press YES to use Ring Again. Press NO to send a message. See *Sending messages* on page 128 and *Turning on Ring Again* on page 86.
Select a line	Either you have no prime line, or the prime line is in use, or the line programmed for an autodial number, speed dial number, or Hotline is in use. Select a line and dial again.
Send message? YES NO	Press YES to send a message. See Messages.

For other displays, see *Common feature displays* on page 257.

Choosing a line using a line button

You have one line button for each line assigned to your telephone. Press the line button to select the line you want to answer or use to make a call. Having several line buttons allows you immediate access to more than one line.

The M7100 and T7100 telephones each have two intercom paths which are used instead of line buttons to answer and make calls. Each set can be assigned two lines. You can press [↩] to switch between two calls, one active and one on hold.

Line pools

A line pool is a group of external lines that can be shared by many telephones. You can use a line in a line pool to make an external call.

The MICS system can have 15 non-PRI line pools and a maximum of four PRI line pools, depending on the hardware and profile configuration for your system. A telephone can be programmed to access any number of line pools. You can have several different line pools for your system, each one giving you access to a different set of external lines. It is one way of sharing lines across telephones in a system.

A line pool access code is a number you dial to get a non-PRI line pool. The access code can be up to four digits long. Your installer or customer service representative programs the line pool access codes and gives each telephone access to a line pool.

PRI line pools are accessed using destination codes. Destination codes differ from line pool codes, in that PRI line pools are assigned to specific routes that are then assigned a destination code. Destination codes can also be assigned to schedules, so that different pools are used at different times of the day.

Everyone in the office should have a list of the line pool access codes and destination codes for the line pools their telephones can use.

Using a line pool to make a call

Use this process to make a line pool call:

1. Press [ ] [6] [4].
2. Enter a line pool access code or destination code.

If you have a free internal line, you can make a call using a line pool without entering the feature code first.

1. Select an internal line (intercom).
2. Dial the line pool access code or destination code.

Tip - *If no lines are available in the line pool, you can use Ring Again at the busy tone. You are notified when a line in the line pool becomes available. See Using Ring Again on page 85.*

Programming a memory button with a line pool

When you program a button with the line pool feature code, you must enter a line pool access code or destination code after the feature code. The programmed line pool button accesses a specific line pool, not the line pool feature. See *Programming feature buttons* on page 147 for more information.

If you program a button with an indicator to access a line pool, when all the lines in a line pool are busy, the indicator for the line pool button turns on. The indicator turns off when a line becomes available.

Making calls from an ISDN terminal

ISDN terminals do not have line keys or intercom keys as do Norstar telephones. To make an outgoing call from an ISDN terminal, access an external line by entering a line pool code or by using the ARS feature.

Changing how you dial your calls

To change how how you dial your calls, use this feature:

1. Press [Feature] [*] [8] [2].
2. Press [#] or NEXT until the dialing mode you want appears.
3. Press [Handsfree] or OK to select the displayed dialing mode.

The dialing modes feature code cannot be programmed onto a memory button.

Using Standard dial

Standard dial allows you to make a call by selecting a line and dialing the number. If you have a prime line, it is selected automatically when you lift the receiver or press the handsfree button.

You cannot use Standard dial on an M7100 or a T7100 telephone unless you pick up the receiver first. If you have this type of telephone, use the Automatic dial or Pre-dial feature for on-hook dialing.

Using Automatic dial

Automatic dial allows you to dial a number without selecting a line. Your prime line is selected as soon as you start dialing a number.

Automatic dial does not work if your telephone has no prime line or if your prime line is in use.

Telephones connected to an analog terminal adapter (ATA) cannot use Automatic dial.

Using Pre-dial

Pre-dial allows you to enter a telephone number, check it, then change it before actually making the call. The call is not dialed until you select a line or line pool, or pick up the receiver. You can pre-dial both external and internal numbers. You must, however, select the correct type of line (external or internal) for the type of number you entered.

Tip - *If your telephone starts ringing while you are pre-dialing a number, you can stop the ringing by turning on Do Not Disturb ([ ] [8] [5]). This does not affect numbers you are entering.*

You cannot pre-dial a telephone number if all the lines on your telephone are busy.

When the internal number you called is busy

There are a couple of methods you can use if the telephone you are calling is currently busy.

Priority Call

If you get a busy signal or a Do Not Disturb message when you call someone in the office, you can interrupt them. Use this feature for urgent calls only.

Tip - *Priority calls cannot be made to Hunt Group DNs. For more information about Hunt Groups, see Programming Hunt Groups on page 169.*

Making a priority call

1. Press [Transfer] [6] [9].
2. Wait for a connection, then speak.

A person who receives a priority call while on another call has eight seconds to accept or block the call. For information about blocking calls, see *Stopping calls from ringing at your telephone: Do Not Disturb (DND)* on page 200. If the person does nothing, the priority call feature puts their active call, including conference parties, on Exclusive Hold and connects your call.

Giving a telephone the ability to make priority calls

You need the programming template found at the front of this guide. See *Getting started with Norstar* on page 13 for more information.

1. Press [Transfer] [*] [*] [2] [6] [6] [3] [4] [4].
2. Press [2] [3] [6] [4] [6] (the default System Coordinator password).
3. Press [Show] and enter the internal number of the telephone you want to program.
4. Press [Show] twice.
5. Press [Next] nine times. The display shows `Priority call:`.

6. Press CHANGE to choose Y (Yes) or N (No)

Displays

Call blocked	You tried to place a priority call to another Norstar telephone. The person you called has blocked your call. Try to call later.
Please wait	The party you are calling has eight seconds to decide whether to accept or reject your priority call.
Priority denied	The telephone you are calling has already received a priority call or is unable to receive priority calls.

You can make a priority call only while your telephone displays:

221 busy PRIORITY LATER	The set you are trying to call has call on all assigned lines.
Calling 221 PRIORITY LATER	
Do not disturb PRIORITY LATER	The set you are trying to call has the Do Not Disturb feature activated.
On another call PRIORITY LATER	The set you are trying to call is busy because the person is on another line.

Using Ring Again

Use Ring Again when you call someone on your Norstar system and their telephone is busy or there is no answer. Ring Again can tell you when they hang up or next use their telephone. You can use Ring Again to tell you when a busy line pool becomes available.

Tip - *The Ring Again feature cannot be used when calling a Hunt Group DN. For more information about Hunt Groups, see Programming Hunt Groups on page 169*

Turning on Ring Again

1. Press [↩] [2] before you hang up.

Using Ring Again cancels any previous Ring Again requests at your telephone.

Canceling Ring Again

1. Press [↩] [#] [2] to cancel a Ring Again request.

Displays

Can't ring again	You cannot use Ring Again on your current call. You can only use Ring Again while you have a busy signal on an internal call or line pool request, or while an internal call is ringing.
Ring Again? YES NO EXIT	Press YES to use Ring Again. Press NO if you prefer to send a message.

Time savers for making calls

Storing a number on a memory button for Autodial

You can program memory buttons for one-touch dialing of internal or external telephone numbers.

Buttons used for lines, answer DNs, or handsfree/mute cannot be used as autodial buttons.

If the power to your Norstar system is off for more than three days, autodial numbers, and some other system programming, may be lost from the memory.

Adding an autodial button

Use these features to program external and internal numbers.

1. Press [Feature] [*] [1] to program an external number.

   Press [Feature] [*] [2] to program an internal number.

2. Choose a button and then enter the number as if you were dialing it.

When programming Autodial you can use:

- Last Number Redial
- Saved Number Redial
- destination codes — use the Intercom line as the line
- host system signaling

Choosing a line for Autodial

To include a line selection for an external number, press the line or intercom button before you enter the number. To select a line pool, press a programmed line pool button, or press the button labeled Intercom and enter a line pool access code.

If you select a line before pressing the autodial button, the call goes out on the line you have selected instead of the line that is part of the autodialer programming.

For the M7100 and T7100 telephones, an external autodialer can be programmed only by using a line and not a line pool.

Tip - *If you do not include a line selection in an autodial number, the call uses your prime line (if you have one).*

Using intercom as the line for Autodial

If you press the Intercom button as the line for an external autodial number, you must include a valid line pool access code or a destination code. If line pool access codes or destination codes are changed, remember to reprogram autodial numbers.

Displays

987_ QUIT BKSP OK	Continue to enter digits until the number is complete. Press [ ] or BKSP to erase an incorrect digit. Press [ ] or OK when you are finished.
Autodial full	The memory allotted to autodial numbers in your Norstar system is full.

`Button erased`	While programming external Autodial, you erased the button by pressing ⌣ or OK before entering any digits.
`Enter digits` `QUIT OK`	Enter the number you want to program. Choose the line first, if necessary, then enter the number exactly as if you were making a call.
`Intercom #: _` `QUIT`	Enter the internal telephone number you want to program.
`Invalid number`	You are programming an internal autodial button and have entered a number that is not an internal number on your system. Enter a valid internal number. If the number you are entering is a destination code, use external autodial.
`Press a button` `QUIT`	Press the memory button you want to program.
`Program and HOLD`	Enter the number you want to program onto the button, then press ⌣.
`Program and OK` `QUIT OK`	Enter the number you want to program onto the button, then press ⌣ or OK. You may include a line or line pool selection in an autodial sequence by selecting the line before entering any digits.
`Programmed`	The number is stored on the button.

For other displays, see *Common feature displays* on page 257.

Using Last Number Redial

Press [✆] [5] to redial the last external number you dialed.

Last Number Redial records a maximum of 24 digits.

Tip - *If you have a programmed Last Number Redial button, you can use Button Inquiry ([✆] [*] [0]), then press the Last Number Redial button followed by [#]) to check the last number before you dial it.*

Preventing a telephone from using Last Number Redial

Last Number Redial can be restricted at individual telephones.

You need the programming template found at the front of this guide. See *A map for using programming* on page 23 for more information.

1. Press [✆] [*] [*] [2] [6] [6] [3] [4] [4].
2. Press [2] [3] [6] [4] [6] (the default System Coordinator password).
3. Press [Show] and enter the internal number of the telephone you want to program.
4. Press [Show].
5. Press [Next] three times. The display shows `Restrictions`.
6. Press [Show] twice.
7. Press [Next]. The display shows `Allow last no:`.
8. Press CHANGE to choose `Y` (Yes) or `N` (No).

Displays

`Hidden number`	The last number you dialed was a speed dial number that displayed a name rather than the number. The number is dialed correctly, but you cannot see it.
`No last number`	You have not dialed an external telephone number since the last power interruption or system reset.

Tip - *You can copy a number onto an autodial button using Last Number Redial.*

Using Speed Dial

Norstar provides two types of speed dialing: system and personal.

- **System Speed Dial** programming allows you to assign a maximum of 255 three-digit speed dial codes (001-255) to the external numbers your co-workers call most frequently.
- **User Speed Dial** programming allows individuals to program a maximum of 24 speed dial numbers that are personal to their telephone. These numbers also have three-digit codes (256-279)

Speed dial numbers are subject to the same restriction filters as regularly dialed numbers. Your installer or customer service representative can program system speed dial numbers to bypass dialing restrictions.

Speed dial numbers may include host system signaling codes.

Making a speed dial call

Tip - *There is no difference between using User Speed Dial and using System Speed Dial. They differ only in how you program them.*

1. Press [ ] [0] to quickly dial external telephone numbers that have been programmed onto speed dial codes.
2. Enter the appropriate three-digit speed dial code.

Changing and adding System Speed Dials

The system coordinator assigns numbers to System Speed Dial codes for the entire system. See *Adding or changing a system speed dial* on page 31.

Adding or changing User Speed Dial

To add or change a User Speed Dial number on your telephone:

1. Press [ ] [*] [4].
2. Enter a three-digit code from 256 to 279 that you want to associate with a telephone number.
3. To include a line selection for this number, press the line or intercom button. To select a line pool, press a programmed line pool button, or press the Intercom button and enter a line pool access code.
   For the M7100 and T7100 sets, you can select only a line pool.
4. Enter the number you want to program.
5. Press [ ] or OK.

Displays

01:9_ CANCL BKSP OK	Continue entering the number you want to program. You can change the number by pressing BKSP or ◄►. When you are finished, press ⌣ or OK.
Enter digits QUIT OK	Enter the telephone number you want to program exactly as if you were dialing it normally. When you are finished, press ⌣ or OK.
Invalid code	You have entered a code outside the code range (001-255 for system, 256-279 for user codes).
No number stored	There is no number stored on the speed dial code you have dialed.
Program and HOLD	If you want to program a line or line pool selection for this speed dial number, select the line or line pool. Otherwise, enter the telephone number exactly as if you were dialing it normally. When you are finished, press ⌣.
Program and OK QUIT OK	If you want to program a line or line pool selection for this speed dial number, select the line or line pool. Otherwise, enter the telephone number you want to program exactly as if you were dialing it normally. When you are finished, press OK.
Select a line	There is no line associated with the speed dial number you are trying to use. Select a free external line or line pool and enter the speed dial feature code again.
Unknown number	The system cannot dial the number stored. Reprogram the number.

For other displays, see *Common feature displays* on page 257.

Using Saved Number Redial

[✆] [6] [7]

You can use this feature while you are on an external call that you dialed to save the number so that you can call it again later.

Each telephone can save one number at a time with Saved Number Redial, not one number for each line.

Tip - *You can copy a number onto an autodial button using Saved Number Redial.*

Saved Number Redial records a maximum of 24 digits.

Dialing a saved number

Press [✆] [6] [7] when you are not on a call.

If you have a programmed Saved Number Redial button, you can use Button Inquiry ([✆] [*] [0]) to check the last number before you dial it.

Blocking Saved Number Redial

Saved Number Redial can be restricted at individual telephones.

You need the programming template found at the front of this guide. See *A map for using programming* on page 23 for more information.

1. Press [✆] [*] [*] [2] [6] [6] [3] [4] [4].
2. Press [2] [3] [6] [4] [6] (the default System Coordinator password).
3. Press [Show] and enter the internal number of the telephone you want to program.
4. Press [Show].
5. Press [Next] three times. The display shows `Restrictions`.
6. Press [Show] twice.
7. Press [Next] twice. The display shows `Allow saved no:`.
8. Press CHANGE to choose `Y` (Yes) or `N` (No).

Displays

`Hidden number`	You have saved a speed dial number that displays a name rather than the number. The number is dialed correctly, but you cannot see it.
`No number saved`	You have tried to save the number of an incoming call. You can only save numbers that you have dialed yourself.

Handling many calls at once

Using Hold

You can temporarily suspend a call by pressing [ ].

When a call is on hold, its indicator flashes on all telephones that have access to the line. The call can be retrieved from any of these telephones.

On the M7100 and T7100 sets, [ ] alternates between two lines. One line is active, the other is on hold. These sets cannot retrieve a call placed on hold by another telephone.

Tip - *Answered Hunt Group calls can be placed on hold at the answering telephone. For more information about Hunt Groups, see Programming Hunt Groups on page 169.*

Retrieving a held call

You can connect to a call on hold by pressing the flashing line button of the held call.

Holding automatically

If your line has been programmed with full autohold, you can switch from one call to another and have your calls put on hold automatically.

Press the line button of the caller to whom you want to speak. Your current caller is put on hold automatically.

Listening on hold

If you have been put on hold, you can hang up the receiver while you wait for the other person to return.

1. Press [↩].
2. Hang up the receiver.
3. Press the line button of the call. You may hear indications from the far end that you are on hold, for example, tones or music.
4. When the person you were talking to returns, you hear them through your telephone speaker. Lift the receiver and talk.

Tip - *If Automatic handsfree has been assigned to your telephone, you can use the handsfree/mute feature instead of Listen on Hold.*

Holding a call exclusively

You can put a call on Exclusive Hold so that it can be retrieved only at your telephone.

Press [✆] [7] [9] or [✆] [↩]. The line appears busy on all other telephones, and the call cannot be picked up by anyone else in the office.

Displays

On hold: LINENAM	You have placed one or more calls on hold. The name of the line that has been held the longest is displayed.

Using Call Queuing

[ ] 8 0 1

If you have more than one call ringing at your telephone, use this feature code to choose the call that has the highest priority.

Call Queuing answers incoming external calls before callback, camped, and transferred calls.

Transferring calls

Using the transfer feature

Transfer allows you to direct a call to a telephone in your Norstar system, within the network, or external to the network.

Transferring a call

1. Press [Transfer] [7] [0].
2. Call the person to whom you want to transfer the call.
3. If you want to talk to the person to whom you are transferring the call, wait for them to answer, then speak to them before proceeding.
4. When you are ready to complete the transfer, press [Transfer] or JOIN.

You cannot use Last Number Redial, Saved Number Redial, a speed dial code, Priority Call or Ring Again to dial the number for a transfer.

Depending on how a private network call is routed, it may not always be possible for the system to return a transferred call to you if the transferred call is not answered. When transferring a call to a private network destination, stay on the line until the person to whom you are transferring the call answers.

You cannot use the Line Pool feature code to access a line pool for a transfer. To use a line pool, use a programmed line pool button, or press the key labelled Intercom and enter a line pool access code or a destination code.

If you have an auxiliary ringer programmed to ring for calls on an external line, and you transfer a call on that line without announcing the transfer, the auxiliary ringer rings for the transferred call.

Transferring external calls

If an external call is transferred to a busy telephone, or not answered after a few rings, the call automatically rings again at the telephone from which it was transferred, and the display indicates that the telephone was busy or that no one answered.

When transferring an external call to an external number, the external call you are trying to transfer must be an incoming call on a disconnect supervised line.

While on a conference call, you can remove yourself from the conference and connect the other two callers using the Transfer feature. However, if both of the other people are from outside the system, at least one of the outside callers must have called you and both of the outside calls must be on disconnect supervision lines.

Note: Transfer via Hold on DID lines is not supported. Once a call is answered, the line appearances on all other sets are free immediately to take other calls. This allows a greater number of calls to be received. Use the Call Park feature to transfer a call.

In certain situations, you may experience lower volume levels when transferring an external call to an external person, or when transferring two external callers from a conference call.

Canceling a transfer

You can reconnect to the person you are trying to transfer at any time before the transfer is complete.

1. Press [transfer] [#] [7] [0] or CANCL.
2. If you are not reconnected to your original call, press [transfer] and then press the line key of the original call, which is now on hold.

Displays

221>222 CANCL RETRY JOIN	You are talking to the person you want to transfer the call to. Press RETRY if you decide to transfer the call to someone else. Press [transfer] or JOIN to transfer the call.
221 no reply CALLBACK	The person to whom you tried to transfer a call did not answer. Press CALLBACK or the flashing line button to reconnect to the call. On the 7100 telephones, lift the receiver.
Do not disturb CANCL RETRY JOIN	The person to whom you tried to transfer a call has Do Not Disturb active on their telephone. Press JOIN to transfer the call anyway. Press RETRY to transfer the call to someone else. Press CANCL or the flashing line button to reconnect to the call (on M7100 or T7100 telephones, press [transfer] [#] [7] [0]).
Invalid number CANCL RETRY	You entered an invalid internal number. Press RETRY and enter the number again.
Line001 hung up	The external caller you were transferring hung up before the transfer was complete.
Line001>221 CANCL RETRY JOIN	Press JOIN to transfer the call on line 001 to telephone 221. Press RETRY if, after talking to the person at extension 221, you decide to transfer the call to someone else.
Not in service CANCL RETRY	The telephone to which you are trying to transfer a call is out of service.
Restricted call CANCL RETRY	You cannot transfer the call because of telephone or line restrictions.

`Still in trnsfer` `CANCL  RETRY`	Complete the transfer in progress before you access a new feature, answer another alerting call, or select an outgoing line.
`Transfer denied` `CANCL  RETRY`	Your transfer cannot be completed for one of these reasons: • All the resources needed to perform a transfer are in use. Try again later. • You have tried to transfer an external call to another external party. Some restrictions apply. • You cannot transfer a conference call.
`Transfer to:2_` `CANCL  RETRY`	Press RETRY if you entered the wrong internal number or if the person to whom you are transferring the call is unavailable.

For other displays, see *Common feature displays* on page 257.

Using Camp-on

You can transfer an external call to another telephone within the system, even if all of its lines are busy.

1. Press [↻] [8] [2].
2. Dial the number of the telephone you want to camp the call to.

Camped calls appear on a line button on the receiving telephone, if one is available. If there is no line button available, you receive a message on the display and hear Camp tones.

Each set can handle only one camped call at a time.

Displays

221 Camp max CALLBACK	You tried to camp a call to a telephone that already has a camped call. The call has come back to you. Press the CALLBACK button or the line button to reconnect to the call. On M7100 or T7100 telephones, just pick up the receiver.
221 DND CALLBACK	The person to whom you redirected a call has Do Not Disturb active on the telephone. The call has come back to you. Press the CALLBACK button or the line button to reconnect to the call. On M7100 and T7100 telephones, just pick up the receiver.
Camp denied	You have tried to camp an internal call. You can only camp external calls.
Camp to: CANCL	Dial the number of the internal telephone to which the call is sent.
Camped: 221 CALLBACK	The telephone to which you camped a call did not answer the call. The call has come back to you. Press CALLBACK or the line button to reconnect to the call. On M7100 or T7100 telephones, just pick up the receiver.
Line001 hung up	A call you camped has come back to you, but the caller hung up before you could reconnect.
Not in service CALLBACK	The telephone to which you have camped a call is out of service or is being used for programming. The call has come back to you. Press CALLBACK or the line button to reconnect to the call. On M7100 or T7100 telephones, just pick up the receiver.
Release a call	The line that the camped call is on is in use or that line does not appear at your telephone. Release the line or release an internal line.

For other displays, see *Common feature displays* on page 257.

Parking a call

You can suspend a call so that it can be retrieved from any telephone in your system.

1. Press [feature] 7 4.
2. Use the Page feature ([feature] 6 0) or press PAGE to announce the retrieval code displayed by your telephone.

Retrieving a parked call

1. Select an internal line.

   On M7100 or T7100 telephones, pick up the receiver.

2. Dial the Call Park retrieval code.

Using Call Park

When you park a call, the system assigns one of 25 codes for the retrieval of the call. These codes consist of the Call Park prefix, which may be any digit from 1 to 9, and a two-digit call number between 01 and 25. For example, if the Call Park prefix is 1, the first parked call is assigned Call Park retrieval code 101. The call park prefix is assigned during system programming. Check your *Modular ICS Programming Record* if you are unsure about what range your system uses.

The Norstar system assigns Call Park codes in sequence, from the lowest to the highest, until all the codes are used. This round-robin approach means that a greater variety of codes are used, which makes it easier for a call to reach the right person when more than one incoming call is parked.

The highest call number, which is made up of the Call Park prefix followed by 25, is used only by T7100/M7100 telephones, analog telephones, or devices connected to the

system using an analog terminal adapter (ATA) or an Analog Station Module (ASM). Analog telephones or devices cannot use the other Call Park codes.

Your installer or customer service representative programs both the Call Park prefix and the delay before parked calls are returned to the originating telephone. External calls parked for longer than the programmed delay are returned to your telephone.

Tip - *Answered Hunt Group calls are parked in the same manner as other calls. For more information about Hunt Groups, see Programming Hunt Groups on page 169.*

Call Park can be disabled by your installer or customer service representative.

Displays

`Already parked`	The person you were talking to has already parked your call. You cannot park the same call.
`No call to park`	You have attempted to use Call Park with no active call on your telephone. If the call you want to park is on hold, reconnect to it before you park it.
`Invalid number`	You have entered an invalid retrieval code.
`No call on: 101`	There was no call on the retrieval code you entered.
`Park denied`	You have tried to park a conference call. Split the conference and park the calls separately. The person who retrieves the calls can reconnect the conference.
`Parked on: 402` `PAGE EXIT`	Record the code shown. Use Page (6 0) or press PAGE to announce the call and its retrieval code.

`Parking full`	All available retrieval codes are in use. Transfer the call or take a message instead.

For other displays, see *Common feature displays* on page 257.

Using system-wide call appearance (SWCA)

This feature allows a call to maintain an appearance on the System Wide Call Appearance (SWCA) buttons to a group of users for the life of the call. SWCA codes can be assigned to up to 16 program buttons with indicators on each telephone in a group.

See *Programming a feature code onto a memory button* on page 147 for general information about setting or changing key programming for a telephone. SWCA keys can be assigned to memory keys using [ ] [*] [3] to assign the SWCA feature codes: [ ] [*] [5] [2] [0] to [ ] [*] [5] [3] [5].

Refer to the *Module ICS 6.1 Installer Guide* for information about programming buttons through the programming interface.

TIPs - *Telephones without assigned SWCA keys can still retrieve a SWCA call by entering the feature code that was used to park the call, providing that they have a free intercom key with which to accept the call. However, there is no indication on these telephones to show which codes were used to park which call. This information can be communicated by the person who parked the call by using a voice call or by using the Page feature to provide a verbal alert.*

A call can also be parked on the system by entering a SWCA code, if there are no assigned SWCA user keys on the telephone.

Tips - *Since SWCA keys use the park feature, check with your system administrator to ensure that park is turned on for your system.*

A SWCA call on park that exceeds the park timeout timer is released from the SWCA button and rings again at the original telephone.

Each group telephone must either have a line appearance of the call coming in, or a free intercom button to be able to retrieve a SWCA call. The number of SWCA keys that can be assigned will depend on available buttons on the telephone. T7316, T7316E, T7316E+KIM, and T7324 telephones provide the broadest use of this feature since they have the most memory keys with indicators. Companion, M7000/T7000 and M7100N/T7100 telephones do not have line or intercom buttons, therefore, they cannot be assigned SWCA lines.

Incoming calls

When you answer an external call, the system can react in one of two ways, depending on what settings were specified in system programming:

- the call may be transferred automatically to a free SWCA key when you answer the call. To park the call, and free your line, press the SWCA key or press ⌣. The call becomes available to any other telephone that has that SWCA key.

  OR

- you may need to press a free SWCA button to transfer the call manually to a SWCA key. In this case, when you transfer the call, the call parks on the line, and the line the call came in on is released.

When you put a call on hold, the system can react in one of two ways if you have SWCA keys defined:

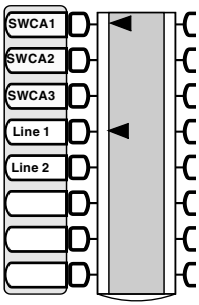
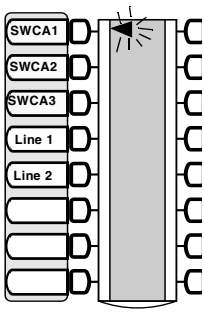
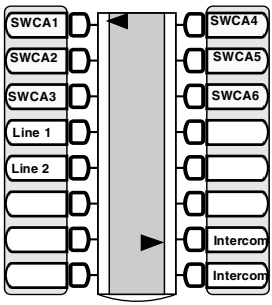
- when you put the call on Hold, the call transfers to a free SWCA key and all the other extensions with corresponding SWCA keys display a flashing indicator beside the button. The call can be picked up at any other extension. If the call automatically transferred to a SWCA key when it was answered, then this option puts the call on hold at the same key.

  OR

- when you put the call on Hold, it stays on hold on the line that it came in on. To make the call available to other extensions, press a free SWCA key to transfer the line.

Calls with appearances on SWCA keys show a solid indicator when the call is active. On the extension where the call is active, an Intercom or Line button also becomes active.

SWCA indicators, call status states (auto assign)

Call is answered and automatically assigns to a SWCA key.	Call is put on Hold. The SWCA indicator flashes at all extensions. The indicator beside the line key disappears, freeing up the line	Call is retrieved. An indicator appears beside the Intercom button. The SWCA indicator becomes solid on all extensions, indicating that the call is active.
		

Outgoing calls

When you make an outgoing call using the intercom key on your telephone, the call is automatically transferred to the first available SWCA key. Solid indicators appear beside the intercom button and the SWCA key on your telephone. All other telephones in the group also see a solid indicator beside the SWCA key, indicating that the line for that key is in use. If you put the call on hold (or press the SWCA key), the SWCA key indicator fast-flashes on your telephone, and slow-flashes on the other telephones in the group. The call can then be picked up by any other telephone in the group.

No free call keys

If all the SWCA keys are currently occupied when a new call comes in, you can still put the call on Hold.

- If a SWCA key has been freed up between the time you answered the call, and when you want to put the call on Hold, the call will transfer to the free SWCA key, or you can manually transfer it to a free SWCA key. The call will act as described in *Incoming calls* on page 109.
- If all SWCA keys are still occupied when you put the new call on Hold, the call will be held at your telephone on the line it came in on. When a SWCA key becomes free, you can take the call off hold and press the free SWCA key so the call has a group-wide appearance.

These principles also apply to outgoing calls.

Using Callback

When you direct a call you have answered to another telephone, the system monitors the call to make sure it is answered. If no one answers the call within a set length of time, the system directs it back to you.

Callback generates a variety of displays. Most occur after a set delay and are listed in the index. Some occur immediately if the telephone to which you are directing a call is out of service or otherwise unavailable. These are listed with the descriptions of the specific features such as Transfer or Camp-on.

Forwarding your calls

Forwarding your calls to another Norstar telephone

Use this feature to forward your calls within your system or network.

1. Press [✆] [4].
2. Enter the number of the internal telephone to which you want your calls forwarded.

Use Line Redirection to forward calls outside the system. Line redirection takes precedence over Call Forward.

TIP - *T7316E telephones display this call forwarding icon when a call has been forwarded:*

Canceling Call Forward

1. Press [✆] [#] [4].

Using Call Forward at your telephone

When you use [✆] [4], all calls go to the destination you select, regardless of how Forward on busy and Forward no answer are programmed.

Tip - *If your telephone is a member of a Hunt Group, the Call Forward all calls setting is overridden by the Hunt Group routing for Hunt Group calls. For more information about Hunt Groups, see Programming Hunt Groups on page 169.*

If the telephone to which you forwarded your calls does not have the same external lines as your telephone, the forwarded calls appear on intercom buttons.

If a call is forwarded, it does not ring but the line indicator flashes on your telephone. You can answer the call by pressing the button next to the flashing indicator.

Tip - *Beware of creating call-forward loops*

If you are one of a group of people who regularly forward their calls to one another, be aware that it is possible to set up forward loops where a call is forwarded from one telephone to another in a circle, and is never answered anywhere.

Overriding Call Forward

If you call someone who has their calls forwarded to you, your call rings at that telephone even though they are forwarding their calls to you.

Changing the automatic Call Forward settings for a telephone

Call forwarding occurs automatically when a call is not answered or the line is busy. These automatic options are changed in programming.

For step-by-step instructions, see *Change where a call goes when there is no answer* on page 37.

Changing Forward no answer

Forward no answer redirects unanswered calls to another telephone on your Norstar system.

Tip - *If the set is a member of a Hunt Group, the Call Forward no answer feature is overridden and the Hunt Group call continues to ring until the hunt time has expired. For more information about Hunt Groups, see Programming Hunt Groups on page 169.*

Line Redirection takes precedence over Forward no answer.

For instructions for changing Forward no answer refer to *Change where a call goes when there is no answer* on page 37.

Changing the delay before a call is forwarded

You can assign the number of times that the incoming call rings at your telephone before the call is forwarded. To estimate the delay time in seconds, multiply the number of rings by six.

For step-by-step instructions, see *Change the number of times the telephone rings before it is forwarded* on page 38.

Forward on busy

Forward on busy redirects your calls to another telephone on your Norstar system when you are busy on a call, or when you have Do Not Disturb activated at your telephone. For step-by-step instructions, see *Making changes to Call Forward No Answer* on page 37.

Line Redirection takes precedence over Forward on busy. Calls that are redirected by Line Redirection are not affected by any Call Forward features or Call Forward programming.

Telephones that have Forward on busy active can receive priority calls. If you are busy on a target line call, another call to that target line is redirected to the prime telephone for that target line.

Tip - *If the set is a member of a Hunt Group, the Call Forward on busy feature is overridden and the Hunt Group call continues to ring until the hunt time has expired. For more information about Hunt Groups, see Programming Hunt Groups on page 169.*

DND on Busy

When you are busy on a call and a second call comes in, your telephone rings softly to alert you to the second call. If you find this second ring distracting, you can have the system prevent a second call from disturbing you by assigning Do Not Disturb (DND) on Busy to your extension.

When DND on Busy is turned on for the telephone, internal and private network callers hear a busy tone instead of ringing when you are on the telephone. External callers are transferred to the prime set used in your system. For step-by-step instructions, see *Making Changes to Do Not Disturb on Busy* on page 40.

If you use DND on Busy, the line indicator for an external incoming call flashes, but your telephone does not ring.

Forward on busy takes priority over DND on Busy.

If an external call uses a target line, the call is processed according to the programming of the target line. If the target line is busy, the caller may hear a busy tone or the call may be routed to the prime set for the target line regardless of the DND on Busy programming for the telephone.

