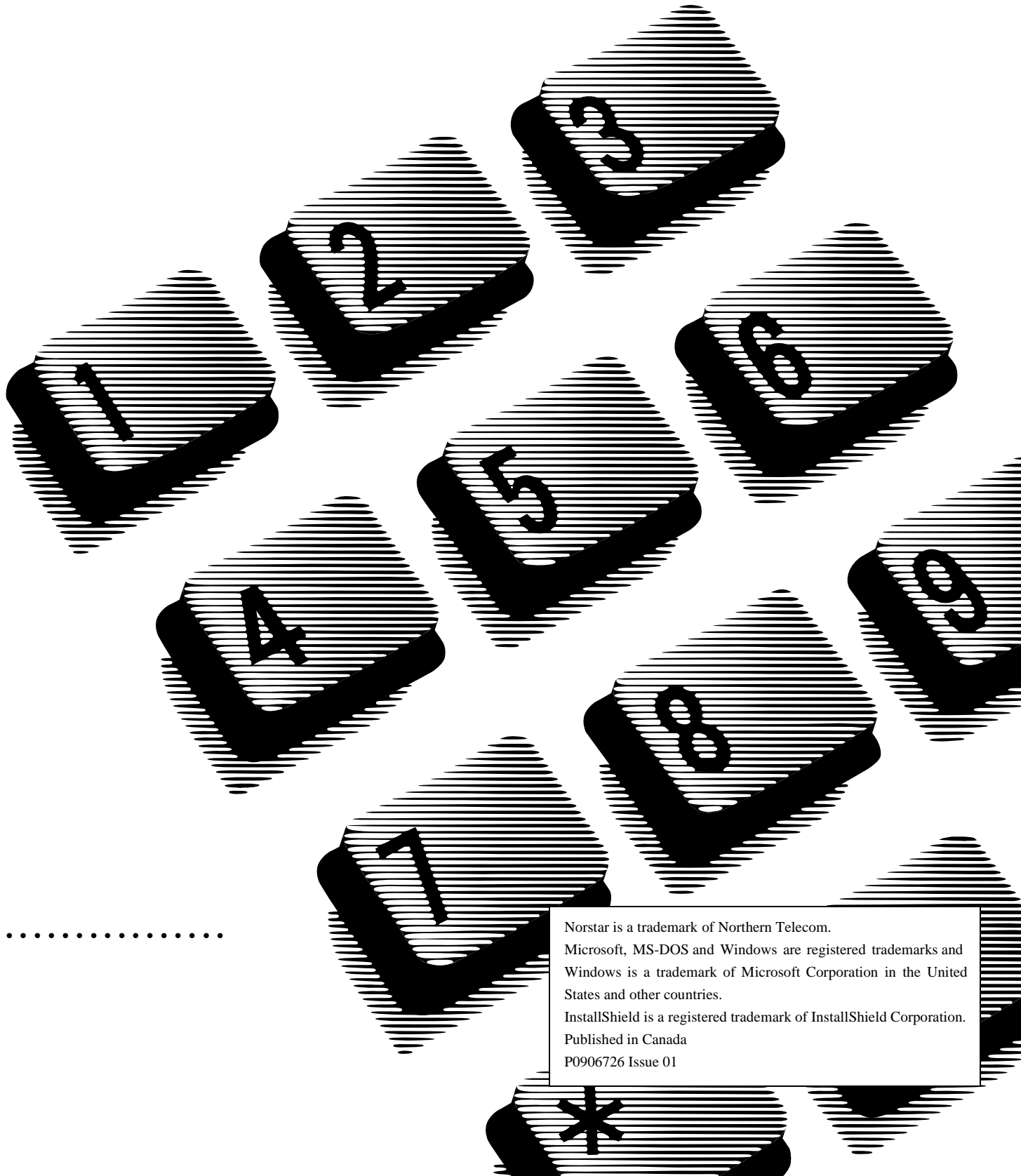


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Norstar Manager User Guide



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Table of contents

About this guide	1 -1
Introduction	1 -1
How this guide is organized	1 -1
Other documents	1 -2
Conventions	1 -3
Learning about Norstar Manager	2 -1
Introduction	2 -1
System Overview	2 -1
How Norstar Manager works	2 -3
About the screens	2 -3
Dialog boxes	2 -4
Moving within a screen	2 -5
Selecting items	2 -5
Selecting multiple items	2 -6
Choosing tasks	2 -6
Using action buttons	2 -6
Using quick keys	2 -6
Using accelerator keys	2 -7
About the menus	2 -7
Entering Norstar system information	2 -8
Different types of fields	2 -8
Using check boxes	2 -10
Using the Help screens	2 -10
Installing Norstar Manager	3 -1
Introduction	3 -1
Before you start	3 -1
Upgrading Norstar Manager	3 -2
Upgrading to Release 3.x	3 -2
Installing	
Release 3.x and keeping	
Release 2.xx	3 -3

Installing Norstar Manager	3 -4
Starting Norstar Manager	3 -5
Logging on	3 -7
Logging off	3 -7
Changing the password	3 -7
Norstar Manager default settings	3 -9

Preparing and adding Norstar system information

4 -1

Introduction	4 -1
Collecting Norstar system information	4 -1
Completing the programming record	4 -2
System Information	4 -2
System Startup	4 -4
Installed Equipment	4 -5
System, Line, and Set programming	4 -5
Systems Directory screen	4 -5
Adding a Norstar system to the database	4 -7
Grouping Norstar systems	4 -7
Adding a Norstar system	4 -7
Deleting a Norstar system from the directory	4 -9
Changing Norstar system information	4 -9

Making an on-line connection

5 -1

Introduction	5 -1
Changing information with an on-line connection	5 -1
Different ways to make an on-line connection	5 -2
Opening Remote Tools from Norstar Manager	5 -3
Making a remote or direct on-line connection	5 -3
Making an operator assisted on-line connection	5 -4
Making a Quick connect	5 -6
Changing Norstar programming	5 -7
Exiting from an on-line session using Norstar Manager	5 -9

Programming a Norstar system

6 -1

Introduction	6 -1
Connecting to a Norstar system	6 -1
System Programming Overview screen	6 -2
Hardware Info	6 -3
Adding programming information	6 -4
Installed equipment	6 -6
Programming line and set names	6 -6
Changing the received number of a target line	6 -6
Programming set types	6 -6
Initializing Programming	6 -7
Initializing a system	6 -7
Initializing a line	6 -9
Initializing a set	6 -9
System programming	6 -9
Call handling	6 -11

Miscellaneous 1	6 -12
Miscellaneous 2	6 -14
System Centrex	6 -16
Service modes	6 -17
Ringing groups	6 -18
Changing the KSU date and time	6 -20
System Filters	6 -20
Passwords	6 -24
System speed dials	6 -25
Remote access packages	6 -27
Trunk Cartridges	6 -28
Routing table	6 -31
Destination Codes	6 -32
Change individual DNs	6 -33
Changing the DN length	6 -34
Line programming	6 -36
Line data	6 -37
Trunk data	6 -38
Abilities and Call Services	6 -39
Service mode options	6 -40
Programming multiple lines	6 -42
Line data copy	6 -43
Set programming	6 -45
Line access	6 -46
Set abilities	6 -49
Set abilities 1	6 -51
Set abilities 2	6 -53
Buttons and Status	6 -54
Removing a button assignment	6 -56
Assigning a new feature	6 -56
Assigning outside autodial	6 -57
Assigning inside autodial	6 -57
Exchanging button assignments	6 -58
Programming dual memory buttons	6 -58
Changing CAP programming	6 -58
Personal speed dials	6 -59
Call services	6 -61
Programming multiple sets	6 -63
Set data copy	6 -63
Mobility programming	6 -66
Portable registration	6 -67
Mobility setup	6 -68
Cells	6 -69
Re-evaluation	6 -71
Entering software codes	6 -72
RAD Programming	6 -73
RAD	6 -75
Global RAD	6 -76
Peripheral Programming	6 -78
Using the Voice Mail Programming screen	6 -78

Backing up and restoring Norstar system information	7 -1
Introduction	7 -1
How backups work	7 -2
Performing a backup or restore	7 -2
Cautions when performing a backup or restore	7 -2
Scheduling a backup or restore	7 -3
Scheduling a backup to repeat automatically	7 -5
Running the backup or restore immediately	7 -6
Restoring an Archive copy	7 -6
Job Queue	7 -6
Running a job	7 -8
Starting the Job Queue	7 -8
Stopping the Job Queue	7 -8
Editing a job	7 -8
Deleting a job	7 -9
Resubmitting a job	7 -9
Checking the status of a job	7 -9
Job Queue error messages	7 -10
Copying Norstar systems	8 -1
Introduction	8 -1
Copying Norstar system information	8 -1
Requirements for copying Norstar systems	8 -2
Copying Norstar system files	8 -3
Copying system files to a floppy disk	8 -3
Deleting a Norstar system from the directory	8 -4
Upgrading to a T1 Release 1 system	8 -4
How to upgrade a system	8 -4
Upgrading to a MICS-XC system	8 -5
Features	8 -5
Programming Parameters changed	8 -5
T1 upgrade	8 -6
Centrex upgrade	8 -6
Norstar Manager reports	8 -1
Introduction	8 -1
Printing system, set	
or line programming reports	8 -1
Printing wireless or maintenance reports	8 -3
Printers	8 -5
Printing key cap labels	8 -5
Adjusting the key cap label printing	8 -7
Show Inventory screen	8 -8
Maintaining a Norstar KSU	10 -1
Introduction	10 -1
Maintenance	10 -1
Determining the System Version number	10 -2
Querying the Port status	10 -2
Hardware Info dialog box	10 -4

Running a connectivity test	10 -5
Checking the provision status	10 -8
Running a loopback test	10 -9
Checking the System Test Log	10 -9
Checking the System Admin Log	10 -11
Viewing the Network Log	10 -12
Viewing the clock sources	10 -13
Viewing the CSU statistics	10 -14
Checking the module status	10 -15
 Applications of Norstar Manager	 11 -1
Introduction	11 -1
Installing new systems	11 -1
Recommended Norstar Manager processes	11 -2
Changing Norstar system programming	11 -2
Adding peripherals	11 -2
Troubleshooting on-line	11 -3
Troubleshooting customer problems	11 -3
Can't access Compact ICS programming	11 -4
Autodial/Personal Speed Dial buttons cannot be programmed	11 -4
Dial tone absent on external lines	11 -4
Display unreadable	11 -4
Problems with Background Music and Music On Hold	11 -5
Telephone dead	11 -5
Responding to system alarms	11 -5
Printing reports and key labels	11 -6
Service contracts	11 -7
 Appendix A: Programming Records	 A -1
Software versions	A -2
 Glossary	 Glossary -1
 Index	 Index -1

About this guide 1

Introduction

This guide is designed to help you use the Norstar Manager software. This guide explains how you:

- set up and maintain the Norstar Manager database
- change a customer's Norstar Business System programming
- maintain Norstar Business Systems

This section explains what is contained in this guide and the conventions used to show Norstar Manager screens, commands, options, and menus.

Note: Screens in this guide are based on the NA-MICS-DR 1.1, CDA-MICS-XC 1.1 and USA-MICS-XC 1.1 product line.

How this guide is organized

The **Norstar Manager for Windows™ User Guide** is divided into 12 sections that cover:

About this guide

This section explains how this guide is organized and the conventions used in the guide.

Learning about Norstar Manager

This section explains how you use the Norstar Manager screens, the different menus, and the icons.

Installing Norstar Manager

This section explains how you install and start the Norstar Manager application on your personal computer (PC).

Preparing and adding Norstar system information

This section explains how to complete a **Norstar Manager for Windows™ Programming Record** and add Norstar system information to the Norstar Manager database.

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Making an on-line connection

This section explains how you make an on-line connection to a Norstar system.

Programming a Norstar System

This section explains how you add Norstar programming information to a Norstar system.

Backing up and restoring Norstar system information

This section explains how you copy programming from a Norstar Key Service Unit (KSU) and store it in the Norstar Manager database. This section also explains how you send a copy of Norstar system programming, stored in the Norstar Manager database, to a Norstar KSU.

Copying Norstar systems

This section explains how you copy Norstar system programming to other Norstar systems and how to perform an upgrade.

Norstar Manager reports

This section explains how to print Norstar Manager reports. It also describes how to access the Inventory Summary screen and how to print key labels.

Maintaining a Norstar KSU

This section explains what is involved in maintaining a Norstar KSU.

Applications of Norstar Manager

This section gives examples of common uses for Norstar Manager.

Appendix A: Programming Records

The appendix contains the **Norstar Manager for Windows™ Programming Records** and a table of various software versions and KSU types.

Other documents

For more information about Norstar Manager, refer to:

- **Norstar Manager for Windows™ Reference Guide**
- **RAD Installation Guide**
- **Norstar Manager for Windows™ Programming Records**
- **Norstar Companion Alarm and Event Code Manual**

Conventions

This guide uses certain conventions to present information about Norstar Manager. These conventions address:

- pressing keys
- choosing action buttons
- highlighting text
- selecting items
- choosing items

Pressing keys

As you work through this guide you will notice some words appear in smaller type, surrounded by a square box. These words represent keys found on a PC keyboard.

For example: Press

Choosing action buttons

Words that appear with grey boxes behind them represent action buttons. They perform the task they are labeled with or change the display to a different Norstar Manager screen.

For example: Choose

Highlighting text

Certain conventions are also used in the steps describing how you perform a task. When a step describes a field as being highlighted, it means the text appears in inverse video. When you move the cursor to a field, the color of the text and background in that area changes. The exact color depends on your Windows setup.

For example:

Port	DN	Name	Type	
101	221	Monique	M7324	
102	222	Carol	M7324	

In the example above, the line of text with the set **Monique** is highlighted.

Selecting items

Frequently, a step will ask you to select an item. When you select an item, you are preparing it for some other task, such as editing. To select an item, use the mouse, cursor keys or to place the selection cursor on the item. Selected items are either highlighted, surrounded by a dotted rectangle, or both.

Choosing items

Choosing an item is different from selecting it. When you choose an item, you perform a task or pick a value or option. To choose an item, use the mouse or press and or

Learning about Norstar Manager 2

Introduction

Norstar Manager is a software package that assists you in administering, maintaining, and programming a Norstar KSU (Key Service Unit). Norstar Manager helps you perform programming tasks, such as programming feature keys on sets.

Before you can begin using Norstar Manager, you need to know:

- how Norstar Manager works
- the different screens and menus
- about selecting tasks from a screen
- how to use the Norstar Manager Help screens

This section explains how to move within the Norstar Manager program.

System Overview

Norstar Manager is designed to help you program and support a Norstar system more efficiently. The application is installed on a personal computer (PC) located at the Norstar Key Service Unit (KSU) site, or at your office. Norstar Manager allows a PC to communicate with a KSU.

PC and KSU communication occurs through a Remote Access Device (RAD). There are four types of device: the RAD, Global RAD, FastRAD, and Internal RAD. Each RAD allows a PC and KSU to exchange information. This information exchange can occur in three ways:

1. The RAD is connected directly to the PC through the RAD's RS-232 port. This is known as a direct connection.
2. The PC uses a modem or DCI to make a remote connection with a RAD. This connection is used when a PC is not located at the customer site.
3. The PC uses a modem or DCI to make an operator assisted connection with a RAD. This connection is used when a PC is not located at the customer site and Norstar Manager needs assistance from the customer to connect to the RAD.

Norstar KSU programming and system information are stored on a database in the PC. This database acts like a central file for all Norstar information and programming. Figure 2.1 shows the different components of the Norstar Manager system, and how the components are connected.

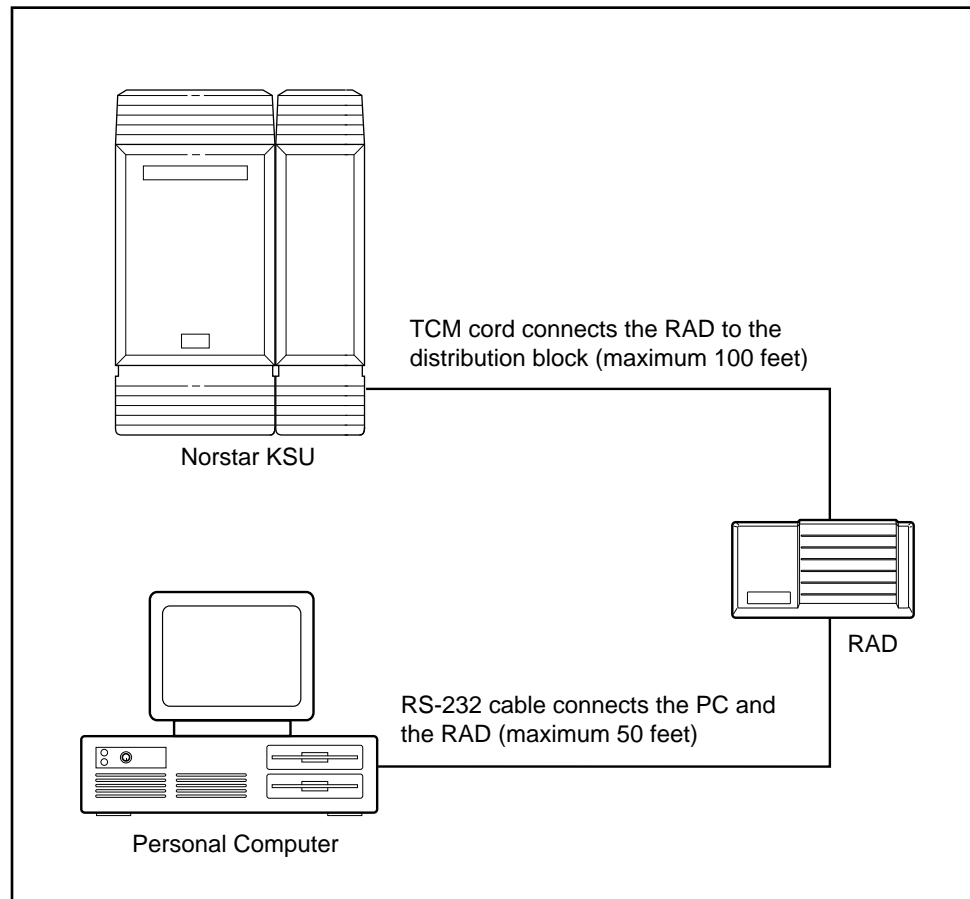


Figure 2.1 – System overview of a direct connection

How Norstar Manager works

Norstar Manager works through a series of screens and menus. These allow you to navigate through the different areas of the application and easily enter Norstar information and programming.

About the screens

Screens are like information forms that you fill out on the PC. These screens contain some information you can edit and some information you can view only. The information you can choose or select, you can edit.

Note: How to choose or select information is discussed later in this section.

Norstar Manager screens consist of four basic parts: a title bar, a menu bar, a status bar and a main body.

The title bar is at the very top of the screen and normally contains the title of the screen. On system, line or set programming screens, the actual title of the screen is in the main body of the screen and the title bar lists the programming section you are in (e.g. Norstar Manager-Line Programming).

The menu bar is directly below the title bar and lists the menus available for the screen.

The status bar is at the bottom of the screen and lists status information such as the date and time.

The main body is between the menu bar and the status bar. This is the area where you read and edit information about the Norstar system and its programming.

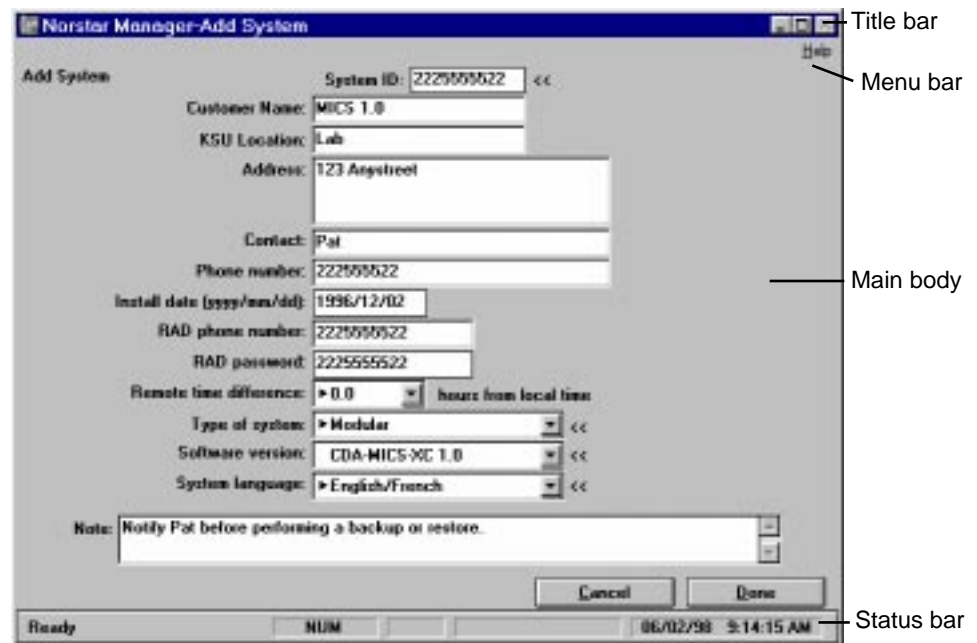


Figure 2.2 – The screen components

Dialog boxes If Norstar Manager needs more information on a specific field, or has a message for you, a dialog box appears on the screen.

For example, when you choose the **Start On-line Session...** menu item from the **File** menu on the **Systems Directory** screen, a dialog box appears prompting you to enter information about the method of connection.

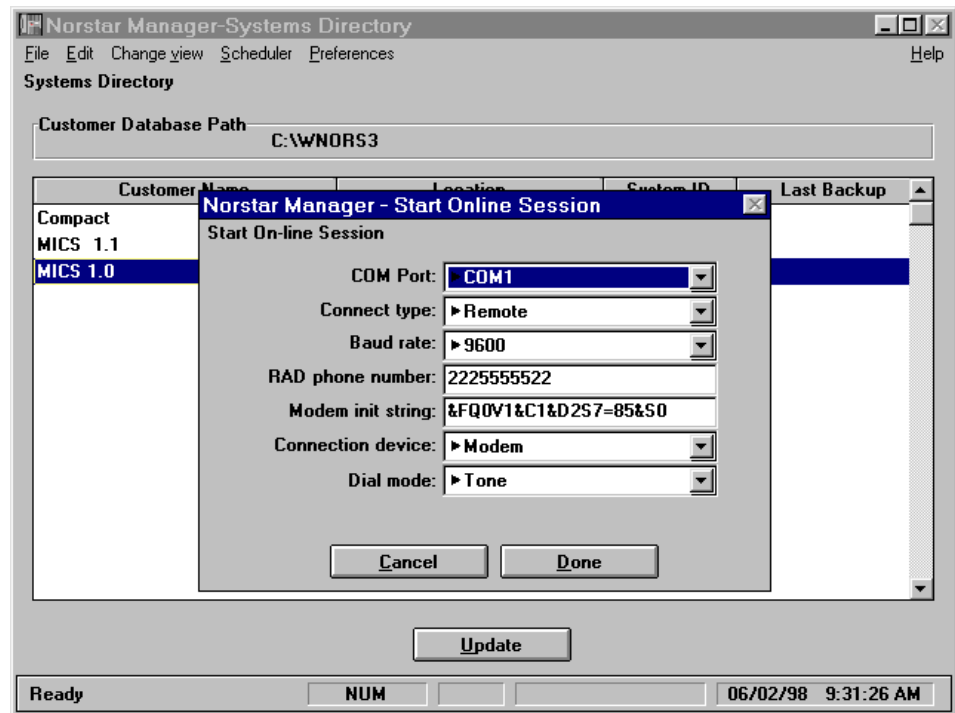


Figure 2.3 – Example of a dialog box

Moving within a screen

Moving within a screen is easy. Use the mouse to move to any field or button shown on the screen. If a mouse is not available, use keyboard commands to move around the screen. Table 2.1 shows the key commands that move the cursor to different areas of a screen.














Key commands	Function
Press  or  or  or 	move within a field, or between fields in a list
Press  or press 	move from field to field
Press  and  or press 	move back to the previous field
Press 	move down a page in a list
Press 	move up a page in a list
Press 	move to the top of a list or the beginning of a line in a scroll region
Press 	move to the bottom of a list or the end of a line in a scroll region


Table 2.1 – Key commands for navigating through a screen

Selecting items

Before performing a function on an item, such as a text box or list box, the item must be selected. To select an item, use the mouse (or key commands) to place the selection cursor on the item. When an item is selected, that item will change appearance to indicate that it is selected. When selected:

- list boxes are highlighted or surrounded by a dotted rectangle
- text boxes are highlighted or have the insertion cursor within the box

To select an item using the mouse, move the mouse pointer onto the item and press the mouse button.

To select an item using key commands, press  until the desired item is highlighted or surrounded by a dotted rectangle.



After you select an item, it is ready for you to choose one of the options or edit the field.

Note: In this manual, choosing an item is different from selecting the item. When you select an item, the item is being prepared for another action. For example, selecting a text box moves the cursor into the text box so you can enter new text or edit the old text. When you choose an item, you are performing the task or activating the option the item represents. For example, choosing the Done action button will end the current task.

Selecting multiple items

In some list boxes, multiple options can be selected.

To select multiple options using the mouse:


1. Select the first option.
2. Press and hold  while you select each of the other options. To remove the selection of an option, select it a second time while holding .

Choosing tasks

There are four ways to choose tasks and navigate through the Norstar Manager application. You can use:

- action buttons
- quick keys
- accelerator keys
- screen and cascade menus




Using action buttons

Action buttons appear on screens. These buttons are labeled with the task they perform or the screen that will be displayed. For example,  is an action button that appears on the **Add System** screen. When you choose this action button, you cancel the task of adding a new Norstar system to the database.

To choose an action button using the mouse:

1. Move the mouse cursor onto the action button and press the left mouse button.


To choose an action button using the cursor keys:

1. Press  until the desired action button is selected.
Note: When a button is selected, the border around the button becomes darker.
2. Press  or  when the button is selected.

Sometimes action buttons appear with the label shown in light grey type. When this occurs, you cannot select the button.

For example: 

Using quick keys

A quick key is a combination of two keys used together. Quick keys allow you to quickly choose action buttons and menu items. The quick key is a combination of  and another key. The other key appears underlined in a menu or on an action button.

For example: **File**

When you press  and  you have chosen the **File** menu.

Using accelerator keys

Accelerator keys are similar to quick keys in that they allow you to quickly choose menu items. To use an accelerator key, type the key combination that is shown with the menu item. For example, on the **System Directory** screen you can type to choose the **Change Customer Path...** menu item from the **File** menu.

About the menus

Menus are lists of options that are available for a field or screen. There are two types of menus: screen menus and cascade menus.

Screen menus

Screen menus provide you with options for accessing different programming, communication, and maintenance task screens. To open a screen menu, select the name of the menu from the menu bar using the mouse or the accelerator keys. Once the menu is open, choose the desired menu item using the mouse or the arrow keys and . Figure 2.4 shows a sample screen menu from the **Systems Programming Overview** screen.

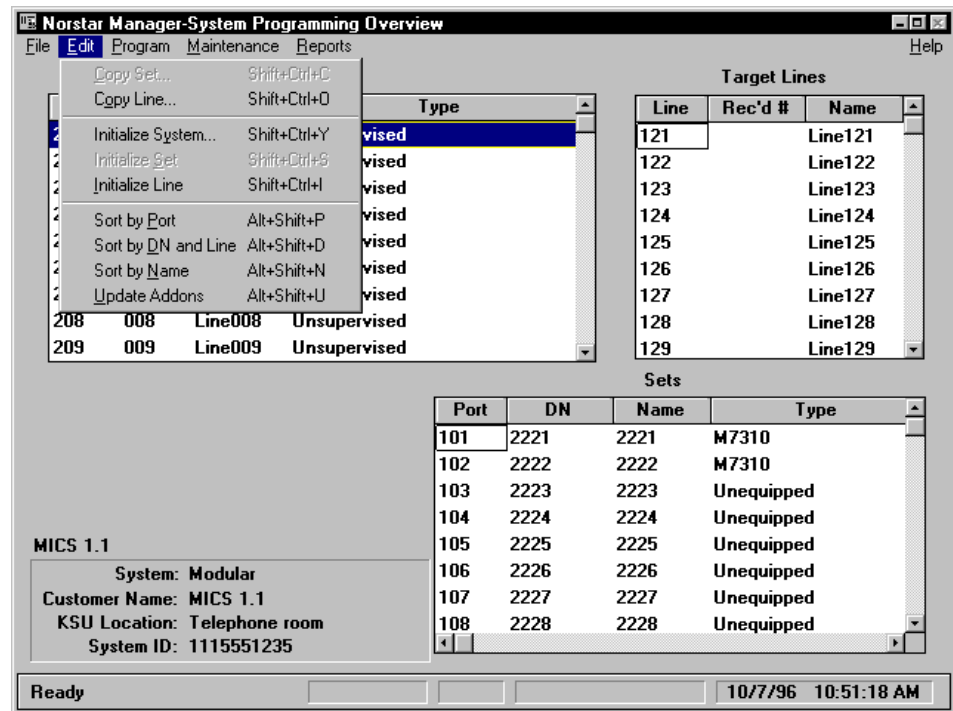


Figure 2.4 – Example of the System Programming Overview screen menu

Screen menus often show different symbols beside the menu items. These symbols represent an instruction. Table 2.2 shows the symbols and explains what each symbol means.

Symbol	Indicates
▶	If you choose this option, a cascade menu appears.
...	This icon indicates a dialog box is available for this field.
accelerator key (e.g. Ctrl+Q)	When you press the key sequence shown, the menu item is chosen.

Table 2.2 – Menu symbols

Cascade menus

A cascade menu is part of a screen menu. This menu provides an additional set of options to the screen menu. A cascade menu appears when you choose a menu item that has a ▶ symbol beside it.

For example, if you choose the **System** menu item from the **Program** menu, a cascade menu of system programming options appears beside the screen menu.

Entering Norstar system information

Norstar information and programming is entered into the Norstar system through the Norstar Manager screens. Before you enter Norstar information and programming in the Norstar system, you should know:

- what the different types of fields are
- how to use check boxes

Different types of fields

The kind of information you enter into a field, and how you enter it in, is determined by the type of box that surrounds the field. These boxes determine whether the data is entered directly or by choosing an item from a list box.

The cursor also tells you how data is entered into fields. The cursor appears as a flashing black, vertical bar. When the cursor is positioned on a field and is flashing, you can type information directly from the keyboard. When the cursor is not visible, you must select a value from the list box. Table 2.3 shows the different types of fields.

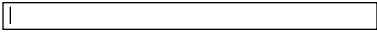

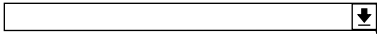

Field appearance	Type of entry allowed
	direct entry from the keyboard
	choose one or several of the options shown
	choose one of the options shown when the drop list arrow is chosen
	choose one of the options shown when the drop list arrow is chosen or enter an option directly from the keyboard
Drop list arrows	

Table 2.3 – The different types of Norstar Manager fields and entries allowed

When you are typing information into a field, you can move around within the field and make corrections, or change the information you have entered. The easiest way to move around in these fields is to use the mouse. If a mouse is not available, you can also use key commands. Table 2.4 shows the different key commands you can use to move within a field.












Key commands	Function
Press  or  or  or 	move within a field
Press 	toggle between insert and overwrite data
Press  or 	delete data
Press 	move to the beginning of a field
Press 	move to the end of a field
Press  	moves the cursor down one line in a multi-line direct entry field (e.g. Address field on Add System screen)

Table 2.4 – Field editing key commands

Using check boxes

Check boxes allow you to select parameters. Check boxes appear as squares and are usually in groups.

All, several, or none of the boxes can be chosen. For example, when you are choosing features for a set you may want to choose several.

Set abilities:

- ☒ Full Handsfree
- ☐ Auto handsfree
- ☒ Handsfree answerback
- ☐ Priority call
- ☐ Auxiliary ringer
- ☐ Redirect ring

When you choose one of the boxes in the group, the symbol **X** appears in the box. This indicates that the feature beside this box is on or active. In the example above, the set will have Full Handsfree and Handsfree answerback active.

To choose a check box using the mouse:

1. Move the mouse cursor on the box you want to choose.
2. Press the mouse button.

To choose a check box using key commands:

1. Press to move to the desired check box.
2. Press

Also use this procedure to clear a chosen check box.

Using the Help screens

When you forget how to select an item, move within a screen, or want to know what a Norstar Manager symbol means, you can find out by using the help screens. Four help screens are available at any time while you are using Norstar Manager.

The **Help** screens provide you with information about:

- function keys
- screen navigation
- icons and color coding

To access the **Help** screens, choose the **Help** menu. When you request help, your current work is replaced with the **Help** screen. This screen covers your work, but does not remove your work. Choosing takes you to the next **Help** screen. Choosing returns you to your work in progress.

Installing Norstar Manager 3

Introduction

Before you can begin using Norstar Manager, the software must first be installed on your personal computer (PC). Installing Norstar Manager involves:

- making sure your PC has the correct requirements to run the application
- installing the software on the PC's hard drive
- logging on
- setting the default configuration and operation parameters for the PC and Norstar Manager

This section explains how you install and start up Norstar Manager. For more information on setting Norstar Manager up, refer to **Section 2** of the **Norstar Manager for Windows™ Reference Guide**.

Before you start

The Norstar Manager software is installed on the hard disk of your PC. Before you install Norstar Manager, make sure your computer is a 100% IBM compatible PC, equipped with:

- ☐ a 486 or higher microprocessor
- ☐ at least 16 Mbytes (MB) of Random Access Memory (RAM)
- ☐ 400+kilobytes of conventional memory available in Windows™
- ☐ 20 MB of virtual memory
- ☐ a hard disk (minimum 100 MB of free space)
- ☐ a 1.44 MB inch floppy drive
- ☐ MS-DOS® 5.0 or later
- ☐ Microsoft® Windows™ 3.1; Windows™ for Workgroups 3.11; or Windows™95.
- ☐ a VGA color monitor (640 X 480 pixels or higher resolution. If a higher resolution is used, the Windows™ font setting should be "Small Fonts" by default.)
- ☐ a Windows™ compatible mouse

Microsoft is a registered trademark and Windows is a trademark of Microsoft Corporation.

- ☐ a Hayes compatible modem
- ☐ if you have ordered Norstar Remote Utilities on compact disc, you need a CD-ROM drive to install the program

Note: If you are installing Norstar Manager on a LAN, refer to **Section 3** of the **Norstar Manager for Windows™ Reference Guide**.

Note: For all remote connections, you require a Hayes compatible modem capable of operating at 1200, 2400, 4800, 9600, or 19,200 baud. The modem should also have a separate line port and phone port.

Upgrading Norstar Manager

When you are upgrading a previous version of Norstar Manager to Release 3.4, there are several steps that you should take to ensure optimum configuration.

Upgrading to Release 3.4 allows you to open the Remote Tools window from Norstar Manager.

Upgrading to Release 3.4

This section applies to upgrading to Norstar Manager for Windows™ Release 3.4 from Release 2.xx, Release 3.0, Release 3.1, Release 3.2, or Release 3.3. To upgrade Norstar Manager for Windows™ to Release 3.4:

1. Start the Norstar Manager for Windows™ release you are currently using.
2. Go to the **Preferences** screen and write down the pathnames entered in the **Job Queue path** and **Default customer path** fields.
3. Exit from Norstar Manager.
4. Install Norstar Manager for Windows™ Release 3.4 using the steps described in **Installing Norstar Manager**, later in this section.
Note: In step 5 of the installation procedure, select the **Path** field and change the pathname of the directory where you want Norstar Manager installed. The pathname should be the same as the name of the previous software release. Be sure to type the full pathname, including the disk drive to be used. The default directory for Release 2.xx and 3.0 is **C:\WNORMGR**. The default pathname for Release 3.1 or higher is **C:\WNORS3**.
5. Start Norstar Manager for Windows™ Release 3.4.
6. Go to the **Preferences** screen and change the pathnames entered in the **Job Queue path** and **Default customer path** fields to the pathnames you wrote down earlier.

Note: All the fields on the **Preferences** screen return to default values when you install or re-install any version of Norstar Manager for Windows™.

Installing Release 3.4 and keeping Release 2.xx

Use this method if you are installing Norstar Manager for Windows™ Release 3.4 and want to keep Norstar Manager for Windows™ Release 2.xx.

You may want to keep Release 2.xx because using the Automatic database updates feature in conjunction with database programming allows faster access to the KSU than on-line programming alone. Therefore, using Release 2.xx to program systems supported by Release 2.xx may be faster than using Release 3.4.

To install Norstar Manager for Windows™ Release 3.4:

1. Start the Norstar Manager for Windows™ release you are currently using.
2. Go to the **Preferences** screen and write down the pathnames entered in the **Job Queue path** and **Default customer path** fields.
3. Exit from Norstar Manager.
4. Install Norstar Manager for Windows™ Release 3.4 using the steps described in **Installing Norstar Manager**, later in this section.
5. Start Norstar Manager for Windows™ Release 3.4.
6. Go to the **Preferences** screen and change the pathnames entered in the **Job Queue path** and **Default customer path** fields to the pathnames you wrote down earlier.

Note: All the fields on the **Preferences** screen return to default values when you install or re-install any version of Norstar Manager for Windows™. The customer path and other preferences of Norstar Manager for Windows™ Release 3.4 do not affect any of the previous releases except Release 3.2. Release 3.2 and higher will use the preferences of Release 3.4 and higher.

When using Release 2.xx and Release 3.4 side by side, we recommend that the systems created in one release are backed up and restored with the same release. For ease of use, ensure that each system in the **Systems Directory** screen is named to reflect the type of system and Norstar Manager Release to be accessed.

Note: If you want to use the Automatic database updates feature in Release 2.xx check that the feature is turned on when you start Release 2.xx.

Note: When Norstar Manager is installed, the customer path is set to the same directory as your installation path. For Norstar Manager Release 3.1 or higher, the installation path is the default of **C:\WNORS3** or the path you enter when you install. If you want to keep using your customer databases from Release 2.XX, you need to access the **Preferences** screen and change the **Default customer path** field.

Installing Norstar Manager

The Norstar Remote Utilities software is contained on a CD-ROM or is available from the World Wide Web site for download on to multiple 3.5-inch floppy disks.

If you are using disks, you should make a backup copy of the originals before you install the software. For instructions on how to copy a disk, refer to the MS-DOS manual that came with your PC.

The InstallShield® Wizard guides you through the installation process. Follow the directions in each window to complete the installation. You can cancel the installation at any time and return to it later.

Note: If the installation fails for any reason, delete any files which were placed in the “temp” folder in the Windows folder or in your defined “temp” directory during the installation attempt. The next installation attempt will not work unless these files are removed. Do not delete the “temp” folder.

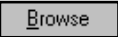



To install Norstar Manager

1. Uninstall any previous versions of Norstar Remote Utilities using the Add/Remove Programs Control panel (Windows 95), or the uninstall icon in the Remote Utilities program group (Windows 3.1).

Note: The uninstall process does not remove your Norstar Manager customer database, preferences, or backup files from a previous installation of Norstar Remote Utilities.

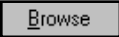
2. Insert the Norstar Remote Utilities CD-ROM, or insert the Norstar Remote Utilities disk labeled “Disk 1”.
3. For Windows 95:
Click the **Start** button, then choose the **Run** command. The **Open** dialog box appears.

For Windows 3.1 (and Windows for Workgroups 3.11):
From the **File** menu of the Program Manager, choose **Run**. The **Run** dialog box appears.

4. Click  and choose the drive that is designated for your CD-ROM or floppy drive.
5. If you are using CD-ROM, double-click the “DISK1” folder.
6. Click once on setup.exe. Click  (Windows 95) or  (Windows 3.1). Click  to start the installation.

The Norstar Remote Utilities installation banner appears, along with a Setup window. The window shows the progress of the InstallShield Wizard setup. When setup is complete, the Welcome window appears.

7. Follow the directions given by the wizard.

During the installation process, you are asked to confirm the directory where you want the application installed. For Norstar Manager, the default directory is `c:\WNORS3`; for Norstar Remote Tools, it is `c:\NRU`. Choose  if you wish to select another directory.

If you are installing Norstar Manager and your PC has an older version of the

application on its hard drive, change the directory to the old Norstar Manager directory name so the new release will replace the old one.

When the installation is complete on Windows 95, the Norstar Remote Utilities component folders appear, ready for use. On Windows 3.1, the Norstar Remote Utilities program group appears.

If you are running Windows 95 and any of the Norstar Remote Utilities components you selected for installation fails to install, no folders (even the folders of the components which did install) appear when the install is complete. You can open the folders for the successfully installed components using the **Start** menu.

If you are running Windows 95, installation creates a folder for Norstar Remote Tools (if installed) and a folder for Norstar Manager.

If you are running Windows 3.1, installation creates a Norstar Remote Utilities program group that contains icons for

- Remote Tools, if it is installed
- Remote Tools help, if Remote Tools is installed
- Norstar Manager and Norstar Manager error messages
- uninstall programs

Now that Norstar Manager is installed on the PC's hard drive, store the original software and backup disks in a safe location. Make sure all disks are write-protected so no one can accidentally replace or delete the information on them.

If you need to uninstall either Norstar Manager or Remote Tools, use Add/Remove Programs in the **Control Panel** window (Windows 95), or double-click the uninstall icon included in the program group (Windows 3.1). You have to manually remove a few files (such as Wnors.ini and NRU.ini) from the Windows folder after the uninstall. These remaining files are not useful without the rest of the program files.

Note: The uninstall process does not remove your Norstar Manager customer database, preferences, or backup files from a previous installation of Norstar Remote Utilities.

