

*norstar*

'Modular DR5.1'  
System Coordinator  
Guide



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**Modular DR5.1**  
System Coordinator  
G u i d e

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## Welcome to Norstar

In addition to basic telephone service, your Norstar digital key system has many extra features that will greatly improve your office communications.

Please take the time to read this guide. It will help you to learn the various tasks which a System Coordinator should perform. This guide also serves as a reference when you assist co-workers to become familiar with Norstar features.

When a telephone system is first installed, it takes a bit of time to settle into using new equipment. Norstar minimizes this orientation by providing straightforward features and simple instructions.

### System Coordinator's role

The System Coordinator plays an important role in customizing Norstar to suit the organization and updating information as the office grows and changes.

Norstar can be customized at three levels:

#### Personal programming

Personal programming is done by individual telephone users who wish to personalize their Norstar telephones by programming features and telephone numbers onto specific memory buttons.

#### Administration programming

Administration programming is done by the System Coordinator, when you want to change various system-wide settings, as well as some specific settings for each line or telephone.

#### Configuration programming

Configuration programming is usually done for you by the Installer or Service Representative when Norstar is being installed. Specific system-wide parameters are set up in Configuration.

## Assisting your co-workers

It is human nature to ask someone how to do something rather than read a user guide. The System Coordinator may be asked to demonstrate to **co-workers** how to select and use **Norstar** features. To help **you** prepare for that possibility:

- Familiarize yourself with the procedures for using **Norstar** features. Examine the components of your **Norstar** system, identifying the buttons on the different types of **Norstar** telephones. Read the Telephone User Cards chapter of this Guide for more information on each telephone.
- Familiarize yourself with the various programming reminders provided at the end of the Programming chapter of this Guide. Distribute copies of these reminders to your co-workers after filling in information such as System Speed Dial numbers and names.

It is important for everyone in the office to know that you are the System Coordinator and to know when you are available for consultation. You may wish to schedule sessions for small groups or provide individual assistance to co-workers for programming features on their **Norstar** telephones.

## Your Service Representative

Ask your Service Representative for the service department's telephone number, and write it down. If you have problems with your **Norstar** equipment, telephone your Service Representative. If you have problems with programming or using any of the features, first read the appropriate section of this Guide and try again before calling your Service Representative.

## Enhanced Transfer

There is a new **procedure** for using the Transfer feature in this system. If you are upgrading a **Norstar** Modular system, be sure to familiarize yourself with the new procedure.

## Call Display services

Most public telephone companies offer Call Display services which provide information about an incoming call. The caller's **name**, telephone number and in some cases, long distance indication, can be shown on a telephone with a display. Your **Norstar DR5.1** system allows you to:

- view incoming call information as well as the **Norstar** line name that receives the call,
- keep a log of incoming call **information** and,
- view an integrated display that appears when you have received a message from either an internal **Norstar** user or a Voice Mail message from an external caller.

**Note:** You can access Call Display information only if **you** subscribe to the services offered by your public telephone company, and if you have the appropriate hardware installed. Contact your Service Representative for more information.

## Call Display Information

Call Display information may be shown on your telephone display when you answer an incoming call. In addition to the caller's name, telephone number and long distance indicator, if available, your **Norstar** system can display the line name that received the call.

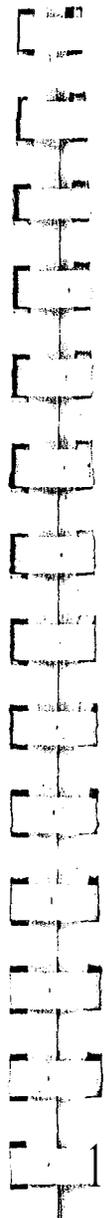
In the case where several users share a line, only one **telephone** can be designated to automatically receive Call Display information when a call is alerting on that line. If the call is **transferred** or camped to another telephone, the Call Display information is automatically available to that telephone.

If a line is not administered to automatically deliver Call Display information to a telephone, the user can invoke the Call Information feature (see Telephone Features section) or answer the call to view the information.

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Depending on your requirements, Call Display information presents several convenient options.

- When a caller is identified before the call is answered, you can answer using a personal greeting. You can also prepare yourself prior to answering the call by retrieving any relevant documents, or otherwise orienting yourself to the expected discussion.
- The Long Distance indicator alerts you that an incoming call is long distance and may therefore have higher priority.
- If you are unable to immediately attend to an incoming call, you can use the calling information to make a quick note.
- You can shorten the interruption time of a call from a recognized person. For instance, you can quickly answer the call and let the party know that you are busy but will return the call soon.
- A telephone can be programmed to first view either the caller's name or number or line name. For example, an attendant might wish to see the calling number and area code first in order to transfer the call according to sales region. The salesperson's telephone could display the caller's name first so they can answer with a personal greeting.



Call Display services

- Call Display information allows you to answer calls on a priority basis. For example:
  - If several calls are alerting at your telephone at the same time, you can request information about the calls to decide which one may be more important.
  - If you are already on a call, information about a second call starting to alert at your telephone can help you to decide whether to answer the second call or remain connected to the first call.
  - If you are in a meeting, the information associated with an incoming call can help you determine if the call is important enough to interrupt the meeting.
  - If you have several calls on hold and wish to identify the callers, you can view the Call Display information associated with each of the calls to help you determine which one you will respond to first.

Programming tips

In order for the designated telephone to automatically receive Call Display information, it must be programmed to ring for incoming calls on that line.

Before programming Call Display information you may wish to consider the following:

- which individual would benefit the most from automatically receiving Call Display information on an alerting line?
- how are calls routed and what information is the most important to know before a call is answered? For instance, if certain lines are private to individuals, an attendant might wish to first view the line name to determine who the incoming call is for.

## Call Log

The Norstar Call Log feature uses incoming Call Display information to make a record of call details for follow-up. Call Log also records several other useful facts such as the time and date of the log entry, the number of repeated calls by the same caller and which telephone answered the call if it was subsequently rerouted and handled by someone else in the Norstar system.

When the volume of incoming calls exceeds the ability of employees to handle all calls, or when staff are unavailable to answer calls, Call Log provides a convenient means of capturing information about missed calls.

When connected to a call that has Call Display information, the Logit feature of Call Log can be used to provide a quick and accurate means of recording the caller's information for future use (see Telephone Features for more information).

### Programming tips

Call Log space can be assigned to individual telephones according to how much space you wish to allocate to each user. You can also assign all or most Call Log space to a central answering position. For example:

In order to maximize the value of Call Logs and avoid confusion for the end user and their customers, it is important to consider the following when configuring Call Log:

#### #1 Application of Call Log

Does the user want to return customer calls, track the numbers of calls unanswered, keep a record of most commonly called numbers, etc.?

#### #2 Who is most interested in logging calls on a particular line?

For instance, dentists working in a clinic may have an individual line assigned to them but prefer that the receptionist handle all of the calls logged on their line.

We strongly recommend that you limit the number of users logging calls for the same line, as this would be confusing. For example, if two users are logging calls for the same line, they do not know who the call was originally intended for nor are both Call Logs updated when one of the users returns a customer's call. Potentially a customer could be called back twice.

There are few situations where the same call needs to be logged at more than one set.

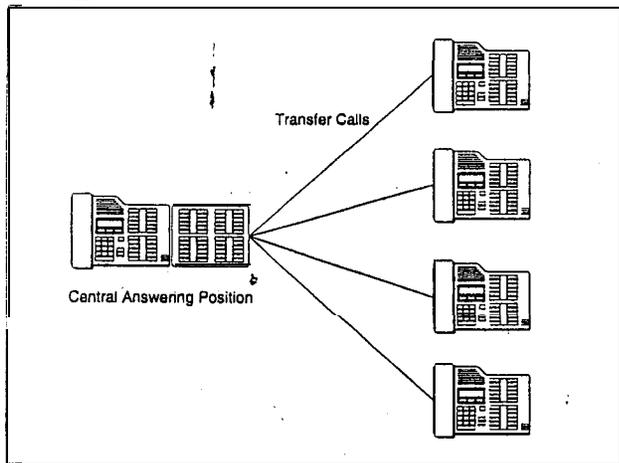
#### Recommended configuration 1

The Central Answering Position (CAP) has all lines appearing at the CAP set. Incoming calls are first answered on the CAP set and then transferred to the required destination.

The Attendant wants to track all calls unanswered on the system, during working hours and after hours. The users want to capture in their Call Log, any calls which they did not answer at their set and be able to return those calls from the log.

The CAP position logs No one answered on all lines and the users log calls Unanswered by me. In this configuration the user will log calls transferred to them via intercom (I/C) from the attendant or another user, even though the administration setting is (Logging Set: N). Thus the entries in their Call Log are specifically meant for them.

Call Logs with a Central Answerina Position



Programming:

CAP Position

Configuration:

Line Access  
 Line Assignment  
 (all lines to appear  
 at the CAP)  
 Ringing

Administration:

Log Defaults  
**Space/Log:** (assign log space  
 to all sets for example, 25.)  
 Set Services  
**Logging Set:** Y

Set Programming:

Feature \* 8 4 (No one answered)

Set Users

Administration:

Set Services  
**Logging Set:** N (no lines assigned)

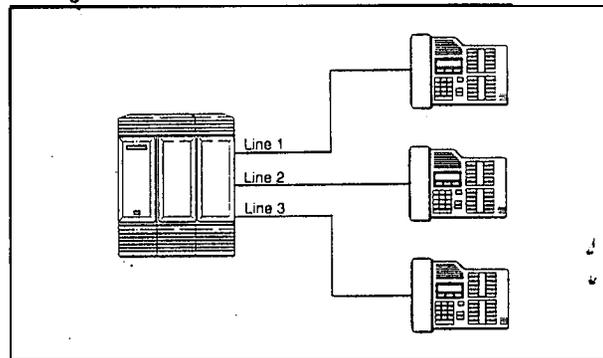
Set Programming:

Feature \* Q 4 (Unanswered by me)

Recommended configuration 2

Each Norstar user has a unique line appearing at their set. The users have a variety of requirements in terms of logging calls. Using Feature \* 8 Q the users can program logging capabilities specifically for their sets.

Call Logs with dedicated lines.



Programming:

Configuration:

Line Access  
 Line Assignment  
 Ringing

Administration:

Log Defaults  
**Space/Log:** #  
 Set Services  
**Logging Set:** Y

Set Programming:

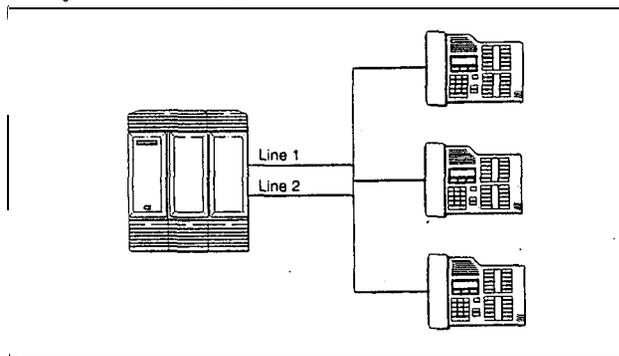
Feature \* 8 4  
 (No one answered, Unanswered by me, Lo9 all Calls,  
 No autologging).

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Recommended configuration 3

The Norstar system has lines 1 and 2 appearing on all sets. The supervisor wants to log all calls for lines 1 and 2 at his/her set in order to analyze call traffic. Two users have been selected to return unanswered customer calls. To avoid confusion when logging and sharing lines, one user logs No one answered calls on line 1 and a second user logs No one answered calls on line 2. This clearly identifies who is responsible for returning calls for each line and ensures that only one person calls the customer back.

Call Logs with shared lines



Programming:

Configuration:

- Line Access
- Line assignment
- Ringing

Administration:

- Log Defaults
- Space/Log: #
- Set Services

Show Set: 21 (supervisor's set)  
 Logging Set:  
 Lines 001 & 002 ✓  
 Show Set: 22  
 Logging Set: Line 001 ✓  
 Show Set: 23  
 Logging Set: Line 002 ✓

Set programming:

Set 21 Feature \* 8 4 Log All Calls

Set 22 and 23 Feature \* 8 4 No one answered

Note: For more information, see the Call Log Feature Card.

Message Waiting

Norstar Message feature allows you to send and receive internal messages as well as maintain a record of your messages. If you have subscribed to Voice Mail Messaging (provided by your public telephone company), and visual message waiting indication is defined at your set, Message Waiting also informs you if you have messages at your Voice Message Center and allows you to:

- receive a visual indication that you have messages waiting,
- call your Voice Message Center to hear your messages and,
- clear the message waiting indication from your display.

Programming tips

In order for a telephone to use this feature, it must have a line appearance and Message Waiting must be activated for that line by your public telephone company.

It is possible for two or more telephones to share a line appearance. You must determine if one, some or all of the users sharing a line will receive Message Waiting notification. If it is a sub-group, such as a sales team within a company, it may be appropriate to share the feature providing that the users have an agreed upon procedure for retrieving and deleting messages.

For further information on Call Information, Call Log and Messages, see the Telephone features section. Programming actidhs are described in further detail in the Programming section.

## What's New with Norstar Modular DR 5:1

### ATA Answer Timer

The Norstar system allows you to administer a delay between the last digit you dial on a device connected to an analog terminal adaptor (ATA) and when the KSU is ready to receive DTMF tone from the far end analog device. Up until now there was a fixed seven-second delay. Now you can shorten or lengthen the delay depending on the requirements of the device attached to the ATA. Facsimile machines and credit card sets, for example, require a three second delay.

### Auxiliary Ringer

To resolve the problem of an auxiliary ringer indicating internally transferred calls, the Auxiliary ringer can be set by line and by telephone. The telephone setting when combined with the line setting allows you to chose if the Auxiliary Ringer (if installed) will ring when a call is sent to a specific telephone or on a specific line. For example, an incoming call on a line programmed to yes will ring the auxiliary ringer. Once the call is answered and transferred within the system, the auxiliary ringer will not ring for a call sent to a telephone that has auxiliary ringer set to no.

### Do Not Disturb 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.

### Last Number Redial

Up to now Last Number Redial was available for all telephones on a system wide basis. Now you can change the ability of a particular telephone to use Last Number Redial. This helps to ensure that only authorized users can view access codes or passwords.



### Link Feature

You can change a telephone's ability to use Link (a host system signaling option).

### Page Tone

The tone preceding a Page Announcement up to now was always on. Now it is possible to turn the Page tone off for all users. This is convenient if the office environment is often busy with Page Announcements.

### Page Timeout

You can now specify the amount of time required before a Page Announcement session expires. Longer announcements can be completed without having to re-page the other party. This feature enhancement appears in Configuration programming under Cdl Handling.

### Saved Number Redial

Up to now Saved Number Redial was available for all telephones on a system wide basis. Now you can change the ability of a particular telephone to use Saved Number Redial. This helps to ensure that only authorized users can view access codes or passwords.

## Programming

The system comes programmed with default settings that may be sufficient initially. Administration programming is performed by the System Coordinator, and lets you change settings that probably have to be updated regularly because of staff turnover or new business contacts. You can also assign some features to individual lines and telephones. This provides you with real flexibility in making your telephones work together.

This chapter contains detailed procedures for programming System Speed Dial codes, Names for lines and telephones, and Time and Date information. If you are new to Administration programming, you may want to get comfortable with these three procedures before attempting other procedures.

Personal programming does not follow the same procedures as Administration programming. Personal programming allows you to assign a particular function to some of the keys, and is unique to each telephone. For more information on Personal programming see the Feature programming description in the Telephone features chapter.

### How to do programming

The system is programmed using a M7324 or M7310 Telephone. Use the buttons on the telephone to program a setting or to request a specific programming action.

Norstar guides you step by step on the telephone display while you enter programming, select and change what you want, and exit programming.

### Reviewing programmed settings

The Set Profile and Line Profile features help you to check your programming by allowing you to review the settings. For more information, see the Telephone features chapter.



**Planning**

Only one Norstar telephone can access Administration programming at a time. While programming a telephone, you cannot use it to make or receive calls. While you are programming, other users of the Norstar system may use their telephones, but cannot program any memory keys.

**Determine programming requirements**

Read about the available programming settings in this chapter, then determine how your co-workers would like the features programmed.

Get the following information:

- the numbers of the installed lines
- the internal telephone numbers of installed Norstar telephones
- the telephone numbers to be programmed into System Speed Dial
- the names for lines and telephones
- the lines and internal numbers that are subject to Line abilities and Set abilities programming
- the required Filters and Remote access packages
- the Set Abilities to be assigned to individual telephones
- how the system should be programmed to optimize the Service Modes feature
- whether a new Administration password is required
- whether Class of Service passwords are required.



**Programming tools**

**A Norstar telephone**

System programming can only be performed on an M7310 or M7924 Telephone.

**The N&star Programming Overlay**

The Nor-star *Programming Overlay* is a paper cutout that labels telephone buttons used during programming. This makes it easier for you to recognize the button that you want. The *Norstar Programming Overlay* is provided at the end of this book.

**Norstar Programming Overlay**



**The Norstar Modular DR5.1 Programming Record**

The *Norstar Modular DR5.1 Programming Record* provides a convenient way to record what you have programmed. It also helps you to plan your programming. Settings are grouped according to their function.

Pages from the Record may be photocopied as necessary for programming many telephones or lines.

**The Norstar Telephone User Cards**

Each Norstar telephone has a *Norstar Telephone User Card* that lists the most commonly used features.

**The Norstar Modular DR5 Telephone Feature Card**

The *Norstar Modular DR5.1 Telephone feature Card* lists the features that can be accessed with the **Feature** button.

## Administration overview

Administration programming lets you change settings for the entire Norstar system, as well as settings for individual telephones and external lines.

Pre-programmed default settings may initially be sufficient for your needs. You can use Administration programming to customize your Norstar system by changing these default settings. In this section, default options are shown in bold type.

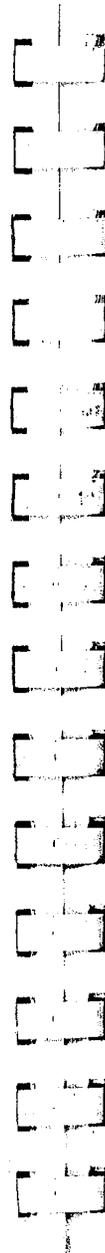
The defaults correspond to those assigned during Norstar installation. The option you see while programming may be different if that setting has been changed. If the display shows a line number or internal number during programming, an example is shown in the Administration procedures.

The default Norstar internal numbers may vary depending on the installed Norstar system. The defaults are:

- two-digit internal numbers (beginning at **21**) for non-expanded Norstar systems
- three-digit internal numbers (beginning at 221) for expanded Norstar systems.

### Administration headings

Headings and subheadings in Administration programming help you to keep track of where you are. An example of a heading is **1.Sys speed dial** for programming System Speed Dial. When you program a System Speed Dial number, **Display digits** is displayed as a subheading.



Administration programming has nine headings:

ADMINISTRATION CODE 1

↓  
Password:

↓  
**1.Sys speed dial**

System Speed Dial assigns a two-digit code (01-70) for fast dialing of up to 70 telephone numbers from any Norstar telephone.

↓  
2. Names

Names identifies external lines and telephones by name.

↓  
**3. Time and date**

**Time** and Date adjusts the time and date displayed on each Norstar telephone.

↓  
4. Direct-Dial

Direct-Dial designates the telephones that can be reached by dialing a single digit.

↓  
5. Capabilities

Capabilities **defines** dialing filters, remote access packages, line abilities and telephone abilities. It assigns restrictions and capabilities to Class of Service (COS) passwords, to telephones, to lines and to line/telephone combinations.

↓  
6. Service Modes

Service Modes controls how the Norstar system responds to calls, depending on the time of day.

↓  
7. Password

Password changes the password that controls access to Administration programming.

↓  
8. Log Defaults

Log Defaults reallocates the Call Log space for all telephones in the system.

↓  
9. Call Services

Call Services customizes the use of Call Display information at your telephone.

## Entering Administration

When your system is first installed, there is no password stored in the Norstar system. You are not prompted to enter a password as you enter Administration for the first time unless your Customer Service representative has already programmed one for your system.

To Enter Administration:

1. Release all calls on your telephone.

2. Enter the Administration access code:

Feature \* \* 2 3 4 6 which is also  
Feature \* \* A D M I N .

3. If the display changes to Password:, enter the Administration password. (The password is not shown on the display as you enter it.)

If the password is correct, the display shows 1.Sys speed dial, and three triangular indicators ► are shown on the vertical display.

If the password is incorrect, the display does not change. Check the password. Press **RETRY** and re-enter the password.

4. Place the *Norstar* Programming *Overlay* over the buttons pointed to by the three triangular indicators, . .

## Exiting Administration

Norstar stores your changes automatically as soon as you alter any settings; you do not need to "save" your changes.

1. Press **End**.  
The display briefly, shows End of session.



## Moving through Administration

To program a setting, you must first locate the correct heading. To do this, scan through the headings of Administration using the **Next** and **Back** buttons.

To **move through** Administration headings: After entering Administration, the display shows 1.Sys speed dial.

1. Press **Next**.  
The display shows 2. Names.
2. Press **Next**.  
The display shows 3. Time and date.
3. Press **Next**.  
The display shows 4. Direct-Dial.
4. Press **[Next]**.  
The display shows 5. Capabilities.
5. Press **Next**.  
The display shows 6. Service Modes.
6. Press **Next**.  
The display shows 7. Password.
7. Press **(Next)**.  
The display shows 8. Los Defaults.
8. Press **Next**.  
The display shows 9. Call Services.
9. Press **Next**.  
The display shows 1.Sys speed dial.

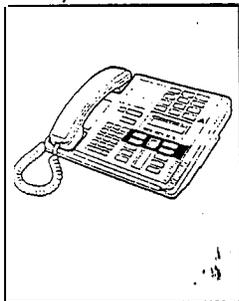
## Using the Overlay

The Indicators show which buttons can be used at that programming step. The functions on these buttons allow you to move through the headings and subheadings of Norstar programming.

- Heading** moves up in the hierarchy of headings and subheadings.
- Show** moves down in the hierarchy of headings and subheadings, or to begin programming settings under a heading or subheading.
- Next** moves to the next heading, subheading, or programmable setting.
- Back** moves to the previous heading, subheading, or programmable setting.

The Norstar Programming Overlay is located inside the back cover of this Guide.

M7310 Telephone with a **Norstar Programming Overlay**

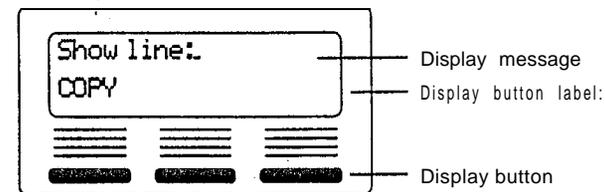


M7324 Telephone with a **Norstar Programming Overlay**



## The Norstar display buttons

Display buttons perform many functions. Depending on where you are in programming, one, two, or three display buttons may be available at any one time. Press one of the display buttons to select the function that you want.



The most common display button labels are:

- CHANGE** changes a programmable setting.
- BKSP** moves the cursor one space backward (backspace) and delete a character, allowing you to re-enter a number or letter.
- COPY** copies line or telephone programming.
- VIEW→** shows the last part of a displayed message longer than 16 characters.
- ←VIEW** shows the first part of a displayed message longer than 16 characters.
- ⇒** moves the cursor one position to the right when programming a name.
- ←** moves the cursor one position to the left when programming a name.

## Programming details

### Entering numbers

Numbers are entered from the Norstar telephone dial pad. The **BKSP** display button may be used to edit the number.

Line numbers must always be entered as a three-digit number. Line numbers from 10 to 99 must be entered with a leading zero (line 020, for example). Similarly, line numbers less than 10 must be entered with two leading zeros (line 002, for example).

Internal telephone numbers, also referred to as Directory Numbers (DNs), can be two- to seven-digits long on a non-expanded system, and three- to seven-digits long on an expanded system. The default DN length is two on a non-expanded system and three on an expanded system. The DN length can be changed by your Customer Service representative.

### Viewing long telephone numbers

External telephone numbers can be up to 24 digits, but the telephone display is only 16 character spaces long. If you wish to see a previously programmed number that is longer than 16 digits, you must do the following:

Begin, for example, with **123456789012345...**

The display shows only the first 15 digits. The three dots (...) at the end of the display indicate that more digits remain to be displayed for the external number.

1. To see the remaining digits, press **VIEW**.
2. To see the first 15 digits again, press **←VIEW**.



## Entering names

Letters and numbers can be entered as part of a name for various settings. The method of entering a name is always the same.

Begin with a setting that prompts you to enter a name. The display shows a cursor ( . ) to indicate where you can enter the next character. To enter a name:

1. Press the button on the dial pad with the printed letter or number that you want.

Each time that you press the button, a new character is shown on the display. For example, the button for the number 3 has the letters D, E, and F, where:

D is shown after the first press

E is shown after the second press

F is shown after the third press

3 is shown after the fourth press

D is shown again after the fifth press.

(Letters are always shown in upper case.)

2. When the character that you want is displayed, press **→** or **#** to move the cursor to the next character position.

OR

If you want to correct a character entered by mistake, press **←** or **\*** until the cursor is positioned beneath the character that you want to correct.

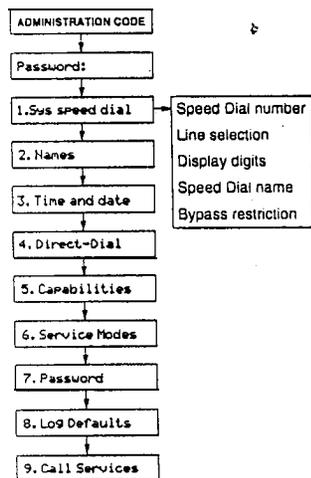
OR

If you want to move the cursor back and delete a character, press **BKSP**.

3. Repeat step 1 for the remaining characters.

## System Speed Dial

The System Speed Dial programming section allows you to set the Speed Dial codes for external telephone numbers which the people in your office use most often. Use the Personal Speed Dial feature to program numbers used by only one or two people.



You can program 70 System Speed Dial codes ranging from #01 to #70.

### System Speed Dial Number

System Speed Dial Number lets you assign a System Speed Dial telephone number to a two-digit code. The System Speed Dial Number may contain 24 digits.

Begin with the display showing 1.Sys speed dial.

1. Press **Show**.
2. The display shows Speed dial #:..  
  
Select the Speed Dial code you want to program:  
Press **Next** until the display shows the correct code.  
O R
3. Enter the Speed Dial code on the dial pad.  
  
Press **Show**.  
  
Note: To assign default settings, press **DEFAULT** and then press **Next** to go to the next Speed Dial code.
4. Press **CHANGE**.  
For example, the display may show #05:..
5. Enter the new telephone number from the dial pad, including all digits such as an initial 9 or an area code that must be dialed to call the number manually. If you need to backspace the cursor, press the **BKSP** display button.  
For example, press **5** **Q** **5** **Q** **2** **3** **Q**.  
The display shows 5551234..
6. Press **OK** to store the System Speed Dial number.

#### Programming hints

A Host System Signaling feature code may be inserted into the System Speed Dial number. Pause and Run/Stop each use one character position; and Link and Programmed Release each use two positions.

For more information on using the features in System Speed Dial programming, see the Host System Signaling section in Telephone features.

### Line Selection

Line Selection allows you to specify the external line that is used for a System Speed Dial number. The options are the Prime line, an external line, or a line pool.

After you have programmed a System Speed Dial number, press  and the display shows:

Use Prime line

OR

Use line: 002, for example, if a line is already assigned

OR  
Pool code: 42, for example, if a line pool access code is already assigned.

1. To change the setting, press **CHRNGE** until the display shows the option to be programmed.
2. If you select a line number or a line pool access code, enter the digits from the dial pad. A line pool access code can be from one to four digits long.

### Display Digits

Display Digits determines whether the telephone number is displayed when a System Speed Dial number is used, or whether a name associated with that number is displayed.

After you have programmed a line selection for a System Speed Dial number, press  and the display shows **Display digits**.

1. Press **CHANGE** to change the setting. Options are Y (Yes) and N (No).



### System Speed Dial Name

System Speed Dial Name allows you to assign a name to the stored System Speed Dial number. When the Display Digits setting is "No", the programmed name is shown on the Norstar display when the System Speed Dial feature is used.

The name can be up to 16 characters long. The default name is the System Speed Dial number; for example, Sys Spd Dial 02 for System Speed Dial code 02.

After programming Display Digits to "No", press  and the display shows Name.

1. Press **[Show]**.  
The display shows the assigned or default name.
2. Press **CHANGE**.
3. Enter the first character of the name by pressing the appropriate dial pad button one, two, three, or four times. For more information, see the section in this chapter entitled **Entering names**.
4. To move the cursor to the next position, press **→**.  
Continue entering characters.

#### Programming hints

You can program System Speed Dial Name only if Display Digits is set to No.