Tip - *If a telephone is a member of a Hunt Group and the telephone activates this feature, the telephone does not receive notification of incoming Hunt Group calls while on a call. The DND on busy feature overrides the Hunt Group. For more information about Hunt Groups see Programming Hunt Groups on page 169.*

Call Forward and Voice Mail

If you want a voice mail system to pick up unanswered calls automatically, do either of the following:

- use the internal number of your voice mail as the destination when you program Forward no Answer and Forward on busy
  Note: If the voice mail hardware is attached to another system on the private network, the forwarded number for the voice mail system will be an external number on all systems in the network, except the one to which the voice mail system is directly connected.
- make the ring delay greater than the delay used by your voice mail system, if your voice messaging system or service automatically retrieves calls

Displays

`Forward denied`	There are several reasons why you may get this message. For instance, you cannot forward your calls to a telephone that has been forwarded to your telephone.
`Forward>221` `CANCL`	Your calls are being forwarded to telephone 221.
`Not in service`	Two or more telephones are linked in a forwarding chain, and one of them is out of service or is being used for programming.

For other displays, see *Common feature displays* on page 257.

Line Redirection

Line Redirection allows you to send your external calls to a telephone outside the office. You may choose to redirect all your external lines or only some of them.

Line Redirection takes precedence over the Call Forward feature. If both features are active on a telephone, incoming external calls on redirected lines are routed to the specified Selective Line Redirection (SLR) external destination. Incoming internal calls are forwarded to the specified Call Forward destination.

You cannot use the Line Redirection feature on an M7100 or a T7100 telephone, or on a telephone connected to an ATA.

Turning on Line Redirection

Follow these steps to turn on Line Redirection:

1. Press [✆] [8] [4].
2. Select the outgoing line to be used for redirected calls.
3. Enter the number to which calls are redirected.

Refer to the list below for suggestions.

4. Select the lines to be redirected.

In step 3, you can enter the telephone number to which you want to redirect calls, using one of the following methods:

- Press an external autodial button.
- Enter an external telephone number (using no more than 24 digits) then press ⌣ or OK.
- Press ⌣ or OK if the line you have chosen as the outgoing line is a private network line that does not require you to dial digits.

If you use ALL to redirect all your lines, it is important that you wait until all the lines on your telephone light up before pressing ⌣ or OK. If you press ⌣ or OK before all the lines light up, those lines not lit are not redirected.

Tip - *The line chosen for redirecting calls on other lines can be used normally when it is not busy on a redirected call. To avoid redirection failing because the chosen line is in use, choose a line pool with several lines in it.*

Tip - *The system does not check that the number you give for line redirection is a valid one. If you redirect to an invalid number, redirection fails. Using an autodial button to enter the redirection number helps avoid this possibility. An autodial button used for line redirection must be programmed to use a specific line.*

Canceling Line Redirection

When you are ready to resume service, use this procedure to cancel line redirection.

1. Press [Feature] [#] [8] [4].
2. Select the lines you no longer want to be redirected.

Allowing a telephone to redirect calls

You can use programming to determine if a set can use the redirect calls feature and turn it on or off.

You need the programming template found at the front of this guide. See *Getting started with Norstar* on page 13 for more information.

1. Press [Feature] [*] [*] [2] [6] [6] [3] [4] [4].
2. Press [2] [3] [6] [4] [6] (the default System Coordinator password).
3. Press [Show] and enter the internal number of the telephone you want to program.
4. Press [Show] twice.
5. Press [Back] four times. The display reads `Allow redirect:`.
6. Press CHANGE to select `Y` (Yes) or `N` (No).

Turning the redirect ring for a telephone on or off

You can program a telephone to ring briefly (200 milliseconds) when a call is redirected to one of the lines assigned to it.
You need the programming template found at the front of this guide. See *Getting started with Norstar* on page 13 for more information.

1. Press [Feature] [*] [*] [2] [6] [6] [3] [4] [4].
2. Press [2] [3] [6] [4] [6] (the default System Coordinator password).

3. Press [Show] and enter the internal number of the telephone you want to program.
4. Press [Show] twice.
5. Press [Back] three times. The display reads `Redirect ring:`.
6. Press CHANGE to select `Y` (Yes) or `N` (No).

Tip - *If a telephone has redirect ring enabled, it rings briefly for redirected calls on one of its lines even if another telephone set up the line redirection.*

Displays while redirecting lines

`Intercom`	You selected the intercom button as the facility to place the call on. Enter a line pool code or a destination code.
`Line Redirection` `QUIT ADD REMOVE`	Press [*] or ADD to begin redirection. Press [#] or REMOVE to cancel a previous redirection.
`No line to use`	You have one external line on your telephone, but you need a second line to perform line redirection. Redirect your external line using a line pool as the outgoing line.
`Outgoing line`	You are attempting to redirect a line and the line you have chosen is the outgoing line you have selected as a destination. You cannot redirect a line to itself. Select another line.
`Pool code: _` `QUIT`	Enter a valid line pool access code.
`Redir by 221` `OVERRIDE`	You have attempted to redirect a line, but someone else has already redirected that line. Press [*] or OVERRIDE to override the previous redirection and redirect the line as you want.

`Redirect denied`	You can redirect calls only on individual lines.
`Select line out` `QUIT`	Select the line that is used to redirect calls out of the system.
`Select line(s)` `QUIT ALL`	Press the lines to be redirected. To undo a line selection, press it again. Press ALL to redirect all your lines.
`Select line(s)` `ALL OK`	Continue to press the lines to be redirected. Press ↵ or OK when you are finished.
`Unequipped line`	The line you are attempting to redirect cannot be redirected because the hardware does not support redirection.

Displays while canceling redirection

`Select line(s)` `QUIT ALL`	Press the lines that are no longer to be redirected. The lines light up as you press them. Once you cancel redirection for a line you cannot restore it by pressing the line again. Press ALL to cancel redirection for all your lines. To end, press ↵ or OK.
`Select line(s)` `ALL OK`	Continue to press the lines that are no longer to be redirected. Press ↵ or OK when you are finished.

For other displays, see *Common feature displays* on page 257.

How Line Redirection is different from Call Forward

Call Forward forwards all calls that arrive at a particular telephone to another telephone within the Norstar system. Line Redirection redirects only the lines you specify, no matter which telephones they appear on, to a telephone outside the Norstar system. Line Redirection takes precedence over Call Forward.

Using Line Redirection

You redirect lines at a telephone, but once redirected, the lines are redirected for the entire system.

You can redirect only lines that appear at line buttons on your telephone.

You can answer the telephone if it rings while you are in the middle of programming Line Redirection, but none of the Norstar call handling features are available until the feature times out. If you need to use a Norstar feature to process the call, quit Line Redirection programming by pressing [ ]. Do not press [ ] or you disconnect the call you are trying to process.

While you are programming Line Redirection you do not receive any indication of calls that do not actually ring at your telephone.

Be careful to avoid redirection loops. If for example, you redirect your lines to your branch office and your branch office redirects its lines to you, you can create a redirection loop. If these calls are long distance, you end up paying charges.

In certain situations, callers may experience lower volume levels when you redirect calls to an external location.

Centralized voice mail and auto attendant

How centralized voice mail and auto attendant systems are accessed, depends on which node users are attached.

Using a centralized voice mail system

If your system is part of a network that uses just one Meridian voice mail or Norstar voice mail system, how the users access the system will depend on which node they reside.

Users with telephones attached to the same system as the voice mail system use the internal prompts (981) to access messages.

Users with telephones attached to any other nodes, will be prompted to enter a mailbox number, then a password and the # key at the end of the sequence. The subsequent voice prompts will be the same ones that the users encounter when they dial into a system from a remote site. As well, instead of using the key to access feature codes, users use the * key (* 981), just as they would if they were dialing into their own system from a remote location.

Communicating in the office

Paging

Paging allows you to make announcements over the Norstar system using the telephone speakers, or an external loudspeaker system, if one is available.

Making a page announcement

1. Press [✆] [6] [0].
2. Choose a page type. Page types are:
   - [1] through the telephone speakers (internal page)
   - [2] through an external speaker (external page)
   - [3] both internal and external (combined page)
3. If necessary, choose a zone.
4. Make your announcement.
5. Press [☎].

Tip - *Instead of entering the Page feature code followed by the page type, you can enter the following shortcut codes.*

Page zone 0 is all zones.

Internal	[✆] [6] [1] and zone (0 to 6)
External	[✆] [6] [2] (code 2 has no zones)
Combined	[✆] [6] [3] and zone (0 to 6)

Activating and deactivating the ability to page

You need the programming template found at the front of this guide. See *Getting started with Norstar* on page 13 for more information.

1. Press [✆] [*] [*] [2] [6] [6] [3] [4] [4].
2. Press [2] [3] [6] [4] [6] (the default System Coordinator password).
3. Press [Show] and enter the internal number of the telephone you want to program.
4. Press [Show] twice.
5. Press [Next] seven times. The display reads **Paging**.
6. Press **CHANGE** to select the setting: **Y** (Yes) or **N** (No).

Creating page zones

Each telephone can be assigned to one of six zones for receiving pages.

Tip - *Hunt Group DNs cannot be included in a page zone. For more information about Hunt Groups, see Programming Hunt Groups on page 169.*

You need the programming template. See *Getting started with Norstar* on page 13 for more information.

1. Press [✆] [*] [*] [2] [6] [6] [3] [4] [4].
2. Press [2] [3] [6] [4] [6] (the default System Coordinator password).
3. Press [Show] and enter the internal number of the telephone you want to program.

4. Press Show twice.
5. Press Next six times. The display reads Page Zone.
6. Press CHANGE to select the setting: 1, 2, 3,4, 5, 6 or None.

You can make a telephone part of a page zone only if the telephone has paging set to Y (Yes).

A zone is any set of Norstar telephones that you want to group together for paging, regardless of their location. The maximum number of sets in a page zone is 50.

Your installer programs whether a tone sounds before a page begins, and the maximum number of seconds a page can last before it is automatically turned off.

Tip - *Make sure that everyone who needs to make page announcement has a list showing which telephones are in which page zones. Enter this information into your Modular ICS 6.1 Programming Record.*

Displays

Enter zone:_ ALL	Enter the desired page zone number (0- 6) or press ALL.
Invalid zone	You have entered a page zone code that is not between 0 and 6.
Page choice: SETS SPKR BOTH	Select the type of page you want. See the list in *Making a page announcement* on page 125.
Page timeout	The time allotted for paging has expired.
Paging ALL	You are making a page. The display shows the page zone you have chosen. Press ☆ or ☎ when you are finished.
Paging busy	A page is already being made in the page zone you have requested.

For other displays, see *Common feature displays* on page 257.

Tip - *You can make an announcement to one person by placing a voice call to their telephone.*

Using Page with external paging equipment

When you make a page that uses external paging equipment — external page or combined page — the Long Tones feature is automatically activated for the external paging system only. This allows you to control optional equipment with the Long Tones feature.

Sending messages

The Messages feature allows you to leave a message on the display of another digital set or to analog telephones connected to an Analog Station Module (ASM). The Messages feature indicates if you have any messages waiting.

The Messages feature uses a message waiting list to keep a record of your internal messages and your external voice mail messages if you subscribe to a voice message service with visual message waiting indication.

Sending a message

You can leave a message on the display of another telephone in your Norstar system.

You can send up to four messages to different telephones, including your voice message center. If your telephone is a

direct-dial telephone or a central answering position (CAP), you can send up to 30 messages.

Only the designated direct-dial telephone for an analog telephone connected to an Analog Station Module (ASM) can send messages to analog telephones by pressing [✆] [1]. Depending on the programming setup, the analog telephone provides either a Stuttered Dial Tone or a Message Waiting Lamp to inform the user of messages pending.

If your reply to a message is forwarded or is answered at another telephone using the Call Pickup feature, the message remains on your telephone until you cancel it or successfully contact the telephone that sent the message.

For analog telephones connected to an ASM, the message waiting indicator remains on until the user invokes [Link] [#] [6] [5]. If the analog telephone has the Message Reply Enhancement feature set to Yes, the message waiting indicator is turned off automatically after the reply call is answered no matter from where the call is answered.
For more information about the Message Reply Enhancement feature, see the *Norstar Modular ICS 6.1 Installer Guide*.

1. Press [✆] [1].
2. On a telephone with a two-line display, press ADD.
   Note: This step is not necessary on a telephone with a one-line display.
3. Enter the internal number of the person to whom you want to send the message. The person's display reads Message for you.
4. On analog telephones connected to an Analog Station Module (ASM), the message waiting indicator is activated.

Canceling a message you have sent

1. Press [✆] [#] [1]. The display reads `Cancel for:`.
2. Enter the internal number of the person to whom you sent the message.

Viewing your messages

You can receive up to four messages from different telephones, including your voice message center. A single message from your voice message center may pertain to several voice messages.

On a telephone with a one-line display

1. Press [✆] [6] [5]. The display shows the first message.
2. Press [*] or [#] to move through your messages.

On a telephone with a two-line display

1. Press MSG. The display shows your first message.
2. Press NEXT to move through your messages.

Replying to a message

You can call the person who sent a message or your voice message center while you are viewing the message.

On a telephone with a one-line display

Press [0].

On a telephone with a two-line display

Press CALL.

If you want to call your voice message center using a line other than the programmed line, exit your message list and dial the

voice message center telephone number using normal dialing methods.

Replying to a message using an analog telephone connected to an ASM

On an analog telephone connected to an Analog Station Module

Press Link * 6 5 . The system automatically retrieves and connects the user to the oldest message sender. (The message can originate from either the designated direct-dial telephone or the internal voice mail system.)

If the analog telephone has the Message Reply Enhancement feature set to Yes, and the sender is the designated direct-dial telephone, the message waiting indicator is turned off automatically after the reply call is answered, no matter from where the call is answered.

For analog telephones connected to an ASM, using the Message Waiting Reply feature (Link * 6 5), retrieves only internal messages sent to the user.

Analog telephones connected to an ASM cannot retrieve external messages by using the Message Waiting Reply feature (Link * 6 5). For external messages, users must call back the external voice mail center to retrieve their messages. When doing so, the message waiting indicator on the analog telephone is turned off automatically.

Tip - *If there is no voice mail system installed, only the designated direct-dial telephone can send messages to an analog telephone connected to an Analog Station Module (ASM) using ✆ 1 . The analog telephone can in turn invoke a single digit access code to reach the designated direct-dial telephone and retrieve messages.*

Tip - *If the designated direct-dial telephone of an analog telephone connected to an Analog Station Module (ASM) is changed, messages sent by the previous designated direct-dial telephone are kept in the incoming message list of the analog telephone until they are retrieved.*

Removing items from your message list

You can erase a message while you are viewing it in your message list. If the message is from your voice message center, this only erases the message notification at your telephone. You need to erase the voice message at your voice message center. Refer to your voice message center documentation.

On a telephone with a one-line display

Press [ ].

On a telephone with a two-line display

Press ERASE.

Removing items from your message list using an analog telephone connected to an ASM

To remove both internal and external messages on an analog telephone connected to an Analog Station Module

Press [Link] [#] [6] [5] to invoke the Cancel Message Waiting feature.

On analog telephones connected to an ASM, the Cancel Message Waiting feature cancels the oldest message received. The system no longer provides either a Stuttered Dial Tone or a Message Waiting Lamp if there are no messages pending.

Viewing messages you have sent

On a telephone with a two-line display, you can view the messages you have sent.

1. Press [✆] [1].
2. Press SHOW to display your first sent message.
3. Press NEXT to move through your sent messages.

Displays

`Cancel denied`	You have entered an invalid number when attempting to cancel a message.
`Cleared>LINENAM` `NEXT`	You have cleared an external message from your message waiting list. The message itself exists in your voice message center until you erase it there.
`In use: 221`	You are trying to call from your message waiting list. The line that you want to use is being used by the identified Norstar user.
`L001:LINENAMVMsg` `NEXT CALL CLEAR`	You are viewing your message list. The display shows the number and name of the line that was used for your voice mail message.
`Message denied`	You have tried to send a message to an invalid internal number or to a telephone that is out of service.
`Message list` `SHOW ADD EXIT`	SHOW appears only if you have outstanding messages. Press SHOW to review messages you have sent. Press ADD to send a new message.
`Message to:`	Enter the internal number of the telephone to which you want to send a message.
`Messages & Calls` `MSG CALLS`	You have one or more messages and one or more new Call Logs. Press [✆] [8] [0] [6] to change the first line of the display to the current time and date.

No button free	You have no line button free with which to reply to a message.
No number stored	There has been no number programmed for the voice message center. Contact your voice messaging service provider.
Start of list NEXT	You are at the beginning of your list of messages. Press NEXT to move through your messages.
Their list full	You are trying to send a message to a user whose message waiting list is full.
Your list full	You have tried to send a message but list of sent messages on your set is full. Cancel one of the messages you have sent, if possible, or wait until you have received a reply to one of those messages.

For other displays, see *Common feature displays* on page 257.

Using Voice Call

[ ] 6 6

Use this feature to make an announcement or begin a conversation through the speaker of another telephone in the system.

Tip - *Hunt Groups cannot accept voice calls. Answer buttons have no appearances for voice calls, and the telephone does not ring for voice calls. For more information about Hunt Groups, see Programming Hunt Groups on page 169. For more information about Answer buttons, see Answer DNs and Answer keys on page 63.*

Muting Voice Call tones

When a voice call begins at your telephone, you hear a beep every 15 seconds as a reminder that the microphone is on.

To stop it from beeping, pick up the receiver or press the handsfree/mute key.

Answering a Voice Call with handsfree

If handsfree answerback is assigned to your telephone, you can respond to a voice call without touching the telephone.

Handsfree answerback is not available to the M7100 or the T7100 telephones.

When someone makes a voice call to you, simply start talking. Your telephone microphone picks up your voice.

Once you have answered a voice call, you can put it on hold, transfer it, or otherwise treat it as a normal call.

Blocking Voice Calls using Voice Call Deny

[✆] [8] [8]

Use this feature to prevent voice calls to your set. The result is that Voice calls ring like regular internal calls. Your other calls proceed normally.

Canceling Voice Call Deny

Press [✆] [#] [8] [8].

Displays

`Dial voice call`	Dial the internal number or press the internal autodial button of the person to whom you want to speak.
`Microphone muted`	Your handsfree microphone is muted. Press the handsfree/mute key or pick up your receiver to respond to the voice call.
`Voice call`	The line is open for you to speak.

`No voice call`

The telephone receiving the call cannot accept voice calls for one of the following reasons:

- it is active or ringing with another call
- Call Forward is turned on
- Do Not Disturb is turned on
- Voice Call Deny is turned on
- it is not a Norstar telephone.

Your call proceeds automatically as a regular ringing call.

Tracking your incoming calls

Using Call Log

Telephones can automatically log Call Display information for calls on an external line. The line must appear on that telephone but it does not have to be a ringing line.

If your system is equipped with the appropriate equipment, and you have subscribed to the call information feature supplied by your service provider, you are able to capture information about incoming callers in your call log. The same feature is supplied by an ISDN service package that comes with calling line identification (CLID).
Call Log creates a record of incoming external calls. For each call, the log can contain:

- sequence number in the Call Log
- name and number of the caller
- indication if the call was long distance
- indication if the call was answered, and identify who answered it
- time and date of the call
- number of repeated calls from the same source
- name of the line that the call came in on

Call Log can help you to

- keep track of abandoned or unanswered calls
- track patterns for your callers, for example, volume of calls and geographical location of calls
- record caller information quickly and accurately
- build a personal telephone directory from log items

The long distance indicator and the name and number of the call may not be shown in the log. This information depends on the Call Display services provided by your local telephone company and the local telephone company of the caller.

To use the features on the following pages, your telephone must have spaces available in its Call log. Your installer or customer service representative programs each telephone with an appropriate number of spaces.

Call Log options

With this feature, you can select the type of calls to be stored in your Call Log. Choose from four Autolog options: `No one answered`, `Unanswerd by me`, `Log all calls`, `No autologging`.

1. Press [✆] [*] [8] [4]. The display shows the current option.
2. Press [#] or NEXT to change the option.
3. Press [✆] or OK to select the display option.

Logging a call manually

[✆] [8] [1] [3]

If your calls are not automatically logged, you can manually log call information when you are connected to an external call. Storing information for your current call can be helpful in many situations.

For example, you may want to

- record caller information without using paper and pencil
- record only selected calls of your choice, rather than relying on the automatic Call Log
- quickly record caller information before a caller hangs up

Enabling and disabling autobumping

Your log has a set number of items that it can hold. When it becomes full, new calls cannot be logged. When your log is full, Autobumping automatically deletes the oldest Call Log item when a new call is logged.

Press [Feature] 8 1 5 to enable autobumping.

Press [Feature] # 8 1 5 to disable autobumping.

Viewing your Call Log

To view your log:

1. Press [Feature] 8 1 2. The display shows the number or previously read items (old) and the number of new, unread items (new) in the log.
2. Press * or OLD to view old items.
   Press # or NEW to view new items.
   Press 0 or RESUME to display the last item you viewed, the last time you viewed your Call Log.

Names and numbers for external callers are displayed only if you have subscribed to Call Display services from your local telephone company.

Viewing a Call Log item

Press [Volume] or MORE to view the information for a call log item.

Erasing log items

You should routinely erase log items to make space for new items in your log.

1. Display the item you want to erase.
2. Press [ ] or ERASE.
3. Press [ ] to exit.

If you accidentally erase an item, you can retrieve it.

1. Press [ ] or UNDO immediately.
2. Press [ ] to exit.

Making a call using Call Log

You may find it helpful to place calls from within your Call Log. The number stored for each call may vary, depending on the type of call. For example, if the call was placed from a Centrex or PBX system, the first few numbers may need to be trimmed before you can make the call. If the number you want to call is long distance, or if you want to use a line pool, you may need to add numbers.
To place a call:

1. Display the log item for the call you want to place.
2. Display the associated telephone number.
3. Press [ ] or TRIM, once for every digit that you want to remove.
4. Dial any extra digits required.
5. Press an external line or line pool button.
6. Lift the receiver. (This is not necessary if handsfree is programmed at your telephone.) The displayed number is dialed.

Creating a password to your Call Log

To access your Call Log through a password:

1. Press [✆] [*] [8] [5]. The displays reads `New passwrd:`.
2. Enter your four-digit password.
   The display reads `Repeat New:`.
3. Re-enter your four-digit password. The display reads `Password changed`, which confirms that your password has been assigned.

To enter Call Log using your password:

1. Press [✆] [8] [1] [2] to enter Call Log. If you have programmed a password, the display reads `Password:`.
2. Enter your four-digit password.

If you forget your Call Log password, it can be deleted in programming. See *Using passwords* on page 224.

Changing your Call Log password

Use this procedure when you want to change the Call Log password for your telephone.

1. Press [✆] [*] [8] [5]. The display reads `Old passwrd:`.
2. Enter your old password.
   The display reads `New passwrd:`.
3. Enter your new four-digit password.
   The display reads `Repeat New:`.
4. Re-enter your password.
   The display reads `Password changed`, which confirms that your password has been changed.

Deleting an assigned password

Use this procedure when you want to delete an assigned password.

1. Press [✆] [*] [8] [5]. The display reads `Old Passwrd:`.
2. Enter your old password.
3. The display reads `New Passwrd:`.
4. Press [⌣] or OK.
   The display reads `No Pswd Assigned`, which confirms that your password has been deleted.

Programming a telephone to log calls automatically

Your installer or customer service representative can program each telephone to automatically log calls coming in on a line.

Displays

`1:Unknown name`	The caller name is unavailable.
`1:Unknown number`	The caller number is unavailable.
`12:KATE SMITH` `NEXT ERASE MORE`	_ indicates a new item.
`12)KATE SMITH` `NEXT ERASE MORE`	) indicates that the call was answered.
`12$KATE SMITH` `NEXT ERASE MORE`	$ indicates a long distance call.
`49/123456789012 3` `NEXT ERASE MORE`	/ indicates that the stored number has been shortened to its final 11 digits. Press [◂ ▸] or MORE to display additional information about the call.

`Call(s) bumped`	One or more log entries have been deleted by the Autobumping feature while you are looking at the Call Log.
`Hold or release`	Hold or release your active call before entering Call Log.
`In use: SETNAME`	The external line is in use.
`Jan 4 9:00a 3X` `NEXT ERASE MORE`	The repeat call counter, shown along with time and date, indicates the number of calls you received from the same caller.
`Line001 ❯227` `NEXT ERASE MORE`	This call was answered at another telephone (227).
`Line001 ❯Logit` `NEXT ERASE MORE`	This call was logged manually.
`Line001` `NEXT ERASE MORE`	This call was not answered.
`Messages & Calls` `MSG CALLS`	There are one or more items in your message waiting list, and there are one or more new items in your Call Log. Press [c] [8] [0] [6] to change the first line of the display to the current time and date.
`New calls begin`	You have viewed your last old log item and now view your new log items.
`No info to log`	No information is available for the call.
`No log assigned`	No log space has been assigned to the telephone.
`No resume item`	The resume item has been removed because of Autobumping, repeat call update, or log reallocation while you are looking at the Call Log.

For other displays, see *Common feature displays* on page 257.

Using external Voice mail

If you subscribe to a voice message service outside your office, you can access that service through your Norstar system. Your installer or customer service representative programs your Norstar telephone to indicate when you have a voice message waiting on a particular line.

To find out if your external voice message service works with Norstar, or if you have any problems with your service, contact your voice message service provider.

Customizing your telephone

Finding out what a button does using Button Inquiry

[↻] [*] [0]

You can use this feature to check the function of any line, intercom, or programmed button on your telephone.

On the M7100 and the T7100 telephones, Button Inquiry shows your internal number followed by the function assigned to your single memory button.

Displays

001 <LINENAME> SHOW OK	The display shows the number and name of the line. Press SHOW to view the redirection status of the line.
123456789012345... VIEW→ OK	Press [#] or press VIEW→ or ←VIEW to view a number that is too long to fit on the display. Press [⌣] or OK when you are done.
221 <SETNAME> NEXT VIEW→	The display shows the directory number of the telephone, and the assigned name. Press NEXT to see the first line assigned to ring at the intercom button.
<Feature name> SHOW OK	The name of the feature assigned to a button is displayed when you press the button. Press [#] or SHOW for additional information.
Press a button EXIT	Press the button you want to check. Press [↻] or EXIT when you are finished.

For other displays, see *Common feature displays* on page 257.

Changing the set display contrast

Use this feature to adjust the contrast on your set.

1. Press [⌂] [*] [7].
2. Press a number on the dialpad to choose the contrast level you prefer.

On a two-line telephone, you can use the UP and DOWN display buttons to adjust the contrast. The number of contrast levels available varies from one telephone model to another.

Changing the language on the display

You can select the language used on the display of each set. The languages supported depends on which Profile was installed on your system at Startup.

English is the default first language.

Refer to the *Modular ICS 6.1 Installer Guide* for a list of languages supported by each profile. Check the programming guide to determine which Profile was assigned to your system.

You can program [⌂] [*] [5] [0] [1], the first language code, on to a memory button. If you want subsequent languages to display, you can keep pressing the button until the language code you want appears on the display.

You cannot program [⌂] [*] [5] [0] [2] or [⌂] [*] [5] [0] [3] onto a memory button.

Programming a feature code onto a memory button

You can program a feature code onto a memory button. In some cases, pressing the button a second time cancels the feature.

Programming feature buttons

Any memory button not programmed as an external or internal line, target line, Answer button, or handsfree/mute button, is available for features.

1. Press [✆] [*] [3].
2. Press the memory button you want to program with a feature.
3. Enter the appropriate feature code you want to assign onto the button.

The following feature codes cannot be programmed onto a memory button: Long Tones and any code beginning with [*] except [✆] [*] [5] [0] [1] (Language Choice) and [✆] [*] [7] (Contrast Adjustment).

Tip - *When you program a button with the line pool feature code, you must enter a line pool access code after the feature code. The programmed line pool button accesses a specific line pool, not the line pool feature.*

Erasing a feature button

1. Press [✆] [*] [1].
2. Press the feature button.
3. Press [⌣] or OK to erase the button.

Displays

<Feature name> SHOW OK	The name of the feature assigned to a button is displayed when you press the button. SHOW appears when there is more information available. Press # or SHOW for additional information.
Enter code:	If you are checking a speed dial button, enter the three-digit speed dial code that you want to check.
F_ QUIT CLEAR	Enter the feature code, or press ☎ or QUIT to quit programming or CLEAR to clear the numbers you have entered. The system accepts the entry as soon as you enter a valid feature code.
Feature code: QUIT	Press ✆ and enter the feature code you want to assign to the button. You cannot enter invalid codes.
Feature moved	You programmed a button with a feature that was already programmed onto another button. The feature has moved to the button you just programmed. Its original button is now blank.
Press a button EXIT	Press the button you want to check. Press ✆ or EXIT when you are finished.
Program and HOLD	Enter the number you want to program and press ⌣. To erase the button, just press ⌣.
Program and OK QUIT OK	Enter the number you want to program and press OK. To erase the button, just press ⌣ or OK.

For other displays, see *Common feature displays* on page 257.

Labeling your set

The Business Series Terminals have label strips that come with each telephone. You can print the label for each button on your telephone and install the strip beside the buttons. The Norstar M-series telephones have individual keycap labels. This section suggests the process for setting up the labelling for your set.

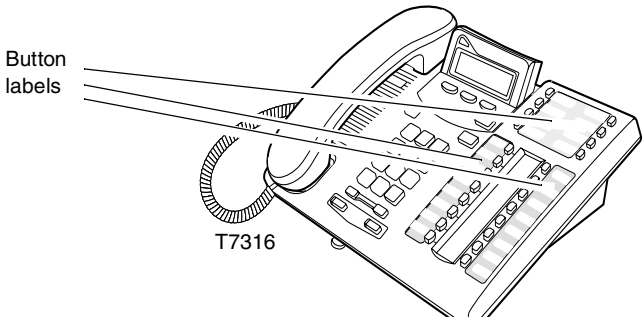
Applying button labelling

Before you apply button labels, use the Button Inquiry feature ([ ] [*] [0]) to verify the button functions, and to avoid activating features as you put the labels onto the buttons. For more information refer to *Finding out what a button does using Button Inquiry* on page 145.

Business Series Terminals

The T-series telephones are labelled beside the buttons. You can use the Desktop Assistant utility to make changes and print a new label card. Your system administrator can access this application from the system CD or it can be downloaded from http://www.nortelnetworks.com (Choose: Customer Support/ Software Distribution, under Product Selection choose Desktop Assistant).

Business Series Terminal T7316 button label locations



Norstar button caps

The Norstar M-series has two types of button caps:

- **Unlabeled, clear button caps** with appropriate green or grey paper for line numbers, telephone numbers, and features
- **Pre-printed, colored button caps** in green or grey

Some examples of pre-printed button caps

Green caps	Grey caps
Line 1	Last No.
Handsfree Mute	Speed Dial

Tips - *To make identification of line types easier, use preprinted green button caps for lines that support incoming and outgoing calls. Use clear button caps for target lines that are incoming only.*

Default button assignments

During Startup, the Norstar installer chooses one of the available templates. Default features are assigned automatically to the programmable buttons on installed sets. These defaults vary depending on the template you choose, and the style of telephone.

The default features are listed mapped out below.

Tips - *Norstar M-series telephones are shipped from the factory with the button caps in place for the Square template.*

Please consult your customer service representative to determine the type of template programmed into your system. Not all templates are available in all software loads.

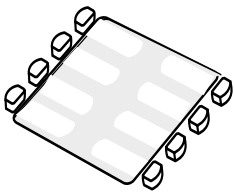
T7316E Business Series Terminal button defaults

The default button assignments for the T7316E Business Series Terminal (BST) depend on the template applied. Refer to your Programming Records to identify the current button programming for each telephone or group of telephones.

Note also that this telephone has a separate handsfree button (under the dial pad). Also, the current incoming call on this telephone defaults to the voice path last used. For example, if you answered the previous call using your headset, the next call will come in over your headset.

Line numbering starts on button 09.