Starting Norstar Manager

Once you have installed the Norstar Manager software, you can start Norstar Manager.

To start Norstar Manager in Windows 3.1:

1. Make sure the Windows Program Manager appears on your monitor.
2. Open the **Norstar Remote Utilities** program group.
3. Double click the **Norstar Manager** icon. The **Log On** dialog box appears.

To start Norstar Manager in Windows 95:

1. Click **Start**.

2. From the **Program** menu, point to **Norstar Remote Utilities**.
3. Point to **Norstar Manager**. The **Log On** dialog box appears.

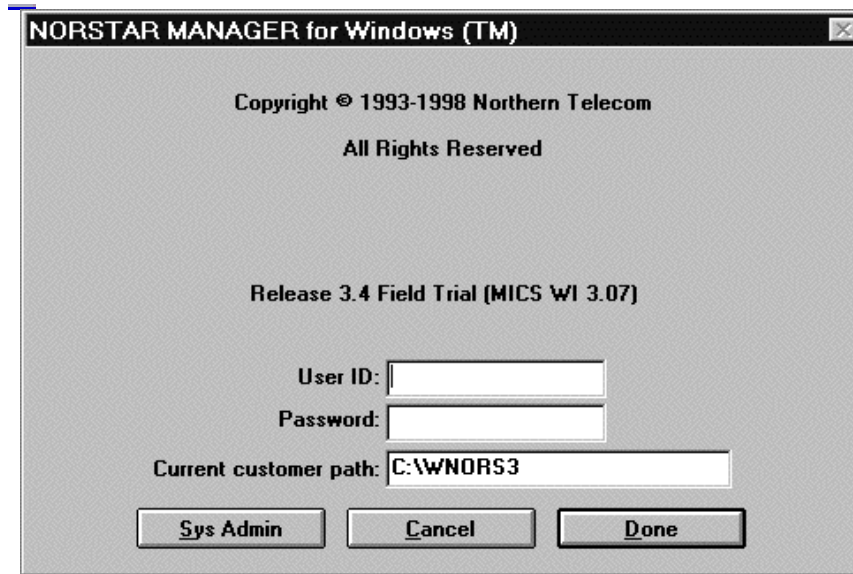


Figure 3.1 – The Log On dialog box

Once the **Log On** screen appears on your monitor, you can log on to the application. There are two passwords that you will use: the General user password and the Administrator password. When you first start Norstar Manager, the General user password is **password** and the Administrator password is **adminpassword**.

Note: If you enter an incorrect password, Norstar Manager will remain at the Log On screen. Try entering the password again.

The General user password provides access to all of the functions in Norstar Manager except changing passwords. The Administrator password provides access to all of the functions in Norstar Manager including changing passwords.

Passwords can contain any alphanumeric character and must be from 1 to 17 characters long.

Norstar Manager passwords are case sensitive. This means that upper case letters are considered different from lower case letters. For example, the default General user password is "**password**". If you type "**Password**", Norstar Manager will not recognize the password because the letter "**P**" is capitalized.


Important: For security reasons, it is strongly recommended that you change the default passwords when starting Norstar Manager for the first time.

The **Current customer path** field contains the pathname of the directory shown when Norstar Manager starts. It is important that the pathname specified in this field is the pathname of a directory your PC has access to. If the pathname specifies a directory your PC cannot access, such as a network drive you are no longer connected to, Norstar Manager will not start.

Logging on

Before you log on, make sure the **Log On** dialog box appears on your monitor.



To log on to Norstar Manager:

1. Select the **User ID** field and type your user ID.
2. Select the **Password** field and type the General user password.
3. Select the **Current customer path** field and type the path of the directory you want to start working in.
4. Choose The **Systems Directory** screen appears.

Logging off

When you have finished with Norstar Manager, you should log off and return to the Windows operating system.

Before you log off, make sure the **Systems Directory** screen is displayed on your monitor. To log off:

1. Choose the **File** menu and then the **Quit** menu item.
A dialog box appears asking if you are ready to exit the program.
Note: If you want to cancel logging off, choose 
2. Choose Your monitor shows the Windows operating system.

Note: Do not exit from Norstar Manager in any method other than the one described above. If Norstar Manager exits to DOS or the Windows operating system by any means other than logging off, perform the steps described in **Troubleshooting Norstar Manager** in **Section 2** of the **Norstar Manager for Windows™ Reference Guide**.

Changing the password

Before you change the passwords, make sure your monitor shows the **Log On** screen and you have chosen an Administrator and General user password.

To change the password:



1. Select the **User ID** field and type your user ID.
2. Select the **Password** field and type the Administrator password.
Note: The default Administrator password is **adminpassword**.
3. Choose The **Norstar Manager Passwords** dialog box appears.



Figure 3.2 – The Norstar Manager Passwords dialog box

4. Select the **General user** text box and type a new General user password.
5. Select the **Administrator** text box and type a new Administrator password.
6. Choose The dialog box disappears and the **Log On** screen re-appears.

Important: Be sure to write down the new passwords exactly as you entered them, including capitalization. Remember that Norstar Manager passwords are case sensitive. Put the written passwords in a safe place. Lost passwords cannot be recovered. If these passwords are lost, you must re-install Norstar Manager and change the default passwords.

Norstar Manager default settings

Several of the Norstar Manager preference default settings can be customized to suit your specific application.

Note: Norstar Manager preference default settings are provided to ease the use of Norstar Manager. Most of the parameter defaults can be changed on the programming screens when non-default settings are required.

Listed below are the default settings that can be changed and a description of what each setting affects. Instructions on how to change default settings immediately follows the list of descriptions.

COM port: This is the communication port on the personal computer that Norstar Manager uses to communicate with the KSU. You can select COM1, COM2, COM3 or COM4. COM1 is the default.

Connect type: Norstar Manager uses three different ways to connect to the KSU: Direct, Remote, and Operator Assisted. The connection type used depends on where the KSU is located relative to the PC, and the type of assistance required at the far end to connect to the RAD. Remote is the default. For more information about connection types, see **Section 5, Different ways to make an on-line connection**.

Baud rate: This is the communication rate used by Norstar Manager to communicate with the KSU in an on-line session, a backup, or a restore. The default is 19200. If you are using a direct connection, the local baud rate at the RAD must match the baud rate chosen for the direct connection in Norstar Manager. If you are using a remote type of connection, 1200, 2400, 4800, 9600 or 19200 baud can be used. If you choose a baud rate for a remote connection that is higher than the rate supported by the RAD, your modem will "auto-baud down" to the modem speed of the RAD. For more information about connection types, see **Section 5, Different ways to make an on-line connection**.

Connection device: This is the device used by the PC to communicate with the RAD. You can choose either a modem or a Norstar Data Communications Interface (DCI) as the connection device. If you choose a DCI, you must change the **Modem init string**. See **Using a DCI** in **Section 4** of the **Norstar Manager for Windows™ Reference Guide** for more information.

Note: The DCI is not supported by T1 Release 1, Compact ICS, CDA-MICS-XC 1.0, USA-MICS-XC 1.0, NA-MICS-DR 1.1, CDA-MICS-XC 1.1, and USA-MICS-XC 1.1 systems. On these systems you must use a modem.

Dial mode: The dial mode used by Norstar Manager can be either pulse or tone, depending on the CO line type used by Norstar Manager.

Norstar Manager Modem init string: Some modems require special codes to be sent to them before they are ready to communicate. Use this field to enter any special codes that Norstar Manager must send to your modem before it is ready to communicate with the RAD.

Note: For on-line help, click on the icon called **Norstar Manager Error Messages**. This brings up a file in Write (Windows™ 3.1) or WordPad (Windows™ 95). See **Modem Initialization String Problems**.

The default value for the Modem init string is "&FQOV1&C1&D2S7=85&S0". If your modem cannot connect to a RAD, you may have to change this string. Refer to your modem manual for information on what codes must be included in the Modem init string.

There is a default or existing internal string that the application automatically displays in the Modem Init String field which contains the following elements:

&F	Load default factory configuration
Q0	Return response codes
V1	Return verbal response codes
&C1	Set the carrier detect (CD) high when the remote carrier is detected and drop the CD when the remote carrier is lost
&D2	Accept commands only when data transfer ready (DTR) is high and drop the call when DTR is low
S7=85	Wait up to 85 seconds for the remote carrier to be detected
&S0	Data set ready (DSR) always on

If your modem cannot connect to a RAD, you may use the modem init string field to include additional commands at the beginning or end of the string, or to edit the existing string to be sent to your modem. Refer to your modem manual for information on what codes must be included in the Modem init string, and whether the codes you add should be sent before or after the default ones.

Note: In general, you should not delete or alter any of the commands in the default string. However, the modem wait for carrier delay (S7) must be set to include both the delay before the RAD auto-answers and the time for the call to be dialed and connected. Some modems have a maximum wait of 60 seconds. If this is the case, you may set S7 in the modem init string to a lower value. If you lower the S7 value and also want the RAD to auto-answer before the modem times out, you must ensure that the seconds to wait before answering at the RAD is less than the S7 value. For best results, set the maximum modem speed to the maximum connect speed.

Note for US Robotics modem users: Be sure to add **&I0** and **&B1** to your modem init strings.

&I0	Software flow control disabled
&B1	Fixed serial port rate

Refer to your modem documentation for the maximum carrier delay time. The recommended S7 setting is 85 seconds if the RAD is set to auto-answer after 60 seconds.

Note: For on-line help and other modem init strings, click on the icon called **Norstar Manager Error Messages**. This brings up a file in Write (Windows™ 3.1) or WordPad (Windows™ 95). See **Modem Initialization String Problems**.

Language: Norstar Manager is designed to provide all of the screens and prompts in either English or French. Use this field to change the language displayed by Norstar Manager. The language will change after you exit from Norstar Manager and log on again.

Job Queue path: Enter the path for the directory where the Job Queue will be run. To run a local Job Queue, enter the path for a directory on the hard drive of your PC. To run a network Job Queue, enter the path for a directory on the network drive. If you are using a network Job Queue, you should enter the same path on each PC running Norstar Manager. For more information about the Job Queue, see **Section 7, Job Queue**.

Default customer path: Enter the path for the default directory where the customer databases are stored. The default for this field is the directory where Norstar Manager was installed.

Backup speed dialers: When you perform a backup of a Norstar system, all of the information stored in the KSU is copied to the Norstar Manager database. On certain systems, you may want to backup all of the Norstar system information except the personal speed dial numbers. To backup all of the information except the personal speed dialers, make sure this check box does not contain an X.

To change the preference default settings:

1. Make sure the **Systems Directory** screen is displayed.
2. Choose the **Preferences** menu.
The **Preferences** screen appears.

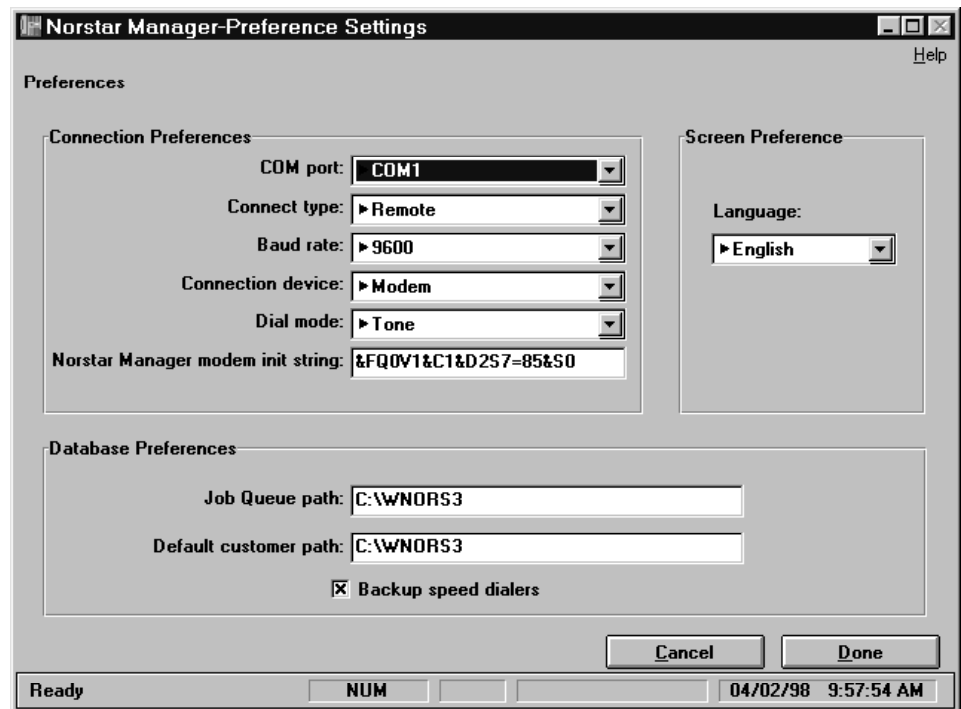



Figure 3.3 – The Preferences screen

3. Choose the drop list arrow of the setting you want to change.
4. Choose the new default setting from the list of settings shown.
Note: If you are changing the Modem init string, Job Queue path, or Default customer path, no list of settings is available. After you select any of these fields, type in the appropriate path or string.

Choose  to exit this screen and implement your changes.

Preparing and adding Norstar system information

4

Introduction

Norstar Manager stores Norstar system information and programming in a central location on your PC, known as a database. This database contains a record of site information, KSU configuration, inventory, and programming for each Norstar system.

Preparing to add Norstar system information to the database involves:

- collecting Norstar system information
- completing a **Norstar Manager for Windows™ Programming Record**

After these steps are completed, you can add Norstar system information to the database.

This section explains how you complete the steps required to add Norstar system information to the Norstar Manager database.

Collecting Norstar system information

The first step in adding Norstar system information to the Norstar Manager database is to collect the following information:

- the name and address of the company that owns the Norstar system
- where the Norstar system is located
- what type of Norstar KSU is installed
- programming preferences

Once you have collected this information, you can begin filling in the **Norstar Manager for Windows™ Programming Record**.

Completing the programming record

Norstar information and programming is recorded on the **Norstar Manager for Windows™ Programming Records**. The programming records consist of several pages divided into system, line, and set programming.

Before you enter any Norstar information programming, you should fill in a programming record.

Norstar Manager for Windows™ Programming Records are found in **Appendix A** of this guide. These programming records are designed to follow the Norstar Manager screens. Each section of information is written in the order it appears on the Norstar Manager screens.

To keep writing to a minimum, most areas of the programming record provide choices that you circle or check. Default settings are shown in **bold**.

Before you begin writing down information on the programming record, make sure you:

- are using the correct programming record for the Norstar system.
Appendix A contains programming records for Modular DR5, Modular ICS and Centrex systems.
- are equipped with any necessary reference materials, such as the **Modular DR5 Installer Guide**, to help you complete the programming record.
- know if a KSU is already installed and running, or if this is a new installation.

Important: If a KSU is already installed and running, you will not enter programming information from a programming record. However, you must still add the Norstar system information to the Norstar Manager database to be able to back up the Norstar system programming. For instructions on backing up Norstar system information, refer to **Section 7**.

System Information

The first area to complete on the programming record is the System Information section. This area, found at the top of page 2, provides general information about the Norstar system.

When you are adding a new Norstar system to the Norstar Manager database, this general information should be entered in the database before you enter any Norstar programming information. Norstar Manager uses this information to set up a database file for the Norstar system.

The information you need for the system information section is listed in the following paragraphs.

System Identification (ID)

This is a unique 10 digit number that identifies a Norstar system. This is a number that you assign.

No two systems can have the same System Identification number. When a company has several Norstar systems stored in the database, this number allows you to distinguish between systems.

Note: To ensure each system has a unique ID, we recommend you use the Norstar system's main phone number as the ID number.

Customer name

This is the name of the company or business that owns the Norstar system.

KSU location

This is where the Norstar KSU is located on site, such as the telephone room. The KSU location is not always the same as the customer's address. You should know where the KSU is located in case a problem occurs on site.

Note: Since the information stored in the **KSU location** field is shown on many of the Norstar Manager screens, it may be helpful to store other important information in this field. Examples of other information are: Service contract level, Maintenance contract number, etc.

Address

This is the customer's business address. The address can be three lines long.

Contact

This is the name of person at the customer site who coordinates Norstar programming and troubleshooting.

Phone number

This is the phone number of the contact person. Remember to include an area code if the phone number is outside your local calling exchange.

Install date

This is the date that the KSU was installed, or will be installed, at the customer site. This date should contain eight digits in the format YYYY-MM-DD. Any single digit month or day must be preceded by a zero.

RAD phone number

This is the number Norstar Manager dials to make contact with the RAD at the customer site.


RAD password

This is the number Norstar Manager uses to identify itself as a valid user to the RAD. This password can be a maximum of 10 digits.

Important: When the RAD is initially programmed, the RAD password is assigned in two different manners:

- On the Global RAD, the RAD password is entered through the RADMIN programming feature. The RAD password shown on this screen **must** be the same as the password entered in RADMIN programming. For information about RADMIN programming, refer to the **RAD Installation Guide**.
- On RADs other than the Global RAD, the RAD password defaults to the System ID. Therefore, for initial installation the RAD password shown on this screen **must** be the same as the customer's Norstar System ID.

After the initial installation, the RAD password can be changed to another number in an on-line programming session. For more information about on-line RAD programming, see **Section 6, Programming a Norstar system**.

Note: To change the programming for a FastRAD, use the Remote Set tool and . If you use Norstar Manager to program a FastRAD, any password that does not use 10 digits is rejected, and the baud rate settings do not match the values you are shown. Avoid problems by using the Remote Set tool option.

Remote time difference

This is the difference in time between your location, or the location of the PC running Norstar Manager, and the location of the Norstar system. The remote time difference can range from +3.5 to -3.5 hours.

Type of system

This is the kind of Norstar KSU the customer is using. Norstar Manager supports Compact, Compact Disconnect, 3X8, and Modular ICS (MICS) systems. For any other type of system, choose CICS/MICS2.0/Other.

Software version

This is the type of software the KSU is running. Norstar Manager supports DR5, T1 Release 1, Centrex+, Centrex Release 1, CDA-MICS-XC 1.0, USA-MICS-XC 1.0, NA-MICS-DR 1.1, CDA-MICS-XC 1.1, and USA-MICS-XC 1.1 systems. For any other type of system, choose CICS/MICS2.0/Other.

Note: For more information about system types, software version types and product names, refer to **Appendix A**.

System language

This is the language combination the Norstar system uses. Norstar DR5 KSU software versions are available in English/French or English/Spanish. All 0X32 KSU software versions are available in English/French/Spanish only.

Note: The system language for 0X32 KSUs only shows English/French but does support English/French/Spanish.

Note: The **System ID**, **Type of system**, and **Software version** fields cannot be changed after the Norstar system has been added to the database.

After you have gathered the above information, write it down in the System Information section of the programming record. After you complete the System Information section of the programming record, you can fill in the remaining pages. The remaining pages of the programming record are devoted to the actual configuration and administration programming of the Norstar system.

System Startup

The System Startup command applies a template to the KSU. On all systems other than a CDA-MICS-XC 1.1, USA-MICS-XC 1.1, CDA-MICS-XC 1.0, USA-MICS-XC 1.0, Centrex+ and Centrex Release 1, the default template is the square template.

You can use Norstar Manager to change a template set up by the installer. If you are going to apply a template to the system, write down the type of template you are going to use and refer to **Initializing a system** in **Section 6** of this guide for instructions on changing a template.

On T1 Release 1 systems you can also specify or change the starting DN using the System Startup command. The default starting DN is 221.

Note: On Centrex+ and Centrex Release 1 systems, the Centrex template is the only option available. On CDA-MICS-XC 1.0 systems, the PBX template is the only option available.

Important: If you change the system template or the starting Directory Number (DN), the on-line session is immediately terminated and you are returned to the **Systems Directory** screen. For more information about on-line connections, see **Section 5** of this guide.

Installed Equipment

In the Installed Equipment section, write down the port number, DN, name or location, and type of equipment attached to the Norstar KSU. Names or locations of sets or other peripheral equipment can be a maximum of seven characters long.

When you are completing a 3X8 DR5 or Compact DR5 programming record, you need only one copy of this page. If you are completing other programming records, more than one copy may be necessary. If the system you are recording programming for has additional equipment, make copies of this page before you start filling it out.

System, Line, and Set programming

When you are completing the System, Line, and Set Programming sections remember, there are several differences between the different types of system programming parameters.

Before you write down any programming preferences, make sure you are using the correct programming record for the Norstar system. If you are unsure of any area in System, Line, or Set Programming sections, refer to the **Norstar Installer Guide** for the type of system you are programming.

After you complete the **Norstar Manager for Windows™ Programming Record**, you can add the Norstar system programming information to the KSU. Before you start:

- write the date, your name, and the total number of pages in the programming record on the first page of the **Norstar Manager for Windows™ Programming Record**
- make a photocopy of the completed programming record and store it in a safe place

It is important that you file the programming record in a safe place because it contains the original system configuration.

Systems Directory screen

The **Systems Directory** screen is the first screen you see after you log on to Norstar Manager. This screen lists all of the Norstar systems in the current directory. The maximum number of Norstar systems in a directory is 2500.

When you first start Norstar Manager, the Norstar systems are organized alphabetically by the customer name. To list the Norstar systems numerically by System ID, choose the **Change view** menu. To change the list back to an alphabetical order, choose the **Change view** menu again.

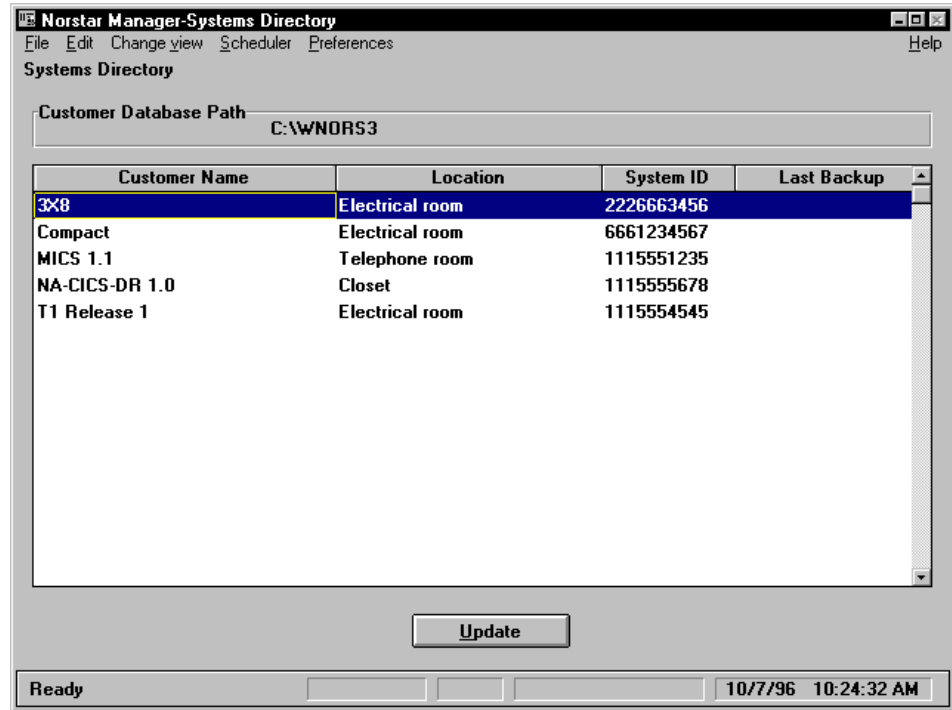


Figure 4.1 – The Systems Directory screen

Before you can perform any function on a Norstar system, you must select the system. To select a Norstar system, use the mouse or and the cursor keys to highlight the desired system. After the system is highlighted, choose the function you want to perform from the applicable menu.

Norstar systems can also be selected by typing the first letter of the customer name. When you type a letter, the first customer name that starts with that letter is highlighted. For example, if you want to select the customer “Zoo” type .

The **Systems Directory** screen lists all of the Norstar systems for a single directory, but not all of the Norstar systems available to Norstar Manager. Other Norstar systems can be accessed by changing the directory.


To change the directory:

1. Choose the **File** menu and then the **Change Customer Path...** menu item.
2. Type the new database pathname.
Note: If the directory you wish to display is on a disk drive other than the one Norstar Manager is installed on, you must include the drive name. For example: **D:\CUSTOMER**. The maximum length for the full pathname of the database directory is 127 characters. For more information about directories, see your DOS manual.

3. Choose 

The list of Norstar systems for the new customer database is shown.

Note: Databases other than the default database created when you installed Norstar Manager are not available until you create them. To create a new database directory, use the steps shown above to enter the name of the new directory into the **Enter customer data base path** field. After you have chosen

 Norstar Manager will ask you to confirm the creation of the new directory.

Important: Do not change the customer path to the directory **c:\wnors3\template**. If you use this directory, you may corrupt the blank database files used to add new systems. If these files become corrupted you must re-install Norstar Manager.

Adding a Norstar system to the database

When you add a Norstar system, you must enter the system information, recorded on page 2 of the **Norstar Manager for Windows™ Programming Record**, into the Norstar Manager database. Adding a Norstar system to the database involves:

- grouping Norstar systems
- entering the system information into the database

Grouping Norstar systems

Similar Norstar systems can be collected into a single group and placed in a specific database directory. This provides you with quick access to customers who share a similar business. For instance, a department store might be in a group called Retail.

When you have decided what database directory the Norstar system should be entered into, you must access, or create, that database directory from Norstar Manager.

Adding a Norstar system

Before you can add any Norstar programming or make a backup copy of a Norstar system's existing programming, you must add the Norstar system information to the Norstar Manager database.

Before you begin, make sure your monitor displays the **Systems Directory** screen. To add Norstar system information:

1. Choose the **Edit** menu and then the **Add System** menu item. The **Add System** screen appears.

Norstar Manager-Add System

Help

Add System

System ID: 1115551235 <<

Customer Name: MICS 1.1

KSU Location: Telephone room

Address: 327 Main Street

Contact: Monique

Phone number: 1115551235

Install date (yyyy/mm/dd): 1996/01/08

RAD phone number: 1115551235

RAD password: 1115551235

Remote time difference: 0.0 hours from local time

Type of system: Modular <<

Software version: MICS 1.1 (NA/CDA/USA) <<

System language: English/French <<

Note: Notify Monique before performing a backup or restore.

Cancel Done

Ready 10/7/96 9:50:29 AM

Figure 4.2 – The Add System screen

All the information you need for the **Add System** screen is found on page 2 of the programming record.

Reminder: When you are entering information in the **Add System** screen, use the mouse to move from field to field. You can also press **Tab** to move from field to field, and **Shift** and **Tab** to move back a field. To move the cursor down one line within the **Address** field, press **Ctrl** **Enter**.

To add Norstar system information, select each of the fields listed on the **Add System** screen and enter the information specified on the programming record. For some of these fields, such as Customer Name, you must type in the information. For other fields, such as Type of system, you choose an option from a list box. See **System Information** section, earlier in this section, for a description of each of the fields on this screen. If desired, select the Note field and type any information you want to add about the customer's Norstar system.

Note: System ID, Type of system, Software version, and System language are mandatory fields. Valid information must be entered into these fields before a Norstar system is added to the database. The other fields may be left blank if necessary.


Choose **Done** to return to the **Systems Directory** screen.

After a Norstar system is added to the Norstar Manager database, you can initiate an on-line session, or make a backup copy of an existing system.

If you are adding Norstar programming, refer to **Section 6** of this guide for more information. If you are making a backup copy of a customer's existing system, refer to **Section 8** for more information.

Deleting a Norstar system from the directory

When you delete a Norstar system from the Norstar Manager directory, all record of programming for this system is removed from the directory. To delete a Norstar system:

1. Select the Norstar system you want to delete.
2. Choose the **Edit** menu and then the **Delete System(s)** menu item.
3. Choose 

The Norstar system is removed from the Norstar Manager directory.

Changing Norstar system information

When a customer's name or address changes, you must alter the information stored in the Norstar Manager database. You alter this information by accessing the **Edit System Details** screen.

The **Edit System Details** screen is similar to the screen used to add a customer to the Norstar Manager database. The **Edit System Details** screen differs, because you cannot alter the System ID, Type of system, or Software version.

Before you change Norstar information, make sure the **Systems Directory** screen appears on your monitor. To change Norstar system information:

1. Select the Norstar system to edit.
2. Choose the **Edit** menu and then the **Edit System Details** menu item. The **Edit System Details** screen appears.

The screenshot shows a Windows-style dialog box titled "Norstar Manager-Edit System Details". It contains various input fields for system configuration. The fields are as follows:

- System ID:** 1115551235
- Customer Name:** MICS 1.1
- KSU Location:** Telephone room
- Address:** 327 Main Street
- Contact:** Monique
- Phone number:** 1115551235
- Install date (yyyy/mm/dd):** 1996/01/08
- RAD phone number:** 1115551235
- RAD password:** 1115551235
- Remote time difference:** 2.0 hours from local time
- Type of system:** Modular
- Software version:** MICS 1.1 (NA/CDA/USA)
- System language:** English/French

At the bottom, there is a "Note" field containing the text: "Notify Monique before a backup or restore." Below the note are "Cancel" and "Done" buttons. The status bar at the bottom left shows "Ready" and the bottom right shows the date and time "10/7/96 10:37:14 AM".

Figure 4.3 – The Edit System Details screen

The **Edit System Details** screen is similar to the **Add System** screen. For instructions on moving around this screen, refer to **Adding a Norstar system** earlier in this section.

Making an on-line connection 5

Introduction

To change Norstar system programming with Norstar Manager, you must first make an on-line connection. In an on-line connection, the Norstar Manager PC is connected to the Norstar system using a Remote Access Device (RAD) and, in some cases, a modem.

To use Norstar Manager, you must make an on-line connection. A RAD acts as a communication bridge between the KSU and the Norstar Manager software running on your PC.

After you have made an on-line connection, you can change the Norstar programming parameters. This section explains how to make an on-line connection.

Changing information with an on-line connection

An on-line connection with a Norstar KSU allows you to change a Norstar KSU's line, set, and system programming. When your PC has an on-line connection with the Norstar KSU, any changes you make on a Norstar Manager screen are also made at the KSU.

Note: You should perform, or schedule, a backup of the Norstar system when you are finished programming. Backing up the Norstar system you have just made changes to updates the copy of the Norstar programming stored in the Norstar Manager database. Refer to **Section 7** for instructions.

Do not connect or disconnect equipment from the KSU when you are in an on-line session. When an on-line session is initiated, Norstar Manager scans the KSU to determine what devices are connected. Norstar Manager does not scan the KSU again during that on-line session. If someone adds or removes a set during an on-line session, you must exit from the on-line session and start another session before Norstar Manager will recognize the change.

Different ways to make an on-line connection

When you make an on-line connection to the Norstar KSU, you have three choices on how the connection is made:

- remote
- operator assisted
- direct

Remote connection

A remote connection means the PC communicates with the RAD at the remote site using a modem and a telephone line.

In this case, Norstar Manager uses the modem to dial the KSU line using the phone number you specify in the connect dialog box. This KSU line must be set to be answered by the RAD after a configurable number of seconds. Once the RAD answers, Norstar Manager transmits the RAD password and gains access to the Norstar KSU.

This type of connection is used when the Norstar KSU is at a remote site and the RAD can be accessed by Norstar Manager.

Operator Assisted connection

Like the remote connection, an operator assisted connection uses a modem to link your PC to the RAD. The difference is that you must get assistance from the customer site before Norstar Manager can make a connection.

To make an operator assisted connection, use the telephone connected to your PC's modem to call the receptionist and have your call transferred to the RAD. The receptionist can transfer the call to the RAD by pressing . After you hear the high pitched tone which indicates the transfer is completed, press and hang up the telephone. Norstar Manager completes the connection to the RAD.

An operator assisted connection is used when:

- the Norstar KSU is located at a remote site and Norstar Manager software cannot access the RAD directly
- or if you wish to talk to someone on-site before you make the on-line connection
- or if the RAD is not set up to Auto-answer calls

You must have access to a separate line port and phone port on the modem. These two ports are either equipped by the modem itself or are obtained by inserting a commercially-available dual phone port device into the modem phone port. One port is connected to a public network line, and the other is connected to an analog telephone that you use to make the call.

Caution: Modems that require a dual phone port device to perform operator assisted calls are susceptible to noise generated when you hang up your telephone. For operator assisted calls, it is highly recommended you use a modem that has a separate line port and phone port instead of one that requires a dual phone port device.

Direct connection

A direct connection means the PC is connected to the RAD by an RS-232 cable. Refer to **Section 2, Figure 2.1** for a diagram of a direct connection.

This type of connection is used when you are running Norstar Manager on a PC at the site of the Norstar KSU.

Note: The RAD password specified in the **Edit System Details** screen must match the password of the RAD.

Opening Remote Tools from Norstar Manager

When you are using Norstar Manager, open the Remote Tools window by selecting **Open Remote Tools** from the File menu. The Remote Tools window uses the connection settings for the current customer as they are stored in the Norstar Manager database. Remote Tools is the only option for connecting to Compact ICS, Modular ICS 2.0, or any other ICS not supported by Norstar Manager.

Making a remote or direct on-line connection

Before you begin, make sure the **Systems Directory** screen appears on your monitor. To make an on-line connection with a Norstar KSU using a remote or direct connection:

1. Select the Norstar system you want.
2. Choose the **File** menu and then the **Start On-line Session...** menu item. The **Start On-line Session** dialog box appears.

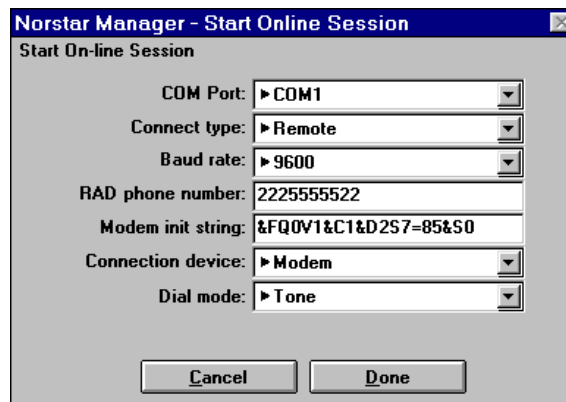



Figure 5.1 – The Start On-line Session dialog box

3. Choose the drop list arrow beside the **COM Port** field and choose the PC communication port Norstar Manager will be using.
4. Choose the drop list arrow beside the **Connect type** field and then choose either **Direct** or **Remote** connection.

5. Choose the drop list arrow beside the **Baud rate** field and then choose the appropriate baud rate.
Note: The default is 19200. If you are using a direct connection, the local baud rate at the RAD must match the baud rate chosen for the direct connection in Norstar Manager. If you are using a remote type of connection, 1200, 2400, 4800, 9600 or 19200 baud can be used.
6. If you chose **Remote** connection, select the **RAD phone number** text box and type the RAD's phone number.
Note: The default for this field is the RAD phone number you entered on the **Edit System Details** screen.
7. If you are using a modem as the connection device, you may have to enter an initialization string in the **Modem init string** field. This is an optional field that is not required for all modems. Check the documentation for your modem to see if an initialization string is required. Refer to **Section 3, Norstar Manager default settings**.
Note: If you are using a DCI as a connection device, you must add **S7=55** to the end of the modem init string.
8. Choose the drop list arrow beside the **Connection device** field and then choose either **Modem** or **DCI**.
Note: This field is not required for Direct connection.
9. Choose the drop list arrow beside the **Dial mode** field and then choose either **Pulse** or **Tone**.
Note: This field is not required for Direct connection.
10. Choose  .

When the PC to KSU connection is established, the **System Programming Overview** screen appears.

Important: Wait for five minutes (ten minutes on CDA-MICS-XC 1.0, USA-MICS-XC 1.0, NA-MICS-DR 1.1, CDA-MICS-XC 1.1 and USA-MICS-XC 1.1 systems) before attempting to use Norstar Manager to reconnect to a Norstar system that has been restarted in any manner. This allows the Norstar system to startup and get ready to answer calls. This includes warm restarts, cold restarts and startup programming.

Making an operator assisted on-line connection

If the RAD is connected to the KSU at a remote site and can only be reached through the receptionist, you must select the **Operator Assisted** option. With the **Operator Assisted** option you must phone the receptionist at the remote site and ask this person to reroute the call to the RAD.

For an operator assisted connection, you must have access to a separate line port and phone port on the modem. These two ports are either provided by the modem itself or are obtained by inserting a commercially-available dual phone port device into the modem phone port. One port is connected to a public network line, and the other is connected to an analog telephone that you use to make the call.

Caution: For operator assisted calls, it is highly recommended you use a modem that has a separate line port and phone port instead of one that requires a dual phone port device.

Before you use the **Operator Assisted** option, make sure the **Systems Directory** screen appears on your monitor. To make an Operator Assisted connection:

1. Select the Norstar system you want.
2. Choose the **File** menu and then the **Start On-line Session...** menu item. The **Start On-line Session** dialog box appears.

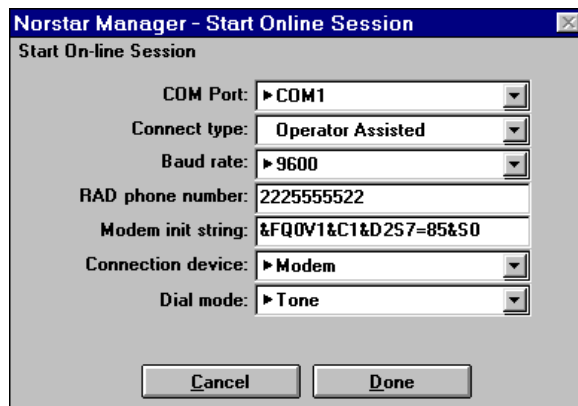


Figure 5.2 – The Start On-line Session dialog box

3. Choose the drop list arrow beside the **COM Port** field and choose the PC communication port Norstar Manager will be using.
4. Choose the drop list arrow beside the **Connect type** field and then choose **Operator Assisted**.
5. Choose the drop list arrow beside the **Baud rate** field and then choose the appropriate baud rate.
Note: For an operator assisted connection, 1200, 2400, 4800, 9600, or 19200 baud can be used. The default is 19200. If you are using a direct connection, the local baud rate at the RAD must match the baud rate chosen for the direct connection in Norstar Manager. If you are using a remote type of connection, 1200, 2400, 4800, 9600 or 19200 baud can be used. If you choose a baud rate for a remote connection that is higher than the rate supported by the RAD, your modem will “auto-baud down” to the modem speed of the RAD.
6. Select the **RAD phone number** text box and type the RAD's phone number.
Note: The default for this field is the RAD phone number you entered on the **Edit System Details** screen.
7. Enter an initialization string in the **Modem init string** field, if necessary. This is an optional field that is not required for all modems. Check the documentation for your modem to see if an initialization string is required. Refer to **Section 3, Norstar Manager default settings**.
8. Choose the drop list arrow beside the **Connection device** field and then choose **Modem**.
Note: You cannot use a DCI with an Operator assisted connection.
9. Choose the drop list arrow beside the **Dial mode** field and then choose either **Pulse** or **Tone**.
10. Choose **Done** A dialog box appears.



Figure 5.3 – Operator Assist dialog box

11. Use the telephone attached to the modem to dial the number of the remote Norstar system.
12. When your call is answered, ask the receptionist to transfer the call to the RAD by pressing
 .
Note: You must place the customer call from the telephone connected to the same line as the modem.
13. When you hear the carrier signal (a high pitched tone), choose and hang up the phone.

When the PC to KSU connection is established, the **System Programming Overview** screen appears.

Important: Wait for five minutes (ten minutes on CDA-MICS-XC 1.0, USA-MICS-XC 1.0, NA-MICS-DR 1.1, CDA-MICS-XC 1.1 and USA-MICS-XC 1.1 systems) before attempting to use Norstar Manager to reconnect to a Norstar system that has been restarted in any manner. This includes warm restarts, cold restarts and startup programming.

Making a Quick connect

If you want to start an on-line session with a Norstar system not listed in the Norstar Manager database, use the Quick Connect feature. The procedure used to make a Quick Connect is the same as the procedure used to start a normal on-line session, except you must specify the RAD password. For remote connections you must also specify the RAD phone number in the **RAD phone number** field. Figure 5.9 shows the **Quick Connect** dialog box.

Before you use the **Quick connect** option, make sure the **Systems Directory** screen appears on your monitor. To make a Quick connect:

1. Choose the **File** menu and then the **Quick Connect...** menu item. The **Quick Connect** dialog box appears.

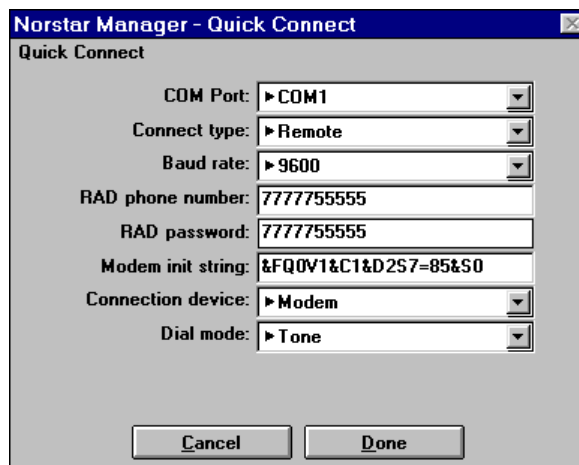



Figure 5.4 – The Quick Connect dialog box

2. Enter the correct information into each field on this dialog box.
Note: The **RAD password** and **RAD phone number** fields do not have any default values listed. The information in these two field is unique for each system and must always be entered when using the Quick Connect feature.
3. Choose .