### Bypass Restrictions

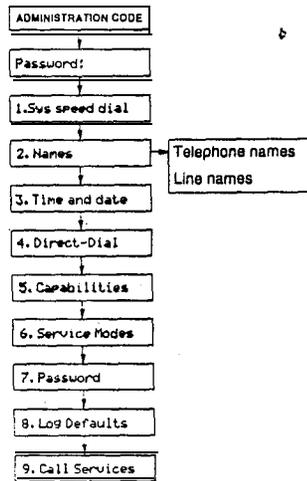
Bypass Restrictions allows the System Speed Dial number to bypass any restrictions in applied Dialing filters. Dialing filters are programmed in the Capabilities section of Administration programming.

After programming the System Speed Dial Name, press  and the display shows **Bypass restr'n**.

1. Press **CHANGE** to change the setting. Options are N (No), and Y (Yes).

## Names

You can assign names to identify external lines, target lines and your co-workers' telephones. 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.



### Programming hints

Telephone names and line names can contain both letters and numbers, but cannot be **longer** than seven characters. The # and \* symbols cannot be used.

You can give the same name to two or more telephones, or to a telephone and a line in your system. To avoid confusion, **you** should avoid such duplication. Use initials, abbreviations, or even nicknames to give each telephone a unique name.

Two lines cannot have the same name. If you enter a line name which has already been used, you hear an error tone, and the display shows Use unique name.

## Telephone Names

**Personalize** your office communication by assigning names to the telephones in the **Norstar** system. A telephone's default name is its **internal number**, for example, 227.

Begin with the display showing **1. Sys speed dial**.

1. Press **(Next)**.  
The display shows 2. Names.
2. Press **Show** twice.  
The display shows Show set..
3. Enter the internal number of the telephone.  
OR  
Press **Next** for the name of the telephone with the first, internal number.
4. Press **CHANGE**.  
The **name** is removed from the display, and a cursor is shown.
5. Enter the **first** character of the name by pressing the appropriate dial pad button one, two, three, or four times. For more information, see the section in this chapter entitled Entering names.  
  
Note: Press **Next** to restore the default name and go to the next internal number.
6. Press **→** to move the cursor to the next position.  
Continue entering characters.

### Program&g hints

If **Automat& Telephone Relocation** is turned ON, the name and internal number of a telephone are saved if the telephone is moved within your system.

## Line Names

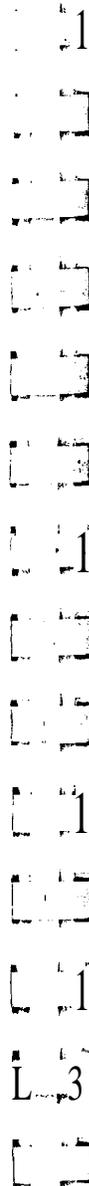
Line Names allows you to assign a name to an external line. The default name is the line number, for example, **Line002**.

Begin with the display showing **1.Sys speed dial**.

1. Press **Next**.  
The display shows **2. Names**.
2. Press **Show**.  
The display shows **Set names**.
3. Press **Next**.  
The display shows **Line names**.
4. Press **[Show]**.  
The display shows **Show line: ..**
5. Enter the line number from the dial pad.  
OR  
Press **Next** to program the name of line 001.
6. Press **CHANGE**.  
The name is removed from the display, and a cursor is shown.
7. Enter the first character of the name by pressing the appropriate dial pad button one, two, three, or four times. For more information, see the section in this chapter entitled **Entering names**.

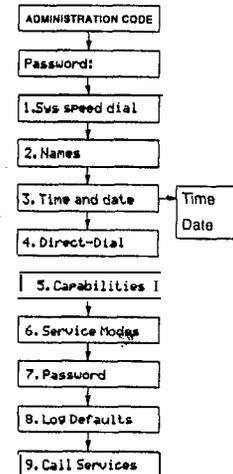
Note: Press **Next** to restore the default name and go to the next external line.

1. Press **-->** to move the cursor to the next position.  
Continue **entering characters**.



## Time and date

Time and date programming allows you to set the time and date which is shown on the display when a telephone is not in use. As with any clock, this needs to be done every time that your office has a power failure.



Changing the time and date is easy, but there are a couple of things to remember:

- All times and dates must be entered using numerals. For example, February would be entered as "2".
- The time may be entered in either 12 or 24-hour format. If the display is in English, and the hour entered is less than thirteen, the display prompts you to specify "am" or "pm".
- The year is not shown on the telephone display, but make sure that it is set correctly. **Norstar** is programmed to allow for leap years.

English language displays always show the time in 12-hour format, while the alternate language displays always use the 24-hour format.

#### Setting the time

Begin with the display showing 1.Sys speed dial.

1. Press **Next** twice.  
The display shows 3.Time and date.
2. Press **Show**.  
The display shows the time, for example, Time 01:00.
3. Press **CHANGE**.  
The display shows the hour, for example, Hour:01.
4. Set the hour.
  - a. Press **CHANGE**.  
A cursor replaces the number on the display.
  - b. Enter the hour using the dial pad.  
For example, press **0 9**.
  - c. Press **Next**.  
The display shows the minutes, for example, Minutes: 00.
5. Set the minutes.
  - a. Press **CHANGE**.  
A cursor replaces the number on the display.
  - b. Enter the minutes using the dial pad.  
For example, press **1 5**.
  - c. Press **Next**.  
If the hour entered in step 5 is less than thirteen, the display shows am.
6. To switch the message to **PM**, press **CHANGE**.  
To switch it back to **am**, press **CHANGE** again.

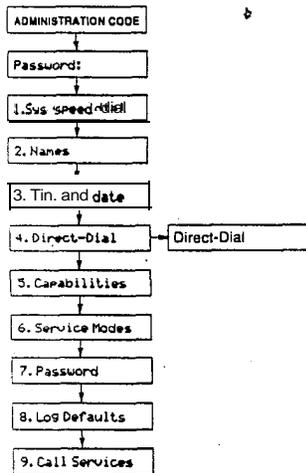
#### Setting the date

Begin with the display showing 1.Sys speed dial.

1. Press **Next** twice.  
The display shows 3.Time and date.
2. Press **Show**.  
The display shows the time, for example, Time 01:00.
3. Press **Next**.  
The display shows the date, for example, Date 31 Mar 91.
4. Press **CHANGE**. The display shows Year: 88.
5. Set the year.
  - a. Press **CHANGE**.  
A cursor replaces the number on the display.
  - b. Enter the year using the dial pad.  
For example, press **9 9** to enter the year 1990.
  - c. Press **Next**.  
The display shows the month, for example Month: 01.
6. Set the month.
  - a. Press **CHANGE**.  
A cursor replaces the number on the display.
  - b. Enter the month using the dial pad.  
For example, press **0 9** to enter February.
  - c. Press **(Next)**.  
The display shows the day, for example Day: 01.
7. Set the date.
  - a. Press **CHANGE**.  
A cursor replaces the number on the display.
  - b. Enter the date using the dial pad.  
For example, press **1 4**.

## Direct-Dial

Direct-Dial programming allows you to call the Direct-Dial telephone assigned to your telephone by dialing a single digit. Up to five Direct-Dial telephones can be designated to handle calls from five groups of telephones. Use this Administration heading to specify which telephone directory numbers (DNs) are designated as Direct-Dial telephones.



Use the **Show** button, the **CHANGE display** button and the dial pad to enter the internal number of the telephone to be designated as the Dir&Dial telephone.

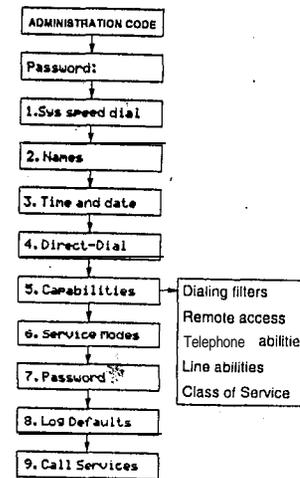
### Programming hints

To complete Direct-Dial telephone programming, assign a Direct-Dial telephone to each telephone in the system using the Capabilities section of Administration programming.

The digit you dial in order to get the Direct-Dial telephone to ring can be programmed by your Customer Service representative.

## Capabilities

Capabilities programming assigns restrictions, exceptions, and remote access capabilities to Class of Service (COS) passwords, telephones, and lines.



### Dialing Filters

A dialing filter is made up of restrictions and exceptions. These specify the external numbers which can or cannot be dialed from a telephone or on a line.

After dialing filters are defined, they may be used as telephone (set) filters, line filters and line/set filters to manage outgoing calls, and as remote filters applied to lines. Remote access packages control the numbers that can be dialed by remote users when they are calling into Norstar to use a Norstar line for placing calls.

Use the **Show** button, the **ADD display** button, the dial pad, and the **OK** display button to program the restrictions for each dialing filter.

Press the **ANY display** button to enter a **\*** wild card character that represents any digit in a sequence of numbers.

After programming a restriction, press the **Show** button to program the exceptions to that restriction. Use the **ADD display** button, the dial pad, and the **OK** display button to program the exceptions for each restriction.

For example

You may need filters for three different types of users:

- Managers may require unrestricted dialing.
- Secretaries may need to be limited to calls on line 003 to the West coast office only.
- Clerks may need to be limited to calling specific area codes and the West coast office.

**Internal users**

Dialing filters are most commonly used to prevent unauthorized long-distance calls, without restricting local calls. Dialing filters restrict the numbers that an internal user can dial on external lines.

If a line/set filter has been defined for the line selected at the user's telephone, it overrides any line filters or telephone filters which might otherwise apply.

If no line/set filters have been defined, dialed digits are filtered through (and may be rejected by either of) the telephone filter (if defined) and the line filter (if defined).

**External users**

For a remote user, who has dialed into **Norstar** on an auto-answer line (or a DID line), and passed through any **DISA** security, there are no restrictions on the numbers the user can dial.



For remote users trying to tandem through the **Norstar** system, the Line filters and Remote filters assigned in Line abilities apply.

For a remote user entering the system through **DISA**, the filters and Remote access packages associated with their **COS** password replace the Remote filter, the Line filter, and the **Remote** access package assigned to the incoming line.

**Programming hints**

- **Norstar** can have up to 100 dialing filters (00 to 99).
- Filter 00 cannot be changed.
- Each programmable filter can have up to 48 restrictions; there is no limit on the number of exceptions that can be allocated to any restriction.
- There is a maximum of 400 restrictions and exceptions allocated to the 99 programmable filters. For example, notice the reduction in the number of available restrictions and exceptions after each filter has been programmed.

Filter	User type	Rest's	Excep's	Remaining
00	manager	- -	- -	400
01	secretary	5	5	390
02	clerk	7	12	371
Total		12	17	(400-12-17 = 371)

- The maximum length for a restriction is 15 digits; for an exception, the maximum is 16 digits.

- The **\*** is a "wild card" that stands for any digit.
- You can use an **asterisk \*** in a sequence of numbers in either a restriction or an exception. This character is often used as part of **feature** codes for other systems or for features provided by your central office.  
 Note: If you are using an earlier version of **KSU** software, the asterisk **\*** is used as the "wild card".
- When restricting the dialing of a central office feature code, do not forget to create **separate** restrictions for the codes used for DTMF and pulse lines. For example, '67 and 1167.
- Do not string together a central office feature code and a dialing sequence that you want to restrict. Create a separate restriction for each.
- You can use **COPY** and the dial pad to copy restrictions and overrides from one dialing filter to another.
- Any restriction or exception can be used in any number of filters. Each time it is used, it counts **as one** entry. For example, if restriction 411 exists in filters 01, 02 and 03 it uses up three entries of the 600 entries available.
- Removing a restriction also removes the exceptions associated with it, and changes the identifying number of the restriction. For example, removal of restriction 01 'renumbers restrictions 01 to 48 as 01 to 47.  
 Note: The removal of a restriction from one dialing filter has no effect on the contents of other filters into which the restriction was copied.
- You cannot **delete** a filter. Removing the restrictions programmed **on a filter** makes it an unrestricted filter but the **filter is not removed**.

Filter descriptions

Filter 00 permits unrestricted dialing, and cannot be changed.

- Filter 01 is pre-programmed with five restrictions and some associated exceptions.

Template				
Square, Hybrid, PBX		Centrex		
Filter	Restrict's	Except's	Restrict's	Except's
00	Unrestricted dialing			
01	0		90	
	1	1800 1555 1*1*555 1*0*555	91	91800 91555 91*1*555 91*0*555
	911	911	9911	9911
	411		9411	
	976		9976	
02 - 99	None			

- Filters 02, 03, and 04, although not pre-set with restrictions and exceptions, are the default filter settings used later in programming:

Filter	Where the filter is programmed as a default setting in Capabilities programming	
02	Set abilities	Set filter:
03	Line abilities	Line filter:
04	Line abilities	Remote filter:

## Remote access packages

Remote access packages allow you to control the remote use of Norstar line pools and the Remote Page feature.

Remote access packages are associated with COS passwords and the auto-answer lines used by remote users.

### Remote access packages default template

Parameter	Square Centrex Hybrid PBX
<b>Package 00 †</b>	Prohibits access to line pools and Remote Page. Cannot be changed.
Package 01	
Line Pool access	Y for Pool A N for Pools B to 0
Remote Page	No
Packages 02 - 15	
Line Pool access	N for Pools A to 0
Remote Page	No

† Remote package 00 is the default setting for the Remote package setting.

Use the Show button and the dial pad to select the Remote Access package you want to program. Then, use the CHANGE display button to select the line pool access setting: N (No) or Y (Yes).

Note: The Line Pool access display shows an alphabetic line pool identifier, followed by a numeric line pool access code in brackets, for example, Pool A <9>:N. If no access code has been identified, there is nothing between the brackets, for example Pool A <>:N. The line pool access code can be programmed by your Customer Service representative.

Use the CHANGE display button to select the Remote Page setting: N (No) or Y (Yes).

### Programming hints

Norstar systems can have up to 16 Remote access packages (00 to 15). The limitations are:

- Package 00 permits no access to line pools or to remote pa&g. Unlike packages 01 to 15, package 00 cannot be changed.
- For remote users calling into the Norstar system to use Norstar lines for calling out, the Remote dialing filters and the outgoing Line dialing filters (in Line abilities) still apply.

## Telephone (Set) abilities

Telephone (Set) abilities programming applies dialing filters and permissions to telephones. Telephone abilities include:

Telephone (set) filters	Auxiliary Ringer
Line/telephone filters	Direct-dial telephones
Telephone Administration Lock	Call Forward On Busy
Full Handsfree	Call Forward No Answer
<b>Automatic Handsfree</b>	Allow Redirect
Handsfree Answerback	Redirect ring
Call Pickup Group	Hotline
Paging	Priority Call
Page zone	Allow Last Number Redial
ATA Ans timer	Allow Saved Number Redial
Do Not Disturb on Busy	

## Telephone (Set) filter

A Telephone filter is a collection of restrictions and exceptions defined in Dialing filters. These filters are applied to telephones through Set filter programming.

Telephone filters do not apply to calls dialed out on E&M trunks. Someone could dial out to a destination on the private network that is restricted on the public network. To restrict calling on E&M lines, apply a restriction to the line rather than to the telephone.

Use the **Show** button, the **CHANGE** display button and the dial pad to enter the number of the Dialing filter to be assigned as the Telephone filter. The default telephone filter is 02.

### Line/telephone (Line/set) filter

A Line/telephone dialing filter is applied to the appearance of a line at a specific telephone. This type of filter replaces any Line or Telephone filters which might otherwise apply.

Line/set filters control the numbers that may be dialed on specific external lines from specific telephones.

For example, a Line/set filter can permit a call to a specific long-distance number on line 003 from a specific telephone, but no other long-distance numbers, and on no other line.

Use the **Show** button, the **CHANGE** display button and the dial pad to enter the number of the Dialing filter to be assigned as the Line/telephone filter.

#### Programming hints

- Up to 100 filters may be defined in the system (filters 00 to 99). Line/set filters fall under this limitation.
- A maximum of 255 Line/set dialing filters may be applied to lines at telephones.

### Telephone Administration Lock

Telephone Administration Lock limits the types of features that may be used or programmed at a telephone. Use the **CHANGE** display button to select one of the three options: None, Partial and Full.

**None** allows you to access any feature on your telephone.

**Partial** prevents:

- programming **Autodial** buttons
- programming **Personal 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**
- using **Administration programming**
- 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 **Call Forward all calls**
- using **Send Message**
- using **Trunk Answer**
- activating **Service Modes**

### Full Handsfree

Full Handsfree allows you to make or receive calls without picking up the receiver, and allows a headset to be used with the **Norstar** telephone. Use the **CHANGE** display button to select the setting: N (No) or Y (Yes).

#### Programming hints

A **Handsfree** button is automatically assigned to a telephone that is programmed with Full Handsfree. Full Handsfree is always disabled for an M7100 Telephone.

### Automatic Handsfree

Automatic Handsfree activates the Handsfree microphone and speaker when you make or receive calls by pressing a line button. Use the CHANGE display button to select the setting: N (No) or Y (Yes).

#### Programming hints

You can program Automatic Handsfree only if the telephone has Full Handsfree set to Yes.

### Handsfree Answerback

Handsfree Answerback allows you to answer a Voice Call without lifting the receiver. Use the CHANGE display button to select the setting: Y (Yes) or N (No).

#### Programming hints

Handsfree Answerback is always disabled for an M7100 Telephone.

### Call Pickup (Group)

Each telephone can be assigned to one of up to nine Call Pickup groups. Members of a Call Pickup group can answer any calls ringing at a telephone in the group. Use the CHRNGE display button to select the setting: NO, 1, 2, 3, 4, 5, 6, 7, 8, or 9.

#### Programming hints

You cannot pick up a call that is on a Private line, or a call that is ringing only the Auxiliary Ringer.

### Paging

This setting determines whether a telephone has access to the Page feature. Use the CHANGE display button to select the setting: Y (Yes) or N (No).

### Page zone

Each telephone can be assigned to one of six zones for receiving Page messages. A zone is any selection of **Norstar** telephones you want to group together, regardless of location. Use the CHANGE display button to select the setting: 1, 2, 3, 4, 5, 6, or NO.

#### Programming hints

You can program Page zone only if the telephone has Paging set to Yes.

### Auxiliary Ringer

Auxiliary ringer can be set by line and by telephone. The telephone setting when combined with the line setting allows you to choose if the Auxiliary Ringer (if installed) will ring when a call is sent to a specific telephone or on a specific line. An Auxiliary Ringer is important in noisy environments where a **Norstar** telephone might otherwise not be heard. Use the CHRNGE display button to select the setting: N (No) or Y (Yes).

#### Programming hints

To ensure that the auxiliary ringer does not ring for internally, transferred calls, your Installer should program the line setting for auxiliary ringer to yes under configuration programming. Under the heading Capabilities in administration programming, set auxiliary ringer to no. An incoming call on a line programmed to yes will ring the auxiliary ringer. Once the call is answered and transferred within the system, the auxiliary ringer will not ring for a call sent to a telephone that has auxiliary ringer set to no.

### Direct-Dial telephones

A telephone can be assigned to call a Direct-Dial telephone when you dial a single digit. Use the CHRNGE display button to select the setting: **Set1**, Set2, Set3, Set4, Set5, and None.

#### Programming hints

Each telephone can call only one Direct-Dial telephone, although up to five Direct-Dial telephones can be designated in the Direct-Dial section of Administration programming. Any number of telephones can be assigned to call a particular Direct-Dial telephone.

The digit you dial in order to get the Direct-Dial telephone to ring can be programmed by your Customer Service representative.

### Call Forward On Busy

Call Forward On Busy redirects an incoming call 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.

Use the **Show** button, the **CHANGE** display button, and the dial pad to program the internal number of the telephone that your calls are to be directed to.

#### Programming hints

Call Forward on Busy programming is ignored in the following situations:

- If you are busy on a target line call, another call to that target line is redirected to the Prime telephone for the trunk that received the second target line call.
- If Line Redirection is in effect, it takes precedence.

### Call Forward No Answer

Call Forward No Answer lets you redirect an incoming call to another telephone on your Norstar system when the call is not answered at your telephone.

Use the **Show** button, the **CHANGE** display button, and the dial pad to program the internal number of the telephone that your calls are to be directed to.

#### Programming hints

Line Redirection takes precedence over Call Forward No Answer.

### Forward No Answer delay

If you assign another telephone to receive your calls, you can also assign the number of times that the incoming call rings before the call is forwarded. To estimate the delay time in seconds, multiply the number of rings by six. Use the **CHANGE** display button to select the setting: 2, 3, 4, 6, or 10 rings.

### Do Not Disturb 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 set, 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.

Press **CHANGE** to toggle the setting on (Y) or off (N).

#### Programming hints

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

If an external call uses a target line (for example, calls coming in on auto-answer loop start, E&M or DID lines), the call will be processed according to the configuration of the target line. If the target line is busy, the caller may hear a busy tone or be routed to the prime set for the target line regardless of the DND on Busy programming for the set.

Forward on busy takes priority over DND on busy.

### Allow Redirect

**Allow Redirect** enables you to use the Line Redirection feature. Use the **CHANGE** display button to select the setting: Y (Yes) or N (No).

See the explanation of Line Redirection in the Telephone Features chapter for more information on redirecting lines.

### Redirect ring

The Redirect ring setting causes a telephone to ring briefly (a 200 millisecond burst) when a call is redirected on one of its lines. Each telephone with a ringing appearance of that line also rings briefly for the redirected call if the Redirect ring setting for them is 'Y' (the default). Use the **CHANGE** display button to select the setting: Y (Yes) or N (No).

A user enters the Line Redirection feature code to redirect calls. See the explanation of Line Redirection in the Telephone Features chapter for more information on redirecting lines.

### Hotline

Hotline automatically calls a pre-assigned number when you lift the receiver or press **Handfree** at your telephone. Hotline has three options: None, internal (Intrnl), and external (Extrnl).

Internal assigns an internal number.

External assigns an external number. If you select an external number, you can also select the line on which the call is made: the Prime line, an external line, or a line pool. You will have to specify the Line Pool Access code for a line pool.

Use the **CHFINGE** display button to select Hotline setting. If you select **Intrnl**, use the **Show** button, the **CHFINGE** display button, and the dial pad to program the internal number of the telephone that Hotline calls are to be directed to.

If you select **Extrnl**, use the **Show** button, the **CHANGE** display button, and the dial pad to program the external telephone number that Hotline calls are to be directed to, and to program the line Hotline calls are to be made on.

#### Programming hints

The telephone should be labeled to inform anyone using it that Hotline is active.

A telephone's Prime line, line pool access codes, and access to a line pool can be programmed by your Customer Service representative.

### Priority Call

This feature lets you call from your Norstar telephone and interrupt calls or override Do Not Disturb on another Norstar telephone. Use the **CHANGE** display button to select the setting: N (No) or Y (Yes).

#### Programming hints

Apply this feature only to telephones from which such interruptions can be justified.

### Allow Last Number Redial

A telephone's ability to use Last Number Redial can be turned on or off. Press **CHFINGE** to select the setting: N (No) or Y (Yes).

### Allow Saved Number Redial

A telephone's ability to use Saved Number Redial can be turned on or off. Press **CHFINGE** to select the setting: N (No) or Y (Yes).

### Allow Link

The ability of a telephone to use Link (a host system signaling option) can be turned on or off. Press **CHANGE** to select the setting: N (No) or Y (Yes).

### ATA Answer Timer

A timer can be used to administer a delay between the last digit you dial on a device connected to an analog terminal adaptor (ATA) and when the ATA or analog device is ready to receive DTMF tone from the far end analog device. To change the delay time, press **CHRNGE** to select the setting (in seconds): ATA Ans timer: 3, 5, 7, or 10.

#### Programming hints

To accommodate the device attached to the ATA, you may want to lengthen or shorten the delay. If a modem or fax machine is attached to the ATA you will want to keep the delay short. If a call to a fax machine or modem cannot be connected, try shortening the delay. If an individual is dialing the number for a fax machine or modem, you may want to make the delay a little longer.

## Line abilities

Line abilities programming applies dialing filters, remote access dialing filters and remote access packages to lines.

### Line filter

A Line filter is a collection of restrictions and exceptions defined in a Dialing filter, and applied to an outgoing line. A Line filter on an outgoing line may be used to limit the capabilities of that line to carry calls made to specific area codes or destinations.

Use the **CHANGE** display button, and the dial pad to program the Line filter. Filter 03 is the default Line filter.

### Remote filter

A remote access dialing filter can control dialing on incoming auto-answer trunks used for making tandem calls (that is, calling into **Norstar** to use one of its lines for placing calls). Employees can be allowed to telephone into a **Norstar** system on auto-answer lines, and call out on a line designated for long-distance calls to specific area codes.

Use the **CHANGE** display button, and the dial pad to program the Remote filter. Filter 04 is the default Remote filter.

### Remote package

Remote access packages control access to line pools and the Remote Page capability, for calls on incoming auto-answer trunks.

Use the **CHANGE** display button, and the dial pad to program the Remote Access package. Package 00 is the default Remote package, which gives no access to line pools or to Remote page.

## Class of Service (COS) passwords

Class of Service (COS) passwords permit controlled access to a system's resources by remote users. Class of Service programming defines passwords, their associated dialing filters, user filters and remote-user access packages.

A Class of Service can be associated with a telephone, a line, or a COS password. Class of Service determines whether a remote user can or cannot access lines in line pools and remote paging. It also determines the dialing capabilities that apply to outgoing lines from line pools (in the case of remote users), or to internal telephones and any lines used for external calls (in the case of internal users).

The capabilities to which a remote user has access depend on:

- the COS associated with the auto-answer trunk on which the user is calling
- a COS password, if entered.

Depending on the COS in effect, remote users may be able to access all or some of the system's resources available to remote users. Typically, each user has a separate password. Several users can share a password or one user can have several passwords.

Entry of a DISA DN (if one has been programmed) allows a remote user to change the COS applied for the duration of the call.

### COS passwords for internal users

Internal users have a Class of Service associated with their telephones, in the sense that there are dialing filters associated with telephones, as well as line pool assignments. Internal use of a COS password affects only the telephone's dialing capabilities.

The ability to change the COS internally means that someone using another person's telephone can temporarily change the restrictions that would normally be applied,

Password security

- Class of Service passwords for a system should be determined randomly, and should be changed on a regular basis.
- System users should memorize their COS passwords instead of writing them down.
- Employees' COS passwords should be deleted when they leave the company.

You can block tandem calls that would use expensive routes by using Class of Service to restrict access to line pools, and YOU can control the external destinations dialed through the use of dialing filters.

You can use Class of Service to prevent remote access to line pools and remote paging. Remote calls are then limited to target lines in the system.

Groups of users can be restricted, or permitted, to access remote paging through the Class of Service applied to their password.

Programming hints

- A system can have a maximum of 100 six-digit COS passwords (00 to 99).
- You can copy the data from one COS password to another COS password number using the COPY display button in the same way that telephone and line data can be copied.
- COS passwords must be unique.

Programming COS passwords

Use the Show button, the CHANGE display button, and the dial pad to program the six-digit sequences for each password. Use the BKSP display button to edit digit sequences you have entered.

User filter

The COS User filter replaces the telephone (set) filter, the line/set filter or the remote filter, that would otherwise apply to a specific call.

Use the Show button, the CHANGE display button, and the dial pad to program the two-digit User filter. The default setting (Deflt), means that any other filters in place (telephone (set) filter, line/set filter, or remote filter) still apply.

Line filter

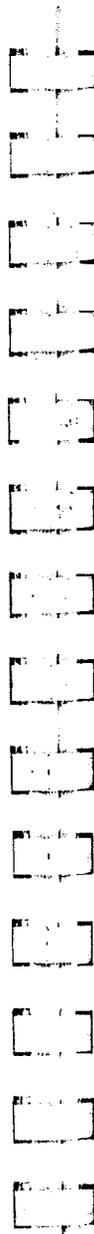
The COS Line filter replaces the line filter that would otherwise apply to a specific call.

Use the CHANGE display button, and the dial pad to program the two-digit Line filter. The default setting (Deflt), means that any Line filter already programmed still applies.

Remote package

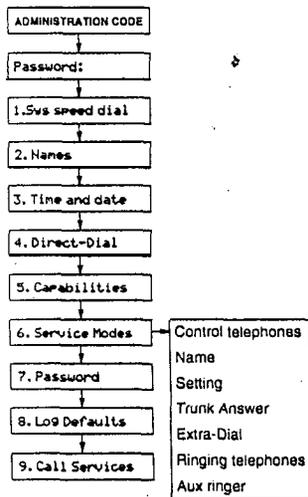
The COS Remote package replaces the Remote Access package that would otherwise apply to a specific call.

Use the CHANGE display button, and the dial pad to program the Remote package. The default setting (Deflt), means that any Remote Access package already programmed still applies:



## Service Modes

Using Service Mode!, you can control how the Norstar system responds to calls, depending on the time of day. Up to three different Service Modes can be programmed, each with unique ringing arrangements.