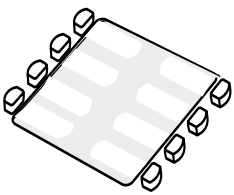
T7316E BST upper buttons (PBX/DID template)

01 Contrast 02 Show Time 03 04		05 06 Sys Park (DID only) 07 Send Msg 08 Speed dial

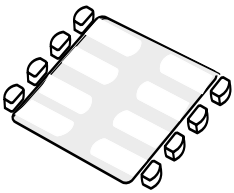
T7316E BST lower buttons (PBX and DID)

PBX template		DID template	
09 Sys Park	17 Call Timer	09 Line<xx>	17 Call Timer
10 Saved No.	18 Ring Again	10 Saved No.	18 Ring Again
11 Call Fwd	19 DND	11 Call Fwd	19 DND
12 Pick-Up	20 Conf/Trans	12 Pick-Up	20 Conf/Trans
13 Page	21 Last No.	13 Page	21 Last No.
14 Transfer	22 Voice Call	14 Transfer	22 Voice Call
15 Time/Date	23 Intercom	15 Time/Date	23 Intercom
16 Receive msg	24 Intercom	16 Receive msg	24 Intercom

T7316E BST upper buttons (Hybrid template)

01 Contrast 02 Show Time 03 Privacy 04		05 Saved No. 06 Sys Park 07 Send Msg 08 Speed dial

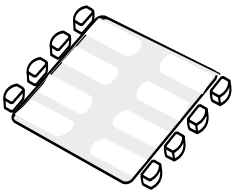
T7316E BST upper buttons (Centrex template)

01 Contrast 02 Show Time 03 04		05 Saved No. 06 Sys Park 07 Send Msg 08 Speed dial

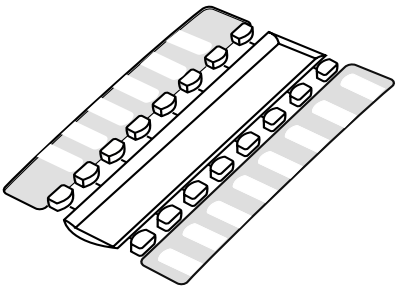
T7316E BST lower buttons (Hybrid and Centrex

Hybrid template		Centrex template	
09 Line<xx>	17 Call Timer	01	09 Call Timer
10 Line Pool	18 Ring Again	02 Call Fwd	10 Ring Again
11 Call Fwd	19 DND	03 Pick-Up	11 DND
12 Pick-Up	20 Conf/Trans	04 Page	12 Conf/Trans
13 Page	21 Last No.	05 Transfer	13 Last No.
14 Transfer	22 Voice Call	06 Time/Date	14 Voice Call
15 Time/Date	23 Intercom	07 Leave msg	15 Intercom
16 Receive msg	24 Intercom	08 Flash	16 Intercom

T7316E BST upper buttons (Square template)

01 Contrast 02 Show Time 03 Privacy 04		05 Svd N redial 06 Sys Park 07 Send Msg 08 Speed dial

T7316E BST lower buttons (Square template)

Button #/ Function	Square template	Button #/ Function
09 Line<xx>		17 Call Timer
10 Line<xx>		18 Ring Again
11 Call Fwd		19 DND
12 Pick-Up		20 Conf/Trans
13 Page		21 Last No.
14 Transfer		22 Voice Call
15 Time/Date		23 Intercom
16 Receive msg		24 Intercom

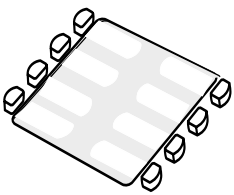
T7316 Business Series Terminal button defaults

The default button assignments for the T7316 Business Series Terminal (BST) depend on the template applied. Refer to your Programming Records to identify the current button programming for each telephone or group of telephones.

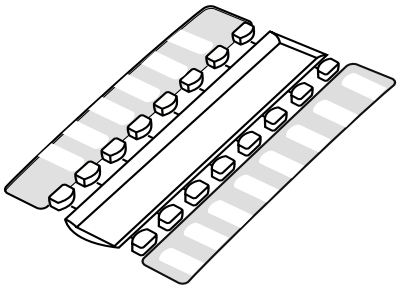
Note the button numbering for some of buttons of this telephone are not consecutive. This is because the buttons are mapped to the M7310. However, since there is no second level to the memory buttons on this telephone, the button numbers only reflect the lower level. In Button programming, however, the absent button numbers appear, but they are not valid programming for this telephone.

These examples show defaults for a system with three-digit internal numbers. The defaults do not actually exist on any telephone, as no telephone has an autodial button for itself. The position that would be taken by the autodial button for itself is blank.

T7316 BST upper buttons

Button 23 Set 227 Button 25 Set 228 Button 27 Set 229 Button 29 Set 230		Button 31 Set 231 Button 33 Set 232 Button 24 Set 239 Button 26 Set 240

T7316 BST lower buttons

Button # / Function	PBX template	Button # / Function
11 Set 221 13 Set 222 15 Set 223 01 DND 02 Transfer 03 Call Fwd 04 Pick-Up 05 Page		17 Set 224 19 Set 225 21 Set 226 06 Conf/Trans 07 Last No. 08 Voice Call 09 Intercom 10 Intercom

DID template		Square template	
11 Set 221 13 Set 222 15 Set 223 01 Line<xx> 02 Transfer 03 Call Fwd 04 Pick-Up 05 Page	17 Set 224 19 Set 225 21 Set 226 06 Conf/Trans 07 Last No. 08 Voice Call 09 Intercom 10 Intercom	11 Set 221 13 Set 222 15 Set 223 01 Line 1 02 Line 2 03 Call Fwd 04 Pick-Up 05 Page	17 Set 224 19 Set 225 21 Set 226 06 Conf/Trans 07 Last No. 08 Voice Call 09 Intercom 10 Intercom

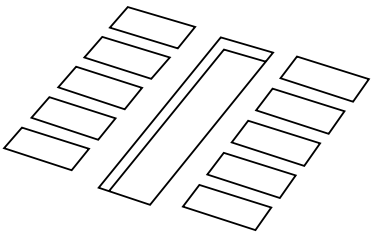
Hybrid template				Centrex template			
11	Set 221	17	Set 224	11	Set 221	17	Set 224
13	Set 222	19	Set 225	13	Set 222	19	Set 225
15	Set 223	21	Set 226	15	Set 223	21	Set 226
01	Line 1	06	Conf/Trans	01	Line<xx>	06	Conf/Trans
02	Line pool	07	Last No.	02	Transfer	07	Last No.
03	Call Fwd	08	Voice Call	03	Call Fwd	08	Voice Call
04	Pick-Up	09	Intercom	04	Pick-Up	09	Intercom
05	Page	10	Intercom	05	Link	10	Intercom

M7310 telephone button defaults

The default button assignments for the M7310 telephone depend on the template applied. The exception is the default numbering for the dual memory buttons. Refer to *Using Buttons* on page 16.

M7310 lower button assignments

The following tables map the positions for the lower set of buttons for the Norstar M7310 telephone.

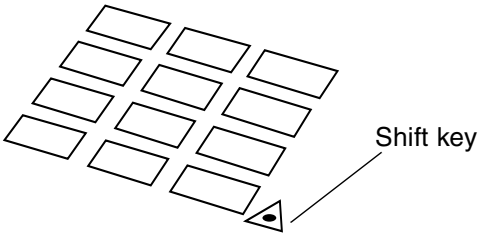
Button #/ Function	Square template	Button #/ Function
01 Line 1		06 Conf/Trans
02 Line 2		07 Last No.
03 Call Fwd		08 Voice Call
04 Pick-Up		09 Intercom
05 Page		10 Intercom

PBX template				Hybrid template			
01	DND	06	Conf/Trans	01	Line 1	06	Conf/Trans
02	Transfer	07	Last No.	02	Line pool	07	Last No.
03	Call Fwd	08	Voice Call	03	Call Fwd	08	Voice Call
04	Pick-Up	09	Intercom	04	Pick-Up	09	Intercom
05	Page	10	Intercom	05	Page	10	Intercom

Centrex template				DID template			
01	Line<xx>	06	Conf/Trans	01	Line<xx>	06	Conf/Trans
02	Transfer	07	Last No.	02	Transfer	07	Last No.
03	Call Fwd	08	Voice Call	03	Call Fwd	08	Voice Call
04	Pick-Up	09	Intercom	04	Pick-Up	09	Intercom
05	Link	10	Intercom	05	Page	10	Intercom

M7310 with dual memory buttons

*12	Set 233	*20	Set 237	*28	Set 241
11	Set 221	19	Set 225	27	Set 229
*14	Set 234	*22	Set 238	*30	Set 242
13	Set 222	21	Set 226	29	Set 230
*16	Set 235	*24	Set 239	*32	Set 243
15	Set 223	23	Set 227	31	Set 231
*18	Set 236	*26	Set 240	*34	Set 244
17	Set 224	25	Set 228	33	Set 232

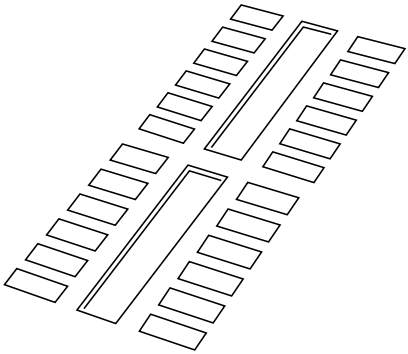


Note: This example shows defaults for a system with three-digit internal numbers. The defaults do not actually exist on any telephone, as no telephone has an autodial button for itself. The position that would be taken by the autodial button for itself, is blank.

* These settings are produced using the shift key, located beside the upper set of buttons.

M7324 telephone button defaults

The default button assignments for the M7324 telephone depend on the template applied during startup. Refer to *Using Buttons* on page 16.

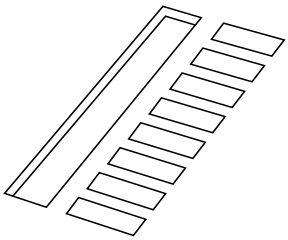
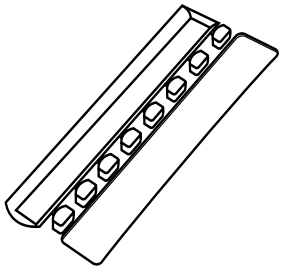
# Function	Square template	# Function
01 Line 1		13 Call Fwd
02 Line 2		14 Speed Dial
03		15 Last No.
04		16 Saved No.
05		17 Conf/Trans
06		18 Transfer
07		19 DND
08		20 Pick-Up
09		21 Voice Call
10		22 Page
11		23 Intercom
12		24 Intercom

PBX template		Hybrid template	
01	13 Call Fwd	01 Line 1	13 Call Fwd
02	14 Speed Dial	02 Line pool	14 Speed Dial
03	15 Last No.	03	15 Last No.
04	16 Saved No.	04	16 Saved No.
05	17 Conf/Trans	05	17 Conf/Trans
06	18 Transfer	06	18 Transfer
07	19 DND	07	19 DND
08	20 Pick-Up	08	20 Pick-Up
09	21 Voice Call	09	21 Voice Call
10	22 Page	10	22 Page
11	23 Intercom	11	23 Intercom
12	24 Intercom	12	24 Intercom

Centrex template		DID template	
01 Line<xx>	13 Call Fwd	Line<xx>	13 Call Fwd
02	14 Speed Dial	Transfer	14 Speed Dial
03	15 Last No.	blank	15 Last No.
04	16 Link	blank	16 Saved No.
05	17 Conf/Trans	blank	17 Conf/Trans
06	18 Transfer	blank	18 Transfer
07	19 DND	blank	19 DND
08	20 Pick-Up	blank	20 Pick-Up
09	21 Voice Call	blank	21 Voice Call
10	22 Page	blank	22 Page
11	23 Intercom	blank	23 Intercom
12	24 Intercom	blank	24 Intercom

M7208 and T7208 button defaults

The default button assignments for the M7208 and the T7208 sets are the same, depending on which template was applied.

M7208 button set	Square template	T7208 button set
	01 Line 1 02 Line 2 03 Last No. 04 Page 05 Conf/Trans 06 Speed Dial 07 Intercom 08 Intercom	

Centrex template	Hybrid template	PBX template	DID template
01 Line<xx>	01 Line 1	01 Pick-Up	01 Line<xx>
02 Transfer	02 Line pool	02 Transfer	02 Transfer
03 Last No.	03 Last No.	03 Last No.	03 Last No.
04 Link	04 Page	04 Page	04 Page
05 Conf/Trans	05 Conf/Trans	05 Conf/Trans	05 Conf/Trans
06 Speed Dial	06 Speed Dial	06 Speed Dial	06 Speed Dial
07 Intercom	07 Intercom	07 Intercom	07 Intercom
08 Intercom	08 Intercom	08 Intercom	08 Intercom

Tips - *The default Page button activates the External Page option ([*] [6] [2]).*

M7100 and T7100 button defaults

For all templates, the one programmable button on the M7100 and the T7100 sets is defaulted to [Last No.].

Rules of default button assignment

- Line and Intercom buttons are assigned by default templates and can be changed in programming.
- Handsfree/mute and answer DN buttons are not assigned by default. If these features are defined, however, they are automatically assigned to specific buttons, as described on this and the following page.
- None of these buttons can be assigned to M7100 or T7100 telephones, as telephones have only one program button.

- The handsfree/mute feature appears on the bottom right-hand button on the M7310 telephone and the bottom button on the M7208 telephone, moving the Intercom button(s) up one position. The Business Series Terminals have a separate mute button, which is located under the numeric dialpad, beneath the volume rocker button. The T7316E telephone also has a separate handsfree button, located beside the mute button, however, this button only works if the telephone is connected to a system that is version 6.1 or later.

- Each telephone can have up to eight Intercom buttons. These buttons assign to the position above the handsfree/mute button, if there is one, at the bottom right-hand button position, if there is two columns of buttons.

- Each telephone can have up to eight answer DN buttons. On the M7310 and T7316/T7316E telephones, they appear above Intercom buttons in the right column and continue up from the bottom in the left column, replacing the features on those buttons. On the M7208 and T7208 telephones, answer DN buttons appear above the Intercom buttons and below external line buttons in a single column.

- External line buttons appear in ascending line order, starting at the top button in the left column of the M7310 Norstar and M7208 and T7208 telephones. If more than five external lines are assigned to an M7310 telephone, or more than 12 to an M7324 telephone, assignment continues down the buttons on the right column, erasing the features on those buttons. Line buttons have priority over feature access buttons but not handsfree/mute, Intercom, or answer DN buttons.
  The T7316 starts lines at button 01, which is the fourth button down, on the left side of the lower button set.
  The T7316E starts line numbering at button 09, which is the left top corner of the lower button set. Refer to the

default charts for specific button placement for these telephones.

Moving line buttons

You can move external lines, hunt group appearances, and target line appearances to different buttons on your telephone, to arrange your lines in the way that makes the most sense to you. If you have a CAP, you cannot move intercom, answer keys or handsfree/mute buttons onto the module, but you can move your lines over to the modules. If you have a T7316E CAP with eKIMs you can move lines, target line appearances and hunt group appearances over to the KIM.

1. Press [✆] [*] [8] [1].
2. Press the button you want to move the line from.
3. Press the button you want to move the line to.

Displays

`Exchanged`	The two buttons you selected have exchanged position.
`Invalid location`	You have tried to move a line to a button that cannot be used as a line button, such as an intercom button, handsfree/mute button, or an answer button.
`Move line from:` `QUIT`	Press the button of the line you want to move. Press [✆] or QUIT when you have finished moving lines.
`Move line to:` `QUIT`	Press the button you want to move the line to. Neither of the buttons is erased. The lines, or the line and feature, simply switch places.
`Press a line`	The button you are trying to move is not a line button. If you are trying to switch a line and a feature, move the line to the feature button and not the feature button to the line.

Changing the type of ring

You can choose one of four distinctive rings for your telephone. This makes it easier to identify your telephone in an open office.

1. Press [✆] [*] [6].
2. Press [1], [2], [3], [4], or NEXT. You hear the selected ring for two seconds.
3. Repeat until you hear the ring you prefer, then press [⌣] or OK.

Adjusting the Ring volume

Use this feature to adjust the ring volume.

1. Press [✆] [*] [8] [0]. The telephone rings.
2. Press [◂ ▸] to adjust the volume; left end for lower and right end for higher.

Hiding the message or calls indication

The display that shows you have messages or calls can be replaced with the current time and date. You can retrieve your message and call information by using the display buttons that appear on the second line of the display. If you are using a telephone with a single-line display, the message or call indication is hidden.

1. Press [✆] [8] [0] [6]. The current time and date appears on the top line of the display.
2. Press MSG or [✆] [6] [5] to see your messages, or press CALLS or [✆] [8] [1] [2] to see your calls.

Restoring the messages and calls indication

Press [✆] [#] [8] [0] [6].

User Preferences

The User Preferences section of programming allows you to program memory buttons, speed dial codes and other settings for any Norstar or BST telephone on the system.

For example, an employee may want to have the Do Not Disturb feature programmed onto a memory button or create a speed dial code. Instead of programming from the each specific set, you can go into programming on the telephone nearest you to make the change.

Using User Preferences

1. Press [Feature] [*] [*] [U] [S] [E] [R] ([Feature] [*] [*] [8] [7] [3] [7]).
2. Enter the Basic password (the default passwords is [2] [2] [7] [4] [2]). (Note: You can also use the Coordinator password to change User preferences.

By using a Basic password, it is possible to have someone else do day-to-day upkeep of the telephone programming without giving out access to sensitive programming. See *Using passwords* on page 224.

After you enter the proper password, the display shows you the telephone with the lowest internal number followed by its name (For example, 221:Reception).

1. Press [Next] to move through all the telephones on the system.
2. Press [Show] when you see the telephone you want to change. The display reads the model number of the telephone at the extension.

The display shows Connect set if no telephone is connected at that internal number.
You cannot make changes if the model is Other.

3. Press [Next] to move through all the subheadings in User Preferences.

User Preferences programming is available under the heading Terminals&Sets.

Sub-headings in User Preferences

User prefernces
Model
Button prgrming
User speed dial
Call log opt'ns
Dialing opt'ns
Language
Display cntrst
Ring type

Changing button programming

1. Press [Show] at Button prgrming. The display shows the number of buttons on the telephone. An example is shown in Displays at the end of this section.
If the telephone has a CAP module, you can press CAP1 or KIM1 to see the buttons on the module.

2. Press [Next] to move through all the buttons on the telephone. Refer to *Default button assignments* on page 150 for button number mapping for each type telephone.

3. Use the display buttons to change the programming for a button.

The display buttons used in button programming.

CANCL	Moves you out of a setting without making any changes to it.
CLR	Erases the button.
TEL#	Programs the key as an autodial number for an internal or an external number. If it is an external autodial number, you must choose a line, line pool, or the routing table for the call to use.
CHANGE	Used when you are setting up an external autodial number. Press CHANGE until you see the type of line or pool you want the number to use.
FEATR	Press to store a feature code on the button.
FIND	Locates a specific button on a telephone by entering its number. Button numbers are shown in the illustrations.
LIST	Takes you to a list of feature codes. Press Next to move through the list and press OK when you see the feature you want to program on the button.

Note: User Preferences programming cannot change the buttons that are used by lines, intercom, and the handsfree feature, which are assigned by the system administrator. Refer to the *Modular ICS 6.1 Installer Guide* for details.

Changing User Speed Dial

1. Press Show at User Speed Dial. The display shows the number of speed dial codes that are available.
2. Press Next to see the first speed dial code (256).
3. Press Next to move through all the speed dial codes.
4. Press Show to find the code you want to change.
5. Press CHANGE and enter the telephone number the same way you would dial it on the telephone.
6. Press OK.

7. Press Next and choose the line (or enter a code for a line pool) the speed dial code should use.

Use the line pool code to select a particular line pool for use with Speed Dial. If you select `Use routing tbl`, a line or pool is chosen by the routing programming according to the initial digits in the number.

The route you choose for a User Speed Dial code must be one that the telephone can use. For example, if the telephone does not have access to Line Pool B and you use that pool code with the speed dial code, the code does not work. Lines and line pools are assigned to the telephones by the system administrator. Refer to the *Modular ICS 6.1 Installer Guide* for details.

To change a system speed dial code, see *Adding or changing a system speed dial* on page 31.

Changing Call Log options

1. Press Show at `Call log opt'ns...`.
2. Press CHANGE until you see the option you want to use. See *Call Log options* on page 138.

Changing how calls are dialed

1. Press Show at `Dialing opt'ns...`.
2. Press CHANGE until you see the option you want to use.

Descriptions for dialing options are found on the *Telephone Feature Card*, or see *Changing how you dial your calls* on page 82.

Changing the language used on the display

Press CHANGE at Language: until you see the language you want to use. See *Changing the language on the display* on page 146.

Making the display lighter or darker

Press CHANGE at Display cntrst until you see the value you want to use.

The display contrast on the telephone you are using for the programming session does not change when you are programming another telephone.

Changing the ring type

At Ring type:, press CHANGE until you see the option you want to use.

Descriptions for ringing options are found on the *Telephone Feature Card* or in *Changing the type of ring* on page 162.

Displays

10+24 buttons FIND	There are 10 memory buttons and 12 dual memory buttons on the telephone you are viewing. Press Next to begin looking at what is on each button.
B01:L06:Line 001 FIND	A line appears on the button. You cannot store a feature or number on it.
B02:#Reply Msg... CLR TEL# FEATR	A feature is stored on this button. Press Show to see the feature code. A full list of names and codes for features is included in the index.
Code:F#65... CLR TEL# FEATR	Shows the feature code stored on a button. Press Show to see the button number and feature name.

B03:160455512... CLR TEL# FEATR	The button has a telephone number stored on it. Press Show to see the rest of the number.
Externl tel #... CLR TEL# FEATR	The autodial is an external number. Press Show to see what line or pool the call is programmed to go out on.
Internl tel #... CLR TEL# FEATR	The autodial is an internal number. Press Show to see more information.
B04:Intercom... FIND	The button is used for intercom. Press Show to see more information about the button. You cannot store a feature or number on it.
B05:Ansr 93 FIND	The button is used for an Answer DN. You cannot store a feature or number on it.
B06:Blank button CLR TEL# FEATR	Either nothing is stored on the button or you have just cleared the button by pressing CLR.
B10:Handsfree FIND	The button is occupied by the handsfree feature. You cannot store a feature or number on it.

For other displays, see *Common feature displays* on page 257.

Programming Hunt Groups

The Hunt Groups feature allows a group of Norstar or BST telephones to be called by a single directory number ensuring that calls are easily routed to the appropriate group.

The Incoming Line Group (ILG) functionality is now accomplished through the Hunt Group feature. When upgrading from a pre-Modular ICS 4.0 system to a Modular ICS 6.1 system, any lines previously belonging to an ILG are not automatically converted to broadcast Hunt Groups. You must go in and program them to the new feature. Please refer to *Assigning or unassigning lines to a group* on page 173.

Hunt Groups are used in situations where a group of people performing the same task are required to answer a number of related phone queries. Some typical uses of Hunt Groups are:

- a sales department answering questions on product prices or availability
- a support department answering questions concerning the operation of a product
- an emergency department answering calls for help.

Hunt Groups can be used to route calls to a support service such as a Help Line for a software company. Specialists dealing with Product A can be in one group, and specialists dealing with Product B can be in another group. Incoming calls hunt for the next available telephone in the group. If no telephone is available, the call can be placed in a queue or routed to telephone designated as the overflow set.

The Hunt Groups subheading in system programming is the area where programming changes are made to the following:

- members of a group
- member position in a group
- what lines are assigned to a group
- how incoming calls are distributed
- how long the system looks for available members
- where a call goes if all members are busy

Note: Videophones should not be programmed as members of a Hunt Group. Hunt Groups allow one B channel connection at a time and videophones use two B channels.

Features affected by Hunt Groups include:

- Call Forward All Calls
- Call Forward No Answer
- Call Forward on Busy
- Group Pickup
- Transfer via Hold
- Priority Call
- Line Redirection
- Page Zones
- Voice Call

Adding or removing members from a group

A DN for a telephone can be associated as a member of a Hunt Group, and is called a member DN.

Members of the group can be any Norstar or Business Series Terminal telephone, ISDN terminal, or portables. A telephone can be in more than one Hunt Group but is considered a member in each Hunt Group, increasing the total number of members in the system.

There can be only one appearance of the Hunt Group on a telephone, no matter how many lines are assigned to the group.

Hunt Group DNs cannot be members of other Hunt Groups.

Consult your customer service representative to determine your Hunt Group number range.

1. Place the appropriate programming overlay on your programming set.
2. Press [ ] [*] [*] [2] [6] [6] [3] [4] [4] (CONFIG). The display shows `Password:`.
3. Press [2] [3] [6] [4] [6] (ADMIN). The display shows `Terminals&Sets`.
4. The display shows `Terminals&Sets`.
5. Press [Next] until the display shows `System prgrming`.
6. Press [Show]. The display shows `Hunt groups`.
7. Press [Show]. The display shows `Show group`.
8. Enter the Hunt Group number you want to program (1-30) or press [Next] to scroll through the groups.

9. Press [Show]. The display shows Member DNs.
10. Press [Show]. The display shows the first group member, if there are members.
11. Press ADD and enter a telephone DN to add a member to the group. Press REMOVE to remove a member from the group. Press [Next] to move through the list.
12. Press [☎] to exit or [Next] to continue programming.

Moving members of a group

Member order within a Hunt Group is important. The member order determines how a call is routed through a Hunt Group.

1. At Hunt groups, press [Show]. The display shows Show group.
2. Enter the Hunt Group number you want to program (1-30) or press [Next] to scroll through the groups.
3. Press [Show]. The display shows Member DNs:.
4. Press [Show]. The display shows the members for that group.
5. Press MOVE to move an existing member to another place within the Hunt Group. The display shows the member number followed by an arrow.
6. Enter the new position number for the extension.
7. Press [☎] to exit.

Assigning or unassigning lines to a group

You can assign one or several lines to a hunt group.

Hunt group line notes:

- Configure the prime set for a Hunt Group line to `None` to avoid delayed ring transfer of external Hunt Group calls to the prime set before the Hunt Group can receive the call.
- A line can be assigned to only one group.
- Do not assign any hunt group lines to individual telephones. If any of the telephones that are part of the hunt group have the line assigned, remove the line from the telephone before assigning it to the hunt group.

1. At `Hunt groups`, press [Show]. The display shows `Show group`.
2. Enter the Hunt Group number you want to program (1-30) or press [Next] to scroll through the groups.
3. Press [Show]. The display shows `Member DNs:`.
4. Press [Next]. The display shows `Line assignment`.
5. Press [Show]. The display shows `Show line:`.
6. Enter the line number you want to program or press SCAN to go to the first line assigned to this group, or press LIST to go to the first line in the system.
7. Press CHANGE to program the line as `Unassigned` or `Assigned`.
   HGnn means the line is assigned to another Hunt Group.
8. Press [☎] to exit or [Next] to continue programming.

Setting the distribution mode

There are three modes of call distribution:

- **Broadcast**—rings each telephone in the group simultaneously. Calls are handled one at a time, while succeeding calls are queued. As soon as a call is picked up, the call next in the queue is presented immediately to the group.

  In Broadcast mode, a single incoming call rings simultaneously at all the telephones in a group. This way, all receptionists in the group can share the load of answering large volumes of calls. All telephones automatically display the calling line identification (CLID), if available. A familiar example is a fund-raising campaign where a group of operators are waiting to take each call as it comes in.

- **Sequential**—starts the call at the first telephone in the Hunt Group. Distribution is complete when the first idle telephone is found. Simultaneous calls can be presented. Distribution is order based.

  In Sequential mode, you can program your top salesperson to be the first member of the group to receive calls.

- **Rotary**—the call starts at the telephone after the one which answered the last call. Distribution is complete when the next idle telephone has been found. Simultaneous calls can be presented. Distribution is order based.

  In Rotary mode, you can ensure that all your helpline people are receiving calls on an equal basis, rather than one person receiving the majority of calls. The call rings at one set at a time in a round robin fashion.

If a Hunt Group has available members but nobody answers the call, the call is rerouted through the list until someone answers the call. If all lines are busy, the call is routed according to whatever has been set for the busy line setting. Refer to 'Programming busy line setting' on pa ge176.

1. At Hunt groups, press [Show]. The display shows Show group.
2. Enter the Hunt Group number you want to program (1-30) or press [Next] to scroll through the groups.
3. Press [Show]. The display shows Member DNs:.
4. Press [Next] until the display shows Mode.
5. Press CHANGE to set the mode: Broadcast, Sequential, Rotary.
6. Press [☎] to exit or [Next] to continue programming.

Setting the hunt delay

This setting allows you to program the number of rings the system permits at a Hunt Group telephone before moving on to the next telephone in the Hunt Group.

1. At Hunt groups, press [Show]. The display shows Show group.
2. Enter the Hunt Group number you want to program (1-30) or press [Next] to scroll through the groups.
3. Press [Show]. The display shows Member DNs:.
4. Press [Next] until the display shows Hunt delay.
5. Press CHANGE to select the setting: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.
6. Press [☎] to exit or [Next] to continue programming.

Programming busy line setting

A Hunt Group is considered busy if one of two scenarios exists:

- all of its members are being presented an incoming Hunt Group call
- all of its members are active on a Hunt Group call

There are three routing options if all members are busy:

- **BusyTone**—the caller gets a busy tone (PRI lines only)
- **Overflow**—the call is routed to an overflow position. If the overflow DN is the hunt group DN for that same hunt group, the overflow option will not appear.
- **Queue**—the call stays in the system for a period of time. Within this period of time, the call is presented to an member if one becomes available. When the time-out occurs, the call is presented to an overflow position.

1. At `Hunt groups`, press [Show]. The display shows `Show group`.
2. Enter the Hunt Group number you want to program (1-30) or press [Next] to scroll through the groups.
3. Press [Show]. The display shows `Member DNs:`.
4. Press [Next] until the display shows `If busy:`.
5. Press CHANGE to set the mode: `BusyTone`, `Overflow`, `Queue`.
6. Press [☎] to exit or [Next] to continue programming.

Programming the queue time-out

This setting allows you to program the number of seconds a call remains in the Hunt Group queue before it is routed to the overflow position.

1. At `Hunt groups`, press [Show]. The display shows `Show group`.
2. Enter the Hunt Group number you want to program (1-30) or press [Next] to scroll through the groups.
3. Press [Show]. The display shows `Member DNs:`.
4. Press [Next] until the display shows `Q Timeout:`.
5. Press CHANGE to set the queue time-out: `15, 30, 45, 60, 120, 180`.
6. Press [☎] to exit or [Next] to continue programming.

Programming the overflow set

This setting allows you to program the overflow telephone to which the Hunt Group calls are to be routed. Unless the overflow position is a Hunt Group telephone, the call ceases to be a Hunt Group call. If the overflow telephone is a Hunt Group telephone, the call is treated as a new call and goes to the bottom of the queue.

The overflow telephone can be a DN number associated with a voice mailbox.

1. At `Hunt groups`, press [Show]. The display shows `Show group`.
2. Enter the Hunt Group number you want to program (1-30) or press [Next] to scroll through the groups.

3. Press [Show]. The display shows Member DNs:.
4. Press [Next] until he display shows Overflow:.
5. Press CHANGE to change the overflow position.
6. Enter the new overflow position.
7. Press [☎] to exit or [Next] to continue programming.

Setting the name

This setting allows you to program the Hunt Group name, such as Service or Sales. The name can be up to seven characters in length. This name becomes the CLID display name when the DN is called.

1. At Hunt Groups, press [Show]. The display shows Show Group.
2. Enter the Hunt Group number you want to program (1-30) or press [Next] to scroll through the groups.
3. Press [Show]. The display shows Member DNs:.
4. Press [Next] until the display shows Name:.
5. Press CHANGE.
6. Use the dialpad to enter the name of the Hunt Group.
7. Press [Next] to store the name.
8. Press [☎] to exit or [Next] to continue programming.

Allowing/disallowing an auxiliary ringer

This setting allows you to allow/disallow an external ringer to sound when a call comes in for a specific hunt group. If you allow this service, you must have an auxiliary ringer properly installed on your system. Refer to *Using an auxiliary ringer* on page 233.

1. At Hunt Groups, press [Show]. The display shows Show group.
2. Enter the Hunt Group number you want to program (1-30) or press [Next] to scroll through the groups.
3. Press [Show]. The display shows Member DNs:.
4. Press [Next] until the display shows Aux. Ringer:.
5. Press CHANGE to choose Y (yes) to turn the ringer on or N (No) to disallow an auxiliary ringer.
6. Press [☎] to exit or [Next] to continue programming.

Assigning a distinctive ring pattern to a Hunt Group

You can assign distinctive ring patterns to your Hunt Group so that calls can be rated in priority for the group. These distinctive ring patterns have the same characteristics as for line and extension distinctive ring patterns.

The Hunt Group distinctive ring pattern determines how a call will ring within the Hunt Group. If members of the group have ring patterns assigned to their telephones that are higher than the ring patterns of the incoming line or the Hunt Group, then the Hunt Group will use the ring of the corresponding member telephones.

If the incoming call (line) has a higher ring pattern assigned than the Hunt Group, the Hunt Group will ring with the line ring pattern.

1. At `Hunt groups`, press [Show]. The display shows `Show group`.
2. Enter the Hunt Group number you want to program (1-30) or press [Next] to scroll through the groups.
3. Press [Show]. The display shows `Member DNs:`.
4. Press [Next] until the display shows `Dstnct Ring:NONE`.
5. Press `CHANGE` to toggle to the ring pattern number you want to assign to the Hunt group line. (`None, 2, 3, 4`)
6. Press [☎] to exit or [Next] to continue programming.

Using Silent Monitor

When silent monitor is activated on your system, you can use your SM supervisor two-line display telephone to monitor Hunt group calls based on which DN you select to monitor.

Refer to the *Modular ICS Installation Guide* for detailed information about the fields that make up this feature.