When the PC to KSU connection is established, the **System Programming Overview** screen appears.

Note: If the KSU is not supported by Norstar Manager, try establishing a connection with Remote Tools.

Changing Norstar programming

Changing Norstar programming is easy. When a change is requested:

- use the **Norstar Manager for Windows™ Programming Record** or Figure 6.3, Overview of Norstar programming, to determine which screen contains the information you need to change
- go to the page in **Section 6** that describes the appropriate screen and follow the procedure given to open the screen in Norstar Manager
- change the appropriate data within the screen

For example: Mr. Brown of Clark and Company asks you to add seven new system speed dial numbers to his company's Norstar system. He also wants the background music feature enabled, the DRT to prime delay set to four rings, and full handsfree enabled for all sets on the system.

You would perform the following steps to carry out Mr. Brown's requests:

1. Refer to Figure 6.3 and note which screens contain the information you need to change.

2. The screens you would note are:
 - System Programming, System Speed Dials (for the seven new system speed dial numbers)
 - System Programming, Miscellaneous 1 (for enabling background music)
 - System Programming, Call Handling (for the DRT to prime delay)
 - Set Programming, Set Abilities (for full handsfree for each set)
3. Refer to this guide's Table of contents to determine which pages give instructions on accessing these screens.
4. Start an on-line session with the KSU.
5. Access the screens and make the necessary changes.

Exiting from an on-line session using Norstar Manager

To exit from an on-line session:

1. Choose the **File** menu and then the **Exit System...** menu item. The **End On-line Session** dialog box appears.

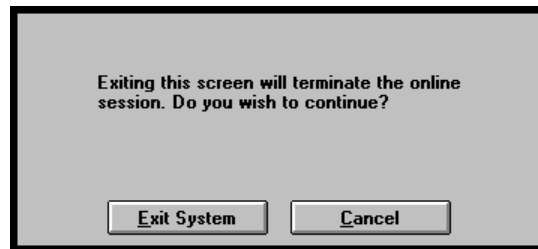
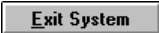


Figure 5.5 – The End On-line Session dialog box

2. Choose  to exit from the on-line session.

The **Systems Directory** screen appears.

Programming a Norstar system 6

Introduction

Norstar programming defines how a Norstar KSU and its peripheral devices work together.

Adding Norstar programming involves entering the information that is in the **Norstar Manager for Windows™ Programming Record** into the Norstar KSU.

This section explains how to add Norstar programming, written down in the programming record, to the Norstar KSU.

Note: If the Norstar system is already installed and running, you can use the steps described in this section to change the existing programming. If you are installing Norstar Manager for Windows™ and programming Compact ICS, refer to the *Remote Tools User Guide*. Refer to the **Compact ICS Programming Record**.

Connecting to a Norstar system

Before you begin entering programming information, make sure you have:

- completed a copy of the appropriate **Norstar Manager for Windows™ Programming Record**, found in **Appendix A**
- read the related **Norstar Installer Guide** or **Norstar System Coordinator Guide**.

Before you can add programming to the Norstar system, you must first select the Norstar system that you want to program and start an on-line session. You select the Norstar system on the **Systems Directory** screen. The **Systems Directory** screen is the first screen your monitor shows after you log on.

Before you begin, make sure the **Systems Directory** screen appears on your monitor. To connect to a Norstar system:

1. Select the Norstar system you want to program.
2. Start an on-line session.
The **System Programming Overview** screen appears.

Note: For information on starting an on-line session, refer to **Section 5, Making an on-line connection.**

Port	Line	Name	Type
201	001	Line001	Unsupervised
202	002	Line002	Unsupervised
203	003	Line003	Unsupervised
204	004	Line004	Unsupervised
205	005	Line005	Unsupervised
206	006	Line006	Unsupervised
207	007	Line007	Unsupervised
208	008	Line008	Unsupervised
209	009	Line009	Unsupervised

Line	Rec'd #	Name
121		Line121
122		Line122
123		Line123
124		Line124
125		Line125
126		Line126
127		Line127
128		Line128
129		Line129

Port	DN	Name	Type
101	2221	2221	M7310
102	2222	2222	M7310
103	2223	2223	Unequipped
104	2224	2224	Unequipped
105	2225	2225	Unequipped
106	2226	2226	Unequipped
107	2227	2227	Unequipped
108	2228	2228	Unequipped

MICS 1.1
System: Modular
Customer Name: MICS 1.1
KSU Location: Telephone room
System ID: 1115551235

Ready 10/7/96 10:46:23 AM

Figure 6.1 – The System Programming Overview screen

System Programming Overview screen

When you first access a Norstar system, Norstar Manager shows the **System Programming Overview** screen. This screen provides access to system, line and set programming.

The **System Programming Overview** screen shows you all of the lines and sets that are connected to the Norstar KSU. Any KSU port that does not have a line or set connected will be shown as unequipped. In the **Sets** data box you also see other pieces of Norstar equipment that can be connected to a station port, such as an ATA.

Note: The **System Programming Overview** screen will show only the pieces of Norstar equipment that use the KSU memory (NVRAM) and can be administered by Norstar Manager. Some equipment, such as RADs and StarTalk, use their own memory and thus do not appear on this screen. Other equipment, such as the DCI, are not shown because they cannot be programmed by Norstar Manager.

On the **System Programming Overview** screen you can view information about trunks, target lines and sets. For trunks you can see the port number, line number, line name and trunk type. For target lines you can see the line number, received number and line name. For sets you can see the port number, DN, set name, set type, and add-on device (CAP and BLF).

Note: To view the addon devices, choose the **Edit** menu, and choose **Update Addons**, then scroll to the right in the **Sets** data box.

The **System Programming Overview** screen allows you to change some of the information shown. You can change the trunk name, the target line name, the received number, and the set name. The set type can be changed when the set is not physically connected to the port.

You can change how the items in the **Sets** or **Trunks** data boxes are sorted. The sets shown can be sorted by DN or by port number. The trunks shown can be sorted by name.

To view the sets by DN number, choose the **Edit** menu and then the **Sort by DN and Line** menu item.

To view the sets by Port number, choose the **Edit** menu and then the **Sort by Port** menu item.

The devices shown in the **Addons** field of the **Sets** data box are not automatically updated when you access the **System Programming Overview** screen. To update the addon devices, choose the **Edit** menu and then the **Update Addons** menu item.

Hardware Info

The **Hardware Info** dialog box provides additional information about the lines and sets that are connected to the Norstar KSU. For the lines connected to the KSU, the **Hardware Info** dialog box shows the port number, line number, name, type and version number. For the sets connected to the KSU, the **Hardware Info** dialog box shows the port number, DN, name, type, version number, add-on device (eg. CAP and BLF), and add-on version number.

Before you open the **Hardware Info** dialog box, you must select one or more lines or sets on the **System Programming Overview** screen. The **Hardware Info** dialog box will then show details about the lines and sets connected to the selected modules.

To view the **Hardware Info** dialog box:

1. Choose the lines or sets you want to view additional information about.
Note: You cannot view lines and sets at the same time.
2. Choose the **Maintenance** menu and then the **Hardware Info** menu item. The **Hardware Info** dialog box appears.

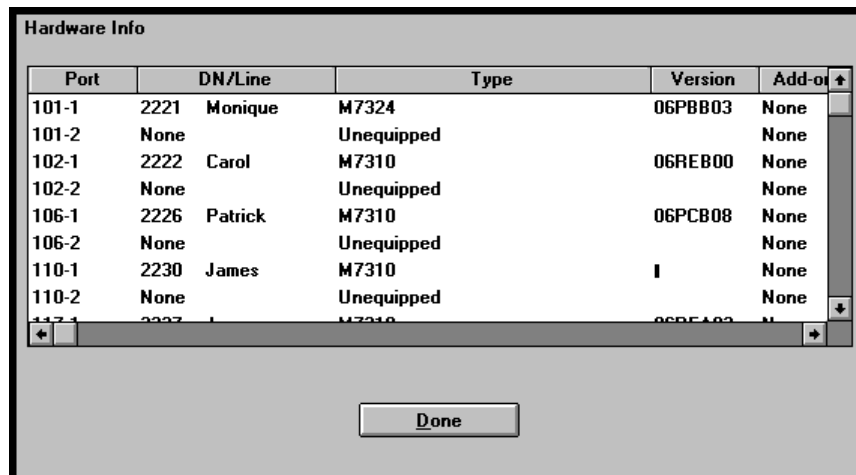



Figure 6.2 – The Hardware Info dialog box

There may be a delay before the **Hardware Info** dialog box appears. The length of the delay becomes longer if you select more lines or sets.

Note: The Hardware Info dialog box can also be accessed from the **Port Status** screen. For information about the **Port Status** screen, refer to **Section 10, Querying the Port status**.

Choose  to return to the System Programming Overview screen.

Adding programming information

Adding Norstar programming involves entering information about:

- installed equipment
- system programming
- line programming
- set programming
- RAD programming
- voice mail programming

Refer to Figure 6.3 for an overview of the different areas of Norstar programming. This Figure provides a conglomerate summary of all options. For information about specific applicable options, refer to **Appendix A** and the Programming Record that applies to the KSU you are programming.

The information you need for adding programming to the Norstar system is found in the programming record.

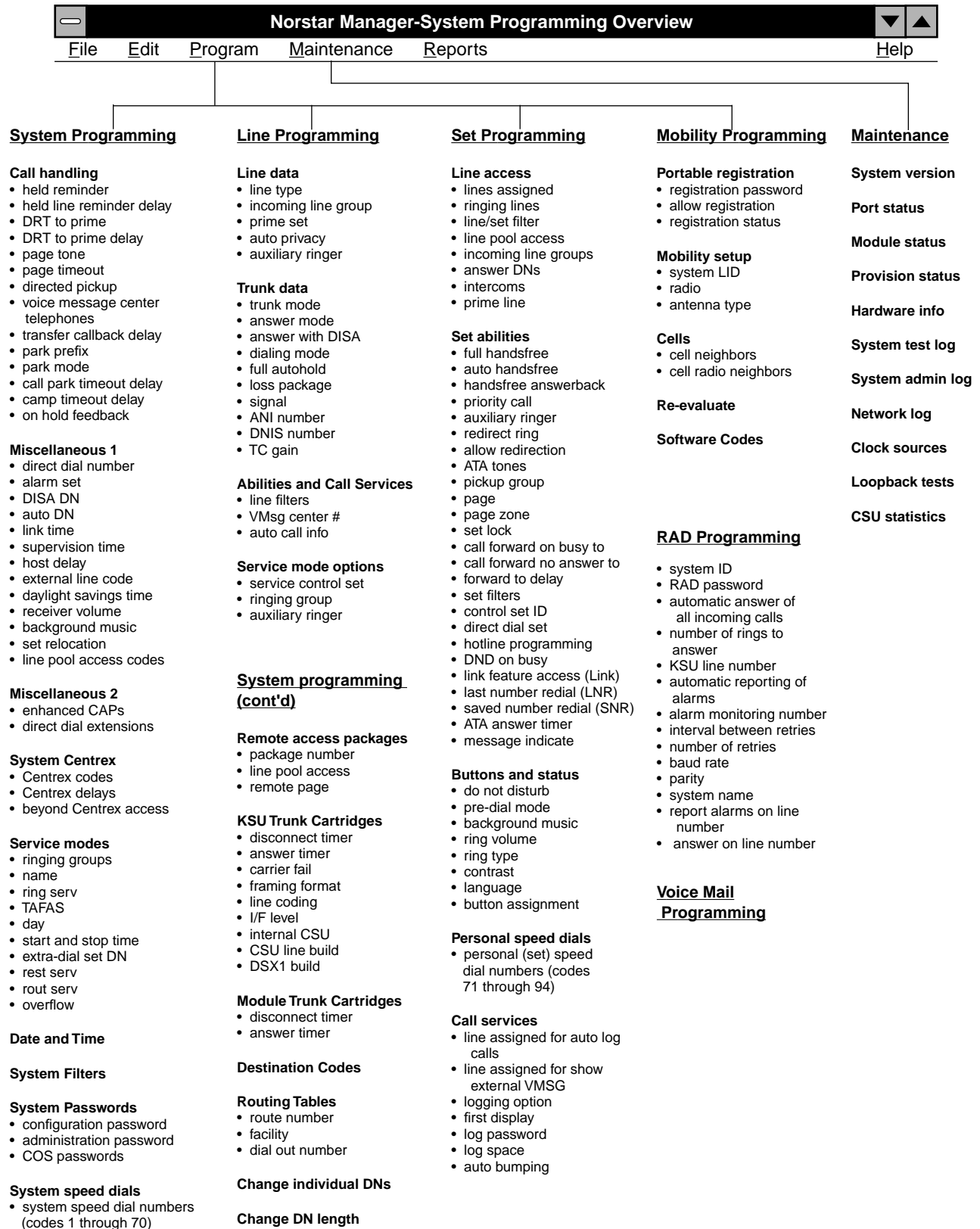


Figure 6.3 – Conglomerate Overview of Norstar programming

Installed equipment

The first task in adding programming to the Norstar system is to define what equipment is installed on site. This information is found in the Installed Equipment section of the programming record. Enter the information from the Installed Equipment section on the **System Programming Overview** screen.

Note: On Modular two-port, six-port, and twelve-port systems, you can enter the names and received numbers of target lines on the **System Programming Overview** screen.

Programming line and set names

Before you can program the names for the lines and sets on a Norstar system, you must access the **System Programming Overview** screen.

To enter the names:

1. Select the **Name** field of the trunk, set or target line.
2. Type the name of the line or set.
Line and set names are a maximum of seven characters long.
3. Repeat steps 1 and 2 for each line and set on the Norstar system.

Changing the received number of a target line

Received numbers are available only on expanded Modular systems. Before you can change the received number of a target line, you must access the **System Programming Overview** screen.

To change the received number:

1. Select the **Rec'd #** field of the target line you want to change.
2. Type the new received number.
The new received number must be the same length as the old received number. To change the number of digits required for a received number, refer to **Changing the DN length**.
3. Repeat steps 1 and 2 for each received number you are changing.

Programming set types

The set type can be changed when the set is not physically connected to the port. Before you can program which type of sets will be connected to a Norstar system, you must access the **System Programming Overview** screen.

To program the type of sets connected:

1. Double click on the **Type** field of the set in the **Sets** data box.
A menu of possible set types appears.
2. Choose the type of set used on this DN.
Note: You cannot change set type on the port the RAD is currently connected to.
3. Repeat the steps 1 to 2 for each of the sets to be programmed.

Note: Use care when programming line and set types to expansion modules. Norstar Manager assumes that you know which type of expansion module has been added to the KSU and does not check if you are programming the correct type of device to the module.

Initializing Programming

Initializing a system returns all programmable options to the default values. If you just need to make minor changes, initializing may not be necessary. You may want to change only the required options.

Initializing a system

When you initialize a system, you are applying a new template to that system. This changes all of the programming parameters to their default values.

There are five different types of system templates: Square, Centrex, Hybrid, PBX and DID. Each template has a different set of default programming parameters. For detailed listing of what the difference is in programming defaults, see the appropriate **Norstar Installer Guide**.

The type of template that you can apply depends on the type of Norstar system you are programming. Table 6.1 lists the templates available for each type of Norstar system.

System	Square	Centrex	Hybrid	PBX	DID
NA-MICS-DR 1.1	✓	✓	✓	✓	✓
CDA-MICS-XC 1.1				✓	✓
USA-MICS-XC 1.1				✓	✓
USA-MICS-XC 1.0				✓	✓
CDA-MICS-XC 1.0				✓	
T1 Release 1	✓	✓	✓	✓	✓
Modular DR 5	✓	✓	✓	✓	
Centrex+		✓			
Centrex Release 1		✓			
Compact DR5	✓		✓	✓	
3X8 DR5	✓		✓	✓	

Table 6.1 – System templates

To initialize a system:

1. Move to the **System Programming Overview** screen.
2. Choose the **Edit** menu and then the **Initialize System** menu item. The **Initialize System** screen appears.

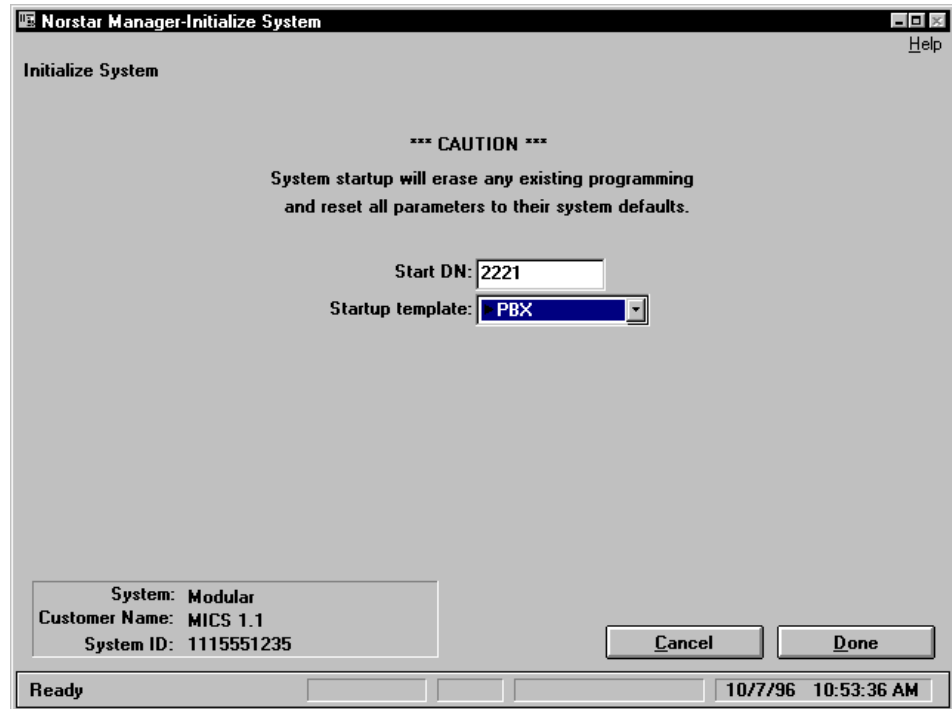


Figure 6.4 – The Initialize System screen

3. Select the **Start DN** field and type the DN of the first set. The rest of the set DNs will number sequentially from this DN.
Note: This field is only available for T1 Release 1, Centrex Release 1, CDA-MICS-XC 1.0, USA-MICS-XC 1.0, NA-MICS-DR 1.1, CDA-MICS-XC 1.1, and USA-MICS-XC 1.1 systems.
4. Choose the drop list arrow beside the **Startup template** field and choose a template from the list shown.
5. Choose **Done** to implement your changes.

When you initialize a system, the on-line session will terminate automatically.

Note: The DN length does not change when you initialize the system. To change the DN length to or from its default value, you must use the **Change DN Length** screen. For more information, refer to **Changing the DN length** later in this section.

Initializing a line

When you initialize a line, you are erasing any programming changes that were made to the line. All of the programming parameters for the line are set to their default values.

To initialize a line:

1. Select the line or lines that you want to initialize.
2. Choose the **Edit** menu and then the **Initialize Line** menu item.

Initializing a set

When you initialize a set, you are erasing any programming changes that were made to the set. All of the programming parameters for the set are changed to their default values.

To initialize a set:

1. Select the set or sets that you want to initialize.
2. Choose the **Edit** menu and then the **Initialize Set** menu item.





System programming



System programming information is found in the System Programming section of the programming record. System programming involves entering information about:

- Call handling
- Miscellaneous 1
- Miscellaneous 2 (Modular only)
- System Centrex (Centrex+ and Centrex Release 1 only)
- Service modes
- Ringing Groups CDA-MICS-XC 1.0, USA-MICS-XC 1.0, NA-MICS-DR 1.1, CDA-MICS-XC 1.1, and USA-MICS-XC 1.1 only)
- Date and Time
- System Filters
- System Passwords
- System speed dials
- Remote access packages (Modular only)
- Trunk cartridges (T1 Release 1, CDA-MICS-XC 1.0, USA-MICS-XC 1.0, NA-MICS-DR 1.1, CDA-MICS-XC 1.1, and USA-MICS-XC 1.1 only)
- Routing table (T1 Release 1, CDA-MICS-XC 1.0, USA-MICS-XC 1.0, NA-MICS-DR 1.1, CDA-MICS-XC 1.1, and USA-MICS-XC 1.1 only)
- Destination codes (T1 Release 1, CDA-MICS-XC 1.0, USA-MICS-XC 1.0, NA-MICS-DR 1.1, CDA-MICS-XC 1.1, and USA-MICS-XC 1.1 only)
- Change individual DNs
- Change DN length

Each area of information is entered into the Norstar system through a dedicated screen. These screens are accessed by selecting an option from the **Program** menu.

After you have entered information in one of these screens, you can:

- Choose  to implement your changes and move to the next programming screen.
- Choose  to implement your changes and move to the previous programming screen.
- Choose  to cancel all new programming changes and return to the **System Programming Overview** screen.
- Choose  to implement the new programming changes and return to the **System Programming Overview** screen.

Note: The steps described in this section assume that you are starting from the **System Programming Overview** screen. If you are not, return to the **System Programming Overview** screen or use  or  to move to the appropriate programming screen.

Call handling


To enter Call handling information:

1. Choose the **Program** menu and then the **System** menu item.
2. Choose the **Call Handling** menu item.
The **Call Handling** screen appears.

Figure 6.5 – The Call Handling screen

3. If Held reminder is to be enabled, choose the **Held reminder** check box. Then choose the drop list arrow beside the **Held line reminder delay** field. A list of delays appears. Choose the desired Held line reminder delay.
4. If Delayed ring transfer to prime is to be enabled, choose the **Delayed ring transfer to prime** check box and then choose the drop list arrow beside the **Delayed ring transfer to prime delay** field. A list of transfer delays appears. Choose the desired Delayed ring transfer to prime delay.
5. If Directed pickup is to be enabled, choose the **Directed pickup** check box.
6. If Page Tone is to be enabled, choose the **Page Tone** check box.
Note: This field is only available for CDA-MICS-XC 1.0, USA-MICS-XC 1.0, NA-MICS-DR 1.1, CDA-MICS-XC 1.1, and USA-MICS-XC 1.1 systems.
7. In the **Voice Message Center Telephones** box, select the text box for **VMmsg telephone #1**. Type the telephone number of the voice message center.
8. Repeat step 7 for each voice message center.
9. Choose the drop list arrow beside the **Transfer callback delay** field. Choose the Transfer callback delay from the list shown.

10. Choose the drop list arrow beside the **Park prefix** field. Choose the Park prefix from the list presented.
Note: In early versions of DR5 KSU software, the Park prefix could not be changed to or from **None** by Norstar Manager. To avoid potential problems, we recommend that you *do not* set the Park prefix to **None** on KSUs with early releases of DR5 software.
11. Choose the drop list arrow beside the **Call park timeout delay** field. Choose the Call park timeout delay from the list shown.
12. Choose the drop list arrow beside the **Camp timeout delay** field. Choose the Camp timeout delay from the list shown.
13. Choose the drop list arrow beside the **On hold feedback** field. Choose the desired option from the list shown.
14. Choose the drop list arrow beside the **Page timeout** field. Choose the Page timeout delay from the list shown.
Note: This field is only available for CDA-MICS-XC 1.0, USA-MICS-XC 1.0, NA-MICS-DR 1.1, CDA-MICS-XC 1.1, and USA-MICS-XC 1.1 systems.

Choose  to exit this screen and implement your changes.

Miscellaneous 1

To enter Miscellaneous programming information:

1. Choose the **Program** menu and then the **System** menu item.
2. Choose the **Miscellaneous 1** menu item. The **Miscellaneous 1** screen appears.
Note: On Compact DR5 or 3X8 DR5 systems, this screen and menu item are titled **Miscellaneous**.

Norstar Manager-System Programming

Miscellaneous 1

Direct dial number: 0

Alarm set: 2221 2221

DISA DN:

Auto DN:

Link time: 600 msec

Host delay: 1000 msec

External line code: None

Receiver volume: Use system volume

☐ Background music

☐ Set relocation

☒ Daylight savings

System: Modular
Customer Name: MICS 1.1
KSU Location: Telephone room
System ID: 1115551235

Line pool access codes

Pool	Code
Pool A	9
Pool B	
Pool C	
Pool D	
Pool E	
Pool F	
Pool G	
Pool H	
Pool I	
Pool J	
Pool K	
Pool L	
Pool M	
Pool N	
Pool O	

Back Next


Cancel Done

Ready 10/7/96 11:07:04 AM

Figure 6.6 – The Miscellaneous 1 screen

3. Choose the drop list arrow beside the **Direct dial number** field and then choose a digit from the list.
4. Select the **Alarm set** field and type the DN of the set designated to receive Norstar alarms. To select one of the default alarm sets, choose the drop list arrow beside this field and choose the required set.
5. Select the **DISA DN** field and type the DN specified in the programming record.
6. Select the **Auto DN** field and type the DN specified in the programming record.
7. Choose the drop list arrow beside the **Link time** field and then choose the time specified in the programming record.
8. Choose the drop list arrow beside the **Supervision time** field and then choose the time specified in the programming record.
Note: This field is not available for T1 Release 1, CDA-MICS-XC 1.0, USA-MICS-XC 1.0, NA-MICS-DR 1.1, CDA-MICS-XC 1.1, or USA-MICS-XC 1.1 systems.
9. Choose the drop list arrow beside the **Host delay** field and then choose the time specified in the programming record.
10. Choose the drop list arrow beside the **External line code** field and then choose the code that will allow a user to access an external line.

11. Choose the drop list arrow beside the **Receiver volume** field and then choose one of the options shown.
Note: This field is only available for T1 Release 1, CDA-MICS-XC 1.0, USA-MICS-XC 1.0, NA-MICS-DR 1.1, CDA-MICS-XC 1.1, and USA-MICS-XC 1.1 systems.
12. If **Background music** is to be enabled, choose the check box beside it.
13. If **Set relocation** is to be enabled, choose the check box beside it.
14. If **Daylight savings** is to be enabled, choose the check box beside it.
Note: This field is only available for CDA-MICS-XC 1.0, USA-MICS-XC 1.0, NA-MICS-DR 1.1, CDA-MICS-XC 1.1, and USA-MICS-XC 1.1 systems.
15. Select the field under the heading **Code** for the line pool you are programming.
16. Type the line pool access code indicated for the line pool on the programming record.
17. Repeat steps 15 and 16 for each line pool access code to be entered.

Choose  to exit this screen and implement your changes.

Miscellaneous 2

The programming information accessed with the **Miscellaneous 2** screen only applies to Modular KSUs. If you are not programming a Modular KSU, skip to **Service Modes** to continue system programming.

To enter additional Miscellaneous programming information:

1. Choose the **Program** menu and then the **System** menu item.
2. Choose the **Miscellaneous 2** menu item. The **Miscellaneous 2** screen appears.

Norstar Manager-System Programming

Miscellaneous 2

Enhanced CAPs

ECAP Sets

- None
- None
- None
- None
- None

Direct Dial Extensions

Destination	Set	External number	Resource	M
Internal	2221	2221	None	Dis
None	None		None	Dis
None	None		None	Dis
None	None		None	Dis
None	None		None	Dis

System: Modular
Customer Name: MICS 1.1
KSU Location: Telephone room
System ID: 1115551235

Back Next
Cancel Done

Ready 10/7/96 11:08:12 AM

Figure 6.7 – The Miscellaneous 2 screen

3. Select the first ECAP Sets field.
4. Type the DN the CAP is assigned to.
Note: To delete an ECAP assignment, select the ECAP Sets field and type **None**
5. Repeat steps 3 and 4 for each ECAP on the system.
6. Select the direct dial field you want to program and type the DN of the direct dial set. Repeat this step for each direct dial number.
Note: If you are programming a Modular DR5, Centrex+, or Centrex Release 1 system, you are finished programming on the **Miscellaneous 2** screen. If you are programming a T1 Release 1, CDA-MICS-XC 1.0, USA-MICS-XC 1.0, NA-MICS-DR 1.1, CDA-MICS-XC 1.1, or USA-MICS-XC 1.1 system, complete steps 7 to 12 instead of step 6.
7. Select the **Destination** field of the Direct Dial set you want to program and choose either Internal, External or None.
8. Select the **Set** field and choose or type the DN of the Direct Dial set.
9. If this is an external Direct Dial set, select the **External number** field and type the external number.
10. If this is an external Direct Dial set, select the **Resource** field and choose a line, a line pool or the routing code.
11. Select the **Manual Override** field and choose either Disabled or Enabled.
12. Repeat steps 7 to 11 for each Direct Dial set.

Choose **Done** to exit this screen and implement your changes.

System Centrex

Centrex options only apply to Centrex+ and Centrex Release 1 systems. If you are programming a system other than an Centrex+ or Centrex Release 1 system, skip to **Service Modes** to continue system programming.

To enter Centrex options programming information:

1. Choose the **Program** menu and then the **System** menu item.
2. Choose the **Centrex Access** menu item. The **Centrex Access** screen appears.

Feature	Code
Call Forward	
Cancel Call Forward	
Ring Again	
Cancel Ring Again	
Group Call Pickup	
Directed Call Pickup	
Busy Override/Priority Call	
Make Set Busy	
Cancel Make Set Busy	
Answer Waiting Call	F
Alternate calls	F

F = Link/Flash

Note: Please ensure that the feature access codes match with the host system

System: Modular
Customer Name: Centrex
KSU Location: Telephone Room
System ID: 1234567890

Centrex delays
after link: 1 Sec
after feature: 1 Sec


Beyond Centrex:
☐ 1 ☐ 2 ☐ 3
☐ 4 ☐ 5 ☐ 6
☐ 7 ☒ 8 ☒ 9
☐ 0

Back Next
Cancel Done

Ready 10/9/96 1:37:17 PM

Figure 6.8 – The Centrex Access screen

3. Select the code field of the feature to be programmed and then type the code specified in the programming record.
4. Repeat step 3 for each feature code you are changing.
5. Choose the drop list arrow beside the **after link** field and then choose the time used for the after link delay.
6. Choose the drop list arrow beside the **after feature** field and then choose the time used for the after feature delay.
7. Choose the **Beyond Centrex** check box for each digit that can be used for beyond Centrex access.

Choose  to exit this screen and implement your changes.

Service modes

To enter Service modes programming information:

1. Choose the **Program** menu and then the **System** menu item.
2. Choose the **Service Modes** menu item. The **Service Modes** screen appears.

Mode	Name	Ring Serv	TAFAS	Extra-dial set DN	Rest Serv	Rout Serv	Overflow
1	Night	Off	On	2221 2221	Off	Off	Disabled
2	Evening	Off	On	2221 2221	Off	Off	Disabled
3	Lunch	Off	On	2221 2221	Off	Off	Disabled
4	Mode 4	Off	On	2221 2221	Off	Off	Disabled
5	Mode 5	Off	On	2221 2221	Off	Off	Disabled
6	Mode 6	Off	On	2221 2221	Off	Off	Disabled

System: Modular
 Customer Name: MICS 1.1
 KSU Location: Telephone room
 System ID: 1115551235

Back Next
 Cancel Done


Ready 10/7/96 11:10:12 AM


Figure 6.9 – The Service Modes screen

To edit the Service Modes for 3X8 DR5, Compact DR5, Modular DR5, and Centrex+ systems:

1. Select the **Name** field and type the name of the service you are programming.
2. Select the **Type** field and then choose a type of operation.
Note: If you choose Manual or Off, go to step 5.
3. Select the **Start time** field and type the time the service is to start. Enter this time in the format HHMM using the 24 hour clock. For example, 11:00 pm would be entered "2300".
4. Select the **Stop time** field and type what time the service is to stop. Enter this time in the format HHMM using the 24 hour clock. For example, 11:00 pm would be entered "2300".
5. Select the **TAFAS** field and then choose On or Off.
6. Select the **Extra-dial set DN** field and type the DN of the Extra-dial set.
7. Repeat steps 1 through 6 for the remaining service modes.

To edit the Service Modes for T1 Release 1, CDA-MICS-XC 1.0, USA-MICS-XC 1.0, NA-MICS-DR 1.1, CDA-MICS-XC 1.1, or USA-MICS-XC 1.1 systems:

1. Select the **Name** field and type the name of the service you are programming.
2. Select the **Ring Serv** field and then choose a type of operation.
Note: If you choose Manual or Off, go to step 8.
3. Choose the **Mode Times** menu.
The **Mode Times** screen appears.
4. Select the **Start time** field and type the time the service is to start.
Enter this time in the format HHMM using the 24 hour clock. For example, 11:00 pm would be entered "2300".
5. Select the **Stop time** field and type what time the service is to stop.
Enter this time in the format HHMM using the 24 hour clock. For example, 11:00 pm would be entered "2300".
6. Repeat steps 5 and 6 for each of the seven days.
7. Choose  to return to the **Service Modes** screen
8. Select the **TAFAS** field and then choose On or Off.
9. Select the **Extra-dial set DN** field and type the DN of the Extra-dial set.
10. Select the **Rest Serv** field and choose either Auto, Manual or Off.
11. Select the **Rout Serv** field and choose either Auto, Manual or Off.
12. Select the **Overflow** field and choose either Enabled or Disabled.
13. Repeat steps 1 through 12 for the remaining service modes.

Choose  to exit this screen and implement your changes.

Ringing groups

Ringing groups are part of Service mode programming for T1 Release 1, CDA-MICS-XC 1.0, USA-MICS-XC 1.0, NA-MICS-DR 1.1, CDA-MICS-XC 1.1, and USA-MICS-XC 1.1 systems only.

Note: On earlier versions of T1 Release 1 systems the **Ringing Groups** menu does not appear in the menu bar. You cannot program ringing groups for these earlier versions.

Before you begin, make sure the **Service Modes** screen appears on your monitor. To add ringing groups:

1. Choose the **Ringing Groups** menu. The **Ringing Groups** screen appears.

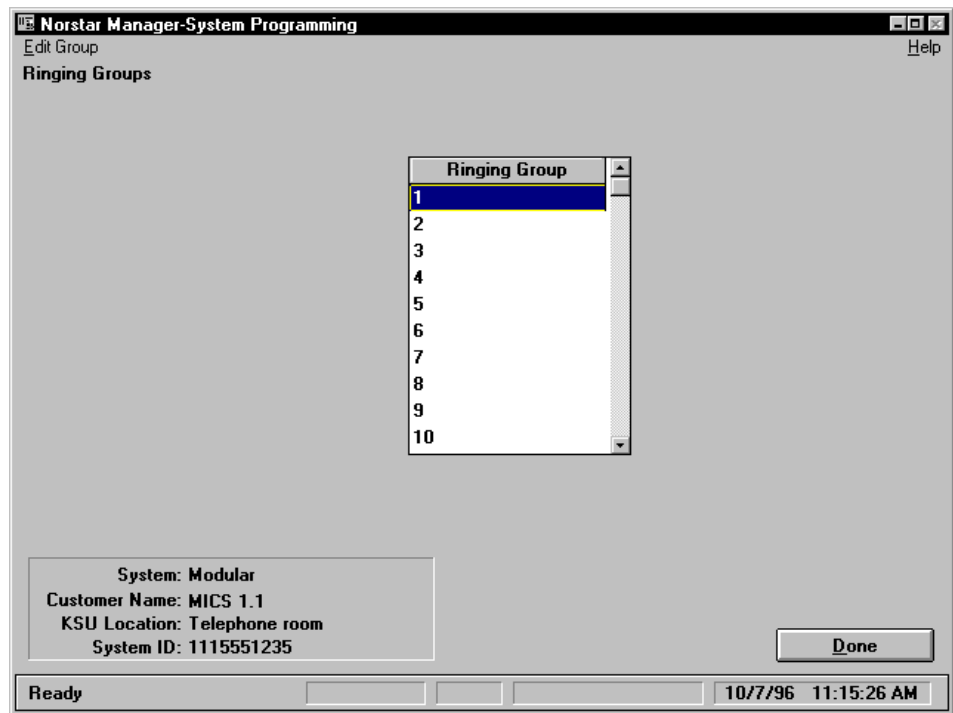


Figure 6.10 – The Ringing Groups screen

2. Select the ringing group you are changing.
3. Choose the **Edit** menu.
The **Edit Ringing Groups** screen appears showing all of the set assigned to the group.

To add sets to the ringing group:

1. Choose the **Edit** menu and then the **Assign set(s)** menu item.
The **Select ringing sets** dialog box appears.
2. Select the sets you want to add to this ringing group.
3. Choose to return to **Ringing Groups** screen.

To delete sets from the ringing group:

1. Select the sets you want to delete from this ringing group.
2. Choose the **Edit** menu and then the **Delete set(s)** menu item.
3. Choose to return to **Ringing Groups** screen.
4. Repeat steps 2 to 9 for each ringing group you want to edit.

Choose to exit the **Ringing Groups** screen and implement your changes.

Choose to exit the **Service Modes** screen.

Changing the KSU date and time

To enter the KSU date and time:

1. Choose the **Program** menu and then the **System** menu item.
2. Choose the **Date and Time** menu item. The **Date and Time** screen appears.

Figure 6.11 – The Date and Time screen

3. Choose **Update Status** to get the date and time that is stored in the KSU.
4. Select the **KSU date and time** field and type in the new date and time. Type this information in the format **yyyy/mm/dd hh:mm** (year/month/day hours/minutes).
5. Choose **Set the KSU Date and Time**

Choose **Done** to exit this screen and implement your changes.

Note: You must always edit the KSU Date and Time field in order to set the KSU date and time successfully. This means you must complete steps 3 and 4 before performing step 5.

The value in the **Time difference from local time** field is the same value as is recorded in the **Remote time difference** field on the **Add new system** screen. This field can be changed from the **System Details** screen.

System Filters

To access the **System Filters** screen:

1. Choose the **Program** menu and then the **System** menu item.

2. Choose the **System Filters** menu item. The **System Filters** screen appears.

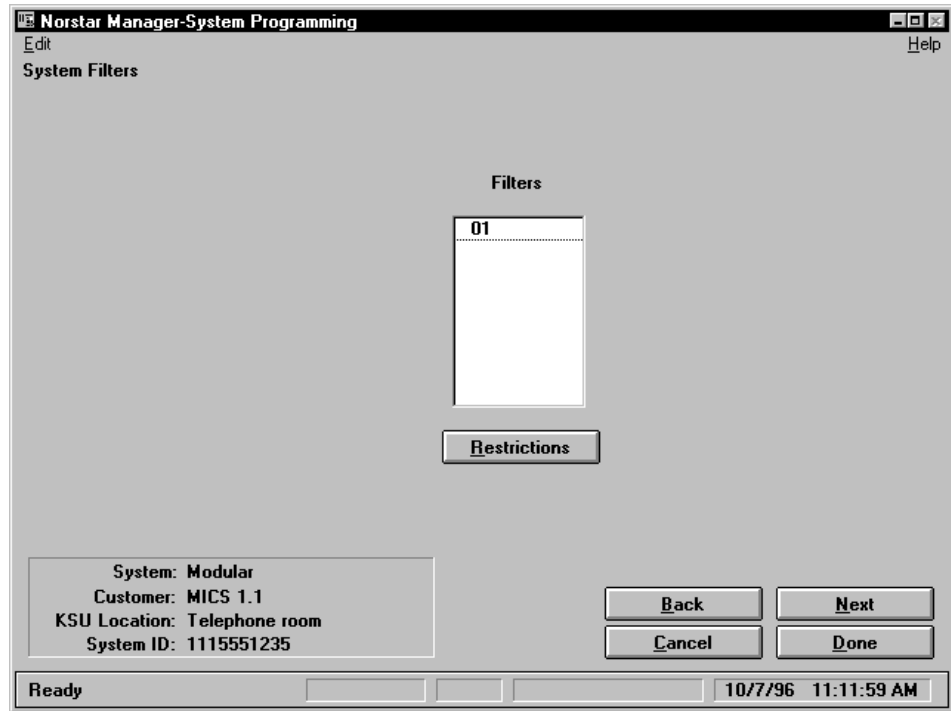




Figure 6.12 – The System Filters screen

Filters


To add a filter:

1. Choose the **Edit** menu and then the **Add filter** menu item. The **Add Filter** dialog box appears. Select the filter you want to add and press .
2. The **Restrictions** dialog box appears with the new filter number displayed in the **Filter number** field.
3. Since a filter must have at least one restriction defined, you must enter a restriction number. Select the **Restriction digits** field and enter the new restriction number.
4. Choose  to return to the **System Filters** screen.

When you enter the maximum number of restrictions and exceptions, a warning message appears. If you delete some filters, extensions or restrictions and try to add new ones the error message remains. You must delete some filters, return to the System Programming Overview screen, and then return to **System Filters** screen and add the new filters.

To delete filters:


1. Select the filter or filters to be deleted
2. Choose the **Delete filter** menu item.

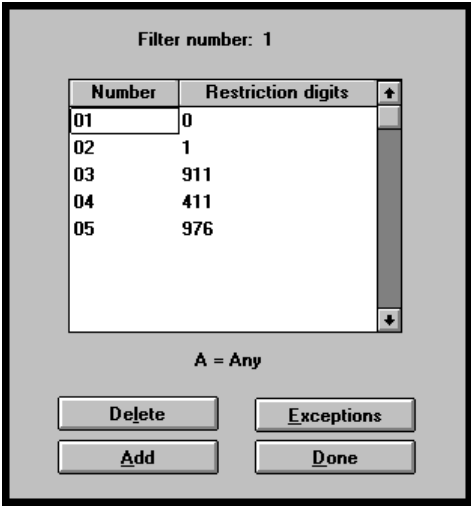
3. Choose 

When you are editing a filter, you are adding, deleting or changing the restrictions and exceptions that are assigned to the filter. Refer to the **Restrictions** and **Exceptions** sections for more information.