### Control telephones

Control telephones are assigned to each external line and are used to control the Service Mode by allowing you to turn the Service Mode ON & OFF for that line.

Use the **Show** button, the **CHANGE** display button, and the dial pad to program the internal number of the Control telephone for each line.

### Programming hints

Only the external lines programmed with a Control telephone can be placed into a Service Mode.

You can assign a Control telephone to *more* than one external line, but a line cannot be assigned to more than one Control telephone.

Only *one* Service Mode applies at any one time to all external lines controlled by a given Control telephone.

The default Control telephone for all lines is 221

## Service Modes

The three Service Modes are programmed in the same way.

### Service Mode Name

The Service Mode Name identifies the active Service Mode; and is shown on the display of the Control telephone when the Service Mode is turned ON.

Use the **Show** button, the **CHANGE** display button, and the dial pad to program the Service Mode name. For information on entering names, see the information in this chapter entitled **Entering Names**.

### Programming hints

The default names of the three possible Service Modes are only suggestions, and may be changed to any other name.

A Service Mode name can be one to seven characters.

### Service Mode setting

The Service Mode setting controls how the Service Mode is turned ON and OFF. Use the **CHANGE** display button to select the setting: Manual, Automatic, or OFF.

Manual allows you to turn the Service Mode ON and OFF at any time from a Control telephone. The Service Modes feature code must be entered at the telephone to access this feature.

Automatic allows you to pre-assign a stop and start time during which the Service Mode is active. You are still able to start and stop the Service Mode by entering the Service Modes feature code at a Control telephone. If you select this setting, you will have to program start and stop times. See the section in this chapter on Time and Date for information on programming times.

OFF prevents the Service Mode from being activated.

#### Programming hints

Overlapping times may be assigned. For example, if Service Mode 1 is assigned from 9:00 am to 4:00 pm and Service Mode 2 is assigned from 1:00 pm to 5:00 pm, then the Start time of the second Service Mode is treated as a stop time for the first Service Mode. This is also true if two Service Modes have the same start time but different stop times.

If one Service Mode starts and stops within the times of another Service Mode, the first service temporarily ends when the second service starts. The first service then resumes when the second service has ended.

Default stop and start times correspond to typical hours which may be required for a night Service Mode.

#### Default Service Mode times

Service Mode	Start time	Stop time
Service Mode 1: Night	23:00	07:00
Service Mode 2: Evening	17:00	23:00
Service Mode 3: Lunch	12:00	13:00

## Trunk Answer

Trunk Answer allows you to answer, from any telephone, an external call which is ringing at another telephone in your office. This is useful if the other telephones have not been assigned the same lines as the telephone you are using to answer the call.

You can change the Trunk Answer setting only if the Service Mode is set to Manual or Automatic.

Use the CHANGE display button to select the setting: Y (Yes) or N (No).

## Extra-Dial telephone

A telephone normally in service as a Direct-Dial telephone, can be programmed in Service Modes to allow internal calls to the Direct-Dial telephone to also ring at the Extra-Dial telephone.

Use the CHANGE display button and the dial pad to enter the internal telephone number of the Extra-Dial telephone.

#### Programming hints

The Extra-dial telephone provides the option of assigning one more Direct-Dial telephone in the Norstar system for each operational Service Mode.

## Ringling

You can assign additional telephones to ring for incoming calls on each external line, including target lines. Use the Show button, the ADD display button and the dial pad to enter the internal telephone number of the Ringling telephone for each line.

You can indicate whether the Auxiliary Ringer (if installed) also rings. Use the CHANGE display button to select the setting: Y (Yes) or N (No).

#### Programming hints

The default ringing telephone is 221. This means that all lines ring at Control telephone 221, when Service Modes are activated. A Ringling telephone can be assigned to more than one Service Mode.

## Password

The Administration password allows access to Administration programming. This prevents unauthorized or unintentional changes to settings. To ensure security, distribute the passwords only to selected personnel, keep a record of your password in a secure place, and change the password periodically.

The password is a one to six-digit number. The default Administration password is **A D M I Q** which is the same as **2 3 6 4 6**.

Use the **Show** button, the **CHANGE** display button and the dial pad to enter the new Administration password. Use the **OK** display button accept the programmed password.

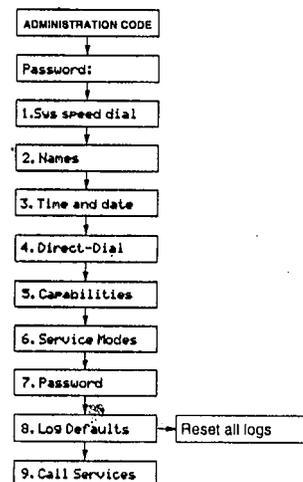
### Programming hints

The password is easier to remember if the digits correspond to the letters in a word.

If you forget the Administration password, you are not able to access Administration programming. Call your Customer Service representative to assign a new Administration password.

## Log Defaults

If you subscribe to Call Display services, external calls can be tracked in a Call Log. Log Defaults programming customizes how log space is allocated to telephones throughout the system.



### Reset All Logs

Use the **Show** button and the dial pad to enter the space allocation for the Call Log at each telephone. Use the **OK** display button to accept the settings and end Administration programming. The system automatically reallocates Log space.

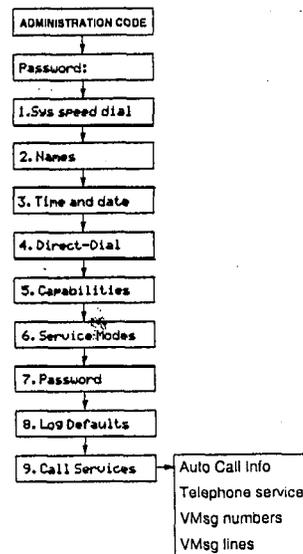
**Note:** Reallocation of Call Log space may destroy Call Log data at telephones that lose space.

There are 600 Call Log spaces available in the system. There are no spaces allocated by default. Changing the space allocation using Log Defaults will define the log space available to all telephones in the system. Unassigned log space is available in a Log Pool, and can be re-allocated in Call Services programming.



## Call Services

If you subscribe to Call Display services, external calls are identified on the display. Call Services programming allows you to customize how this information is used.



### Auto Call Info

Automatic Call Information allows you to specify which telephone displays the Call Display information when a call is ringing on an external line. (After the call is answered, Call Display information is always shown at the telephone that answered the call.) Use the **SHOW** button, the **CHANGE** display button and the dial pad to enter the internal number of the telephone to display Call Display information.

**Note:** In order for a telephone to display the Call Display information for calls on an external line, that telephone must also be programmed to Ring for that line.

## Telephone (Set) Services

Telephone Services programming allows you to customize how Call Display information is used at each telephone.

### Autolog/Show Voice Message

Logging telephone (set)

Logging telephone allows you to specify the telephone that automatically logs 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. Use the **SHOW** button and the **CHANGE** display button to select the setting: N (No) or Y (Yes).

Show External Voice Message

If you subscribe to Voice Message services, you can access that service through your **Norstar** system. Show External Voice Message controls the display of External Voice Message Waiting indication for each line at each telephone. The telephone must have an appearance of that line. Use the **CHANGE** display button to select the setting: N (No) or Y (Yes).

### Log Space

Log Space changes the number of items that can be stored in the Call Log for each telephone. Use the **[Show]** button, the **ADD** display button and the **REMOVE** display button to redistribute the log space. There is no Log Space assigned by default.

Programming hints

Space must be available in the Log Pool before any space can be added to a current Call Log space.

System-wide allocation of space is performed from Log Defaults programming. If you are performing extensive changes, it may be appropriate to use the Log Defaults programming mechanism instead.

### Log Password

Log Password allows you to clear any Call Log password programmed with the Call Log feature. Use the **CHANGE** display button to clear the programmed password.

## First Display

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, and the name of the line in your **Norstar** system that the call is on. Use the **CHANGE** display button to select the setting to be shown first for each telephone: Name, Number or Line.

Programming hints

The Call Information feature is used to display and scroll through all of the Call Display information: the caller name, number and line number. See the Telephone features chapter for more information.

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.

## Voice Message Center telephone numbers

If you subscribe to Voice Message services, you can access that service through your **Norstar** system. This setting specifies the external telephone number that is automatically dialed by the Message feature to retrieve voice messages. Use the **CHANGE** display button and the dial pad to enter the external telephone number.

Programming hints

The display does not show that external messages are waiting unless the Show External Voice Message prompt is set to Yes.

Five Voice Message Center numbers can be programmed, but most systems require only one.

## Voice Message Center lines

If you subscribe to Voice Message services, you can specify which Voice Message Center is used for each external line that can receive Message Waiting indication. Use the **CHANGE** display button to select the setting: 1, 2, 3, 4, 5, or N (None).

## Copying settings

Programmed settings for lines, telephones, and certain Capabilities can be copied to other lines or telephones. If lines or telephones require the same settings, program one line or telephone, and then copy those settings.

### Line programming

Line programming can be copied for Line abilities in the Capabilities section of Administration programming, and Ringing telephones in the Service Modes section of Administration programming.

Use the **COPY** display button and the dial pad to identify the source and destination of the copied information.

### Telephone programming

Norstar telephone programming can be copied for Set Abilities in the Capabilities section of Administration programming.

Use the **COPY** display button and the dial pad to identify the source and destination of the copied information.

### Capabilities programming

In addition to Line abilities and Set abilities, Norstar Capabilities programming can be copied for:

- Dialing filters
- Remote access packages
- COS passwords

Use the **COPY** display button and the dial pad to identify the source and destination of the copied information.

## Set profile and Line Profile

Use Set Profile and Line Profile to review the settings programmed in Configuration and Administration programming. Set Profile and Line Profile allow you to browse through, but not change, the programmed settings.

Set Profile allows you to verify settings for each Norstar telephone. Line Profile allows you to verify settings for each external line.

### Using Set Profile and Line Profile

As many as four people in the Norstar system can use Set Profile or Line Profile at the same time. You may access Set Profile and Line Profile while on a call at your telephone.

If someone is using Configuration or Administration programming you can still access Set Profile and Line Profile from another Norstar telephone. The latest programming changes can be seen as soon as they are made.

Set Profile and Line Profile can be used only from an M7310 or M7324 Telephone.

A Norstar Programming Overlay is not required to perform Set Profile or Line Profile.

### Programming you can review

The following table shows the Configuration and Administration programming headings that can be reviewed in Set Profile and Line Profile.

Programming that can be reviewed

Set Profile	Line Profile
Set name	Line name
Line Access	Trunk data (physical lines only)
Set abilities	Received number (target lines only)
	Line data
	Line abilities
	Service Modes

The following table shows how line names and telephone names appear on the display while you are using Set Profile and Line Profile.

Telephone name	7.21: 221 OR 221: C WHITE	internal number:internal number or name (if programmed)
Line name	Line001:Line001 OR Line001:WATS	external line number:external line number or name (if programmed)

### To begin Set Profile

From an M7310 or M7324 Telephone:

1. Press **Feature** \* \* 7 3 8, which is the same as **Feature** \* \* S E T.  
The display shows Show set:..
2. Enter the internal number of the telephone to be reviewed.  
OR  
Press **FIRST** to review programming for the telephone with the first internal number.  
The display shows, for example, 221: 221 or 221: C WHITE, if that name was programmed for the telephone.

### To begin Line Profile

From an M7310 or M7324 Telephone:

1. Press **Feature** \* \* 5 4 6 3, which is the same as **Feature** \* \* L I N E.  
The display shows Show Line:..
2. Enter the number of the line to be reviewed.  
OR  
Press **FIRST** to review programming for the first line number.  
The display shows, for example, Line001:Line001 or Line001:WATS, if that name was programmed for the line.

### To exit Set Profile or Line Profile

1. Press **Feature**.

### Using Set Profile

Begin with 221: 221 or 221: C WHITE.

1. To see the name for the next telephone, (or to return to Show set: ., if this telephone is the telephone with the last internal number), press NEXT.  
OR  
To see the name for the previous telephone (or to return to Show set: ., if this telephone is the telephone with the first internal number), press BACK.  
OR  
To review settings for this telephone, press SHOW.  
The display shows Line **Access**.
2. To see programming for Line Access, press SHOW.  
OR  
To display, the name of the telephone, as in step 1, press BACK.  
OR  
To review the next setting, press NEXT.  
The display shows Set **Abilities**.
3. To see programming for Set Abilities, press SHOW.  
OR  
To display Line Access, as in step 2, press BACK.  
OR  
To return to the name of the telephone, press NEXT.

### Using Line Profile

Begin with Line009:Line009 or Line009:WATS.

1. To see the name for the next line, (or to return to Show 1 line: ., if this is the last line number), press NEXT.  
OR  
To see the name for the previous line, (or to return to Show 1 line: ., if this is the first line number), press BACK.  
OR  
To review other settings, press SHOW.  
The display shows Trunk data.
2. To see programming for Trunk data, press SHOW.  
OR  
To display the name of the line, as in step 1, press BACK.  
OR  
To review the next setting, press NEXT.  
The display shows Line **data**.
3. To see programming for line data, press SHOW.  
OR  
To display Trunk data, as in step 2, press BACK.  
OR  
To review the next setting, press NEXT.  
The display shows Line **abilities**.
4. To see the programming for Line Abilities, press SHOW.  
OR  
To display Line data, as in step 3, press BACK.  
OR  
To review the next setting, press NEXT.  
The display shows Service **Modes**.
5. To see the programming for Service Modes, press SHOW.  
OR  
To display Line abilities, as in step 4, press BACK.  
OR  
To return to the name of the line, press NEXT.



### Prime telephones

Prime Telephone operator	
Internal number	-----
Lines answered at the Prime telephone	-----

Prime Telephone operator	
Internal number	-----
Lines answered at the Prime telephone	-----

Prime Telephone operator	
Internal number	-----
Lines answered at the Prime telephone	-----

Prime Telephone operator	
Internal number	-----
Lines answered at the Prime telephone	-----

### Central Answering Position

CAP operator	Internal number
	-----
	-----
	-----

### Page zones

Page zone	Location
1	
2	
3	
4	
5	
6	

### Line Pools

Pool	Access code	Use
A	- - - -	
B	-----	
	-----	
E	- - - -	
F	- - - -	
G	- - - -	
H	-----	
	-----	
J	- - - -	
K	- - - -	
L	- - - -	
M	-----	
N	- - - -	
O	- - - -	

### Miscellaneous programming

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Call Park Prefix digit	---
Dial first to make external calls	---



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## Using Norstar features

To use a **Norstar feature**, enter the feature code and watch your telephone display for **instructions**. Different displays come up at different times, depending on how you invoke the feature and the choices you make while using the feature. If you want more information about a display, look it up in the Displays section of each feature listing.

Note that some features work only in certain circumstances. For example, to use **Conference** you must have two calls at your telephone, one active and one on hold.

The **displays** shown in this book use a **3-digit** internal number, which is the default for an expanded system. (A non-expanded system has a **2-digit** internal number default.)

### One-line and two-line displays

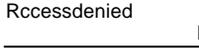
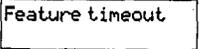
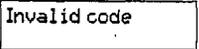
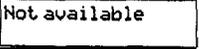
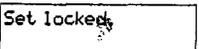
All **Norstar** telephones have LCD displays that give you information about your calls and guide you through **Norstar** features. The M7100 and M7208 Telephones have a one-line display. The M7310 and M7324 Telephones have a two-line display. The second line of a two-line display shows the functions of the three buttons directly below it. If you have a telephone with a two-line display, you can use these display buttons. Some display buttons, such as **TRANSFER** and **ALL**, are simply shortcuts. If you have a telephone with a one-line display, these shortcuts are not available. Other display buttons, such as **OK** and **SHOW**, perform essential functions. If your telephone has a one-line display, you can use the following buttons in place of these display buttons:

<b>OK</b>		<b>CANCEL</b>	
<b>QUIT</b>		<b>VIEW</b>	
<b>ADD</b>		<b>QUERRID</b>	
<b>SHOW</b>		<b>E</b>	
		<b>BKSP</b>	

All displays listed in this book are shown as they appear on the two-line display, except those that appear only on telephones with a one-line display. If you are using a telephone with a one-line display, ignore both the second line of the display shown in this book, and the instructions for using display buttons.

### Common feature displays

You may see the following displays when you use a feature.

	<b>Someone</b> is using Configuration or Administration programming. You cannot use programming features. Try again later.
	You have taken more than 15 seconds to press a button in response to a display.
	You have entered an invalid feature code.
	You have tried to use a feature that is not available in the present set-up of your <b>Norstar</b> system.
	You cannot use the feature you have chosen because your telephone is locked. See Telephone Administration Lock in Customizing your telephone.

### Dialing and Answering the telephone

Many **Norstar** features require you to dial telephone numbers. The displays associated with dialing are listed in the Dialing section. If you see a display that is not listed with the feature you are using, look for it in the Dialing section. All the displays that appear when you are receiving a call are listed in the Answering the telephone section.

**One button access**

You can program most **Norstar** feature codes onto telephone memory buttons so that you can use the feature by pressing a single button. See the procedures in the Feature programming section,

Whenever the instructions tell you to enter a feature code, you can do so either by pressing the buttons shown in the feature description or by pressing a memory button on which the feature code has been programmed. You can also enter a telephone number by pressing an **Autodial** button, rather than entering it manually.

**Canceling a feature**

Some features change the way your telephone works. To make your telephone work normally again you must cancel the feature. To cancel a feature, press **Feature**, then **#** and the feature code. For example, to cancel Call Forward, which you activate by pressing **Feature** **4**, press **Feature** **#** **4**.

If a feature code is programmed onto a memory button, you may be able to cancel the feature by pressing the memory button while the feature is active.

If you change your mind in the middle of using a feature, you can back out by pressing **Feature** or **Ris**. Be aware that pressing **Ris** disconnects any active or held call.

**M7100 Telephone**

Because the **M7100** Telephone does not have any line buttons it sometimes works slightly differently from other **Norstar** telephones. Where other telephones may require you to select a line button to answer a call, on the **M7100** Telephone you simply pick up the receiver. Where other telephones require you to select a line button to take a call off hold, you press **[Hold]** on the **M7100** Telephone. The **M7100** Telephone cannot have a **Transfer** button. You will find special instructions for the **M7100** Telephone in some feature descriptions.

## Answering the telephone

**Answering**

Your **Norstar** telephone can receive many different types of calls. Your telephone's display tells you what type of call you are receiving. The usual way to answer a call is to pick up the receiver, but there are several other possible methods, depending on how your system is set up and the type of call that is ringing.

**Callback**

When you direct a call you have answered to another telephone, the system monitors the call to make sure someone answers it. If no one answers a call within a programmable length of time, the system directs it back to you. Callback generates a variety of displays. Most occur after a programmable delay and are listed in this section. 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 features in which they occur.

**Delayed Ring Transfer (DRT)**

If no one answers a call within a programmable length of time, the system transfers the call to the Prime telephone.

**Call Display information**

If you have subscribed to Call Display services from your local telephone company, one line of information about an external caller is displayed after you answer. If your telephone has been programmed to receive Call Display information automatically that information is shown before you answer. Depending on the setting in Administration Programming 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 recipient's telephone.

There will be a delay between the time your telephone rings and when Call Display information is available. If you answer a call before the Call Display information arrives, that information is not available for the call.

## Related features

### Call Pickup

Call Pickup lets you use your telephone to answer a call that is ringing at someone else's telephone.

### Call Queuing

Call Queuing allows you to choose the call with the highest priority when you have more than one call ringing at your telephone.

### Do Not Disturb

If you do not wish to receive calls, turn on Do Not Disturb.

Feature 8 5

### Handsfree/Mute

You can answer calls without picking up the receiver using Handsfree/Mute.

Handsfree Mute

### Prime telephone

A Prime telephone receives calls that go unanswered at other telephones. For more information, see Special telephones.

### Retrieving a Parked Call

You can retrieve a parked call at any telephone in the system.

### Voice Call Deny

If you do not wish to receive voice calls, turn on Voice Call Deny.

Feature 8 8

## 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.

## Rings you may hear

A double beep every ten 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. See Line Redirection.

Three beeps descending in tone

You are receiving a priority call.

## Displays

You will see one or more of the following displays when you receive a call on your telephone and while you are answering that call. See Messages for a full explanation of the Messages feature. See Dialing for a full explanation of Ring Again.

▶

This indicates a long distance call. (May be available with Call Display Services.)

221  
TRANSFER

You are connected to an internal call. You can press **TRANSFER** to transfer the call.

247>221

Either you are receiving an internal call from telephone 247 forwarded by telephone 221 or you have an Answer button for telephone 221 and an internal call from 247 is ringing on 221.

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. To call the number again, press **YES** or the flashing internal line button. On the M7100 Telephone, 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 Dialing.

Camped: 221  
CALLBACK

The person to whom you camped the call did not answer it. The call has come back to you. Press the **CALLBACK** button or the line button to reconnect to the call.

Line001  
TRANSFER

You are connected to an external call. You can press **TRANSFER** to transfer the call.

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. If you have an M7100 Telephone, press **Hold**.

Line001>221

Either 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.

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, you must press the line button to answer the call on that line.

Not in service

The telephone to which you have directed a call is not in service or is otherwise unavailable. The call is returned to your telephone.

Parked call  
CALLBACK

Nobody 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 **Handsfree Only** to answer a ringing or camped call.

Priority>221  
BLOCK

You are receiving a Priority Call. If you are on another call, inform the person you are, speaking to that the call is about to be put on hold. Press the flashing line indicator of the Priority Call or wait till the call connects automatically (in eight seconds). The Priority Call goes through when you hear the next beep. Your active call is placed on Exclusive Hold. It will be 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).

To reject a Priority Call, use **DND** (Feature **8** **5**) or press **BLOCK**.

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. To use the line pool, press **YES** or the flashing internal line button. On the **M7100** Telephone, 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 Dialing.

## Prime telephone displays

If yours is a Prime telephone, you may see the following 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 in Do Not Disturb mode.

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 the **CALLBACK** button 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.

Line015>Line087

The call coming in on line 015 was intended for target line 087. Line 087 is busy so the call has come to you.

## Notes

There are three indications of an incoming call: ringing, a line-button flashing, and a message on the display. You will not necessarily receive all three indications for any particular call. You may have a line that has been set up not to ring at your telephone. If so, you will see only a flashing line button. If there is no button free for a camped call to appear: you will get a special ring and a message on your display, but no line button will flash. If someone makes a voice call to you, you will hear a beep followed by their voice. There are many possible combinations, depending on how your system is set up. See Lines in the System features section for more information on the use of lines.

There are many ways to answer a call. Many of them depend on settings in Administration programming. Depending on various settings and the type of call you are receiving, you may be able to answer a call by: picking up the receiver, picking up the receiver and pressing a line button, pressing **Handsfree**, pressing **Handsfree** and pressing a line button, pressing a line button, or simply speaking.

If you receive a Priority Call and your telephone has no free internal line buttons, you cannot transfer the call or do anything else with it, except release it.

On M7100 Telephones, you may answer a second call by pressing **Hold**. 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.



## Autodial

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

### External Autodial

Feature  \* 1

1. Press Feature  \* 1.
2. Select the button you want to program. This is not necessary for the M7100 Telephone.
3. If you want this autodialer to use a particular line or line pool, select that line or line pool button. You can only select a line pool button on the M7100 Telephone.
4. Enter the number.
5. Press **OK** or **Hold**.

### Internal Autodial

1. Press Feature  \* 2.
2. Select the button you want to program. This is not necessary for the M7100 Telephone.
3. Enter the number.

### Displays

You will see some of the following displays while programming an Autodial button. See Dialing for displays that may occur while using an Autodial button.

987.  
QUIT BKSP OK

Continue to enter digits until the number is complete. Press **BKSP** or **⇒**  **⇐** to erase an incorrect digit. Press **OK** or **Hold** when you are finished.

Autodial full

The memory allotted to Autodial numbers in your Norstar system is full.

Button erased  
QUIT OK

While programming External Autodial, you pressed **OK** or **Hold** before entering any digits. This erases the button.

Enter digits  
QUIT OK

Enter the number you wish to program exactly as you would if you were dialing it yourself.

/Hold or release

You cannot program an **Autodial** button while you are on a call. Finish your call or place it on hold before programming an **Autodial** button.

Intercom #:   
QUIT

Enter the internal telephone number you wish to program.

Press a button  
QUIT

Press the memory button you want to program.

Program and HOLD

This display pertains only to the M7208 Telephone. Enter the number you want to program onto the button, then press **Hold**. You may include a line or line pool selection in an **autodial** sequence by selecting the line before entering any digits.

Program and OK  
QUIT OK

Enter the number you want to program onto the button, then press **Hold** 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.



You can program Host System Signaling codes as part of a number on an External Autodial button. See Host System Signaling.

If you do not include a line selection in an autodialer, the call will use your Prime line, if you have one. If you select a line before pressing the **Autodial** button, any line selection programmed onto the button will be ignored.

You can copy the telephone number from a Last Number Redial button or Saved Number Redial button onto an **Autodial** button. Simply enter the Last Number Redial feature code or Saved Number Redial feature code when the **Autodial** feature asks you to enter a number.

Notes

If the power to your **Norstar** system is off for more than three days, **Autodial** numbers may be lost from the memory.

**Autodial** numbers must be programmed onto memory buttons. They can not be programmed onto line buttons, the **Handsfree/Mute** button, or **Answer** buttons.

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

Telephones that have Call Forward on Busy active can still receive Priority calls. Call Forward on Busy does not forward camped calls.

When Call Forward is active, all calls go to the call forward destination, regardless of the Call Forward on Busy and Call Forward no Answer settings.

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 in which a call is forwarded from one telephone to another in a circle, and is never answered anywhere.

Calls that are redirected by Line Redirection are not affected by any of the Call Forward features.

## Call Information

Feature 8 1 1

Call Information allows you to display information about incoming calls. This information is more detailed than the Call Display information you automatically receive. See the Answering the telephone section in this chapter for details. For external calls, you can display the caller's name, telephone number, and the line name. For an internal call, you can display the name of the caller and their internal number. You can obtain information from ringing, answered, or held calls.

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

### Display Call Information before or after answering

- To find out who is calling or to obtain information about your current call, press **Feature 8 1 9**.
- If the call is an internal call, the caller's name and the internal number are displayed.  
OR  
If the call is an external call, Call Display information is displayed according to how this feature was programmed in Administration programming.  
  
To obtain more information about an external call:  
For a one-line display, press **#** repeatedly to display more information about the call.  
OR  
For a two-line display, continue to press **VIEW** to display more information about the call.

### Display Call Information for a call on hold

- To obtain information about your held call, press **Feature 8 1 1**.
- The display shows **▶ Select** a call.
- Select the line on hold.

## 98 /Call Information

4. If the call is an internal call, the caller's name and internal number are displayed.

OR

If the call is an external call, the caller's information is displayed.

To obtain more information about an external call:

For a one-line display, press **Q** repeatedly to display more information about the call.

OR

For a two-line display, continue to press **VIEW** to display more information about the call.

## Related features

### Call Log

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.

## Displays

P5551234  
EXIT VIEW  
555

You would see this display if you were on an active call with a caller at 555-1234.

P5551234  
EXIT VIEW

You would see this display if you were on an active long distance call with a caller at 555-1 234.

## Notes

Call Display information becomes available between the first and second ring of an alerting call. If you answer before the Call Display information is available on your display, and you press

**Feature** **8** **1** **1**, you will only see the line number or line name.

## Call Log

Call Log creates a list of records of incoming external calls. The log could contain the following information for each call:

- sequence number in the Call Log,
- name and number of caller,
- indication if call was long distance,
- indication if call was answered (and identification of who answered it),
- 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.

Call Log has many benefits. For example, you may find it helpful to:

- keep track of abandoned or unanswered calls,
- call back a customer who was unable to reach anyone,
- track patterns for your callers (for example volume of calls and geographical location of calls),
- record caller information quickly and accurately, and
- build a personal telephone directory from log items.

Log space is assigned to each telephone. Since a log can become full, Call Log has Autobump, which when set to **ON**, allows new calls to be logged, while at the same time deleting old entries.

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

## Choose Logging Options

Feature [ ] \* [8] [4]

You can select the type of calls that will be stored in your Call Log.

1. Press Feature [ ] \* [8] [4].
2. If the default has not changed, the display shows No one answered. If you want to log calls that were not answered, press **OK** or Feature [ ].  
OR  
Press **NEXT** or **Q** to display the next selection.
3. The display shows &answered by me. If you want to log calls that were unanswered at your telephone but answered elsewhere in the system, press **OK** or Feature [ ].  
OR  
Press **NEXT** or **Q** to display the next selection.
4. The display shows Log all calls. If you want to log all calls, answered and not answered at the telephone, press **OK** or Feature [ ].  
OR  
Press **NEXT** or **#** to display the next selection.
5. The display shows No autologging. If you do not want information to be automatically logged, press **OK** or Feature [ ].  
OR  
Press **NEXT** or **#** to return to the first selection.
6. To exit, press **RTS**.