To start a session, on a silent monitor supervisor telephone:

1. Enter [✆] [*] [5] [5] [0].
2. Type in the SM password (default: `SILENT (745368)`)
3. Enter the DN of the hunt group telephone you want to monitor and press `OK`.

   If that telephone is currently on a Hunt group call, you will be automatically connected to the call. If the telephone is

idle or not on a hunt group call, you will be prompted to pick another DN to monitor.

Tips - *Your telephone is muted by default at the beginning of any monitoring session. Press the handsfree/mute button or the display key under* JOIN *to enter the conversation.*

To end a session: Press [↶], or press the display key under OTHER or EXIT.

While attempting to monitor a call, or during a call, you may get one of the following prompts:

OBSERVE RETRY OK	Enter the DN for the Hunt Group telephone that you want to monitor. If you make a mistake entering a DN number, press RETRY and re-enter the number. If the number you entered is correct, press OK. The system redisplays this prompt if it is unable to establish a session with the telephone DN that you enter.
OTHER JOIN EXIT	While a call is being monitored, you can choose to: • move to another Hunt group member (OTHER) • join the current conversation (JOIN) • exit the silent monitoring (EXIT)
OTHER LEAVE EXIT	When you join a monitored call, you can choose to: • move to another Hunt group member (OTHER) • mute your telephone out of the current conversation (this does not disconnect silent monitoring) (JOIN) • exit the silent monitoring (EXIT)
Access denied	You tried to start a monitoring session on a telephone that does not support the feature.

Needs Handsfree	You entered the silent monitor feature code without picking up the handset, and the telephone does not support handsfree operation.
Release calls	You entered the silent monitor feature code on a telephone that already has an active call. To continue, you will have to release it.
Your number	You entered your own DN.
Invalid number	The DN you entered is invalid for your system.
Not in Service	The DN you entered did not respond to the system.
Not HG member	The DN you entered is not a Hunt Group member.
Supervisor	The DN you entered belongs to another Supervisor. You cannot monitor SM supervisor telephones.
Not Supported	The DN you entered belongs to a portable telephone or an ISDN terminal.
DN: Idle OTHER EXIT	The current call on the telephone you are monitoring is either not a Hunt Group call, or the call came in on a line key on that telephone. Note: You should not assign lines which are assigned to the hunt group to individual hunt group members
Need I/C key	No intercom key is currently available to support the feature.

Feature notes

- You can only monitor external hunt group calls.
- You must release all calls on your supervisor telephone before you attempt to run a monitoring session.
- The DN you choose to monitor must be a designated member of a hunt group.
- The supervisor telephone can be part of a hunt group. Supervisor telephones cannot be monitored.
- If the hunt group call gets transferred, the session is dropped because the call is no longer a hunt group call.
- If any of the parties release the call, the monitoring session is dropped, and the supervisor will be prompted to pick another DN to monitor.
- To transfer a session to your handset when you start the monitoring session in handsfree mode, press the OTHER key and re-enter the DN, otherwise the session will continue on your telephone speaker.
- If your telephone is in Silent Monitor idle mode, and you press the Intercom key, the monitoring session will terminate.
- You can monitor calls that are forwarded to a hunt group member.
- If the call is parked, attached to a SWCA key, put on Hold, or camped, Silent Monitor will drop the monitoring session and the supervisor will receive an indication that the hunt group telephone is now idle.
- If the current hunt group call is part of a conference call, it cannot be monitored.
- You can initiate a session on a Hunt group telephone with Do Not Disturb or Auto Privacy are active.

- Using a headset automatically defaults Silent Monitor to mute. This is the recommended way of using the Silent Monitor feature.
- Messages received by the supervisor during a silent monitoring session, will not provide an indication on the display.
- Attempting to initiate any feature keys on the supervisor set, while a session is active, will terminate the silent monitoring session.
- A priority call or ring again call will be indicated on the display. The monitoring session will terminate if the call is accepted.
- If a line is assigned to both a ringing group and a hunt group, calls coming in over this line cannot be monitored.
- If a voice call coming into a supervisor telephone is accepted, any active monitoring session will be released.
- T7316 telephones used as supervisor may experience problems using mute and unmute when joining or leaving a silent monitor session.

MCDN constraints: The attendant cannot break-in to a call which is being monitored. Trunk Anti-Tromboning (TAT) will not be applied to a call that is currently being monitored. If a call has already had TAT applied, the call cannot be monitored.

Using the Hospitality features

This section describes the Hospitality Services feature which is used to administer room and alarm services in small to medium-sized facilities such as hotels, motels, or hospitals.

There are three types of sets that make up this type of system:

Common set—this telephone can be found in the lobby, office, or common area, and is not associated with a room. This type of telephone is used for public access, and cannot access the admin or room features.

Room set—this telephone resides in a specific room and can be used by both guests and cleaning staff to set alarms or to indicate room condition. Up to five DNs can be assigned to the same room number, such as for fax lines, internet dial-up, etc.

Administration set—this telephone must be a two-line display telephone, and is usually configured with a password to allow secure administration of room occupancy and condition services and alarm services.

Hospitality passwords

There are two passwords within the hospitality feature. One provides secure access to the administration set, and one provides secure access to a room condition setting from each room set for housekeeping staff.

Desk pswd

Change this password frequently, to maintain security.

1. Place the appropriate programming overlay on the set you are using to do programming.
2. Press [↩] [*] [*] [2] [6] [6] [3] [4] [4] (CONFIG). The display shows `Password:`.
3. Press [2] [3] [6] [4] [6] (ADMIN). The display shows `Terminals&Sets`.
4. Press [Next] until the display shows `Hospitality`.
5. Press [Show]. `Desk pswd:` displays. (default:4677)
6. Press CHANGE. `New pswd:` displays
7. Enter a new password, then press OK.

Cond pswd

Change this password frequently, to maintain security.

1. Place the appropriate programming overlay on the set you are using to do programming.
2. Press [↩] [*] [*] [2] [6] [6] [3] [4] [4] (CONFIG). The display shows `Password:`.
3. Press [2] [3] [6] [4] [6] (ADMIN). The display shows `Terminals&Sets`.
4. Press [Next] until the display shows `Hospitality`.
5. Press [Show]. `Desk pswd:` displays
6. Press [Next]. `Cond pswd:None` displays.
7. Press CHANGE. `New pswd:` displays
8. Enter a new password, then press OK.

Room/desk information

There are two aspects to programming room information.

- First you must program individual DNs to a specific room and set up the room occupancy filters, which determine what types of calls can be made from a room set at various states of occupancy.
  Note: You can assign up to five DNs to the same room number.
- Then you need to administer the room occupancy and state of the room.

Programming room information

Use this setting to assign set DNs to a specific room.

1. Place the appropriate programming overlay on the set you are using to do programming.
2. Press [⌂] [*] [*] [2] [6] [6] [3] [4] [4] (CONFIG). The display shows `Password:`.
3. Press [2] [3] [6] [4] [6] (ADMIN). The display shows `Terminals&Sets`.
4. Press [Next] until the display shows `Hospitality`.
5. Press [Show]. `Room/desk info` displays.
6. Press [Show]. `Show set: displays`.
7. Enter a room set number or press `LIST` and press [Next] until you find the DN of the set you want to assign to a room.
8. Press [Show]. `Room #:None` displays.
9. Press `CHANGE` and enter the room number, then press `OK` to accept the change.

10. Press Next. Adm pwd req'd:Y displays
11. Press CHANGE and choose Y or N, depending on your security requirements.

Call restrns

Call restrictions can be set up by the system administrator. Refer to the *Modular ICS Installer Guide* for details.

Service times

You can set the time when occupied rooms change from Service done to Service required. This setting affects the Room condition feature.

1. Place the appropriate programming overlay on the set you are using to do programming.
2. Press ↻ * * 2 6 6 3 4 4 (CONFIG). The display shows Password:.
3. Press 2 3 6 4 6 (ADMIN). The display shows Terminals&Sets.
4. Press Next until the display shows Hospitality.
5. At the Hospitality heading, press Show until Service time displays.
6. Press Show. Hour: 00 displays.
7. Press CHANGE and enter the hour (00 to 23).

   If the number is less than 13, the display shows AM. Press CHANGE to select PM, if required. Press OK to accept.
8. Press Next. Minutes: 00 displays.
9. Press CHANGE and enter the minutes (00 to 59).

Using the room/set programming

This section describes how the room occupancy and room condition settings are used.

Setting dialing filters by room state

1. Press [feature] 8 7 9.
2. Enter the Desk admin password if you are prompted for a password.

   The set displays: `Oc of rm#:`
3. Enter the room number and press OK.

   The set displays `rrrrr:Vacant`.
4. Press the CHANGE display key and select the required status for the room set.
5. To program other rooms, press the FIND or NEXT display key and return to step 3.
6. Press [end] to exit.

Note: Setting the room state to Vacant cancels any outstanding alarms.

Setting the room condition

You can use this feature on a room set or administration set to:

- set the room state to service done (`Srvc done`)
- set the room state to Needs service (`Needs srvc`)
- query the state of the room

Using the room set:

1. Press [✆] [8] [7] [6] on a digital set
   or [Link] [*] [8] [7] [6] on an analog set.
2. At the prompt, set the status of the room.

   Note: You may be required to enter a Room condition password.

   Press [1] to indicate `Set to srv done`.

   Press [2] to indicate `Set to needs srv`.

   The set displays the selected prompt.
3. Press [☎] to exit.

Using the admin set:

1. Press [✆] [8] [7] [8].
2. Enter the Desk admin password if you are prompted for a password.

   The set displays: `Cd of rm#:`
3. Enter the room number and press OK.

   The set displays `rrrrr:Vacant`.
4. To update the condition, press CHANGE and select the required status.

   To query the condition of other rooms, press the FIND or NEXT displays keys.
5. Press [☎] to exit.

Programming the alarm feature

If you want to allow the room sets to program wake-up alarms, there are a couple of program settings that need to be entered.

1. Place the appropriate programming overlay on the set you are using to do programming.
2. Press [⌂] [*] [*] [2] [6] [6] [3] [4] [4] (CONFIG). The display shows `Password:`.
3. Press [2] [3] [6] [4] [6] (ADMIN). The display shows `Terminals&Sets`.
4. Press [Next] until the display shows `Hospitality`.
5. Press [Show]. `Room/desk info` displays.
6. Press [Next] until `Alarm` displays.
7. Press [Show]. `Attn attempts:3` displays.
8. Press CHANGE until you find the number you want (1-5).
9. Press [Next]. `Retry intrvl:4` displays.
10. Press CHANGE until you find the number you want (2, 4, 6, or 8).
11. Press [Next]. `Attn duration: 15` displays.
12. Press CHANGE until you find the number of seconds you want (10, 15, 20, 30, 40, 50).
13. Press [Next]. `Time format:12 hr` displays.
14. Press CHANGE to choose either `12hr` or `24hr`.
15. Press [Next]. `Expired alarms` displays.
16. Press [Show]. `Notify set:None` displays.
17. Press CHANGE to enter a set DN to be notified.
18. Press [Next]. `Use tone: N` displays.

19. Press CHANGE to choose either Y (yes) or N (no).
20. Press ☎ to exit or Next to continue programming.

Using the Administration set to control alarms

Only a Hospitality Services set can use this alarm administration feature. This feature is also associated with a room number, and cannot be used on common sets.

Use this feature to:

- query a current or last alarm time set for a room
- assign an alarm time for any room
- change an alarm time for any room
- cancel an pending alarm for any room

To program the alarm, follow these steps:

1. Press ✆ 8 7 7.
2. Enter the Desk admin password if you are prompted for a password.

   The set displays: al of rm#:
3. Enter the room number.
4. Press VIEW. The set displays Alrm: 07:00am OFF:.

   If the alarm time is correct, press the ON/OFF display key.

   If you want to change the time, enter a new four-digit alarm time.

   If the clock uses a 24-hour format, enter an hour between 00 and 23, and minutes between 00 and 59. The set displays: Alarm ON hh:mm

If the clock uses a 12-hour format, enter the time, then when the set displays: `hh:mm AM or PM?`, press AM or PM. The set displays: `Alarm ON hh:mm`.

5. Press [↩] to exit.

Using the alarm

To set an alarm on a digital telephone:

1. Press [✆] [8] [7] [5]. The displays shows `Alrm:07:00 OFF`
2. Do one of the following:

   If the alarm is correct, press ON/OFF.The set displays: `Alrm:07:00am ON`. Press DONE to exit.

   If you need to change the alarm time, press CHG. The set displays: `Enter time:`
3. To enter a new time, do one of the following:

   If the clock uses a 24-hour format, enter an hour between 00 and 23, and minutes between 00 and 59. The set displays: `Alarm ON hh:mm`

   If the clock uses a 12-hour format, enter the time, then when the set displays: `hh:mm AM or PM?`, press AM or PM. The set displays: `Alarm ON hh:mm`.

To set an alarm on an analog set:

1. Press [Link] [*] [8] [7] [5]. A tone sounds.
2. Enter a four-digit alarm time:

   If the clock uses a 24-hour format, enter an hour between 00 and 23, and minutes between 00 and 59. A tone sounds.

   If the clock uses a 12-hour format, enter the time, then press [*] to select am or [#] to select pm. A tone sounds.

To enter a new time, repeat the above steps and enter a new time. This overwrites the existing entry.

Canceling an alarm

Canceling the alarm time for any set cancels the alarm time for all the sets in the same room.

Digital set: Press [✆] [#] [8] [7] [5].

Analog set: Press [Link] [#] [8] [7] [5].

Turning off an alarm

When the alarm rings, the user can release the ring by doing one of the following, depending on the type of set in the room:

Digital set: Press any button except [⌣].

Analog set: Lift and replace the handset.

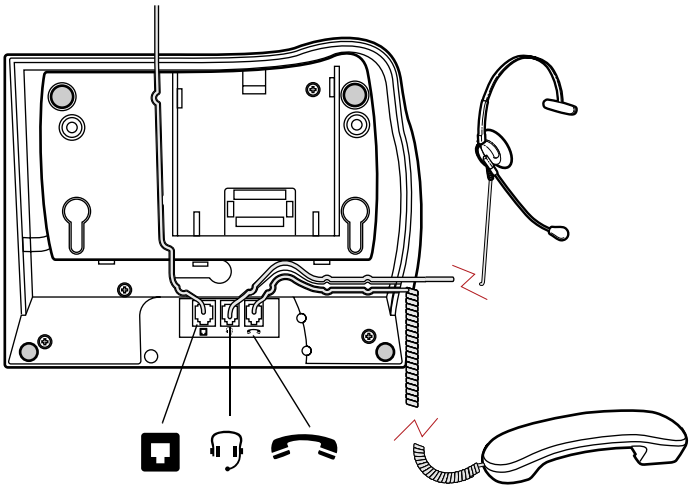
[⌣] acts like a snooze alarm and will temporarily disable the alarm for a programmed period. Refer to *Service times* on page 188.

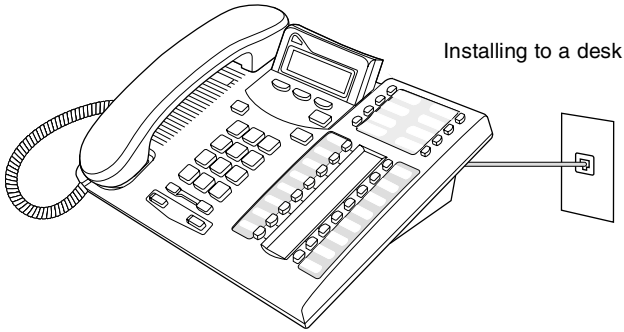
If the user is on a call when the alarm sounds, they can press any button except [☎], which would release the call instead.

Installing Business Series Terminals

If you are connecting a Business Series Terminal for the first time, refer to the following illustrations as a guide.

Installing the Business Series Terminal connections

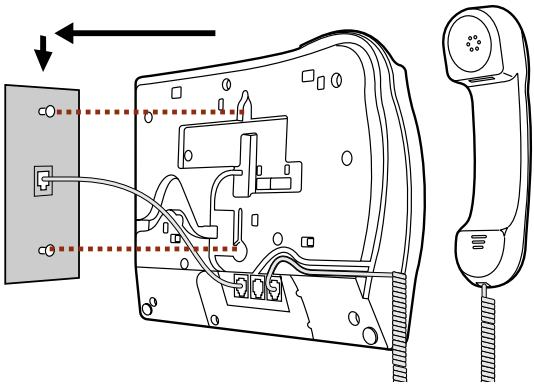




Installing to a desk jack

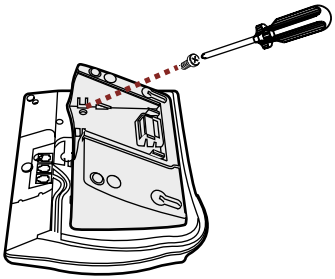
Mounting a Business Series Terminal on the wall

Installing without the angled base

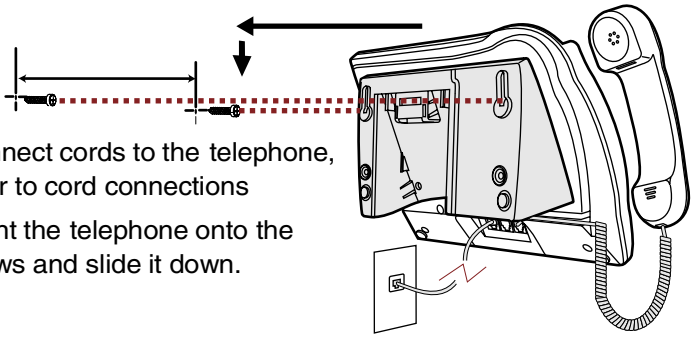


Mounting a Business Series Terminal using the stand

Tighten screws for a secure fit.



Mount the stand as shown and insert screw. Use the screw that came with your keystation.



Connect cords to the telephone, refer to cord connections

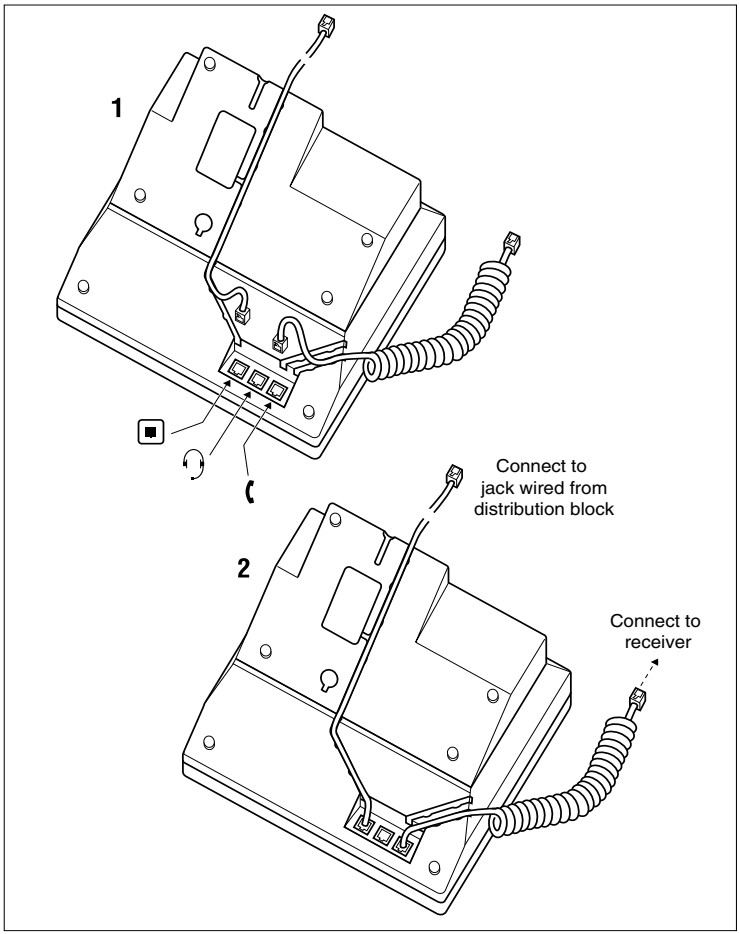
Mount the telephone onto the screws and slide it down.

Connect line cord to wall jack.

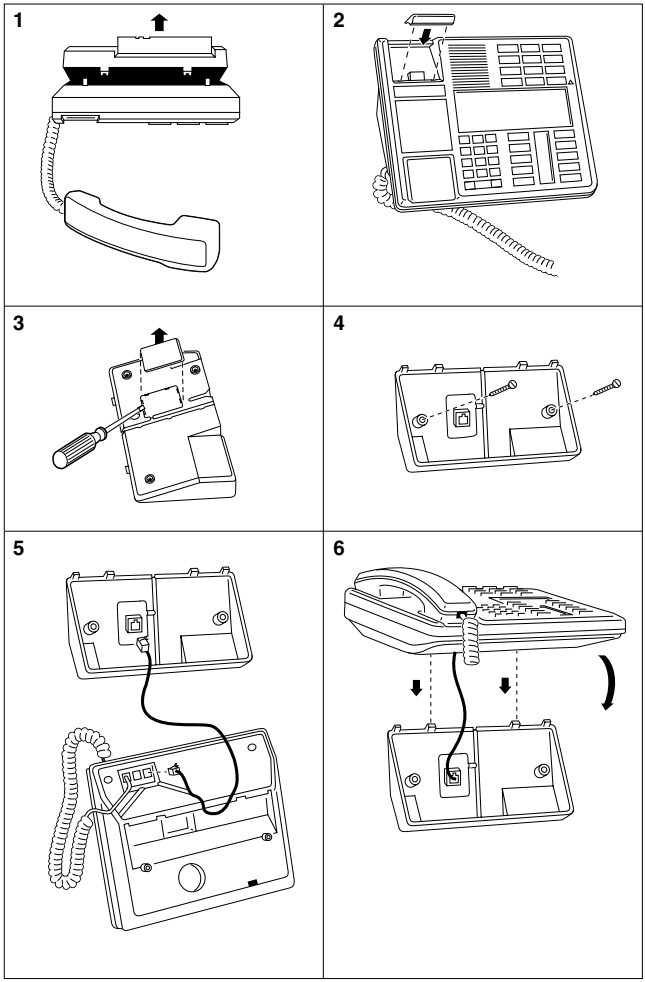
Installing Norstar telephones

If you are connecting a Norstar telephone for the first time, refer to the following illustrations as a guide.

Installing a Norstar telephone



Mounting a Norstar telephone on the wall



Naming a telephone or a line

You can assign names to identify external lines, target lines, and each telephone. During a call, the name, if programmed, is shown on the telephone display instead of the external line number or internal telephone number of the caller. Step-by-step instructions for adding or changing the name of a telephone or a line are in *Changing the name of a telephone* on page 34.

Telephone names and line names can contain both letters and numbers, but cannot be longer than seven characters. You cannot use the # and * symbols.

Tip - *You can give the same name to two or more telephones, or to a telephone and a line in your system. To avoid confusion, avoid such duplication. Use initials, abbreviations, or even nicknames to give each telephone a unique name.*

If automatic telephone relocation is turned on, the name and internal number of a telephone are saved if the telephone is moved within your system.

Moving telephones

You may be required by law to report any telephone moves to your local telecommunications carrier or 911 service provider. For further details, consult your local carrier, your local 911 service provider, and/or your local telecommunications service provider.

If automatic telephone relocation is enabled in programming by your installer or customer service representative, you can move your telephone from one Norstar jack to another without losing any of its custom programming. If you want to replace

a telephone and cancel the programming, ensure that the relocation setting is off.

Stopping calls from ringing at your telephone: Do Not Disturb (DND)

Stopping calls

Press [✆] [8] [5] to stop calls from ringing at your telephone.

Only priority calls ring at your telephone. A line button flashes when you receive a call, but the call does not ring.

Refusing to answer a call

While you are on a call, you can refuse to answer a second call (including a priority call).

Press [✆] [8] [5] while your telephone is ringing.

Canceling Do Not Disturb

Press [✆] [#] [8] [5].

Displays

`Allow calls`	Your telephone receives calls normally.

Using Do Not Disturb

Once you turn Do Not Disturb on, calls are forwarded to the prime telephone only if there is no other telephone on which the line appears. If there is another telephone that shares the same line, the call may be answered by that person. The Delayed Ring Transfer feature transfers all unanswered calls to the prime telephone after a specified time.

Do Not Disturb prevents voice calls from alerting at your telephone. Voice calls are presented as normal intercom calls.

Tip - *Norstar and BST telephones that are members of a Hunt Group can temporarily leave a Hunt Group by activating this feature. Hunt Group calls arriving while a telephone is in Do Not Disturb mode are routed to the next member in the Hunt Group. For more information about Hunt Groups, see Programming Hunt Groups on page 169.*

Using Background Music

[ ] 8 6

Use this feature to active the optional music feature. You will hear whatever music source is attached to the Modular ICS.

Your installer or service representative makes this feature available to all telephones in programming. You need to supply a music source, such as a radio, and have it attached to your ICS.

In accordance with U.S. copyright law, a license may be required from the American Society of Composers, Authors and Publishers or a similar organization if radio or TV broadcasts are transmitted through the Background Music feature of this telecommunication system.
Nortel Networks hereby disclaims any liability arising out of the failure to obtain such a license.

Turning Background Music off

The music stops automatically if you make or answer a call, or press [ ] # 8 6 to turn it off.

ISDN PRI and BRI

Integrated Services Digital Network (ISDN) technology provides a fast, accurate and reliable means of sending and receiving data, image text and voice information through the telephone system.

By using Primary Rate Interface (PRI) or Basic Rate Interface (BRI), your ISDN service allows for faster transmission speeds and the addition of a variety of powerful business applications, including remote LAN access, videoconferencing, file transfer and Internet access.

Your installer configures ISDN services and terminal equipment.

ISDN PRI

PRI is economical because separate analog trunks and data circuits are not needed for Direct Inward Dialing (DID), Direct Outward Dialing (DOD), and data transfer.

With PRI there is greater flexibility because B channels can be dynamically reconfigured to accommodate changes in traffic with the Call by Call feature. For more information, see *Call by Call service selection for PRI* on page 206.

PRI offers fast information access because channel usage is optimized to allow you the full benefit of available bandwidth and real-time connectivity.

PRI lines are configured as DID lines. Incoming calls on a PRI line can appear on a DID button or on an intercom button depending on how your target lines are assigned to the telephones. Outgoing calls are made using the intercom buttons.

PRI lines can be accessed from all devices such as Norstar telephones, Business Series Terminals (BST telephones), ISDN sets, and wireless handsets.

ISDN PRI features

Selected ISDN network features can be used from a Norstar telephone. Your central office switch (ISDN network) determines which features are available to you.

Network Name Display for PRI

Your Norstar system displays the name of an incoming call when it is available from the service provider. Name information can be displayed on a Norstar or BST telephone, but not on an ISDN terminal. If the Calling Party Name has the status of *private,* it may be displayed as `Private name`. If the Calling Party Name is unavailable, it may be displayed as `Unknown name`.

Your Norstar system displays the name of the called party on an outgoing call, when it is provided by your service provider.

The Business Name concatenates with the set name on an outgoing call. This can only occur if the Business Name has been programmed.

The available features include:

- receiving Connected Name
- receiving Calling Name
- receiving Redirected Name
- sending Connected Name
- sending Calling Party Name

Consult your customer service representative to determine which of these features is compatible with your service provider.

Name and number blocking for PRI

When activated, [ ] 8 1 9 allows you to block the outgoing name and/or number on a per-call basis. Name and number blocking can be used with a Norstar or BST telephone, but not with an ISDN terminal.

Consult your customer service representative to determine whether or not this feature is compatible with your provider.

Emergency 911 Dialing

Modular ICS 6.1 with the ISDN PRI feature is capable of transmitting the telephone number and internal extension number of a calling station dialing 911 to the Public Switched Telephone Network. State and local requirements for support of Emergency 911 Dialing service by Customer Premises Equipment vary. Consult your local telecommunications service provider regarding compliance with applicable laws and regulations.

If transmission of internal extension numbers is not required or desired, then it is recommended that the System Coordinator maintain a site map or location directory that allows emergency personnel to rapidly locate a Norstar or BST telephone, given its DID number. This list should be kept up to date and readily available, and can be included with the Programming Record.

Two-way DID

With PRI, the same lines can be used for receiving direct inward dialing (DID) and for making direct outward dialing (DOD) calls.

The dialing plan determines how calls are routed.

Consult your customer service representative to determine whether or not this feature is compatible with your service provider.

Call by Call service selection for PRI

PRI lines can be dynamically allocated to different service types with the Call by Call feature. PRI lines do not have to be pre-allocated to a given service type.

Call types that may be available, depending on your service provider are:

Public	Public calls connect your telephone with a Central Office (CO). DID and DOD calls are supported.
Private	Private calls connect your telephone with a private network. DID and DOD calls are supported. A private dialing plan may be used.
Tie	Tie lines are private incoming and outgoing lines that connect Private Branch Exchanges (PBX) such as Norstar.
FX	Foreign Exchange calls connect your telephone to a remote CO. It provides the equivalent of local service at the distant exchange.
Outwats	Outwats is for outgoing calls. This allows you to originate calls to telephones in a specific geographical area called a zone or band. Typically a flat monthly fee is charged for this service.

Inwats Inwats is a type of long distance service which allows you to receive calls originating within specified areas without a charge to the caller. A toll-free number is assigned to allow for reversed billing.

Consult your customer service representative to determine whether or not this feature is compatible with your provider.

Dialing Plan and PRI

The Dialing Plan supports PRI connectivity to public and private networks. The dialing plan is a collection of features responsible for processing and routing incoming and outgoing calls. All PRI calls must go through a dialing plan.

The Dialing Plan

- allows incoming calls to be routed to telephones, based on service type and digits received
- allows Enbloc dialing by buffering user-dialed digits until a complete DN has been dialed
- provides the ability to map user-dialed digits to a service type on a Call by Call basis
- allows long distance carrier selection via user-dialed Carrier Access Codes

Depending on the type of dialing plan chosen, you may also need to specify a Private DN length so the system knows when the user has completed dialing.

Refer to the Networking chapter in the *Modular ICS 6.1 Installer Guide* for more details about dialing plans. Consult your customer service representative to determine how your dialing plan is configured.

ISDN BRI

Modular ICS 6.1 supports a maximum of 30 ISDN sets on the system.

The following ISDN services are supported:

- incoming calls
- outgoing calls
- Calling Line Identification Presentation (CLID)
- sub-addressing
- bearer capabilities
- teleservices

The Call Forward All Calls feature can be used from ISDN terminals connected to Modular ICS.

Note: Norstar and BST telephones can accept voice calls only. Video and data calls do not alert at a Norstar or BST telephone.

Although an ISDN S-loop or LT-loop can support up to eight devices, the loop has a limit of two B-channels. If both B-channels are in use, other devices on that loop cannot make or receive calls until a B-channel is available, or until both B-channels are available, in the case of a video terminal. Thus, the number of terminals installed must take into account whether you require dedicated access for the terminals on that loop.

Note: System telephone features, other than Transfer and Call Forward All Calls, are not available to ISDN terminals. In addition, you cannot retrieve a parked call, or reach a Direct-Dial set by using the Direct-Dial digit from an ISDN terminal.

Line access from an ISDN terminal

ISDN terminals do not have line keys or intercom keys, as do Norstar telephones and Business Series Terminals. To make an outgoing call from an ISDN terminal, access an external line by entering a line pool code or by using the ARS feature.

ISDN BRI features

Selected ISDN network features can be used from a Norstar or BST telephone. Your central office switch (ISDN network) determines which features are available to you.

Network Name Display for BRI

Your Norstar system displays the name of an incoming call when it is available from the service provider. Name information can be displayed on a Norstar or BST telephone, but not on an ISDN terminal. If the Calling Party Name has the status of *private* it may be displayed as `Private name`. If the Calling Party Name is unavailable it may be displayed as `Unknown name`.

Your Norstar system displays the name of the called party on an outgoing call, when it is provided by your service provider.

As with PRI, your Norstar system sends the Business Name concatenated with the set name on an outgoing call, but only if a Business Name has been entered for the set.

The available features include:

- receiving connected name
- receiving calling name
- receiving redirected name
- sending connected name
- sending calling party name

Consult your customer service representative to determine whether or not this feature is compatible with your service provider.

Name and number blocking for BRI

When activated, [✆] [8] [1] [9] allows you to block the outgoing name and/or number on a per-call basis. Name and number blocking can be used with a Norstar set but not with an ISDN terminal.

Consult your customer service representative to determine whether or not this feature is compatible with your service provider.

Service provider features

Consult your customer service representative to determine if the new ISDN features are supported with your service provider.

Call Forward

Call Forward allows you to forward your calls to an external telephone number.

1. Select an ISDN line by selecting a line button, a line pool, or the handsfree button, or by lifting the handset (if an ISDN line is your prime line).
2. Consult your service provider for the appropriate feature code to enter on your dialpad. Listen for three tones followed by dial tone.
3. Enter the internal number of the telephone to which you want your calls forwarded. If the call is answered, stay on

the line for at least five seconds to activate the Call Forward feature.