Restrictions

Before you can add, delete or edit restrictions, you must access the **Restrictions** dialog box. To access the **Restrictions** dialog box:

1. Select the filter with the restrictions you want to add, delete or edit.
2. Choose 
The **Restrictions** dialog box appears with the number of the filter you selected in the **Filter number** field.



Number	Restriction digits
01	0
02	1
03	911
04	411
05	976

A = Any








 
 

Figure 6.13 – The Restrictions dialog box

To add restrictions:

1. Choose 
A new restriction is added to the dialog box.
2. Select the **Restriction digits** field and type the restriction number.
Note: If there are exceptions for this restriction, refer to the **Exceptions** section for information about adding, deleting and editing exceptions.
3. Repeat steps 1 and 2 for each restriction you are adding to this filter.
4. Choose  to save your changes and return to the **System Filters** screen.

To edit a restriction:

1. Select the **Restriction digits** field for the restriction you are changing.
2. Type the new restriction digits.
3. Choose  to save your changes.

Important: When you change a restriction, you must also change the exceptions that are assigned to that restriction. Therefore, Norstar Manager will automatically open the **Exceptions** dialog box after you save your changes to the restriction.

If you press Alt+A and the **Exceptions** screen appears for different restriction, you must delete any empty exceptions and choose **Done** to return to the **Restrictions** screen. Highlight the restriction you want to add and choose

Exceptions . Choose **Add** to add exceptions. Choose **Done** .

To delete restrictions:

1. Select the restrictions to delete.
2. Choose **Delete**
3. Choose **Done** to save your changes and return to the **System Filters** screen.

Exceptions

Before you can add, delete or edit exceptions, you must access the **Exceptions** dialog box. To access the **Exceptions** dialog box:

1. Select the filter with the exceptions you want to add, delete or edit.
2. Choose **Restrictions**
The **Restrictions** dialog box appears with the number of the filter you selected in the **Filter number** field.
3. Select the restriction with the exceptions you want to add, delete or edit.
4. Choose **Exceptions**
The **Exceptions** dialog box appears with the number of the filter and restriction you selected shown at the top of the dialog box.

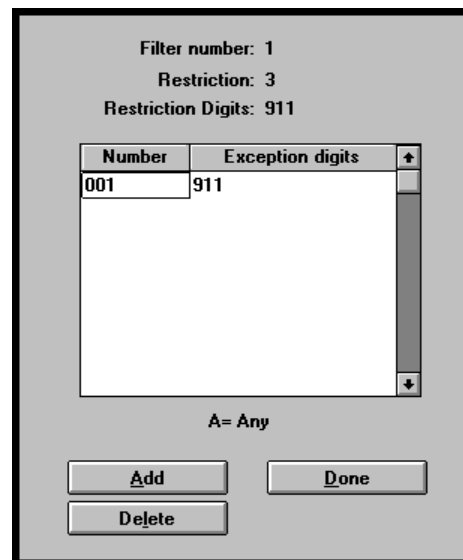





Figure 6.14 – The Exceptions dialog box



To add exceptions:


1. Choose  **Add**
A new exception is added to the dialog box.
2. Select the **Exception digits** field and type the exception number.
3. Repeat steps 1 and 2 for each exception you are adding to this restriction.
4. Choose  **Done** to save your changes and return to the **Restrictions** dialog box.

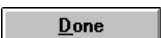
To edit an exception:

1. Select the **Exception digits** field for the exception you are changing.
2. Type the new exception digits.
3. Choose  **Done** to save your changes and return to the **Restrictions** dialog box.

To delete exceptions:

1. Select the exceptions to delete.
2. Choose  **Delete**
3. Choose  **Done** to save your changes and return to the **Restrictions** dialog box.

Choose  **Done** to return to the **System Filters** screen.

Choose  **Done** to exit the **System Filters** screen and implement your changes.

Passwords

To enter System Passwords and change Administration and Configuration passwords:

1. Choose the **Program** menu and then the **System** menu item.
2. Choose the **System Passwords** menu item. The **System Passwords** screen appears.

Norstar Manager-System Programming

System Passwords

**CONFIG password: 266344

**ADMIN password: 23646

Pswd Number	COS Password	User Filter	Line Filter	Remote Package
00		Deflt	Deflt	Deflt
01		Deflt	Deflt	Deflt
02		Deflt	Deflt	Deflt
03		Deflt	Deflt	Deflt
04		Deflt	Deflt	Deflt
05		Deflt	Deflt	Deflt
06		Deflt	Deflt	Deflt
07		Deflt	Deflt	Deflt
08		Deflt	Deflt	Deflt
09		Deflt	Deflt	Deflt


System: Modular
Customer Name: MICS 1.1
KSU Location: Telephone room
System ID: 1115551235

Back Next
Cancel Done

Ready 10/7/96 11:19:14 AM

Figure 6.15 – The System Passwords screen

3. Select the ****CONFIG password** text box and type the new Configuration password.
4. Select the ****ADMIN password** text box and type the new Administration password.
5. Select the first **COS Password** field.
6. Type the password indicated on the programming record.
7. If a User filter is used with this password, select the **User Filter** field and type the number of the User filter or choose one of the filters from the list shown.
8. If a Line filter is used with this password, select the **Line Filter** field and type the number of the Line filter or choose one of the filters from the list shown.
9. If a Remote access package is accessed using this password, select the **Remote Package** field and type the number of the remote package or choose one of the remote packages from the list shown.
10. Repeat steps 5 to 9 for each password listed on the programming record.

Choose  to exit this screen and implement your changes.

System speed dials

To enter system speed dial numbers:

1. Choose the **Program** menu and then the **System** menu item.

- Choose the **System Speed Dials** menu item. The **System Speed Dials** screen appears.

Code	Phone number	Line	Name	Show	Bypass
01		Prime	Sys Spd Dial 01	Y	N
02		Prime	Sys Spd Dial 02	Y	N
03		Prime	Sys Spd Dial 03	Y	N
04		Prime	Sys Spd Dial 04	Y	N
05		Prime	Sys Spd Dial 05	Y	N
06		Prime	Sys Spd Dial 06	Y	N
07		Prime	Sys Spd Dial 07	Y	N
08		Prime	Sys Spd Dial 08	Y	N
09		Prime	Sys Spd Dial 09	Y	N
10		Prime	Sys Spd Dial 10	Y	N
11		Prime	Sys Spd Dial 11	Y	N
12		Prime	Sys Spd Dial 12	Y	N
13		Prime	Sys Spd Dial 13	Y	N

Reach Through Codes

F = Link/Flash P = Pause R = Programmed Release
X = Run/Stop W = Wait for Dial Tone


System: Modular
Customer Name: MICS 1.1
KSU Location: Telephone room
System ID: 1115551235

Back Next
Cancel Done

Ready 10/7/96 11:21:32 AM

Figure 6.16 – The System Speed Dials screen

- Select the **Phone number** field of the System speed dial to be programmed.
- Type the speed dial number indicated on the programming record.
Note: You can enter Link/flash, Wait for tones, Pause, Run/stop, and Programmed release codes within the number, but remember some of these codes use up to two spaces within the number. The maximum length for the speed dial phone number is 24 digits.
- Select the **Line** field and then choose a line, line pool or routing code from the list.
- Select the **Name** field and then type the name for the speed dial code.
- Select the **Show** field and then choose **Y** if you want the speed dial number shown on the set.
- Select the **Bypass** field and then choose **Y** if the speed dial number is to bypass restrictions.
- Repeat steps 3 through 8 for each speed dial number on the programming record.

Choose  to exit this screen and implement your changes.

Remote access packages

Use the **Remote Access Packages** screen to select the line pools that are restricted from use by remote access packages. On this screen you also assign whether the remote access package can use the page feature.

Note: Remote access packages are only available on Modular DR5, T1 Release 1, CDA-MICS-XC 1.0, USA-MICS-XC 1.0, NA-MICS-DR 1.1, CDA-MICS-XC 1.1, and USA-MICS-XC 1.1 systems.

To assign remote access:

1. Choose the **Program** menu and then the **System** menu item.
2. Choose the **Remote Access Packages** menu item. The **Remote Access Packages** screen appears.

Package	Feature 0	Option 0	Feature 1	Option 1	
01	None	None	Line Pool	Pool B	Line
02	Line Pool	Pool A	Line Pool	Pool B	Line
03	Line Pool	Pool A	Line Pool	Pool B	Line
04	Line Pool	Pool A	Line Pool	Pool B	Line
05	Line Pool	Pool A	Line Pool	Pool B	Line
06	Line Pool	Pool A	Line Pool	Pool B	Line
07	Line Pool	Pool A	Line Pool	Pool B	Line
08	Line Pool	Pool A	Line Pool	Pool B	Line
09	Line Pool	Pool A	Line Pool	Pool B	Line
10	Line Pool	Pool A	Line Pool	Pool B	Line
11	Line Pool	Pool A	Line Pool	Pool B	Line
12	Line Pool	Pool A	Line Pool	Pool B	Line

System: Modular
Customer Name: MICS 1.1
KSU Location: Telephone room
System ID: 1115551235

Back Next
Cancel Done

Ready 10/7/96 11:24:04 AM

Figure 6.17 – The Remote Access Packages screen

3. Select the **Feature** field of a line pool that cannot be used with the remote access package you want to edit. Choose **None** from the choice list shown.
Note: The line pool designation for this field will also change to none.
4. Repeat step 3 for each line pool that cannot be accessed using the remote access package.
5. Repeat step 3 for one of the paging features if all of the paging features cannot be accessed using this remote access package.
6. Repeat steps 3 to 5 for each remote access package to be programmed.

Choose **Done** to exit this screen and implement your changes.

Trunk Cartridges

The programming information accessed with the **Trunk Cartridges** screen only applies to T1 Release 1, CDA-MICS-XC 1.0, USA-MICS-XC 1.0, NA-MICS-DR 1.1, CDA-MICS-XC 1.1, and USA-MICS-XC 1.1 systems. If you are programming a different type of system, skip to **Change individual DNs** to continue system programming.

The **Trunk Cartridges** screen shows the type of cartridges connected to the KSU. It also provides access to the trunk cartridge parameters. To view the trunk cartridges:

1. Choose the **Program** menu and then the **System** menu item.
2. Choose the **Trunk Cartridges** menu item. The **Trunk Cartridges** screen appears.

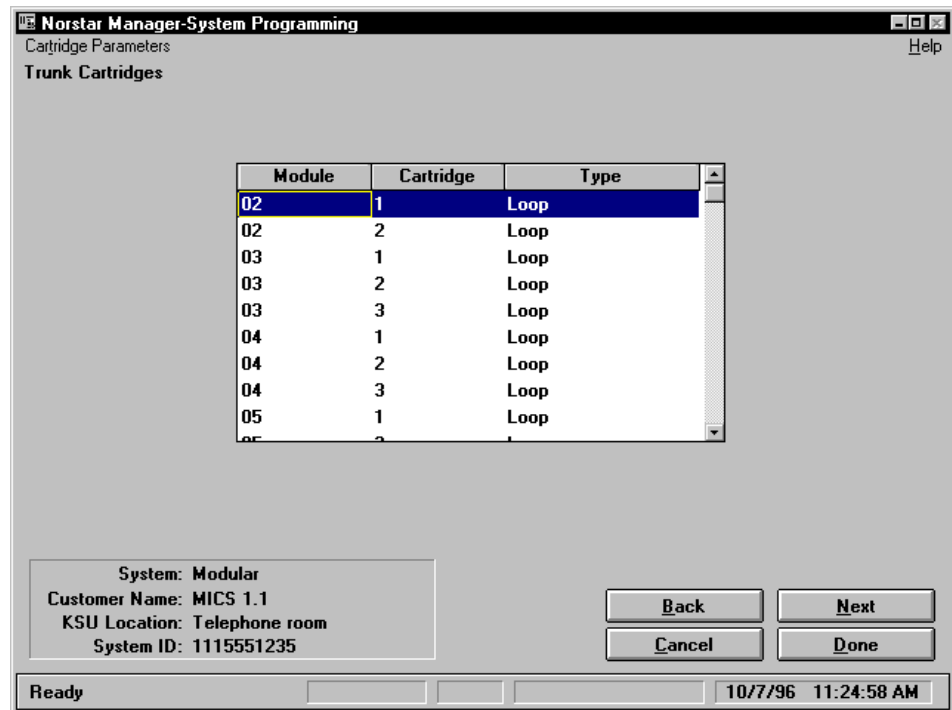


Figure 6.18 – The Trunk Cartridges screen

3. Choose the **Type** field and then choose a trunk cartridge type.
Note: The trunk cartridge must be disabled under Module Status before it can be changed.


The trunk cartridge parameters are changed using two different screens: the **KSU Trunk Cartridges** screen and the **Module Trunk Cartridges** screen.

To change the parameters of the trunk cartridges connected to the core KSU:

1. Choose the **Cartridge Parameters** menu and then the **KSU Trunk Cartridges** menu item.
The **KSU Trunk Cartridge Parameters** screen appears.

Figure 6.19 – The KSU Trunk Cartridge Parameters screen

2. Choose the drop list arrow beside the **Disconnect Timer** field and choose one of the times listed.
3. Choose the drop list arrow beside the **Answer Timer** field and choose one of the options listed.
4. Choose the drop list arrow beside the **Carrier Fail** field and choose one of the options listed.
5. Choose the drop list arrow beside the **Framing Format** field and choose one of the formats listed.
6. Choose the drop list arrow beside the **Line Coding** field and choose one of the coding formats listed.
7. Choose the drop list arrow beside the **I/F Levels** field and choose one of the levels listed.
8. Choose the drop list arrow beside the **Internal CSU** field and choose either On or Off.
9. Choose the drop list arrow beside the **CSU Line Build** field and choose one of the options listed.
10. Choose the drop list arrow beside the **DSX1 Build** field and choose one of the distances listed.

Choose  to implement your changes and return to the **Trunk Cartridges** screen.

To change the parameters of the trunk cartridges connected to the expansion modules:

1. Choose the **Cartridge Parameters** menu and then the **Module Trunk Cartridges** menu item.

The **Module Trunk Cartridge Parameters** screen appears.

System Programming-Module Trunk Cartridge Parameters

Module Trunk Cartridge Parameters

Lines Busy: 0

Loop Cartridge Only

Disconnect Timer: 460

E & M Cartridge only

Answer Timer: 2


System: Modular
Customer Name: MICS 1.1
KSU Location: Telephone room
System ID: 1115551235


Cancel Done

Ready 10/7/96 2:12:52 PM

Figure 6.20 – The Module Trunk Cartridge Parameters screen

2. Choose the drop list arrow beside the **Disconnect Timer** field and choose one of the times listed.
3. Choose the drop list arrow beside the **Answer Timer** field and choose one of the options listed.

Choose  to implement your changes and return to the **Trunk Cartridges** screen.

Choose  to exit this screen and implement your changes.

Routing table

The programming information accessed with the **Routing table** screen only applies to T1 Release 1, CDA-MICS-XC 1.0, USA-MICS-XC 1.0, NA-MICS-DR 1.1, CDA-MICS-XC 1.1, and USA-MICS-XC 1.1 systems. If you are programming a different type of system, skip to **Change individual DNs** to continue system programming.

To enter routing codes:

1. Choose the **Program** menu and then the **System** menu item.
2. Choose the **Routing Table** menu item. The **Routing Table** screen appears.

Route No.	Facility	Dial out Number
001	None	
002	None	
003	None	
004	None	
005	None	
006	None	
007	None	
008	None	
009	None	

P = Pause W = Wait for dial tone

System: Modular
Customer Name: MICS 1.1
KSU Location: Telephone room
System ID: 1115551235

Back Next
Cancel Done

Ready 10/7/96 11:26:36 AM

Figure 6.21 – The Routing Table screen

3. Select the **Facility** field and choose the line pool used by the routing code.
4. Select the **Dial out Number** field and type the telephone number this routing code will dial.

Note: You can enter Pause and Wait for dial tone within the number, but remember these codes use up to two spaces within the number. The maximum length for the dialing string is 24 digits.

Choose **Done** to exit this screen and implement your changes.

Destination Codes

The programming information accessed with the **Destination Codes** screen only applies to T1 Release 1, CDA-MICS-XC 1.0, USA-MICS-XC 1.0, NA-MICS-DR 1.1, CDA-MICS-XC 1.1, and USA-MICS-XC 1.1 systems. If you are programming a different type of system, skip to **Change individual DNs** to continue system programming.

To change the Destination Codes:

1. Choose the **Program** menu and then the **System** menu item.
2. Choose the **Destination Codes** menu item. The **Destination Codes** screen appears.

No.	Code	Normal	Mode 1	Mode 2	Mode 3	Mode 4	Mode 5	Mode 6	Norm
001	81	999	None	017	None	None	None	None	7
002	87	999	025	None	None	None	None	None	7
003	83	999	None	None	021	None	None	None	7

System: Modular
Customer Name: MICS 1.1
KSU Location: Telephone room
System ID: 1115551235

Update Table
Back Next
Cancel Done

Ready 10/7/96 1:47:53 PM

Figure 6.22 – The Destination Codes screen

To add a destination code:

1. Choose the **Edit** menu and then the **Add Code** menu item.


To program a destination code:

1. Select the **Code** field and type the number of this destination code.
2. Select the **Normal** field and choose a routing code from the list.
3. Repeat step 2 for each of the **Mode** fields.
Note: The following three steps are applicable to USA-MICS-XC 1.0, NA-MICS-DR 1.1, CDA-MICS-XC 1.1, and USA-MICS-XC 1.1 systems only. If you are programming any other type of system, skip to step 7.
4. Select the **Norm Absorb** field and choose the number of digits absorbed when the system is not using service modes.
5. Select the **Second Mode** field and choose the service mode used with digit absorption.

6. Select the **Second Absorb** field and choose the number of digits absorbed when the system is using the service mode specified in the **Second Mode** field.
7. For USA-MICS-XC 1.0, NA-MICS-DR 1.1, CDA-MICS-XC 1.1, and USA-MICS-XC 1.1 systems, repeat steps 1 to 7 for each destination code. For all other systems, repeat steps 1 to 3 for each destination code.
Note: Norstar Manager allows you to define routing codes that have not yet been programmed. The KSU destination codes programming through Feature **CONFIG does not allow you to do this.

To delete a destination code:

1. Select the code or codes to delete.
2. Choose the **Edit** menu and then the **Delete Code** menu item.

Choose  to exit this screen and implement your changes.

Change individual DNs

Use the **Change Individual DNs** screen to change the DN assigned to a set. The DNs are sorted every time you access this screen, including when you leave this screen to view the Help screens.

Note: You should warn the customer that the Norstar system may slow down for about two minutes.

To change individual DNs:

1. Choose the **Program** menu and then the **System** menu item.
2. Choose the **Change Individual DNs** menu item.
The **Change Individual DNs** screen appears.

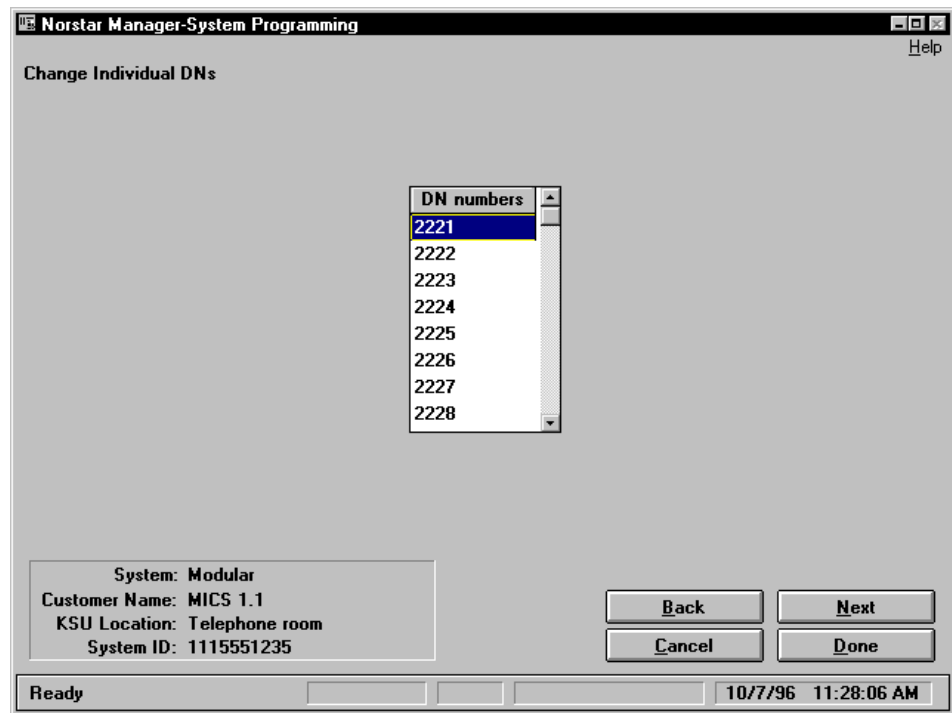



Figure 6.23 – The Change Individual DNs screen

3. Select the DN you want to change and type the new DN.
Repeat this step for each DN you are changing.

Choose  to exit this screen and implement your changes.

Changing the DN length

Use the **Change DN Length** screen to change the DN length and the Received number length.

When you change the DN length, you change the number of digits required to access an internal device, such as a telephone set. The DN length can be from two to seven digits long. You can only change the DN length on Modular systems. Compact and 3X8 systems allow only a two digit DN.

Note: If you change the DN length from 2 digits, you cannot change it back to 2.

When you change the Received number length, you change the number of digits required to make a specific target line ring. The Received number length can be one to seven digits long. You can only change the Received number length on the Modular KSUs. Target lines are not supported on Compact DR5 or 3X8 DR5 KSUs.

To change the DN length or Received number length:

1. Choose the **Program** menu and then the **System** menu item.

2. Choose the **Change DN Length** menu item.
The **Change DN Length** screen appears.




Figure 6.24 – The Change DN Length screen

3. Choose the drop list arrow beside the **DN length** field and then choose the number of digits used for the DN.
4. Choose the drop list arrow beside the **Received number length** field and choose the number of digits used for the Received number length.

Note: You should warn users that the Norstar system may slow down for up to two minutes while the DN length is changing.

Important: If you change the DN length, Norstar Manager will automatically terminate the on-line session and return you to the **Systems Directory** screen. For more information about on-line connections, see **Section 5** of this guide.

Choose  to exit this screen and implement your changes.

Line programming

Once you have entered the Norstar system programming information, you can begin entering line programming information. This information is found in the programming record. Make sure you follow the programming record for each line programming screen you use.


For each line on the system, you can enter line programming information on:

- Line data
- Trunk data
- Abilities and call services
- Service mode options




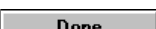
Each area of information is entered into the Norstar system through a dedicated screen. Refer to Figure 6.3 for an overview of the different areas of line programming.



Before you can access a line programming screen, you must first select the line you want to program.

To select a line using the mouse, move the mouse pointer onto the line you want to program and press the mouse button.

To select a line using the keyboard, press  and the cursor keys until the line you want to program is highlighted.

After you have entered information in one of the line programming screens, you can:

- Choose  to implement your changes and move to the next programming screen.
- Choose  to implement your changes and move to the previous programming screen.
- Choose  to cancel all new programming changes and return to the **System Programming Overview** screen.
- Choose  to implement the new programming changes and return to the **System Programming Overview** screen.

Note: The steps described in this section assume that you are starting from the **System Programming Overview** screen. If you are not, return to the **System Programming Overview** screen or use  or  to move to the appropriate programming screen.

Important: Before you begin line programming, you must program the line type. Refer to **Installed equipment** earlier in this section for instructions.


Line data

To enter Line data information:

1. Select the line you want to program.
2. Choose the **Program** menu and then the **Line** menu item.
3. Choose the **Line Data** menu item. The **Line Data** screen appears.

Figure 6.25 – The Line Data screen

4. If this line is a public line or is assigned to a line pool, choose the drop list arrow beside the **Line type** field and choose Public or the assigned line pool.
If this line is a private line, select the **Line type** field and type the DN of the set the line is private to.
5. Choose the drop list arrow beside the **Incoming line group** field and choose the line group this line belongs to.
Note: This field is only available for T1 Release 1, CDA-MICS-XC 1.0, USA-MICS-XC 1.0, NA-MICS-DR 1.1, CDA-MICS-XC 1.1, and USA-MICS-XC 1.1 systems.
6. Select the **Prime set** field and type the DN of the prime set.
To enter one of the default DNs, choose the drop list arrow beside the **Prime set** field and choose one of the options listed.
7. If **Auto privacy** is to be enabled, choose the **Auto privacy** check box.
8. If **Auxiliary ringer** is to be enabled, choose the **Auxiliary ringer** check box.

Choose  to exit this screen and implement your changes.

Trunk data

To enter Trunk data information:


Note: The lines must be idle to program trunk mode data.

1. Select the line you want to program.
2. Choose the **Program** menu and then the **Line** menu item.
3. Choose the **Trunk Data** menu item. The **Trunk Data** screen appears.

Figure 6.26 – The Trunk Data screen

4. Choose the drop list arrow beside the **Trunk mode** field and choose the trunk mode specified in the programming record.
Note: Not all of the options shown on this screen are available for all trunk types. The type of trunk you choose in the **Trunk mode** field will determine what fields you need to program.
5. If the trunk type is Loop or E&M, choose the drop list arrow beside the **Answer mode** field. Choose either Manual or Auto.
6. If the programming record specifies Auto Answer with Direct Inward Station Access, choose the **Answer with DISA** check box.
7. If the trunk type is Loop or E&M, choose the drop list arrow beside the **Dialing mode** field. Choose either pulse or tone.
8. If the trunk type is Loop, and Full autohold is specified in the programming record, choose the **Full autohold** check box.
9. If you are programming an analog line on a T1 Release 1, CDA-MICS-XC 1.0, USA-MICS-XC 1.0, NA-MICS-DR 1.1, CDA-MICS-XC 1.1, or USA-MICS-XC 1.1 system, choose the drop list arrow beside the **Loss Pkg** field. Choose one of the loss packages shown.

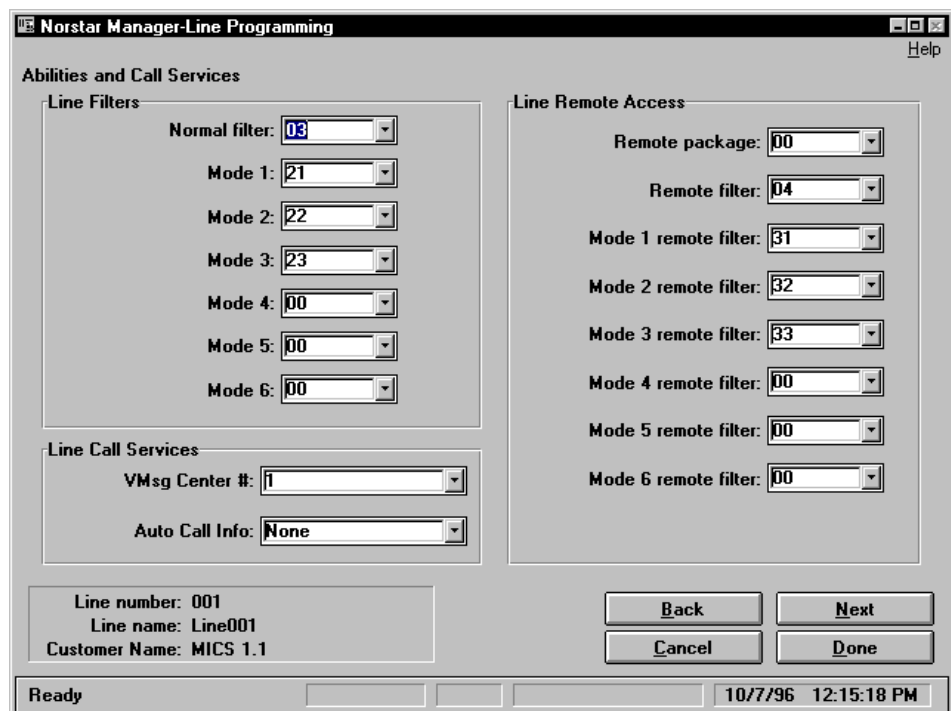
10. If the trunk type is Loop or DID, choose the drop list arrow beside the **Signal** field. Choose either Wink start, Immediate, or Delay dial.
11. If you are programming a T1 Release 1, CDA-MICS-XC 1.0, USA-MICS-XC 1.0, NA-MICS-DR 1.1, CDA-MICS-XC 1.1, or USA-MICS-XC 1.1 system and ANI number is specified in the programming record, choose the **ANI Number** check box.
12. If you are programming a T1 Release 1, CDA-MICS-XC 1.0, USA-MICS-XC 1.0, NA-MICS-DR 1.1, CDA-MICS-XC 1.1, or USA-MICS-XC 1.1 system and DNIS number is specified in the programming record, choose the **DNIS Number** check box.
13. If the trunk type is E&M, choose the drop list arrow beside the **Gain** field. Choose either Normal or High.

Choose  to exit this screen and implement your changes.

Abilities and Call Services

To enter abilities and call services information:

1. Select the line you want to program.
2. Choose the **Program** menu and then the **Line** menu item.
3. Choose the **Abilities and Call Services** menu item. The **Abilities and Call Services** screen appears.



Norstar Manager-Line Programming

Abilities and Call Services

Line Filters

Normal filter: 03

Mode 1: 21

Mode 2: 22

Mode 3: 23

Mode 4: 00

Mode 5: 00

Mode 6: 00

Line Call Services

VMsg Center #: 1

Auto Call Info: None

Line Remote Access

Remote package: 00

Remote filter: 04

Mode 1 remote filter: 31

Mode 2 remote filter: 32

Mode 3 remote filter: 33

Mode 4 remote filter: 00

Mode 5 remote filter: 00

Mode 6 remote filter: 00


Line number: 001
Line name: Line001
Customer Name: MICS 1.1

Back Next
Cancel Done

Ready 10/7/96 12:15:18 PM

Figure 6.27 – The Abilities and Call Services screen

4. Select the **Normal filter** text box and type the number of the line filter used with this line.
To enter one of the default line filter numbers, choose the drop list arrow beside the **Normal filter** field and choose one of the filter numbers listed.
5. If you are programming a T1 Release 1, CDA-MICS-XC 1.0, USA-MICS-XC 1.0, NA-MICS-DR 1.1, CDA-MICS-XC 1.1, or USA-MICS-XC 1.1 system, repeat step 4 for each mode field.
6. Select the **VMsg Center #** text box and type the number of the voice message callback center used by this line.
To enter one of the default voice message callback center numbers, choose the drop list arrow beside the **VMsg Center #** field and choose one of the numbers listed.
7. Select the **Auto Call Info** text box and type the DN of the set that will show the call display information for this line.
To enter a default DN, choose the drop list arrow beside the **Auto Call Info** field and choose one of the DN's listed.
8. Select the **Remote package** text box and type the number of the remote package specified for this line.
To enter one of the default remote package numbers, choose the drop list arrow beside the **Remote package** field and choose one of the remote packages listed.
9. Select the **Remote filter** text box and type the number of the remote filter used with this line.
To enter one of the default remote filter numbers, choose the drop list arrow beside the **Remote filter** field and choose one of the filter numbers listed.
Note: Remote packages are only available on Modular DR5, T1 Release 1, CDA-MICS-XC 1.0, USA-MICS-XC 1.0, NA-MICS-DR 1.1, CDA-MICS-XC 1.1, and USA-MICS-XC 1.1 systems.
10. If you are programming a T1 Release 1, CDA-MICS-XC 1.0, USA-MICS-XC 1.0, NA-MICS-DR 1.1, CDA-MICS-XC 1.1, or USA-MICS-XC 1.1 system, repeat step 9 for each mode remote filter field.

Choose  to exit this screen and implement your changes.

Service mode options

To assign Service mode options:

1. Select the line you want to program.
2. Choose the **Program** menu and then the **Line** menu item.
3. Choose the **Service Mode Options** menu item. The **Service Mode Options** screen appears.

Norstar Manager-Line Programming Help

Service Mode Options

Service control set: 2221 2221

Mode 1: Night	Mode 2: Evening	Mode 3: Lunch	Mode 4: Mode 4	Mode 5: Mode 5	Mode 6: Mode 6
Ringing group: 001	Ringing group: 001	Ringing group: 001	Ringing group: 001	Ringing group: 001	Ringing group: 001
<input type="checkbox"/> Aux. ringer	<input type="checkbox"/> Aux. ringer	<input type="checkbox"/> Aux. ringer	<input type="checkbox"/> Aux. ringer	<input type="checkbox"/> Aux. ringer	<input type="checkbox"/> Aux. ringer

Line number: 001
Line name: Line001
Customer Name: MICS 1.1

Back Cancel Done

Ready 10/7/96 1:44:39 PM

Figure 6.28 – The Service Mode Options screen

4. Select the **Service control set** text box and type the DN of the Service control set.
To enter one of the default DNs, choose the drop list arrow beside the **Service control set** field and choose one of the DNs listed.

Note: On CDA-MICS-XC 1.0, USA-MICS-XC 1.0, NA-MICS-DR 1.1, CDA-MICS-XC 1.1, and USA-MICS-XC 1.1 systems, ringing groups, not ringing sets, are assigned to service modes. If you are programming a CDA-MICS-XC 1.0, USA-MICS-XC 1.0, NA-MICS-DR 1.1, CDA-MICS-XC 1.1, or USA-MICS-XC 1.1 system, skip the instructions concerning assigning or deleting sets.

To assign ringing sets to all systems except the CDA-MICS-XC 1.0, USA-MICS-XC 1.0, NA-MICS-DR 1.1, CDA-MICS-XC 1.1, or USA-MICS-XC 1.1:

5. Choose the **Edit** menu and then the **Assign set(s)** menu item.
6. Choose the menu item for the mode you are assigning ringing sets to. For example, choose the **Mode1...** menu item to assign mode 1 ringing sets. The **Select ringing set(s)** dialog box appears.
7. Select the DNs of all of the sets that will be Mode 1 ringing sets.
8. Choose **Done**
9. If the Auxiliary ringer is a ring for Mode 1, choose the **Aux. Ringer** check box.

10. Repeat steps 5 to 9 for each service mode you are programming.


Note: If you are programming a T1 Release 1 system, there are six modes to assign ringing sets to. If you are programming any other type of system, there are three modes to assign ringing sets to.

To remove assigned sets from a Service mode:

11. Select the set or sets to be deleted.
12. Choose the **Edit** menu and then the **Delete set(s)** menu item.

To assign a ringing group (CDA-MICS-XC 1.0, USA-MICS-XC 1.0, NA-MICS-DR 1.1, CDA-MICS-XC 1.1, and USA-MICS-XC 1.1 systems only):

1. Choose the drop list arrow beside the **Ringing group** field and then choose the number of the ringing group assigned to this mode.
2. Repeat step 1 for all six modes.

Choose  to exit this screen and implement your changes.

Note: To determine the time period when each of the service modes are active, check the **Service Mode** section of system programming.

Programming multiple lines

After you have worked through the Line Programming section, you have completed the programming for one line on the Norstar system.

To continue programming the remaining lines, you can either work through the Line Programming section for each line in the Norstar system, or use the Copy Line feature. This feature allows you to copy the programming you have just completed for one line, to other lines.

The Copy Line feature can be used to program the lines on a Norstar system quickly and efficiently. Even if all the lines in the Norstar system do not share the same programming parameters, you should consider using the Copy Line feature to program all the lines. You can then go to each individual line and change the parameters that are different.

The Copy Line feature does not copy line name programming. Certain line parameters, such as Private to, are not copied from one line to another if the parameter is already specified at the line to be copied to.

For example, if the line type of Line 04 is specified as Private to set 33, and you attempt to copy Line 03 attributes to it, the line type remains as Private to set 33. If however, Line 04 has a line type of pool, when you copy Line 03 attributes to it, the line type will change to that of Line 03.

Note: Line programming can only be copied between lines that are the same type and that are physically connected to the KSU. For example, T1 line programming can only be copied to another T1 line that is connected to the KSU.

For information about what gets copied, see the “Line data copy” section.

To copy one line's programming to other lines:

1. Select the line you want to copy programming from.
2. Choose the **Edit** menu and then the **Copy Line** menu item. The **Copy Line** dialog box appears.

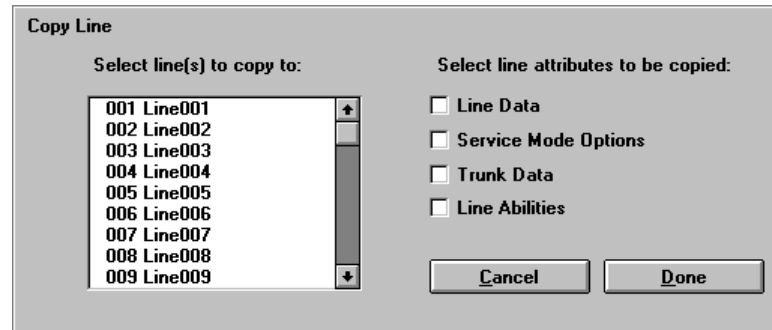



Figure 6.29 – The Copy Line dialog box

3. Choose the check boxes of the attributes you want to copy.
4. Select the line or lines you want to copy programming to.
5. Choose . The programming is copied to the selected lines.

Line data copy

Data copied by selecting Line Data attributes:

- auxiliary ring enable flag
- privacy control flag
- incoming line group numbers
- overflow call routing (OCR) busy flag
- private set DN
- line access (a pool number/public/private)

Data copied by selecting Trunk Data attributes:

- DTMF enable flag (a dial mode)
- full auto-hold flag
- answer mode
- signal mode
- gain mode
- DISA mode
- dial tone detection on line seizure setting
- AC15 loss setting
- recall timing

- recall at exchange setting
- Automatic Number Identification (ANI) setting
- Dialed Number Identification (DNIS) setting
- loss package setting

Trunk Data is copied in the following two conditions:

- the two trunks must belong to the same trunk cartridge type, and
- the two trunks must be configured with the same trunk mode

Note: You cannot copy the trunk mode using the remote device copy request.

Data copied by selecting Line Abilities attributes:

- alternate restriction filters for all service modes

Set programming

When you have completed entering system and line programming, you can begin entering set programming information. Refer to the programming record for the information you need to enter as set programming.

Set programming involves entering information on:

- Line access
- Set abilities (Set abilities 1 and Set abilities 2 for NA-MICS-DR 1.1, CDA-MICS-XC 1.1, and USA-MICS-XC 1.1 systems)
- Buttons and status
- Personal speed dial
- Call services

Each area of information is entered into the Norstar system through a dedicated screen. Refer to Figure 6.3 for an overview of the different areas of set programming.

Before you can access a set programming screen, you must first select the set you want to program.

To select a set using the mouse, move the mouse pointer onto the set you want to program and press the mouse button.

To select a set using the keyboard, press and the cursor keys until the set you want to program is highlighted.

After you have entered information in one of these screens, you can:

- Choose to implement your changes and move to the next programming screen.
- Choose to implement your changes and move to the previous programming screen.
- Choose to cancel all new programming changes and return to the **System Programming Overview** screen.
- Choose to implement the new programming changes and return to the **System Programming Overview** screen.

Note: The steps described in this section assume that you are starting from the **System Programming Overview** screen. If you are not, return to the **System Programming Overview** screen or use or to move to the appropriate programming screen.

Important: Before you begin set programming, you must program the set type. Refer to **Installed equipment** earlier in this section for instructions.

When you are programming a set, the KSU must disable the set to change some of the parameters. If any of the sets being changed are busy (i.e. on a call), that set cannot be disabled and the programming cannot be changed. Norstar Manager will display an error message indicating that the change was not made.

Line access

The **Line access** screen shown applies to an M7324, M7310, or M7208 set. If you are programming an ATA or an M7100 set some fields that appear on the sample screen below will not appear on the screen on your monitor.

To enter line access information:

1. Select the set you want to program
2. Choose the **Program** menu and then the **Set** menu item.
3. Choose the **Line Access** menu item. The **Line Access** screen appears.

Norstar Manager-Set Programming

Edit Help

Line Access

Lines assigned

Line
001 Line001
002 Line002
003 Line003
004 Line004
005 Line005

Ringing lines

Line
001 Line001
002 Line002
003 Line003
006 Line006
007 Line007

Line pool access

Pool A
Pool B
Pool C
Pool D
Pool E
Pool G
Pool J

Incoming line groups

ILG 01
ILG 02
ILG 03
ILG 04
ILG 05
ILG 07
ILG 08

Prime line:

► Intercom

Intercoms: ► 2

Line/set filters

Line	Filter	Mode 1	Mode 2	Mode 3
001 Line001	01	99	None	98
004 Line004	None	None	01	None
006 Line006	02	None	None	None
008 Line008	None	None	None	01

Answer DNs

Set	Ringing
2222 Monique	On
2232 Jean	On
2245 Pepe	On
2247 Angela	On

Name: 2221 **DN:** 2221

System ID:

Customer Name:

Next

Cancel Done

Ready 10/7/96 1:27:05 PM

Figure 6.30 – The Line Access screen

To add line appearances:

1. Choose the **Edit** menu and then the **Add Line appearance...** menu item. The **Specify line(s)** dialog box appears.
2. Select the lines the programming record indicates are assigned to this set.
3. When you have selected all the lines that are to be assigned to the set, choose **Done**. The **Line Access** screen appears with the assigned lines in the **Lines assigned** box.