## Use Logit (manually log a call)

Feature [ ] [8] [1] [3]

If your calls are not automatically logged, **Logit** lets you manually log call information when you are connected to an external call. Being able to store information for your current call can be helpful in many situations. For example, you may want to:

- record a caller's information without using paper and pencil,
- record only selected calls that you personally choose, as opposed to using Call Log automatically, and
- quickly record caller information before a caller hangs up.

To manually log an external call:

1. Press Feature [ ] [8] **Q** [3].

OR

Program this feature on a memory key. (See the **Norstar** Telephones section in this chapter.)

## Use Autobumping

Feature [ ] [8] [1] [5]

Since your log has a set number of entries that it can hold, Autobumping is a feature that lets you tell **Norstar** what to do when your log becomes full. When Autobumping is ON, a new log entry causes the first entry to be deleted. If Autobumping is OFF, your **Norstar** system will not log new calls when your log is full.

1. To turn Autobumping ON, press Feature [ ] [8] [1] [5].  
OR  
To turn Autobumping OFF, press Feature [ ] [8] [1] [5].

## Enter Call Log

Feature [ ] [8] [1] **Q**

You can enter your Call Log to view stored information. The Log may display special characters. These are described in detail in the description of Displays, later in this section. To view your log:

1. Press Feature [ ] [8] [1] [2].
2. The display shows the number of previously read items (Old) and the number of new, unread items (New) in the log.
3. To view old items, press **OLD** or **\***.  
OR  
To view new items, press **NEW** or **#**.  
OR  
To return to an item viewed when you last exited the log, press **RESUME** or **0**.

### Navigate within Call Log

You can navigate within your Call Log to view a particular log entry. You can also scroll within an entry itself.

- To scroll through an entry, press **MORE** or **[Left Arrow]** **[Right Arrow]** **[Left Arrow]**  
 O R  
 To view the next entry, press **NEXT** or **Q**  
 O R  
 To go back to the previous entry, press **\***.
- To exit, press **[Ris]**.

### Erase Log Items

It is necessary to routinely erase read log items to make space for new items in your log.

- Navigate to the item you want to erase.
- Press **\_ERASE\_ or (Hold)**.
- To exit, press **[Ris]**.

If you accidentally erase an item, you can undo the erasure.

- Immediately after accidentally erasing an item, press **UNDO** or **(Hold)**.
- To exit, press **[Ris]**.

### Call from Call Log

You may find it helpful to place calls from within your Call Log.

Each stored caller number may vary according to the information associated with that particular call. If the caller number involves a Centrex or PBX system, the first few digits may need to be "trimmed" to make the caller number dialable. If the number that you want to call is long distance or uses line pool access, digits may need to be added to the beginning of the number.

#### Place a call

- Navigate to the log item for the number that you want to dial.
- Display the number and edit it if necessary to make it dialable (the instructions for adding or trimming digits follow).
- Press an external line or line pool button.

- Lift the receiver. This is not necessary if Handsfree is Programmed at your telephone.
- The displayed number is dialed.

Trim a number involving Centrex or PBX  
 To trim the caller number:

- Press **TRIM** or **[Left Arrow]** **[Right Arrow]**, once for every digit that you want to remove.

Add digits for long distance or line pool access

- Add digits to the number by pressing the appropriate dial pad digits, just as you would do to dial.
- To remove digits you have added, press **BKSP** or **[Left Arrow]** **[Right Arrow]**, once for every digit that you want to remove.

### Optional Password

You have the option of accessing your Call Log through a password. If you forget your password, there is a facility in Administration programming to clear it (and then you could enter a new password from your telephone).

#### Assign a password to your Call Log

- Press **[Feature]** **\*** **[8]** **Q**. The display shows New Password:..
- Enter your four-digit password. The display shows Repeat New:..
- Re-enter your four-digit password. The display shows Password changed. which confirms that your password has been assigned.

#### Using your Password to enter Call Log

- Press **[Feature]** **[8]** **Q** **[2]** to enter Call Log.
- If you have programmed a password, Password:.. appears.
- Enter your four-digit password.

#### Change your password

- Press **[Feature]** **\*** **Q** **[5]**. The display shows Old Password:..
- Enter your old password. The display shows New Password:..

3. Enter your new four-digit password. The display shows Repeat New...
4. Re-enter your password. The display shows Password changed, which confirms that your password has been changed.

**Delete an assigned password**

After assigning a password to your Call Log, you may later decide that you do not want to use a password at all.

1. Press **Feature** **\*** **8** **5**. The display shows Old password...
2. Enter your old password. The display shows New password...
3. Press **OK** or **Hold**. The display shows No pswd assigned, which confirms that your password has been deleted.

**Related features**

**Call Information**

The same Call Display information as in Call Log is displayed, but it is not recorded in a log.

**Displays**

You will see some of the following displays as you use Call Log.

12:KATE SMITH  
NEXT ERASE MORE

This is a Call Log item with its sequence number. When the first digit is underlined, it is a new item.

12:KATE SMITH  
NEXT ERASE MORE

This indicates that the call was answered.

12:KATE SMITH  
NEXT ERASE MORE

This indicates a long distance call.

49/1234567890123  
NEXT ERASE MORE

The "slash" symbol (/) indicates that the displayed information for a call has been truncated.

Jan 4 9:00a 3X  
NEXT ERASE MORE

This is the repeat call counter, shown along with time and date display. It indicates the number of calls you have received from the same caller.

Autobumping ON

The Autobumping feature is active.

Autobumping OFF

The Autobumping feature is deactivated.

Cal 1 (s) bumped

One or more calls have been autobumped.

Call for you

There is one new item in the Call Log.

Calls for you

There are two or more new items in the Call Log.

Call logged

The call was successfully logged with Logit.

Hold or release

Your active call must be held or released before entering Call Log.

In use: SETNAME

The external line is in use.

Item erased

The item was erased from the Call Log.

Line001 227  
NEXT ERASE MORE

This display shows that this call was answered at telephone 227.

Line001 Logit  
NEXT ERASE MORE

This display shows that this call was manually logged.

Line001  
NEXT ERASE MORE

This display shows that this call was not answered.

Log is empty

Your Call Log is empty.

Log is full

No additional calls can be logged until you either turn Autobumping ON, or you delete some items in your log.

Messages & Calls  
MSG CALLS

This indicates that there are one or more items in your Message Waiting List, and there are one or more new entries in your Call Log.

New calls begin

This appears before the first "New" item when navigating from the "Old" items to the "New".

No free lines

All lines in the pool are in use.

No info to log

No information is available on the call.

No log assigned

No log space has been assigned to the telephone.

No new items

There are no new calls in the Call Log.

No old items

There are no old or "viewed" items in the Call Log.

No resume item

The resume item is no longer in the Call Log due to Autobumping, repeat call update, or log reallocation.

Private name

The caller's name is private.

Private number

The caller's number is private.

Release calls

On an M7100 Telephone, the active call must be released before entering Call Log.

1:Unknown call

The caller's name and number are unknown.

1:Unknown name

The caller's name is unavailable.

1:Unknown number

The caller's number is unavailable.

## Notes

You may want to use the punch-out overlay, which is provided in the Call Log Feature Card. This card is available in a separately **orderable** Call Display Button Cap Kit. Please contact your Customer Service representative.

The long distance indicator, as well as the caller's name and number, may not be shown in the log, depending on the Call Display services provided by your local telephone company.

For tips on programming Call Logs, see the Call Display services section.

# Call Park

Feature 7 4

## Park 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 to announce the retrieval code displayed by your telephone.

## Retrieving a parked call

1. Select an internal line.  
OR  
If you have an M7100 Telephone, pick up the receiver.
2. Dial the call park retrieval code.

## Displays

You will see some of these displays while parking a call. You may see some of these displays while retrieving a parked call.

Already parked

The person you were talking to has already parked your call. You cannot park the same call.

Get call first

You have attempted to park a call with no active call on your telephone. If the call you wish to park is on hold, you must reconnect to it before you can 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.

No call to park

You have attempted to park a call, but there are no calls at your telephone.

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 (Feature 8 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.

## Notes

When you park a call, the system assigns one of nine codes for the retrieval of the call. These codes consist of the Call Park prefix, which may be any digit from 0 to 9, and a two digit call number between 01 and 09. For example, if the Call Park prefix is 4, the first parked call is assigned Retrieve Park code 401.

Your Installer sets the Call Park prefix in Configuration programming. If the Call Park Prefix is set to None, parking is disabled.

Your installer also sets the Call Park Callback delay in Configuration programming. External calls parked for longer than the program delay are returned to your telephone.

Internal calls parked are not returned to the telephone that parked the call and there is no callback reminder.

# Call Pickup

You can pick up a call that is ringing at another telephone.

## Directed Pickup

Feature 7 5

You can answer any telephone that is ringing in your Norstar system

1. Press Feature 7 5.
2. Enter the internal number of the ringing telephone.

## Group Pickup

Feature 7 5

Your Norstar system can be divided into as many as 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 Feature 7 5.

## Trunk Answer

Feature 8 0 0

The Trunk Answer feature allows you to answer an external Call that is ringing at any other telephone in your office.

Trunk Answer works only with calls that are ringing on lines for which a Service Mode is active and if Trunk Answer is ON in Administration programming.

1. Press Feature 8 0 0

## Displays

You may see some of these displays while using a Call Pickup feature.

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, your co-worker dials the number of a telephone in your Pickup group, and you attempt to pick up that call.

Denied in admin

Your telephone is not a member of a Pickup group.

No button free

You have tried to pick up a call when you have no line button available.

Pickup denied

(Pickup) There is no call that you can pick up or the call that was ringing has already been answered.

(Trunk Answer). The call that is ringing is on a line that is not in a Service Mode.

You have attempted 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 once you have activated Directed Pickup, press Feature . The call will continue to ring.

## Notes

Call Pickup cannot be used on private lines. Group Pickup can not be used to retrieve a camped call.

To use 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.

If a call is ringing on an Answer button, you can use Directed Pickup to answer the call by entering the internal number of any member of the Answer group.

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

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

The System Coordinator can assign telephones to one of nine Pickup groups in Administration programming.

## Call Queuing

Feature 8 0 1

When you have more than one call ringing at your telephone, you can choose the call that has the highest priority.

1. Press Feature 8 0 1.
2. The system connects you to the call that has the highest priority.

### Notes

Call Queuing answers incoming calls before callback and camped calls.

Call Queuing can be programmed onto a memory button.

## Camp On

Feature 8 2

### Camp a call

You can send an external call to another telephone, even if all its lines are busy.

1. Press Feature 8 2.
2. Dial the number of the telephone you want to camp the Call to.

### Related features

#### Transfer

Camp On is a variation of the Transfer feature.

Feature 7 0

### Displays

You will see some of the following prompts while Camping a call.

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 the M7100 Telephone, 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 the M7100 Telephone, just pick up the receiver.

Camp denied

You have tried to camp an internal call. You can only camp external calls.

Camp to:  
CANCEL

Dial the number of the internal telephone to which the call will be sent.

## Camp On / 115

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 the M7100 Telephone, 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.

Make call first

You have no call to camp. If the call you want to camp is on hold, take it off hold and then camp it.

Not in service  
CALLBACK

The telephone to which you have camped a call is out of service or is being used for Configuration or Administration programming. The call has come back to you. Press **CALLBACK** or the line button to reconnect to the call. On the M7100 Telephone, 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.

### Notes

If you use Call Queuing to answer a camped call, external calls are answered before the camped call.

Camped Calls appear on a line button on the receiving telephone, if one is available. If not, there is just a message on the display and Camp tones.

## Conference

Feature 3

### Create a conference

You can talk to 4 people at once.

1. Make sure you have two calls, one active and one on hold.
2. Press **Feature 3**.
3. Take the held call off hold (this is automatic on the M7100 Telephone).

### Conference using Privacy

Feature 8 3

Normally your calls are private; no one else can pick up your line and join in your conversation. You can turn privacy off for a call allowing another person with the same line to press the line button and join in your conversation, forming a conference.

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

### Disconnect one party

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

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.  
OR  
For the M7100 Telephone, press **Feature # 9** which places one party on hold. Press **Hold** again if necessary, to put on hold the party that you want to keep.
2. Press **Fls**. The call is disconnected.
3. To speak to the remaining party, press the line button of the held call, or for the M7100 Telephone, press **Hold**.

### Independently hold two calls

For all Norstar telephones except the M7100 Telephone, you can put the two people 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 **Hold**. The second person is put on hold:

You can reestablish the conference.

1. Take one call off hold.
2. Enter the Conference feature code.
3. Take the other call off hold.

### Put a conference on hold

You can put a conference on hold, allowing the other two people to continue speaking to each other.

1. Press **Hold**.

You can reconnect to the conference.

1. Press either of the held line buttons, or for the M7100 Telephone, press **Hold**. You are reconnected.

### Split a conference

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

1. Press the line button of the person you want to speak to. The other person is automatically put on hold.  
OR  
For the M7100 Telephone, press **Feature # 9**, which puts the first party on hold. Press **Hold** again, if necessary to switch parties.

You can reestablish the conference.

1. Press **Feature 3**.
2. Take the held call off hold. This is not necessary for the M7100 Telephone.

## Related features

### Unsupervised Conferencd

You can disconnect yourself from the conference and leave the other two people talking by pressing (Feature 7 0). However, if both of the other people are outside the system, there are some restrictions: At least one of the outside callers must have called you and that call must be on a disconnect supervised line.

## Displays

You will see some of these displays while using the Conference feature.

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.

Access denied

Privacy control cannot be used on internal or conference calls.

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 entering the Transfer feature code.

Make calls first

You have tried to set up a conference call, without having made the calls that are to be connected. Make both calls first.

Make call first

You have tried to use Privacy Control when you are not on a call.

Make second call

You have tried to set up a conference call while connected to only one caller. Put your first call on hold, make a second call, and enter the Conference feature code-again.

No button FREE

You have put a conference call on hold from your M7100 Telephone, then tried to get another line. Your M7100 Telephone can handle only two lines at a time, and your conference call is using both of them.

Press held line

You have activated the Conference feature with one call active and another on hold. Press the line of the call on hold to bring that person into the conference.

## Notes

Only the person who established the conference can process the conference in any of the ways just described.

The Conference feature supports only three people.

If you are using an M7100 Telephone:

- Your conference is connected as soon as you enter the Conference feature code. There is no need to take the second call off hold.
- To split a conference, press (Feature # 3). Then, press (id) to change from one caller to the other.
- You cannot independently hold two calls.
- You cannot join an existing two-party call to establish a Privacy conference although you can use the Privacy feature for calls at your telephone.

When a third person joins a conversation on a line that has privacy turned OFF, the call becomes a conference. All the rules applicable to a **conference** apply except that there is only one-line in use, instead of the normal two. This means that you cannot split a conference set up using Privacy.

In certain situations, you may experience lower volume levels when using the Conference feature with two external calls.

The volume level of an external call is determined by the central office line and may not match the volume level of an internal call. Therefore, if you make a conference with an external caller and an **internal** caller, the volume of the internal caller may be louder than the volume of the external caller.

When two external callers are **conferenced** together, they may complain about low volume levels. The reason the volume is **low** is that the **Norstar** conference has connected the two external calls together thus doubling the length of the connection.

## COS Password

Feature 6 8

### Change your Class of Service

A Class of Service password is a six digit code that lets you switch from your current Class of Service to one that lets you dial numbers prohibited by your current Class of Service.

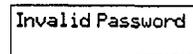
1. Press **Feature 6 8**.
2. Enter your COS password.

### Displays

You will see the first of these displays when entering a COS password, you may also see the second.



(Blank display) Enter your password. It will not be shown on the display.



You have entered a password that is not programmed into your system.

### Notes

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. Class of Service passwords can give you access to features not available with the regular Class of Service. See Using **Norstar** remotely.

You must enter a Class of Service password each time you wish to make a call using a Class of Service not normally available on your line or telephone.

Norstar allows up to 100 Class of Service Passwords.

The System Coordinator defines Class of Service passwords in Administration programming.

## Customizing your telephone

You can **change the** way a telephone works in several ways. Some of the **following** features are assigned to telephones in Administration programming. You can turn other features ON and OFF at individual telephones.

### Automatic Handsfree

Automatic Handsfree lets you make or answer a call without having to pick up the receiver or press the  button. The telephone's internal microphone and speaker turn on automatically when **you** make or answer a call.

The System Coordinator assigns Automatic Handsfree capability to a telephone in Administration programming. Full Handsfree capability must be assigned to a telephone before Automatic Handsfree capability can be assigned to it. This is also done in Administration programming.

This feature is not available on M7100 Telephones.

Note: With Automatic Handsfree enabled, held calls are immediately put on handsfree when you retrieve the call by pressing the flashing line button.

### Contrast Adjustment

You can set the contrast level of your telephone display.

1. Press  \* .
2. Choose the contrast level you like best. The number of contrast levels available varies from one Norstar telephone to another.

This is the **display** you will see in Contrast adjustment.

**Contrast level 2**  
DOWN UP OK

Press a number for the contrast level you want or press **UP** or **DOWN**. Press  or **OK** to set the new contrast level.

## Dialing Modes

You can set the dialing mode of your telephone.

1. Press  \*  .
2. Choose the dialing mode you want.

Norstar supports three dialing modes; Automatic Dial, Pre-Dial, and Standard Dial. All three modes support on-hook dialing. (On-hook dialing means dialing 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.

The Dialing Modes feature code cannot be programmed into a memory button.

### Standard Dial

In Standard Dial mode, you 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 .

Standard Dial does not support on-hook dialing on an M7100 Telephone. If you have an M7100 Telephone, use the Automatic Dial or Pre-Dial feature for on-hook dialing.

### Automatic Dial

If you have a Prime line assigned to your telephone, 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 Prime line is in use.

Telephones connected to an Analog Terminal Adapter (ATA) cannot use Automatic Dialing.

### Pre-Dial

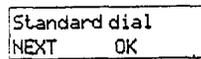
Pre-Dial allows you to enter a telephone number, check it, then **change** it before actually making the call. The call is not dialed until you select a line or line pool, or pick up the receiver.

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 have entered.

If all the lines on your telephone are busy, you will not be able to enter a telephone number.

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

This is the display you will see when selecting a Dial mode.



The current dial mode is shown. Press  or NEXT until the dial mode you want appears. Press  Hold  or OK to select the displayed dial mode. If Automatic Dial is not available it is because you have no Prime line.

### Language Choice

English

Feature  \*  5  0  1

You can select English as the language of your telephone display.

1. Press Feature  \*  5  0  1.

Alternate Language

Feature  \*  5  0  2

You can select the alternate language as the language of your telephone display.

1. Press Feature  \*  5  0  2.

Each Norstar system supports English and one alternate language. Norstar systems are available with either French or Spanish as the alternate language. Button caps are available in both alternate languages.

You can select either English or the alternate language at each telephone. When your system is first installed, all telephones will use English.

You can program a memory button for one-touch switching, between languages. Program Feature  \*  5  0  Q onto the button. Pressing the button will switch you back and forth between English and the alternate language.

Feature  \*  5  Q  2 cannot be programmed onto a memory button.

One of the following displays will appear when you enter a language choice feature code.

En français...

Telephone display messages will be in French.

En español...

Telephone display messages will be in Spanish.

In English...

Telephone display messages will be in English.

### Move Line buttons

Feature  \*  8  1

You can move external lines to different buttons on your telephone. You can use this feature to arrange your lines in the way that makes the most sense to you.

1. Press Feature  \*  8  1.
2. Press the button you want to move the line from.
3. Press the button you want to move the line to.

You will see some of these displays while moving lines

Invalid location

You have tried to move a line to a button that cannot be used as a line button, such as a Handsfree/Mute button, or an Answer button.

Move line from:  
QUIT

Press the button of the line you want to move. Press QUIT or Feature  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 vice versa.

### Pulse/Tone Dialing

Each external line is set to either pulse or tone dialing. Pulse dialing 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. (For more information, see the section Using Norstar remotely).

Your Installer sets your lines to pulse or tone dialing in Configuration programming.

To switch from pulse to tone dialing

If your external lines are programmed for pulse dialing, you can switch your telephone temporarily to tone dialing.

1. Press **[#]** while on an active line. Once you hang up, your telephone returns to pulse dialing.

### Ring Type

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 **Feature** \* **[6]**.
2. Choose the ring type you want.

This is the display you will see when choosing a ring type.

Ring type: 1  
NEXT OK

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

### Ring Volume

You can set the volume at which your telephone rings.

1. Press **Feature** \* **[8]** **[0]**. The telephone will ring.
2. Press **[<]** **[>]** to adjust the volume.

This is the display you will see while setting Ring volume.

Press VOLUME bar

Press either side of the volume bar (**[<]** **[>]**) to adjust the volume.

### Telephone Administration Lock

Telephone Administration Lock limits the ways in which you can customize your telephone. There are three types of Telephone Administration Lock: Full, Partial, and None.

Full Administration Lock lets you change the contrast of your telephone's display, use Ring Type, Ring Volume and Button Inquiry, and control the volume of your speaker.

Partial Administration Lock allows you to forward your calls, turn on Do Not Disturb and Service Modes, and use the Background Music, Send Message, Ring Again, Privacy, and Trunk Answer features.

None (No Administration Lock) allows you to access all features that are programmed for your telephone. The System Coordinator assigns Administration Lock to each telephone in Administration programming.

Telephone Administration Lock does not affect call handling features.

## Related features

### Autodial

Feature \* 1 / Feature \* 2

You can program your telephone's memory buttons to dial frequently used numbers with the **Autodial** feature.

### Feature programming

Feature \* 3

You can program feature codes onto your telephone's memory buttons using the **Feature programming** feature.

### Speed Dial programming

Feature \* 4

You can program personal speed dial numbers onto speed dial codes 71 to 94 using the **Personal Speed Dial programming** feature.



## Dialing

One of the most important features of your telephone system is the ability to dial telephone numbers. Many features require you to dial telephone numbers. The displays associated with dialing are listed here.

### Note:

When dialing telephone numbers keep in mind that if there is a 10 second pause between dialing one digit and the next, the call will be cancelled by the system. You must reenter the dialing sequence from the beginning.

### Direct-dial

You can dial a **Direct-dial** telephone with a single digit. The **Direct-dial** telephone is usually in a central location, such as a receptionist's or secretary's desk. It is usually a **Prime** telephone and a **Central Answering Position (CAP)**.

### External line access code

The **external line access code** is the number you dial to get an external line. You will need to use an external line access code if your **Prime** line is an internal line. The code will connect you to a line pool through your internal line.

If your **Prime** line is an external line, or if you select an external line on your telephone, you will not need an external line **access code**. You will always need an external line access code on an **M7100** Telephone.

Your Installer assigns the external line access code in **Configuration programming**.

### Last Number Redial

Feature \* 5

You can redial the last external number you dialed.

1. Press **Feature \* 5**.

### Ring Again

Feature

If you can't get through to someone on your **Norstar** system because their telephone is busy or there is no answer, you can have the **Norstar** system tell you when they hang up or next use their phone.

1. Press   before you hang up.

You can also use Ring Again to tell you when a busy line pool becomes available.

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

### Cancel Ring Again

Feature

You can cancel a ring again request by entering the Cancel Ring Again feature code.

### Saved Number Redial

Feature

You can save the number of the external call you are on (providing you dialed the call) so that you can call it again later.

1. Press    while you are still on the call.

You can dial a saved number.

1. Press    when, you are not on a call.

## Related features

### Autodial

Feature   / Feature

The **autodial** feature lets you program telephone numbers onto memory buttons for one-touch dialing.

### Dialing modes

Feature

**Norstar** supports three different methods of dialing. They are described in the Customizing your telephone section under the heading **Dialing Modes**.

### Line Pools

Line pools give you access to many external lines.

### Priority Call

Feature

If you get a busy signal when you call someone in your office, you can interrupt them using Priority Call.

### Speed Dial

Feature

The Speed Dial feature lets you dial programmed numbers by entering speed dial codes.

## Displays

You will see some of these displays while selecting lines and dialing telephone numbers and in response to the numbers you dial.

9.  
QUIT BKSP

You are dialing using Pre-Dial. To erase an incorrect digit, press **BKSP** or **⇒**   **←**. When the number is complete, select a line or lift the receiver.

221 busy  
PRIORITY LATER

The telephone you have called has no internal lines available. You may press **LATER** to use the Ring Again or Message features or press **PRIORITY** to make a Priority Call.

9551234  
TRANSFER

This **prompt** remains on your display as long as you are on a call you have dialed. You may transfer the call by **pressing 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  
LATER

Wait for the telephone to be answered, or press **LATER** to use the Ring Again or Messages features.

Calling 221  
PRIORITY LATER

Wait for the telephone to be answered. If no one answers, you may press **LATER** to use the Ring Again or Messages features, 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 is in Do Not Disturb mode. Press **LATER** to use the Ring Again or **Messages features**, or press **PRIORITY** to make a Priority Call.

In use: 221

The line you have chosen is in use at another telephone. Use a different line, or wait until the line is free.

Invalid number

You have entered a number that does not exist.

Line denied

You have attempted to use someone else's private line.

Line in use

The line you have chosen is in use. Try another. If the line remains in use and never seems to clear, it may be hung. See Lines in the System Features **section for** information on hung lines.

Line001  
TRANSFER

Enter the digits of the number you want to dial.

No button free

You have tried to make or receive a call when no line button was available.

No last number

You have not dialed an external telephone number since the last power interruption or system reset.

No lines selected

Either you have no Prime line or your Prime line is busy. Select a line manually before dialing.

No number saved

You have tried to save the number of an incoming call. You can only save numbers that you have dialed yourself.

Nosavednumber

You have tried to use Saved Number! Redial, but have not first saved a telephone number. The Saved Number Redial memory is empty.

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 is not allowed for your Class of Service. Make your call on a line or telephone that is not restricted, or use a Class of Service password to bypass the restriction.

Ring Again?  
YES NO EXIT

Press **YES** to use Ring Again, Press **NO** if you prefer to send a message. See Message and Ring Again.

Select a line

Either you have no Prime line, or the Prime line is in use, or the line programmed onto an Autodialer, Speed Dialer, or Hotline is in use. Select a line and dial again.

Send message?  
YES NO

Press **YES** to send a message. See Messages.

Your-number

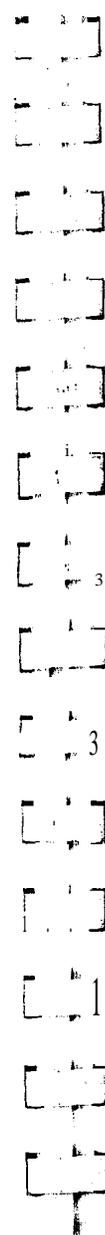
You have dialed your own number.

Notes

The maximum number of digits that Last Number Redial or Saved Number Redial records is 24.

You can copy the telephone number from a Last Number Redial or Saved Number Redial button onto an **Autodial** button. Simply enter the Last Number Redial or Saved Number Redial feature code when the Autodial feature asks you to enter a number.

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



## Do Not Disturb

5 8 5

### Do Not Disturb

You can stop calls from ringing at your telephone.

1. Press **Feature** **8** **5**.

Only Priority Calls will ring at your telephone. A line button will flash when you receive a call, but the call will not ring.

You can refuse to answer a particular call (including a Priority Call).

1. Press **Feature** **8** **5** while your telephone is ringing.

### Cancel Do Not Disturb

Feature # 8 5

You can cancel Do Not Disturb.

1. Press **Feature** **#** **8** **5**.

### Displays

Do not disturb

Your telephone is in Do Not Disturb mode. To cancel Do Not Disturb, press **Feature** **#** **8** **5**.

Allows calls

Your telephone is receiving calls normally.

### Notes

If you use Do Not Disturb while an external call is ringing, the call will be forwarded to the Prime telephone. It may also be answered by anyone whose telephone shares the line it is on. Once you turn Do Not Disturb on, calls will be forwarded to the Prime telephone only if there is no other telephone on which the line appears. (The Delayed Ring Transfer feature transfers all unanswered calls to the Prime telephone after a specified time.)

## Do Not Disturb 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 in Administration programming.

When DND on Busy is turned on for the set, 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.

## Notes

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

If an external call uses a target line (for example, calls coming in on auto-answer loop start, E&M or DID lines), the call will be processed according to the configuration of the target line. If the target line is busy, the caller may hear a busy tone or be routed to the prime set for the target line regardless of the DND on Busy programming for the set.

Forward on busy takes priority over DND on busy.



## Feature Programming

Feature \* 0

### Program a button

You can program a feature code onto a memory button

1. Press **Feature** \* **Q**.
2. For all telephones other than the M7100 Telephone, select the button you want to program.
3. Enter the feature code you want to program onto the button.