Canceling Call Forward

1. Select an ISDN line by selecting a line button, a line pool, or the handsfree button, or by lifting the handset (if an ISDN line is your prime line).
2. Consult your service provider for the appropriate feature code to enter on your dialpad. Listen for a series of tones.
3. Press ☎.

Calling the number your calls are forwarded to

1. Select an ISDN line by selecting a line button, a line pool, or the handsfree button, or by lifting the handset (if an ISDN line is your prime line).
2. Consult your service provider for the appropriate feature code to enter on your dialpad.

Automatic Call Back

If you call a number and it is busy, enter the appropriate feature code designated by your service provider to receive a distinctive ring at your set when the line becomes available for calls.

Automatic Recall

Automatic Recall allows you to automatically dial the number of the last call you received. You may not see the number on the display if the information is not available from your service

provider, or if you do not have Caller ID as part of your ISDN service.

Consult your service provider for the appropriate feature code to enter on your dialpad.

MCID (profile 2)

The MCID feature allows you to enter [✆] [8] [9] [7] to have call information recorded on the central office system for an incoming call on a specific line (ETSI EURO ISDN lines, only).

The user must invoke the feature code either during the active call or within 30 seconds (time varies on different networks) after the caller hangs up, but before the user hangs up.

MCID prompts

`Call traced`	The MCID request was accepted by the network.
`No response`	No response to the MCID request.
`Not incoming`	MCID can only be invoked on received calls.
`Not available`	The caller information is not available. The CO is not able to log the information or it is not an ETSI BRI/PRI type of call.
`Not subscribed`	MCID feature is not subscribed to.
`Invalid state`	MCID is not allowed in the current state of the call.
`Not allowed`	Invalid interaction with another supplementary service.

Network Call Diversion (profile 2)

This feature is a network function that allows forwarding and redirection of calls outside the Norstar network when using an ETSI ISDN line. Functionality is similar to that of External Call Forward (ECF). NCD redirects calls using the same line on which they arrive. Call forward is efficient since there is no need for additional outside lines.

Overlap dialing (profile 2)

This feature allows a break in the dialing sequence when dialing on ETSI PRI lines that require overlap dialing.

ISDN BRI terminals

Your Modular ICS allows connection of eight Basic Rate Access loops (four 2B+D channels) that can be used for fully digital connections to ISDN networks and devices. Loops are connections between the ICS and devices or between the ICS and the network.

Each loop provides two separate B-channels that can be used to make two simultaneous voice or data calls, or one data call and one voice call.

ISDN applications for BRI and PRI

ISDN terminal equipment delivers a wide range of powerful business applications:

Videoconferencing and video telephony

Video conferencing offers instant visual and audio contact between distant parties using either studio-based or desktop ISDN terminals.

Desktop conferencing

ISDN allows computer users in distant locations to share and edit any image, data or text file on their own computer screens while they discuss the information.

File transfer

The ISDN network allows you to transfer files containing data, text, images, data, or audio clips, faster and cheaper than with a conventional modem.

Telecommuting

Convenient retrieval, processing and storage of files is possible for the employee working at home by using ISDN lines to give high-speed access to information resources at the office.

Group 4 fax

ISDN fax applications save money by increasing both transmission speed and the quality of resolution.

Remote LAN access

ISDN provides an affordable and fast means for employees at remote sites (at home or branch offices) to access local area networks (LANs).

Leased line backup

Essential backup for leased lines can be provided using ISDN as required, rather than duplicating costly permanent leased lines.

LAN to LAN bridging

Local area network (LAN) bridge/routers allow flexible interconnection between LANs using ISDN, with charges incurred only when information is actually transmitted.

Internet and database access

The fast call set up and high bandwidth of ISDN are ideal for accessing information services such as the Internet and databases.

Using System features

Using alternate or scheduled services

There are three types of Services to make your Norstar system handle calls differently on different days and at different times of the day: Ringing service, Restriction service and Routing service.

Each of the three services, and the six schedules available to each service, are customized for you by your installer or customer service representative. They program which telephone is used to turn Services on and off, and display what Services are in use. This is called the control telephone.

Preventing certain calls from being made

Restriction service prevents a user from making certain kinds of calls from a telephone or from lines that are available at the telephone. The restrictions are programmed by your installer or customer service representative. For example, you might want to restrict long distance dialing between certain hours of the day.

Making additional telephones ring

Ringing service makes additional telephones ring for incoming calls on external lines. For example, all incoming external calls can ring at a security telephone during the night. Or calls to one attendant can ring at another telephone during lunch. This service does not suppress your normal ringing assignment.

Changing the lines used by outgoing calls

Routing service allows you to assign alternate routes to calls during different schedules. In this way you can take advantage of lower costs available on particular routes on certain days and at certain times. Both the regular and alternate routes are programmed by your installer or customer service representative.

Note: Your system administrator can also assign alternate routes for destination codes that are defined to run on a schedule. In this case, alternate routes are offered only in the case where the original route is not available. Refer to the section on least-cost routing in the *Modular ICS Installer Guide*.

Turning Services on and off

The master control for how different services and their schedules are used by your system is in programming. There are three settings: `Manual`, `Automatic` and `Off`.

- **Manual** allows you to turn the service on and off at any time from a control telephone using a feature code.
- **Automatic** allows you to use the preassigned stop and start time for a service. You are able to start and stop the service by entering the appropriate feature code at a control telephone. If you select this setting, you use the start and stop times programmed by your installer or customer service representative.
- **Off** prevents the service from being activated.
  In the case of restriction settings and routing, this means that the Normal schedule will be in effect.

You need the programming template found at the front of this guide. See *Getting started with Norstar* on page 13 for more information.

1. Press [ ] [*] [*] [2] [6] [6] [3] [4] [4].
2. Press [2] [3] [6] [4] [6] (the default System Coordinator password).
3. Press [Next] twice. Services displays
4. Press [Show]. Ringing Service displays.
5. Press [Next] until you see the service you want to program.
6. Press [Show] and [Next] until you see the schedule you want to program.
7. Press [Show] and use CHANGE to select the setting that works best for your office: Off, Manual or Automatic.

Each schedule can have its own configuration of a Service which works independently of automatic start and stop times. For example, there may be a version of Restriction service called Night Schedule that prevents anyone from making long distance calls. But calling it Night Schedule does not mean it can only be used with a schedule. You can turn the Night Schedule for Restriction Service on or off, as needed, any time of the day or night. If you decide to run a service on a schedule, the system uses the start and stop times used for that schedule.

An example of how to turn on a Service manually

You may have Ringing service, as your night service, set up to run according to the Night Schedule. You may decide you want that ringing arrangement to come into effect only when it is turned on and off manually.

You need the programming template found at the front of this guide. See *Getting started with Norstar* on page 13 for more information.

1. Press [✆] [*] [*] [2] [6] [6] [3] [4] [4].
2. Press [2] [3] [6] [4] [6] (the default System Coordinator password).
3. Press [Next] twice. `Services` displays
4. Press [Show]. `Ringing Service` displays.
5. Press [Show]. The display reads `Sched:Night`.
6. Use [CHANGE] to set the Service to `Manual`.

Night Schedule for Ringing Service no longer follows the schedule but can be turned on and off by using the feature code and selecting Night Ringing. See *Turning Services on and off* on page 220.

Turning Services on and off

The master control for services is in programming. See *Turning Services on and off* on page 218. Day-to-day use of Services is controlled using the following feature codes.

[✆] [8] [7] [1]	Turns on Ringing service. When used at the direct-dial telephone, it activates the alternate direct-dial telephone (extra-dial telephone).
[✆] [#] [8] [7] [1]	Turns off Ringing service.
[✆] [8] [7] [2]	Turns on Restriction service.
[✆] [#] [8] [7] [2]	Turns off Restriction service.
[✆] [8] [7] [3]	Turns on Routing service.
[✆] [#] [8] [7] [3]	Turns off Routing service.

To turn a Service on:

1. Enter the appropriate feature code from a control telephone.
2. For Restriction and Routing service you have to enter the System Coordinator or Basic password.
3. Press NEXT to move through the schedules until the display shows the version of the service you want to be turned on.
4. Press OK to select the setting, or press QUIT to exit the feature without making any changes.

To turn a Service off:

1. Enter the appropriate feature code from a control telephone.
2. For Restriction and Routing service you have to enter the System Coordinator or Basic password.

Do not confuse activating Normal service with canceling a Service.

Setting a Service to Normal is not the same as canceling a Service using a feature code. If you set the Service to Normal, the normal version of a Service overrides any automatic schedule and remains in effect until you manually cancel it. If you cancel the Service, you return to the automatic schedule.

Viewing the active Services on a two-line display

When a Service is active, the control telephone display reads Services ON.

1. Press LIST. The display shows the first active Service and the schedule that is in use.
2. If there are several active Services, press NEXT to see them all.

3. Press EXIT to exit the feature.

Viewing the active Services on a one-line display

1. Press [*] [8] [7] [0]. The display shows the first active Service.
2. Press [#] to move through the active schedule.
3. Press [⌐] to exit.

Displays

<Sched> Restr'n EXIT NEXT	You are viewing the active Services. Press [#] or NEXT to see the other active Services. Press [⌐] or EXIT to quit.
<Sched> Restr'n QUIT OK NEXT	The name of the current Restriction service schedule displays. Press [#] or NEXT to see the other Ringing service schedules. Press [⌣] or OK to select the desired schedule.
<Sched> Ringing EXIT NEXT	You are viewing the active Services. Press [#] or NEXT to see the other active Services. Press [⌐] or EXIT to quit.
<Sched> Ringing QUIT OK NEXT	The name of the current Ringing service schedule displays. Press [#] or NEXT to see the other Ringing service schedules. Press [⌣] or OK to select the desired schedule.
<Sched> Routing EXIT NEXT	You are viewing the active Services. Press [#] or NEXT to see the other active Services. Press [⌐] or EXIT to quit.
<Sched> Routing QUIT OK NEXT	The name of the current Routing service schedule displays. Press [#] or NEXT to see the other Routing service schedules. Press [⌣] or OK to select the desired schedule.
<Sched> until * QUIT OK NEXT	Press [⌣] or OK to select this schedule, [#] or NEXT to see the next available schedule, or [⌐] or QUIT to exit. If you select this schedule, it is in effect until the next automatic schedule takes effect.

No services ON	You have entered the Show Services feature code and there is no active Service.
Services ON LIST	There is a Service active in your system. Press * or LIST to view the active Services.

For other displays, see *Common feature displays* on page 257.

Services that have been turned on automatically are indicated by an asterisk (*) before the name on the display. You can neither manually activate nor cancel automatically-scheduled services, although you can override them by manually turning on another schedule.

The control telephone can override Services that are turned on and off according to a schedule at any time by entering a Services feature code, and then selecting a different schedule. This override remains in effect until it is canceled. If you select a schedule with an asterisk (*), the next automatic service schedule comes into effect at the programmed time.

Direct-dial calls to a direct-dial telephone ring at the extra-dial telephone only when you enter the Ringing service feature code ([ ] 8 7 1) at that direct-dial telephone. Note that only the extra-dial telephone is activated, not the actual Ringing service. This is the case unless that direct-dial telephone is a control telephone. The extra-dial telephone is designated by your installer or customer service representative.

Tip - *Norstar provides six service schedules named Night, Lunch, Evening, Sched 4, Sched 5, and Sched 6. Your installer or customer service representative can change these names to suit your business.*

Using passwords

Your passwords prevent unauthorized or unintentional changes to your Norstar system. To keep your telephone service secure, distribute the password only to selected personnel or make use of the basic password described below. Record your password in a secure place and change it periodically.

If you forget the administration or basic passwords, you cannot do any programming. Call your customer service representative to assign a new password.

The password is a one to six-digit number. It is advised to make your password at least six digits long for security reasons. If you press CHANGE but do not enter a new password, the existing password is erased. Anyone can then access programming without a password.

The default System Coordinator password is A D M I N, which is the same as 2 3 6 4 6.

One password cannot be a subset of another one. For example, you cannot have 123 and 12345.

Using a Basic password

In addition to a System Coordinator password, there is a Basic password. This allows you to delegate some of the duties of being a system coordinator to someone else without allowing access to sensitive programming.

The default Basic password is B A S I C or 2 2 7 4 2.

You can enter the Basic password after the following feature codes:

- [✆] [*] [*] [U] [S] [E] [R] to access User Preferences
- [✆] [*] [*] [T] [I] [M] [E] to change the system time and date

Because the Basic password can be used to change the time, you should give it out with care and change it when necessary, for example, when an employee leaves the company. If restrictions, routing or other services operate on a schedule, changing the time can allow someone to bypass the programming.

Registration password

The Registration password is used to control the registration of Companion portables to the Norstar system. See the *Modular ICS Companion System Coordinator Guide* for more information.

Changing passwords

You need the programming template found at the front of this guide. See *Getting started with Norstar* on page 13 for more information.

1. Press [✆] [*] [*] [2] [6] [6] [3] [4] [4].
2. Press [2] [3] [6] [4] [6] (the default System Coordinator password).
3. Press [Next] four times. `Passwords` displays.
4. Press [Show]. `Call Log pswds` displays.
5. Press [Next] until you see `Prograing pswds ▶`.
6. Press [Show]. `Sys Admin:` displays.

7. Press Next until you see the name of the password you want to change.
8. Use Show, CHANGE and the dialpad to enter the new password. Press OK to accept the new password.

You cannot erase or eliminate the ability to program passwords.

Clearing a Call Log password

If an individual has forgotten their Call Log password, you can clear it in programming. The individual can then enter a new password from his or her telephone.

You need the programming template found at the front of this guide. See *Getting started with Norstar* on page 13 for more information.

1. Press ✆ * * 2 6 6 3 4 4.
2. Press 2 3 6 4 6 (the default System Coordinator password).
3. Press Next four times. Passwords displays.
4. Press Show. Call Log pswds displays.
5. Press Show and enter the internal telephone number of the telephone where you want to clear the Call Log password.
6. Press Show, then press CLR to clear the password after the Log pswd: prompt.

Hospitality passwords

There are two passwords within the Hospitality feature. One provides secure access to the administration set for programming the service, and one provides secure access to a room condition setting from each room set for housekeeping staff.

Desk pswd

Change this administration password frequently, to maintain security.

At Hospitality:

1. Press [Show]. Desk pswd: displays. (default is 4667)
2. Press CHANGE. New pswd: displays
3. Enter a new password, then press OK.

Cond pswd

Change this password frequently, to maintain security.

At Hospitality:

1. Press [Show]. Desk pswd: displays.
2. Press [Next]. Cond pswd:None displays.
3. Press CHANGE. New pswd: displays
4. Enter a new password, then press OK.

Silent Monitor password

Users must enter a password when they use [ ] [*] [5] [5] [0] to monitor Hunt group calls.

It is advisable to change this password frequently.

At SM Passwd (default: 745368 (SILENT)):

1. Press CHANGE.

   New pswd: displays

2. Use the keypad to enter a new password.
3. Press OK.

Using special telephones

Direct-dial

You can reach the direct-dial telephone by dialing a single digit. The direct-dial telephone is usually in a central location, such as at the desk of an administrative assistant or attendant. You can have up to five direct-dial telephones for your Norstar system. It is usually the prime telephone or the central answering position (CAP).

The direct-dial telephone can send up to 30 messages and can invoke Services to activate the extra-dial telephone.

You cannot forward calls to a direct-dial telephone that is outside your Norstar system. See *Making changes to Call Forward No Answer* on page 37.

Note: ISDN terminals cannot use the Direct-Dial digit to reach a Direct-Dial set.

Changing the direct-dial telephone assignments

Your installer or customer service representative sets up the direct-dial telephone.

You can change which direct-dial telephone a telephone is assigned to, or assign it no direct-dial telephone.

You need the programming template found at the front of this guide. See *Getting started with Norstar* on page 13 for more information.

1. Press [✆] [*] [*] [2] [6] [6] [3] [4] [4].
2. Press [2] [3] [6] [4] [6] (the default System Coordinator password).
3. Press [Show] at `Terminals&Sets`.
4. Enter the internal number of the telephone you want to program and press [Show]. The display reads `Capabilities`.
5. Press [Show].
6. Press [Next] until the display reads `D-Dial`.
7. Press CHANGE to select `Set1`, `Set2`, `Set3`, `Set4`, `Set5` or `None`.

Any number of telephones can be assigned to call the direct-dial telephone.

Tip - *The digit you dial in order to get the direct-dial telephone to ring can be programmed by your installer or customer service representative.*

The Norstar system cannot verify that the number you assign as an external direct-dial telephone is valid. Check the number before assigning it as a direct-dial telephone, and call the direct-dial telephone after you've assigned it in order to test it.

Hotline

A hotline telephone calls a preset internal or external telephone number when you pick up the receiver (or press the handsfree button).

Tip - *Label the telephone to inform anyone using it that Hotline is active.*

Bypassing a Hotline

Press a line button, or use the Pre-Dial or the Automatic Dial feature before you pick up the receiver or press the handsfree button on a hotline telephone. See the *Telephone Feature Card* or see *Changing how you dial your calls* on page 82.

Making a telephone a hotline telephone

You can set up a telephone as a hotline.

Tip - *A Hunt Group set DN can be specified as a Hotline telephone. For more information about Hunt Groups, see Programming Hunt Groups on page 169.*

You need the programming template found at the front of this guide. See *Getting started with Norstar* on page 13 for more information.

1. Press [✆] [*] [*] [2] [6] [6] [3] [4] [4].
2. Press [2] [3] [6] [4] [6] (the default System Coordinator password).
3. Press [Show] at `Terminals&Sets`.

4. Enter the internal number of the telephone you want to program.
5. Press Show. The display reads Capabilities.
6. Press Show.
7. Press Next until the display reads Hotline.
8. Press CHANGE to select the type of call the hotline makes: None, Intrnl, or Extrnl.

   • Internl assigns an internal number.

   • External assigns an external number.

   If you select an external number, you can select the line on which the call is made:

   • the prime line

   • an external line

   • a line in a line pool, and a line pool access code
   For this type of line, you must specify the line pool access code.

   • a line selected by the routing table
   For this type of line, the number dialed is treated as a destination code and is routed according to the routing tables.

A prime line, line pool access codes, and access to a line pool can be programmed by your installer or customer service representative.

Control telephone

The control telephone allows you to place the telephones and external lines for which it has responsibility into and out of service schedules. See *Using alternate or scheduled services*

on page 217. Settings for this telephone can be copied from one control telephone to another.

SM Supervisor

A telephone designated as an SM Supervisor allows you to monitor Hunt group calls without or without a conference tone indicator to the other two parties. See *Using Silent Monitor* on page 180.

Using Set lock

Set lock limits the ways in which you can customize your telephone. There are three levels of Set Lock: `Full`, `Partial`, and `None`. `None` allows you to access all features on your telephone.

Partial prevents:

- programming autodial buttons
- programming user speed dial numbers
- programming feature buttons
- moving line buttons
- changing the display language
- changing dialing modes (Automatic Dial, Pre-Dial, and Standard Dial)
- using Voice Call Deny
- saving a number with Saved Number Redial

Full, in addition to the restrictions outlined for Partial lock, prevents:

- changing Background Music
- changing Privacy
- changing Do Not Disturb
- using Ring Again
- using Call Forward all calls
- using Send Message
- using Trunk Answer
- activating Services

Changing Set Lock programming for a telephone

You need the programming template found at the front of this guide. See *Getting started with Norstar* on page 13 for more information.

1. Press [✆] [*] [*] [2] [6] [6] [3] [4] [4].
2. Press [2] [3] [6] [4] [6] (the default System Coordinator password).
3. Press [Show] at `Terminals&Sets` and enter the internal number of the telephone you want to program.
4. Press [Show].
5. Press [Next] until the display reads `Restrictions`.
6. Press [Show] twice.
7. Press [Next] until the display reads `Set lock`.
8. Use [CHANGE] to select one of the three options: `None`, `Partial` and `Full`.

Using an auxiliary ringer

An auxiliary ringer is a separate device that has to be connected to Norstar. Refer to the section on installing optional equipment in the *Modular ICS 6.1 Installer Guide*.

Turning the auxiliary ringer for a telephone on or off

You need the programming template found at the front of this guide. See *Getting started with Norstar* on page 13 for more information.

1. Press [✆] [*] [*] [2] [6] [6] [3] [4] [4].
2. Press [2] [3] [6] [4] [6] (the default System Coordinator password).

3. Press [Show] at `Terminals&Sets`.
4. Enter the internal number of the telephone you want to program and press [Show]. The display reads `Capabilities`.
5. Press [Show].
6. Press [Next] until the display reads `Aux.ringer`.
7. Use CHANGE to select `Y` (Yes) or `N` (No).

Your installer or customer service representative can program the auxiliary ringer to start ringing for incoming lines as part of Ringing Service.

Using Host System dialing signals

You can access host systems, such as private branch exchanges (PBX) from Norstar by using host system signaling features (known as end-to-end signaling). These features either send a special signal to the host system or allow you to program delays required by host systems in external autodial or speed dial sequences.

Link

[*] [7] [1]

If your Norstar system is connected to a private branch exchange (PBX), you can use a Link signal to access special features. On some telephones, Link is called FLASH.

The Link signal can be included as part of a longer stored sequence on an external autodial button or in a speed dial code. The Link symbol (F) uses two of the 24 spaces in a dialing sequence.

Preventing a telephone from using Link

Link can be restricted at individual telephones. You need the programming template found at the front of this guide. See *Getting started with Norstar* on page 13 for more information.

1. Press [✆] [*] [*] [2] [6] [6] [3] [4] [4].
2. Press [2] [3] [6] [4] [6] (the default System Coordinator password).
3. Press [Show] and enter the internal number of the telephone you want to program.
4. Press [Show]. `Capabilities` displays.
5. Press [Next] three times. The display reads `Restrictions`.
6. Press [Show] twice.
7. Press [Next] three times. The display reads `Allow link:`.
8. Press [CHANGE] to choose `Y` (Yes) or `N` (No).

Tip - *If your Norstar system is connected to a private branch exchange (PBX), program Link onto a memory button for one-touch access.*

Pause

[ ] 7 8

The Pause feature enters a 1.5-second delay in a dialing sequence on an external line. This is often required for signaling remote devices, such as answering machines, or when reaching through to PBX features or host systems.

You can program more than one pause in an external autodial or speed dial sequence.

The Pause symbol ( ) uses one of the 24 spaces in a dialing sequence.

For pulse dialing, * inserts a 1.5-second pause into the dialing sequence.

Long Tones

The Long Tones feature allows you to control the length of a tone so that you can signal devices such as fax or answering machines which require tones longer than the standard 120 milliseconds.

1. While on a call, press [ ] 8 0 8 .
2. Press the dialpad buttons to produce the appropriate tones. Each tone sounds for as long as you hold down the button.

Long tones can be used on any call except a conference call. You can use internal lines of the Norstar system to activate a device connected to an analog terminal adapter (ATA) in another area of your office, or external lines to access devices outside the Norstar system.

Displays

Long Tones:	At the appropriate time, press any dialpad button. Hold each button down for as long as necessary. Press [ ] or [ ] to cancel Long Tones.

Programmed Release

[ ] [*] [8] [9]

The Programmed Release feature performs same function as [ ] in a programmed dialing sequence. When the system encounters Programmed Release in a dialing sequence, it stops dialing and hangs up the call.

The Programmed Release symbol (▣) takes up two of the 24 spaces in a programmed dialing sequence.

The system ignores any digits or commands that follow a Programmed Release in a programmed dialing sequence.

Run/Stop

[ ] [*] [9]

Run/Stop inserts a break point into a sequence of dialed numbers or characters used for automatic dialing. This may be necessary when you are connecting to a PBX or similar host system.

For example, you can call a company with an automated attendant that instructs you to dial the internal number you need. You can program the company number, a Run/Stop, then the internal number on one external autodial button. Press the autodial button once to dial the company number. When you hear the automated attendant, press the autodial button again to dial the internal number.

The Run/Stop symbol (T) uses one of the 24 spaces in an autodial or speed dial sequence.

You can include up to three Run/Stop commands in a dialing string. The system ignores a fourth Run/Stop, and any digits or commands that follow it in a programmed dialing sequence.

Wait for Dial Tone

[ ] [8] [0] [4]

Wait for Dial Tone causes a sequence of numbers to pause until dial tone is present on the line before continuing to dial. This is useful if you must dial a remote system and then wait for dial tone from that system before dialing the rest of your number.

The Wait for Dial Tone symbol (,5) uses two of the 24 spaces in an autodial or speed dial sequence.

Displays

`Invalid code`	You have entered a code that can be used only in a programmed autodial or speed dial sequence, not on a call you dial directly. Programmed Release and Run/Stop are for use in programmed dialing sequences only.

Using tone dialing for a call

If your external telephone lines use tone dialing, you can temporarily switch to tone dialing by pressing [#] after selecting the line. Tone dialing allows your Norstar telephone communicate with devices and services that respond to tone signals, such as automatic switchboards, and fax or answering machines.

Using your Norstar system from an external location

You can use the lines and some of the features of a Norstar system from outside the system. You can do this over the public telephone network when you are away from the office, or you can call from another system, over a private network.

An example of how remote access works is a sales representative who spends a lot of time out of the office and who needs to make long distance calls to the European office. Your Norstar system has a leased line to Europe with reduced transatlantic charges. You provide the sales representative with a Class of Service (COS) password that gives access to the transatlantic line. The sales representative can then telephone into the Norstar system from a hotel, enter their Class of Service password, and use the leased transatlantic line to make calls.

Remote users can access Norstar lines, line pools, the page feature, and remote administration, if that features is enabled through Software Keys. The exact facilities available to you through remote access vary, depending on how your installer or customer service representative set up your system.

Tip - *If the loop start line used for remote access is not supervised, auto-answer does not function and the caller hears ringing instead of a stuttered tone or the system dial tone.*

Controlling access to your Norstar system

It is important to maintain the security of your Norstar system by limiting access to authorized users and limiting those users to the features they need.

Remote users can make long distance calls.

Remember, a remote user can make long distance calls that are charged to your company and can make page announcements in your office unless you create the proper restrictions for external access lines.

Direct inward system access (DISA)

Control access to your Norstar system with direct inward system access (DISA). Access to your Norstar system from the public telephone network should always be controlled with DISA. If your installer or customer service representative programs the line used for remote access to answer a call automatically and wait for a DISA internal number, callers hear a stuttered dial tone and must enter a Class of Service password before they are allowed into the system.

Class of Service (COS)

To control the level of telephone service a remote user can access, your installer can assign a remote filter and remote package to the line used for remote access. The remote filter restricts the numbers that can be dialed on the line, and the remote package restricts the use of line pools and the page feature. To change the restrictions for the line, the user can enter their Class of Service (COS) password when the system answers with DISA, or can dial the DISA internal number and enter their Class of Service password.

Maintaining security

To maintain the security of your system, the following practices are recommended:

- Warn anyone to whom you give the remote access number, to keep it confidential.
- Change Class of Service passwords often.
- Warn anyone to whom you give a Class of Service password, to remember it and not to write it down.
- Remove the Class of Service password of anyone who leaves your company.

Accessing Norstar remotely over the public network

1. Dial the Norstar system remote access number.
2. When you hear a stuttered dial tone, enter your COS password.
3. Wait for the system dial tone.

To use the system remotely, you must use a telephone with tone dialing to call the system.

Remote access is possible only on lines that your installer or customer service representative programs to auto-answer calls.

To use features on a remote Norstar system, press [*] followed by the feature code. Even if you are calling from a Norstar system, such as within a private network, press [*] instead of [↻].

In certain situations, you may experience lower volume levels when using Norstar remotely.

Tones

You may hear some of the following tones while accessing Norstar remotely.

Tone	What it means
Busy tone	Dialed a busy line pool access code. You hear system dial tone again after five seconds.
Norstar system dial tone	You may use the Norstar remotely.
Fast busy tone	You have done one of the following • Entered an incorrect COS password. Your call is disconnected after five seconds. • Taken too long while entering a COS password. Your call is disconnected after five seconds. • Tried to use a line pool or feature not permitted by your Class of Service. You hear system dial tone again after five seconds. • Dialed a number in the Norstar system which does not exist. Your call is disconnected after five seconds.
Stuttered dial tone	Enter your COS password.

Using Class of Service (COS) passwords

Class of Service passwords permit controlled access to system resources both by internal and remote users. When you enter a Class of Service password at a telephone, the restriction filters associated with your Class of Service password apply, rather than the normal restriction filters. Similarly, when a remote user enters a Class of Service password on an incoming auto-answer line, the restriction filters and remote package associated with their Class of Service password apply, rather than the normal restriction filters and remote package. COS passwords are programmed by either your customer service representative or installer.

Users should memorize their COS passwords instead of writing them down. Typically, each user has a separate password. Several users can share a password or one user can have several passwords.

Individual COS passwords should be deleted when an employee leaves the company. Group COS passwords should be changed if one of the group members leaves the company.

Changing your Class of Service

You must enter a Class of Service password each time you want to make a call that is normally restricted on a line or telephone.

To change the restriction filters on a line or telephone:

1. Press [ ] [6] [8].
2. Enter your six-digit COS password.

COS passwords allow you to define individual passwords and determine the restriction filters, and remote package associated with each.

Tip - *If you use your Norstar system from outside the office, you may have to enter a Class of Service password to gain access to the system. See Using your Norstar system from an external location on page 239.*

Displays

	(Blank display) Enter your password. It is not shown on the display.
Invalid Password	You have entered a password that is not programmed into your system.

General System features

The following features are available for the entire Norstar system.

Set profile

Set profile allows you to view but not change the programming settings for each Norstar set. You can access Set Profile from any M7310, M7324, or T7316/T7316E telephone, even while you are on a call.

1. Press [✆] [*] [*] [S] [E] [T].
2. Enter the internal number of the telephone whose programming you want to review.
3. Use BACK, SHOW and NEXT to navigate through the settings.

Line profile

Line profile allows you to view but not change the programming settings for each Norstar line. You can access Line Profile from any M7310, M7324, or T7316/T7316E telephone, even while you are on a call.

1. Press [✆] [*] [*] [L] [I] [N] [E].
2. Enter the number of the line whose programming you want to review.
3. Use BACK, SHOW and NEXT to navigate through the settings.

Pulse or tone dialing

If your external lines use pulse dialing, you can switch temporarily to tone dialing to communicate with devices such as answering machines, to access the features that PBX systems may offer, or to use another Norstar system remotely.

Press # while on an active line. Once you hang up, your telephone returns to pulse dialing.

Disconnect supervision

When Disconnect Supervision is assigned to a line, the Norstar system monitors it to detect if an external caller hangs up. This allows the system to release the line for other uses. Your installer or customer service representative assigns disconnect supervision.

Hunt Groups

Your Norstar system allows you to establish Hunt Groups. Hunt Groups are a group of Norstar or BST telephones which can be called by a single directory number. The Hunt Groups feature ensures calls are easily routed to the appropriate people.

You can also monitor hunt group calls using the Silent Monitoring feature.

For more information about Hunt Groups and the Silent Monitoring feature see *Programming Hunt Groups* on page 169.

Internal numbers

Each telephone in the Norstar system has its own internal number. The length of internal numbers in your system can be from three to seven digits. All numbers in your system are the same length. Your installer or customer service representative sets the length of internal numbers, called the DN length. The default DN length is three.

To find out your internal number, use the Button Inquiry feature ([ ] [*] [0]) on an intercom button. On the M7100 or the T7100 sets, Button Inquiry shows your internal number, followed by the function assigned to your single-memory button.

Line assignment

Any of the lines in your system can be assigned to any of your telephones. Your installer or customer service representative assigns lines to telephones in `Configuration` programming, under `Terminals&Sets`. Lines can be assigned to appear only, appear and ring, or to ring only.

Usually, only the lines that are appropriate for a particular person appear at their telephone. When a line is assigned to a telephone, it is automatically given a line button on that telephone, if a button is available. The M7100 and the T7100 sets do not have line buttons.

Calls on lines that ring, but which do not appear at a telephone, are presented at an intercom button.

You may be able to answer a call on a line that does not appear or ring at your telephone. To pick up such a call, use Call Pickup, Call Park, or Trunk Answer.

A telephone may have buttons assigned for lines 001 to 003, but have only lines 001 and 002 programmed to ring as well. An incoming call on any of the three lines causes a line button indicator to flash, and the telephone can be used to answer the call. This is especially useful for people who monitor other telephone lines, but want only their own lines to ring.

Target line

A target line is used to route a call directly to a particular telephone or group of telephones. Target lines are used only for incoming calls. A single incoming line may provide connections to several different target lines. This allows each person or department in the office to have their own number without having a separate external line for each number.

Tip - *The maximum number of target lines available in the fully expanded XC system is 192.*

Maxi system: lines 157-284

Expanded: lines 157-348

Privacy issue

You can set a target line to Private (default is Public), however, such features as Call Pickup can still answer these lines at remote telephones.