To delete line appearances:

1. Select the line appearances to delete.
2. Choose the **Edit** menu and then the **Delete Line appearance** menu item.

Note: What happens when deleting line appearances in Norstar Manager differs slightly from what happens in set based administration (Feature **CONFIG). In Norstar Manager, if a line is assigned as a line appearance and a line filter, then deleting that line from the line appearances will automatically delete the line from line filters as well. In set based administration, the line is not automatically deleted from line filters.

To add ringing lines to a T1 Release 1, CDA-MICS-XC 1.0, USA-MICS-XC 1.0, NA-MICS-DR 1.1, CDA-MICS-XC 1.1, or USA-MICS-XC 1.1 system:

1. Choose the **Edit** menu and then the **Add Ringing line(s)...** menu item. The **Specify Ringing line(s)** dialog box appears.

Note: If you are not programming a T1 Release 1, CDA-MICS-XC 1.0, USA-MICS-XC 1.0, NA-MICS-DR 1.1, CDA-MICS-XC 1.1, or USA-MICS-XC 1.1 system, select the **Ringing** field of a line that is a ringing line and choose On. To change the line to a non-ringing line, select Off. When you are finished assigning ringing lines, proceed to adding line filters.

2. Select the line or lines that should be ringing lines for this set.
3. After you have selected all the ringing lines for this set,

choose 

The **Line access** screen appears with the assigned lines in the **Ringing lines** box.

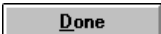
To delete ringing lines from a T1 Release 1, CDA-MICS-XC 1.0, USA-MICS-XC 1.0, NA-MICS-DR 1.1, CDA-MICS-XC 1.1, or USA-MICS-XC 1.1 system:

1. Select the line or lines you want to assign as non-ringing.
2. Choose the **Edit** menu and then the **Delete Ringing line** menu item. The selected lines are removed from the **Ringing lines** box.

To add line filters:

1. Choose the **Edit** menu and then the **Add Line filter...** menu item. The **Specify line filter(s)** dialog box appears.

2. Select the lines assigned to this set that have a filter.

3. When you have selected all the lines that have a filter assigned, choose 

The **Line access** screen appears with the selected lines in the **Line/Set filters** box.

To add Line/Set filters:


1. Select the **Filter** field of a line in the **Line/set filters** box and type the filter number assigned.
2. If you are programming a T1 Release 1, CDA-MICS-XC 1.0, USA-MICS-XC 1.0, NA-MICS-DR 1.1, CDA-MICS-XC 1.1, or USA-MICS-XC 1.1 system, repeat step 1 for each of the six service mode filters for this line.

3. Repeat steps 1 and 2 for each line in the **Line/set filters** box.

To delete line filters:

1. Select the line filters to delete.
2. Choose the **Edit** menu and then the **Delete line filter** menu item.


To add line pool access

1. Choose the **Edit** menu and then the **Add Line pool access...** menu item. The **Specify line pool(s)** dialog box appears.
2. Select the line pools that are assigned to this set.
3. When you have selected all the line pools that are assigned to the set, choose . The **Line access** screen appears with the assigned line pools in the **Line pool access** box.

To delete line pool access:

1. Select the line pools to delete.
2. Choose the **Edit** menu and then the **Delete line pool access** menu item.

To add ILGs:

1. Choose the **Edit** menu and then the **Add ILG** menu item. The **Specify ILG(s)** dialog box appears.
Note: Incoming line groups are only available for T1 Release 1, CDA-MICS-XC 1.0, USA-MICS-XC 1.0, NA-MICS-DR 1.1, CDA-MICS-XC 1.1, and USA-MICS-XC 1.1 systems. If you are not programming a T1 Release 1, CDA-MICS-XC 1.0, USA-MICS-XC 1.0, NA-MICS-DR 1.1, CDA-MICS-XC 1.1, or USA-MICS-XC 1.1 system, proceed to changing the prime line.
2. Select the incoming line groups that are assigned to this set.
3. When you have selected all the incoming line groups that are assigned to the set, choose . The **Line access** screen appears with the assigned incoming line groups in the **Incoming Line Groups** box.

To delete ILGs:

1. Select the ILGs to delete.
2. Choose the **Edit** menu and then the **Delete ILG** menu item.


To add Answer DNs:

1. Select the **Set** field of the **Answer DNs** box and type the DN of a set that can be answered from this set.
2. Select the **Ringling** field of the same set and choose either On or Off.
3. Repeat steps 1 and 2 for each Answer DN.

To change the prime line, choose the drop list arrow beside the **Prime line** field and then choose the prime line for this set.

Remember: Only lines that are assigned to the set can be made prime lines.

To change the number of intercom keys, choose the drop list arrow beside the **Intercoms** field and then choose the number of intercom lines specified in the programming record.

Choose  to exit this screen and implement your changes.

Set abilities

The **Set Abilities** screen shown applies to an M7324, M7310, or M7208 set. If you are programming an ATA or an M7100 set, some fields that appear on the sample screen below, do not appear on the screen on your monitor.

Note: If you are programming a NA-MICS-DR 1.1, CDA-MICS-XC 1.1, or USA-MICS-XC 1.1 system, the corresponding programming is entered from the **Set Abilities 1** and **Set Abilities 2** screens.

To enter Set abilities programming:

1. Select the set you want to program.
2. Choose the **Program** menu and then the **Set** menu item.
3. Choose the **Set Abilities** menu item. The **Set Abilities** screen appears.

Figure 6.31 – The Set Abilities screen

4. If Full handsfree is to be enabled, choose the **Full handsfree** check box.
5. If Auto handsfree is to be enabled, choose the **Auto handsfree** check box.
Note: You must choose Full handsfree before you can choose Auto hands-free.


6. If Handsfree Answerback is to be enabled, choose the **Handsfree answerback** check box.
7. If Priority Call is to be enabled, choose the **Priority call** check box.
8. If Auxiliary Ringer is to be enabled, choose the **Auxiliary ringer** check box.
9. If Redirect Ring is to be enabled, choose the **Redirect ring** check box.
10. If Allow Redirect is to be enabled, choose the **Allow redirection** check box.
11. If this set is an ATA, choose the drop list arrow beside the **ATA tones** field and choose either Suppress tones or Allow tones.
Note: The **ATA tones** field is not available for Modular DR5, T1 Release 1, CDA-MICS-XC 1.0, USA-MICS-XC 1.0, NA-MICS-DR 1.1, CDA-MICS-XC 1.1, or USA-MICS-XC 1.1 systems.
12. Choose the drop list arrow beside the **Normal** field and then choose the number of the filter assigned to this set.
Note: If you are not programming a T1 Release 1, CDA-MICS-XC 1.0, USA-MICS-XC 1.0, NA-MICS-DR 1.1, CDA-MICS-XC 1.1, or USA-MICS-XC 1.1 system, ignore this step and proceed to step 14.
13. Repeat step 12 for all six service mode filters.
14. Choose the drop list arrow beside the **Pickup group** field and then choose the number of the Pickup group this set is assigned to.
15. Choose the drop list arrow beside the **Page** field and then choose either On or Off to enable or disable the page feature.
16. Choose the drop list arrow beside the **Page zone** field and then choose the number of the Page zone specified in the programming record.
17. Choose the drop list arrow beside the **Set lock** field and then choose either None, Full or Partial.
18. Select the **Call forward on busy to** field and type the DN specified on the programming record. To choose one of the default DNs, choose the drop list arrow beside this field and select the specified DN.
19. Select the **Forward no answer to** field and type the DN specified on the programming record. To choose one of the default DNs, choose the drop list arrow beside this field and choose the specified DN.
20. Choose the drop list arrow beside the **Forward to delay** field and then choose the number of rings before the set is considered unanswered and is call forwarded.
21. Select the **Set filter** field and type the number of the set filter. To choose one of the default filters, choose the drop list arrow beside this field and choose the specified filter.
Note: This field is not available for T1 Release 1, CDA-MICS-XC 1.0, USA-MICS-XC 1.0, NA-MICS-DR 1.1, CDA-MICS-XC 1.1, or USA-MICS-XC 1.1 systems.
22. Choose the drop list arrow beside the **Direct dial set** field and then choose the number of the Direct dial set specified in the programming record.

23. Select the **Control set ID** field and type the DN of the control set. To choose one of the default DNs, choose the drop list arrow beside this field and choose the specified DN.

Note: This field is only available for T1 Release 1, CDA-MICS-XC 1.0, USA-MICS-XC 1.0, NA-MICS-DR 1.1, CDA-MICS-XC 1.1, and USA-MICS-XC 1.1 systems.

24. Choose the drop list arrow beside the **Hotline type** field and then choose None (if the hotline is not enabled), Internal, or External.
25. If hotline type is Internal, select the **Internal DN** field and type the DN that is specified as the Hotline.
26. If hotline type is External, choose the drop list arrow beside the **External line** field and choose either prime, the line number, or the line pool code to use for the Hotline.

Note: Only lines or line pools that are assigned to this set can be chosen.
27. If hotline type is External, select the **External digits** field and type the digits shown on the programming record.
28. If DND on busy is to be enabled, choose the **DND on busy** check box.

Choose  to exit this screen and implement your changes.

Set abilities 1

The **Set Abilities 1** screen is available to NA-MICS-DR 1.1, CDA-MICS-XC 1.1, and USA-MICS-XC 1.1 systems only. If you are programming a different type of system, the corresponding programming is entered from the **Set Abilities** screen.

The screen shown applies to an ATA, M7324, M7310, M7208, or an M7100 set.

To enter Set abilities 1 programming:

1. Select the set you want to program.
2. Choose the **Program** menu and then the **Set** menu item.
3. Choose the **Set Abilities 1** menu item. The **Set Abilities 1** screen appears.

Norstar Manager-Set Programming Help

Set Abilities 1

Call Forwarding

Call forward on busy to: None

Forward no answer to: None

Forward to delay: 3 rings

Link: Off

LNR: On

SNR: On

Hotline Programming

Hotline type: None

Internal DN: None

External line: None

External digits:

P = Pause

ATA Answer Timer: 7

Msg Indicate: None

Name: Monique DN: 221

System ID:

Customer Name:

Back Next

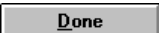
Cancel Done

Ready 17/07/96 13:13:01

Figure 6.32 – The Set Abilities 1 screen

4. Select the **Call forward on busy to** field and type the DN specified on the programming record. To choose one of the default DNs, choose the drop list arrow beside this field and select the specified DN.
5. Select the **Forward no answer to** field and type the DN specified on the programming record. To choose one of the default DNs, choose the drop list arrow beside this field and choose the specified DN.
6. Choose the drop list arrow beside the **Forward to delay** field and then choose the number of rings before the set is considered unanswered and is call forwarded.
7. Choose the drop list arrow beside the **Hotline type** field and then choose None (if the hotline is not enabled), Internal, or External.
8. If hotline type is Internal, select the **Internal DN** field and type the DN that is specified as the Hotline.
9. If hotline type is External, choose the drop list arrow beside the **External line** field and choose either prime, the line number, or the line pool code to use for the Hotline.
Note: Only lines or line pools that are assigned to this set can be chosen.
10. If hotline type is External, select the **External digits** field and type the digits shown on the programming record.
11. Choose the drop list arrow beside the **Link** field and then choose if Link feature access is On or Off.
12. Choose the drop list arrow beside the **LNR** field and then choose if Last Number Redial is On or Off.

13. Choose the drop list arrow beside the **SNR** field and then choose if Saved Number Redial is On or Off.
14. Choose the drop list arrow beside the **ATA Answer Timer** field and then choose the number specified in the programming record.
15. Choose the drop list arrow beside the **Msg Indicate** field and then choose either None, Lamp or Tone.

Choose  to exit this screen and implement your changes.

Set abilities 2

The **Set abilities 2** screen is available to NA-MICS-DR 1.1, CDA-MICS-XC 1.1, and USA-MICS-XC 1.1 systems only. If you are programming a different type of system, the corresponding programming is entered from the **Set abilities** screen.

The screen shown applies to an ATA, M7324, M7310, M7208, or an M7100 set.


To enter Set abilities 2 programming:

1. Select the set you want to program.
2. Choose the **Program** menu and then the **Set** menu item.
3. Choose the **Set Abilities 2** menu item. The **Set Abilities 2** screen appears.

Figure 6.33 – The Set Abilities 2 screen

4. If Full handsfree is to be enabled, choose the **Full handsfree** check box.
5. If Auto handsfree is to be enabled, choose the **Auto handsfree** check box.

6. If Handsfree Answerback is to be enabled, choose the **Handsfree answerback** check box.
7. If Priority Call is to be enabled, choose the **Priority call** check box.
8. If Auxiliary Ringer is to be enabled, choose the **Auxiliary ringer** check box.
9. If Redirect Ring is to be enabled, choose the **Redirect ring** check box.
10. If Allow Redirect is to be enabled, choose the **Allow redirection** check box.
11. If DND on busy is to be enabled, choose the **DND on busy** check box.
12. Choose the drop list arrow beside the **Pickup group** field and then choose the number of the Pickup group this set is assigned to.
13. Choose the drop list arrow beside the **Page** field and then choose either On or Off to enable or disable the page feature.
14. Choose the drop list arrow beside the **Page zone** field and then choose the number of the Page zone specified in the programming record.
15. Choose the drop list arrow beside the **Set lock** field and then choose either None, Full or Partial.
16. Choose the drop list arrow beside the **Direct dial set** field and then choose the number of the Direct dial set specified in the programming record.
17. Select the **Control set ID** field and type the DN of the control set. To choose one of the default DNs, choose the drop list arrow beside this field and choose the specified DN.
18. Choose the drop list arrow beside the **Normal** field and then choose the number of the filter assigned to this set.
19. Repeat step 18 for all six service mode filters.

Choose  to exit this screen and implement your changes.

Buttons and Status

The **Buttons and Status** screen shown applies to an M7324 set. If you are programming another model of set, some fields that appear on the sample screen below do not appear on the screen on your monitor.

To enter Buttons and status programming:

1. Select the set you want to program.
2. Choose the **Program** menu and then the **Set** menu item.
3. Choose the **Buttons and Status** menu item. The **Buttons and Status** screen appears.

Norstar Manager-Set Programming

Edit Program button Help

Buttons and Status Button assignments for M7310

Autodial 2233 2233	Autodial 2237 2237	Autodial 2241 2241
Blank	Autodial 2225 2225	Autodial 2229 2229
Autodial 2234 2234	Autodial 2238 2238	Autodial 2242 2242
Autodial 2222 Monique	Autodial 2226 2226	Autodial 2230 2230
Autodial 2235 2235	Autodial 2239 2239	Autodial 2243 2243
Autodial 2223 2223	Autodial 2227 2227	Autodial 2231 2231
Autodial 2236 2236	Autodial 2240 2240	Autodial 2244 2244
Autodial 2224 2224	Autodial 2228 2228	Autodial 2232 Jean
001 Line001		Answer 2245 Pepe
002 Line002		Answer 2232 Jean
003 Line003		Answer 2222 Monique
004 Line004		Intercom
Answer 2247 Angela		Intercom

Pre-dial mode: ▶ Standard Dial Do not disturb: ▶ Off Contrast: ▶ 1

Language: ▶ English Background music: ▶ Off Set status: Idle

Forwarded to: None Ring volume: ▶ 3

Ring type: ▶ 1

Update Status

Back Next

Cancel Done

Name: 2221 DN: 2221

System ID:

Customer Name:


Ready 10/7/96 1:37:49 PM

Figure 6.34 – The Buttons and Status screen


4. Choose the drop list arrow beside the **Do not disturb** field and then choose either Off or On.
5. Choose the drop list arrow beside the **Pre-dial mode** field and then choose one of the pre-dial mode options.
6. Choose the drop list arrow beside the **Background music** field and then choose either Off or On.
7. Choose the drop list arrow beside the **Ring volume** field and then choose one of the ring volume digits.
8. Choose the drop list arrow beside the **Ring type** field and then choose desired ring type to be used on this set.
9. Choose the drop list arrow beside the **Contrast** field and then choose the desired contrast level to be used by the display on the set.
10. Choose the drop list arrow beside the **Language** field and then choose the desired language.

The **Forwarded to** and **Set status** fields are display fields. You cannot edit these fields.

The **Forwarded to** field indicates if this set has call forwarding enabled. If it does, the DN the calls are forwarded to is shown.

The **Set status** field indicates what state the set is currently in (e.g. busy or idle). The status shown in this field is the status of the set when you opened the **Buttons and Status** screen, it does not automatically update. To get the current status, choose 

The **Buttons and Status** screen is not available if you are programming a set that is not currently connected to the KSU.

Note: Choosing  only updates the **Set status** field. The other fields are only read from the set when you enter the **Buttons and Status** screen.

The appearance of the **Buttons and status** screen depends on the type of set you are programming. For example, when you are programming an M7324 set, the **Buttons and Status** screen shows you what features and buttons can be assigned to that particular set.

The following paragraphs deal with the various functions of the **Buttons and Status** screen. This screen allows you to:

- remove button assignments
- assign new features
- assign inside and outside autodial
- program dual memory buttons on an M7310 set
- program CAP buttons (for an M7324 set only)


Removing a button assignment


If your monitor does not show the **Buttons and Status** screen, refer to **Buttons and Status** earlier in this section. To remove a button assignment:

1. Select the button you want to delete the assignment from.
2. Choose the **Edit** menu and then the **Remove assignment** menu item. The button assignment is changed to a blank button.

Assigning a new feature


To assign a new feature to a button:

1. Select the button you want to assign a new feature to.
2. Choose the **Program button** menu and then the **Feature...** menu item. The **Program Feature Button** dialog box appears.
3. Choose the drop list arrow beside the **Feature** field, and then choose the feature to be assigned to this button.
4. Choose 
The button assignment box shows the feature you selected.

Note: If an option is required for the feature chosen in step 3, the **Feature Option** dialog box appears. Choose the drop list arrow beside the **Options** field and then choose the appropriate option. Choose  to return to the **Buttons and Status** screen.


**Assigning outside
autodial**

To assign an outside autodial to a button:

1. Select the button you want to assign the outside autodial to.
2. Choose the **Program button** menu and then the **Outside autodial...** menu item. The **Program Outside Autodial button** dialog box appears.
3. Select the **Number** text box and then type the outside autodial number.
Note: You can enter Link/flash, Run/stop, Wait for tones, Pause, and Programmed Release codes within the number, but remember these codes may use up to two spaces within the number. The maximum length for the speed dial number is 24 digits.
4. Choose the drop list arrow beside the **Line** field and then choose the line or line pool used by outside autodialer.
5. Choose .
The button assignment changes to the phone number you entered.

**Assigning inside
autodial**

To assign an inside autodial to a button:

1. Select the button you want to assign the inside autodial to.
2. Choose the **Program button** menu and then the **Inside autodial...** menu item. The **Program Inside Autodial button** dialog box appears.
3. Select the text box and type the inside autodial number.
Note: An inside autodial number is the DN of another set on the Norstar system.
4. Choose .
The button assignment changes to the Autodial number you typed in step 3.

Exchanging button assignments

To exchange the position of two button assignments:

1. Select the two buttons to exchange assignments between.
2. Choose the **Edit** menu and then the **Exchange assignment** menu item. The button assignments are exchanged.

Note: The **Exchange assignment** menu item is available only when two buttons are selected, and both buttons can be moved. Some buttons cannot be exchanged, including buttons used for Intercom, Handsfree, or Answer DNs.

Programming dual memory buttons

On the M7310 sets, there are 12 dual memory buttons. These buttons are represented by the 12 pairs of button assignment slots in the upper portion of the Button assignments box. The top slot of the button assignment pair is the feature or autodial number accessed using the shift button on the telephone.

Assign features and autodial numbers to the dual buttons using the procedures described in the preceding paragraphs.


Changing CAP programming

CAP programming can only be performed on M7324 sets equipped with a CAP module. Refer to **Installed equipment**, in this section, for instructions on defining the set type.

CAPs must be attached to the Norstar system and enabled before you can program them. If you try to program a CAP that is not attached or enabled, an SQL -434 error message "this set doesn't have a CAP attached" will appear.

A CAP should be initialized if you are moving the CAP from one Norstar system to another. If you do not, Norstar Manager may get a "no record found" error when trying to display the CAP information. To initialize a CAP, hold down the two buttons on the bottom right and the two buttons on the bottom left of the CAP while the display is flashing (immediately after you connect the CAP).

To program a CAP module:

1. Choose  The **CAP buttons** screen appears.

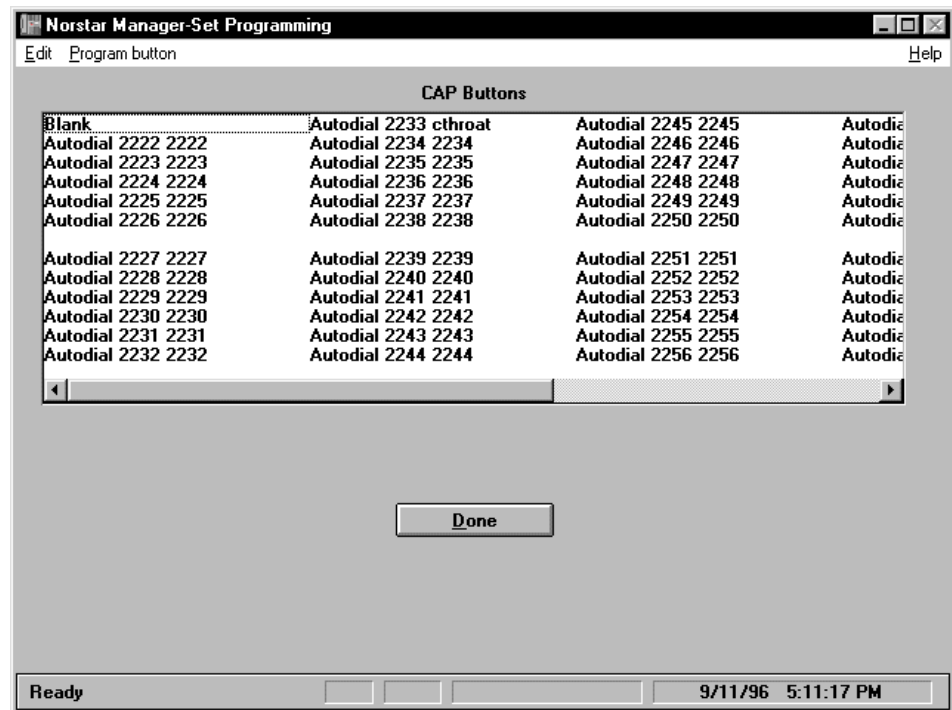


Figure 6.35 – The CAP buttons programming screen

2. Select the button you want to assign a feature to.

Features and autodials are assigned to CAP buttons using the same procedures used to assign features and autodials to set buttons. When you have completed making changes to the CAP button programming, choose **Done** to return to the **Buttons and Status** screen.

Personal speed dials

To enter Personal speed dial programming:

1. Select the set you want to program
2. Choose the **Program** menu and then the **Set** menu item.
3. Choose the **Personal Speed Dials** menu item. The **Personal Speed Dials** screen appears.

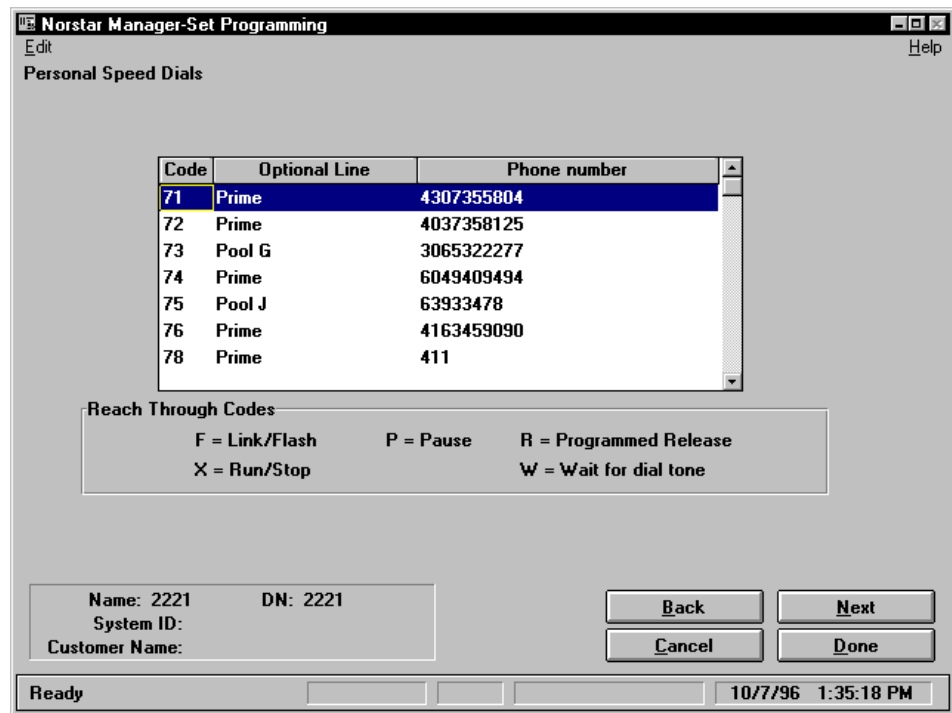



Figure 6.36 – The Personal Speed Dials screen

To add a Personal speed dial:


1. Choose the **Edit** menu and then the **Add speed dial(s)...** menu item.
2. Select the speed dial code or codes you want to add.
3. Choose 

To program a Personal speed dial:

1. If required, select the **Optional Line** field and then choose the line or line pool this speed dialer will use.
2. Select the **Phone number** field of the speed dial code to add.
3. Type the speed dial numbers indicated on the programming record. You can enter Link/flash, Programmed Release, Pause, Wait for tones, and Run/stop within the number, but you should remember some of these codes use two spaces within the number. The maximum length for the speed dial phone number is 24 digits.

To delete a Personal speed dial:

1. Select the Personal speed dial to delete.
2. Choose the **Edit** menu and then the **Delete speed dial(s)** menu item.

Choose  to exit this screen and implement your changes.

Call services

To enter Call services programming:

1. Select the set you want to program.
2. Choose the **Program** menu and then the **Set** menu item.
3. Choose the **Call Services** menu item. The **Call Services** screen appears.

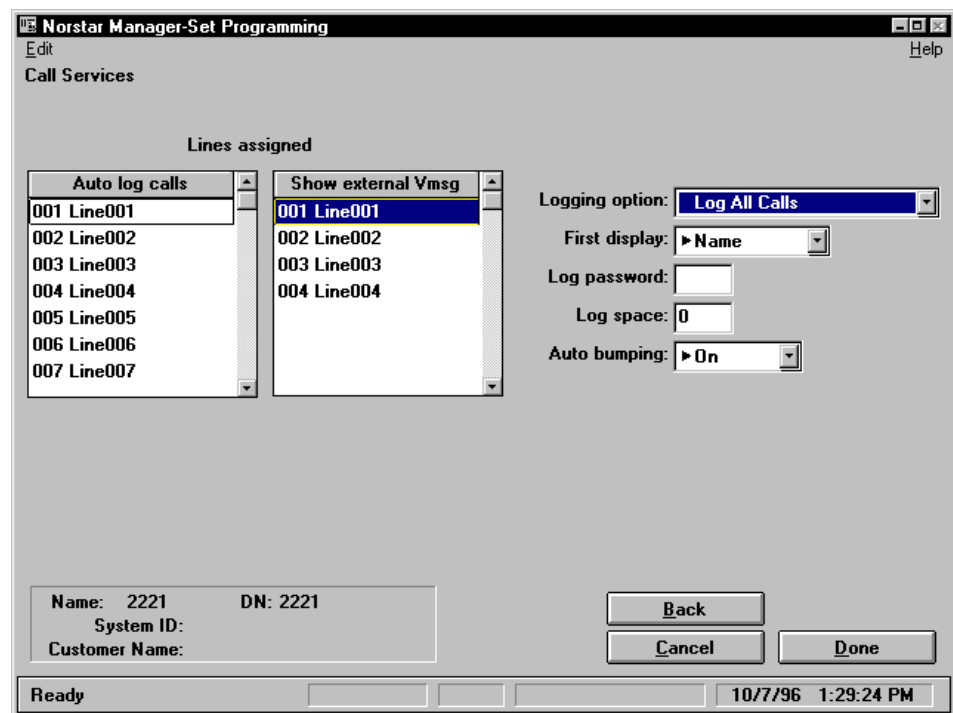



Figure 6.37 – The Call Services screen

To add lines that will provide Call Service information to this set:


1. Choose the **Edit** menu and then the **Add Auto Log Lines...** menu item. The **Lines** dialog box appears.
2. Select the line or lines to be logged by this set.
3. Choose . The selected lines are added.

To delete lines that provide Call Service information to this set:

1. Select the line or lines to be deleted.

2. Choose the **Edit** menu and then the **Delete Auto Log Lines** menu item.
The selected lines are deleted.


If you subscribe to an external voice message center, a notification message is sent to you when one of your lines has a message waiting. To add lines that show a message is waiting at the external voice message center:

1. Choose the **Edit** menu and then the **Add External VMsg Lines...** menu item.
2. Select the line or lines that will show if a message is waiting.
3. Choose .
The selected lines are added.

To delete lines that provide external voice message service to this set:

1. Select the line or lines to be deleted.
2. Choose the **Edit** menu and then the **Delete External VMsg Lines** menu item.
The selected lines are deleted.

To program Call services options:

1. Choose the drop list arrow beside the **Logging option** field and then choose the Call Logging option used by this set.
2. Choose the drop list arrow beside the **First display** field and then choose the information that will be shown on the first line of the Call log display.
3. Select the **Log password** text box and type the password for the Call log.
4. Select the **Log space** text box and type the size of Call Log for this set.
Note: If you enter a Call Log size larger than the maximum, Norstar Manager automatically defaults to the maximum amount available.
5. Choose the drop list arrow beside the **Auto bumping** field and choose ON to activate the Auto bumping feature or OFF to disable it.
6. Choose  to exit this screen and implement your changes.

Programming multiple sets

When you have worked through the **Set programming** section you have completed the programming for one set on the Norstar system. To continue programming the remaining sets, you can either work through the above sections for each set on the Norstar system, or use the Copy set feature.

The Copy set feature can be used to program all sets on a Norstar system quickly and efficiently. Even if all the sets in the Norstar system do not share the same programming parameters, you should consider using the Copy set feature to program the same type of sets. For example, you can program one M7310 set, then copy its programming to all the M7310 sets. You can then go to each set individually and change any parameters that are different.

Important: You can copy any type of set to any type of set. If the set types are identical, all fields will copy. If the set types are different, certain fields will not copy. You can copy to sets that aren't physically connected to the KSU but only some fields will copy, meaning virtual set copying is not supported by Norstar Manager.

Note: For more information on what gets copied, see the "Set data copy" section.

To copy set programming:

1. Select the set you want to copy programming from.
2. Choose the **Edit** menu and then the **Copy Set...** menu item. The **Copy Set** dialog box appears.

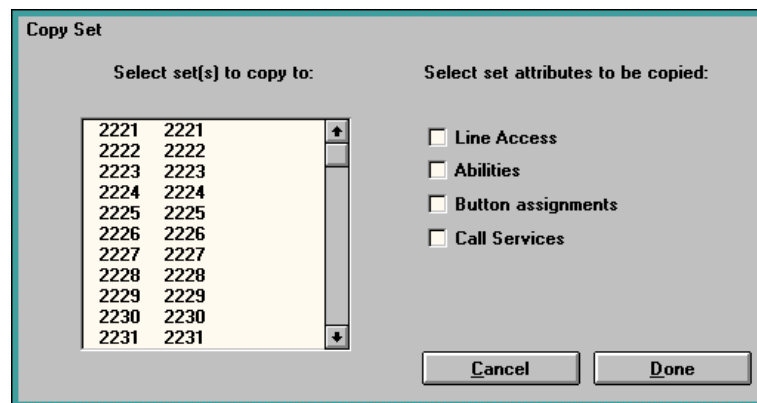


Figure 6.38 – The Copy Set dialog box

3. Choose the check boxes of the attributes you want to copy.
4. Select the sets you want the attributes copied to.
5. Choose . The programming for one set is copied to the selected sets.

Set data copy

Copying all four attribute groups is the same as the **Copy Set** feature invoked from **C.Ext Copy** under **Admin**.

Data copied by selecting Line Access attributes:

- prime line index
- line appearance flags
- line ring preference flags
- answer keys DNs
- answer key ring flags
- line pool access flags
- number of intercom keys
- set based incoming line group data
- originating line ID number

Data copied by selecting Abilities attributes:

- hands free enable flag
- hands free answerback enable flag
- auxiliary ringer enable flag
- page zone number
- call pickup group number
- forward no answer destination set DN
- call forward delay
- priority call enable flag
- short DTMF tones receive flag
- allow ATA tones flag
- ATA tones set indicator flag
- set lock data (also updates restrictions)
- auto handsfree enable flag
- forward on busy destination DN
- direct dial telephone set ID
- cable loss status
- auto-connect info
- page feature enable flag
- selective line redirection enable flag
- ring splash enable flag
- do not disturb (DND) on busy flag
- dialing restrictions filters
- alternate restriction filters
- line/set filters
- link feature access (LINK)
- saved number redial (SNR)

- last number redial (LNR)
- ATA answer timer
- (Message) Msg indicate

Data copied by selecting Button Assignments attributes:

- personal speed dial DNs
- autodial keys and programmed keys
- autodial DNs
- language ID

Note: User data, speed dial numbers, buttons and status, applies to the physical set both at the source and the destination.

Data copied by selecting Call Services attributes:

- CLASS Message Waiting receivership flags
- auto-logging flags (line selection)
- preferred incoming calling line ID (ICLID) display

Mobility programming

Mobility programming is available only for CDA-MICS-XC 1.0, USA-MICS-XC 1.0 CDA-MICS-XC 1.1, and USA-MICS-XC 1.1 systems. If you are programming a different type of system, skip to the **RAD programming** section.





Note: Mobility programming is not available for NA-MICS-DR 1.1.



Mobility programming involves entering information about:

- Portable registration
- Mobility setup
- Cells
- Re-evaluation
- Software codes (USA-MICS-XC 1.0 and USA-MICS-XC 1.1 only)

Each area of information is entered into the Norstar system through a dedicated screen. Refer to Figure 6.3 for an overview of the different areas of mobility programming.

After you have entered information in one of these screens, you can:

- Choose  to implement your changes and move to the next programming screen.
- Choose  to implement your changes and move to the previous programming screen.
- Choose  to cancel all new programming changes and return to the **System Programming Overview** screen.
- Choose  to implement the new programming changes and return to the **System Programming Overview** screen.

Note: The steps described in this section assume that you are starting from the **System Programming Overview** screen. If you are not, return to the **System Programming Overview** screen or use  or  to move to the appropriate programming screen.

Portable registration

To change Portable data:

1. Choose the **Program** menu and then the **Mobility** menu item.
2. Choose the **Portable Registration** menu item. The **Portable Registration** screen appears.

Norstar Manager - Portables

Portable Registration

System LID: 5BF6

Registration password: 72346

☐ Allow registration

Portable credits: 0 of 0

Registration status	
DN	Status
2637	Not registered
2638	Not registered
2639	Not registered
2640	Not registered
2641	Not registered
2642	Not registered
2643	Not registered
2644	Not registered
2645	Not registered
2646	Not registered
2647	Not registered
2648	Not registered
2649	Not registered
2650	Not registered
2651	Not registered

System: Modular
Customer name: MICS 1.1
System location: Telephone room
System ID: 1115551235

Update
Next
Cancel
Done

Ready 10/7/96 12:51:31 PM

Figure 6.39 – The Portable Registration screen

3. Select the **Registration password** field and type in the registration password listed on the programming record.
4. Choose the **Allow registration** check box to allow portables to register.

The fields in the **Registration status** box show if a portable is registered with the system. If a portable registered with the system should not be registered, you can change its status to not registered. To change the status of a portable to not registered:

1. Select the portable or portables
2. Choose the **Edit** menu and then the **Deregister portables** menu item. The registration status is changed to Not registered.

The registration status shown is the status of the portables when you opened the screen. To get the current status, choose **Update**

Choose **Done** to exit this screen and implement your changes.

Mobility setup

To change radio data:

1. Choose the **Program** menu and then the **Mobility** menu item.
2. Choose the **Mobility Setup** menu item. The **Mobility Setup** screen appears.

Cell	Radio	Antenna type
None	07011	Internal
None	07012	Internal
None	07021	Internal
None	07022	Internal
None	07031	Internal
None	07032	Internal
None	07041	Internal
None	07042	Internal
None	07051	Internal
None	07052	Internal
None	07061	Internal
None	07062	Internal
None	07071	Internal
None	07072	Internal
None	07081	Internal
None	07082	Internal


Figure 6.40 – The Mobility Setup screen

3. Select the **System LID** field and type in the System LID listed on the programming record.
4. Select the **Cell** field for the radio you want to change. Choose the cell number assigned to this radio.
5. Select the **Antenna type** field for the radio you want to change. Choose either Internal or External.
6. Repeat steps 4 and 5 for each radio.

The **UTAM status** and **Radio credits** fields are display fields that are only used on **Norstar-PLUS USA-MICS-XC** systems. You cannot edit these fields.

The **UTAM status** field indicates if system can use the radio credits listed in the **Radio credits** field.

The **Radio credits** field indicates the current number of radio credits remaining from the total number of radio credits in the system. As you add radios, the number of current radio credits available is decreased.

Choose  to exit this screen and implement your changes.

Cells Use the **Cells** screen to select a cell then view the **Neighbors** screen for that cell. From the **Neighbors** screen you can view and change the neighbor status of cell neighbors and cell radio neighbors.

To access neighbor data:

1. Choose the **Program** menu and then the **Mobility** menu item.
2. Choose the **Cells** menu item. The **Cells** screen appears.

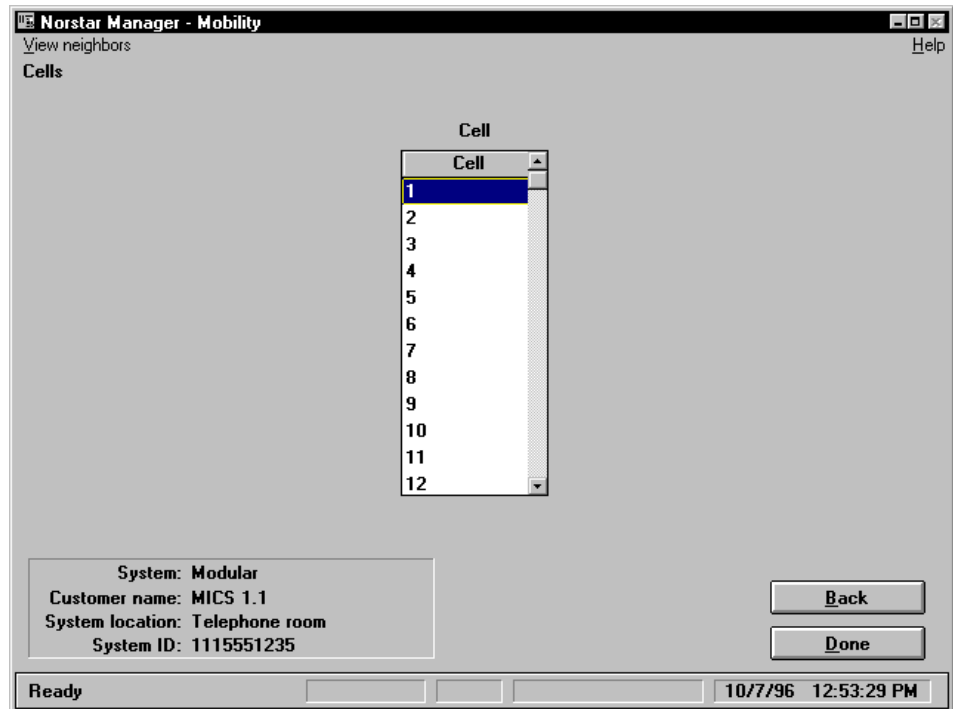


Figure 6.41 – The Cells screen

3. Select the cell you want to view neighbor data for.
4. Choose the **View neighbors** menu. The **Neighbors** screen appears.

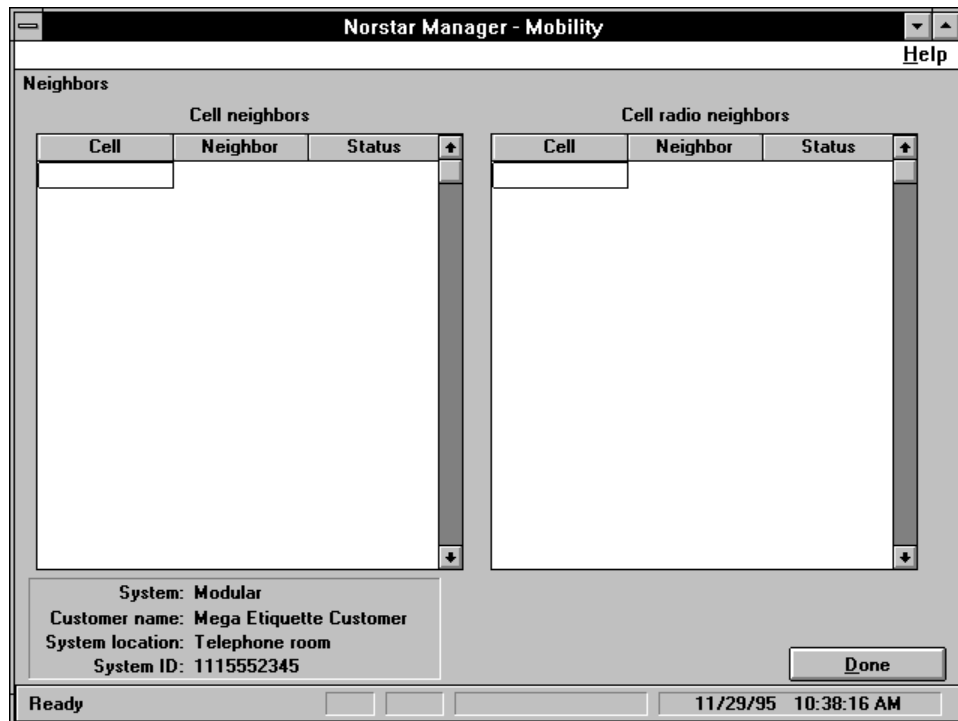


Figure 6.42 – The Neighbors screen

5. In the **Cell neighbors** scroll region, select the **Status** field for the cell you want to change and choose either Distant or Neighbor. Repeat this step for each cell neighbor you are programming.
6. In the **Cell radio neighbors** scroll region, select the **Status** field for the cell you want to change and choose either Distant or Neighbor. Repeat this step for each cell radio neighbor you are programming.
7. Choose to exit the **Neighbors** screen and implement your changes.