### Erase a button

You can erase a memory button.

Feature \* 0

1. Press **Feature** \* **Q**. This is actually the External Autodial feature code.
2. For all telephones other than the M7100 Telephone, select the button you want to erase.
3. Erase the button by pressing **OK** or **Hold**.

You cannot erase Answer, Handsfree/Mute, Intercom, or line buttons.

### Button Inquiry

You can check the function of any line. Intercom, or memory button on your Norstar telephone.

Feature \* 0

1. Press **Feature** \* **0**.
2. For all telephones other than the M7100 Telephone, press the button you want to know about.
3. Read the display.

When you are labeling or replacing a button cap, activate Button Inquiry so that you won't accidentally activate a feature.

## Displays

You will see some of the following displays while programming, erasing, or checking, buttons. A variety of displays appear in Button Inquiry. See the display <Feature name> for information applicable to these displays.

1234567890123...  
VIEW→ OK

Press **[#]** to move either right or left, or press **VIEW→** or **←VIEW** to view a number that is too long to fit on the display. Press **[Hold]** or **OK** when you are finished.

<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 two-digit Speed Dial code that you want to check.

Enter Digits

To erase a button, press **[Hold]**.

F.  
QUIT CLEAR

While entering a feature code you can press **[Feature]** or **QUIT** to quit programming or **CLEAR** to clear out the characters you have entered. The system will accept the entry as soon as you enter a valid feature code.

Feature code:  
QUIT

Press **[Feature]** and enter the feature code you want to program onto the button. Invalid codes cannot be entered.

Feature removed

You have 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 blank.

Hold or release

You cannot program an autodialer or feature button while you are on a call.



Press a button  
EXIT

Press the button you want to check!  
Press **[Feature]** or **EXIT** when you are finished.

Program and HOLD

To erase a button, press **[Hold]**.

Program and OK  
QUIT OK

To erase a button, press **[Hold]** or press **OK**.

Release calls

You have tried to use Button Inquiry while you were on a call or had calls on hold.

## Notes

When this book tells you to enter a feature code, you can do so by pressing a memory button programmed with that feature code. In some cases, pressing the button a second time cancels the feature.

On the M7100 Telephone, Button inquiry shows your internal number followed by the function assigned to your single memory button.

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

The following feature codes cannot be programmed onto a memory button: Long Tones and any code beginning with **[\*]** except Language Choice and Contrast Adjustment.

## Group Listen

Feature **8 0 2**

### Group Listen

You can let people in your office listen in on a call.

1. Press **Feature 8 0 2**. You will hear the caller's voice through your telephone's speaker.
2. Continue to speak to the caller through the telephone receiver. The caller will not hear people in your office.

### Cancel Group Listen

Feature **# 8 0 2**

You can cancel Group Listen for the current call.

1. Press **Feature # 8 0 2**.

Group Listen is canceled automatically when you hang up the Group Listen call.

## Displays

You may see one of these displays with Group Listen.

**Make call first**

You have tried to use Group Listen when you are not on a call.

**Pick up receiver**

to use Group Listen without picking up the receiver.

## Notes

Keep the receiver away from the speaker, or you may hear feedback. The higher the volume, the more the feedback. Press the **Ris** button to prevent feedback when hanging up.

You can switch a Group Listen call to Handsfree by pressing **Handsfree Mute**. To switch back to Group Listen, enter the Group Listen feature code again.

## Handsfree/Mute

Handsfree Mute

### Make calls without lifting the receiver

You can make calls without lifting the receiver. However, you must have a Prime line assigned to your telephone.

1. Press **Handsfree Mute**. The telephone's internal microphone and speaker are automatically turned on.
2. Dial your call.
3. Speak normally.

### Answer calls without lifting the receiver

You can answer calls without lifting the receiver.

1. When your telephone rings, press **Handsfree Mute**. The telephone's internal microphone and speaker are automatically turned on if you have a Prime line assigned to your telephone.
2. Speak normally.

### Mute Handsfree

You can switch off the telephone microphone so that you can speak privately to someone in your office while you are on a handsfree call.

1. Press **Handsfree Mute**. The microphone is turned off.

You can turn the microphone back on again and continue your handsfree call.

1. Press **Handsfree Mute**.

### Regular call to Handsfree

You can turn any regular call into a handsfree call.

1. Press **Handsfree Mute** and hang up the receiver.

### Handsfree to regular call

You can turn a handsfree call into a regular call.

1. Lift the receiver.

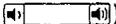
## Notes

The indicator next to  is solid when you are in Handsfree mode. It flashes when you mute the microphone.

In open-concept **environments**, use the receiver or a headset when Handsfree communication is not necessary, or when you need privacy during a call. Always tell the person you are speaking to that you are using Handsfree, and let them know who else is listening to the conversation.

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.

Wait for your caller to finish speaking before you speak. The microphone and speaker cannot both be on at once. Your caller's voice 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 your caller's speech.

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's volume (using ) also prevents echo.

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.

A Handsfree button is assigned to a telephone by the System Coordinator in Administration programming.

The Handsfree/Mute feature is not available on M7100 Telephones, 9



## Hold



### Put a call on hold

You can temporarily suspend a call.

1. Press .

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.

### Retrieve a held call

You can connect to a call on hold.

1. Press the flashing line button of the held call.

### Automatic Hold

You can switch from one call to another.

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

### Listen 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 will hear them through your telephone speaker. Lift the receiver and talk.

## Exclusive Hold

Feature   or  
 Hold

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

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

## Music/Tones/Silence on Hold

External callers can hear either music, a periodic tone, or silence while they are on hold. In order for your caller to hear music, your company must have installed a music source.

### WARNING

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 Music on Hold feature of this telecommunication system.

Northern Telecom Inc. hereby disclaims any liability arising out of the failure to obtain such a license.

Your Installer sets this feature to music, tones, or silence in Configuration programming.

## Notes

On the M7100 Telephone,  alternates between two lines: one active, one on hold. The M7100 Telephone cannot retrieve a call placed **ON hold** by another telephone.

If the Automatic Handsfree feature has been assigned to your telephone, use the Handsfree/Mute feature instead of Listen on Hold.

## Host System Signaling

You can access Host systems, such as Private Branch Exchanges (PBX) from **Norstar** by using Host System Signaling **features** (also 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 onto external **Autodial** buttons or Speed Dial codes.

## Host system signaling codes

### Link

Feature

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 () uses two of the 24 spaces in a dialing sequence.

### Pause

Feature

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 obtain a Pause with one button press if you program **the** feature code onto a memory button. More than one Pause can be programmed onto an External **Autodial** button,

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.

**Programmed Release**

Feature \* 8 Q

The Programmed Release feature performs the function of the **RI** button in a programmed dialing sequence. When the system encounters Programmed Release in a programmed dialing sequence, it stops dialing and hangs up the call. The Programmed Release symbol (EI) takes up two of the 24 spaces in a programmed dialing sequence.

**Run/Stop**

Feature \* 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 may 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 autodialer once to dial the company number. When you hear the automated attendant, press the autodialer again to dial the internal number.

The Run/Stop symbol (s) uses one of the 24 spaces in an External **Autodial** or Speed Dial sequence.

**Displays**

You may see this display while entering Host System Signaling codes.

Invalid code

You have entered a code that can only be used 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.



**Notes**

If your external telephone lines are programmed for Pulse Dialing, you can temporarily switch to Tone Dialing by pressing **Q** after selecting the line. Tone Dialing lets your **Norstar** telephone communicate with devices and services that respond to tone signals, such as automatic switchboards, and fax or answering machines.

## Line Pools

 Feature  

### Use a line pool

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.

1. If you have a free internal line, dial a line pool access code on an internal line. (You do not need the Line Pool feature code.) If you have no free internal line, press    and then a line pool access code.

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

### Displays

You may see some of the following displays while using a line pool. For displays associated with dialing telephone numbers, see the Dialing section.

Code:	Enter a line pool access code
Denied in admin	Access to the line pool you requested is denied in Configuration programming.
Invalid code	You have entered an invalid line pool access code.
Line in use	The line chosen by the system for your <i>line</i> pool request became active before connecting with your call. Retry the line pool request.
No button free	There is no free button on which the line pool line can appear.
No free lines	You have tried to access your line pool, but there are no lines in the line pool or all the lines are busy. Use Ring Again or call again later.

### Notes

You do **not** usually need to enter the Line Pool feature code to use a line pool. Simply dial the line pool access code on an internal line. If you have no free internal lines, you will need to use the feature code to get a line pool. You will also need it to program access to a specific line pool onto a memory button.

You can program a button to access a line pool by programming the Line Pool feature code and a line pool access code onto a memory button in Feature programming ( \* ). 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.

Your Norstar system can have 15 line pools, and a telephone can be programmed to access any number of them.

You can use a line pool only to make external calls.

If no lines are available in the line pool, you can use Ring Again at the busy tone. You will be notified when a line in the line pool becomes available. See Ring Again.

Your Installer gives telephones access to line pools in Configuration programming. Each line pool is assigned a line pool access code in Configuration programming.

## Line Redirection

Feature 8 4

### Redirect a line

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

1. Press **Feature 8 4**.
2. Select the outgoing line to be used for redirected calls.
3. Enter the number to which calls will be redirected.
4. Select the lines to be redirected.

### Cancel Line Redirection

You can cancel Line Redirection.

Feature # 8 4

1. Press **Feature # 8 4**.
2. Select the lines for which redirection is to be canceled.

### Related features

#### Call forward

4 line

Note the **differences** between Line Redirection and 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.

### Displays while redirecting lines

You will see some of the following displays while programming Line Redirection. The displays you see while canceling redirection are listed after this chart. See the Dialing section for displays that occur while entering telephone numbers.

Continue entering digits. Press **BKSP** or

Access denied

You cannot perform line redirection on an M7100 Telephone.

Deniedinadmin

Line Redirection is not allowed on your telephone. To allow Line Redirection, the Allow Redirect parameter must be set to Y(Yes).

Enter digits  
QUIT OK

Enter the telephone number to which you wish to redirect calls using one of the following methods:

- Press an External **Autodial** button
- **Enter an** external telephone number of no more than 24 digits. Then, press **Hold** or **OK**.
- Press **Hold** 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.

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.

Line Redirection  
QUIT ADD REMOVE

Press **\*** or the **ADD** button to begin redirection. Press **REMOVE** or **\*** 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

Pool code: .  
QUIT

Programmed

Redir by 221  
OVERRIDE

Restricted call

Select line out  
QUIT

Select line(s)  
QUIT ALL

Select line(s)  
ALL OK

Unequipped line

Enter a valid line pool access code.

This message appears when you have successfully redirected a line or successfully canceled redirection of a line.

You have attempted to redirect a line, but someone else has already redirected that line. You may press **OVERRIDE** or **Q** to override the previous redirection and redirect the line as you wish.

The destination you have chosen for line redirection is restricted.

Select the line that will be used to redirect calls out of the system, using one of the following methods:

- 1. Press an external line button.
- 2. Press an internal line button and dial a line pool access code.
- 3. Press a line pool memory button.
- 4. Press an External Autodial button.

Press the lines that are to be redirected. To deselect a line, press it again. You may press **ALL** to redirect all your lines.

**Continue** to press the lines that are to be redirected. Press **OK** or **Hold** when you are finished.

The line you are attempting to redirect cannot be redirected because the hardware does not support redirection.



### Displays while canceling redirection

You will see the following displays while canceling Line Redirection.

Redir by 221  
OVERRIDE

This line is redirected by someone else. Press **OVERRIDE** or **Q** to cancel redirection of the line.

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. You may press **ALL** to cancel redirection for all your lines. When you are finished, press **OK** or **Hold**.

Select line(s)  
\* ALL OK

**Continue** to press the lines that are no longer to be redirected. Press **OK** or **Hold** when you are finished.

### Notes

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 will be available until the feature times out. If you need to use a Norstar feature to process the call, you must quit Line Redirection programming by pressing the **Feature** button. Do not press **Ans** or you will disconnect the call you are trying to process.

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

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 will fail. Using an Autodialer to enter the redirection number helps avoid this possibility. An Autodialer used for line redirection must have a specific line programmed onto it.

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

Be aware of the consequences of redirecting your lines. If you redirect your target line to your home, for instance, and someone calls you from home, they will get a busy signal when the system tries to call the telephone they are using. Companies with offices in different time zones should avoid situations in which the lines from the eastern office are redirected to the west and those from the west are redirected to the east. This could result in a costly long distance redirection loop.

The system can be set up so that redirected calls give a brief ring on telephones in the Norstar system as they are redirected. These calls cannot be answered within the system until you cancel redirection.

The line chosen for redirecting calls on other lines can still 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.

In certain situations, callers may experience lower volume levels when you use Selective Line Redirection to an external location.

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

## Long Tones

**Feature** **8** **0** **8**

### Use long tones

The Long Tones feature lets you 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 **Feature** **8** **0** **8**.
2. Press the dial pad buttons to produce the appropriate tones. Each tone will sound for as long as you hold down the button.

### Displays

You will see some of the following displays while using Long Tones.

Long Tones:

At the appropriate time, press any dial pad button. Hold each button down for as long as necessary. You can cancel Long Tones by pressing **Feature** or **Hold**.

Make call first.

You have tried to use Long Tones when you are not on a call.

Tones denied

The person you are calling has pressed **Hold**, canceling your long tones.

### Notes

4

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.

# Messages

The Messages feature allows you to leave a message on the display of another Norstar telephone, and lets you know 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). From your Message Waiting List, you can:

- view your messages,
- call back the internal caller who left a message,
- erase an internal message,
- call your Voice Message Center that left a message(s), and,
- clear a message sent by your Voice Message Center (the message still remains at the Center until it is erased there).

## Send a message

Feature 1

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

1. Press **Feature 1**.
2. A one-line display shows Message to:  
O R  
A two-line display shows Message list. Press **ADD** to display **Message to:**
3. Enter the internal number that is to receive your message.  
OR  
Press an Internal Autodial button.
4. Your recipients display identifies that the message has arrived.

## Show your sent messages

Feature 1

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

1. Press **Feature 1**. The display shows **Message list**.

2. Press **SHOW** to display your first sent message.

## Cancel a sent message

Feature # 1

You can cancel a message that you have sent to someone.

1. Press **Feature # 1**. The display shows **Cancel for:**
2. Enter the internal number for the message that you want to cancel.

## Notification of message(s)

If another user in your Norstar system or your Voice Message Center has sent you a message, your display reads **Message for you** or **Messages for you**. If you also have items in your Call Log, your display reads **Messages & Calls**.

## Enter your Message Waiting List

Feature 6 5

To enter your Message Waiting List:

1. Press **Feature 6 5**. The display shows the first item.

## Navigate through your Message Waiting List

To navigate forward through your list, press **NEXT** or **▶**. To navigate backward, press **◀**.

## Call from your Message Waiting List

From your Message Waiting List, you can call the person (or your Voice Message Service) who sent the message. First, you may want to view your messages and decide if you want to reply to them.

1. Press **Feature 6 5**. The display shows the first message.
2. Press **NEXT** or **▶** to scroll through the list of messages.
3. To call a particular number, press **CALL** or **0**. The telephone number that is dialed to access your Voice Message Center is programmed in Administration programming. This telephone number is dialed automatically when you press **CALL** or **0**.

If you wish to use a line other than the programmed line, exit from the Message Waiting List and dial the Voice Message Center telephone number using normal dialing methods.

### Remove items from your List

Feature # 8 5

You can erase an internal message or clear a message you have received from your Voice Message Center. When you clear this message from your Message Waiting List, it still exists at your Voice Message Center until you erase it there. To erase a voice message, refer to your Voice Message Center documentation.

- From an idle telephone, press Feature # Q 5 to erase or clear the first message (either an internal message or a message from your Voice Message Center).  
OR  
From within your Message Waiting List, press CLEAR or ERASE or Hold for the item that you want to remove.

### Related features

#### Call Log

The status display for the Message Waiting List shares the same display with the Call Log status display.

### Displays

You will see some of the following displays while sending messages.

1.221  
NEXT ERASE EXIT

When reviewing the messages you have sent, press NEXT to view the next message or ERASE to erase the message on the display.

221 called  
NEXT CALL ERASE

This is the Message Waiting List display for internal messages. Press NEXT to see the next message. Press CALL to reply to the message. Press ERASE to erase the message.

Can't send msg

You have tried to send a message to a Norstar Analog Terminal Adapter. The Norstar Analog Terminal Adapter does not have a display so it cannot show a message.

Cancel denied

You have entered an invalid number when attempting to cancel a message.

Cancel for:

Dial the internal number to which you sent the message you wish to cancel.

Cleared LINENAM  
NEXT

You have cleared an external message from your Message Waiting List. The message itself still exists in your Voice Message Center until you erase it there.

Erased 221  
NEXT

You have erased an internal message.

Hold or release

This message does not pertain to M7100 Telephones. If you try to access your Message Waiting List while on an active call, this display advises you to hold or release the present call.

In use: 221

You are trying to call from your Message Waiting List. The line that you are trying to use is being used by the identified Norstar user.

L01:LINENAM UMS9  
NEXT CALL CLEAR

This is the Message Waiting List display. For that particular voice message, it tells you the line the call came in on, and the name of that line.

Message denied

You have tried to send a message to an invalid internal number or to a telephone that is out of service.

Message for you  
MSG

You have a one item in your Message Waiting List, and you have no new entries in your Call Log. Press MSG to review the message.

Message list  
SHOW ADD EXIT

The SHOW display button appears only if you have outstanding messages. Press SHOW to review or erase messages you have sent. Press ADD to send a new message.

Message to:

Enter the internal number of the telephone to which you would like to send a message.



## Morstar Telephones

This section covers the basic features of your Norstar telephone and optional equipment that may be attached to it.

### Buttons

#### Feature button



You use the Feature button to invoke Norstar features. See the Using Norstar features section.

#### Hold button



You use the Hold button to put calls on hold. See the Hold section. It is also used in place of the **OK** display button on telephones with one-line displays.

#### Memory buttons

Memory buttons are the buttons with indicators on the M7208, M7310, and M7324 Telephones, and the dual buttons without indicators on the M7310 Telephone. There is also a single memory button, without an indicator, on the M7100 Telephone. Memory buttons can be used for any of the following buttons, except that lines and Answer buttons must appear on buttons with indicators.

#### Answer buttons

You can use an Answer button to monitor calls on another person's telephone. All calls to the monitored telephone appear on the Answer button. Such calls may also ring at the telephone with the Answer button, depending on how the system is configured. Answer buttons are most useful for a secretary who monitors incoming calls for one or several managers.

If more than one call is ringing at the manager's telephone, the first call appears on the secretary's Answer button. Any subsequent calls appear on intercom buttons if they are available.



More than one secretary may have an Answer button for a single manager. This allows two or more secretaries to handle calls for a busy manager.

Similarly, one person can handle calls for up to four other people, using separate Answer buttons for each person.

A secretary's telephone should have a memory button with an indicator programmed as the Internal Autodial button for the manager's telephone. This allows the secretary to call the manager and to deal efficiently with incoming calls.

You cannot make calls using Answer buttons,

#### Autodial buttons

Autodial buttons let you dial numbers by pressing a single button. See the Autodial section.

#### Line buttons

You have one line button for each line assigned to your telephone. You 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 so you can handle and monitor calls easily. The M7100 Telephone does not have line buttons and can have a maximum of two lines. You can switch between its two lines, one active and one on hold, by pressing .

#### Programmed Feature Buttons

Programmed feature buttons allow you to invoke Norstar features by pressing a single button. See the Feature Programming section.

#### 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 (such as Show Message). If you do, you will disconnect the call. Use  instead.

### Volume Bar



The Volume Bar controls the volume of the receiver, telephone ring, Handsfree speaker, headset and Background Music. Press either end of the volume bar (  ) to adjust the volume.

### Headset

A headset lets you keep both hands free while you are on a call without others overhearing your telephone conversations.

If you plug a headset into your telephone while you are on a call, your telephone's microphone and speaker (or your receiver if you are on a regular call) are turned off and your headset microphone and earpiece are turned on.

You must have the Handsfree/Mute feature assigned to your telephone if you wish to use a headset.

While you are using the headset, the receiver and the switch in the telephone cradle do not work.

A headset cannot be used on an M7100 Telephone.

### Using a headset

While on a call using the headset, press  to turn your headset on and off.

To answer a call, press  .

To adjust the volume, press the appropriate side of the volume bar (  ).

To change to a Handsfree call while you are on a call using your headset, unplug your headset. Your telephone's microphone and speaker turn on and the call becomes a Handsfree call. (It is a good idea to put the call on hold while you do this.)



You may see this prompt when you try to use a headset.

 Need Handsfree

You are attempting to use a headset, but Handsfree/Mute is not programmed for your telephone. If you are not using a headset, you have accidentally plugged your telephone receiver into the headset outlet on the bottom of the telephone.

### Hearing Aid Compatibility

The receivers on all Norstar telephones are compatible with hearing aids as defined in the FCC rules, Part 68, section 68.316.

*Note:* Not all hearing aids are optimized for use with a telephone.

### Wall Mounting

Most Norstar telephones can be mounted on a wall. Contact the Installer or Service Representative if you wish to have any telephones in your system wall-mounted.

## Page

Feature

### Make a page announcement

You can make announcements over the Norstar system. The tone preceding a page announcement up to now was always on. Now it is possible to turn the page tone off for all users in Configuration programming. This is convenient if the office environment is often busy with Page Announcements.

1. Press   .
2. Choose a page type.
3. if necessary, choose a zone.
4. Make your announcement.
5. Press .

Page types are :

- through the telephone speakers (Internal Page)
- through an external speaker (External Page)
- both Internal and External (Combined Page)

### Paging shortcuts

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

Internal    and zone (0 to 6)  
 External    (code 2 has no zones)  
 Combined    and zone (0 to 6)

### Related features

#### Voice Call

Feature

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

## Displays

You will see some of these displays while making a Page announcement.

Denied in admin

Your telephone has not been programmed to allow paging.

Enter zone:

ALL

Enter the desired zone number (0-6) or press **ALL** to page to all zones. (0 equals all zones.)

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 by pressing:

- or **SETS** — Internal Page
- or **SPKR** — External Page
- or **BOTH** — Combined Page

Page timeout

The time allotted for paging has expired.

Paging ALL

The prompt appears while you are paging and shows the page zone you have chosen. Press  or  when you are finished paging.

Paging busy

A page is **already** being made in the page zone you have requested.

## Notes

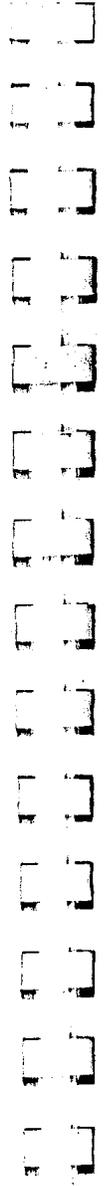
Page zone 0 equals all zones.

When making an announcement using 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.

Each N&star telephone can be assigned access to Paging and is assigned to one of six page zones, or to none, in Administration programming.

Make sure that everyone who needs to make page announcements has a list showing which telephones are in which page zones.

b



## Priority Call

Feature 6 9

If **YOU** get a busy signal when you call someone in your office, you can interrupt them. Use this feature for urgent calls only.

1. Press Feature 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 reject the call. If the person does nothing, the Priority Call feature puts the active call on Exclusive Hold and connects your call.

### Displays

You will see some of these displays while making a Priority Call.

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.

Denied in admin

You have tried to make a Priority Call, but this feature **has** not been assigned to your telephone.

Make call first

You have attempted to use the Priority Call feature with no ringing or busy tone on the line. Use Priority Call only when you hear ringing or a busy signal.

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 is already in a Priority Call or is unable to receive Priority Calls.

## Notes

You can make a Priority Call only while your telephone display shows one of the following prompts:

Do not disturb  
PRIORITY LATER

On another call  
PRIORITY LATER

Calling 221  
PRIORITY LATER

221 busy  
PRIORITY LATER

If Call Forward is active at the telephone you are trying to reach, your call will be forwarded.

If the telephone receiving the Priority Call is in a conference call, the other two parties are automatically put on hold when the Priority Call is accepted.

The System Coordinator gives a telephone permission to make Priority Calls in Administration programming.

## Service Modes

Feature 8 7

### Switch to a service mode

You can use Service Modes to make your Norstar system behave differently at different times of day. For instance, all incoming external calls can be directed to a security guard's telephone during the night, or calls to one receptionist can be directed to another receptionist during lunch.

1. Press **Feature** **8 7** on a Control telephone. (See Special telephones for information on Control telephones.)
2. Select the service mode you want.

### Cancel Service Modes

Feature 8 7

You can return to normal operation or cancel the manual override of an automatic mode. You cannot cancel an automatic mode.

1. Press **Feature** **# 8 7**.

## Displays

You will see some of the following displays when selecting a service mode.

Night Service  
QUIT OK NEXT

The name of the current service mode ("Night Service", in this case) is displayed. Press **#** or **NEXT** to see other service mode options. Press **Hold** or **OK** to select the desired mode.

Denied in admin

You are trying to activate a service mode from a telephone that is not a Control telephone or Direct-dial telephone, or else all service modes are disabled in Administration programming.

## Notes

A SERVICE mode allows you to change which lines ring at which telephone, to activate or deactivate the auxiliary ringer for certain lines, and to have Direct-dial calls ring at the Extra-dial telephone. Service modes can be programmed to begin automatically at certain times or they can be turned on and off at the Control telephone. The System Coordinator sets up service modes in Administration programming.

Automatic service modes are indicated by an asterisk (\*) before the name of the service mode on the display. You can neither manually activate nor cancel automatic service modes, although you can override them with manual modes.

The Control telephone can override automatic service modes at any time by entering the Service Modes feature code ((Feature) 8 7), and selecting a different service mode; this override will remain in effect until it is canceled by means of Feature 8 7. Note that if you selected a service mode with an asterisk (\*), the next automatic service mode will come into effect at the programmed time.

Direct-dial calls to a Direct-dial telephone will ring at the Extra-dial telephone (designated in Administration programming) only when the Service Modes feature code ((Feature) 8 7) is entered at that Direct-dial telephone. Note that only the Extra-dial telephone will be activated, not the actual service mode (unless that Direct-dial telephone is also a Control telephone).

Norstar provides three service modes named "Night", "Lunch", and "Evening". You can change these names to suit yourself. In addition, there is normal service when no service modes are active.

## Special Telephones

You can assign several special functions to the telephones in your Norstar system. Except where noted, you do not need special hardware. A special function is assigned to a telephone either by your Installer in Configuration programming or by the System Coordinator in Administration programming.

### Alarm telephone

An Alarm telephone is a Norstar telephone with a two-line display (M7310 or M7324 Telephones) that your Installer has assigned to display Norstar's system alarm codes, should they occur.

If an alarm message appears on the Alarm telephone's display, follow these instructions:

1. Record the alarm number.
2. Press TIME and record the time displayed.
3. Call your Installer or Service Representative and report the alarm code.
4. After speaking to your Installer or Service Representative, press CLEAR.

This is an example of an alarm display.

```
Alarm: 61-4-2
TIME CLEAR
```

Report this alarm and the time it occurred to your Installer or service representative.

### Central Answering Position

A Central Answering Position (CAP) is a Norstar M7324 Telephone that your Installer has defined as a CAP in Configuration programming. You can connect one or two Norstar CAP modules to the CAP to increase the number of lines it can handle. There can be from one to five CAPs in a Norstar system. It is best if the CAP is also the Prime telephone and Direct-dial telephone for the lines and telephones it serves.

## 174 / Special Telephones

The CAP module displays the busy/not busy status of the telephones in your system by using the triangular indicators beside Internal Autodial, Programmed Feature or line buttons. A CAP can support 120 external lines.

You can send up to 30 messages from a CAP.

For more information, see the *Norstar Central Answering Position User Card*.

### Control telephone

The Control telephone lets you place the external lines for which it has responsibility into a group of Service Modes. See Service Modes.

### Direct-dial telephone

You can dial a Direct-dial telephone with a single digit. The Direct-dial telephone is usually in a central location, such as a receptionist's or secretary's desk. It is usually a Prime telephone and a Central Answering Position (CAP).

There may be up to five Direct-dial telephones in your system, but each telephone in the system is assigned to a single Direct-dial telephone. There is a single Direct-dial digit for the whole system that lets each telephone call its assigned Direct-dial telephone.

Each Norstar Direct-dial telephone can send up to 30 messages and each can invoke Service Modes to activate the Extra-dial telephone.

Your Installer sets up Direct-dial telephones in Configuration programming. The System Coordinator assigns telephones to Direct-dial telephone? in Administration programming.

### Emergency telephone

The Emergency telephone is a single-line telephone (not a Norstar telephone) that functions independently of the Norstar system. You can use the Emergency telephone when your Norstar system is not working.

Emergency Transfer/Power Failure Cut-through provides basic telephone service on external line 001 through an Emergency telephone if the power fails or if a system error occurs.