Line pools

A line pool allows each telephone access to external lines from a group (or pool) of external lines. You can access such lines by pressing an intercom button and entering a line pool access code or a destination code, or by pressing a memory button programmed with the line pool feature code and a line pool access code.

Overflow call routing

If a call comes in for a target line that is busy, Norstar routes the call to the prime telephone for that target line. If there is no prime telephone assigned to the target line, or if a call cannot be directed to a target line, the call goes to the prime telephone for the external line used.

Overflow routing for incoming calls is used with the Routing Service programmed by your installer. A Service must be active for overflow routing to be in effect. Overflow routing is not available in Normal service.

Tips - *When you make a call and the programmed route is busy, you hear the expensive route warning tone and see a display indicating that an expensive route is being used. To avoid using the normal, expensive route, release your call.*

Because overflow routing directs calls using different line pools, a call may be affected by different line filters when it is handled by overflow routing.

If you are not sure how the filters are assigned, refer to the Programming Record for a description of line filters and for a list of line assignments.

M7100 and T7100 telephones

These telephones do not have line buttons, therefore, they work differently from other Norstar telephones.

- Where other telephones can require that you select a line button to answer a call, on the these telephones you simply pick up the receiver.
- Where other telephones require you to select a line button to take a call off hold, you press [ ] on the these telephones.
- Also on these telephones, you can answer a second call by pressing [ ]. Your active call is put on hold and you are connected to the waiting call. You can have no more than two calls at a time.

There is no handsfree button on these telephones. When applicable, special instructions are included with each feature description.

Memory buttons

Memory buttons are the buttons with indicators on the M7208, M7310, M7324, T7208, and T7316/T7316E telephones. The M7310 also has dual buttons without indicators. There is a single memory button, without an indicator, on the M7100 and the T7100 telephones.

Memory buttons can be configured as answer, autodial, line, and programmed feature buttons. Line, intercom and answer buttons must have indicators, and are programmed by the system administrator.

One-line display

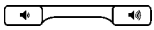
The M7100, M7208, T7100 and T7208 telephones have a one-line display.

Other telephones have a second line on the display which shows the functions of the three buttons directly below it. These indicators are known as display buttons.

Some display buttons, such as TRANSFER and ALL, are simply shortcuts which are not available on a one-line display.

Other display buttons, such as OK and SHOW, perform essential functions. For a one-line display telephone, use the following buttons instead of these display buttons.

Substitutes for display buttons

Display button	Dialpad button	Display button	Dialpad button
OK		CANCEL	#
QUIT		VIEW	#
ADD	*	OVERRIDE	#
SHOW	#	BKSP	

All displays listed in this book are shown as they appear on the two-line display.

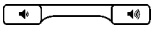
Prime line

Your telephone can be programmed to select an internal or external line or a line pool automatically whenever you lift the receiver or press the handsfree button. This is your prime line.

Private lines

A private line is exclusive to a particular telephone. Calls that are put on hold or left unanswered on a private line cannot be picked up at any telephone except the prime telephone.

Volume bar

The volume bar controls the volume of the receiver, telephone ringer, handsfree speaker, and headset. Press either end of the volume bar  to adjust the volume.

Troubleshooting

Using the alarm telephone

An alarm telephone displays Modular MICS system alarm codes, should they occur. Alarm telephones are Norstar telephones or Business Series Terminals with two-line displays that are specifically assigned by the installer to receive system alarm codes.

Reporting and recording alarm codes

If an alarm message appears on the alarm telephone display:

1. Record the alarm number.
2. Press TIME and record the time displayed.
3. Call your installer or customer service representative and report the alarm code.
4. After speaking to your installer or customer service representative, press CLEAR.

Displays

Alarm: 61-4-2 TIME CLEAR	Report this alarm and the time it occurred to your installer or customer service representative.

Testing the telephone

If you suspect something is wrong with a button, the speaker, the displays, or some other part of the telephone hardware, you can do a quick test to see which part of the telephone is broken.

Tip - *Ensure that the function of a button matches its label by pressing [✆] [*] [0] and then pressing the button to see its function.*

You can end the telephone testing session anytime by pressing [☎] or [✆], unless you are testing those buttons. The test feature times-out after 30 minutes of no activity.

Testing the telephone display

Use a display test if you suspect that one of the indicators on the telephone is not working.

1. Press [✆] [8] [0] [5]. The display reads `Display test`.
2. Press TEST or [⌣] to go ahead with a display test.
3. Adjust the contrast for the telephone display so you are able to see the test results clearly. Enter a number to change the contrast or press DOWN and UP.
4. Press OK or [⌣] to go ahead with the test.

During the test, the display should be filled with solid, dark blocks and all the indicators next to the buttons on the telephone should be turned on. Any Busy Lamp Field (BLF) or CAP modules or KIMs attached to the telephone should be completely lit. You lose any information that was showing on the BLF before the test started.

Pressing any button ends the test.

Testing the telephone buttons

1. Press [✆] [8] [0] [5], then [#] or NEXT.
2. Press TEST or [⌣] to go ahead with a button test.
3. Press the button to see its function. If the button you pressed uses an indicator, it turns on when you test the button.
4. Pressing the [☎] button puts `Rls button` on the display briefly and returns you to the `Button test` display.

Testing the speaker in the telephone handset

The handset test is not available if you have a headset plugged into the telephone.

1. Press [✆] [8] [0] [5], then [#] or NEXT twice. The display reads `Handset test`.
2. Press TEST or [⌣] to go ahead with a handset test.
3. Pick up the handset and listen. Dial tone sounds through the handset at maximum volume. The volume is reset to maximum only while the test is going on.
4. Pressing any button or hanging up ends the test.

Testing the telephone headset

The headset test is not available to telephones that do not have a headset jack or a headset plugged in.

1. Press [✆] [8] [0] [5], then [#] or NEXT until the display reads `Headset test`.
2. Press TEST or [⌣] to go ahead with a headset test.

   You should hear dial tone through the headset. The volume is reset to a default level during the test.

3. Pressing any button ends the test.

Testing the telephone speaker

1. Press [✆] [8] [0] [5], then [#] or NEXT until the display reads Speaker test.
2. Press TEST or [⌣] to go ahead with a speaker test.

   A page tone sounds through the telephone speaker at the maximum volume. The volume returns to its previous setting when you end the test.
3. Pressing any button ends the test.

Testing the power supply to a telephone

1. Press [✆] [8] [0] [5], then [#] or NEXT until the display reads Power test.
2. Press TEST or [⌣] to go ahead with a power supply test.

You should see all the indicators on the telephone go on and hear ringing at maximum volume. When the test has ended, the display should briefly show Power OK.

The test lasts for five seconds or until you press a button.

Common feature displays

You may see the following displays when you use a feature.

Access denied	Someone is already using programming, or the feature you are trying to use is not compatible with the configuration of the telephone or line.
Denied in admin	You have tried to use a feature, but you have not been given access to it in administration programming.
Feature timeout	You have taken more than 15 seconds to press a button in response to a display.
Inactive feature	You have entered a feature code that is used by an application program that your system does not have.
Invalid code	You have entered an invalid feature code.
Not available	You have tried to use a feature that is not available in the present setup of your Norstar system.
Set locked	You cannot use the feature you have chosen because your telephone is locked. See *Using Set lock* on page 232.
1234567890123... VIEW→ OK	Press # or press VIEW→ or ←VIEW to view a number that is too long to fit on the display. Press ⌣ or OK when you are finished.
S	This indicates a long distance call. (May be available with Call Display services.)
239>221	You are receiving an internal call from telephone 239 forwarded by telephone 221 or you have an Answer button for telephone 221 and an internal call from 239 is ringing on 221.
221 TRANSFER	You are connected to an internal call. Press TRANSFER to transfer the call.

221 calling	You are receiving a call from telephone 221.
Call 221? YES NO	You have received a Ring Again offer for a call to an internal telephone. Press the flashing internal line button or YES to call the number again. On M7100 or T7100 telephones, just lift the receiver. Otherwise, press NO or wait 30 seconds for the Ring Again offer to expire. For an explanation of Ring Again, see *Using Ring Again* on page 85 .
Camped: 221 CALLBACK	The person to whom you camped the call did not answer it. The call has come back to you. Press the line button or CALLBACK to reconnect to the call.
Line001 TRANSFER	You are connected to an external call. Press TRANSFER to transfer the call.
Line001>221	You are receiving an external call forwarded from telephone 221 or you have an answer button for telephone 221 and an external call is ringing on that telephone.
Line001 transfer	The call on line 001 is being transferred to you by someone else in your Norstar system.
Line001 waiting	A camped call is waiting. Press the line button or use Call Queuing to answer the call. Press ⏎ if you have M7100 or T7100 telephones.
No calls waiting	You tried to use Call Queuing but no call was ringing at your telephone.
No line selected	There is no call ringing at your telephone. If you have a flashing line button but your telephone is not ringing, press the line button to answer the call on that line.
Not in service	The telephone to which you directed a call is not in service or is otherwise unavailable. The call is returned to your telephone.
Parked call CALLBACK	No one answered the call you parked. The call has come back to you.

Pick up receiver	You have used the Call Queuing feature without picking up the receiver. Auto handsfree has not been assigned to your telephone. You must use the receiver or the button marked handsfree/mute to answer a call.
Priority> 221 BLOCK	You are receiving a priority call. If you are on another call, inform the person you are speaking to that you are about to put the call on hold. Press the flashing line indicator of the priority call or wait until the call connects automatically (eight seconds). The priority call goes through when you hear the next beep. Your active call is placed on Exclusive Hold. It is reconnected automatically when the priority call ends, unless you transfer the priority call, in which case you must press the line button of your original call to reconnect). Use DND ([✆] [8] [5]) or press BLOCK to reject a priority call.
Release a call	You have no free line buttons on which to receive a call. Release one of your current calls and try again to answer the incoming call.
Use line pool? YES NO	You have received a Ring Again offer for a line pool. Press the flashing internal line button or YES to use the line pool. On M7100 and T7100 telephones, just lift the receiver. Otherwise, press NO or wait 30 seconds for the Ring Again offer to expire.
Hold or release	You cannot program a feature button while you are on a call.
Release calls	You have tried to use a feature while you were on a call or had calls on hold. Release the call or calls, before using the feature.
Line in use	The line is in use. Make the call using normal methods or wait until the line is free.

`No button free`	You have tried to make, receive or pick up a call when no line button was available. Some features require you to have a button free. Releasing calls can free up line buttons.
`Make calls first`	The feature you tried to use requires you to be on an active call at your telephone. This display appears when information about a call has been cleared by a system reset.
`No free lines`	All the lines or line pools available to the telephone are in use. This display appears when you have tried to dial an external number or use a feature that conflicts with the lines, line pools or prime line used by the telephone. This must be corrected by your customer service representative or installer.
`No line selected`	The telephone has been set up to dial an external number on a prime line but the telephone does not have a prime line. This must be corrected by your customer service representative or installer.
`In use:221`	You have tried to program redirection while someone else is programming redirection. Only one person can program line redirection at a time.
`Incoming only`	The line you are trying to use for redirecting calls is for incoming calls only. Choose an outgoing line.
`9_` `QUIT BKSP OK`	Continue entering digits. Press or BKSP to delete incorrect digits. Press or OK when you are finished.
`Invalid number`	You have entered an invalid line pool code or an invalid destination code.
`Line denied`	You have selected a line that is private to another telephone.
`Restricted call`	The destination you have chosen for line redirection is restricted.

Glossary

A

access code: Different sequences of characters used to gain access to these Norstar features: Line pools, Call park, external lines, Direct-Dial telephone, Auto DN, and DISA DN. Destination codes are also a form of access code.

alarm code: A number that appears on the alarm telephone display, informing you that the ICS has detected a fault in the system.

alarm telephone: A telephone that is designated to receive reports of Norstar system problems. This function is usually assigned to a prime telephone, but this can be changed under Feature settings in Sys programmng.

Answer button: A telephone button with an indicator that is used to monitor another telephone. The answer button indicates incoming calls destined for the other telephone. Someone working at a telephone with answer buttons (an attendant, for example) can receive all ringing and visual indication of incoming calls for other telephones, and answer those calls when necessary.

One telephone can have up to four Answer buttons. An Answer button is automatically assigned to a telephone when that telephone is assigned an Answer DN.

Answer DN: The internal or directory number (DN) of a telephone that is monitored by an Answer button. You can assign up to four Answer DNs to a telephone under Line Access in Terminals and Sets programming.

Autobumping: [feature] 8 1 5
A feature that determines what the system does with new Call Log items when your Call Log is full. When Autobumping is on, a new log entry causes the oldest entry to be deleted. If Autobumping is off, your Norstar system does not log calls when your log is full.

autodial button: A memory button that, if programmed, provides one-touch dialing of external or internal numbers.

autolog options: [feature] * 8 4
A feature that allows you to select the type of calls that are stored in your Call Log. You can choose to log calls that were not answered by anyone within the system, to log calls that were unanswered at this telephone but which were answered elsewhere in the system, to log all calls answered and not answered at this telephone, or to not have calls automatically logged.

Automatic Dial: A feature that allows you to dial without having to pick up the receiver or select a line. You must have a prime line to use Automatic Dial. Automatic Dial is assigned under Dialing options in Terminals&Sets programming.

Automatic handsfree: A feature which automatically activates handsfree operation when you make or answer a call. Automatic handsfree is assigned under handsfree in Terminals&Sets programming.

Automatic Hold: A feature that automatically places an active call on hold when you select another line.Automatic Hold (Full AutoHold) is assigned in Lines programming.

Automatic Privacy: See Privacy.

Automatic Daylight Savings Time: A feature that switches the system to standard or daylight savings time at pre-programmed times. It is

turned on or off under Daylight time in Sys prgrmmng.

Automatic Telephone Relocation: A feature that allows a telephone to retain personal and system programming when the telephone is plugged into a different Norstar modular jack. Automatic Telephone Relocation is enabled under Set relocation in Sys prgrmmng.

auxiliary ringer: A separate external telephone ringer or bell which can be programmed to ring when a line or a telephone rings. An auxiliary ringer may be programmed to ring only when the system is in a particular schedule. Programming of an auxiliary ringer is done in Services programming after the feature has been enabled under Capabilities in Terminals&Sets programming.

B

Base station (XC 3.0 only): A Companion component that is mounted on walls and ceilings to provide a radio link to an office or other area where Companion portable telephones are used. Each base station houses two radios that allow portables to send and receive calls through the ICS. (See also Companion Wireless)

Background Music: A feature that allows you to hear music from the speaker of your Norstar telephone. It is available only if a music source has been attached to the ICS and the feature has been enabled under Feature settings in Sys prgrmmng.

Basic password: A one- to six-digit password that prevents unauthorized access to the most commonly-used telephone settings. The Basic password can be assigned and changed in Passwords programming.

Business series terminals These terminals were developed to replace the Norstar M-series terminals. Therefore, their functionality closely parallels the M-series terminals.

busy lamp field (BLF): A device with a liquid crystal display (LCD) panel of indicators that shows the status of up to 24 telephones in the Norstar system. The BLF attaches to the M7310 and T7316/T7316E telephones.

button caps: Interchangeable plastic caps that fit over the buttons of Norstar telephones. They are used to indicate the features programmed onto each programmable memory button. Button caps are either pre-printed or have clear windows that allow you to insert labels.

Button Inquiry: [✆] [*] [0]
With this feature you can check the function of each programmable button on your system telephone.

C

Call Duration timer: [✆] [7] [7]
A feature that allows you to see how long you spent on your last call, or how long you have been on your present call.

Call Forward: [✆] [4]
A feature that forwards all the calls arriving at your telephone to another telephone in your Norstar system. To have calls forwarded outside the system, use Line Redirection.

Call Forward No Answer: A feature that forwards all calls arriving at your telephone to another designated telephone in your Norstar system after a specific number of rings. Call Forward No Answer is assigned under Capabilities in Terminals&Sets programming.

Call Forward On Busy: A feature that forwards all calls at your telephone to another designated telephone if your telephone is busy. This feature is assigned under Capabilities in Terminals&Sets programming.

Call Forward Override: An automatic system feature that allows you to call someone and ask them to stop forwarding their calls to you.

Call Information: [✆] [8] [1] [1]
Call Information allows you to display information about incoming calls. For external calls, you can display the caller name, telephone number and the line name. For an internal call, you can display the name of the caller and the internal number. You can obtain information about ringing, answered, or held calls.

Call Log: [✆] [8] [1] [2]
Enter your Call Log to view a record of incoming calls. The log could contain the following information for each call: sequence number in the Call Log, name and number of caller, long distance indication, indication if the call was answered, time and date of the call, number of repeated calls from the same source, and name of the line that the call came in on. See Autobumping, Autolog options, and Call Log for further information.

Call Park: [✆] [7] [4]
With this feature you can place a call on hold so that someone can retrieve it from any other telephone in the Norstar system by selecting an internal line and entering a retrieval code.

The retrieval code appears on the display of your telephone when you park the call. You can park up to 25 calls on the system at one time.

Call Park Callback: See Callback.

Call Park prefix: The first digit of the retrieval code of a parked call. This digit cannot conflict with the first digit of any existing DNs, Line Pool access codes, the Direct-dial digit, or the external line access code. The default Call Park prefix digit is 1. It may be set to none, in which case Call Park is disabled. Call Park prefix is assigned under Access codes in Sys prgrmmng.

Call Pickup Directed: [✆] [7] [6]
A feature that allows you to answer a call ringing at any system telephone by entering the internal number of that telephone before taking the call. Call Pickup Directed is enabled under Feature settings in Sys prgrmmng.

Call Pickup Group: See Pickup Group.

Call Queuing: [✆] [8] [0] [1]
If you have several calls waiting at your telephone, you can invoke the Call Queuing feature to answer them in order of priority. Priority is given to incoming calls, followed by callback and camped calls.

Callback: If you park, camp, or transfer a call to another telephone and it is not answered there, it will ring again at your telephone. How long the system will wait before Callback occurs is set under Feature settings in Sys prgrmmng.

Camp-on: [✆] [8] [2]
A feature that allows you to reroute a call to a telephone even if all the lines on that telephone are busy. To answer a camped call, use Call Queuing or select a line if the camped call appears on your telephone. Priority is given to queued calls. Note: Systems which use a centralized voice mail system attached to a Meridian 1, can provide this service to all nodes of the network.

Camp timeout: The length of a delay before a camped call is returned to the telephone that camped the call. The length of delay is set under Feature settings in Sys prgrmmng.

Central answering position (CAP): An M7324 telephone and one or more CAP modules or a T7316E telephone and one or more KIMs that are designated as a CAP under CAP assign in Sys prgrmmng. The CAP provides backup answering and can be used to monitor the telephones within a Norstar system. Buttons can also be programmed under Button programming, in this configuration.

Class of Service (COS): The set of Norstar features and lines available to the user for a call. The Class of Service for a call is determined by the restriction filters and remote access packages assigned to the telephone in Lines programming. The Class of Service for a call can be changed by entering a six-digit Class of Service password. (Internal users cannot change their access to features with a COS password, only their restriction filters.) Class of Service and Class of Service passwords are assigned in Passwords programming. See Remote Access.

Class of Service password: [✆] [6] [8]
A six-digit code that allows you to switch from your current Class of Service to one that allows you to dial numbers prohibited by your current Class of Service.

Companion Wireless: The name for Nortel Networks communication systems which use radio technology to transmit and receive signals between its components and the Norstar system. Companion Wireless provides mobility in the workplace. Calls that used to ring just at your Norstar set can also appear and ring at your portable.

Companion portable telephone: Hand-held wireless sets which allow complete mobility within the reach of Companion base stations or an external antenna. Portables offer many, but not all, Norstar features and share much of the same programming as wired desk sets.

Conference: [✆] [3]
A feature allows you to establish a three-person call at your Norstar telephone.

contrast adjustment: [✆] [*] [7]
Allows you to set the contrast level of your telephone display.

control telephone: A control telephone can place the lines for which it has responsibility in or out of a Service Mode.

The direct-dial telephone is a control telephone for directing calls to the extra direct-dial telephone. A telephone is made a control telephone and has lines assigned to it in Services programming.

Coordinated Dialing Plan: (CDP) This dialing plan uses a steering code to identify each node in a private network. This one-digit code becomes part of the set DN number rather than a separate code. In this way, system A might have codes in range 2100 to 2999, whereas system B might have codes in range 3100 to 3999.

COS: See Class of Service.

cursor: A short horizontal line that appears on the system telephone display to indicate that characters can be entered using the dialpad.

D

data terminal: A device, such as a modem, that can be used to transfer data instead of sound over a telephone network. You cannot use Norstar programming to set up such devices. See the documentation that accompanies the device.

date: See Show Time or Time and Date.

defaults: The settings for all Norstar features when the system is first installed. Settings are changed from their defaults in programming. In this manual, default settings are shown in **bold** text.

Delayed Ring Transfer (DRT) to prime: After a specified number of rings, this feature transfers an unanswered call on an external line, to the prime telephone associated with that line. This feature is activated under Feature settings in Sys prgrmmng.

destination code: A two- to seven-digit number that the system interprets and then translates into the digits that you want dialed out. Both the code and its associated dialed digits are assigned under Routing service in Services programming.

dialing restriction: See Restriction filter.

dialing modes: [feature] [*] [8] [2]
This feature allows you to set the dialing mode of your telephone. Norstar supports three dialing modes: Automatic Dial, Pre-Dial, and Standard Dial. All three modes support on-hook dialing, meaning you can dial a call without picking up the receiver. The special features of the Automatic and Pre-Dial modes are available only when you dial on-hook.

Direct-dial: A feature that allows you to dial a designated telephone in your Norstar system with a single digit, such as the main receptionist. As many as five direct dial sets can be established. Each telephone in the system is assigned to one direct-dial telephone. There is a single, system wide digit for calling the assigned direct-dial telephone of any telephone. Direct-dial telephones are established in System programming. Telephones are assigned to a direct-dial telephone under Capabilities in Terminals&Sets programming.

Direct-dial #: A digit used system-wide to call the Direct-dial telephone. The digit is assigned under Access codes in Sys prgrmmng.

Direct-dial number: The digit used to call the direct-dial telephone.

Direct inward system access (DISA): The feature that allows remote users to dial directly into the Norstar system and use Norstar features. Callers will hear stuttered dial tone and will be required to enter a Class of Service password to gain access to the system. See Remote Access.

directed pickup: See Call Pickup Directed.

Directory number (DN): A unique number that is automatically assigned to each telephone or data terminal. The DN, also referred to as an internal number, is often used to identify a telephone when settings are assigned during programming.

Default DN assignments start at 221.

DISA DN: The received number assigned to the Norstar direct inward system access facility. If a caller dials a number that is assigned to the DISA DN, the caller hears stuttered dial tone and must enter a Class of Service

password. Once the password is accepted, the caller hears system dial tone and can use Remote Access features. See Remote Access.

Disconnect Supervision: A setting that enables the Norstar system to detect if an external caller hangs up. Once an external caller hangs up, the Norstar system can disconnect its line. Disconnect Supervision is enabled under Trunk/Line data in Lines programming.

display: A liquid crystal display (LCD) on the telephone that guides you through feature operation and programming.

display button: The Norstar M7310 telephone and M7324 telephone and the Business Series Terminal T7316 and T7316E are each equipped with three buttons located directly beneath the display. During feature operation or programming, some or all of these buttons may be used to provide further options. If an option is available, it is shown in the bottom row of the two-row display, directly above the corresponding display button. Display buttons are represented in this manual as underlined capital, such as OK.

DN: See Directory number.

Do Not Disturb: [feature] 8 5
A feature that stops calls from ringing at your telephone. Only Priority Calls will ring at your telephone. A line button will flash when you receive a call, but the call will not ring.

DTMF: See Dual tone multifrequency.

dual tone multifrequency: Two distinct telephone signaling tones used for dialing.

E

Emergency 911 dialing: The capability to access a public emergency response system by dialing the digits 9-1-1. State and local requirements for support of Emergency 911 Dialing service by Customer Premises Equipment vary. Consult your local telecommunications service provider regarding compliance with applicable laws and regulations.

emergency telephone: A single-line telephone, also referred to as a 500/2500 telephone, that becomes active when there is no power to the ICS.

evening schedule: See Schedules, and Services.

event message: Event messages are stored in the system log and displayed during a Maintenance session. They record a variety of events and activities in the Norstar system.

exceptions: See Overrides.

external call: A call to a destination outside the Norstar system.

External Call Forward: See Line Redirection.

external code: The number you dial to get an external line. By default it is 9, but this can be changed under Access codes in Sys prgrmmng. You do not always need an external code. It is primarily to support the M7100 and T7100 telephones, and single-line telephones using an Analog Terminal Adapter.

external line: A line on your system telephone used for making calls to destinations outside the Norstar system.

external music source: See Music source.

external paging: A feature you can use to make voice announcements over an externally-mounted loudspeaker connected to the ICS. The external speaker is not a Norstar component and must be supplied by the customer.

F

feature button: Many Norstar features are invoked by pressing the Feature ([f]) button followed by a feature code. The feature button is also used to exit a feature.

feature code: A number that is used to activate a particular feature.

Feature programming: [f] [*] [3] Allows you to program a feature code onto a memory button.

Forward: See Call Forward.

Full Autohold (on idle line): When this feature is on, if you select an available line and then do something that selects another line, the first line is put on hold. `Full Autohold` is enabled under `Trunk/Line` data in `Lines` programming.

Full handsfree: See handsfree.

G

Group Listening: [f] [8] [0] [2]
A feature that allows you to have others in your office hear a caller through your telephone speaker. The caller hears you only when you speak into the receiver. They cannot hear other people in the office.

You can cancel Group Listen for the current call. Group Listen is cancelled automatically when you hang up the Group Listen call.

H

Handsfree:
A feature you can use to make calls without using the telephone receiver. `Full Handsfree` is activated under `Capabilities` in `Terminals&Sets` programming. When it is activated, a handsfree/mute button is automatically assigned to the telephone.

Handsfree (HF) Answerback:
When activated, this feature automatically turns on the microphone at a telephone receiving a Voice Call so that the person receiving the call can respond without lifting the receiver. It is activated under `Capabilities` in `Terminals&Sets` programming.

Handsfree/Mute button: See handsfree.

Hardware: A section in programming that shows what equipment has been installed in the ICS. This section is accessed by the installer.

headset: A head-mounted or ear-mounted telephone receiver that is used instead of the hand-held receiver. Headsets are not Norstar components and must be supplied by the customer.

Held (Line) Reminder: A system telephone rings and displays the message `On hold: LINENAM` when an external call has been placed on hold for a certain period of time. The `Held Line Reminder` feature and `Remind delay` are set under `Feature settings` in `Sys prgrmmng`.

HF Answerback: See handsfree answerback.

Hold button: [⌣]
This button is used to suspend calls so that the person using the telephone can perform another task without disconnecting the caller.

Hook Switch Flash: See Link time.

Host system signaling: (Also referred to as end-to-end signaling.) System telephones can access a remote system or dial a number on an alternate carrier by means of host feature activation, such as Link, Pause and Run/ Stop.

Hospitality The Hospitality features allow business which use hospitality telephones, or room-based telephones, to control access, alarms, and maintenance duties through the telephones.

Hotline: This feature automatically calls a pre-assigned number when the telephone receiver is lifted or the handsfree/mute button is pressed. A Hotline number can be an internal or external number. Hotline is assigned under `Capabilities` in `Terminals&Sets` programming.

Hunt group: The hunt groups feature allows a group of sets to be called by a single directory number ensuring that calls are easily routed to the appropriate group.

I

I/C: An abbreviation of intercom.

ICS (integrated communication system): The central hardware component in the Norstar system. The ICS has its own processor and memory, and provides a physical point of connection for the various types of devices, telephones, and expansion modules used in Norstar.

The ICS can function on its own as a basic system (with 32 system telephones and up to 48 external lines), or with the addition of Trunk Modules (TM) that supports more external lines, or Station Modules (SM) that support more system telephones.

Integrated Services Digital Network (ISDN): A digital telephone service that allows for a combination voice and data connection over a single, high-speed connection. ISDN service can operate over the same copper twisted-pair telephone line as analog telephone service.

intercom button: A button that provides access to internal lines used for calls within a Norstar system and access to external lines through a line pool or external code. A telephone may be assigned zero to eight Intercom buttons. This is done under `Line access` in `Terminals&Sets` programming.

intercom keys: See Intercom button.

internal line: A line on your telephone dedicated to making calls to destinations inside your Norstar system. An internal line may still connect you with an external caller if you use it to access a line pool or to pick up a call using Norstar call handling features such as Call Park or Call Pickup Directed.

internal number: A number, also referred to as a Directory Number or DN, that identifies a Norstar telephone or device.

internal user: Someone using a system telephone within a Norstar system.

ISDN: See integrated services digital network.

ISDN DN: A directory number (DN) used by ISDN terminal equipment connected to the ICS. The system uses a maximum of thirty ISDN DNs.

K

key indicator module (KIM):

This module is configured similarly to the CAP module except that, as an eKIM, it can support multiple target lines and Hunt Group DNs. You can

attach one or more module to a T7316E telephone.

L

Last Number Redial: [✆] [5]
A feature that allows you to redial the last external number you dialed.

Fixed line:
A telecommunications line between two service points leased from a communications carrier for private use, usually incurring a monthly service rate. Fixed lines setting is used solely by data modules.

Least cost routing: See Routing service.

line: The complete path of a voice or data connection between one telephone (or other device) and another.

Lines: A programming section that allows you to assign settings to each trunk and external line. Lines programming can be done by an Installer or a System Coordinator Plus. A System Coordinator can program the name of a line.

Line number: A number that identifies an external line. The total number of lines depends on how many Trunk Modules are installed.

Line Pool: [✆] [6] [4]
A group of lines used for making external calls. Line pools provide an efficient way of giving a telephone access to external lines without taking up many line buttons. A line is assigned to be part of a line pool under `Trunk/Line` data in `Lines` programming.

Line Redirection: [✆] [8] [4]
A feature that allows you to redirect all calls on an incoming line to a destination outside the Norstar system. Once a line is redirected it cannot be answered within the Norstar system.

The system may be set up to give a brief ring when a call comes in on a redirected line, under `Capabilities` in `Terminals&Sets` programming.

This feature differs from Call Forward in two ways: It redirects only external calls, not internal calls, and it redirects calls to destinations outside the system. Call forward redirects calls only to destinations inside the Norstar system. See Call Forward.

Link: [✆] [7] [1]
If your Norstar system is connected to a Private Branch Exchange (PBX), you can use a Link signal to access special features. The Link signal can also be included as part of a longer stored sequence on an External Autodial button or in a Speed Dial code. The Link symbol (P) uses two of the 24 spaces in a dialing sequence.

Long Tones: [✆] [8] [0] [8]
A feature that allows you to control the length of a tone so that you can signal devices such as fax or answering machines which require tones longer than the standard 120 milliseconds.

Lunch schedule: See Schedules, and Services.

M

M7000 telephone This telephone has a no display. It does have four memory buttons. (Note this telephone is only supported on systems running Profile 2, 3, or 4).

M7100 telephone: A telephone with a single line display and one programmable memory button without an indicator.

M7208 telephone: A telephone with a single-line display and eight programmable memory buttons with indicators.

M7310 telephone: A telephone that has a two-line display, three display buttons, 10 programmable memory buttons with indicators, and 12 dual memory programmable buttons without indicators. An M7310 can be equipped with a Busy Lamp Field.

M7324 telephone: A telephone with a two-line display, three display buttons, and 24 programmable memory buttons with indicators. An M7324 telephone can be equipped with a CAP module.

Malicious Caller ID (MCID) This feature is a European ETSI-based network feature that allows a user to use [✆] [8] [9] [7] record the caller information at the service provider.

memory buttons: Buttons that can be programmed to dial frequently used features or numbers automatically. See M7100/T7100, M7208/T7208, M7310, T7316/T7316E, and M7324 telephone entries for their exact memory button configurations.

message: A feature that allows you to send a message to another Norstar user. The Message feature also allows you to know if you have any messages waiting and maintains a Message Waiting List to keep a record of your internal messages and your (external) voice mail messages.

Message Waiting Indicator: PRI lines can provide the signal that cause the set to display a message-waiting message, or light a lamp on the set to indicate a voice message.

Monitoring See Silent Monitoring.

Move Line buttons: [✆] [*] [8] [1] A feature that allows you to move assigned lines to different buttons (with indicators) on your telephone.

Music source: A radio or other source of music can be connected to the Integrated Communication System to provide music for the Music on Hold and Background Music features. A music source is not part of the Norstar system and must be supplied by the customer.

N

Names: Names can be assigned to System Speed Dial numbers, external lines, telephones, and service schedules. This is done in programming. You can use up to 16 characters to name a System Speed Dial number, and seven characters to name a telephone, line, or schedule. If a Name has not been assigned, the line number or DN will appear on the display instead of a name.

Network DN: A number supplied by the ISDN network service provider for ISDN terminal equipment.