Choose to exit the **Cells** screen.

Re-evaluation

Use the **Re-evaluate** screen to run or schedule a re-evaluation of the mobility configuration of a CDA-MICS-XC 1.0, USA-MICS-XC 1.0, CDA-MICS-XC 1.1, or USA-MICS-XC 1.1 system. To re-evaluate the mobility configuration:

1. Choose the **Program** menu and then the **Mobility** menu item.
2. Choose the **Re-evaluation** menu item. The **Re-evaluate** screen appears.

Figure 6.43 – The Re-evaluate screen

In the upper portion of the **Re-evaluate** screen are two fields which show the status of the mobility re-evaluation: the **Execution** field and the **Scheduling** field.

The **Execution** field shows you if a re-evaluation is needed. If “Required” is in the **Execution** field, you should run or schedule a re-evaluation.

The **Scheduling** field shows you if a re-evaluation has already been scheduled. If “Scheduled” is in the **Scheduling** field, a re-evaluation is scheduled to run.

To run a re-evaluation, choose The re-evaluation of the mobility configuration will start immediately.

To schedule a re-evaluation:

1. Select the **Date & Time** field.
2. Enter the date and time the re-evaluation is to start.
Note: The start date and time must be later then the current KSU date and time.
3. Choose
Note: Only one date and time can be used for a scheduled re-evaluation. A dialog box will appear if a re-evaluation has already been scheduled. You can then choose to use the previous date and time for the re-evaluation or the date and time you have just entered.

Choose to exit this screen and implement your changes.

Entering software codes

Software codes are codes used to upgrade a USA-MICS-XC 1.0 or USA-MICS-XC 1.1 system by adding more portable telephones or functionality. The **Software Codes** screen is used to enter these software codes.

Before you begin, make sure your monitor shows the **System Programming Overview** screen.

To enter a software key:

1. Choose the **Program** menu and then the **Mobility** menu item.
2. Choose the **Software Codes** menu item. The **Software Codes** screen appears.

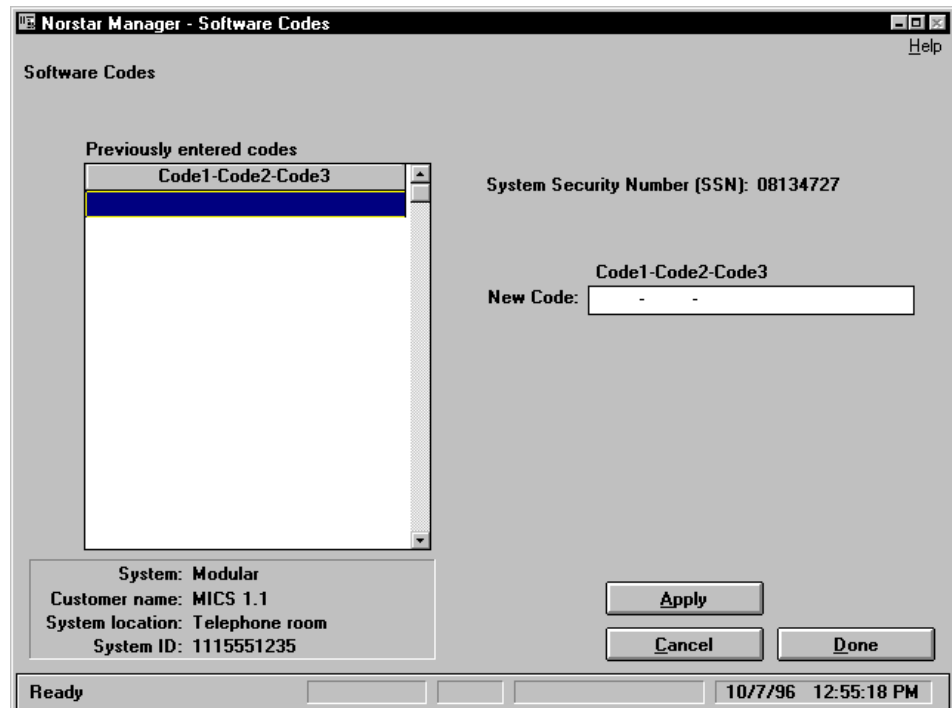


Figure 6.44 – The Software Codes screen

3. Select the **New Code** field and enter the new software code.
Note: Contact your telephone company representative or Norstar distributor for details on obtaining a software key.

4. Choose to add the software key.

Choose to exit this screen and implement your changes.

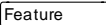



RAD Programming

If you previously used the original RAD, you should be aware of the following differences between the original RAD and the Global RAD:

- In a direct connection, the RAD is connected to the Norstar Manager PC using a serial cable. On the original RAD this cable connects to a 25-pin connector. On the Global RAD the serial cable is connected to a 9-pin connector.
- The original RAD is powered from the KSU or a Station Auxiliary Power Supply (SAPS). The Global RAD has a dedicated power supply that must be connected before it can be used.
- The original RAD uses a KSU line or a dedicated CO line connected directly to the RAD to answer Norstar Manager calls. The Global RAD uses a KSU line only.
- The Global RAD may be programmed from a Norstar set to auto-answer any KSU line (001 to 999), even off-core lines. When programmed from Norstar Manager, the auto-answer line is limited to on-core lines only.
Note: Norstar Manager can only display line numbers from 001 to 255. If the auto-answer line has been programmed from a Norstar set to a line greater than 255, the **KSU line number = external line** field on the **RAD Admin** screen is used to indicate that the line number is outside of the Norstar Manager range.
- The Global RAD can be programmed from a Norstar set to use a separate KSU line for alarm reporting. When programming line numbers for the Global RAD from Norstar Manager, the alarm reporting line is set to the same line as the auto-answer line.
- The Global RAD has different valid ranges for the number of rings, retry time and number of retries. If you enter a number from Norstar Manager that is outside of the valid range, the Global RAD will set the parameter to the nearest valid value.
- The Global RAD's delay before auto-answering is measured in seconds. Norstar Manager measures the delay before auto-answering in full ring cycles. When Norstar Manager reads the delay time from the Global RAD, the number of seconds is divided by six to get the number of full ring cycles. Any remaining seconds are discarded. When a new delay time is entered from Norstar Manager, the number of rings entered is multiplied by six to get the value in seconds.

To avoid confusion, FastRAD programming should be done using the Remote Set tool and . However, if you program the FastRAD with Norstar Manager, you should keep in mind the following special considerations:

- For direct connections, keep the baud rate at the default setting (9600). Although the FastRAD can support connections up to 19200, choosing a higher rate for a direct connection (when the PC is connected directly to the RAD) does not increase the speed of the connection.
- When changing the password for a FastRAD, the new password must be 8 to 10 digits long. Any password less than 8 digits is rejected, but no error message appears and you still have to use the old password to connect to the ICS.

- Alarm baud rate options for the FastRAD do not appear with their correct values in Norstar Manager. For example, the 300 setting is actually 1200. To avoid confusion, FastRAD programming should be done using the Remote Set tool and    .

After the RAD is installed at the customer's site, its programming can be changed using a dedicated Norstar Manager screen.

However, you should be careful when you change RAD programming. Changing certain RAD programming parameters can make it impossible to re-establish an on-line session with the remote Norstar system. Table 6.1 outlines where you should be careful when you make changes to the RAD programming.

Action	Caution
Changing the RAD password	When using a Start on-line session, the changed RAD password is automatically updated in the System Details . If using Quick connect, record the new password so you can use it to make a quick connection, if necessary, and update System Details .
Changing the KSU line	If the RAD uses a KSU line and you change the line number, make sure the RAD phone number in the System Details screen matches the new line's phone number. If you do not match these numbers, you cannot make an on-line connection. (Note1)
Changing automatic answer	If you disable Automatic answer of all incoming calls , you will be unable to make an on-line connection without having someone at the remote site reprogram the RAD for you. (Note1)
Changing the RAD connection (not available on the Global RAD)	If you change the connection from KSU line to External line , and the RAD is not physically configured for a CO line connection, the physical configuration must also be changed by someone at the customer site. After this physical change is made, you must enter the new RAD phone number in the System Details screen before you can make an on-line connection. (Note1)

Table 6.2 – RAD programming cautionary notes

Note1: If you encounter these problems, you can use an operator assisted connection to access the KSU and correct the programming parameters.

Before you begin, make sure your monitor shows the **System Programming Overview** screen.

- Choose the **Program** menu.
- Choose the **RAD** menu item.
The **RAD Programming** screen appears.


Note: Two different RADs can be used with Norstar Manager: the RAD and the Global RAD. When you choose the **RAD** menu item, Norstar Manager automatically detects which type of RAD is being used and displays the correct **RAD Programming** or **Global RAD Programming** screen.

RAD The following steps describe programming for a RAD.

Figure 6.45 – The RAD Programming screen

1. Select the **RAD password** field and enter the RAD password listed in the programming record.
2. If you want the RAD to automatically answer the designated line, choose the **Automatic answer of all incoming calls** check box.
Note: Automatic Answer must be enabled to make a remote connection without assistance from someone at the KSU site.
3. Choose the drop list arrow beside the **Number of rings to answer** field then choose the number of rings the RAD waits before automatically answering a call.
4. Choose the drop list arrow beside the **KSU line number** field then choose the line that the RAD will answer. You can choose External for a line connected directly to the RAD or any KSU line number.
5. If you want the RAD to report alarms to an alarm center, choose the **Automatic reporting of alarms** check box.
Note: If you enable alarm reporting, you must enter at least one of the alarm monitoring numbers.
6. Select the **Alarm monitoring number 1** field and enter the telephone number of the first alarm center the RAD will report alarms to.
7. Select the **Alarm monitoring number 2** field and enter the telephone number of the second alarm center the RAD will report alarms to.
8. Choose the drop list arrow beside the **Interval between retries** field then choose the number of minutes the RAD waits after a failed attempt to contact the alarm center before attempting again.

9. Choose the drop list arrow beside the **Number of retries** field then choose the number of times the RAD will attempt to contact the alarm center.
10. Choose the drop list arrow beside the **Baud rate** field then choose the baud rate RAD will use to send an alarm message to the alarm center.
11. Choose the drop list arrow beside the **Parity** field then choose the type of parity the RAD will use when reporting alarms.

Choose  to exit this screen and implement your changes.

For detailed information about the RAD programming, see the **RAD Installation Guide**.

Global RAD

The following steps describe programming for a Global RAD.

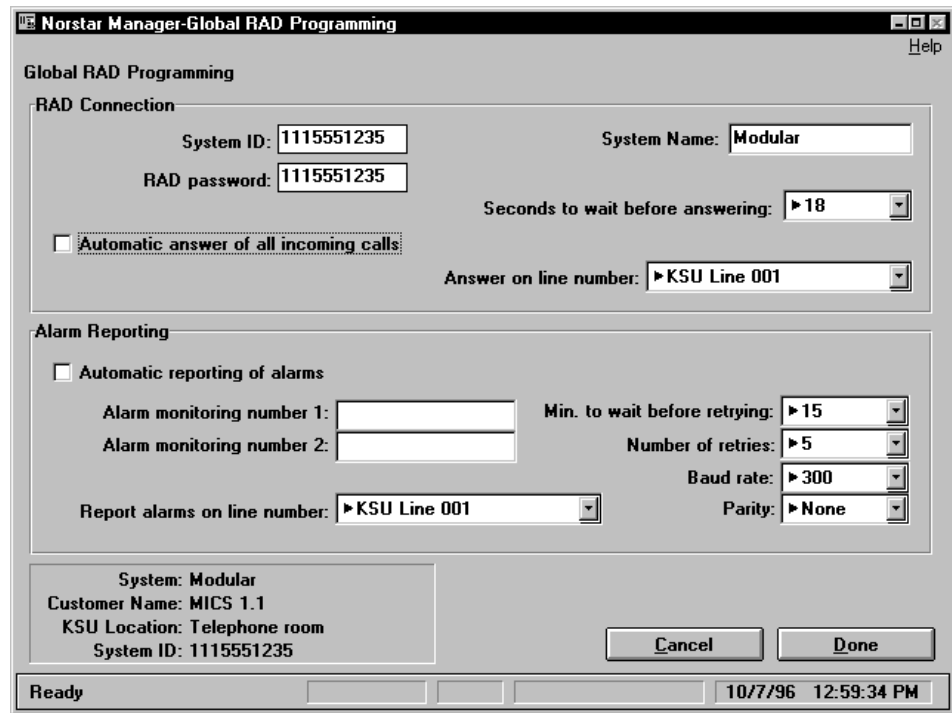



Figure 6.46 – The Global RAD Programming screen

1. Select the **System ID** field and enter the system ID number listed in the programming record.
2. Select the **System name** field and enter the system name listed in the programming record.
3. Select the **RAD password** field and enter the RAD password listed in the programming record.
4. If you want the RAD to automatically answer the designated line, choose the **Automatic answer of all incoming calls** check box.

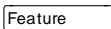



Note: Automatic Answer must be enabled to make a remote connection without assistance from someone at the KSU site.

5. Choose the drop list arrow beside the **Seconds to wait before answering** field then choose the number of seconds the RAD waits before automatically answering a call.
6. Choose the drop list arrow beside the **Answer on line number** field then choose the line number that the RAD will answer.
7. If you want the RAD to report alarms to an alarm center, choose the **Automatic reporting of alarms** check box.
Note: If you enable alarm reporting, you must enter at least one of the alarm monitoring numbers.
8. Select the **Alarm monitoring number 1** field and enter the telephone number of the first alarm center the RAD will report alarms to.
9. Select the **Alarm monitoring number 2** field and enter the telephone number of the second alarm center the RAD will report alarms to.
10. Choose the drop list arrow beside the **Report alarms on line number** field then choose the line number that the RAD will use to report alarms.
11. Choose the drop list arrow beside the **Min. to wait before retrying** field then choose the number of minutes the RAD waits after a failed attempt to contact the alarm center before attempting again.
12. Choose the drop list arrow beside the **Number of retries** field then choose the number of times the RAD will attempt to contact the alarm center.
13. Choose the drop list arrow beside the **Baud rate** field then choose the baud rate RAD will use to send an alarm message to the alarm center.
14. Choose the drop list arrow beside the **Parity** field then choose the type of parity the RAD will use when reporting alarms.

Choose  to exit this screen and implement your changes.

For detailed information about the RAD programming, see the **RAD Installation Guide**.

Note: The Global RAD can also be administered through the RAD Administration screen of the Remote Set tool . See *Remote Tools User Guide*.

To change the programming for a FastRAD, use the Remote Set tool and     . If you use Norstar Manager to program a FastRAD, any password that does not use 8 to 10 digits is rejected, and the baud rate settings do not match the values you are shown. Avoid problems by using the Remote Set tool option.

Peripheral Programming

Using the **Voice Mail Programming** screen, you administer the Norstar Voice Mail Interface (VMI), the Norstar Station Message Detail Recording (SMDR) and the Norstar voice mail systems, such as StarTalk and Norstar Voice Mail. The **Voice Mail Programming** screen emulates a Norstar telephone interface, which allows you to use the following programming feature codes:

Feature Code [†]	Description
Feature <input type="text" value="9"/> <input type="text" value="0"/> <input type="text" value="5"/>	VMI administration programming
Feature <input type="text" value="9"/> <input type="text" value="∗"/> <input type="text" value="1"/>	Feature Code Checklist (voice mail systems)
Feature <input type="text" value="9"/> <input type="text" value="∗"/> <input type="text" value="2"/>	SMDR administration programming
Feature <input type="text" value="9"/> <input type="text" value="8"/> <input type="text" value="1"/>	Open Mailbox (voice mail systems)
Feature <input type="text" value="9"/> <input type="text" value="8"/> <input type="text" value="2"/>	Operator Status (voice mail systems)
Feature <input type="text" value="9"/> <input type="text" value="8"/> <input type="text" value="3"/>	System Administration (voice mail systems)
Feature <input type="text" value="9"/> <input type="text" value="8"/> <input type="text" value="4"/>	Date and Time (voice mail systems)
Feature <input type="text" value="9"/> <input type="text" value="8"/> <input type="text" value="5"/>	Directory Number (voice mail systems)

[†] The voice mail feature codes to are the default codes. If the system you are programming is not using the default codes, use the Feature Code Checklist code to determine the new codes.

Table 6.3 – Voice Mail feature codes

Most programming tasks that can be done from a Norstar telephone using these feature codes can be done from the **Voice Mail Programming** screen. The exception is voice recording and play back.

Note: For information about programming the SMDR, VMI or a voice mail system, see user documentation for that product.

Using the Voice Mail Programming screen

Before you begin, make sure your monitor shows the **System Programming Overview** screen.

To program SMDR, VMI, or a voice mail system:

1. Choose the **Program** menu.
2. Choose the **Voice Mail** menu item.
The **Voice Mail Programming** screen appears.

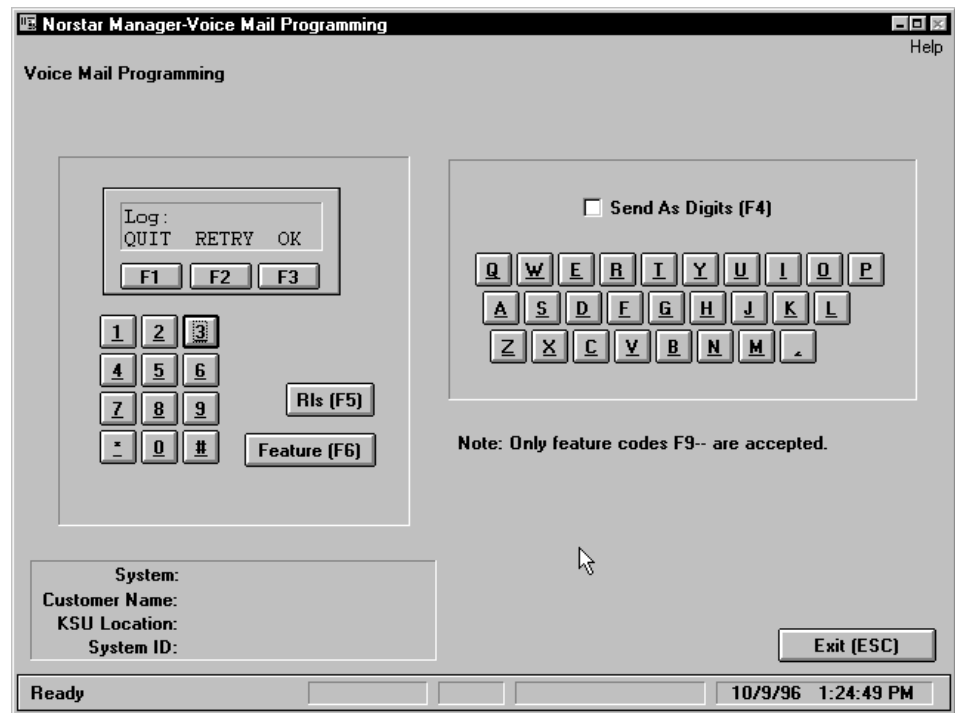


Figure 6.47 – The Voice Mail Programming screen

3. Enter the feature code and start programming the device.

When you are programming, the buttons on the left hand side of the screen work exactly the same as the buttons on the telephone. You can choose these buttons using the mouse or you can type the corresponding button on the keyboard. For example, to choose the center display button, you can choose it using the mouse or press **F2**

The alphabetic keys that appear on the right side of the screen work in two different modes:

- When the **Send As Digits (F4)** field is empty, the alphabetic keys send alphabetic characters. This is useful when you are entering letters such as the name of mailboxes.
- When there is an "x" in the **Send As Digits (F4)** field, the alphabetic keys send numbers. The numbers sent correspond with the numbers and letters shown on the Norstar telephone dial pad. For example, when you type **admin**, the digits that appear on the screen are **23646**.

Choose **Exit (ESC)** to exit this screen.

Backing up and restoring Norstar system information

7

Introduction

Norstar system programming is protected when you back it up frequently. If data is lost, backed up Norstar programming can be quickly restored to a KSU.

When you perform a backup, Norstar Manager retrieves a complete copy of all programming information from the Norstar KSU, and stores it in the Norstar Manager database.

You use the Backup feature when you:

- add a customer with an existing Norstar system to the Norstar Manager database
- are offering to backup customer programming as a service
- want to update the system database with the current programming data

When you restore a customer's programming, a complete copy of a customer's Norstar system programming, stored in the Norstar Manager database, is sent to the customer's KSU.

You use the Restore feature when the Norstar system has lost all its programming.

When you perform a restore, the Norstar system is put in maintenance mode for the duration of the restore process.

This section explains how to perform a backup or restore operation.

How backups work

Norstar Manager stores up to two different copies of a Norstar system's programming. These different copies include:

Current

This version contains the same programming that was in the KSU at the time of the last backup or restore.

Archive

If enabled, this version stores the current copy prior to the last backup.

Backups are treated as an assembly line. When a backup is performed, the information stored in the Current version is moved to the Archive version.

Performing a backup or restore

You can perform a backup or restore immediately or schedule it for a later date and time.

Note: Backup and restore are not available for Compact ICS 1.0. Use the Backup and Restore tool included in Norstar Remote Tools to perform backup and restore operations for Compact ICS and Modular ICS, version 2.0 or higher.

When you perform a backup, the customer's Norstar system may slow down, but it remains completely operational. However, when you perform a restore, the customer's Norstar system is non-operational and call processing is suspended during the restore process.

We suggest you perform restores during non-business hours, and warn the customer that the Norstar system will be non-operational. You should also schedule backups for non-business hours so that the Norstar Manager PC is free for you to perform other functions during working hours. The amount of time it takes for a backup or restore to complete depends on the size and configuration of the Norstar system, and the baud rate your PC is using.

If you perform a backup, a copy of the customer's Norstar system programming is stored in the Norstar Manager database. This copy can be used to restore the customer's Norstar system in the event of complete programming loss.

If you perform a restore, a copy of the customer's Norstar system programming is loaded from the Norstar Manager database into the Norstar system.

Cautions when performing a backup or restore

When Norstar Manager runs a restore, all of the sets are put in maintenance mode. Programming data from the Norstar Manager database is then loaded into the KSU memory. After the data is loaded, Norstar Manager takes the sets out of maintenance mode. If a scheduled restore fails to complete due to an error, the sets will be left in maintenance mode and the KSU will be left with corrupted programming data. These two conditions can leave the KSU inoperable.

There are three different conditions that can cause a restore to fail:

- excessive noise or network failure
- a power fail or hardware error on the Norstar Manager PC or LAN

- a power fail or hardware error on the Norstar KSU or RAD

Because a failed restore can render a KSU inoperable, it is important to ensure the restore completes successfully. If you have a restore that fails, start an on-line session and use the maintenance functions described in **Section 10** to check what state the KSU is in. If the KSU is operable and no lines or sets are disabled, end the on-line session and schedule another restore to start after the customer's working hours. It may also be advisable to warn the customer that his KSU may have problems until you can perform another restore. The new restore will ensure that all of the correct programming data is loaded into the KSU. If the KSU is inoperable (in maintenance mode or has lines or sets disabled), initialize the KSU, end the on-line session and start another restore immediately. If this second attempt to run a restore fails, you must send a technician to the customer site to troubleshoot the Norstar system and its connections.

CAPs must be attached to the Norstar system and enabled before you attempt a backup or restore. If you are performing a restore, the CAP must also be on the same port as it was when the backup was performed.

The line buttons on an Enhanced CAP are restored in the default order (the first available buttons on the CAP) regardless of the order in which the lines were programmed originally.

When restoring DR5 systems, the sets must be equipped for external autodialers to be restored.

Scheduling a backup or restore

Usually you schedule a backup for a later date and time when you are offering a backup service. For example, you can schedule a backup of system data at the beginning of each week or month.

When you have several Norstar systems to backup, you should schedule the backups to run overnight. This method prevents any degradation of service on the Norstar system that is being backed up.

Usually you schedule a restore for a later date and time unless the KSU requires information from the Norstar Manager database immediately.

Important: After a restore process is successfully completed, you must wait at least 10 minutes before attempting to make another on-line connection to the Norstar system you just restored data to.

Before you begin, make sure the **Systems Directory** screen appears on your monitor. To perform a backup or restore:

1. Select the Norstar system you want to back up or restore.
2. Choose the **Scheduler** menu and then the **Run/Submit Job** menu item. The **Submit Job** screen appears.

Figure 7.1 – The Submit Job dialog box

3. Select the **Date & Time** field and enter the date and time the backup or restore will start. The date and time must be entered in the format yy/mm/dd hh:mm (e.g. 93/02/25 02:58) with any single digit year, month, day, hour or minute preceded by a zero.
Note: The slash (/) and colon (:) are entered automatically.
Important: The time you enter into this field is the time the job will start according to your Norstar Manager PC. If there is a time difference between your site and the Norstar system site, check the **Time difference** field to ensure you do not accidentally schedule the job to start during the customer's work hours.
4. Choose the drop list arrow beside the **Job type** field and then choose either **Backup** or **Restore**.
5. Choose the drop list arrow beside the **Copy type** field and then choose **Complete copy**.
Note: Complete copy is the only option available for this field.
6. Choose the drop list arrow beside the **Repeat every** field and then choose the interval between repeated backups. If you do not want this job repeated, choose **Do not repeat**.
7. Choose the drop list arrow beside the **Save archive** field and then choose either **Yes** or **No**. If you choose Yes, the programming currently stored in the database will become the archive copy. If you choose No, the programming currently stored in the database is deleted.
Note: This field is only used if you are performing a backup.

8. If you want to use a RAD telephone number that is different than the one entered on the **System Details** screen, select the **RAD phone number** field and type the new telephone number. For more information on the RAD phone number, see **Section 5**.
9. If you want to use a baud rate that is different than the one entered on the **Systems Details** screen, choose the drop list arrow beside the **Baud rate** field and then choose the baud rate used for this backup or restore. For more information on baud rates, see **Section 5**.
10. Select the **Notes** field and type any notes for this backup or restore.
11. Choose or

Note: If you are using a local Job Scheduler, the connection parameters are listed on the **System Details** screen of your PC. If you are using a network Job Scheduler, the connection parameters are listed on the **System Details** screen of the network server.

After the backup or restore is scheduled, you must access the **Job Queue** screen and activate the Job Queue. Until the Job Queue is activated, no scheduled backups or restores will be completed. For more information about the Job Queue, see **Job Queue** later in this section.

Scheduling a backup to repeat automatically

In some cases backups need to be scheduled to run on a regular basis. For instance a customer may want his system backed up every month. This can easily be done using the **Repeat Every** field on the **Submit Job** screen.


The **Repeat Every** field allows you to schedule a backup to run every day, every week, every two weeks and every month. When you choose every day, the backup will be run at the same time every day. When you choose every week or every two weeks, the job is run at the same time and the same day (e.g. 9:00 pm on Monday). When you choose every month, the backup is run at the same time and date every month (e.g. 9:00 pm on the 5th).

To stop the backup from repeating, choose **Do not repeat** from the **Repeat every** field. You must also check the **Job Queue** screen to see if the backup has already been submitted to the Job Queue. If it has, you must remove the backup from the Job Queue. For information about removing a backup from the Job Queue, see **Deleting a job** later in this section.

Note: Once the backup is scheduled, you must access the **Job Queue** screen and activate the Job Queue. Until the Job Queue is activated, no scheduled backups will be completed. For more information about the Job Queue, see **Job Queue** later in this section.

Running the backup or restore immediately

Before you run a backup or restore immediately, make sure the **Submit Job** screen appears on your monitor. When you want to run a backup or restore immediately:

1. Enter the job information on the **Submit Job** screen.
2. Choose .
The backup or restore will start immediately.

Restoring an Archive copy

In certain situations you may need to restore an Archive copy of the customer's Norstar system programming. To do this you must first make the Archive copy the current copy.

To restore an Archive copy:

1. Move to the **Systems Directory** screen.
2. Select the desired Norstar system.
3. Choose the **Scheduler** menu and then the **Undo Last Backup** menu item. The Archive copy of the Norstar system programming becomes the Current copy.
Note: The **Undo Last Backup** menu item is not available unless you create an Archive copy of the Norstar system programming. To create an Archive copy you must choose **Yes** for the **Save archive** field when you backup the Norstar system.
4. Complete the restore using the procedure described in the preceding sections.

Job Queue

When you schedule a job (backup or restore), you must change to the **Job Queue** screen to run them. This screen shows what jobs are scheduled. If you do not access this screen, scheduled jobs are considered pending and will not run.

Two separate Job Queues are available on Norstar Manager: the Local Job Queue and the Network Job Queue. The Local Job Queue operates on your PC and only contains jobs that you submitted to the queue. Your PC is also the only one that can run the scheduled jobs. The Network Job Queue operates on the network server and contains jobs submitted by you and other network users. Any Norstar Manager PC on the network can run jobs scheduled on the Network Job Queue. To change which Job Queue you are using, you must change the **Job Queue path** field on the **Preference Settings** screen. For more information about the **Preference Settings** screen, see **Section 3, Norstar Manager default settings**.

Before beginning, make sure the **Systems Directory** screen appears on your monitor. To open the Job Administrator:

1. Choose the **Scheduler** menu and then the **Job Queue** menu option. The **Job Queue** screen appears.

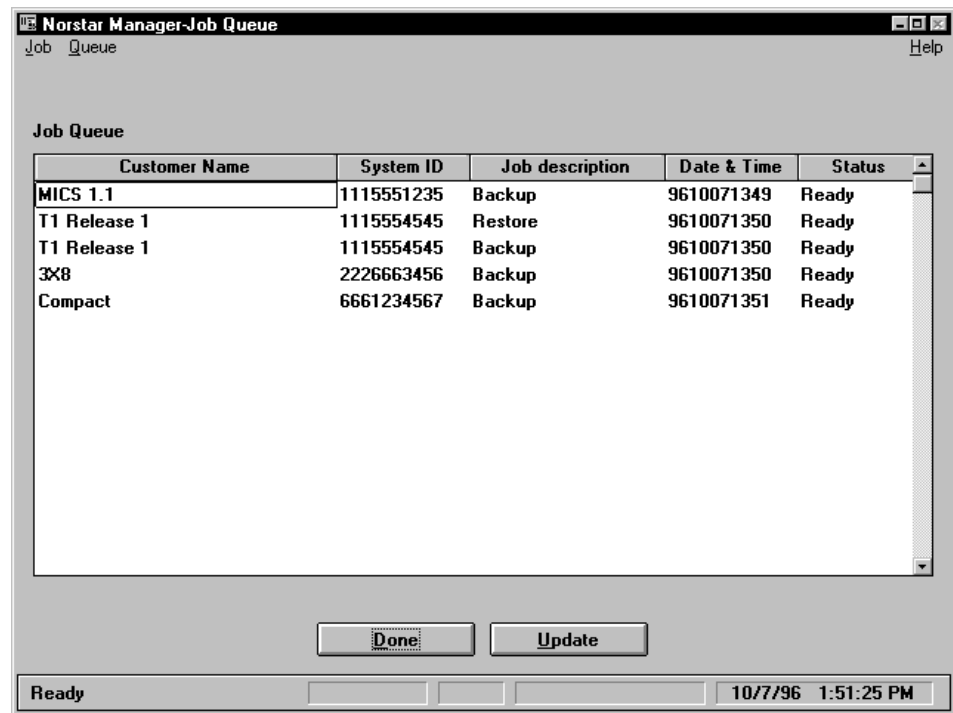


Figure 7.2 – The Job Queue screen

The **Job Queue** screen lists all Norstar systems scheduled for a backup or restore. Each backup or restore in the list is called a job.

Each job on the Job Queue is listed with its Customer name, System ID, whether it is a backup or restore, when the job is scheduled to occur, and its status. The possible status messages are listed below.

- **Ready** – The job has been scheduled and is waiting to be run.
- **Running** – The job is currently being run.
- **Done** – The Job has been completed successfully.
- **Cancelled** – The job was stopped by a Norstar Manager user.
- **Error** – An error occurred while the job was being run. If this status message appears, check the **Job info** dialog box by choosing the **Job** menu and then the **Status** menu item.

Completed jobs are not deleted from the Job Queue. The jobs are left on the screen so you can view the status of the completed jobs.

The maximum number of jobs that can be on the Job Queue is 8500. To prevent the Job Queue from becoming too full, you should delete completed jobs after you have confirmed that they have run successfully. To remove the completed jobs, use the delete procedure described later in this section.

Jobs that are scheduled to repeat automatically are treated like a series of separate jobs. Each time the job is scheduled to repeat, another job is added to the Job Queue. This allows you to check if the previous job has completed successfully and see when this job will be run again.

The **Job Queue** screen allows you to perform several tasks on the jobs shown. You can run a job, start the queue, stop the queue, edit jobs, delete jobs and check on the status of the job.

Running a job

From the **Job Queue** screen you can run any job listed on the queue without running the entire queue. The job can be in any position on the queue, not just the job at the top of the queue. To run a job:

1. Select the job to be run.
2. Choose the **Job** menu and then the **Run** menu item.
The selected job will start immediately.

Note: This option is not available if another job is currently being run.

Starting the Job Queue

Before the jobs listed on the Job Queue will run at their scheduled times, the queue must be started. Once started, the Job Queue will run until you stop it. To start the Job Queue:

1. Choose the **Queue** menu and then the **Run** menu item.

When the Job Queue is running, the display prompt **Job Queue Running** appears in the status bar at the bottom of the screen.

Stopping the Job Queue

To stop the Job Queue, choose the **Queue** menu and then the **Stop** menu item. The Job Queue stops processing the scheduled jobs.

Note: You must stop the Job Queue from running before you can leave the **Job Queue** screen.

Editing a job

The information entered on the **Submit Job** screen can be edited from the **Job Queue** screen. To edit this information, choose the **Job** menu and then the **Edit** menu item. The **Edit Job** screen is displayed and you can edit any of the information about the selected job. The **Edit Job** screen has the same fields as the **Submit Job** screen. For more information about the fields on the **Edit Job** screen, see **Scheduling a backup or restore**, earlier in this section.

Deleting a job

The **Job Queue** screen allows you to remove pending or completed jobs from the Job Queue. To remove a job from the Job Queue:

1. Select the job, or jobs, you want to remove.
2. Choose the **Job** menu and then the **Delete** menu item.
The job, or jobs, are removed from the queue.

Resubmitting a job

After a job has completed or failed to complete due to an error, you can resubmit the job. To resubmit a job:

1. Select the job you want to resubmit.
2. Choose the **Job** menu and then the **Resubmit** menu item.
The job status is changed to Ready and the job will run again.
Note: You can assign the job to run immediately, or assign the job to run later by defining a start time and placing it in the **Job Queue**.

The Resubmit feature is most useful for job that have failed due to an error. Once you have fixed the problem that caused the error, you can use this feature to submit the job again without leaving the **Job Queue** screen.

Checking the status of a job

The **Job info** dialog box shows a more detailed account of the status of a particular job. To show this screen, choose the **Job** menu and then the **Status** menu item. The **Job info** dialog box is shown.



Figure 7.3 – The Job info dialog box

None of the fields on this dialog box can be edited. They are for information purposes only.

If a job has failed for any reason, you can attempt to run it again by choosing the Retry action button.

Job Queue error messages

The error messages that appear on **Job info** dialog box are explained in the **Norstar Manager Error Messages** file. This file uses the application Microsoft Windows™ Write (Windows 3.1) or WordPad (Windows 95). See your Windows documentation for an explanation of how to use this program.

To access this file in Windows 3.1:

1. Move to the Windows Program Manager.
2. Open the **Norstar Manager** program group.
3. Open the **Norstar Manager Error Messages** file.
4. Scan through the list of error messages to find the one you require.
5. When you are finished with the error message file, close the file and return to Norstar Manager.

To access this file in Windows 95:

1. Click **Start**.
2. From the Program menu, select the **Norstar Manager** program group and the **Norstar Manager Error Messages** file.
3. Scan through the list of error messages to find the one you require.
4. When you are finished with the error message file, close the file and return to Norstar Manager.

Copying Norstar systems 8

Introduction

Norstar Manager provides you with powerful utilities that allow information to be duplicated quickly, without error. Norstar Manager provides two methods for duplicating Norstar system information. These methods include:

- copying Norstar system information from an existing system to a new system
- copying Norstar system files to another database on the file server, your PC's hard drive, or a floppy disk

This section explains how to copy Norstar system information and copy Norstar systems between directories.

Copying Norstar system information

When you copy Norstar system information, you are copying all of the system, line, and set programming from an existing Norstar system to a new Norstar system. Copying Norstar system information is useful if you are repeatedly configuring a similar type of system. By copying Norstar system information from an existing Norstar system that is similar, much of the programming for that new system will be done. To complete the new system programming, you simply change the programming parameters that are different between the two systems.

Before you begin, make sure the **Systems Directory** screen appears on your monitor. To copy system information:

1. Make sure the Norstar system you want to copy programming from exists on the Norstar Manager database. If it does not, follow the instructions in **Section 4** to add a new system. Then follow the instructions in **Section 7** to make a backup of the Norstar system.
2. Select the Norstar system you are copying system information from.
3. Choose the **Edit** menu and then the **Copy System Details** menu item. The **Copy System Details** screen appears.

Norstar Manager-Copy System Details

Copy System Details

System ID: <<

Customer Name:

KSU Location:

Address:

Contact:

Phone number:

Install date (yyyy/mm/dd):

RAD phone number:

RAD password:

Remote time difference: hours from local time

Type of system:

Software version:

System language:

Note:

Ready 10/7/96 1:54:50 PM

Figure 8.1 – The Copy System Details screen

4. Type the new customer System ID.
5. Enter the remaining information for the new customer.
Note: Refer to **Section 4** for instructions on using this screen.
6. When you have completed your changes, choose
7. Follow the instruction in **Section 7** to restore the programming to the new Norstar system.
8. Follow the instructions in **Section 5** and **Section 6** to start an on-line session and change the programming parameters that are different on the new system.

Requirements for copying Norstar systems

The programming for a Norstar system can only be copied to a Norstar system with the same system type and software version. For example, a Centrex+ system can be copied to any other Centrex+ system, but not to a Modular DR5 or Compact DR5 system.

Copying Norstar system files

You can copy Norstar system files from one location to another, using the **Copy System(s)** feature. This feature copies system files stored in the Norstar Manager database on your PC's hard drive, or file server, to another location such as the floppy drive on your PC, or another directory.

Note: If you are backing up files for Compact ICS 2.0, Modular ICS 2.0 or other system through Remote Tools, you may have to copy the backed up files manually. See your Windows documentation or online help for information about copying files.

Before you begin, make sure the **Systems Directory** screen appears on your monitor. To copy a Norstar system to another location:

1. Select the Norstar system you want to copy.
2. Choose the **Edit** menu and then the **Copy System(s)** menu item. The **Copy System(s)** dialog box appears.

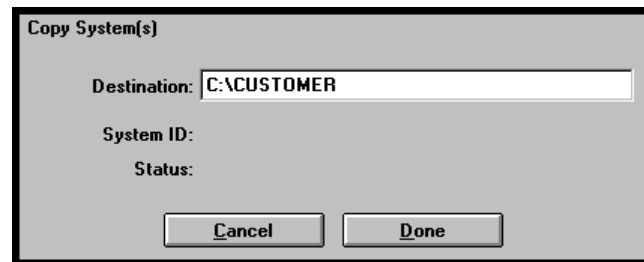



Figure 8.2 – The Copy System(s) dialog box

3. Type the full pathname of the destination directory that you want the system copied to. If you are copying the Norstar system to a floppy disk, change the pathname of the destination directory to include the name of the floppy disk drive (e.g. **A: \backup**).
4. Choose 

Norstar Manager copies the selected Norstar systems to the destination directory. The dialog box shows you the status of the operation.

Important: Some Norstar systems may be too large to be copied on to smaller floppy disks. Use high density floppy disks to copy these systems.


Copying system files to a floppy disk

To copy system files to a floppy disk, copy the file **ksu.db** from the path **<installed dir>\<system id>\current\ksu.db**. For example, copy **c:\wnors3\12345678.90\current\ksu.db** to a floppy disk.

Note: **ksu-db** for a 12 port system is often greater than 1.44 Mb and thus the copy to floppy may fail. If this happens, use a third party archiving tool, such as PKZIP, to compress the **ksu.db** file. Then manually copy the compressed file to a floppy disk(s) using DOS or Windows™ File Manager. The user receiving this archived file must use a decompression tool, such as PKUNZIP, to decompress the file. The archived file can be decompressed into the appropriate destination directory on the target PC.