The Emergency telephone is usually located near the Key Service Unit (KSU). Each KSU can support two Emergency telephones, and each Trunk Module can support one additional Emergency telephone.

### Extra-dial telephone

In Service Modes, a second telephone can be assigned to ring on calls made to a Direct-dial telephone. There may be one Extra-dial telephone for each Direct-dial telephone, and it may be a different telephone in each Service Mode.

### Hotline telephone

You can call a programmed internal or external telephone number simply by picking up the receiver of the Hotline telephone (or by pressing ).

A Hotline telephone can be set up to dial an operator or an emergency number. You should put a notice by the Hotline telephone to let people know which number will be dialed when they lift the receiver.

If the Hotline telephone is set up to dial an external number using the Prime line, there must be an external Prime line assigned to the telephone. If not, the Hotline call will fail.

The System Coordinator sets up the Hotline telephone, the telephone number it dials, and the line on which that number is dialed, in Administration programming.

### To bypass a Hotline

Press a line button, or use the Pre-Dial or Automatic Dial feature before you pick up the receiver or press .

The following displays may occur at a Hotline telephone.

Line in use	The line assigned to the Hotline is in use. Make the call using normal methods or wait until the Hotline line is free.
No line selected	The Hotline has been set up to dial an external number on a Prime line but the Hotline telephone does not have a Prime line. This must be corrected in Configuration or Administration programming.
No free lines	The Hotline has been set up to dial an external number on a Prime line but the Hotline telephone has an internal Prime line and no access to line pools. This must be corrected in Configuration or Administration programming. This message may also appear if the line pool assigned to the telephone is busy.

### Prime telephone

Each line in a Norstar system can have a telephone assigned to it as a Prime telephone. Calls not answered at their normal destinations are transferred to the Prime telephone. The Prime telephone is usually the telephone on the receptionists desk and it is often the Control telephone and a Central Answering Position as well. A Prime telephone is assigned to a line in Configuration programming.

See the Answering the telephone section for the displays that may occur at a Prime telephone.

## Speed Dial

Speed Dial 177

### Make a Speed Dial call

You can quickly dial external telephone numbers that have been programmed onto Speed Dial codes.

1. Press **Feature** **0**.
2. Enter the appropriate two-digit Speed Dial code.

Norstar supports two types of Speed Dial codes, Personal and System. System Speed Dial codes are from 01 to 70. The System Administrator can assign numbers to System Speed Dial codes for the entire system in Administration programming. Personal Speed Dial codes are from 71 to 94 and may have different numbers assigned to them on each telephone. Users can program their own Personal Speed Dial numbers.

### Program Personal Speed Dial

You can add or change a Personal Speed Dial number on your telephone.

1. Press **Feature** **\*** **4**.
2. Enter the code that you want to associate with a telephone number.
3. If you want to include a line selection for this number, select the line or line pool. For the M7100 Telephone, you can only select a line pool.
4. Enter the number you want to program.
5. Press **OK** or **Hold**.

## Displays

You will see some of these prompts while using or programming Speed Dial.

9.  
QUIT BKSP OK

Continue entering the number you wish to program. You can change the number by pressing the left side of the volume bar or by pressing **BKSP**. When you are finished, press **Hold** or **OK**.

Access denied

You have tried to program a Personal Speed Dial number while someone else on the system is in Configuration b or Administration programming.

Autodial full

You have tried to enter a new Personal Speed Dial Number, but the memory for these numbers in your Norstar system is full.

Enter code:

Enter a two-digit code between 71 and 94 for the personal speed dial number you want to program.

Enter digits  
QUIT OK

Enter the telephone number you wish to program **exactly** as you would if you were dialing it normally. When you are finished, press **Hold** or **OK**.

Invalid code

You have entered a code outside the code range (01-94).

Line in use

The line associated with the speed dial number you are trying to use is busy.

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, select the line or line pool. Otherwise, enter the telephone number you wish to program exactly as you would if you were dialing it normally. When you are finished, press **Hold**.

Program and OK  
QUIT OK

If you want to program a line or line pool selection for this Speed Dial, select the line or line pool. Otherwise, enter the telephone number you wish to program exactly as you would if you were dialing it normally. When you are finished, press **Hold** or **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.

Speed dial>

Enter a two-digit Speed Dial code (01-94). You must enter the zero for codes 01 to 09.

## Notes

There is no difference between using Personal Speed Dial and using System Speed Dial. They differ only in how you program them.

Speed Dial numbers may include line choices and Host System Signaling codes.

Speed Dial numbers are subject to the same Class of Service as regularly dialed numbers. System Speed Dial numbers can be programmed to bypass dialing restrictions.

Normally, Speed Dial numbers are shown on the display while they are being dialed. System Speed Dial numbers may be programmed to show a Speed Dial name instead of the number, keeping the actual number confidential.

k

## System features

The following features are available for the entire Norstar system.

### Accidental Disconnect Protection

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

1. Pick up the receiver again or press **Handfree**. You are connected to your call.

### Automatic telephone relocation

If Automatic telephone relocation is enabled, you can move your telephone from one Norstar jack to another without it losing any of its custom programming. Your Installer enables Automatic telephone relocation in Configuration programming.

### Background Music

You can listen to music through your telephone speaker.

1. Press **Feature** **8** **6**.

#### WARNING

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.

Northern Telecom Inc. hereby disclaims any liability arising out of the failure to obtain such a license.

The music stops automatically if you make or answer a call.

Your **Installer** makes this feature available to all telephones in Configuration programming. You will need to supply a music source, such as a radio, attached to your KSU.

## Cancel Background Music

Feature # 8 6

You can cancel Background Music.

1. Press Feature # 8 6.

## Class of Service

The Class of Service for a call consists of all the Norstar features and lines available to you for that call. This is determined by the features assigned to the telephone in Administration programming, including all Dialing Filters and Remote Access Packages.

Users who need to dial numbers not permitted by the Class of Service of the line or telephone that they are using, can switch to a different Class of Service by entering a Class of Service Password. Remote users can change the set of Norstar features available to them by entering the DISA DN followed by a Class of Service password.

## internal numbers

Each telephone in the Norstar system has its own internal number. The length of internal numbers in your system may be from 2 to 7 digits for a non-expanded system or 3 to 7 digits for an expanded system. All numbers in your system are the same length. Your Installer sets the length of internal numbers (also called the DN length) in Configuration programming.

To find out your internal number, use the Button Inquiry feature (Feature \* 0) on an internal line button. On the M7100 Telephone, Button inquiry shows your internal number followed by the function assigned to your single memory button.

## Lines

The following features and characteristics are associated with the use of lines.

## 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 assigns disconnect supervision to lines in Configuration programming. Disconnect supervision can be turned on and off only on Loop start trunks. E&M and DID trunks are always disconnect supervised.

## Line appearance

Any of the lines in your system may appear at any of your telephones. Your Installer assigns lines to telephones in Configuration programming.

Usually, only the lines that are appropriate for a particular person appear at that person's 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 Telephone has no line buttons for its lines.

Normally, you cannot answer a call that is ringing on a line that does not appear on your telephone. To pick up such a call, use Call Pickup, Call Park, or Transfer.

## Hung lines

A line that has been redirected using Line Redirection may remain busy after a call is over. If this happens, the outgoing line for the redirection will also remain busy. These are hung lines and you must clear them.

A line indicator that has been solid for a long time is the only real indication that a line is hung. However, the solid line indicator may also indicate a genuine call in progress. Make reasonably sure that the line is indeed hung before clearing it or you may cut off a real conversation.

You can clear a hung line only at the telephone that was used to redirect the line.

1. Press **Feature** **[\*]** at the telephone that was used to redirect the line.
2. Press the button of the redirected line.
3. Press **SHOW** or **[#]**.
4. Press **DROP** or **Q**. The hung line is cleared.

Clearing the redirected line clears the outgoing line for the redirection as well.

#### 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 by pressing a memory button programmed with the line pool feature code.

#### 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.

#### 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 **Handfree**. This is your Prime line.

#### Ringing Line Preference

Each telephone in the **Norstar** system can be programmed to ring or remain silent for incoming calls on any external lines that appear on the telephone.

For example, a telephone may have buttons assigned for lines 1 to 3, but have only lines 1 and 2 programmed to ring. 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 actually ring.

If a telephone has an external line as a Prime line, that line is usually made to ring.

#### Target line

A target line is used to route a call dialed with a particular number to a particular telephone or group of telephones. A target line can be used for incoming calls only. A single trunk may provide connections to several different target lines. This allows each person or department in the office to have their own number without having as many trunks on the system as there are people in the office.

#### 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 will go to the Prime telephone for the incoming trunk.

## System Speed Dial

Speed Dial codes 01 to 70 are the same for the entire system. See the Speed Dial section for details.

## Timefeatures,

The Time features let you check the present time and how long you have spent on a call.

### Call Duration Timer

You can see how long you spent on your last call or how long you have been on your present Call.

1. Press **Feature** **7** **7** b
2. Read the display.

### Show Time

You can see the present date and time while you are on a call.

1. Press **Feature** **8** **0** **9**.
2. Read the display.

### Displays

One of the following displays will occur when you use a Time feature.

Make call first

You have not made a call since your telephone's clock was last reset.

221 02:47

The display shows the last call you made, or the current call, and the total elapsed time in minutes and seconds.

Apr 9 9:54 am

The display shows the present time.

## Transfer

**Feature** **7** **0**

### Transfer a call

You can transfer a call to a telephone in your Norstar system, within the Norstar network, or external to Norstar:

1. Make a call, answer a call or take a call off hold.
2. Press **Feature** **7** **0** (or **Transfer** if programmed).
3. To transfer within the Norstar system: dial an internal telephone number or press an Internal **Autodial** button.

To transfer within the network or external to Norstar: press a line button and dial the number to which you want to transfer the call, or press an External **Autodial** button.

4. Announce the call after the called party answers. If you do not want to announce the call, complete the transfer as follows.
5. Press **Ris** or **JOIN** or a programmed Call Queuing button if you wish to answer another call.
6. The call is immediately transferred.

Note: When transferring an external call to an external number, note the following restrictions: at least one of the external calls must have been an incoming call, and that call must be on a disconnect supervised line.

### Unsupervised Conference

You can use the Unsupervised Conference feature to connect yourself and two other people, then drop out of the conference leaving the other two to talk to each other. If both parties are external, certain restrictions apply. See Notes at the end of this section.

1. Establish a Conference call as described in Conference.
2. Press **Feature** **7** **0**.

If you are unable to establish an unsupervised conference, you can put the conference on hold. See the Conference section.

## Transfer using Hold

Transfer using Hold can only be used to transfer an external call to another telephone that has a button for the line that the external call is on.

Call the person you want to transfer the call to and tell them there is a call on hold for them. Do not enter **the** Transfer feature code. To accept the call, your co-worker presses the line button with the flashing indicator.

An M7100 Telephone can transfer a call using Hold but it cannot receive a call transferred in this way.

## Displays

You will see some of the following displays while transferring calls.

221 busy  
CANCL RETRY

The person to whom you tried to transfer a call is on another call. Press **RETRY** to enter a new internal number. On the M7100 Telephone, you will automatically be returned to the Transfer to: prompt.

Call transferred

Transient message to indicate that the transfer was successfully completed.

221 DND  
CALLBACK

The person to whom you tried to transfer an external call has Do Not Disturb active on their telephone. Press **CALLBACK** or the flashing line button to reconnect to the call. On the M7100 Telephone, lift the receiver.

Do not disturb  
CANCL RETRY JOIN

The person to whom you tried to transfer an internal call has Do Not Disturb active on their telephone. Press CANCL or the flashing line button to reconnect to the call. On the M7100 Telephone, enter the transfer cancellation code (Feature **7 0**) to reconnect to the call.

221 hung up  
CANCL RETRY

The internal caller you were trying to transfer hung up before the transfer was complete.

Invalid number  
CANCL RETRY

An invalid DN **has been** entered, or the transfer feature has been invoked before the complete DN has been entered.

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 M7100 Telephone, lift the receiver.

221>222  
CANCL RETRY JOIN

Press **RETRY** if, after talking to the person at extension 221, you decide to transfer the call to someone else. Press **AS** or **JOIN** to transfer the call from telephone 221 to 222.

Line001 hung up

The external caller you were trying to transfer has 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.

Make call first

You have tried to use the Transfer feature when you have no call to transfer.

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 transfer  
CANCL RETRY

Once you have invoked the transfer feature you must complete the transfer actions before you can 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 internal 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. See Notes at the end of this section.
- An **Unsupervised** Conference is not possible for your call. See Notes at the end of this section.

Transfer to:  
CANCL RETRY

Press **RETRY** if you entered the wrong internal number or if the person you are transferring the call to is unavailable.

## Notes

If an external call is transferred to a busy telephone, or not answered after a few rings, the call automatically rings you back and the display indicates that the telephone was busy or that no one answered.

You can establish an Unsupervised Conference whether the other two people are inside or outside the **Norstar** system. However, if both of the other people are outside the system there are some restrictions: at least one of the outside callers must have called you and that call must be on a disconnect supervised line.

When transferring an external call to an external number, note the following **restrictions**: at least one of the external calls must have been an incoming call, and that call **must** be on a disconnect supervised line.

In certain situations, you may experience lower volume levels when using external Transfer and unsupervised Conference with two external calls.

## Using Norstar remotely<sup>91</sup>

You can use the lines, and some of the features, of a **Norstar** system from outside that system. You can do this over the public telephone network when you are away from the office, or you can call into a **Norstar** system in another office from your own **Norstar** system over a private network.

The exact facilities available to you through Remote Access will vary depending on how your system is set up. The **Norstar** features that can be made available to remote users are: access to lines, access to line pools, and remote paging.

## Examples

A salesman who spends most of his time on the road 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 that salesman with a Class of Service password that gives access to the transatlantic line. The salesman can then telephone into the **Norstar** system from a clients site, enter his Class of Service password, and use the leased transatlantic line to make his calls.

The manager of one of your branch offices also needs to talk to the European office. She uses a private network line between her branch office and the head office to access the head office's **Norstar** system and use its transatlantic lines.

## Accessing Norstar remotely

### Over the public network

You can use **Norstar** remotely over the public telephone network.

1. Dial the **Norstar** system's remote access number.
2. If you hear a stuttered dial tone, enter a COS password.
3. Wait for the system dial tone.

### Over a private network

You can access Norstar remotely using a private network line.

1. Select the private network line or the line pool that contains private network lines.
2. Dial the number, if any, needed to access the remote system.
3. If you hear a stuttered dial tone, enter a COS password.
4. Wait for system dial tone.

### Using Norstar remotely

Once connected to a remote system you can do any one of the following:

- enter the DISA DN followed by a COS password to change your Class of Service.
- dial the number of someone on the remote Norstar system.
- dial a line pool access code and make an external call.
- enter a Page feature code (60 through 63). Use \* instead of  when entering the feature codes. See Page.



### Tones you may hear

<p>Busy tone</p>	<p>The number you dialed on the Norstar system is busy. Your call will be disconnected after five seconds.</p> <p>You may:</p> <ul style="list-style-type: none"> <li>· enter the DISA DN followed by a COS password to change your Class of Service.</li> <li>· dial the number of someone on the remote Norstar system.</li> <li>· dial a line pool access code and make an external call.</li> <li>· enter a Page feature code (60 through 63) using * instead of <input type="text" value="Feature"/>. See Page.</li> </ul>
<p>Norstar system dial tone</p>	<p>You have done one of the following:</p> <ul style="list-style-type: none"> <li>· entered an incorrect COS password. Your call will be disconnected after five seconds.</li> <li>· taken too long while entering a COS password. Your call will be disconnected after five seconds.</li> <li>· tried to use a line pool or feature not permitted by your Class of Service. You will hear system dial tone again after five seconds.</li> <li>· dialed a number in the Norstar system which does not exist. Your call will be disconnected after five seconds.</li> </ul>
<p>Fast busy tone</p>	<p>Enter your COS password on the dial pad of your telephone.</p>
<p>Stuttered dial tone</p>	

## Controlling access to your Norstar system

It is important that you maintain the security of your Norstar system by limiting access to authorized users and limiting those users to just those features they need. Remember that a remote user can make long distance calls that will be charged to your company and can make page announcements in your office.

### Direct Inward System Access

You can control access to your Norstar system with Direct Inward System Access (DISA). If you set up the trunk used for remote access for auto-answer with DISA, callers will hear a stuttered dial tone and must enter a Class of Service password before they are allowed into the system. Access to your Norstar system from the public telephone network should always be controlled with DISA.

If you are setting up access to your system from another Norstar system over a private network, you may not need DISA. If you set up your E&M trunk to answer without DISA, callers from remote Norstar systems will receive system dial tone immediately.

Your DISA facility has a number (the DISA DN) which an external caller can dial when they hear system dial tone to activate DISA and enter a Class of Service password to change to a different Class of Service.

### Class of Service

You can control which feature a remote user can access through the Class of Service for the call. The Class of Service of a Remote Access call is determined either by the Class of Service password entered when the system answers with DISA or by the Class of Service associated with the trunk when the system answers without DISA.

After having accessed the system, a remote user can change the Class of Service for the call by dialing the DISA DN followed by a 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.

## Notes

To use the system remotely, the telephone you are using to call the system must use tone dialing.

Remote Access is possible only on DID and E&M trunks, and Loop start trunks that are set to auto-answer.

If the Loop start trunk used for Remote Access is set to unsupervised mode, auto-answer will not function and the caller will hear ringing instead of a stuttered or the system dial tone.

If you use one Norstar system to call remotely into another Norstar system, you can use the available features of the remote Norstar system by pressing \* followed by the feature code. If you press **Feature**, you will invoke the features of the local system, not the remote one.

Your Installer sets trunks to be auto-answer, with or without DISA, in Configuration programming. DNs are set in Configuration programming. The System Coordinator sets up Classes of Service and Class of Service passwords in Administration programming.

In certain situations, you may experience lower volume levels when using DISA or using Norstar remotely.

## Voice Call

Feature 8 8

### Make a voice call.

You can make an **announcement** or begin a conversation through the speaker of another telephone in the System.

1. Press **Feature 8 8**.

### Mute 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. You can stop it beeping.

1. Pick up the receiver or press **Handsfree Mute**.

### Handsfree Answerback

If Handsfree Answerback is assigned to your telephone, you can respond to a Voice Call without touching the telephone.

1. When someone makes a Voice Call to you, simply start talking. Your telephone's microphone picks up your voice.

Your telephone will beep periodically to remind you the microphone is on. You can stop it beeping.

1. Pick up the receiver or press **Handsfree Mute**.

### Voice Call Deny

You can prevent your telephone from receiving Voice Calls.

Feature 8 8

1. Press **Feature 8 8**. Voice Calls will ring like regular internal calls, Your other calls will proceed normally.

### Cancel Voice Call Deny

You can cancel Voice Call Deny.

Feature # 8 8

1. Press **Feature # 8 8**.



## Displays

You will see some of these displays while making a Voice Call:

Dial voice call

Dial the internal number or press the internal **Autodial** button of the person to whom you want to speak.

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; it is in Call Forward mode; it is in Do Not Disturb mode; it has Voice Call Deny turned on; it is not a **Norstar** telephone.

Your call proceeds automatically as a regular ringing call.

## Notes

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

When you have Handsfree Answerback assigned to your telephone, and you are using an on-hook Dialing Mode, the microphone and speaker are both activated for external calls,

The System Coordinator assigns Handsfree Answerback to a telephone in Administration programming. You can not assign Handsfree Answerback capability to the M7100 Telephone.

### Using Norstar features:

- Using a Norstar feature**
1. Press **Feature**, and enter the **desired** feature code on the dial pad.  
**OR**  
**Press** the programmed **memory** button.
  2. **Follow** the display messages.

**Note:** On M7310 and M7324 Telephones, some **features** are also available on the display buttons.

- Programming a Norstar feature on a memory button**
1. From an idle telephone, or with your calls on hold, press **Feature** **[X]** **[Y]**.
  2. Press the memory button that you want to program. (This step is not required on the M7100 Telephone.) See your telephone user card for the location of the memory buttons.
  3. Enter the feature code you want to program.

### Personalizing your telephone

- Autobumping** **Feature** **[6]** **[1]** **[5]** Allows the oldest log entry to be deleted from a full Call Log when a new item is logged, so that the new log entry can be **stored**. For more information, see Call Log.  
**Cancel** **Feature** **[4]** **[6]** **[5]**
- Background Music** **Feature** **[6]** **[6]** Allows you to listen to **music** (provided by your office) through your telephone speaker when you are not on a call.  
**Cancel** **Feature** **[4]** **[6]** **[6]**
- Button Inquiry** **Feature** **[4]** **[0]** Checks what is programmed on any button. Use this feature when **labeling** memory buttons.
- Call Log Password** **Program** **[4]** **[6]** **[5]** **password** for your Call Log. To remove the password, see your System Coordinator.
- Class of Service** **Feature** **[6]** **[8]** Overrides the **Class of Service** on a telephone to allow you to make a call from that telephone. The **Class** of Service determines which numbers you can dial. Switch from one **Class** of Service to another using this feature code and a password provided by your System Coordinator.
- Contrast Adjustment** **Feature** **[4]** **[7]** Adjusts the contrast of your telephone display. Press **[1]** through **[9]** (depending on your telephone).
- Dialing Modes** **Feature** **[4]** **[6]** **[2]** Changes the on-hook Dialing Modes. The three Dialing Modes are:  
**Automatic Dial:** If you have a Prime line, dial a telephone number without pressing a line button. A line is selected **automatically**.  
**Pre-Dial:** Dial a telephone number. Edit it by pressing **BACKSP**, or the left side of **[4]** **[0]**. Press a line button to place the call.  
**Standard Dial:** Press a line button, then dial a telephone number.
- Do Not Disturb** **Feature** **[4]** **[5]** Prevents incoming calls from ringing at your telephone.  
**Cancel** **Feature** **[4]** **[6]** **[5]**
- Language Choice** **Selects** **[1]** **[6]** **[5]** **[0]** **[1]** **[3]**h language for the telephone display.  
**SELECTS** **[1]** **[6]** **[5]** **[0]** **[1]** **[7]**h language for the telephone display.

**Moving Line Buttons** **Change** **1** **6** Position of a line button. Remember to switch the button caps after the line button is moved. Lines cannot be moved to positions occupied by **Intercom**, **Handfree**, or **Answer** buttons.

**Programming Call Log** **Select** **1** **7** **9** of calls that will be automatically stored in your Call Log.

**Programming memory buttons** **Feature** **7** **1** External **Autodial**: Stores a line (Optional) and an external telephone number onto a **memory** button for one-but-ton access to that number.  
**Feature** **7** **2** Internal **Autodial**: Stores an internal telephone number onto a **memory** button for one-button access to that telephone number.  
**Feature** **7** **3** Program **Features**: Stores a feature onto a memory button for one-button access to that feature.

**Note:** **Line**, **Intercom**, **Answer**, or **Handfree** cannot be programmed.

**Programming a feature button:**

1. Press **Feature** **7** **3**. (For M7100 Telephones, go to Step 3.)
2. Press the memory button you want to program.
3. Enter the feature code of the feature you want to program.
4. If you entered the Line Pool feature code in step 3, enter the access code for a line pool.

**Ring Type** **Feature** **8** **6** Selects a distinctive ring to help differentiate between Your telephone and others nearby. Enter the feature code and Press **NEXT** or **1** through **6** to select the new Ring Type. Press **Hold** or **OK** to store the new ring.

**Ring Volume** **Feature** **8** **0** **0** Makes your telephone ring so you can adjust the volume, even while you are on a call.

**Run/Stop** **Feature** **9** **9** When using the External **Autodial** programming feature, inserts a break point between two or more numbers stored on a memory button. Press the **memory** button once to dial the first number; a second time to dial the second number, and so on.

**Speed Dial** **Feature** **9** **4** Personal: Programs a telephone number into a Personal Speed Dial code (from 71 to 94).

**Programming a Personal Speed Dial code:**

1. Press **Feature** **9** **4** to enter Personal Speed Dial codes.
2. Enter a two-digit code (from 71 to 94).
3. To program a line as part of the Speed Dial code, press a line button or a line Pool button.
4. Enter the telephone number to be assigned to that code. Telephone numbers cannot exceed 24 digits.
5. Press **Hold** or **OK** to finish programming.

**Voice Call Deny** **Feature** **8** **8** Prevents your telephone from receiving Voice Calls, permits only ordinary ringing calls.  
 Cancel **Feature** **8** **8** **8**

**Remote system signaling**

**Link** **Feature** **7** **1** Generates a Link signal (also called flash or recall) on an active line to access other systems or carriers.

**Long Tones** **Feature** **7** **2** **1** Communication with devices (such as fax or answering machines) on an active line that use longer tone signals. The tone lasts as long as a dial pad button is held down, and only for the current call.

**Pause** **Feature** **7** **8** When programmed in an External **Autodial** sequence, inserts a 1.5-second delay in a number being dialed.  
 For Pulse and Tone Dialing  
 For Pulse Dialing only

**Programmed Release** **Feature** **8** **9** When programmed at the end of an External **Autodial** sequence, performs the same function as **1**.

**Using Norstar from outside the office**

**Calling Norstar from outside the office**

You can use your Norstar system even when you are not in the office to make calls or use the paging feature. You may be required to enter a Class of Service password to get onto the system. Your Class of Service determines which features you can use and which numbers you can dial.

**Note:** Ask your System Coordinator for details on your Classes of Service and Class of Service password.

**Connecting to the Norstar system:**

1. Dial the remote access number provided by your System Coordinator.
2. If you hear a stuttered dial tone, enter a 6 digit COS password.
3. When YOU hear a steady dial tone, you are connected to the Norstar system, YOU can do one of the following:
  - Change Your Class Of Service by dialing the DISA DN and entering a Class of Service password.
  - Dial the number of someone in the office.
  - Enter a line pool access code to use external lines in a line pool.
  - Enter a Page feature code (**8** **0** through **8** **9**) and the appropriate zone number to page someone in the office. See the Page feature on this card for more information on the Page feature.

**System features**

Call Duration Timer	Feature 7 7	Briefly displays the length of your current call. If your telephone is idle, the length of your most recent call is displayed.
Call Log	Opens 0 1 1 0 8	Log to view stored caller information: The Call Log displays use special characters. <ul style="list-style-type: none"> <li>1 A new item in the Call Log is underlined.</li> <li>2 Answered calls are identified.</li> <li>3 Long distance calls are identified.</li> <li>4 The displayed information has been truncated.</li> </ul>
<p>Note: Names and numbers for external callers are disolved only if you have subscribed to Call Display services from your local telephone company.</p> <p>Calling from your Call Log:</p> <ol style="list-style-type: none"> <li>Navigate to the appropriate log item, and display the number.</li> <li>Edit the number, if required. The leading digits may need to be trimmed, or digits may need to be added for Long Distance or line pool access. See your System Coordinator.</li> <li>Press a line button.</li> <li>Lift the receiver.</li> </ol>		
Message	Feature 6 5	Reply to Message: Review your list of external and internal display messages, and return calls. Cancel Feature 7 6 5
	Feature	Send Message: Leave a message on a to-worker's telephone display to call you back. Cancel Feature 7 7
Page	Feature 6 0	Allows you to make announcements through either the internal or external speakers, or both. Enter the feature code, the page code (1 for internal, 2 for external, or 3 for both), and the zone (0 to 6).
	Feature 6 2	External: Allows you to make announcements through your office's loudspeaker system (if connected).
	Feature 6 9	<b>External/Internal:</b> Allows you to make announcements through both your Norstar telephone speakers and your office's loudspeaker system. Enter the feature code, and the zone (0 to 6).
	Feature 6 1	<b>Internal (Zone):</b> Allows you to make announcements, through the Norstar telephone speakers, to a group of Norstar telephones. Enter the feature code, and the zone (0 to 6). 0 pages all zones.
Service Modes	Feature 8 7	Activates one of up to three different telephone answering options, eliminating the need to forward all your calls. Only an assigned Control Telephone can turn ON Service Modes. See your System Coordinator. Cancel Feature 4 8 7
Show Time	Feature 6 8 5	Displays the date and the time.