Night schedule: See Schedules, and Services.

O

On hold: A setting, programmed under `Feature settings` in `Sys prgrmmng`, that controls whether external callers hear music, periodic tones, or silence when they are placed on hold.

overlay: See Programming overlay.

overflow: A setting in `Routing Service` that allows users to decide what path an outgoing call will take if all the lines used in a particular route are in use when the call is made.

Overrides: One component of a restriction filter. Overrides are numbers you can dial even if they are forbidden by a more general restriction. See Restrictions.

P

Page: [ↆ] [6] [0]
A feature you can use to make announcements over the Norstar system. You can make page announcements over the telephone speakers and/or external speakers.

Page Time out: A setting that controls how long a Page Announcement can last. It can be assigned under Feature settings in Sys prgrmmng.

Page zone: An area in the office that receives internal page announcements independently of the rest of the office.

Each page zone is identified by a number. Telephones are assigned to page zones under Capabilities in Terminals&Sets programming.

Park prefix: See Call park prefix.

Park timeout: The time before an unanswered parked call is routed back to the telephone that parked it. Park timeout is configured under Feature settings in Sys prgrmmng.

Password: A password is a specific sequence of digits that you enter to gain access to Norstar programming, to override dialing restrictions, or to use remote access with DISA.

Passwords: A programming section that allows you to assign or change COS passwords, Call log passwords, or any of the programming passwords. Under Passwords programming, you can only modify the passwords for your level of programming.

Pause: [ↆ] [7] [8]
A feature that enters a 1.5-second delay in a dialing sequence on an external line. This is often required for signaling remote devices, such as answering machines, or when reaching through to PBX features or host systems. The Pause symbol (P) uses one of the 24 spaces in a dialing sequence. For pulse dialing, [*] inserts a 1.5 second pause into the dialing sequence.

PBX: private branch exchange.

Pickup Group: [ↆ] [7] [5]
A telephone can be placed into one of nine call pickup groups. A call ringing at a telephone within a pickup group can be picked up at any other telephone within the same pickup group. A telephone is assigned to a pickup group under Capabilities in Terminals&Sets programming.

Pool: See Line pool.

portable telephone: See Companion portable telephone

Pre-dial: A feature that allows you to enter a number and check it on your telephone display before it is actually dialed. If the number is incorrect, you can edit it. The number is dialed only when you pick up the receiver or select a line.

Primary Rate Interface (PRI): An ISDN interface which uses 23 B channels and a D channel (23B+D) for profiles 1, 3 and 4, and D channel (30B+D) for Profile2.

Prime line: The line on your telephone that is automatically selected when you lift the receiver, press the handsfree/mute button or use an external dialing feature.

A Prime Line is assigned to a telephone under Line access in Terminals&Sets programming.

Prime Set (prime telephone): A telephone that provides backup answering for incoming calls on external lines. The prime telephone for a line will ring for any unanswered calls on that line. A prime telephone is assigned to a line under Trunk/Line data in Lines programming.

Priority Call: [feature] 6 9
If you get a busy signal when you call someone in your office, you can interrupt them for an urgent call. This feature is enabled for a telephone under Capabilities in Terminals&Sets programming.

Privacy: This feature determines whether a Norstar user may select a line in use at another telephone and join an established call. Privacy is enabled under Trunk/Line data in Lines programming, but can be turned on and off by users during individual calls.

Private line: See Private to.

Private Monitoring This feature allows a user with a two-line display telephone that has been designated as a supervisor telephone, to monitor Hunt group calls from external sources using [feature] * 5 5 0.

Private network: A telephone network consisting of owned or leased telephone lines used to connect different offices of an organization independently of the public network.

Private Network Identifier (PNI) this is an identifying digit or set of digits assigned to each system in a private network with a Meridian system. These codes are provided by the Meridian system administrator when the node is brought on to the network.

Private to: Allows you to select the telephone that will use the line exclusively. The line cannot appear on any other telephone, except the prime telephone for that line. Private lines cannot be placed into line pools. Private lines are assigned under Trunk/Line data in Lines programming.

Programmed release: [feature] * 8 9 A feature that performs the function of the [phone] button in a programmed dialing sequence.

programming: Setting the way the Norstar system will work. Programming includes system-wide settings and individual telephone and line settings.

programming overlay: A paper template that is placed over the four memory buttons with indicators on the M7310, T7316, T7316E or M7324 telephone during programming. The overlay labels indicate the special function that each of the four buttons takes on in programming.

public line: An external line that can be assigned to any telephone and to many telephones. A line is assigned as Public under Trunk/Line data in Lines programming.

public network: The regular telephone network that connects most homes and businesses.

Public Safety Answering Point (PSAP): This is the first point of contact a caller reaches after dialing 911.

pulse/tone dialing: An external line setting for pulse or tone dialing. Pulse is the traditional method of dialing used by rotary-dial or push- button single-line telephones. Tone dialing allows telephones to communicate with other devices such as answering machines. Tone dialing is required to access the features that PBX systems may offer or to use another Norstar system remotely.

R

recall: See Link time.

receiver: The handset of a telephone.

receiver card: An abbreviated list of system feature codes that is stored under the telephone receiver. The card is found on a perforated sheet that comes with a system telephone.

Remind delay: A feature that causes a telephone to beep and display the message `On hold: LINENAM` when a call has been on hold for a programmable period of time. This period is the Remind delay.

Remote access: The ability to dial into a Norstar system from outside the system and make use of selected Norstar features. The lines, features, and dialing capabilities available to a remote user are determined by the Class of Service. If the remote access line is answered with DISA, the user must enter a Class of Service password to gain access to the Norstar system features.

remote access dial restriction: See Remote restriction.

Remote capability: A subset of Norstar features that are available to users connected through remote access.

Remote monitoring: A feature that allows an off-site technician with a PC call in and troubleshoot your system through the built-in modem.

Remote paging: This feature allows remote users to use the Norstar paging feature. Access to this feature is governed by the Class of Service for the call. See Remote Access and Class of Service.

Remote restriction: A restriction filter applied to a line in order to control which digits can be dialed during an incoming remote access call. It is the equivalent of a set filter for a remote user.

remote user: Someone who calls into a Norstar system from a telephone outside that system and uses Norstar features or lines. See Remote Access.

Restriction filter: Through a combination of restrictions and overrides, restriction filters prevent certain telephone numbers or feature codes from being dialed. Restriction filters can be applied to lines, sets, specific lines on a set, and to Class of Service passwords. The Norstar system can handle up to 100 restriction filters.

Restriction service: A Services section that allows you to assign alternate dialing filters to lines, telephones, lines on a particular telephone, and alternate remote filters to lines at specified times of the day and on specified days.

restrictions: One component of a Dialing filter. Restrictions are numbers you cannot dial when that dialing filter is in effect. See Exceptions.

Ring Again: [✆] [2]
A feature that can be used when you can't get through to someone on your Norstar system because their telephone is busy or there is no answer. Ring Again instructs the Norstar system to inform you when they hang up or next use their telephone.

ring group: A setting under Services that allows you to assign a number of different telephones to ring during one of the schedules.Up to 20 ring groups can be programmed by an installer or a system coordinator plus.

ring type: [✆] [*] [6]
A feature that allows you to select one of four distinctive rings for your telephone.

ring volume: [✆] [*] [8] [0]
A feature that allows you to set the volume at which your telephone rings.

ringing service: A Services section that allows you to make additional telephones ring at specified times of the day and on specified days.

Release button: Ends a call in the same way that hanging up the receiver does. The Release button may also be used to end programming, Maintenance sessions, and feature operations.

Routing: See Routing service.

Routing service: A programming section that allows outgoing calls to be directed automatically based on the numbers a caller dials. For Norstar systems linked in a network, routing can create a transparent or coordinated dialing plan. It can also be used to direct calls to the least expensive lines according to a Services schedule (sometimes called least cost routing).

Run/Stop: [✆] [*] [9]
A feature that creates a break point in a programmed external dialing sequence. When you press a programmed key, the system dials the number up to the run/stop. When you press it again, the system dials the digits following the run/stop.

S

Saved Number Redial: [✆] [6] [7]
A feature that allows you to save the number of the external call you are on (providing you dialed the call) so that you can call it again later.

Schedules: Any of six different sets of services that can be applied to your Norstar system. A schedule can be activated manually from a control telephone or activated automatically at specified times. See also Services.

Selective line redirection: See Line Redirection.

Service modes See Services.

Service Profile Identifier: See SPID.

Services: A programming section that allows you to assign which telephones ring, which restrictions apply, and which call routing is used during any of six different schedules. There are three services: Ringing service, Restriction service and Routing service, all found in Services programming.

set: A telephone.

Set Copy: A programming section that allows you to copy programmable settings from one telephone to another of the same type. Set Copy provides two options: duplicating System Data and User Data, or duplicating System Data only. Set Copy does not provide the same copy capability as COPY, which is more selective of the settings that can be duplicated.

Set filter: See Restriction filter.

Set lock (telephone lock): This feature allows you to limit the number of features that may be used or programmed at a telephone. Full set lock allows very few changes or features, Partial set lock allows some changes and features, and No set lock allows any change to be made and any feature to be used. Set lock is assigned under Capabilities in Terminals and Sets programming.

Set relocation: See Automatic Telephone Relocation.

shift button: A small triangular button beside the dual memory buttons on the upper half of the M7310 telephone. You press the shift button to store or access features on the top half of the dual memory buttons.

Silent Monitoring

This feature allows a user with a two-line display telephone that has been designated as a supervisor telephone, to monitor Hunt group calls from external sources using [✆] [*] [5] [5] [0].

Show Time: [✆] [8] [0] [3]
While on a call, accessing this feature allows you to see the current date and time on the Norstar telephone display.

Startup programming: When a Norstar system is first installed and powered up, Startup programming must be performed before any programming can be done. Startup initializes the system programming to defaults.

Station: An individual telephone or other Norstar device.

System coordinator: The person responsible for customizing the Norstar system through programming and for helping co-workers use the Norstar system.

System coordinator password: A one- to six-digit password that prevents unauthorized access to programming. The System coordinator password can be assigned and changed in Passwords programming.

System coordinator plus: A system coordinator who also performs technical and maintenance functions for the Norstar system.

System coordinator plus password: A one- to six-digit password that prevents unauthorized access to programming. The System coordinator plus password can be assigned and changed in Passwords programming.

System coordinator programming: The programming settings that are most commonly changed once the Norstar system is installed.
Press [✆] [*] [*] [C] [O] [N] [F] [I] [G], then [A] [D] [M] [I] [N] to access System coordinator programming.

system data: An option in the Set Copy function. System Data refers to the programmable system settings that apply to all telephones and lines.

System programming: A programming section that allows you to assign and maintain certain settings on the Norstar system. System programming is performed by an installer or system coordinator plus.

System speed dial code: A three-digit code (001 to 255) that can be programmed to dial a telephone number up to 24 digits long. System speed dial codes are programmed for the entire Norstar system under the System Speed programming heading.

System ID: The System ID (or System Security number) can be accessed on any programming telephone display by pressing [✆] [*] [*] [S] [Y] [S] [I] [D], or [✆] [*] [*] [7] [9] [7] [4] [3].

System-wide Call Appearance (SWCA) keys [✆] [*] [5] [2] [0] to [✆] [*] [5] [3] [5] These 16 feature codes can be assigned to buttons with indicators on a group of telephones to provide call appearance for incoming calls that can be answered by any telephone in the group. At the same time, the indicator displays the current status of the call.

T

T7000 telephone This telephone has a no display. It does have four memory buttons. This telephone functions in the same way as the M7000 telephone. (Note this telephone is only supported on systems running Profile 2, 3, or 4).

T7100 Business Series Terminal: A telephone with a single line display and one programmable memory button without an indicator.

T7208 Business Series Terminal: A telephone with a single-line display and eight programmable memory buttons with indicators.

T7316 Business Series Terminal: A telephone that has a two-line display, three display buttons, 16 programmable memory buttons with indicators, and 12 memory programmable buttons without indicators.

T7316E Business Series Terminal: This telephone has the same functionality as the T7316, with some additional features, such as a separate handsfree key, special display icons (when running on a MICS 6.1 or newer system), and CAP capability by adding KIMs.

T7406 telephone: This portable handset functions very similarly to the T7310 telephone. Functions and installation are all described in separate documentation specific to the telephone.

Target lines: Lines used to answer incoming calls only. A target line routes a call according to digits it receives from an incoming trunk. They are referred to by line numbers in the same way as physical lines.

Telco features: A programming section that allows you to specify the external telephone numbers that are dialed by the Message feature to retrieve voice messages, or to set up CLASS (CMS) services for lines and sets. Telco features are accessed by an installer or a system coordinator plus.

Terminal equipment (TE): A generic term for devices that connect to an ISDN network. Examples of ISDN TE are ISDN telephones, computers equipped with ISDN cards and video terminals.

Terminals and Sets: A programming section that allows you to assign and change settings that apply to the telephones and other devices connected to the Norstar system. Terminals and Sets programming is performed by an installer or a system coordinator.

Time and date: A programming section that allows you to manually change time or date. The time and date can also be changed by pressing * * T I M E and entering the Basic password or one of the programming passwords.

Transfer: ↆ 7 0
A feature that allows you to redirect a call to another telephone in your Norstar system, over a network or outside your Norstar system.

Transfer Callback: If a transferred call is not answered after a specific number of rings, the call will return to the telephone that made the transfer. The number of rings is assigned under Feature settings in System programming. Transfer Callback does not apply to calls transferred externally.

Trunk: The physical connection between the Norstar system and the outside world using either the public telephone system or a private network.

Trunk Answer: ↆ 8 0 0
A feature you can use to answer a call on any line that has an active Ringing service Service Mode, even if that line does not appear on your telephone. Trunk Answer is enabled in Services programming.

U

Uniform Dialing Plan: (UDP) This type of dialing plan uses a location code to identify each node on a private network. Dialing sequence: (destination code)+(location code)+DN.

User Data: User Data is an option in the Set Copy feature. User Data refers to the personal settings that are unique to an individual telephone, and are not programmed for the system. User Data is programmed at each telephone.

These settings, for example, include user Speed Dial and the assignment of programmable memory buttons.

User Filter: See Restriction filter.

User Preferences: a programming section that allows you to assign autodialers, user speed dial codes, display contrast, and other settings to a specific telephone or person. You do not have to program these settings at the person's telephone. User preferences are assigned in Terminals and Sets programming.

User Speed Dial: [✆] [*] [4]
Three-digit codes (256-279) can be programmed to dial external telephone numbers. User Speed Dial numbers are programmed for each telephone, and can be used only at the telephone on which they are programmed.

V

Voice Call: [✆] [6] [6]
A feature you can use to make an announcement or begin a conversation through the speaker of another telephone in the Norstar system. The telephone you call will not ring. Instead, the person you call will hear a beep and then your voice. Their telephone will beep periodically to remind them that their microphone is open.

Voice Call deny: [✆] [8] [8]
A feature that prevents your telephone from receiving Voice Calls.

Voice message center: If you have subscribed to Call Display services you can receive visual Voice Message Waiting Indication, providing your telephone has a display. If you have Voice Message Waiting Indication, you can program the telephone numbers required to access up to five different Voice Message Centers. You can also program which of the five Centers is to be accessed by each specific line.

W

Wait for dial tone: [✆] [8] [0] [4]
A feature that causes of sequence of numbers to pause until dial tone is present on the line before continuing to dial. The Wait for dial tone symbol (**,**) uses two of the 24 spaces in a dialing sequence. This feature requires a Services or Combo Cartridge.

wireless: See Companion.

Index

Symbols

§ Long Distance symbol 257

Autobumping
- canceling (#815) 139
- enable (815) 139

autodial button
- external (*1) 87
- internal (*2) 87

autodial button, external (*0) 90

Background Music
- canceling (#86) 201
- turning on (86) 201

Button Inquiry (*0) 94, 247, 254

Call Forward
- canceling (#4) 113
- using (4) 113, 114

Call Information (811) 55

Call Log
- entering (812) 141
- options (*84) 138
- password (*85) 141, 142
- viewing (812) 139

Call Park (74) 106

Call Pickup (75) 60

Call Queuing (801) 99

Call Transfer
- canceling (#70) 103
- using (70) 66, 101

Camp-on (82) 104

Class of Service (68) 243

Conference Call
- 7100 sets (#3) 65
- on Hold, 7100 sets (#3) 66
- using (3) 64

Contrast Adjustment (*7) 146

Dialing Modes (*82) 82

Directed Pickup (76) 59

Do Not Disturb
- canceling (#85) 200
- turning on (85) 83, 200

Exclusive Hold (79) 98

Feature Button, programming (*3) 147

Group Listening
- canceling (#802) 68
- using (802) 68

Hide message display (806) 162

Host System Dialing Signals
- Link (71) 234
- Long Tones (808) 236
- Pause (78) 236
- Programmed Release (*89) 237
- Run/Stop (*9) 237
- Wait for Dial Tone (804) 238

Last Number Redial (5) 90

Line Pool Access (64) 81

Line Redirection
- canceling (#84) 120
- using (84) 118

Message
- canceling (#1) 130
- sending (1) 129
- viewing (65) 130

Page
- combined zone (63) 125
- external zone (62) 125
- internal zone (61) 125
- using (60) 106

Password
- Basic 23, 224
- Call Log (*85) 141, 142
- System Coordinator 29, 37, 39
- System Coordinator (ADMIN) 27, 224

Priority Call (69) 84

Privacy (83) 75

Restriction Service
- turning off (#872) 220
- turning on (872) 220

Ring Again
- canceling (#2) 86
- using (2) 86

Ring Type (*6) 162

Ring Volume (*80) 162

Ringing Service
- turning off (#871) 220
- turning on (871) 220

Routing Service
- turning off (#873) 220

turning on (873) 220
Services, viewing (870) 222
Speed Dial
adding user (*4) 92
making calls (0) 92
Static Time and Date (806) 133
Testing
display (805) 254
power supply (805) 256
telephone buttons (805) 255
telephone handset (805) 255
telephone headset (805) 255
telephone speaker (805) 256
Time (803) 76
Time and Date (**TIME) 29, 225
Trunk Answer (800) 62
User Preferences (**USER) 163, 225
Voice Call (66) 134
Voice Call Deny
canceling (#88) 135
using (88) 135
ð
Page
using (60) 125
Link symbol 234
Pause symbol 236
Programmed Release symbol 237
Run/Stop symbol 238
Wait for Dial Tone symbol 238
2-way DID
PRI 205
7100 set
Call Park 106
7100 sets
CallBack 105
camping a call 105
Line Redirection 118
Ring Again 258
transferring a call 103
911
description 13
911 service 199
compliance 205
maintaining records 205

A

access
change COS password 243
dialtone for remote calls 242
external lines 249
fast busy tone for remote calls 242
from outside the system 239
remote access tones 242
stuttered dial tone for remote access 242
using a COS 240
using a DISA 240
Access denied 257
accidental release 76
active services, display indicator 223
ADD 251
adjusting the display 146
administration password (see System Coordinator password)
administration programming 14
administration set
controlling alarms 192
hospitality 185
using 190
alarm
cancel 194
Hospitality 191
turn off 194
using 193
Alarm 61-4-2 253
alarm number, recording 253
alarm telephone, description 253
alarms
controlling with admin set 192
query on admin set 192
reporting and recording codes 253
all lines, redirection 119
Allow calls 200
allow redirect
programming 120
Already joined 61, 78
Already parked 107
alternate services 217
analog telephone
answering a message 129
delaying snooze alarm 194
removing a message 132
replying to a message 131
sending messages 128
setting room, Hospitality 190
turn off alarm 194

using wake-up alarms 193
analog terminal adapter (see ATA)
announcement
paging 125
Voice Call 134
answer
programming Handsfree answerback 73
Trunk answer 62
answer button
assigning to sets 160
attendant 63
type 63
answer DNs
answer key 63
answering calls
Answer DNs 63
Call Display services 55
Call Duration Timer 75
Call Pickup 59
CAP 48
Conference Calls 64
directed pickup 59
distinctive ring patterns 46
ending a call 55
Group Listening 68
group pickup 60
Handsfree 69
hearing aid compatibility 55
line indicators 44
prime telephone 47
Privacy 74
several Hold calls 97
TAP 50
Trunk Answer 62
using line buttons 44
using SWCA keys 108
Voice Call 135
answering incoming calls
hunt groups 43
apply button labels 149
assign an alarm time 192
assign lines
Hunt Groups 173
sets 247
ATA
dialing signals 236
using dialing modes 83
attendant answer button 63
Auto Call information (see Caller ID set)
auto-answer, using COS password 242
autobumping, enable/disable 139
autodial
button inquiry 145
choosing a line 88
for M7100 and T7100 88
line pool access code 88
line selection 88
programming 87
set lock 232
storing number on a memory button 87
using intercom line for 88
using Last Number Redial 91
Autodial full 88
automatic
Call information 58
Call Log 137
dial 82
Handsfree 73
Hold 97
logging calls 142
release of a line, see Disconnect Supervision
restriction service 218
automatic call back, ISDN terminal feature 211
Automatic Call Forward, changing settings 115
automatic recall, ISDN terminal feature 211
automatic telephone relocation 199
auxiliary ringer
Hunt Groups 179
auxiliary ringer, programming 233

B

background music
licensing 201
set lock 232
turning off 201
using 201
Basic
password 14, 163
password, changing 224
Restriction and Routing service 221
basic

answer button 63
BKSP 251
blocking
calls, see Do Not Disturb and DND
name and number 205
break point, host system dialing, Run/Stop 237
BRI
ISDN description 203
ISDN services 208
Name and Number Blocking 210
network features 209
Network Name Display 209
broadcast, Hunt Groups, programming 174
business name
features 209
name display, outgoing 204
Business Series Terminal
programming overlay 21
Business Series Terminals
Handsfree 69
installing 195
viewing line profile 245
viewing set profile 245
wall mounting sets 196
busy
call forward on busy 116
CLID display for incoming call 56
DND on busy 116
Do Not Disturb 40
Hunt Group line setting 176
Hunt Group routing 176
priority call 83
programming call forward 39
tone, remote access 242
busy 77, 85
busy tone
Hunt Group routing 176
button caps
clear 150
pre-printed, colored 150
button defaults
M7100/T7100 159
M7208 and T7208 158
M7310 155
M7310 dual memory buttons 156
M7310 lower buttons 155
M7324 telephone 157
T7316 Business Series Terminal 151, 153
Button erased 89
Button Inquiry 145
buttons
Answer DNs/answer key 63
asssign handsfree and mute 73
Button Inquiry 145
CAP 48
changing programming 164
changing user speed dials 165
default assingment 150
dialpad 17
display 17, 19
eKIM 53
erasing programmed features 147
Feature 17, 18
handsfree 18
Hold 17, 18
labels, applying 149
Last Number Redial 90
line button assignment 247
line button indicators 248
line pool feature code 249
memory 17, 87, 250
moving line 161
mute 18
numbering on all telephone types 164
programming features on 147
Release 17, 18, 55
Saved Number Redial 94
TAP 53
testing 254, 255
using a line button 79
using buttons 16
volume control 18
bypassing a Hotline telephone 230

C

call
disconnecting, conference call 65
ending a call 55
independent hold, on conference 65
overflow 249
redial last number 90
Call 221? 258

Call blocked 85
call blocking, turning privacy on 75
Call by Call
FX calls 206
Inwats calls 207
Outwats calls 206
PRI 206
Private calls, DID and DOD 206
Public calls, DID and DOD 206
see also CbC 206
Tie calls 206
call display, answering calls 55
Call Duration Timer 75
Call Forward
All Calls, set lock 232
All Calls,ISDN terminals 208
automatic, changing settings 115
Call Forward No Answer 37
Call Forward on Busy 39, 116
calling the number 211
cancel 211
canceling 113
change delay 115
Forward no answer 115
line redirection differences 122
No Answer, line redirection 115
overriding 114
programming 37, 115, 116
programming, no answer 37
service provider 210
to voice mail 117
using 114
call indicators 43
call information
changing what is shown first 58
displaying 57
displaying information 55
for specific call 56
getting information for a call on hold 57
service provider 137
Call Log
autobumping, enable/disable 139
automatic 137
automatic logging 142
calling from within 140
clearning password 226
erasing items 140
logging a call manually 138
options 138
options, changing 166
password 141—142
canceling 142
changing 141
set 137
using 137
viewing 139
Call Park
description 106
picking up calls 247
retrieval codes 106
Call Pickup
Directed Pickup 59
message forwarded 129
picking up calls 247
Call Queuing
7100 series sets 258
using 99
call restrictions, Hospitality, rooms 188
Call traced 212
Call Transfer 101—104
call transfer
cancelling 103
external calls 102
using 101
Call(s) bumped 143
Callback, using 112
Caller ID set, automatic call information 58
Calling 85
calling party name 204
calls
accidental release 76
allow line redirection programming 120
answering calls on CAP 48
answering calls on TAP 50
answering prime telephone 47
answering with direct pickup 59
answering with group pickup 60
answering with Handsfree 69
automatic dial 82
automatic display 58
automatic Hold 97
blocking the Link feature 235
call queuing 99
cancelling call forward 113
cancelling DND 200

changing Call forward no answer 115
changing how you dial 82
changing to Handsfree 70
checking duration 75
display call information 57
display call information for hold call 57
external call transfer 102
forwarding to internal set 113
forwarding to voice mail 117
from within Call Log 140
holding several calls 97
listening while on Hold 98
making a private call 75
making from ISDN terminal 82
monitoring with CAP 50, 54
muting Handsfree 70
overriding call foward 114
programming 2-way DID 205
programming paging 126
putting on Exclusive hold 84
refusing second call 200
restriction services 217
retrieving a parked call 106
retrieving held call 97
routing outgoing calls 218
saved number redial 94
security on remote access 240
specific call information 56
standard dial 82
tracking incoming calls 137
using answer key 63
using DND 200
using Do Not Disturb 200
using line button 44
using Link for external calls 234
using Pause for external calls 236
using pre-dial 83
using ring again 85
using speed dial 92
ways to make a 77
Camp denied 105
Camp max 105
Camp to 105
Camped 105, 258
camping calls (see Camp-on)
camp-on
tones 104
using 104
Can't ring again 78, 86
CANCEL 251
cancel
a transfer 103
Call Forward 113
call log password 142
Do Not Disturb 200
group listening 68
Hospitality alarm 194
Line Redirection 119
pending alarm 192
sent message 130
voice call 135
Cancel denied 133
CANCL 165
CAP
answering calls 48
customizing 49
DID 48
monitoring calls 50, 54
moving buttons 161
prime telephone 48
sending messages 129
telephone 48
telephone, direct dial 228
using 48
central answering position (see CAP)
centrex template
M7208 158
M7310 lower buttons 155
M7324 buttons 158
T7208 158
T7316 buttons 151, 152, 154
CHANGE 165
change
alarm time 192
automatic Call Forward 115
call log options 166
call log password 141
COS password 243
day 31
dial method 82
display contrast 167
hour 30
how calls are dialed 166
Hunt Group auxiliary ringer 179
Hunt Group Name 178
language on display 167

line name 35
minutes 30
month 30
ring type 162, 167
user speed dial 165
year 30
choosing a line 79
Class of Service
changing 243
managing passwords 243
using a password 242
clear button caps 150
Cleared>LINENAM 133
CLID
display on busy 56
clock, set 31
CLR 165
code, system speed dial 32
colored button caps 150
common set, Hospitality 185
communicating in the office
paging 125—128
sending messages using display 128
Companion, Registration password 225
cond pswd, Hospitality 186
cond pswd, programming 227
condition, setting room condition 189
Conf. on hold 67
Conference busy 67
conference call
by releasing privacy 75
cancel group listening 68
conference on Hold 66
disconnecting from 66
disconnecting one call 65
group listening 68
independent Hold 65
making 64
no privacy button 74
releasing privacy 64
removing yourself from 66
splitting 66
using the Conference feature 64
connecting to ISDN network 213
contrast adjustment 146
control
calls, using alternate or scheduled services 217
system security on remote calls 240
using DISA 240
control telephone
enter Service feature code 221
setting service schedules 231
turn service off 221
turning services off/on 217
viewing active services 221
custom programming, moving sets 199
customizing CAP 49
customizing KIM 53
customizing your telephone
adjusting ring volume 162
Button Inquiry 145
changing ring type 162
contrast adjustment 146
User Preferences 163

D

data transfer, PRI 203
date and time
changing 29
displayed instead of messages 162
displaying 76
length of a call 75
date, change 225
day, set 31
default buttons
assignment 150
defaults
button assignments 150
buttons, T7316 Business Series Terminal 151, 153
M7310 buttons 155
M7310 dual memory buttons 156
M7310 lower memory buttons 155
delay
call forward no answer 115
hunt 175
Delayed Ring Transfer 200
delete
Call Log items 139
call log password 142
messages from list 132
programmed features 147
Denied in admin 257
deny voice call 135
desk information, Hospitality 187

desk pswd 227
Desk pswd, programming 186
desktop conferencing, ISDN applications 214
destination code
line for external calls 231
dial tone, stuttered 242
Dial voice call 135
dialing
911 compliance 205
automatic dial 82
host system signals 234
modes 82
options 166
pre-dial 83
saved number 94
signal, Long Tones 236
signal, Pause 236
signal, Programmed Release 237
signal, run/stop 237
signal, switching from pulse to tone 238
signal, Wait for Dial Tone 238
standard dial 82
switching between pulse and tone 246
switching from pulse to tone 238
using Pause 236
dialing filters, Hospitality room states 189
dialing mode, set lock 232
dialing plan
enblock dialing 207
PRI 207
dialpad
change name 34
entering letters and numbers 29
entering numbers and letters 33
programming buttons 17
DID
2-way DID, PRI 205
calls, extra-dial telephone ringing service 223
CAP lines 48
CbC private calls 206
CbC public calls 206
PRI description 203
DID template
M7208 158
M7310 lower buttons 155
M7324 buttons 158
T7208 158
T7316 buttons 152, 155
digital connections, to ISDN networks and devices 213
direct dial, forward, external 228
direct inward system access (DISA), see also DISA 240
direct-dial telephone
programming 229
using 228
DISA, COS password 240
disable autobumping 139
disconnect
from conference 66
releasing a call, accidentally 76
disconnect supervision, assigning 246
display
2-line 17
automatic caller ID display 58
button equivalents for one-line display 251
buttons 17, 19
Call information 57
call information 56
changing contrast 146
changing first display 58
changing the language 167
contrast 167
Display digits 27
End of Session 27
name instead of number 199
network name, BRI 209
one-line 251
PRI Network Name Display 204
restoring message indication 162
system speed dial 33
time and date 76
display buttons
one-line display 251
user preferences 165
Display digits 27, 33
distinctive ring patterns(DRP)
answering a call 46
distinctive rings 162
distribution modes, Hunt Groups 174
DN (see internal numbers)
DND 105
DND from 47

DND on busy 116
DND transfer 47
DND, cancel 200
DNs
checking for updates 27
rooms 187
Do Not Disturb
canceling 200
on Busy 40
see also DND 200
set lock 232
using 200
Do not disturb 78, 85, 103
Do Not Disturb on Busy, see also DND on busy 116
DOD
CbC private calls 206
CbC public calls 206
PRI description 203
DRT 47
dual memory buttons, defaults 156
duration of call 75

E

echo, handsfree 71
eKIM
button programming 53
emergency 911 13, 205
enable autobumping 139
enbloc dialing, PRI dialing plan 207
End of session 27
ending a call 55
ending test session 254
enhanced, answer button 63
Enter code 148
Enter digits 89, 93
Enter zone 127
entering letters through the dialpad 29
equipment, external page equipment 128
erasing
Call Log items 140
messages from list 132
programmed features 147
Evening Sched 223
Exchanged 161
Exclusive Hold 84, 98
Expensive route 78
expensive route warning tone 249
extended, answer button 63
external
access to Norstar 239
access, describing line pools 249
access, using remote packages on line pools 240
accessing voice mail 144
autodial, programming 87
Call Forward (see Line Redirection)
page 125
paging equipment 128
external calls
assigning Long Tones 236
line pool 231
transferring 102
using Link 234
using Programmed Release 237
external line
routing table 231
external line buttons 160
external lines
call fowarding 114
name display 199
external number, last number redial
description 90
external page option, default page button 159
extra-dial telephone
DID calls 223
direct dial 228
extra-dial telephone, DID 223