Deleting a Norstar system from the directory

When you delete a Norstar system from the Norstar Manager directory, all record of programming for this system is removed from the directory. To delete a Norstar system:

1. Select the Norstar system you want to delete.
2. Choose the **Edit** menu and then the **Delete System(s)** menu item.
3. Choose 

The Norstar system is removed from the Norstar Manager directory.

Upgrading to a T1 Release 1 system

The **Upgrade Database** feature of Norstar Manager is provided to aid you in upgrading from an 8X24 to a 0X32 system. It saves hours of programming time by retaining the set programming and most of the system and line programming.

Note: See the **Programming parameters changed** section for a description of which programming parameters are changed.

How to upgrade a system

The **Upgrade Database** feature will only convert Modular DR5 systems to T1 Release 1 systems. This feature is not available for Compact DR5 or 3X8 DR5 systems. Make sure the system to be upgraded has been upissued to DR5 v9.20 or CTX+ v9.21 or greater.

Important: Before restoring information from the Norstar Manager database to the 0X32 modular system you **MUST**:

- use Feature **CONFIG to manually program the trunk types to match the database being restored
- ensure the database hardware list matches the physical configuration of the KSU

To upgrade a system:

1. Perform a backup of the Modular DR5 system that will be upgraded. This ensures that you have the most current programming information.
2. Move to the **Systems Directory** screen.
3. Use the **Copy System(s)** feature, described earlier in this section, to make a copy of the Modular DR5 system.
4. Select the Modular DR5 system you are going to upgrade.
5. Choose the **Edit** menu and then the **Upgrade Database...** menu item.
6. Install the T1 Release 1 system.
7. Access Feature **CONFIG and set the parameters associated with trunk cartridge types to match the trunk modes that will be restored from the Norstar Manager database.

8. Move the amphenol connector from the 8X24 system to the 0X32 system, matching the module numbers. The core amphenol must go to the 24 port connector on the 0X32 system.
Note: If the amphenol connectors are not moved, CAPs cannot be restored.
9. Remove all Call Identification Interface equipment and M7900 sets.
10. Restore the upgraded database to the 0X32 KSU.
Note: See **Section 7** of this guide for more information about performing a backup or restore.
11. Select the new 0X32 system from the **Systems Directory** screen and choose the **File** menu and then the **Start On-line Session** menu item.
12. Move to the **System Programming Overview** screen and ensure the physical mapping of the lines and sets is the same as the KSU being installed.
13. Configure the parameters that are cleared or defaulted as appropriate. See the **Programming parameters changed** section for a description of which parameters are cleared or defaulted.

Upgrading to a MICS-XC system

To upgrade DR5 to a MICS-XC system, a database upgrade must be performed and restored to a T1 system before doing the core software upgrade.
Note: You must add a new customer to backup the newly upissued core software.

Features

- Upgrade Systems provides a mechanism for porting KSU programming from a 8X24 system to a 0X32 T1 Release 1 system.
- The only upgradable systems are Modular DR5 or Centrex+ systems. This feature is disabled for all other systems in the directory.
- This feature can be accessed in the System Directory.

Programming Parameters changed

Using Norstar Manager, you should be able to make the programming changes required to complete the upgrade in approximately 10-15 minutes.

The following parameters are automatically changed by the Upgrade Database feature:

- The off-core modular 8X24 lines are converted to 0X32 off-core analog lines. The programming parameters for each of these lines are not changed.
- All of the on-core 0X32 lines are defaulted to analog lines.
- The Installer and Admin passwords are reset to 0X32 default values.
- New 0X32 fields, lines and sets are given default values.
- The 16 new DNs (8 B1 and 8 B2 channels) are given the first available DN starting with the same prefix digit as the first previously existing DN.
- F72 Timed Release buttons are removed (blank).

- F72 reach through codes (T) are removed from System speed dials, Personal speed dials, Vmsg telephone numbers, and external autodials.
- On an unexpanded 8X24 system 2-digit DNs are converted to 3-digit DNs after an upgrade, using the prefix digit of the first DN as the new prefix digit of all DNs on the 0X32 system.
- Call Identification Interface equipment is removed from the Hardware List.
- M7900 sets are removed from the database.

T1 upgrade

- Modular 8X24 DR5 lines are mapped to 0X32 T1 lines. The trunk cartridge parameters are set to match the trunk modes.
- The F810, Centrex Make Busy, button is removed during DR5 to T1 upgrades.

Centrex upgrade

- The Centrex Transfer/Conference and Complete Conference Feature Access Codes are removed during upgrades.
- New DNs do not have any lines assigned.
- All Trunk/Line programming is preserved.
- The F810, Centrex Make Busy, button is **not** removed during DR5 to Centrex upgrades.

Norstar Manager reports 9

Introduction

A Norstar Manager report is a list of the programming for a Norstar system. A report may also provide wireless and maintenance information. Reports can be printed out on a printer or stored in an ASCII file. You can open the ASCII file with a standard text editor and print or edit the data.

Norstar Manager creates reports containing three kinds of programming information: system programming, set programming and line programming. You can specify that these reports list all of the information stored in the Norstar system or only part of it. You can also specify that reports only list information about certain lines or sets.

Two types of maintenance report are available: the System Test Log and the System Admin Log. More information about these logs is provided in **Section 10**.

Printing system, set or line programming reports

Before you begin, start an on-line session and make sure the **System Programming Overview** screen appears on your monitor. To print a report:

1. Select the lines or sets the report will be created from. This step is not necessary for printing a report on system programming.

Note: The maximum number of lines or sets you can select is 50.

2. Choose the **Reports** menu and then the **Generate Reports** menu item.

3. Choose the **Generate Reports** menu item. The **Generate Reports** screen appears.

Note: On CDA-MICS-XC 1.0, USA-MICS-XC 1.0, NA-MICS-DR 1.1, CDA-MICS-XC 1.1 and USA-MICS-XC 1.1 systems, choose the **Generate Reports** menu item and then the **Standard Reports** menu item. The **Standard Reports** screen appears. This screen has the same fields as the **Generate Reports** screen.



Figure 9.1 – The Generate Reports screen

4. Choose the check boxes of the programming information you want included on the report.

If you choose the **System Reports** check box, all of the system reports are printed. Similarly, if you choose the **Line Reports** check box all of the line reports are printed and if you choose the **Set Reports** check box all of the set reports are printed.

If you do not want to print all of the reports, do not select the **System Reports**, **Line Reports**, or **Set Reports** check boxes. Only choose the check boxes of the individual reports you want to print.

5. Choose the **Use all lines** check box if you want the report to contain programming information for all of the lines. Choose the **Use currently selected lines** check box if you want the report to contain programming information for the lines you selected on the **System Programming Overview** screen.

Note: If you choose **Use currently selected lines**, the line reports available will vary depending on the lines you selected. If you select trunk lines, the Target Lines report is unavailable and will not print. If you select target lines, the Trunk Data and Line Abilities reports are unavailable and will not print.

6. Choose the **Use all sets** check box if you want the report to contain programming information for all of the sets. Choose the **Use currently selected sets** check box if you want the report to contain programming information for the sets you selected on the **System Programming Overview** screen. Only sets that are currently on the **Hardware List** screen are printed.

Note: Since you cannot select both lines and sets on the **System Programming Overview** screen, a single report cannot contain both selected sets and selected lines. However, a single report can contain both line and set information if you choose either **Use all lines** or **Use all sets**.

7. Choose the **Printer** check box and/or the **File** check box.
8. Choose to print the report to the printer or file.
Note: If you chose the **Printer** check box in step 7, the report will start to print.
9. If you chose the **File** check box in step 7, the file selection dialog box will appear.

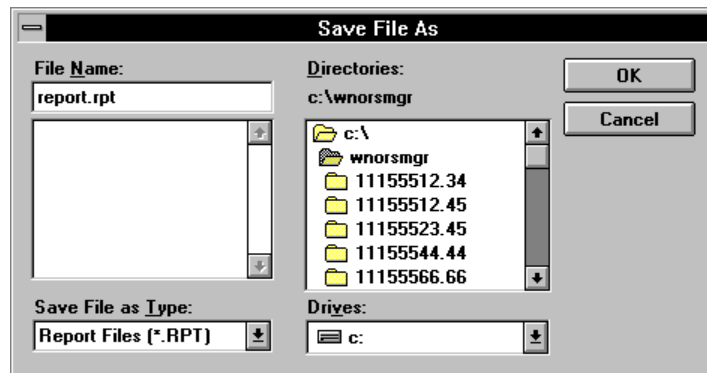


Figure 9.2 – File selection dialog box

10. Enter the name of the file and select the directory where you want the file stored.
11. Choose .

To exit from the **Generate Reports** screen and return to the **System Programming Overview** screen, choose .

Printing wireless or maintenance reports

This report is only available for CDA-MICS-XC 1.0, USA-MICS-XC 1.0, NA-MICS-DR 1.1, CDA-MICS-XC 1.1 and USA-MICS-XC 1.1 systems. Before you begin, start an on-line session and make sure the **System Programming Overview** screen appears on your monitor. To print a report:

1. Choose the **Reports** menu and then the **Generate Reports** menu item.
2. Choose the **Wireless and Maintenance Reports** menu item. The **Wireless and Maintenance Reports** screen appears.



Figure 9.3 – The Wireless and Maintenance Reports screen

3. Choose the check boxes of the programming information you want included on the report.
If you choose the **Wireless Reports** check box, all of the wireless reports are printed. Similarly, if you choose the **Maintenance Reports** check box all of the maintenance reports are printed.
If you do not want to print all of the reports, do not select the **Wireless Reports** or **Maintenance Reports** check boxes. Only choose the check boxes of the individual reports you want to print.
4. Choose the **Printer** check box or the **File** check box.
5. Choose to print the report to the printer or file.
Note: If you chose the **Printer** check box in step 4, the report will start to print.
6. If you chose the **File** check box in step 4, the file selection dialog box will appear.

Note: The Software Codes report is unavailable for CDA-MICS-XC 1.0 and CDA-MICS-XC 1.1 systems. All Wireless Reports are unavailable for NA-MICS-DR 1.1 systems.

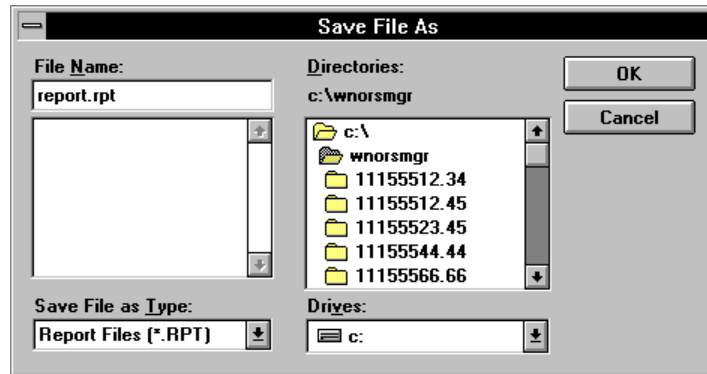




Figure 9.4 – File selection dialog box

7. Enter the name of the file and select the directory where you want the file stored.
8. Choose 

To exit from the **Wireless and Maintenance Reports** screen and return to the **System Programming Overview** screen, choose 

Printers Reports and key cap labels can be printed to any printer supported by Microsoft® Windows™. However, there are a few restrictions on using printers:

- When you are using a dot matrix printer with the generic printer driver, the printer must be set to use compressed mode.
- The generic printer driver will not work with a laser printer.
- When you are printing a report using a laser printer, you can use a landscape or portrait orientation. If you use a landscape orientation, the font size used will be larger and less information will fit on a page.

Although a dot matrix printer can be used to print key cap labels, we recommend using a laser or inkjet printer due to the improved print quality.

Printing key cap labels

Key cap labels are printed using the information stored in the Norstar KSU. The labels show the name of the feature, line or internal autodialer. They also show the number dialed for an external autodialer. The maximum length of the labels is ten characters. Due to this size restriction, feature names are abbreviated and external autodialer numbers are truncated where necessary. If the set is programmed to use the alternate language, the key cap labels are printed in the alternate language.

Key cap labels are printed on a printer or saved in a ASCII file. The ASCII file can be modified using a standard text editor and printed later.

Note: Although you can use any paper to print key cap labels, we recommend that you use the **Norstar Manager Key Cap Templates**. These templates are designed to match the way the Key Cap Printing Utility prints the labels. They are also perforated for easy removal of the labels after printing. A laser printer or ink-jet printer is required to print using the **Norstar Manager Key Cap Templates**.

Before you begin, make sure your monitor shows the **System Programming Overview** screen. To print key cap labels:

1. Select the sets you want to print key cap labels for. The maximum number of sets you may select to print at one time is 50. Key labels are not printed for sets that are not currently connected to the KSU.

Note: If a CAP module is assigned to any of the sets specified, the key cap labels for the CAP are also printed. Also, if the CAP module has more than 30 line appearances assigned to it, the key labels will be printed on both halves of the Key Cap Template.

2. Choose the **Reports** menu and the **Print Key Caps...** menu item. The **Print Key Caps** dialog box appears.

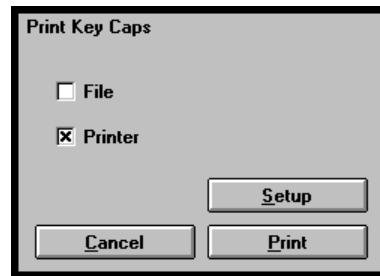


Figure 9.5 – The Print Key Caps dialog box

3. Choose the **Printer** check box to print the key cap labels to a printer or choose the **File** check box to print the key cap labels to a file. You can print key cap labels to both a file and the printer by selecting both check boxes.
4. Choose **Print** to print the report to the printer or file.
Note: If you chose the **Printer** check box in step 3, the report will start to print.
5. If you chose the **File** check box in step 3, the Key cap file selection dialog box will appear

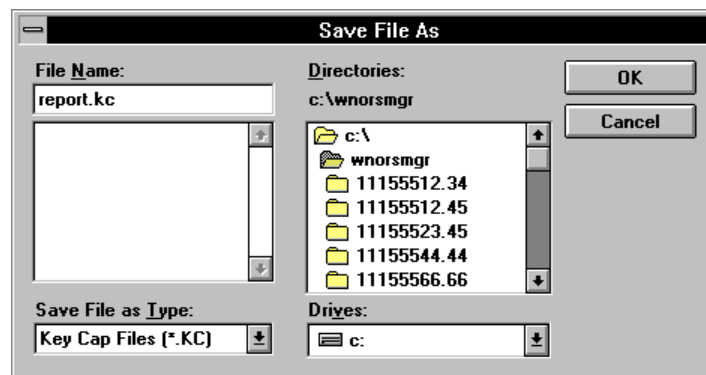


Figure 9.6 – Key cap file selection dialog box

6. Enter the name of the file and select the directory where you want the file stored.
7. Choose
8. When applying the key labels to the sets, use the button inquiry feature (*) to determine where each key label should be placed.

Important: Only use printers that fully support Windows™ 3.1 and the standard Windows™ fonts to print key cap labels.

Adjusting the key cap label printing

Different makes of laser printers will vary slightly in how they position text on a page. If your printer does not align the text on the key cap labels properly, you will have to change the key label setup.

To change the key label setup:

1. Move to the **Print Key Caps** dialog box.
2. Choose
The **Setup Key Caps** dialog box appears.

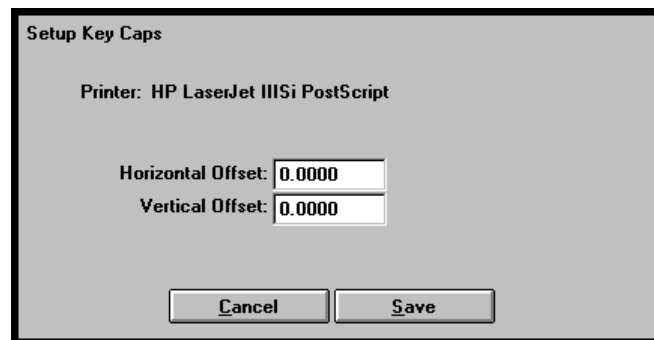


Figure 9.7 – Setup Key Caps dialog box

3. Select the **Horizontal Offset** text box and enter an offset in inches.
The horizontal offset is the number of inches the key cap text will be shifted to the right along the width of the key cap template. To shift the text to the left, enter a negative number into this field. The maximum horizontal offset is eight inches.
4. Select the **Vertical Offset** text box and enter an offset in inches.
The vertical offset is the number of inches the key cap text will be shifted down on the key cap template. To shift the text up on the key cap template, enter a negative number into this field. The maximum vertical offset is eight inches.
5. Choose
The offsets you have entered will be saved in a file on the Norstar Manager default directory.
Note: If you change your default directory, you must copy the key cap setup files to the new default directory or re-create them. Key cap setup files are the files in the default directory that end with the extension .KCP.

The key caps setup files are specific for each type of printer. If you are using more than one printer, you may have to enter offsets for each printer. If you need to make more than one setup file, Norstar Manager will keep track of which setup file belongs to which printer.

Show Inventory screen

The **Show Inventory** screen shows the devices that are currently connected to the KSU. For a Modular KSU, the **Show Inventory** screen shows which modules are connected. It also shows how many lines or sets are connected to each module. On Compact DR5 and 3X8 DR5 KSUs, this screen only shows how many lines and sets are connected.

From this screen you can also access a summary of the lines and sets that are connected to the KSU.

To view the **Show Inventory** screen:

1. Choose the **Reports** menu and then the **Show Inventory** menu item. The **Show Inventory** screen appears.

Module		Trunk Cartridge			Installed		Vacant	
Number	Type	1	2	3	Line	Set	Line	Set
1	Core				0	2	0	30
2	Core	X	X		8	0	40	0
3	Unused				0	0	0	0
4	Unused				0	0	0	0
5	Unused				0	0	0	0
6	Unused				0	0	0	0
7	Unused				0	0	0	0
8	Unused				0	0	0	0

Total lines: 48 Totals 8 2 40 30

System: Modular
Customer Name: MICS 1.1
System ID: 1115551235

View Line details View Set details Done

Ready 10/7/96 1:59:30 PM

Figure 9.8 – The Show Inventory screen

To get detailed information about the lines or sets on this system, choose either

View Line details or **View Set details**

Maintaining a Norstar KSU 10

Introduction

Maintaining a Norstar KSU site involves responding to problems when they occur and using Norstar Manager to find a solution. Norstar problems are reported in two ways:

- a customer telephones the Norstar Manager operator with a problem
- the RAD reports an alarm to a dedicated reporting device

If the problem cannot be solved from the Norstar Manager PC, a technician can be sent to do the repairs on site.

This section explains how to perform maintenance on a Norstar installation. Solving specific Norstar system problems using Norstar Manager is covered in **Section 11**.

Maintenance

Once a problem is reported, it can be investigated using the maintenance functions in Norstar Manager. In a maintenance session, you can:

- check the System version
- query the port status
- run a connectivity test
- check the provision status
- run a loopback test
- check the System Test log
- check the System Admin log
- check the Network log
- change the clock sources
- check the CSU statistics
- check the module status

Before you can perform any of these maintenance functions, you must establish an on-line connection with the Norstar KSU. Refer to **Section 5** of this guide for instructions on connecting to a Norstar KSU.

Note: On Compact DR5 and 3X8 DR5 systems, the only maintenance functions available are checking the System version and the port status.

Determining the System Version number

The System Version feature allows you to view the version number of the software in your Norstar system.

Before you begin, make sure your PC has an on-line connection with the Norstar KSU. To view the System version number:

1. Choose the **Maintenance** menu and then the **System Version...** menu item.

The **System Version** dialog box appears.



Figure 10.1 – The System Version dialog box

For more information about the System version, see the **Norstar Installer Guide**.

Note: The version number can also be seen on the **System Test Log** screen and the **System Admin Log** screen.

Querying the Port status

You query the port status when you want to evaluate the status of individual sets or lines on the Norstar system. Checking the port status allows you to:

- check the status of any set or line
- disable or enable sets and lines

Note: Disabling or enabling lines can interrupt service at the Norstar KSU site.

Note: Enabling a disabled port is the same as enabling all the ports on the module.

Before you begin, make sure your PC has an on-line connection with the Norstar KSU. To check the port status:

1. Choose the **Maintenance** menu and then the **Port Status** menu item. The **Port Status** screen appears.

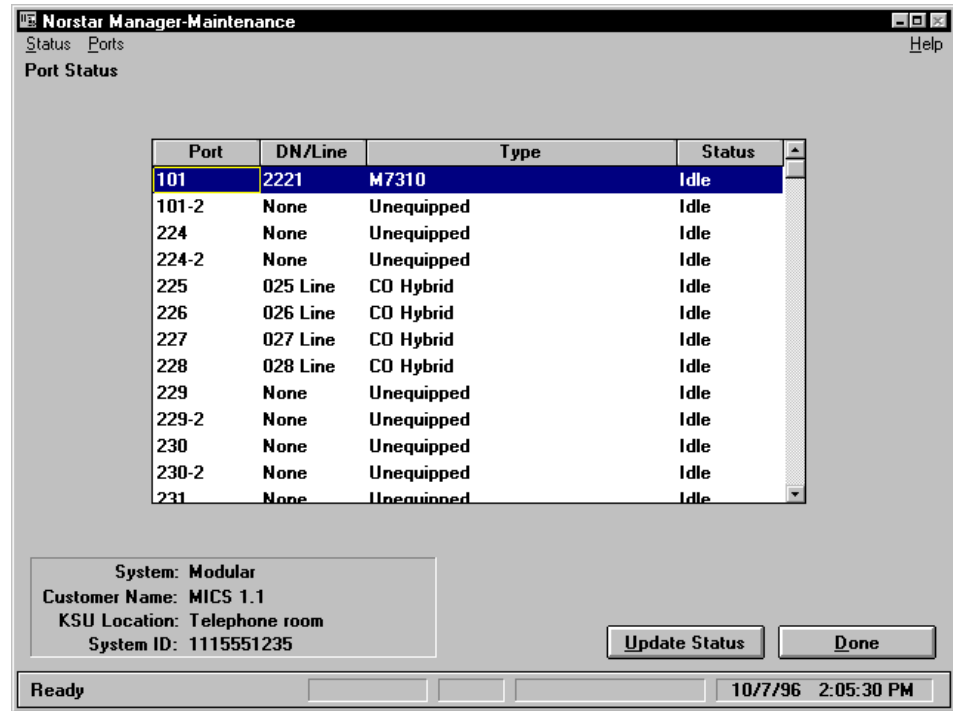


Figure 10.2 – The Port Status screen

2. Choose the **Ports** menu and then the **Select Ports to View** menu item. The **Specify Ports** dialog box appears.
3. Select the port you want the status for by selecting the ports from the list of ports or by entering a range of ports in the **From** and **To** fields.
4. Choose **Done**. The status of the selected ports appears on the **Port Status** screen.

When you no longer want to view the status of certain ports, you can remove them from the **Port Status** screen. To remove ports:

1. Select the port or ports you want to remove.
2. Choose the **Ports** menu and then the **Remove Ports** menu item. The selected ports are removed from the screen.

You can view a summary of the ports shown on the **Port Status** screen. To view a summary:

1. Choose the **Ports** menu and then the **Port Summary** menu item. The **Show Inventory** screen appears.

The **Show Inventory** screen that appears only shows a summary of the ports selected on the **Port Status** screen. For more information about the **Show Inventory** screen, see **Section 8** of this guide.

You can change the status of the ports using the **Status** menu. To change the status of a port:


1. Select the ports.
2. Choose the **Status** menu and then the **Enable** or **Disable Now** menu item.

Important: Always check to ensure that the port you are going to disable is idle. When you choose **Disable Now**, the selected port is disabled immediately and any call on that port is lost.

Caution: Do not disable the port the RAD is connected to. If you disable the RAD port, the Norstar Manager session is immediately terminated and Norstar Manager will not be able to access the KSU until the port is enabled by someone at the KSU site.

Note: Do not disable digital lines. Digital lines should be de-provisioned. For more information about de-provisioning lines, refer to **Checking the provision status** later in this section.

3. Choose 

To exit from this screen and return to the **System Programming Overview** screen, choose 

Hardware Info dialog box

The **Hardware Info** dialog box provides additional information about the lines and sets that are connected to the Norstar KSU. For all devices connected to the KSU, the **Hardware Info** dialog box shows the port number, DN, name, type, version number, add-on device (e.g. CAP and BLF), and add-on version number.

Before you open the **Hardware Info** dialog box, you must select one or more ports on the **Port Status** or **System Programming Overview** screen. The **Hardware Info** dialog box will then show details about the lines and sets connected to the selected modules.

To view the **Hardware Info** dialog box:

1. Choose the port or ports you want to view additional information about from the **Port Status** or **System Programming Overview** screen.
2. Choose the **Ports** menu and then the **Hardware Info** menu item. The **Hardware Info** dialog box appears.

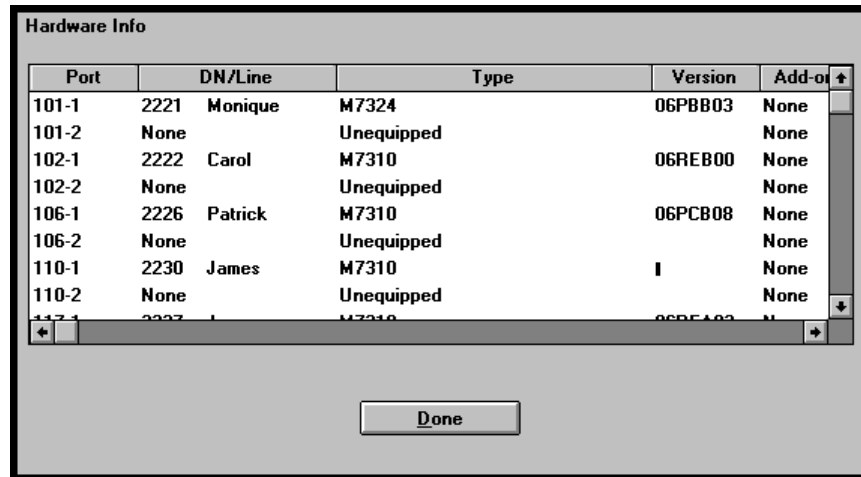


Figure 10.3 – Hardware Info dialog box

Note: There may be a delay before the **Hardware Info** dialog box appears. The length of the delay becomes longer if you select more ports.

Running a connectivity test

A connectivity test is usually performed when you suspect a voice connection is faulty. This test determines if the fault exists in the KSU, expansion modules, or Time Compression Multiplexing (TCM) line.

Note: The connectivity test is only available for Modular DR5 and Centrex+ systems.

Important: The connectivity test interrupts service on the line or device it is testing. Users should be warned before a connectivity test is performed.

Before you run a connectivity test, make sure your PC has an on-line connection with the Norstar KSU and the **Port Status** screen appears on your monitor. To run a connectivity test:

1. Select the lines and/or sets you want to test.
The maximum you can test is 16 lines or sets.
2. Choose the **Connectivity Test...** menu.
A warning dialog box appears.

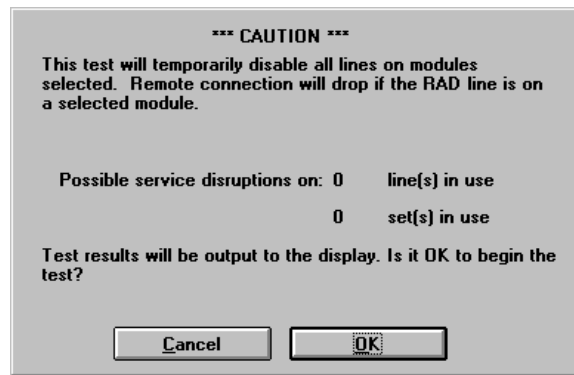



Figure 10.4 – The Connectivity Test caution dialog box

3. To continue with the connectivity test, choose 

After a few minutes (depending on the number of ports you have selected for the test) the connectivity test results appear on your monitor.

Note: Do not disconnect any of the sets while they are being tested. If you do, the connectivity test will not run.

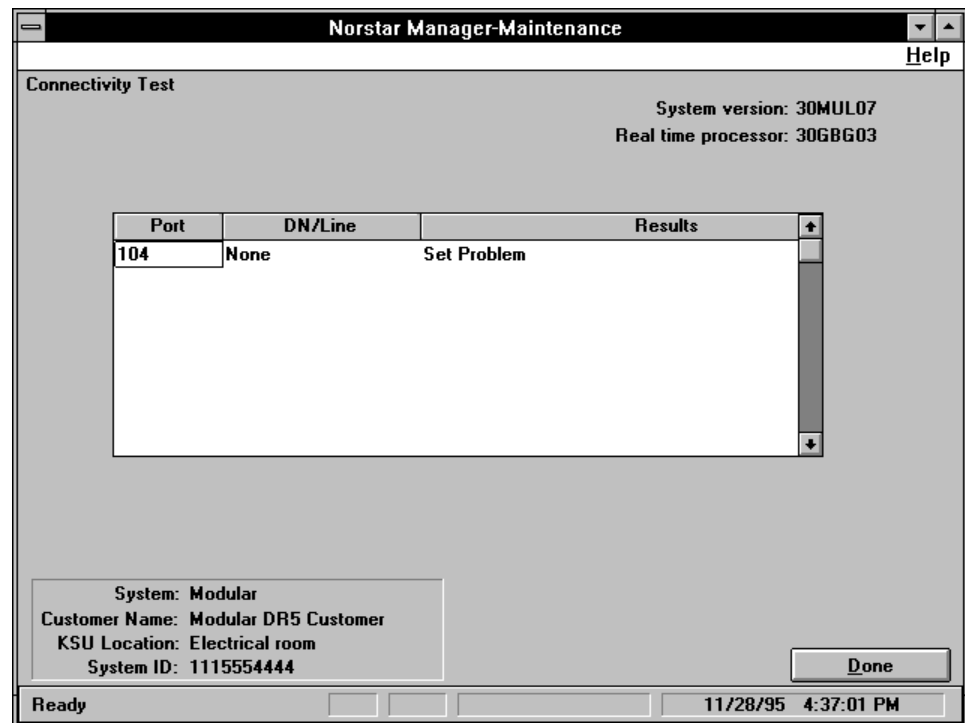


Figure 10.5 – The Connectivity Test screen

The **Connectivity Test** screen lists a result message for every port you tested. Table 10.5 lists all of the possible messages and what each message means.

The results for a Connectivity test can only be shown once. After you leave the **Connectivity Test** screen, you cannot access these test results again. You can, however, access the results again from the System log.

Important: Do not run a Connectivity test on the port the RAD is connected to. If you do, the KSU will drop the call to the RAD. Norstar Manager will still appear to have an on-line session, however you will not be able to perform any programming or maintenance functions.

Important: When you are using a Remote or Operator assisted connection, run Connectivity tests on the expansion modules only. Do not test any port on the core KSU. A Connectivity test on a port on the core KSU can only be run using a Direct connection.

Message	Meaning
InvPort	You have entered a port number that does not have a device or line connected.
Set Problem	Passed – The KSU station port is receiving signals properly. If the device has no voice connection, the problem is with the device.
Trunk Problem	Passed – The KSU trunk port is receiving signals properly. If the trunk has no voice connection, the problem is likely the external line, the 25-pair cable, or the cross-connect.
Trunk Cartridge Problem	Passed – The Trunk Cartridge (TC) is receiving signals properly. If the trunk has no voice connection, the problem is likely with the TC, the external line, the 25-pair cable, or the cross-connect.
TCM KSU Fault	Failed – There is no signaling to this KSU-based device, but other devices on the KSU work. The problem is likely with the TCM line, the device, the 25-pair cable to the KSU, or the cross-connect.
TCM EC Fault	Failed – There is no signaling to this Station Module (SM) based device, but other devices on this SM work. The problem is likely in the TCM line, the 25-pair cable to the SM, the cross-connect, or the SM.
DS KSU Fault	Failed – There is no signaling to any KSU-based device. The problem is likely with the 25-pair cable to the KSU or with the cross-connect.
DS EC Fault	Failed – There is no signaling to any device on this Norstar bus. The problem is likely with the 25-pair cable to the module, the module, the DS-30 cable, or the Expansion Cartridge (EC).
KSU A08 Fault	Failed – A fault was detected in the KSU. Replace the KSU.
EC A08 Fault	Failed – A fault was detected in the Expansion Cartridge. Replace the Expansion Cartridge.

Table 10.1 – Connectivity test result messages

Checking the provision status

The **Provision Status** screen shows all of the digital lines connected to a KSU and indicates which lines are provisioned. You can also use this screen to provision another line or remove a line from service.

Note: This screen is only available on T1 Release 1, CDA-MICS-XC 1.0, USA-MICS-XC 1.0, NA-MICS-DR 1.1, CDA-MICS-XC 1.1 and USA-MICS-XC 1.1 systems.

Before you check the provision status, make sure your PC has an on-line connection with the Norstar KSU. To view the provision status of the digital lines:

1. Choose the **Maintenance** menu and then the **Provision Status** menu item. The **Provision Status** screen appears.

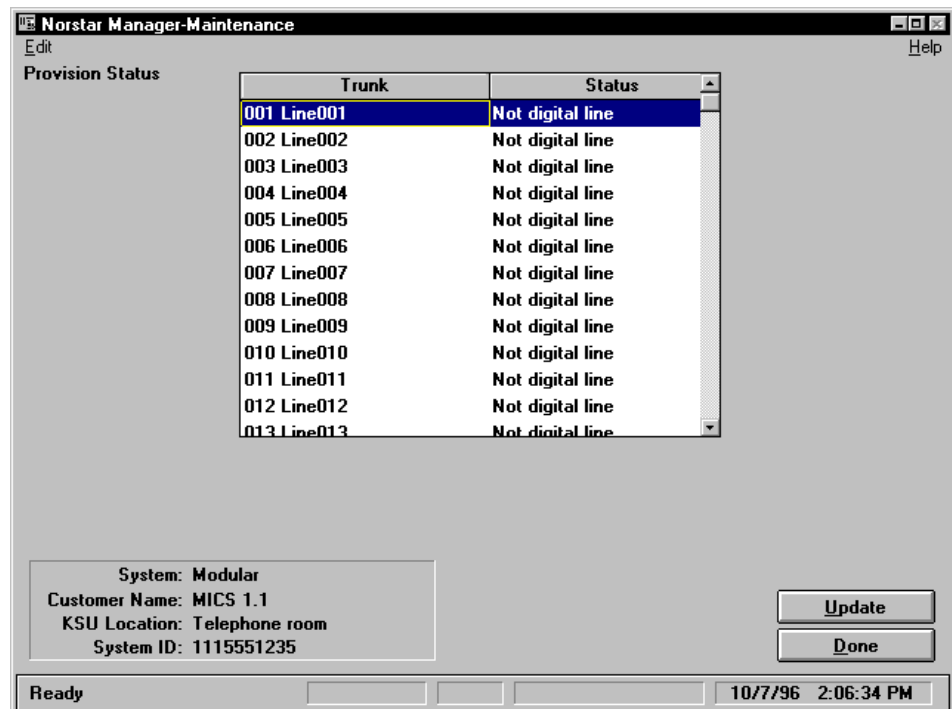


Figure 10.6 – The Provision Status screen

To provision a digital line:

1. Select the line you want to provision.
2. Choose the **Edit** menu and then the **Provision line** menu item.

To remove a digital line from service:

1. Select the line you want to remove from service.
2. Choose the **Edit** menu and then the **Deprovision line** menu item.

Choose **Done** to exit from this screen and return to the **System Programming Overview** screen.

Running a loopback test

Loopback tests are performed on digital lines when you suspect a faulty connection. To run the loopback tests:

1. Choose the **Maintenance** menu and then the **Loopback Tests** menu item. The **Loopback Tests** screen appears.

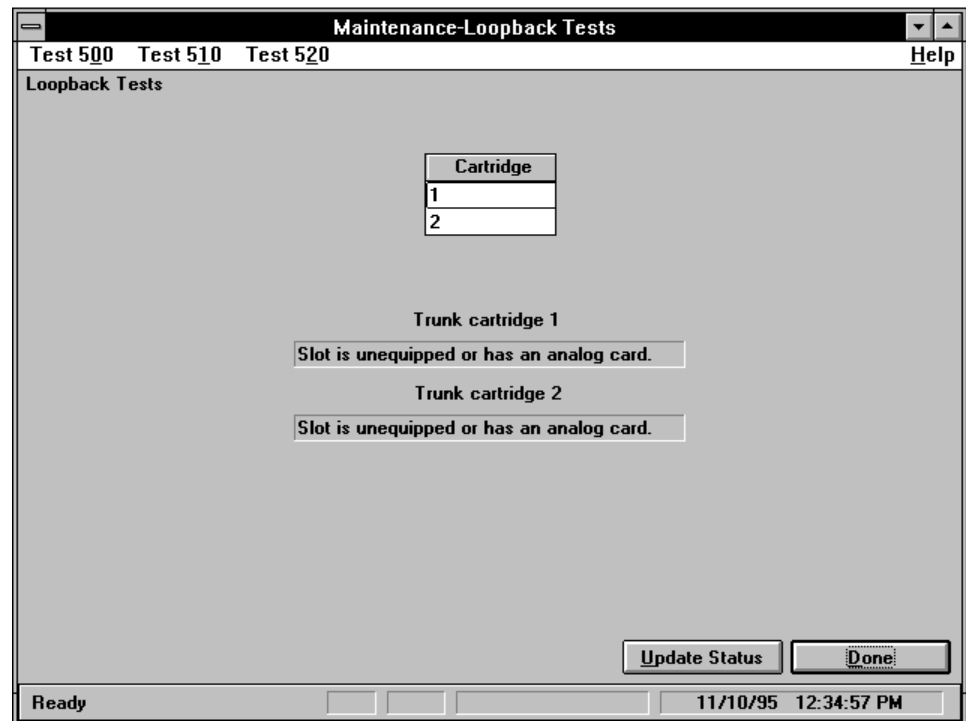


Figure 10.7 – The Loopback Tests screen

2. Select a cartridge from the list box.
3. Choose the **Test 500** menu and then the **Start** or **Stop** menu items.
4. Choose to update the cartridge status display.
5. Choose to return to the **System Programming Overview** screen.

Note: Repeat steps 1 to 5 for the **Test 510** and **Test 520** menus. You must complete each test before beginning the next test.

Choose to exit from this screen and return to the **System Programming Overview** screen.

Checking the System Test Log

The **System Test Log** provides you with a list of diagnostic test results, event messages and alarm codes. You use the **System Test Log** when you want to identify the cause of a problem.

Before you check the **System Test Log**, make sure your PC has an on-line connection with the customer's KSU. To view the **System Test Log**:

1. Choose the **Maintenance** menu and then the **System Test Log** menu item. The **System Test Log** screen appears

Norstar Manager - Maintenance

System Test Log Software version: 30JpL11

Current alarm

Description:

Parameters:

Time:

Description	Parameters	S	Rep	Date & Time
System startup	207	1	1	19940101 01:23
Power up	299	1	1	19940101 01:23
Event Entry	680 1	9	1	19940101 01:25
UTAM codes required	202	8	1	19940101 01:25

S = Severity Rep = Number of repetitions

System:
Customer name:
System location:
System ID:

Ready 10/9/96 1:16:25 PM

Figure 10.8 – The System Test Log screen

The **System Test Log** contains three types of entries: tests, alarms, and events. Each of these entries is shown with a description, a type, a code, a severity rating, the number of repetitions, and the time it occurred.

The severity rating associated with each alarm or event is used to signify how critical the alarm or event is. The severity ratings range from 1 to 9, with 9 being the most critical. Events or alarms with a high severity rating have more impact on the Norstar system and thus should be dealt with first. For a full description of alarms, events and severity ratings, see the appropriate **Norstar Installer Guide**. See also the **Norstar Companion Alarm and Event Code Manual**.

After you have acted on the alarm and event messages, you should erase these messages from the System log.

To erase the Current alarm, choose

To erase the System log, choose

When you have finished viewing the System log, choose to return to the **System Programming Overview** screen.

Checking the System Admin Log

Administration events, such as system initialization or invalid password attempts, are recorded in the Administration log. This log is useful if you want to check when a specific event occurred, or check on a Norstar system's activity.

The log holds a maximum of 10 items. When the log is full, new event messages replace the logged event messages in a chronological order. The oldest event message in the log is replaced by the new event message.

Before you check the **System Admin Log**, make sure your PC has an on-line connection with the Norstar system. To view the **System Admin Log**:

1. Choose the **Maintenance** menu and the **System Admin Log** menu item. The **System Admin Log** screen appears.

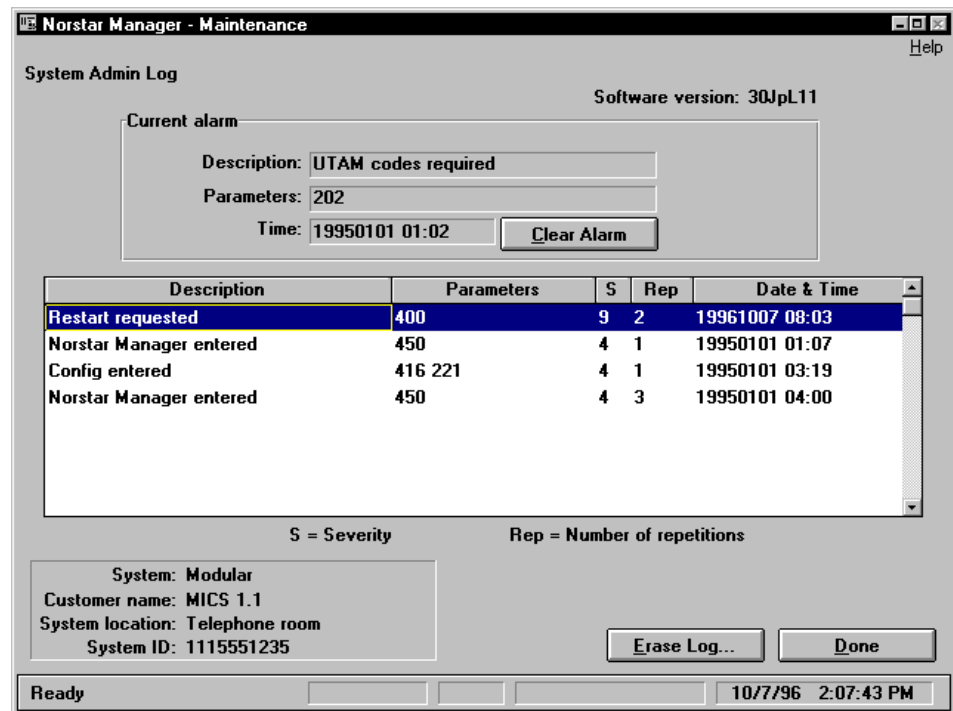



Figure 10.9 – The System Admin Log screen


The **System Admin Log** contains two types of entries: Alarms and Events. Each of these entries is shown with a description, a type, a code, a severity rating, the number of repetitions, and the time it occurred.