**Handling calls**

Call Forward	Feature 4	Sends your calls to another telephone in your Norstar system. Cancel Feature 7 4
	Feature 8 2	Camp-On: Re-routes a call to another telephone even if all its lines are busy.
	Feature 8 4	Line Redirection: Redirects one or more lines on your telephone so that Calls coming in on the line(s) are directed to one or more locations outside the Norstar system. Cancel Feature 7 8 4
Call Information	Feature 8 1 1	Briefly displays the name, number and line name of a ringing or held call. Press 7 or VIEW repeatedly to cycle through the three displays of Information.  Note: Names and numbers for external callers are displayed only if you have subscribed to Call Display services from your local telephone company.
Call Park	Feature 7 4	Automatically puts a call on hold so that it can be retrieved from any telephone in your Norstar system. The display shows a retrieval code.
	Grab 3 1 Retrieval 3 0 0	<b>Retrieval:</b> Answers a parked call from any telephone in your Norstar system by pressing Intercom and dialing the retrieval code. On the M7100 Telephone, dial just the retrieval code. The retrieval code is made up of a programmable Call Park prefix (0 to 9), followed by a call number (01 to 09).
Conference	Feature	<p><b>Setting up a three-person call:</b></p> <ol style="list-style-type: none"> <li>Make or answer the first call.</li> <li>Put the first call on hold.</li> <li>Make or answer the second call.</li> <li>Press Feature 3 (or press Conf/Trans if programmed).</li> <li>Press the fine button of the first held call. (This step is not required on the M7100 Telephone.)</li> </ol> <p><b>Splitting a conference:</b> To speak privately to one of the callers, or to drop one call and stay connected to another, or to hold both parties as separate calls, you must first split the conference.</p> <ol style="list-style-type: none"> <li>Press the line button for one of the calls. The other call is put on hold. To re-establish the conference, press Feature 3.</li> </ol> <p><b>Removing yourself from the conference temporarily:</b></p> <ol style="list-style-type: none"> <li>Press Hold; the other two callers can still speak to each other.</li> </ol> <p><b>Removing yourself from the conference permanently:</b></p> <ol style="list-style-type: none"> <li>Press Feature 7 6 (or Transfer if programmed). The other two parties remain connected.</li> </ol> <p><b>Note:</b> Some external lines may not support this type of transfer if two external parties are involved.</p>

Do Not Disturb	Feature 6 5	Blocks an alerting Priority Call on your telephone.
Exclusive Hold	Feature 7 6 or Feature 7 5	Temporarily <b>suspends</b> an external call and prevents other <b>Feature 7 5</b> from picking it up. <b>Exclusive Hold Retrieval:</b> Press pi.) of the held call. (Press <b>Hold</b> on the M7100 Telephone.)
Group listening	Allows you to use both the receiver and your speaker at the same time while you are on a call. If you <b>experience</b> feedback, turn the volume down, and before hanging up; press <b>Ans</b> . Cancel <b>Feature 2 0 0 2</b>	
Logit	Stores caller information for the current active call in your Call Log. <b>Note:</b> Names and numbers for external callers are displayed only if you have subscribed to Call Display services from your local telephone company.	
Privacy	Feature 8 3 When Privacy is ON, other <b>Norstar</b> users with the same line are prevented from joining your current external call. If Privacy is OFF, other <b>Norstar</b> users with the same line can join in on your external call by pressing that line button. Enter the feature code a second time to restore the <b>original</b> setting.	
Transfer	Feature 7 0 Sends a call to another telephone in your <b>Norstar</b> system, over a <b>network</b> or outside your <b>Norstar</b> system.	

**Using Transfer**

1. Make or answer a call.
2. Press **Feature 7 0** (or **Transfer** if programmed).
3. Dial an internal telephone number, or press an **Autodial** button.
4. If you wish, you can announce the call after the called party answers.
5. Press **Ans** or **JOIN**.

The call is immediately transferred.

**Transfer within your Norstar network or external to Norstar**

1. Make or answer a call.
2. Press **Feature 7 0** (or **Transfer** if programmed).
3. Select a line and dial the telephone number that you wish to transfer the call to.
4. If you wish, you can announce the call after the called party answers.
5. Press **Ans** or **JOIN**.

The call is immediately transferred.

You can also do an external transfer using Unsupervised Conference:

1. Make or answer a call.
2. Call the person to whom you wish to transfer the call.
3. Establish a conference with the two parties.
4. Drop Out of the conference using the Unsupervised Conference feature.

**Note:** If an external call is transferred to a busy internal line, or not answered after a few rings, the call automatically rings you back and the display indicates that the line was busy or that no one answered.

**Answering and making calls**

Call Pickup	Feature 7 6 Feature 7 5	Directed Pickup: Answers a selected telephone in your system. Group Pickup: Answers a call that is ringing at another telephone in the same pickup group. The external call that has been ringing longest is answered first.
Call Queuing	Feature 8 3 0 0	Answers an external call that is ringing on a line that has been placed into <b>Service Modes</b> from any telephone in the <b>Norstar</b> system. This feature does not work on <b>Private</b> lines.
Last Number Aedial	Feature 8	Automatically redials the last external telephone number that you dialed. This feature is available on the <b>Last No.</b> memory button on most telephones.
Line Pools	Feature 8 4	Telephones can share several external lines for making outgoing calls without requiring each telephone to have a button for every line.

**Using a Line Pool:**

1. Press **Intercom** and dial the Line Pool access code for one of the Line Pools assigned to your telephone, or press **Line pool** (if programmed).
2. If you are using a line pool which connects you to the public network, dial the telephone number of the person you want to call.

If you are using a line pool that automatically connects you to another **Norstar** system, see **Using Norstar** from outside the office.

If you are using a line pool which automatically connects you to a system other than **Norstar**, follow the procedure for using that system. Ask your System Coordinator if you need help.

**Note:** See your System Coordinator for your Line Pool access code.

Priority Call	Feature 6 9	Interrupts a call at another telephone, or overrides Do Not Disturb at a telephone. See your System Coordinator.
Ring Again	Feature 1 2	When another telephone or Line Pool within the <b>Norstar</b> system is busy, Ring Again signals you to call back when the telephone or Line Pool becomes available. Cancel <b>Feature 7 2</b>
Saved Number Redial	Feature 6 7	When you are active on a call, this feature stores the external telephone number of a call you have dialed. When you are not active on a call, this feature redials the number previously stored.
Speed Dial	Feature	Dials the number stored for a Speed Dial code. After entering the feature code, enter the two-digit Speed Dial code (01 to 94) for the number you want.
Voice Call	Feature 8 6	Begin a conversation through the speaker of another telephone without first making the other telephone ring. To answer a Voice Call, pick up the receiver, or press <b>Handfree</b> .

## The Norstar Prime Telephone

What is a Prime Telephone?

A **Prime Telephone** can be any Meridian **Norstar**® telephone that has been assigned to **provide** a backup answering **service for incoming external calls**. An external call rings at a Prime Telephone when the call is **not** answered at any other telephones with that call's line appearance.

A **Prime Telephone** can be any one of the following:

- any **Norstar** telephone
- an M7310 telephone with a Busy Lamp Field (BLF)
- an M7324 telephone with **Central** Answering Position (CAP) module.

Your role in operating a Prime Telephone

As the assigned Prime Telephone operator, you are responsible for answering unanswered external calls. You are alerted to these calls when your telephone display shows you a **descriptive** message, the **line** indicator ► flashes, and the call rings.

After answering a call, you may take a message or redirect the Call to another telephone.

Who assigns the external lines for my Prime Telephone?

Check with your System Coordinator to determine which external lines have been assigned for backup answering and which of those **lines** ring at your Prime Telephone. To help you do your job well, **this person** should provide a list of names and numbers associated with each **Norstar** telephone and **external line**, and a list of System Speed Dial names and numbers. **This person** can also tell you which features have been assigned to Your telephone.

There may be more than **one** Prime Telephone operator in your **Norstar** system. If this is the case, then each Prime Telephone operator is responsible for a particular group of assigned lines when providing a backup answering service. Let the appropriate people within your backup answering group know that you are now providing a service for them.

## Answering calls

When do I answer a call?

You answer a call if:

- someone within **Norstar** calls you. You hear the **Norstar** internal ring (two **quick rings** followed by a longer pause), and an indicator ► flashes beside one of your telephone's intercom buttons.
- an **external call** comes directly to **your** Prime Telephone. You hear the familiar external telephone ring, and an indicator ► flashes beside one of your telephone's external line buttons.
- a call is redirected to your Prime Telephone from somewhere else within the **Norstar** system. You hear an internal ring, an external ring, or the **Camp-On** tone (two quick beeps), and you see a message on the display of your telephone.

**Note:** You do **not** answer the call if your **Prime Telephone** does not ring.

How do I answer a call?

If you want a line to be automatically selected:

1. Pick up the **receiver** or press **Handsfree** (if assigned).

OR

If you want to manually answer a line:

1. Press the line or intercom button with a slow flashing indicator ►
2. Pick up the receiver if you want the handsfree microphone OFF.

**Note:** A fast flashing indicator ► shows that a line is on hold.

Handling more than one call at once

When you have more than one call arriving at your telephone, the Call Queuing feature allows you to answer each of the waiting calls by automatically selecting the next call for you.

Use Call Queuing when you are on a call and a new call alerts you by ringing at your telephone, or by sending Call Queuing tones.

1. Pick up the receiver to answer the first call.
2. Press **Programmed** **[0]** **[0]** or the Call Queuing button if the call you were on is automatically put on hold.
3. To return to a previous call: Press the external line button of the call on hold.
4. Continue to answer incoming calls.
5. Press **RC** when you are finished with the call you are on.

## Redirected calls:

Redirecting calls using display messages

The display messages which appear on your Prime Telephone for redirected **Norstar** calls should help you to understand why those calls were passed to your Prime Telephone. This information is useful when you need to decide what to do with the call once it has been answered.

The following table lists some example display messages that could appear on a Prime Telephone when you receive redirected calls:

Example Prime Telephone display message:	What is happening to the call at the other telephone:
<b>Held by KAREN</b>	Karen holds a call for too long.
<b>JOHN DND</b>	The call you transferred is returned to you because the telephone is in 00 Not Disturb mode.
<b>DRT Line 025</b>	Delayed Ring Transfer redirects an unanswered call on line 025.
<b>Line 012 to prime</b>	A call on line 012 cannot ring elsewhere.
<b>Line 010 JANET</b>	A call on line 010 was forwarded or routed to Janet, but was not answered.
<b>Line 003 callback</b>	A transferred, camped, or parked call on line 003 was returned to the originator using the Callback feature, but was not answered.

Held line reminder

The Held Line Reminder message **On hold: LINENAM** is repeated periodically after the first message **Held by KAREN** appears. This message is accompanied by the same tone used with the Camp-On feature (two quick beeps).

The Held Line Reminder message only shows the line name of one held call. If there is more than one call on hold, the line name of the oldest held call is shown. When you retrieve the oldest held call and then end that call by hanging up or putting it on hold, the display will change to show the next oldest held call, if any.

Note: If your KSU has an earlier system version, the Held Line Reminder message will be **Held call**.

## Completing a call

Your options

You have just answered a call for someone else. What do you do next?

You can:

Transfer the call to another telephone within your **Norstar** network, or outside the **Norstar** system.

OR

Camp the call on another **Norstar** telephone.

OR

Announce the call to the office, asking that someone take the call.

OR

Take a message.

Transferring the active call

To a **telephone** within your **Norstar** system:

Check whether the telephone to which you want to transfer is already busy:

- Is there an indicator ► beside the Internal **Autodial** button for the other telephone?
- If you have a **BLF**, is the indicator ON for the other telephone?
- If you have a **CAP** module, is the indicator ► ON for the other telephone?

To transfer a call:

1. Make or answer a call.
2. Enter the transfer feature code.
3. Dial an internal telephone number or press an **Autodial** button.
4. If you wish, you can announce the call after the called party answers.
5. Press **RA** Or **JOIN**.
6. The call is immediately transferred.

To a telephone within the **Norstar network** or external to **Norstar**:

Use the above procedure, substituting the following for step 3:

3. Press a line button and dial the number that you wish to transfer the call to.

You can also do an external transfer using Unsupervised Conference:

1. Make or answer a call.
2. Call the person to whom you wish to transfer the call.
3. Establish a conference with the two parties.
4. Drop out of the conference using the Unsupervised Conference feature.

**Note:** Some external lines may not support an unsupervised conference call. In this case, you may put the conference on hold, allowing the other two parties to continue talking to each other.

**Note:** 00 not use the **RA** button to create an unsupervised conference. Although it will create an unsupervised conference with internal parties, it will not work in a conference with two external parties.

## Completing a call

### Camping the call

If the **Norstar telephone** you want to transfer the call to is busy on another call, you may want to **camp** the call on that telephone. The person receiving the camped call will hear Camp-On tones (two quick beeps).

1. Press **Feature** **8** **9** or the Camp-On button (if programmed).
2. Dial the internal number of the other telephone or press its **Internal Autodial** button if programmed.

### Announcing the active call

You are trying to pass calls you have answered to co-workers who are not at their telephones. Using the Page feature, you can announce the calls over the **Norstar** telephones, an external loudspeaker, or both. A co-worker hearing an announcement can answer the call from the nearest **Norstar** telephone.

#### **If you want your co-worker to take the call from a specific Norstar telephone:**

1. Place the call on hold.
2. Using the Page feature, announce the call and the location of the telephone to which you will transfer the call.
3. Transfer the call to the appropriate **Norstar** telephone.  
OR  
Camp the call on the appropriate **Norstar** telephone.
4. Replace your receiver.

#### **If you want your co-worker to take the call on a specific line:**

1. Place the call on hold.
2. Use the Page feature to announce the call and its line number.
3. Replace the receiver.

Your co-worker can now go to the nearest **Norstar** telephone that has that line, select the line, and lift the receiver.

#### **If you want your co-worker to take the call from any Norstar telephone:**

1. Use the Call Park feature to place the call on hold. Your telephone shows a three-digit Call Park Retrieval code on the display.
2. Use the Page feature to announce the call and the Call Park Retrieval code.
3. Replace your receiver.

Your co-worker can now retrieve the call from any other **Norstar** telephone by lifting the receiver and dialing the three-digit code.

**Note:** Remember that callback (the call is redirected back to your Prime Telephone) occurs if your transferred, parked, or camped call goes unanswered.

## Useful Norstar features

### Informing your co-workers about their calls

Use the Send Message feature to notify co-workers that they should call you for information.

If the person you are trying to call is on another line, or their telephone has 00 Not Disturb ON, a display message shows you that their telephone is busy. If the person you are trying to call does not answer, a display message informs you that there is no reply. In each case, you can use the Ring Again feature.

The Ring Again feature is a method of ensuring that you immediately know when there is a change in the use of the other telephone. You can then try again to place a call.

### Working with other features

Some of the many special features which **Norstar** provides may be particularly useful to you. Some of these features, however, are only available if assigned during Configuration or Administration programming. Speak to your System Coordinator to determine which features you can use, and to obtain details on how to use them.

**Answer Group:** You can immediately answer and monitor a specific group of **Norstar** telephones, for example, your managers', using Answer buttons:

**Automatic Handsfree:** If programmed, you can use the Handsfree microphone and speaker for all your calls.

**Call Pickup Directed:** Anyone in the office can answer a call ringing at any other **Norstar** telephone by dialing that telephone's internal number.

**Call Pickup Group:** Any member of a specified group can answer an external or internal call ringing at another telephone within that specified group.

**Direct-Dial Telephone:** If your Prime Telephone is administered as a Direct-Dial telephone, anyone assigned to your Direct Dial telephone can quickly contact you by dialing an assigned single-digit number.

**Hotline:** A **Norstar** telephone may be programmed to automatically dial your Prime Telephone as soon as its receiver has been lifted.

**Multiple Prime Telephones:** There may be a requirement for more than one Prime Telephone to provide backup answering.

**Page Zone:** If you do not want to disturb the entire office with an announcement, you can direct the page to a choice of smaller areas.

**Priority Call:** If you have answered an urgent call for someone who is busy on another line, you can interrupt the person with this feature.

## Other information

Some unique situations

If an external call comes to you, and no remaining external line buttons are available, the indicator ► for that call will appear next to any available intercom buttons on your telephone.

If your Prime Telephone receives a callback call, you will hear the internal telephone ring instead of the familiar external telephone ring.

The Held Line Reminder or the Delayed Ring Transfer feature is not available unless assigned during Configuration programming.

If you are using all of your external line buttons and intercom buttons, you can still receive a camped call (you will hear **two** quick beeps).

If your Prime Telephone is an **M7324** telephone, you can monitor the busy/not busy status of other No star telephones. Check for the presence or absence of indicators ► beside the Internal **Autodial** buttons for the other telephones.

Where to get help

To learn more about **Norstar** and its features, the System Coordinator can provide you with the following **Norstar** documents:

The *Meridian Norstar Telephone User Cards* show you how to:

- make an external call
- make an internal call
- put a call on hold
- use  handfree
- program memory buttons.

The *Meridian Norstar Feature Card* lists the feature codes and describes the features.

The *Meridian Norstar Busy Lamp Field (ELF) User Card* describes how to use the Busy Lamp Field.

The *Meridian Norstar Central Answering Position (CAP) User Card* describes how to use Central Answering Position modules.

## Your Norstar M7100 telephone

**Release button**

cancels active calls.

**Display**

shows the time, date, call information and guides you while using **Norstar** features.

**Memory button**

is programmable to store a feature or to automatically dial internal or external number.

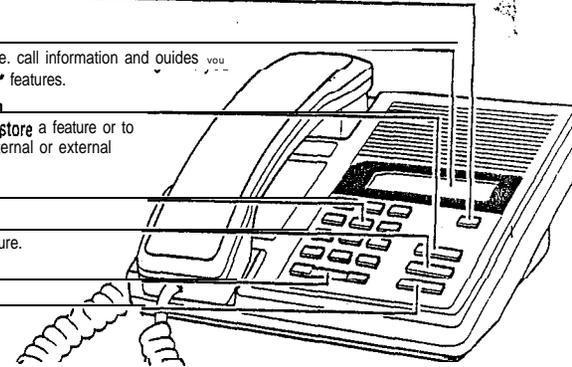
**Dial pad**

**Feature button**

starts or ends a feature.

**Volume control**

**Hold button**



Button inquiry

Confirm that Your memory button has the correct snap-on cap by checking its programming.

1. **Release** all calls and open lines with dial tone.
2. Press  .
3. Read the display.
4. Press  when finished.

Adjusting display contrast

1. Press  .
2. Press  to  for the level you want.

Selecting a ring type and volume

1. Press  .
2. Press , ,  or  to hear the different types of rings,
3. While the telephone is ringing, press  to adjust the volume.
4. Press  to store the ring.

Adjusting receiver or telephone speaker volume

1. Press  when using the receiver or the speaker.

softer louder

\* Meridian and Norstar are trademarks of Northern Telecom.

**Making calls**

- Internal calls
1. Pick up the receiver.
  2. Dial the internal number.

- External calls
1. Pick up the receiver.
  2. Dial [ ] for your system's external line access code].
  3. Dial the external telephone number.

**Note:** Internal numbers and the external access code are supplied by Your System Coordinator.

Making and answering a second call  
The M7100 telephone allows you to have two calls active at the same time. By using **Hold call** switch between calls.

To **answer a second call** while on another call

1. Press **Hold** to put the first call on hold.  
The second call automatically comes onto the line.

To **hold a call and make** a second call

1. Press **Hold** to put the first call on hold.
2. Dial the telephone number for the second Call.

To **return to the first** call

1. Press **Hold** again to return to the first call on hold.  
The second call is automatically put on hold.

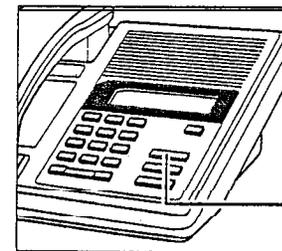
To **hold a call**

1. Press **Hold**.
2. Press **Hold** again to return to the call on hold.  
Check the display for confirmation or additional information.

Hold

**Programming the memory button**

About the memory button



The memory button can store a telephone number or feature code to give you one touch dialing or feature activation. You can change the memory button by programming it with a new number or feature code:

Memory button

Remember: Press **Feature** [ ] **Q** to check the memory button,

Programming memory buttons

**External autodial**

1. If you are on a call or an open line with dial tone, press **Hold** or **Rls**.
2. Press **Feature** [ ] [ ] .
3. Dial the external number.
4. Press **Hold** to store the number.
5. Label your new button.

**Internal autodial**

1. If you are on a call or an open line with dial tone, press **Hold** or **Rls**.
2. Press **Feature** [ ] [ ] .
3. Dial the internal number.
4. Label your new button.

**Features**

1. If you are on a call or an open line with dial tone, press **Hold** or **Rls**.
2. Press **Feature** [ ] [ ] .
3. Press **Feature** and the feature code.
4. Label your new button.

**Erasing memory buttons**

1. If you are on a call or an open line with dial tone, press **Hold** or **Rls**.
2. Press **Feature** [ ] [ ] .
3. Press **Hold** to erase the button.

## Your Norstar M7208 telephone

**Display**  
shows the time, date, call information and guides you while using Norstar® features.

**Indicators**  
appear beside active lines and features.

**Feature button**  
starts or ends a feature.

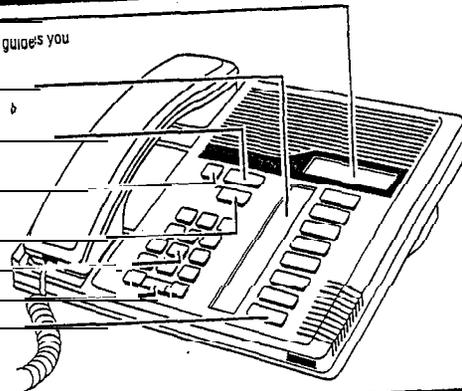
**Release button**  
cancels active calls.

**Hold button**

**Dial pad**

**Volume control**

**Memory and line buttons**  
are buttons with indicators for one touch dialing, feature operation or line access.



Button Inquiry

Confirm that your memory and line buttons have the correct snap-on caps by checking their programming.

1. Release all calls and open lines with dial tone.
2. Press **Feature** **[\*]** **[0]**.
3. Press the **button** you want to check.
4. Read the **display**.
5. Press **Feature** **[\*]** when finished.

Adjusting display contrast

1. Press **Feature** **[\*]** **[7]**.
2. Press a number on the dial pad for the contrast level YOU want. the higher the number the higher the contrast level.

Selecting a Ring Type and volume level

1. Press **Feature** **[\*]** **[6]**.
2. Press **[1]**, **[2]**, **[3]** or **[4]** to hear the different types of rings.
3. While the telephone is ringing, press **[1]** to adjust the volume.
4. Press **Feature** to store the ring. **softer** **louder**

Adjusting receiver or telephone speaker volume

1. Press **[1]** **[1]** when using the receiver or the Speaker. **softer** **louder**

## Making calls

About line buttons

Norstar systems can have different types of line buttons. Match the line buttons on Your telephone with the ones below for instructions on how to use them.

**Intercom**

**Internal calls using Intercom buttons**

1. Pick up the receiver.
2. If **[▶]** appears beside an intercom button, then dial.  
**OR**  
Press an Intercom button without **[▶]**, then dial.

**External calls using numbered buttons**

1. Pick up the receiver.
2. When **[▶]** appears beside a numbered Line button, the **OR**  
Press a numbered Line button without **[▶]**, then dial.

Note: Internal numbers are supplied by your System Coordinator.

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**Internal calls using extension buttons**

1. Pick up the receiver.
2. When **[▶]** appears beside an extension button, then dial.

**External calls using extension buttons**

1. Pick up the receiver.
2. When **[▶]** appears beside the extension button, dial **[\*]** (or your system's external line access code) and the number.

**Hold**

**Holding Calls**

1. Press **[Hold]** **[▶]** flashes beside the line on hold.
2. Press the line button with the flashing **[▶]** to return to the call.  
Check the display for confirmation or additional information.

**Automatic hold**

Calls are put on hold automatically when you switch from one line to another.

**Handsfree Mute**

This button operates the telephone's built-in microphone and speaker in the receiver. Your System Coordinator can program Handsfree to your telephone.

**Making calls**

1. Press **[Handsfree Mute]** instead of picking up the receiver.

**Switching between Handsfree and handset**

1. Press **[Handsfree Mute]** to place the handset to switch to Handsfree.
2. Pick up the receiver to switch back.

**Using Mute**

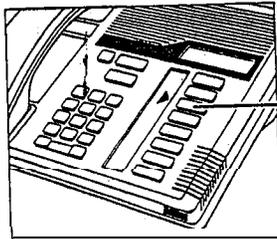
1. Press **[Handsfree Mute]** to turn the microphone OFF.
2. Press **[Handsfree Mute]** again to turn the microphone ON.

Dialing without lifting the handset

1. Press a line button without **[▶]**, then dial your call.
2. When answered, pick up the receiver, or press **[Handsfree Mute]**.
3. If the call is not answered, or the line is busy, press **[Rls]**.

## Programming memory buttons

### About memory buttons



Memory buttons are the buttons with indicators other than line or Handsfree buttons. Memory buttons store telephone numbers or feature codes to give you one touch dialing or feature activation. You can change what a memory button does by just programming it with a new number or feature. You cannot program a line or Handsfree button.

**Remember:** Press **Feature** \* **0** to check a memory or line button.

### Programming memory buttons

#### External autodial

1. If you are on a call or an open line with dial tone. Press **Hold** or **RLS**.
2. Press **Feature** \* **1**.
3. Press a memory button.
4. Dial the external number.
5. Press **Hold** to store the number.
6. Label your new button.

#### Internal autodial

1. If you are on a call or an open line with dial tone. Press **Hold** or **RLS**.
2. Press **Feature** \* **2**.
3. Press a memory button.
4. Dial the internal number.
5. Label your new button.

#### Features

1. If you are on a call or an open line with dial tone, press **Hold** or **RLS**.
2. Press **Feature** \* **3**.
3. Press a memory button.
4. Press **Feature** and the feature code.
5. Label your new button.

#### Erase memory buttons

1. If you are on a call or an open line with dial tone, press **Hold** or **RLS**.
2. Press **Feature** \* **4**.
3. Press the memory button you want to erase.
4. Press **Hold** to erase the button.

## Your Norstar M7310 telephone

### Shill button

for using the too function of a dual-memory button.

### Display

shows the time, date, call information and guides you while using Norstar\* features. The lower line of the display is reserved for display button instructions.

### Dual-memory buttons

store any two features and/or autodial numbers.

### Display buttons

Feature button starts or cancels a feature.

### Release button

cancels active calls.

### Hold button

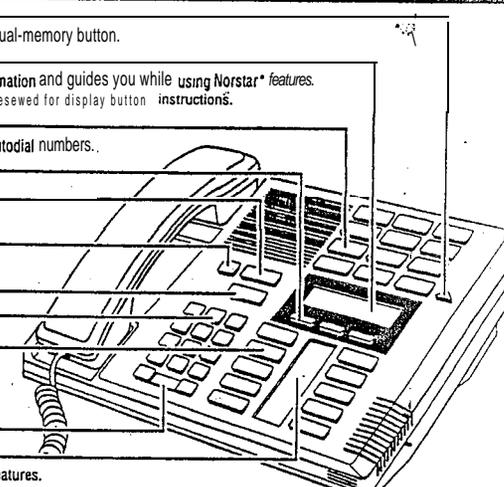
### Dial pad

Memory and line buttons are buttons with indicators for one touch dialing, feature operation or line access.

### Volume control

### Indicators

appear beside active lines and features.



### Using display buttons

Display buttons change with each feature you use. The labels for display buttons appear in capital letters directly above them on the second line of the display. A display button with an "OK" label above it is represented as **OK** in this card.



### Button inquiry

Confirm that your memory and line buttons have the correct snap-on caps by checking their programming.

1. Release all calls or open lines with dial tone.
2. Press **Feature** \* **0**.
3. Press the button(s) you want to check and read the display.
4. Press **Feature** when finished.

### Adjusting display contrast

1. Press **Feature** \* **7**.
2. Press **UP** or **DOWN** for the level you want.
3. Press **OK** when finished.

### Selecting a ring type and volume level

1. Press **Feature** \* **6**.
2. Press **1**, **2**, **3** or **4** to hear the different types of rings.
3. While the telephone is ringing, press **4** or **5** to adjust the volume.
4. Press **OK** to store the ring.



\* Meridian and Norstar are trademarks of Northern Telecom.

**Making calls:**

## About line buttons

Norstar systems can have different types of line buttons. Match the line buttons on your telephone with the ones below for instructions on how to use them.

**Intercom**  
(Line)

*Infernal calls using Intercom buttons*

1. Pick up the receiver.
2. If ► appears beside an Intercom button, then dial.  
OR  
Press an Intercom button without ►, then dial.

*External calls using numbered Line buttons*

1. Pick up the receiver,
2. When ► appears beside a numbered Line button, then dial.  
OR  
Press a numbered Line button without . . then dial.

**Note:** internal numbers are supplied by your System Coordinator.

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*Infernal calls using extension buttons*

1. Pick up the receiver.
2. When ► appears beside an extension button, then dial,

*External calls using extension buttons*

1. Pick up the receiver.
2. When ► appears beside the extension button, then dial [9] (Or your system's external line access code) and the number.

Hold

*Holding Calls*

1. Press Hold ► The ► flashes beside the line on hold.
2. Press the line button with the flashing ► to return to the call.  
Check the display for confirmation or additional information.

**Automatic hold**

Calls are put on hold automatically when you switch from one line to another.