F

fast busy tone, remote access 242
FEATR 165
feature
Message Reply Enhancement, analog telephones 131
privacy 74
using line redirection 123
using page types 125
voice call 134
feature button 17, 18, 232
feature code, control telephone 221
Feature moved 148
feature programming
add change speed dial number 32

allow line redirect 120
automatic call forward 115
auxiliary ringer 233
blocking redial numbers 95
broadcasting to Hunt Groups 174
call display, first display 58
call forward no answer 37
call forward on busy 39
call restrictions, Hospitality 188
change number of rings 38
changing line name 35
changing telephone name 34, 199
direct dial telephone 229
do not disturb on busy 40
external autodial 87
group pickup 60
Handsfree 72
handsfree answer back 73
Hospitality alarm 191
Hospitality passwords 185
hotline on telephone 230
hunt delay 175
Hunt Group busy line setting 176
Hunt Group queue timeout 177
last number redial 90
line redirect ring control 120
line redirection 118
Long Tones 236
overflow set 177
page zone 126
paging 126
Pause 236
programmed release 237
room/desk information 187
Run/Stop dialing signal 237
select speed dial line 32
service times 188
set lock 233
system speed dial 31
system speed dial name 33
time and date 29
Trunk Answer 62
user speed dial 92
using dialpad to enter letters 29
using Link 234
Wait for Dial Tone signal 238

Feature timeout 257

features
adjusting ring volume 162
Autobumping 139
autodial 87
auxiliary ringer 233
Button Inquiry 145
Call Display 55
Call Duration Timer 75
Call Forward 113
call forward, using 114
Call Information 56
Call Log 137
Call Park 106
Call Pickup 59
Call Queuing 99
Call Transfer 101
Callback 112
Camp-on 104
changing ring type 162
Class of Service password 243
Conference Calls 64
contrast adjustment 146
dialing modes 82
dialing signal
Programmed Release 237
run/stop 237
Wait for Dial Tone 238
Do Not Disturb 200
Do Not Disturb on Busy 116
Exclusive Hold 98
external call transfer 102
Group Listening 68
Handsfree 69, 71
hiding the message or calls display 162
Hold, many calls 97
independent Hold during conference 65
Last Number Redial 90
limiting feature access 232
line pools 80
Line Redirection 118—123
Link 234
Messages, sending 128
moving line buttons 161
paging 125—128
Pause 236
PRI name and number blocking 205
priority call 83
Privacy 74

programming on buttons 147
remote access to the system 239
Restriction service 217
Ring Again 85
ring type 162
Ringing service 217
Routing service 218
Saved Number Redial 94
sending messages using analog telephones 128
sending messages using display 128
Speed Dial 91
Test a Telephone 254—256
testing set features 254
Time and Date 225
User Preferences 163
file transfer using ISDN 214
filters, Hospitality room states 189
FIND 165
first display, changing 58
Foreign Exchange, see also FX
Forward denied 118
Forward no answer, changing 115
Forward> 118
forwarding calls 37
Call Forward 113
Call Forward delay 115
Call Forward No Answer 115
Call Forward on Busy 116
direct dial 228
Do Not Disturb on Busy 116
Line Redirection 118—123
to voice mail 117
Foward delay 38
FX
CbC type 206
see also Foreign Exchange 206

G

green button caps 150
grey button caps 150
Group 4 fax, using ISDN applications 214
group answering
SWCA keys 108
Group Listening 68
Group Pickup
Hunt Groups 60
using 60

H

handling many calls at once
Call Queuing 99
Hold 97
handset speaker, testing 255
Handsfree
assign button 73
automatic answer 73
changing to handsfree 70
exiting to handset 71
headset 73
indicators 71
making calls 70
muting the set 70
preventing echo 71
programming 72
talking in turn 71
using 71
Handsfree 72
Handsfree Answerback
programming 73
Voice Call 135
handsfree button 18, 160
headset
Handsfree requirement 73
testing 255
hearing aid compatibility 55
Hidden number 78, 91, 95
Hold
automatic 97
button 17, 18
Conference Call 65
display call information 57
exclusive 98
exclusive hold 84
listening while on hold 98
putting conference on 66
re-establish conference call 65
retrieving call 97
using background music 201
using SWCA keys 108
Hold or release 143, 259
Hospitality
admin set, controlling alarms 192
alarm features 191

- cancel alarm 194
- cond password 186
- delaying alarm 194
- desk password 186
- passwords 185
- room/desk information 187
- service done 189
- service times 188
- set description 185
- sets per room 187
- setting room condition 189
- setting room dialing filters 189
- turn off alarm 194
- using administration set 190
- using room set 190
- using room/set programming 189
- using the alarm 193

hospitality
- password 227

Host system dialing signals
- Long Tones 236
- Pause 236
- programmed release 237
- Run/Stop 237
- system speed dial 91
- using an ATA 236
- Wait for Dial Tone 238

Hotline
- bypassing the telephone 230
- setting up the telephone 230
- using with Handsfree button 230

hour, set 30

hunt group
- moving on telephone 161

Hunt Groups
- adding members 171
- answer incoming calls 43
- assigning lines 173
- auxiliary ringer 179
- broadcast conversion note 169
- Broadcast mode 174
- busy line setting 176
- busy routing 176
- call forward no answer 38
- call forward on busy 40, 116
- call foward no answer 115
- call park 107
- calls on Hold 97
- cannot use Voice Call feature 134
- creating 246
- distribution modes 174
- DND on busy 117
- group pickup 60
- hotline, set DN 230
- hunt delay 175
- incoming calls 174
- member DN 171
- moving members 172
- no videophones 170
- overflow set 177
- paging 126
- priority call 84
- programming 169
- queue time-out 177
- removing members 171
- rerouting to a Hunt Group 63
- Rotary mode 174
- Sequential mode 174
- setting the name 178
- simultaneous ring 174
- temporarily leaving group 201
- unassigning lines 173
- use Do Not Disturb 201
- using call forward 114
- using ring again 85
- where to use 169

hunt groups
- system monitoring 232

hybrid template
- M7208 158
- M7310 lower buttons 155
- M7324 buttons 157
- T7208 158
- T7316 buttons 152, 155

I

In use 133, 260

In use SETNAME 143

Inactive feature 257

incoming call
- CLID display on busy 56

incoming calls
- 2-way DID 205
- hunt groups 43
- indicators 43
- overflow routing 249
- simultaneous ring 174

SWCA keys 109
tracking 137
using COS on auto answer 242
Incoming Line Groups (ILG), see Hunt Groups
Incoming only 260
indicators
active service display 223
call indicators on CAP 50
handsfree and mute 71
incoming call 43
line active 248
long distance call 257
memory buttons 250
message waiting, analog telephone 129
restoring message indicators 162
rings 45
installer programming 14
installing telephones 195—198
Integrated Services Digital Network (see ISDN)
Intercom 121
Intercom # 89
intercom button
answer button calls 63
autodial line 88
using as the line for Autodial 88
internal numbers, description of length 247
internal page 125
Internet access, using ISDN applications 215
Invalid code 93, 238, 257
Invalid location 161
Invalid number 89, 103, 107, 260
Invalid state 212
Invalid zone 127
Inwat, CbC type 207
ISDN
2-way DID 205
applications 213—215
BRI features 209
BRI services 208
Call by Call 206
call forward all calls 208
connecting to 213
description 203
desktop conferencing, using 214
device support on BRI 208
dialing plan, PRI 207
emergency 911 205
equipment 213—215
file transfer, using 214
Group 4 fax, using 214
Internet access using 215
LAN access, using remote 214
LAN to LAN bridging, using 215
leased line backup, using 214
making calls from ISDN terminals 82
Network Name DIsplay, BRI 209
ONN blocking, BRI 210
PRI name and number blocking 205
PRI Network Name Display 204
service provider features 210, 211
telecommuting, using 214
terminal line access 209
videoconferencing, using 213
ISDN terminal
Automatic Call Back 211
Automatic Recall 211
Call Forward 210
calling the call forward number 211
cancel Call Forward 211
no ONN 205

K

KIM
buttons on eKIM 53
customizing 53
sending messages 129
using 50

L

LAN
remote access using ISDN applications 214
router 215
to LAN bridging, ISDN applications 215
language
changing on the display 167
set lock 232
last number redial 90

leased line backup using ISDN
applications 214
length of call, timing 75
length of internal numbers 247
letters, entering with dialpad 33
licensing, background music 201
limiting
access to Norstar 240
telephone feature use 232
telephone programming 232
using alternate or scheduled services 217
line
access from ISDN terminal 209
assign to Hunt Groups 173
assignment 247
button indicators 248
button moving 161
changing the name 35
changing the name of a line 199
choosing a line 79
choosing autodial 88
describing prime line 251
description of menu 23
for external call forwarding 114
Hunt Group busy line setting 176
indicators, description 44
line redirection, describing 118
picking up calls 247
pool 80—81
Redirection, canceling 119
Redirection, using 118—123
remote access to the system 239
replying to messages 130
retrieving a parked call 106
speed dial 32
target line 248
unassigning Hunt Groups 173
using line button to answer call 44
Line 001 waiting 258
line appearances
using SWCA keys 108
line button
assignment 247
bypassing the Hotline button 230
CAP 48
joining call 74
moving 161
privacy 74
Line denied 62, 78, 260
Line hung up 105
Line in use 259
line pool
description 80, 249
external lines routing 231
memory button 249
overflow routing 249
programming buttons 147
programming memory button 81
using remote packages to restrict external access 240
line pool access code
autodial 88
external calls 231
line profile, viewing 245
Line Redirection 121
line redirection
all lines 119
allow programming 120
call forward no answer 115
call fowarding differences 122
programming 118
redirect ring control 120
using 123
Line001 callback 47
Line001 hung up 103
Line001 to prime 47
Line001 transfer 258
LineXXX to prime 47
Link
blocking 235
host system dialing signals 234
program on memory button 235
LIST 165
listening 68
listening on hold 98
log space, programming 142
log, view call log 139
logging a call manually 138
Logit (see Call Log)
long distance call
indicator 257
using COS password 239
Long Tones 237
loop start line, remote access 239
Lunch Sched 223

M

M7100 telephone
- Autodial 88
- button defaults 159
- Button Inquiry 145
- Call Conference 64
- Call Queuing 258
- Conference Call on hold 66
- Conference Call, independent Hold 65
- Hold many calls 97
- Incoming Line Group button 44, 79
- internal numbers 247
- line assignment 247
- memory buttons 250
- one-line display 251
- Ring Again 259
- special set features 250
- Speed Dial programming 92
- standard dial 82
- Voice Call 135

M7208 telephone
- button defaults 158
- memory buttons 250
- one-line display 251

M7310 telephone 16
- button defaults 155
- memory buttons 250
- viewing line profile 245
- viewing set profile 245

M7324 telephone 16
- button defaults 157
- CAP 48
- memory buttons 250
- viewing line profile 245
- viewing set profile 245

maintaining security 241
Make calls first 260
making calls
- dialing modes 82
- Handsfree 70
- priority call 83
- using a line button 79
- using line pools 80
- using Ring Again 85
- with automatic Handsfree 73

managing COS passwords 243
manual, restriction service 218
member DN, Hunt Groups 171
members
- adding to Hunt Groups 171
- moving Hunt Group members 172
- remove from Hunt Group 171

memory buttons 17
- CAP 48
- default assignment 150
- erasing features 147
- indicators 250
- Link 235
- M7310 156
- power off 87
- programming feature codes 147
- programming with line pool 81
- storing autodial numbers 87

menus, top level 23
Message denied 133
Message list 133
Message Reply Enhancement 131
Message to 133
message waiting indicator, analog telephone 129
messages
- alarm messages, recording 253
- analog telephone, answer 129
- canceling a sent message 130
- forwarded to Call Pickup 129
- hiding display 162
- KIM 129
- removing from list 132
- replying 130
- restoring call indication 162
- sending 128
- sending, using the display 128
- viewing 130, 133

Messages & Calls 133, 143
microphone
- muting 70
- using correctly 71

Microphone muted 135
MICS, maximum target lines 248
MICS-XC, maximum target lines 248
minutes, set 30
monitoring
- answer DNs and answer key 63
- calls 248
- calls with CAP 50, 54
- line pool status 85

lines, see also Disconnect Supervision 246
telephone status 85
transferred calls 112
month, set 30
Move line from 161
Move line to 161
moving
911 service note 199
automatic telephone relocation 199
Hunt Group members 172
line buttons, set lock 232
telephones 199
music
background, licensing 201
turning off 201
mute
assign button 73
button icon 18
button positioning on sets 160
indicators 71
muting the set in Handsfree 70
voice call tones 134

N

name
changing telephone name 199
display, BRI lines 209
Hunt Groups 178
PRI Network Name Display 204
system speed dial 33
name and number blocking
BRI 210
PRI 205
see also ONN 205
needs service, Hospitality 189
Network Call Diversion 213
Network Name Display
available features 204
BRI 209
PRI 204
New calls begin 143
night control phone (see control telephone)
Night Sched 223
night schedule, restriction service 219
Night Service (see services and ringing service)
9- 77, 260
no answer, refusing second call 200
No button free 134, 260
No call on 107
No call to park 107
No calls waiting 258
No free lines 260
No info to log 143
No last number 78, 91
No line selected 78, 258, 260
No line to use 121
No log assigned 143
No number saved 95
No number stored 93, 134
No response 212
No resume item 143
No services ON 223
No voice call 136
Norstar system dial tone 242
Norstar telephones
installing 197
mounting on a wall 198
set profile, viewing 245
viewing line profile 245
Not allowed 212
Not available 212, 257
Not in service 78, 103, 105, 118, 258
Not incoming 212
Not subscribed 212
numbers, entering with dialpad 33

O

OK 251
On another call 79, 85
On hold 98
one button dialing (see Autodial)
one-line display
7100 and 7208 sets 251
display button equivalents 251
ONN blocking, BRI 210
outgoing calls
SWCA keys 111
outgoing calls, 2-way DID 205
Outgoing line 121
Outwats, CbC type 206
overflow
call routing 249
expensive route warning 249

Hunt Group routing 176
set Hunt Groups 177
overlap dialing 213
overlay 15, 19, 22, 305
OVERRIDE 251
overriding
Call Forward 114
services, manually 223

P

page
default button 159
external equipment 128
making an announcement 125
programming 126
shortcut codes 125
types 125
zones, programming 126
Page choice 127
Page timeout 127
Paging ALL 127
Paging busy 127
Park denied 107
Parked call 258
Parked Call, retrieving 106
Parked on 107
Parking full 108
password
Basic 163, 224
Call Log 141—142
changing 141
Call Log, canceling 142
change COS 243
changing 224, 225
Class of Service 242
clearing Call Log 226
cond pswd 227
description of menu 23
desk 186
desk pswd 227
entering 27
Hospitality 186
hospitality 185
Hospitality password 227
managing COS passwords 243
registration (Companion) 225
room condition 186
security practices 241
System Coordinator 14, 224
system speed dial code 32
user preferences 163
pause
Host system dialing signals 236
in a sequence of numbers, see Wait for Dial Tone
PBX
link feature 234
programming Run/Stop dialing sequence 237
Tie CbC service 206
PBX template
M7208 158
M7310 lower buttons 155
M7324 buttons 157
T7208 158
T7316 buttons 151, 152, 154
personal programming 14
phone 111
Pick up receiver 259
Pickup 61
Pickup denied 61, 62
pickup group, changing 61
Please wait 85
Pool code 121
power failure, clock 31
power off, affect on memory buttons 87
power supply, testing 256
pre-dial 83
pre-printed button caps 150
Press a button 89, 145, 148
Press a line 161
Press held line 67
prevent calls, restriction services 217
PRI
2-way DID 205
Call by Call 206
Dialing Plan 207
DID 203
DOD 203
emergency 911 205
ISDN description 203
name and number blocking 205
Network Name Display 204
prime line
description 251
external call routing 231
standard dial 82

system speed dial 32
prime telephone
answering calls 47
CAP 48
direct dial 228
overflow routing 249
TAP 50
using DND 200
priority call
exclusive hold 84
see also Call Queuing 43, 83
Priority denied 85
Priority>223 259
privacy
changing status 74
conference call 64
creating conference call 75
set lock 232
private
branch exchange, accessing from Norstar (see also host system dialing signals) 234
call 75
CbC type 206
private dialing plan, Call by Call 206
private line, description 252
Private name 59, 204, 209
private network, enblock dialing 207
Private number 59
Program and HOLD 89, 93, 148
Program and OK 89, 93, 148
Programmed 89
Programmed Release, host system dialing signals 237
programming
administration programming 14
administration set 15
alarm feature, Hospitality 191
alarms 192
auxiliary ringer 233
Basic password 14
basics 14
broadcast mode 174
busy line setting 176
Call Display 58
Call Forward 37, 40
Call Forward delay 115
call forward on busy 39
Call Pickup 59
call restrictions, Hospitality 188
CAP 49
changes, planning 15
changing buttons, users 164
changing the name of a line 35
changing the name of a telephone 34, 199
check DNs 27
condition password 186
customizing your Norstar 14
direct-dial telephones 229
entering passwords 27
external autodial button 87
features on buttons 147
Forward no answer 115
group pickup 60
Handsfree 72
Handsfree Answerback 73
hospitality cond password 227
hospitality desk password 227
hospitality password 227
Hospitality passwords 185
Hotline telephone 230
hunt delay 175
installer programming 14
KIM 53
line redirection 118
Link 234
log space 142
Long Tones 236
overflow set, Hunt Groups 177
overlay 15
page zone 126
paging 126
Pause 236
personal programming 14
programmed release 237
programming indicator◀ 20
programming indicator▶ 20
programming map 23—27
programming overlay 19
queue timeout 177
recording changes 14
Restriction service 217, 218
Ringing service 217
room/desk information 187
Routing service 218
Run/Stop dialing signal 237
service times, Hospitality 188

Set lock 232
set lock 233
starting and ending a session 27—28
system and user speed dial 91
System Coordinator 27
system speed dial 31
telephones
Call Forward, do not disturb 40
Do Not Disturb 200
Do Not Disturb on Busy 40
priority call 83
time and date 29
top-level menu description 23
user preferences 163
User Speed Dial 92
Wait for Dial Tone signal 238
programming record 14
programming telephones
block Link 235
blocking Redial 95
Last Number Redial 90
public network
dialing plan, PRI 207
enblock dialing 207
remote access to Norstar 241
Public, CbC type 206
pulse dialing
selecting on the set 238
switching 246

Q

query alarm 192
queue
Hunt Group routing 176
Hunt Group timeout 177
QUIT 251

R

recording alarm codes 253
recording changes 14
redial
last number 90
saved number 94
Redir by 121
redirect ring, programming 120
Redirect denied122
redirection
all lines 119
cancelling 119
lines 118
loops, avoiding 123
programming 118
ring control 120
using 123
refusing to answer second call 200
Registration password 225
Release a call 105, 259
Release button
☎ 55
icons 18
Release calls 259
releasing
accidentally 76
from conference 66
relocation, automatic relocation, telephones 199
remote access 239—241
change COS password 243
fast busy tone 242
loop start line 239
managing COS passwords 243
security 240
stuttered dial tone 242
system dial tone 242
through public network 241
tones 242
usiing ISDN with LAN 214
using COS password 240
remove
from a conference call 66
Hunt Group members 171
message, analog telephone 132
messages 132
replying to a message
analog telephone 131
digital phone 130
reporting alarm codes 253
Restr'n 222
Restricted call 79, 103, 260
restricting
access to Norstar 240
access using COS password 240
feature use, see Set Lock
telephone feature use 232
telephone programming 232

using alternate or scheduled services 217
restriction service
control telephone 221
filters, COS for remote access calls 242
naming 219
Night schedule 219
preventing calls 217
turning off/on 218
retrieval codes, Call Park 106
retrieving
held call 97
parked call 106
ring
auxiliary ringer 233
changing ring type 162, 167
changing the number of rings before call is forwarded 38
description of types 45, 162
ring volume setting 162
Ringing service 219
rotary mode 174
sequential 174
simultaneous rings 174
Ring Again 85
7100 series terminals 259
set lock 232
Ring Again? 79, 86
ring delay, call fowarding 117
Ringing 222
ringing
distinctive ring patterns 46
ringing service
restriction services 217
Trunk Answer 62
rings
change number for call forward 38
setting Hunt Group delay 175
room
setting condition 189
using room programming 189
room information, programming 187
room set
description 185
using 190
rooms set
call restrictions 188
rotary mode, Hunt Groups 174
Routing 222
routing
2-way DID 205
external lines 231
Hunt Group routing options 176
overflow 249
routing service
control telephone 221
outgoing calls 218
overflow routing 249
run/stop, host system dialing signals 237

S

saved number redial
set lock 232
using 94
Sched 4 223
Sched 5 223
Sched 6 223
scheduled services 217
schedules, viewing active 221
second call, refusing 200
security
managing COS passwords 243
practices 241
system 240
using COS password 240
using DISA 240
Select a line 79, 93
Select line out 122
Select line(s) 122
Send message? 79
sending messages
set lock 232
using feature 128
sent message, cancelling 130
sequential mode, Hunt Groups 174
Service
control telephone 221
overflow routing 249
routing service 218
turn off 221
turn on manually 219
service done, Hospitality 189
Service Modes, see Services
service provider features
911 service 199
Automatic Call Back 211

- Automatic Recall 211
- Call Forward 210
- call information 137
- calling the forwarded numbe 211
- canceling Call Forward 211

Service Schedules
- Evening Sched 223
- Lunch Sched 223
- Night Sched 223
- Sched 4 223
- Sched 5 223
- Sched 6 223

service times, Hospitality 188

Services
- description of menu 23
- display indicator for active services 223
- overriding 223
- Restriction service 217
- Ringing service 217
- set lock 232
- Trunk Answer 62
- turning off and on using feature codes 220
- turning off/on 218
- using control telephone to set 217
- viewing active schedules 221

Services ON 223

set
- date 30
- types of Hospitality sets 185
- using administration set 190
- using room set 190
- using set programming 189

Set Lock
- Full 232
- limiting access to features 232
- partial 232
- programming 233
- using 232—233

Set locked 257

set profile, viewing 245

SHOW 251

Show set 34

signal
- Link 234
- Long Tones 236
- Pause 236
- Programmed Release 237
- run/stop 237
- Wait for Dial Tone 238

simultaneous ring, Hunt Groups 174

snooze, delaying alarm 194

speakers
- telephone, testing 256
- voice call 134

special telephones 228

speed dial
- 7100 sets 92
- add/change number 32
- changing user buttons 165
- choosing a system code 32
- code 92
- display 33
- entering name 33
- making a call 92
- programming for User 92
- selecting a line 32
- system programming 31
- using 91

splitting a Conference Call 66

square template
- M7208 158
- M7310 lower buttons 155
- M7324 buttons 157
- T7208 158
- T7316 buttons 151, 152, 154

standard dial
- prime line 82
- selecting a line 82

Start of list 134

Still in trnsfer 104

stop calls from ringing at set 200

stuttered dial tone 240, 242

suspending a call
- see also Call Park and Hold
- using Call Park 106

SWCA
- no free call keys 111
- using 108

system access, changing programming passwords 224

system code, system speed dial 32

System Coordinator
- maintaining 911 records 205
- password 14
- programming 27
- Restriction and routing service 221

system dial tone 242
system monitor telephone
using 232
System prgrming, description of menu 23
system speed dial
add or change number 32
description 91
description of menu Sys speed dial 23
display numbers 33
host system signaling codes 91
name 33
select a line 32
system time and date, change 225

T

T7100 Business Series Terminal
autodial 88
button defaults 159
Button Inquiry 145
Call Conference 64
Call Queuing 258
Conference Call on hold 66
Conference Call, independent Hold 65
Hold many calls 97
Incoming Line Group button 79
internal numbers 247
line assignment 247
memory buttons 250
one-line display 251
Ring Again 259
special set features 250
Speed Dial programming 92
standard dial 82
Voice Call 135
T7208 Business Series Terminal
button defaults 158
memory buttons 250
one-line display 251
T7316 Business Series Terminal
administration set 16
button defaults 151, 153
memory buttons 250
overlay 21
viewing line profile 245
viewing set profile 245
T7316E
TAP 50
talking in turn, Handsfree feature 71
TAP
answering calls 50
prime telephone 50
telephone 50
using 50
target line
changing the name 199
description 248
maximum 248
overflow 249
target lines
moving on telephone 161
TEL# 165
telecommuting using ISDN applications 214
telephone
7100 special set features 250
911 199, 205
accessing external voice mail 144
adjusting the display contrast 146
administration display 17
administration sets, illustration 16
alarm 253
announcement 134
answer message on analog telephone 129
answer prime telephone 47
answering voice call 135
assigning lines 247
automatic relocation 199
auxiliary ringer 233
blocking link 235
blocking redial feature 95
button inquiry 145
buttons 17
bypassing the Hotline set 230
Call Display information 58
call forward 37
call iinformation 56
call indicators 45
call log, viewing 139
cancel a sent message 130
cancel DND 200
cancel voice call 135
CAP 48, 228
changing direct dial telephone 229

changing line name 199
changing set name 199
changing the name 34
control service schedules 231
control set 221
default button assignment 150
denying voice call 135
dialpad buttons 17
direct-dial 228
directed pickup 59
disconnect supervision 246
display buttons 19
display call information 57
DND 200
ending test session 254
erasing call log items 140
extra-dial 220, 223, 228
Feature button 17, 18
group pickup 60
handsfree button 18
hiding display 162
Hold button 17, 18
Hold call information 57
Hospitality administration set 190
Hospitality room set 190
Hospitality service sets 185
Hotline 230
Hunt Group overflow set 177
installing BST sets 195
installing Norstar sets 197
last number redial 90
line profile, viewing 245
log calls automatically 137
logging call manually 138
Long Tones 236
making calls from ISDN terminal 82
memory buttons 17
moving custom programming 199
mute 18, 70, 134
name display 199
Norstar telephone overlay 22
prime 228
programming paging 126
pulse dialing 238
refusing second call 200
Release button 17, 18
remove messages 132
replying to a message 130
retrieving a parked call 106
ring indicators 45
sending messages 128
sent messages, viewing 133
setting up a hotline 230
stop ringing using DND 200
system monitor, hunt groups 232
system speed dial 31
T7316E and KIM 50
testing 254—256
turn off music 201
using background music 201
viewing messages 130
viewing set profile 245
volume control 18
telephone speakers, testing 256
telephones
set lock 232
template, button assignments 151, 153
Terminal Answering Position (see TAP)
terminal connections, BST sets 195
Terminals&Sets, description 23
testing
buttons 254, 255
ending session 254
telephone 254
Their list full 134
3 parties only 67
Tie, CbC type 206
time
change 225
service times, Hospitality 188
time and date
*TIME 225
*TIME 29
806 133
changing 29
displaying 76
hiding message indication 162
length of a call 75
time savers
autodial 87
Saved Number Redial 94
Speed Dial 91
Time&Date, description of menu 23
timeout, Hunt Group queues 177
tones
camped call tones 104
controlling length 236
dialing, switching 246

expensive route 249
fast busy, remote access 242
remote access tones 242
stuttered dial tone, remote access 242
system dial tone 242
voice call 134
top-level menus 23
tracking incoming calls, Call Log 137
transfer
calls, monitoring 112
cancelling 103
see Call Transfer
Transfer denied 104
transferring calls 101
Callback 112
parking a call 106
using Camp-on 104
troubleshooting
reporting and recording alarms 253
testing handset speaker 255
testing telephone buttons 255
testing telephone display 254
testing telephone speaker 256
testing the headset 255
testing the power supply 256
using the alarm telephone 253
Trunk Answer
feature 62
picking up calls 247
set lock 232
turning off background music 201

U

unassigning lines, Hunt Groups 173
Unequipped line 122
Unknown name 59, 204, 209
Unknown name 142
Unknown number 59
Unknown number 93
until * 222
Use line pool? 259
Use prime line 32
User Preferences 163—168
[&] [*] [*] [U] [S] [E] [R] 225
user preferences
Basic password 163
change display contrast 167
change how calls are dialed 166
change languages on display 167
change ring type 167
changing button programming 164
changing speed dial 165
display buttons 165
password 163
subheadings 164
user call log options 166
user programming 14
user speed dial
changing 165
description 91
programming 92
set lock 232
using
alarms 193
background music 201
Call Forward 114
Call Log 137
DND 200
Do Not Disturb 200
Hospitality administration set 190
Hunt Groups 169
Last Number Redial 90
line redirection 123
Link 234
name and number blocking 205
Norstar remotely 239—241
the room set 190
this guide 13

V

videoconferencing, using ISDN applications 213
VIEW 251
viewing
active Services 221
Call Log 139
messages 130, 133
Voice Call 134—135
answering 135
cancel 135
deny 135
Voice call 135
Voice Call Deny, set lock 232
voice mail
accessing your Norstar system 144

using Call Forward 117
voice message center, viewing messages 130
volume
bar, description 252
button 18
set control 252

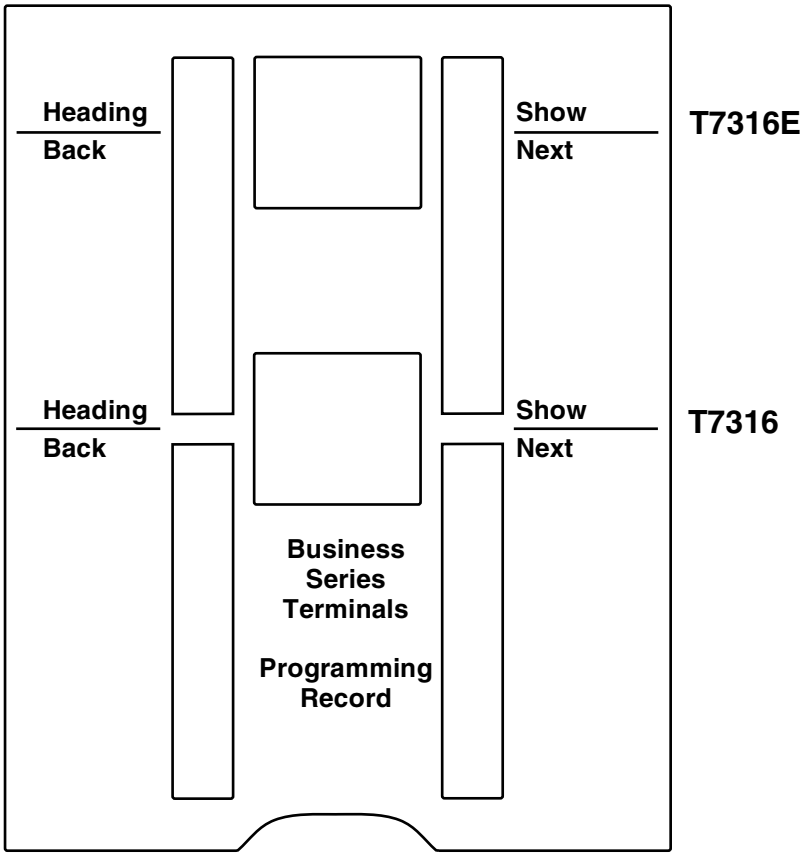
W

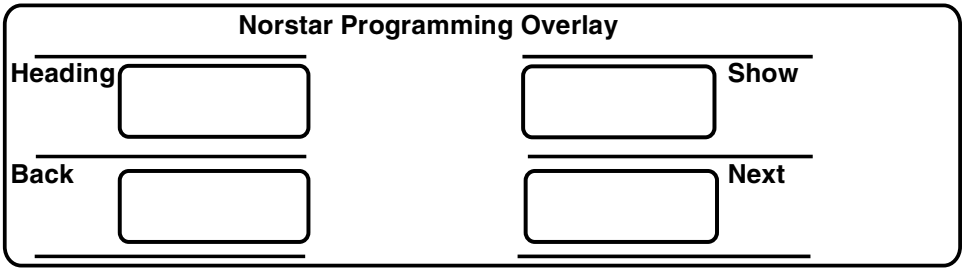
Wait for Dial Tone, Host system dialing signals 238
wake-up
cancel alarm 194
setting alarm 191
turn off alarm 194
using sets 193
wall mounting
BST sets 196
Norstar sets 198

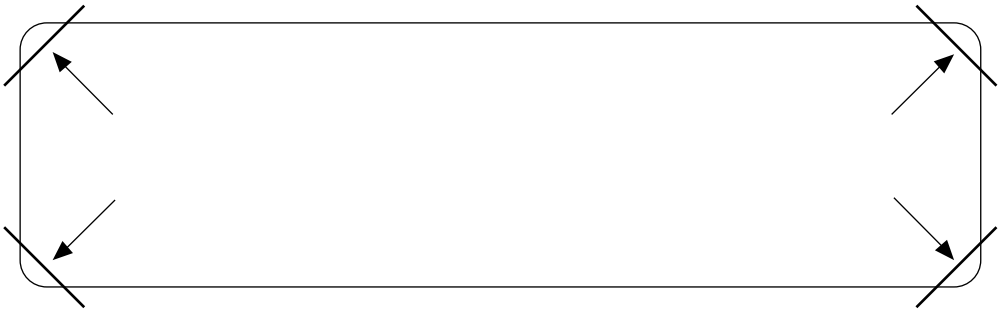
Y

year, set 30
Your list full 134

Backup programming overlays







After you have finished programming, store your Norstar Programming Overlay in the slots provided on the back cover.

Après avoir terminé la programmation, rangez la grille Norstar dans les fentes prévues à cet effet à la fin de ce guide.

Cuando haya terminado de programar, inserte en estas ranuras su Plantilla de programación Norstar que se encuentra en la contra tapa.