Handsfree  
Mute

This button operates the telephone's built-in microphone and speaker in place of the receiver. Your System Coordinator can program Handsfree to your telephone.

**Making calls**

1. Press Handsfree instead of picking up the receiver.

*Switching between Handsfree and handset*

1. Press Handsfree and replace the handset to switch to Handsfree.
2. Pick up the receiver to switch back

*Using Mute*

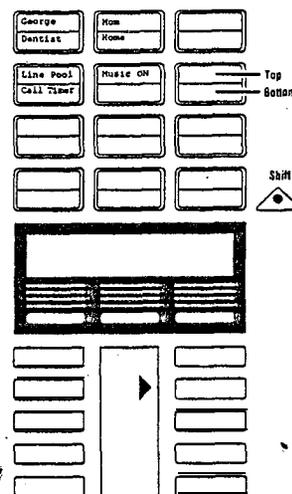
1. Press Handsfree to turn the microphone OFF.
2. Press Handsfree again to turn the microphone ON.

Dialing without  
lifting the handset

1. Press line button without ►, then dial your call.
2. When answered, pick up the receiver, or press Handsfree.
3. If the call is not answered, or the line is busy, press [Rls].

**Programming memory buttons**

## About memory buttons



There are two types of memory buttons: single-memory and dual-memory. Memory buttons store telephone numbers or feature codes to give you one touch dialing or feature activation.

**Dual-memory buttons**

To use the bottom function, press the dual-memory button. To use the top function, press the shift button, then press the dual-memory button.

**Single-memory buttons**

Single-memory buttons are the buttons with indicators other than line or Handsfree buttons.

Remember: Press Feature [ ] [9] to check a memory or line button.

## Programming memory buttons

**External autodial**

1. If you are on a call or an open line with dial tone, press Hold or [Rls].
2. Press Feature [ ] [1].
3. Press a memory button.
4. Dial the external number.
5. Press OK to store the number.
6. Label your new button.

**Infernal autodial**

1. If you are on a call or an open line with dial tone, press Hold or [Rls].
2. Press Feature [ ] [2].
3. Press a memory button.
4. Dial the internal number.
5. Label your new button.

**Features**

1. If you are on a call or an open line with dial tone, press Hold or [Rls].
2. Press Feature [ ] [3].
3. Press a memory button.
4. Press Feature [ ] and the feature code.
5. Label your new button.

**Erasing memory buttons**

1. If you are on a call or an open line with dial tone, press Hold or [Rls].
2. Press Feature [ ] [4].
3. Press the memory button you want to erase.
4. Press OK to erase the button.

## Your Norstar M7324 telephone:

### Memory and line buttons

are buttons with indicators for one touch dialing, feature operation or line access.

### Display

shows the time, date, call information and guides you while using Norstar features. The lower line of the display is reserved for display button instructions.

### Display buttons

### Dial pad

### Volume control

### Feature button

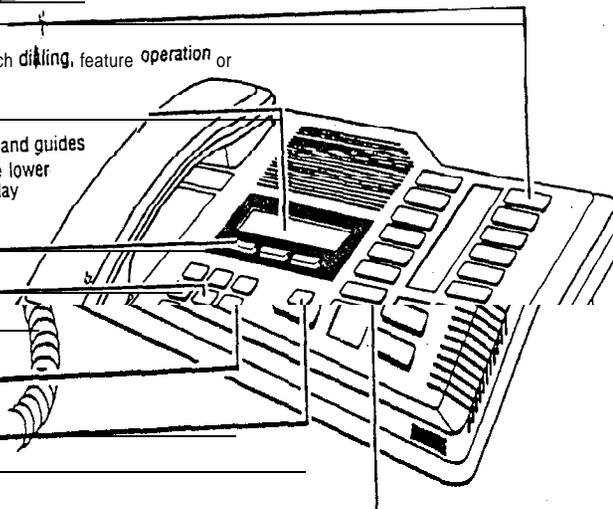
starts or ends a feature.

### Hold button

Release button  
cancels active calls.

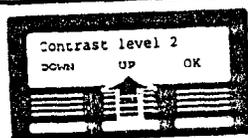
### Indicators

appear beside active lines and features.



### Using display buttons

Display buttons change with each feature you use. The labels for display buttons appear in capital letters directly above them on the second line of the display. A display button with an "OK" label above it is represented as **OK** in this card.



### Button inquiry

Confirm that your memory and line buttons have the correct Snap-on caps by checking their programming.

1. Release all calls or open lines with dial tone.
2. Press **Feature** \* **0**.
3. Press the button(s) you want to check and read the display.
4. Press **Feature** when finished.

### Adjusting display contrast

1. Press **Feature** \* **7**.
2. Press **UP** or **DOWN** for the level you want.
3. Press **OK** when finished.

## Making calls

### About line buttons

Norstar systems can have buttons on your telephone them.

Intercom

Line 1

### Internal calls using *Intercom*

1. Pick up the receiver.
2. If ► appears beside an button, then dial.  
OR  
Press an Intercom butt ►, then dial.

**Note:** Internal numbers ar

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### Internal calls using *extension* buttons

1. Pick up the receiver.
2. When ► appears basic extension button, then

Hold

### Holding Calls

1. Press **Hold**. The
2. Press the line button w  
Check the display for co

### Automatic hold

Calls are put on hold autom

Handsfree  
Mute

This button operates the tel of the receiver. Your System telephone.

### Making calls

1. Press **Handsfree** inst

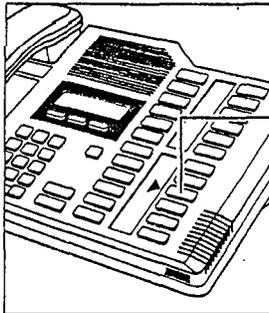
### Switching between Hands

1. Press **Handsfree** and
2. Pick up the receiver to s

### Using Mute

## Programming memory buttons

out memory  
buttons



Memory buttons are the buttons with indicators other than line or Handsfree buttons. Memory buttons store telephone numbers or feature codes to give you one touch dialing or feature activation. You can change what a memory button does by just programming it with a new number or feature.

If you have programmed a memory button with an internal number the indicator comes on when the number is busy.

Remember: Press **Feature** \* **0** to check a memory or line button.

Programming  
memory buttons

### External autodial

1. If you are on a call or an open line with dial tone, press **Hold** or **Rls**.
2. Press **Feature** \* **1**.
3. Press a memory button.
4. Dial the external number.
5. Press **OK** to store the number.
6. Label your new button.

### Internal autodial

1. If you are on a call or an open line with dial tone, press **Hold** or **Rls**.
2. Press **Feature** \* **2**.
3. Press a memory button.
4. Dial the internal number.
5. Label your new button.

### Features

1. If you are on a call or an open line with dial tone, press **Hold** or **Rls**.
2. Press **Feature** \* **3**.
3. Press a memory button.
4. Press **Feature** and the feature code.
5. Label your new button.

### Erasing memory buttons

1. If you are on a call or an open line with dial tone, press **Hold** or **Rls**.
2. Press **Feature** \* **1**.
3. Press the memory button you want to erase.
4. Press **OK** to erase the button.

## Glossary

### A

**Access code:** A sequence of characters used to gain entry into any type of Norstar system programming.

**Administration:** A program that lets one person in your office (the System Coordinator) assign and maintain certain settings on the Norstar system.

**Administration access code:** A code required to access Administration programming. You may be asked for an Administration password.

**Administration password:** A one- to six-digit password that prevents unauthorized access to Administration programming. The Administration password can be assigned and changed in Administration programming.

**Alarm code:** A number that appears on the Alarm telephone's display, informing you that the KSU has detected a fault in the system.

**Alarm telephone (Alarm set):** 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 in Configuration programming.

**Allow Redirect:** A sub-heading in Administration programming that allows you to set whether the Redirection can be used from that telephone.

**Analog Terminal Adapter (ATA):** A device that permits the connection of analog telecommunication devices such as FAX machines, answering machines, and single line telephones to the Norstar system. Programmed defaults for the ATA are automatically assigned by the Norstar system.

**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 (a receptionist, 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.

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**Answer DN:** A Directory Number (DN) of a telephone that is monitored by an Answer button. Up to four Answer DNs can be assigned to a telephone by the Customer Service representative.

**Autobumping:** A setting 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:** 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 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 Handsfree:** A feature that automatically activates Handsfree operation when you make or answer a call. Automatic Handsfree is assigned in Administration programming.

**Automatic Hold:** A feature that automatically places an active call on hold when you select another line. Automatic Hold is programmed by your Customer Service representative.

**Automatic Privacy:** See Privacy.

**Automatic Telephone Relocation:** A feature that lets a telephone retain its personal and system programming when it is plugged into a different Norstar modular jack. Automatic telephone relocation is enabled by your Customer Service representative.

**Auxiliary ringer:** A separate external telephone ringer or bell that 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 service mode. Programming of an auxiliary ringer is done in Administration programming after the feature has been enabled by your Customer Service representative.



## B

**Background Music:** A feature that lets you hear music from the speaker of your Norstar telephone. It is available only if a music source has been attached to the KSU and the feature has been enabled by your Customer Service representative.

**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 shows a telephone as busy if it is active on a call, has Do Not Disturb turned UN, or is being used for programming. The BLF attaches to the M7310 Telephone.

**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 label the buttons.

**Button Inquiry:** A feature that allows you to check the function of each programmable button on your Norstar telephone.

**Bypass Restrictions:** A setting that allows you to override any Call Restrictions applied to specific System Speed Dial numbers. Bypass Restrictions can be turned on in Administration programming.

## C

**Call Forward:** 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 Not-star system after a specific number of rings. Call Forward No Answer is assigned in Administration 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 in Administration programming.

**Call Forward Override:** A feature that allows you to call someone and ask them to stop forwarding their calls to you.

**Call Information:** A feature that allows you to display information about incoming calls. For external calls, you can display the caller's name, telephone number and the line name. For an internal call, you can display the name of the caller and their internal number. You can obtain information about ringing, answered, or held calls.

**Call Log:** A feature that accesses 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, Enter Call Log, and Logit for further information.

**Call Park:** A feature that allows you to 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 nine 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 by your Customer Service representative.

**Call Pickup Directed:** A feature that lets you answer a call ringing at any Norstar telephone by entering the internal number of that telephone before taking the call. Call Pickup Directed is activated by your Customer Service representative.

**Call Pickup Group:** See Pickup Group.

**Call Queuing:** A feature that allows you to answer calls in order of priority if you have several calls waiting at your telephone. Priority is given to external incoming calls, followed by callback and camped calls.

**Callback:** A feature that returns parked, camped or transferred calls to your telephone if they are not answered at another telephone. How long the system will wait before Callback occurs is set by your Customer Service representative.

**Camp-On:** A feature that lets you re-route 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 over camped calls.

**Camp timeout:** The length of a delay before a camped call is returned to the telephone that camped the call. This delay is set by your Customer Service representative.



**Capabilities:** A section heading in Administration programming, that covers the dialing filters, remote access packages, set abilities, and line abilities that can be assigned to Norstar lines, telephones, or Class of Service passwords.

**Central Answering Position (CAP):** An M7324 Telephone that has been designated a CAP by your Customer Service representative. The CAP provides backup answering and can be used to monitor the telephones within a Nor-star system. One or two CAP modules can be attached to a CAP to increase the number of lines it can handle.

**Central Answering Position (CAP) module:** A module connected to an M7324 Telephone that provides 48 additional buttons that can be used as Autodial buttons or Feature buttons. A maximum of two CAP modules can be connected to a single M7324 Telephone.

**Class of Service (COS):** A set of Norstar features and lines available to the user for a call. The Class of Service for a call is determined by the Dialing Filters and Remote Access Packages assigned to the telephone in Administration 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 dialing filters.) Class of Service and Class of Service passwords are assigned in Administration programming. See Remote Access.

**Class of Service password:** A six-digit code that lets you switch from your current Class of Service to one that lets you dial numbers prohibited by your current Class of Service.

**Conference:** A feature that allows you to establish a three-person call at your Norstar telephone.

**Conference using privacy:** A feature that allows you to turn privacy OFF for a call allowing another person with the same line to press the line button and join in your conversation, forming a conference. Normally your calls are private; no one else can pick up your line and join in.

**Contrast Adjustment:** A feature that allows you to set the contrast level of your telephone display.

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**Control telephone:** A telephone that can place the lines for which it has responsibility in or out of a Service Mode. A telephone is programmed as a Control telephone and has lines assigned to it in Administration programming.

**CQS:** See Class of Service.

**Cursor:** A short horizontal line that appears on the Norstar telephone display to indicate that characters can be entered using the dial pad.

**D**

**Data Communications Interface (DCI):** A Norstar device that lets you attach an RS-232 data device to your Norstar system.

**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 Administration programming and by your Customer Service representative. In this manual, default settings are shown in bold text.

**Delayed Ring Transfer (DRT) to Prime:** A feature that transfers an unanswered call on an external line to the Prime Telephone associated with that line after a specified number of rings. This feature is activated by your Customer Service representative.

**Dial mode:** The dialing mode of a line can be either Tone or pulse. Pulse is traditionally used by rotary dial telephones. Tone is also referred to as dual-tone multi frequency (DTMF) tones. Dial mode can be programmed by your Customer Service representative.

**Dialing filter:** A feature that prevents certain telephone numbers from being dialed through a combination of restrictions and exceptions. Dialing filters can be applied to lines (line filters, remote filters), to telephones (set filters), to specific lines on a telephone (line/set filters), and to Class of Service passwords (user filters, remote filters). The Norstar Modular system can handle up to 100 dialing filters.

**Direct Inward System Access (DISA):** A feature that lets remote users dial directly into the Norstar system and use Norstar features. Callers hear stuttered dial tone and are required to enter a Class of Service password to gain access to the system. See Remote Access.

**Direct-dial:** A feature that lets you dial a designated telephone in your Norstar system with a single digit. As many as five Direct-dial telephones 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 Administration programming. Telephones are assigned to a Direct-dial telephone in Administration programming.

**Direct-dial number:** A digit used system wide to call a Direct-dial telephone. The digit is programmed by your Customer Service representative.

**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 21 in a two-digit (non-expanded) system and 221 in a three-digit (expanded) system.

**DISA:** See Direct Inward System Access.

**DISA DN:** A 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.

**Display:** A liquid crystal display (LCD) on the Norstar telephone that guides you through feature operation and programming.

**Display button:** One of three buttons located directly beneath the display on M7310 and M7324 Telephones. 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 line of the two-line display, directly above the corresponding display button. Display buttons are represented in this manual as underlined capitals, e.g. OK.

**Display digits:** A sub-heading in Administration programming that allows you set whether an assigned name or the actual number is displayed when someone uses a system speed dial code.

**DN:** See Directory Number

**DRT delay:** The number of rings before a Delayed Ring Transfer occurs. This is assigned by your Customer Service representative.

**DRT to Prime:** See Delayed Ring Transfer to Prime.

**E**

**Emergency Telephone:** A single-line telephone (also referred to as a **500/2500** telephone) that becomes active when there is no power to the Key Service Unit.

**Event message:** An item stored in the system log and **displayed** during a Maintenance session. Event messages record a variety of events and activities in the **Norstar** system.

**Exceptions:** A component of a Dialing filter. Exceptions are numbers you can dial even if they are forbidden by a more general Restriction. See **Restrictions**.

**Expanded system:** A **Norstar** system with an Expansion Cartridge.

**Expansion Cartridge:** A cartridge which connects Trunk modules and Expansion modules to the Key Service Unit.

**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. The default is 9, but this can be changed by your Customer Service representative. You do not always need an external **code**. It is primarily to support the **M7100** Telephone and single-line telephones using an Analog Terminal Adapter (**ATA**).

**External line:** A line on your **Norstar** 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 Key Service Unit. The external speaker is not a **Norstar** component and must be supplied by the customer.

**Extra-dial telephone:** A heading in Administration programming that allows you to assign an extra Direct-dial telephone when a service mode is active. You can **have one** Extra-dial telephone **for each** of the three service modes.



**F**

**Feature button:** A button that activates many **Norstar** features when it is pressed and followed by a Feature code. The Feature button is also used to exit a feature.

**Feature Cartridge:** A replaceable cartridge containing the **Norstar features**. The Feature Cartridge, a combination of a Data Cartridge and a Software Cartridge, is inserted into the Key Service Unit.

**Feature code:** A number that is used to activate a particular feature.

**Forward:** See Call Forward.

**Forward delay:** The number of rings before an unanswered call is forwarded to another telephone when the Call Forward **No Answer** feature is ON. Forward delay is assigned in Administration programming.

**Forward No Answer:** See Call Forward No Answer.

**Forward On Busy:** See Call Forward On Busy.

**Full Autohold (on idle line):** A feature that, when activated, puts a line on hold when you select an available line and then do something that selects another line. Full **Autohold** is **activated by** your Customer Service representative.

**Full Handsfree:** See Handsfree.

**G**

**Group Listening:** A feature that **allows** you to have others in your office hear a caller through your phone's speaker. The caller hears you only when you speak into the receiver and cannot hear other people in the office.

**H**

**Handsfree:** A feature you can use to make calls without using the telephone receiver. Full Handsfree is activated in Administration programming. When it is activated, a **Handsfree/Mute** button is automatically assigned to the telephone.

**Handsfree (HF) Answerback:** A feature that **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. Handsfree Answerback is activated in Administration programming.

**Handsfree/Mute button:** See Handsfree.

**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:** An indication that an external call has been placed on hold for a certain period of time. Your **Norstar** telephone rings and displays the message On hold: LINENRH. The Held Line Reminder feature and Remind delay are programmed by your Customer Service representative.

**HF Answerback:** See Handsfree Answerback.

**Hold button:** A button used to suspend calls so that the person using the telephone can perform another task without disconnecting the caller.

**Hookswitch Flash:** See Link time.

**Host System Signaling:** (Also referred to as End-to-End Signaling.) **Norstar** 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.

**Hotline:** A feature that automatically calls a pre-identified number when the telephone's receiver is lifted or the **Handsfree/Mute** button is pressed. A Hotline number can be an internal or external number. Hotline is programmed in Administration programming.

**I/C:** An abbreviation of Intercom button.

**Installer:** A person who installs the **Norstar** equipment, and performs System Startup and certain programming actions. The Installer or the System Coordinator can program Administration settings.

**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 by the Customer Service representative.

**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:** A person using a **Norstar** telephone within a **Norstar** system.

**K**

**Key Service Unit (KSU):** The central hardware component in the **Norstar** system. The KSU 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 KSU can function on its own as a basic system (with 24 **Norstar** telephones and 6 external lines), or with the addition of a Trunk Module (TM) that supports more external lines, or a Station Module (SM) that supports more **Norstar** telephones.

**L**

**Line:** The complete path of a voice or data connection between one telephone (or other device) and another.

**Line abilities:** The heading in Administration programming under which you assign Line Filters, Remote Filters, and Remote Access Packages to lines.

**Line filter:** See Dialing filter.

**Line names:** The sub-heading in Administration programming that allows you to assign names to external lines.

**Line number:** A number that identifies an external line. The total number of lines depends on how many Trunk Modules are installed.

**Line Pool:** 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 a member of a **Line Pool** by your Customer Service representative.

**Line Pool access code:** A number that identifies a Line Pool. Line Pool access codes are assigned by your Customer Service representative.

**Line Profile:** A feature you can use to review the settings programmed to lines by the Customer Service representative and by Administration programming. The settings cannot be changed with this feature. Line profile is available only on M7310 and M7324 Telephones.

**Line Redirection:** 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. 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 and Redirect Ring.

**Link time:** A specific time delay that allows access to **PBX** features through a **Norstar** system. Link time is also referred to as a "Hookswitch Flash" or "Recall". Link time is assigned by your Customer Service representative.

**Logit:** A feature that allows you to manually log call information when you are connected to a call.

## M

**M7100 Telephone:** A telephone that has a one-line display and one programmable memory button without an indicator.

**M7208 Telephone:** A telephone that has a one-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 Telephone 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.

**M7900 Telephone:** A telephone with a touch-screen display that replaces the display and memory buttons of other **Norstar** telephones. It provides simplified access to **Norstar** Features and an interface to computer driven application.

**Maintenance:** A type of programming you can use to diagnose and repair problems in the **Norstar** system. Maintenance requires no programmable settings.

**Memory buttons:** The buttons that can be programmed to dial frequently used features or numbers automatically. See **M7100, M7208, M7310, M7324** and **M7900 Telephone** entries for their exact memory button configurations.

**Message:** A feature that allows you to indicate to another internal user that you would like them to call you.

**Music source:** A radio or other source of music that can be connected to the Key Service Unit 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

**Narhes:** A feature that allows you to assign System Speed Dial numbers, external lines, telephones, and Service Modes in Administration programming. You can use up to sixteen characters to name a System Speed Dial number, and seven characters to name a telephone, line, or Service Mode. If a Name has not been assigned, the line number or DN appears on the display instead of a Name.

**Night Service:** See Service Modes.

**Norstar** Programming Overlay: A paper template that is placed over the top four memory buttons with indicators on the M7310 or M7324 Telephone during programming. The overlay labels indicate the special function that each of the four buttons takes on during programming.

## O

**On hold:** A setting that controls whether external callers hear music, periodic tones, or silence when they are placed on hold. This setting is programmed by your Customer Service representative.

**Overlay:** See **Norstar** Programming Overlay.

## P

**Page:** A feature you can use to make announcements over the **Norstar** system. You can choose Internal Page (announcement over the telephone speakers), External Page (announcement over an externally-mounted, Customer-supplied loudspeaker), or both Internal and External Page.

**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 in Administration programming.

**Park prefix:** See Call park prefix.

**Park timeout:** A delay before an unanswered parked call returns to the telephone that parked it. Park timeout is set by your Customer Service representative. See Call Park.

**Password:** 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 are also required for System Startup and Administration programming. See **Character** of Service password.

**Pause:** A character that inserts a 1 S-second delay in a dialing sequence on an external line.



**Personal Speed Dial:** A two-digit code (71-94) that can be programmed to dial external telephone numbers. Personal Speed Dial numbers are programmed for each telephone, and can be used only at the telephone on which they are programmed.

**Pickup Group:** A group of telephones. 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 in Administration programming.

**Pool:** See Line Pool.

**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.

**Prime line:** A 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 by your Customer Service representative.

**Prime telephone (Prime set):** 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 by your Customer Service representative.

**Priority Call:** A feature you can use to make a Voice call to a telephone that is idle, busy or has Do Not Disturb activated. This feature is enabled for a telephone in Administration programming.

**Privacy:** A feature that determines whether a Norstar user may select a line in use at another telephone and join an established call. Privacy is set by your Customer Service representative, but can be turned ON and OFF by users during individual calls.

**Private line:** See Private to.

**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 to:** A line assigned to one telephone as a Private line by your Customer Service representative. The line cannot appear on any other telephone, except the Prime telephone for that line. Private lines cannot be placed into Line Pools.

**Programming:** A series of procedures that set the way the Norstar system works. Programming includes system-wide settings and individual telephone and line settings.

**Programming Overlay:** See Norstar Programming Overlay.

**Programming reminder:** A chart on which you can record some commonly-used settings from Administration programming to keep the Norstar system's records up-to-date.

**Public line:** An external line that can be assigned to any telephone and to many telephones. A line is assigned as Public by your Customer Service representative.

**Public network:** The regular telephone network that connects most homes and businesses.

## R

**Recall:** See Link time.

**Receiver:** The handset of a telephone.

**Redirect ring:** A sub-heading in Administration programming that allows you to set whether a line that has been redirected through Line Redirection gives a short ring on those telephones on which the line appears.

**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, and is programmed by your Customer Service representative.

**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's features.

**Remote access dial filter:** See Remote filter.

**Remote access package:** A sub-heading in Administration programming that allows you set up access to Paging and Line Pools for remote users.

**Remote capability:** A subset of Norstar features that is available to users connected through Remote Access.

**Remote filter:** A Dialing 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 Telephone filter for a remote user.

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Remote paging: A feature that 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 User: A person who calls into a Norstar system from a telephone outside that system and uses Norstar features or lines. See Remote Access.

Restrictions: A component of a Dialing filter. Restrictions are numbers you cannot dial when that Dialing filter is in effect. See Exceptions.

Ringin: A programming function done by your Customer Service representative that assigns a line to ring or not ring at a telephone. If a line has been assigned as "No ring", an incoming call is shown only by a flashing indicator.

Ringin Telephone (Ringin Set): A telephone that has been assigned to ring when a line has been placed into a Service Mode. Ringin Telephones are assigned in Administration programming.

RI button: A button that ends a call in the same way that hanging up the receiver does. It may also be used to end Startup, Administration programming, Maintenance sessions and feature operations.

Run/Stop: A character that creates a breakpoint 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

SAPS: See Station Auxiliary Power Supply.

Selective line redirection: See Line Redirection

Service Modes: A feature that provides special ringing and telephone access after normal office hours, or when there are few people available to answer calls. Certain features become active when one or more lines are placed into a Service Mode. Service Modes settings are assigned in Administration programming.

Set: A telephone.

Set ability: A sub-heading in Administration programming under which set filters, line/Set filters, and a variety of system features are assigned to individual telephones.

Set Copy: A heading in Configuration programming 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 the COPY display button, which is more selective of the settings that can be duplicated.

Set filter: See Dialing filter.

Set Names: A sub-heading in Administration programming that allows you to assign Names of up to seven characters to telephones.

Set Profile: A feature you can use to review the settings that have been programmed by your Customer Service representative and by yourself in Administration programming. The settings cannot be changed with this feature. Set Profile is available only on the M7310 and M7324 Telephones.

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. Press the shift button to store or access features on the top half of the dual-memory buttons.

Show Time: A feature that allows you see the current date and time on the Norstar telephone display while you are on a call.

Station: An individual telephone or other Norstar device.

Station Auxiliary Power Supply (SAPS): A device which provides power to a Norstar telephone that is connected more than 305 m (1000 ft) and less than 760 m (2500 ft) from the Key Service Unit, or to a CAP module.

Supervised line: A line for which disconnect supervision is enabled. If an external caller hangs up, the Norstar system detects the disconnection and hangs up its line also.

System Coordinator: A person responsible for customizing the Norstar system through Administration programming and for helping co-workers use the Norstar system.

System Data: An option in the Set Copy function. System Data refers to the system settings that apply to all telephones and lines. System Data consists of the programmable settings from System Startup and Administration programming. It also includes the setting programmed by your Customer Service representative.

System Speed Dial: In Administration programming, a heading under which you can assign up to 70 numbers as System Speed Dial numbers.

**System Speed Dial Code:** A two-digit code (01 to 70) 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 in Administration programming.

**System Speed Dial Name:** A sub-heading in Administration programming under which you can assign a name to a System Speed Dial number.

**System Startup:** A procedure that initializes the system programming to defaults. When a Norstar system is first installed and powered up, System Startup must be performed before any programming can be done.

## T

**Tandem call:** A call established when a remote user dials into the Norstar system and uses the system to place an outgoing call. The combination of the Incoming and outgoing calls forms a tandem call. See Remote Access.

**Target line:** A line dedicated to receiving calls from outside the Norstar system.

**TCM line (Time Compression Multiplexing line):** A two-wire digital station loop joining the cross-connect at the Key Service Unit to a telephone.

**Telephone lock (Set lock):** A feature that allows you to limit the number of features that may be used or programmed at a telephone. Full telephone lock allows very few changes or features, Partial telephone lock allows some changes and features, and No telephone lock allows any change to be made and any feature to be used. Telephone lock is assigned in Administration programming.

**Time and Date:** A display description. The current Time and Date appear on the display of idle Norstar telephones. The Time and Date can be changed in Administration programming.

**Transfer:** A feature that lets you redirect a call to another telephone in your Norstar system, over a network or outside your Norstar system. There are four types of Transfer; Transfer using Hold, Transfer with Announcement, Transfer without Announcement, and transfer using Unsupervised Conference.

**Transfer Callback:** A feature that returns a transferred call if it is not answered after a specific number of rings. The number of rings is programmed by your Customer Service representative. Transfer Callback does not apply to calls transferred externally.

**Trunk:** A physical connection between the Norstar system and the outside world using either the public telephone system or a private network.

**Trunk Answer:** A feature you can use to answer a call on any line that has an active Service Mode, even if that line does not appear on your telephone. Trunk Answer is activated in Administration programming.

## U

**Unsupervised line:** A line for which disconnect supervision is disabled. If an external caller hangs up, the Norstar system does not detect the disconnection and does not hang up its line. See Disconnect Supervision.

**User Data:** 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 by the Customer Service representative or Administration programming. User Data is programmed at each telephone. These settings, for example, include Personal Speed Dial and the assignment of programmable memory buttons.

User **Filter:** See Dialing filter.

## V

**Voice Call:** 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 does not ring. Instead, the person you call hears a beep and then your voice. Their telephone beeps periodically to remind them that their microphone is open.

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