The severity rating associated with each alarm or event is used to signify how critical the alarm or event is. The severity ratings range from 1 to 9, with 9 being the most critical. Events or alarms with a high severity rating have more impact on the Norstar system and thus should be dealt with first. For a full description of alarms, events and severity ratings, see the appropriate **Norstar Installer Guide**. See also the **Norstar Companion Alarm and Event Code Manual**.

After you have viewed the log and dealt with any alarms or events in the log, you should erase it.

To erase the Current alarm, choose 

To erase the Administration log, choose  All of the entries on the Administration log are erased.

To exit from this screen and return to the **System Programming Overview** screen, choose 

Viewing the Network Log

The **Network Log** screen allows you to view the events and alarms that have occurred on the digital lines:

Note: This screen is only available on T1 Release 1, CDA-MICS-XC 1.0, USA-MICS-XC 1.0, NA-MICS-DR 1.1, CDA-MICS-XC 1.1 and USA-MICS-XC 1.1 systems.

Before you begin, make sure your PC has an on-line connection with the Norstar KSU. To view the Network log:

1. Choose the **Maintenance** menu and then the **Network Log** menu item. The **Network Log** screen appears.

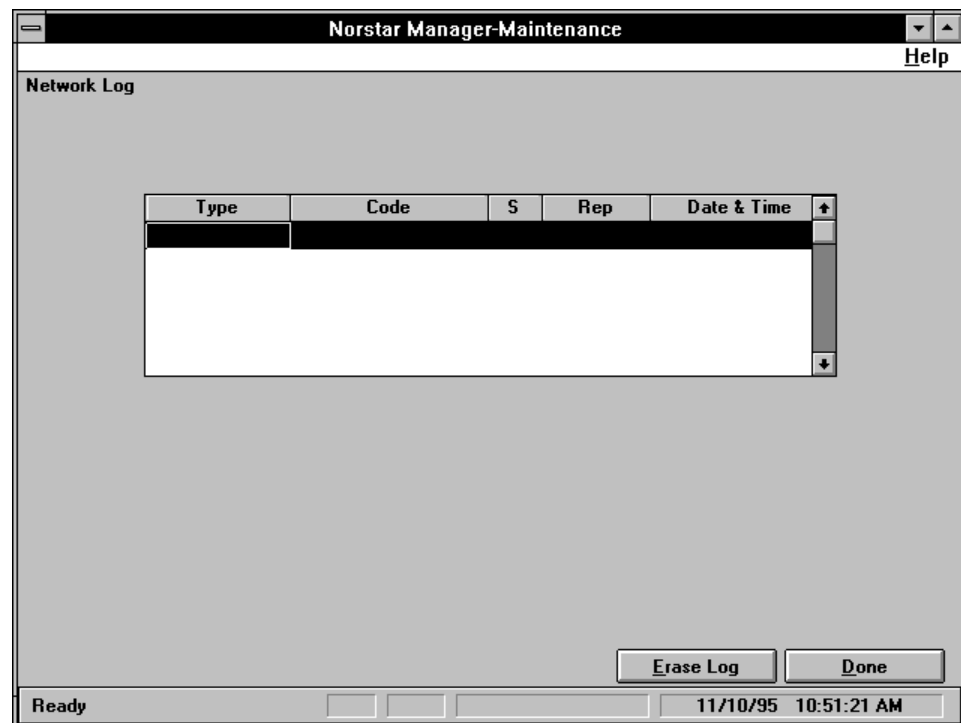



Figure 10.10 – The Network Log screen

After you have viewed the log and dealt with any alarms or events in the log, you should erase it.

To erase the Network Log, choose  All of the entries on the Network Log are erased.

Choose to exit from this screen and return to the **System Programming Overview** screen.

Viewing the clock sources

The **Clock Sources** screen allows you to view the clock source used by the digital lines.

Note: This screen is only available on T1 Release 1, CDA-MICS-XC 1.0, USA-MICS-XC 1.0, NA-MICS-DR 1.1, CDA-MICS-XC 1.1 and USA-MICS-XC 1.1 systems.

Before you begin, make sure your PC has an on-line connection with the Norstar KSU. To view the clock sources:

1. Choose the **Maintenance** menu and then the **Clock Sources** menu item. The **Clock Sources** screen appears.

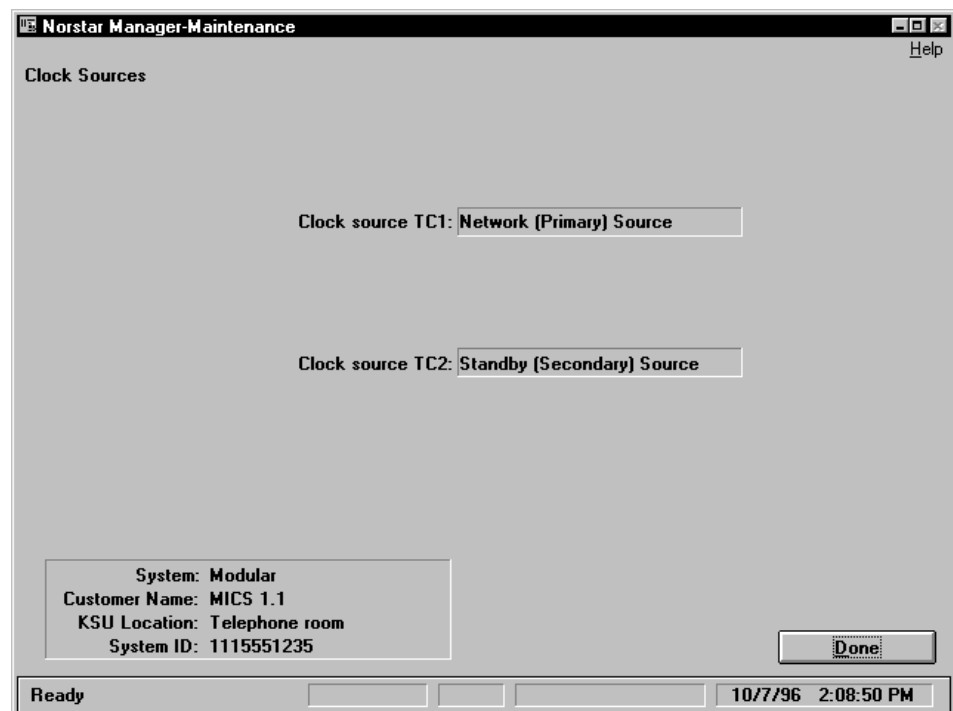


Figure 10.11 – The Clock Sources screen

The **Clock source TC1** field and the **Clock source TC2** field show the clock source used by the digital lines.

Choose to exit from this screen and return to the **System Programming Overview** screen.

Viewing the CSU statistics

The CSU statistics feature allows you to view statistics for the CSU.

Note: This screen is only available on T1 Release 1, CDA-MICS-XC 1.0, USA-MICS-XC 1.0, NA-MICS-DR 1.1, CDA-MICS-XC 1.1 and USA-MICS-XC 1.1 systems.

Before you begin, make sure your PC has an on-line connection with the Norstar KSU. To view the CSU statistics:

1. Choose the **Maintenance** menu and then the **CSU Statistics** menu item. The **CSU Statistics** screen appears.

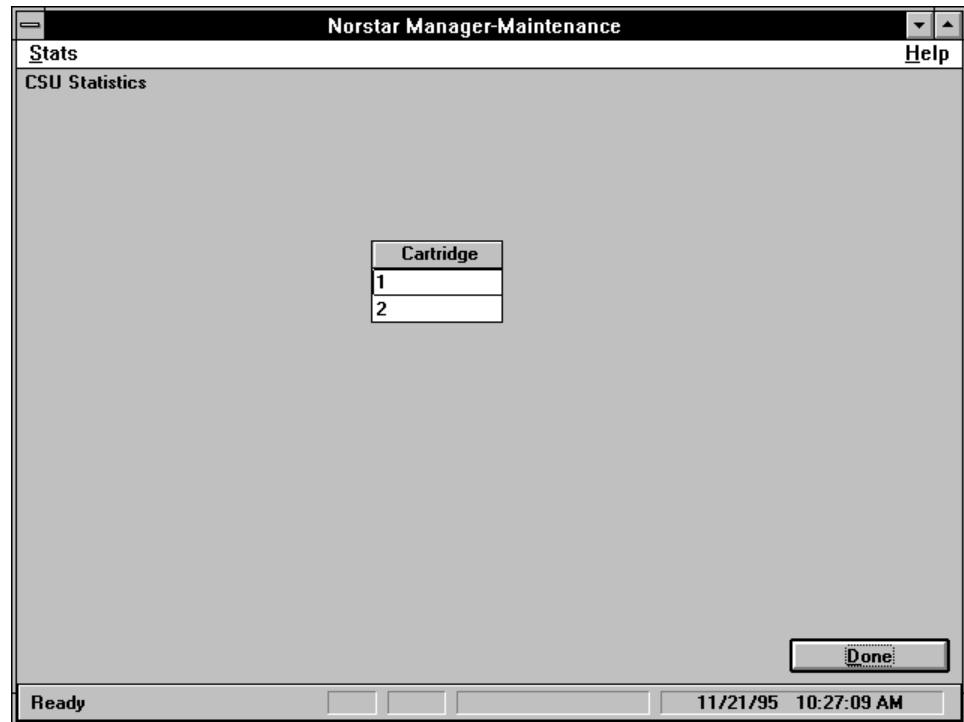




Figure 10.12 – The CSU Statistics screen

To view the performance statistics:

1. Select the cartridge you want to view.
2. Choose the **Stats** menu and then the **Performance Statistics** menu item. The **Performance Statistics** screen appears.
3. After viewing the statistics, choose  to return to the **CSU Statistics** screen.

To view the alarm statistics:

1. Select the cartridge you want to view.
2. Choose the **Stats** menu and then the **Alarm Statistics** menu item. The **Alarm Statistics** screen appears.
3. After viewing the statistics, choose  to return to the **CSU Statistics** screen.

To clear the statistics on either the Alarm Statistics or CSU Statistics screen, choose **Erase Stats**

Choose **Done** to exit from this screen and return to the **System Programming Overview** screen.

Checking the module status

The Module Status feature allows you to view the status of each module. You can also use this screen to enable or disable modules

Note: This screen is only available on T1 Release 1, CDA-MICS-XC 1.0, USA-MICS-XC 1.0, NA-MICS-DR 1.1, CDA-MICS-XC 1.1 and USA-MICS-XC 1.1 systems.

Before you begin, make sure your PC has an on-line connection with the Norstar KSU. To view the module status:

1. Choose the **Maintenance** menu and then the **Module Status** menu item. The **Module Status** screen appears.

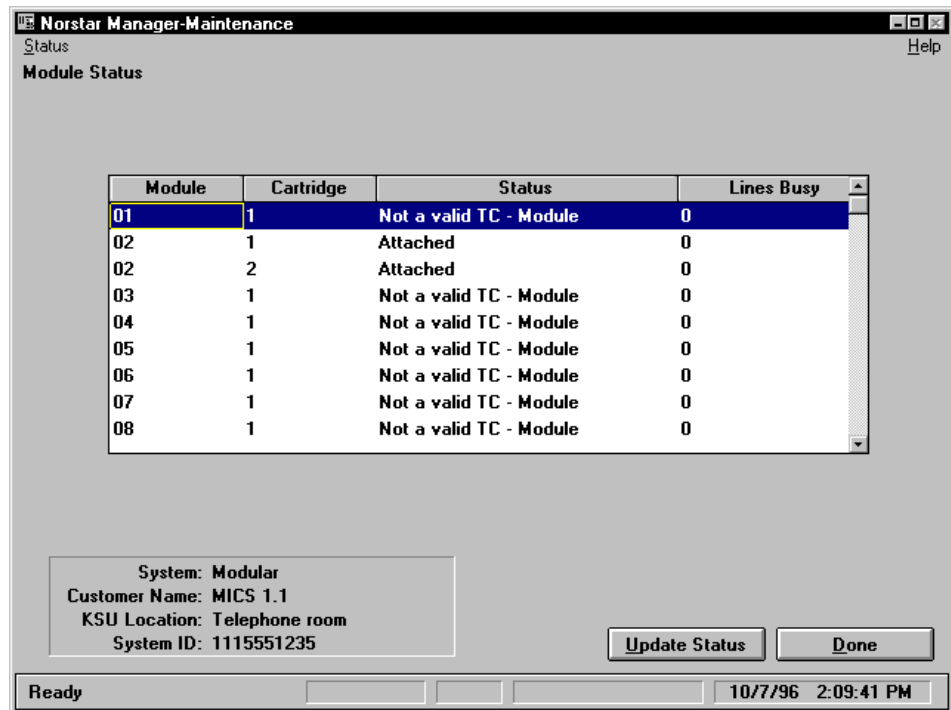



Figure 10.13 – The Module Status screen

To disable a module:

1. Select the module to disable.
2. Choose the **Status** menu and then the **Disable Now** menu item.

To enable a module:

1. Select the module to enable.
2. Choose the **Status** menu and then the **Enable** menu item.

Choose  to exit from this screen and return to the **System Programming Overview** screen.

Applications of Norstar Manager 11

Introduction

The features of Norstar Manager allow you to provide better service to your customers. Seven areas where Norstar Manager can help you provide better service to your customers are:

- installing new systems
- making changes to existing systems
- adding peripherals
- troubleshooting customer problems
- responding to system alarms
- printing reports and key labels
- service contracts

Installing new systems

Using Norstar Manager, you can reduce the amount of time it takes to program a new system by copying programming from an existing Norstar system that has similar programming. For example, one of your customers may be a chain of retail stores with very similar programming. When you want to program a Norstar system for a new store in this chain, you simply copy the programming from one of the stores which has a Norstar system that is already programmed. You then only have to program the parameters that are unique to the new system. See **Section 8** of this guide for more information about copying Norstar systems.

After the Norstar system is programmed, you can use the report feature to print a hardware wiring list. The installer can use this list as a reference when connecting the peripheral devices to the KSU ports.

Recommended Norstar Manager processes

There are many ways to use Norstar Manager to install and maintain your base of Norstar systems. The process we recommend for installing a system is listed below.

1. Install the Norstar system and RAD. If the system is already installed at the customer site, then you only need to install the RAD.
2. Add the new customer to the Norstar Manager database.
3. Program the system using an on-line session then use a backup to copy the data into the Norstar Manager database. If the system already has programming information stored in the KSU, just perform a backup to copy the data into the Norstar Manager database.

After the customer has been installed and added to the Norstar Manager database, we recommend you do the following to maintain the KSU programming.

- Schedule monthly backups to capture any programming changes that may have occurred on site.
- When you use an on-line session to make changes to the programming, make sure you backup the system to update the copy of programming stored in the Norstar Manager database.

Changing Norstar system programming

Norstar Manager can save you time by reducing the number of site trips required to make programming changes. Using Norstar Manager in an on-line session, you can change the programming of an existing Norstar system without sending a technician to the customer site.

Adding peripherals

Norstar Manager provides you with two advantages when you are adding peripherals.

One of the advantages of using Norstar Manager is you can use an on-line session to check if there are station ports available. This information will help you to decide on what equipment is required. For example, if there are not enough station ports available for the additional peripherals, you will have to include a station module in the upgrade equipment.

Another advantage of Norstar Manager is that you can use an on-line session to program the additional peripherals before they are shipped. This saves you from sending a technician out to install a peripheral and then program it. Since the peripheral is already programmed into the KSU, you can simply ship it to the customer. After receiving the peripheral, the customer can then plug it into the correct port and start using it.

Troubleshooting on-line

You can find Norstar Manager troubleshooting help on-line. Click on the **Norstar Manager Error Messages** icon. This brings up a file in Write (Windows 3.1) or WordPad (Windows 95). Help categories include:

- Connection Error Codes
- Modem Initialization String Problems
- SQL Error Codes
- Data Dictionary Error Codes
- Text Error Codes

Troubleshooting customer problems

Using Norstar Manager for troubleshooting allows you to solve a variety of Norstar system problems from your PC. The following paragraphs show you how to use Norstar Manager as part of your troubleshooting procedure.

If you are unable to solve a particular problem using Norstar Manager refer to the appropriate **Norstar Installer Guide** or the **Norstar System Coordinator Guide** for further instructions.

When you use Norstar Manager to solve problems a customer is having with a Norstar installation, you should look for information in the following areas:

- Access line or set information by moving to one of the programming screens. (Refer to **Section 6** for information on accessing line and set programming screens).
- Check the System log and look for system error messages. (Refer to **Section 10** for information on accessing the System log).
- Check the Administration log for system activity. (Refer to **Section 10** for information on accessing the Administration log).
- Query the port status. (Refer to **Section 10** for information on querying the port status).

If you solve a problem by changing Norstar programming in an on-line session, remember to perform a backup. If you do not perform a backup, Norstar programming stored in the Norstar Manager database will not reflect the KSU.

When you are using Norstar Manager to troubleshoot, remember to:

- Have a copy of relevant Norstar documentation, such as the appropriate **Norstar Installer Guide** or **Norstar System Coordinator Guide**
- Warn the customer of any procedures that may interrupt or cause delays in telephone service

**Can't access
Compact ICS
programming**

To access programming features for Compact ICS, you must be using Remote Tools software, and the internal RAD (I-RAD) must be enabled.

**Autodial/Personal
Speed Dial buttons
cannot be
programmed**

Autodial buttons cannot be programmed if the Norstar system memory is full. When a customer phones you with this problem, first check the System Log for an Event 408 "No memory for another pool" message. If you see this message for the set in question, tell the customer the Norstar system memory is full and cannot accept any more speed dial numbers. Refer to **Section 10** for instructions on accessing the System log.

If the System log does not contain this message, check the set's button status. To check the set's button status follow the instructions for accessing the **Buttons and Status** screen in **Section 6**.

**Dial tone absent
on external lines**

When no dial tone on external lines is reported, first check the **Buttons and Status** screen. Make sure the lines that the customer thinks are external lines, are programmed as such. Refer to **Section 6, Buttons and Status** for instructions on accessing this screen.

If the lines are programmed as external lines:

- Check the **Show Inventory** screen to confirm that a Trunk Cartridge for the line is installed.
- If a trunk cartridge is installed, check the **Port status** screen to see if the line is enabled. Enable the Port or DN if it is disabled.
- Run a connectivity test on the line in question and check the results.

If none of these procedures work, you must send a technician to the Norstar KSU site to check the physical connections between the set(s) and the KSU.

**Display
unreadable**

When a customer reports that a set display is unreadable, first check the **Buttons and Status** screen. Make sure the contrast level for the set in question is not set too low.

If the contrast is set too low, use the **Contrast** field to set the contrast to a higher level.

If adjusting the contrast level does not solve the problem:

- Use the **Port Status** screen to disable the set
- Use the **Port Status** screen to enable the set, and have the customer confirm that the display is readable

If these procedures do not solve the problem, a site visit is recommended.

Problems with Background Music and Music On Hold

If a customer reports that Music On Hold or Background Music on a set, or sets, is not working, first check with the installer that a music source was correctly connected to the distribution block when the Norstar system was installed.

Have the customer check that the music source is turned on, is working, and the volume is turned up.

If adjustments to the music source do not solve the problem:

- If the problem is Background Music, use the **Buttons and Status** screen to check the button assignment display to make sure the feature is programmed onto a button (Feature 86).
- Check the **Miscellaneous** screen to see if Background Music is enabled. If it isn't, enable it.

Telephone dead

When a customer reports a telephone is dead, first ask the customer to check the connections at the RJ-11 jack and at the phone.

If these connections are good:

- Check the **Port Status** screen to make sure the port is enabled, if disabled, enable it. If the port is enabled, disable it and then re-enable it.

If these procedures do not solve the problem, send a technician to the customer site to replace the telephone.

Responding to system alarms

Norstar Manager allows you to respond to alarms reported from remote Norstar systems. To receive alarms, program the RAD to report KSU alarms to a terminal or printer located at your Norstar Manager center. The KSU alarms will be printed on the printer or terminal with the date and time the alarm occurred and the System ID number of the KSU affected. After you receive an alarm, you can use the Norstar Manager maintenance functions to check the KSU for the cause of the alarm and potential solutions.

For more information about programming the RAD to report alarms, see the **RAD Installation Guide**. For more information about the Norstar Manager maintenance functions, see **Section 10** of this guide. For information about alarms, see **Section 4** of the **Norstar Manager for Windows™ Reference Guide**. See also the **Norstar Companion Alarm and Event Code Manual**.

Printing reports and key labels

Norstar Manager reports provide information about the programming for a Norstar system. On some systems, reports also provide wireless and maintenance information. Reports can be used for several purposes.

One use of the reports is to provide the customer with a well organized list of the Norstar system programming. Using reports has two main advantages over providing programming records for the customer's records. The first advantage of using reports is that they always show the latest programming information for the system. The other advantage of reports is that they can be customized to meet the customer's needs. For example, areas of programming information can be added or removed so that only the information that the customer needs is printed.

Reports can also be used to as an overview of the programming parameters when training new customers.

Another use of reports is to provide a written copy of a specific area of programming that a technician can use when diagnosing a problem.

Norstar Manager also prints key cap labels using the information stored in the database. Using Norstar Manager to print key cap labels allows you to provide accurate and professional looking key labels to your customers.

See **Section 10** of this guide for more information about reports.

Service contracts

Norstar Manager allows you to provide new service contracts to your customers. Three examples of new services available through Norstar Manager are: backing up customer programming, providing monthly remote programming changes and printing key cap labels.

You can use the backup feature of Norstar Manager to provide a back up service to your customers. By backing up the customer's Norstar system programming on a regular basis, you can protect that programming. An option in the **Schedule a Job** screen allows you to automatically back up data daily, weekly, bi-weekly, and monthly, as required by your customer. In the event of a loss of programming, you can use this backed up data to restore a current version of the programming to your customer's Norstar system. For more information about backing up Norstar systems, see **Section 7**.

You can use the on-line programming capability of Norstar Manager to provide your customers with programming updates as required. This service would allow the customer to update Norstar system programming on a regular basis. For large changes or changes that affect system performance, such as changing the DN length, you could schedule the changes to be done after the customer's working hours. This way the changes can be made without affecting the Norstar system performance.

You can also use the key cap label printing of Norstar Manager to provide additional service to your customers. When you or the customer changes the button assignment for a set, you can print out an up-to-date, high quality set of key cap labels for your customer. For more information about key cap label printing, see **Section 9**.

Appendix A: Programming Records

Contained in this appendix are the following **Norstar Manager for Windows Programming Records**:

- **Norstar Manager for Windows Compact DR5 Programming Record**
- **Norstar Manager for Windows Modular DR5 Programming Record**
- **Norstar Manager for Windows 3X8 DR5 Programming Record**
- **Norstar Manager for Windows Centrex+ Programming Record**
- **Norstar Manager for Windows Norstar-PLUS T1 Release 1 Programming Record**
- **Norstar Manager for Windows Norstar-PLUS Centrex Release 1 Programming Record**
- **Norstar Manager for Windows Norstar-PLUS MICS-XC 1.0 Programming Record**
- **Norstar Manager for Windows Norstar-PLUS NA-MICS-DR 1.1, CDA-MICS-XC 1.1, and USA-MICS-XC 1.1 Programming Record**

A copy of one of these programming records should be filled out before you program a system using Norstar Manager for Windows.

Software versions

The following table describes the names of the various software release and KSU products:

Type of System	Software Version Old Name	Software Version New Name	KSU Product Name
3X8	DR5	DR5	3X8 DR5
Compact	DR5	DR5	Compact DR5
Compact Disconnect	DR5	DR5	Compact Disconnect DR5
Compact ICS (CICS), Modular ICS (MICS) 2.0 other	CICS/MICS2.0/Other	CICS/MICS2.0/Other	various
Modular	DR5	DR5	Modular DR5
Modular (MICS)	Mega ICS	CDA-MICS-XC 1.0	CDA-MICS-XC 1.0
Modular (MICS)	Mega Etiquette	USA-MICS-XC 1.0	USA-MICS-XC 1.0
Modular (MICS)	Centrex R1	Centrex Release 1	Centrex Release 1
Modular	Centrex+	Centrex+	Centrex+
Modular (MICS)	0X32 Release 1	T1 Release 1	T1 Release 1
Modular (MICS)	MICS DR 1.1	MICS 1.1 (NA/CDA/USA)	NA-MICS-DR 1.1 CDA-MICS-XC 1.1 USA-MICS-XC 1.1

Table A.1 – KSU system and software types

Note: NA stands for North America. CDA stands for Canada. USA stands for United States of America.

CICS/MICS2.0/Other refers to any system in the Norstar Manager customer database which is not supported by Norstar Manager, but is administered using Remote Tools.

Norstar Manager supports full backup and restore operations for DR 5.1, but only supports remote programming of DR 5.1 configuration features which are common to DR5 and DR5.1. Any new configuration features found in DR5.1 (additions to DR5 found in DR5.1) must be remotely programmed using the Remote Set tool.

Glossary

Access

The method by which you gain entry to the Norstar Manager database or a Norstar Manager screen.

Action button

Performs a specific action. It appears as a small rectangle displayed on a screen and labeled with the action it performs or the screen it navigates to.

Add system

Adds a new Norstar system to the Norstar Manager database.

Alarm

Indicates an error condition in the KSU.

Analog Terminal Adapter (ATA)

A device that allows analog telecommunication devices, such as a single line telephone, to connect to the Norstar system. Defaults for the ATA are automatically assigned by the Norstar system.

ASCII (American Standard Code for Information Interchange) text file

A standard text file that can be read by several different software programs. When Norstar Manager prints a report to a file, it puts information in this format.

Backup

The process of making a copy of a Norstar KSU's programming. This copy is then stored in the Norstar Manager database.

Block

A section of text or data.

Cancel

An operation that terminates an action and returns to the previous screen or action.

Cascade menu

Appears when a specific menu item is selected and provides another menu of options.

Check box

A small box, displayed on a screen, that allows you to turn a setting on or off. These boxes often appear in groups. Check boxes appear as ☐.

Command

An action or task.

Communicate

The exchange of information between your PC and a Norstar KSU.

Configuration

A type of programming that assigns certain settings to a Norstar system, lines, and sets.

Connection

A link between a KSU and PC. This link is either established through a modem or directly through an RS-232 connection.

Conventions

The way information is described. For example, using smaller text surrounded by a box to represent PC keys.

Copy system details

Copies all of the programming information from one Norstar system to another Norstar system stored in the Norstar Manager database.

Cursor

A flashing character displayed on the screen that tells you where to enter data.

Customer site

The location of a customer's Norstar KSU.

Customer system

A Norstar system used at the customer site.

Data entry

The process of entering Norstar information and programming into the Norstar Manager database.

Database

A collection of files stored on the PC's hard drive, or server. Norstar Manager uses these files to store information about a Norstar system.

Default

A pre-set value or setup that is defined by the KSU software.

Delete system

Removes a Norstar system from the Norstar Manager database.

Device

A printer or monitor external to Norstar Manager.

Diagnostics

Determines what and where a problem is. If you receive an alarm from a remote site, you would run diagnostics to identify what the trouble is.

Dialog box

A window that appears on the screen to perform a specific action or warn you of an error.

Disable

Turns a feature or option off.

Enable

Turns a feature or option on.

End key

A key on the PC keyboard that moves the cursor to the bottom of a list.

Error message

A window that pops onto the screen and tells you what the error is and what action should be taken.

Esc

A key on the PC keyboard that cancels a Norstar Manager operation.

Exchange assignments

Allows you to swap features between buttons on a set.

Execute

Carry out a task.

FastRAD

The latest version of the Remote Access Device (RAD). It offers a faster transmission rate than the Global RAD as well as improved security features.

Feature

A special characteristic of a Norstar system that allows you to customize a line, set, or entire system.

Field

An area reserved for data entry. This area is usually found beside a title or name.

Function

A specific task that Norstar Manager performs.

Global Remote Access Device (Global RAD)

The new Norstar peripheral device which provides Norstar Manager access to a Norstar KSU.

Hardware

The physical components that make up a computer, printer, RAD, KSU or any other device being discussed.

Help

Provides assistance on how to use Norstar Manager. You can access the Help screens from any screen in Norstar Manager by choosing the **Help** menu.

Highlight

When an object is highlighted, the text and background colors change.

Home key

A key on the PC keyboard that moves the cursor to the top of a list.

Icons

Symbols used to indicate certain specifications or states.

ICS

Integrated Communications System.

Installing

The process of starting and setting up Norstar Manager. This term also refers to the process of installing and setting up a Norstar system.

Internal Remote Access Device (IRAD)

The RAD that is built into the Compact ICS KSU and must be enabled with software keys. When enabled, the IRAD allows remote administration and software access to Norstar Manager and Remote Tools.

Inventory

A listing of all lines, sets and other devices on a Norstar system.

Item

A component of a list or menu.

Job

A scheduled operation, such as a Backup or Restore of a Norstar system.

Job Queue

A screen that displays a list of scheduled jobs waiting to be completed. When you have scheduled a Backup or Restore, you must access this screen and leave it on your monitor until the scheduled job is completed.

Key Service Unit (KSU)

The central hardware component in a Norstar system.

Line programming

Customizes Norstar features such as Dialing Mode and Full Autohold.

List

A collection of records that can be selected and used.

Logging on

The process of entering the Norstar Manager software application.

M7100 telephone

The Norstar model M7100 telephone that has a single-line display and one programmable button without an indicator.

M7208 telephone

The Norstar model M7208 telephone that has a single-line display and eight programmable buttons with indicators.

M7310 telephone

The Norstar model M7310 telephone that has a two-line display with three display buttons, 10 programmable buttons with indicators, and 12 dual programmable buttons without indicators.

M7324 telephone

The Norstar model M7324 telephone that has a two-line display with three display buttons and 24 programmable buttons with indicators.

Maintenance

The process of making sure the Norstar Manager database and remote customer site are working correctly.

Mandatory field

A field that must contain valid data.

Menu

A list of actions you can choose from.

Modem

A device used by the PC to communicate with a Norstar KSU. It converts a digital data communications signal into an analog signal that can be transmitted over a standard telephone line.

Module type

Refers to the expansion products on a Norstar Modular KSU. There are two module types: a Station Module and a Trunk Module.

Monitor

The video display terminal that is attached to your PC.

Navigation

Movement between fields or screens in Norstar Manager.

Object

A button or list item that you can manipulate.

On-line

A remote or direct connection between a customer's Norstar KSU and your PC. Any changes you make to a screen while your PC has an on-line connection, are also made at the KSU.

Open system database

Displays and provides access to information for a specific Norstar system.

Optional field

A field that does not need to contain data.

Password

A series of characters that allow access to Norstar Manager or the RAD.

Pathname

The route to a Norstar Manager database. Each database pathname represents a different directory of Norstar systems stored on the PC's hard drive.

Personal computer (PC)

An IBM, or compatible, micro-computer that runs the Norstar Manager software.

Pgdn key

A key on the PC keyboard that moves the cursor down one page in a list.

Pgup key

A key on the PC keyboard that moves the cursor up one page in a list.

Programming

A process of setting up and selecting features on a Norstar system.

Programming Record

A programming guide, found in Appendix A, that provides an area for you to write a Norstar system's programming down.

Query

Checking the status of a customer's Norstar KSU.

Remote Access Device (RAD) types

There are four types of device: the original RAD, Global RAD, FastRAD, and the Internal RAD. The original RAD does not support Remote Tools.

Remote Access Device (RAD)

A Norstar peripheral device which provides Norstar Manager access to a Norstar KSU.

Remote site

A customer's Norstar system that is not located in the same area as your PC.

Remove assignments

Allows you to remove features that are assigned to a specific button on a set.

Reset Programming

Returns all programming for a line or set to the original default values.

Report

A listing of Norstar system programming that can be sent to a printer or to an ASCII file.

Schedule

Determines when a Backup or Restore job should be completed.

Screen

The Norstar Manager display that appears on the PC's monitor.

Select

Identifies a menu item, list item or button as a target for a specific action.

Set programming

Customizes Norstar features such as Personal Speed Dial and Pickup Group.

Software

A set of instructions known as a program. Programs form the basis of Norstar Manager and a Norstar KSU.

Software version

Refers to the type of software that a Norstar KSU uses to operate.

Specify System Configuration

Organizes how station and trunk modules are setup. This setup affects how a Norstar system is programmed.

Steps

A formula for performing a specific task.

System

A Norstar system.

System Admin Log

Keeps a record of activity on a Norstar system. A record of an invalid password entry is kept in the System Admin Log.

System Details

A screen display of a customer's Norstar site and system information.

System ID

A series of digits that identify a Norstar system within the Norstar Manager database.

System Test Log

An area within a Norstar KSU that contains records of alarms and events.

System Programming Overview

Provides information on Norstar systems, sets and lines. Norstar programming features are accessed from this screen.

System programming

Customizes Norstar features such as Call Handling and System Speed Dials.

Systems Directory

The main screen and work area in Norstar Manager. All systems contained in the database can be accessed from this screen.

Systems list

A collection of Norstar systems that are stored in the Norstar Manager database. This list is displayed on the **Systems Directory** screen.

Time Difference

The time zone difference between a remote Norstar system and the local time at the PC.

Title bar

A thick line that appears at the top of the screen. This bar shows the title of the Norstar Manager screen that appears on your monitor.

Translate

The process of converting information.

Transmission

The transfer of information from the PC to the KSU.

Troubleshooting

A process used to determine what a problem is and the steps used to fix it.

Trunk Cartridge

A cartridge that is inserted into a Trunk Module. This device provides a connection to outside lines.

Valid option

Data that is appropriate for a specific field.

Index

A

- Abilities and call services 6 -39
 - auto call info 6 -40
 - line filters 6 -40
 - remote filter 6 -40
 - remote package 6 -40
 - voice message center number 6 -40
- Accelerator keys 2 -7
- Action buttons 1 -3, 2 -6
- Adding, Norstar systems 4 -7
- Alarm set 6 -13
- Allow redirect 6 -50, 6 -54
- Allow registration 6 -67
- ANI number 6 -39
- Answer DNs 6 -48
- Answer mode 6 -38
- Answer timer 6 -29, 6 -30
- Antenna 6 -68
- ATA answer timer 6 -53
- ATA tones 6 -50
- Auto call info, line 6 -40
- Auto DN 6 -13
- Auto handsfree 6 -49, 6 -53
- Auto privacy 6 -37
- Auto-Attendant connection 5 -3
- Autodial
 - assigning inside 6 -57
 - assigning outside 6 -57
 - troubleshooting 11 -4
- Autohold, full 6 -38
- Auxiliary ringer 6 -37, 6 -50, 6 -54

B

- Background music
 - set 6 -55

- system 6 -14

Backup

- checking status 7 -9
- deleting 7 -9
- performing 7 -2
- repeat automatically 7 -5
- resubmitting 7 -9
- running 7 -8
- running immediately 7 -6
- scheduling 7 -3
- speed dials 3 -11

baud rate

- selecting 3 -9, 5 -5

Baud rates 5 -4, 5 -5, 7 -5

Boxes

- check 2 -10
- dialog 2 -4

Button assignment 6 -56

Buttons and status 6 -54

C

Call forward 6 -50, 6 -52, 6 -55

Call handling 6 -11

- call park 6 -12
- call park timeout delay 6 -12
- camp timeout delay 6 -12
- delayed ring transfer to prime 6 -11
- directed pickup 6 -11
- held line reminder 6 -11
- on hold feedback 6 -12
- page timeout 6 -12
- page tone 6 -11
- transfer callback delay 6 -11
- voice message center telephones 6 -11

Call park 6 -12

- timeout delay 6 -12
- Call services
 - auto bumping 6 -62
 - auto call info set 6 -40
 - auto log lines 6 -61
 - callback center 6 -40
 - external voice message lines 6 -62
 - first display 6 -62
 - log password 6 -62
 - log space 6 -62
 - logging options 6 -62
 - set programming 6 -61
- Camp timeout delay 6 -12
- CAP
 - buttons 6 -59
 - programming 6 -59
 - sets 6 -15
- Carrier fail 6 -29
- Cascade menus 2 -8
- Cell neighbors 6 -70
- Cells 6 -69
- Centrex options 6 -16
 - delays 6 -16
- Change DN length 6 -34
- Change individual DN 6 -33
- Check boxes 2 -10
- Choosing
 - accelerator keys 2 -7
 - action buttons 2 -6
 - items 1 -3
 - menus 2 -7
 - quick keys 2 -6
 - tasks 2 -6
- Clock sources, viewing 10 -13
- COM port, default 3 -9
- Connection, to KSU
 - Auto-Attendant 5 -3
 - direct 5 -3
 - operator assisted 5 -2, 5 -4
 - quick connect 5 -6
 - remote 5 -2
- Connectivity test 10 -5
- Control set ID 6 -51, 6 -54
- Conventions 1 -3
- Copying
 - lines 6 -43
 - sets 6 -63
 - systems 8 -1
- COS password 6 -25
- CSU line build 6 -29
- CSU statistics 10 -14

D

- Data field
 - editing keys 2 -9
 - types 2 -8
- Date and time 6 -20
- Daylight savings 6 -14
- Defaults
 - baud rate 3 -9
 - COM port 3 -9
 - customer path 3 -11
 - Norstar Manager 3 -9
- Delayed ring transfer to prime 6 -11
 - delay 6 -11
- Deleting systems 4 -9
- Destination codes 6 -32
- Dialing mode 6 -38
- Dialog boxes 2 -4
- Direct connection 5 -3
- Direct dial number 6 -13
- Direct dial set 6 -15, 6 -50, 6 -54
- Directed pickup 6 -11
- DISA
 - answer with 6 -38
 - DN 6 -13
- Disconnect timer 6 -29, 6 -30
- DN
 - answer 6 -48
 - change individual 6 -33
 - change length 6 -34
- DND on busy 6 -51, 6 -54
- DNIS number 6 -39
- Do not disturb 6 -55
- Documents, other 1 -2
- DSX1 build 6 -29
- Dual memory buttons 6 -58

E

- Entering information 2 -8
- Equipment, installed 4 -5
- Exceptions 6 -23
 - adding 6 -24
 - deleting 6 -24
 - editing 6 -24
- Exchanging button assignment 6 -58
- External line code 6 -13
- Extra dial-0 set 6 -17, 6 -18

F

- Filters 6 -20
 - adding 6 -21
 - deleting 6 -21

- exceptions 6 -23
- line 6 -40
- remote 6 -40
- restrictions 6 -22
- set 6 -50

Framing format 6 -29

Full handsfree 6 -49, 6 -53

G

Gain 6 -39

H

Handsfree

- answerback 6 -50, 6 -54
- auto 6 -49, 6 -53
- full 6 -49, 6 -53

Hardware requirements 3 -1

Held line reminder 6 -11

- delay 6 -11

Help screens, using 2 -10

Highlighting text 1 -3

Host delay 6 -13

Hotline 6 -51, 6 -52

How this guide is organized 1 -1

I

Incoming line group 6 -37

Incoming line groups, adding 6 -48

Initialize

- line 6 -9
- set 6 -9
- system 6 -7

Initializing programming 6 -7

installation

- directory 3 -4
- Norstar Manager 3 -4
- Remote Tools ??-3 -5

Installed equipment 4 -5

Installing Norstar Manager 3 -4

InstallShield wizard 3 -4

Intercom buttons 6 -49

Intercom lines, number of 6 -49

Internal CSU 6 -29

J

Job Queue 7 -6

- checking status 7 -9
- deleting a job 7 -9
- editing a job 7 -8

- error messages 7 -10
- resubmitting a job 7 -9
- starting 7 -8
- stopping 7 -8

K

KSU date and time 6 -20

KSU software 4 -4

L

Language 6 -55

- Norstar Manager 3 -11
- system 4 -4

Last number redial 6 -52

Line access 6 -46

- answer DNs 6 -48
- incoming line group 6 -48
- intercom buttons 6 -49
- line appearances 6 -46
- line pool 6 -48
- prime line 6 -48
- ringing lines 6 -47
- set/line filters 6 -47

Line appearances, adding and removing 6 -46

Line buttons, adding and removing 6 -46

Line coding 6 -29

Line data 6 -37

- auto privacy 6 -37
- auxiliary ringer 6 -37
- incoming line group 6 -37
- line type 6 -37
- prime set 6 -37

Line filters, adding and removing 6 -47

Line pool access 6 -48

Line pool access codes 6 -14

Line programming 6 -36

- abilities and call services 6 -39
- copy lines 6 -43
- initializing 6 -9
- line data 6 -37
- name 6 -6
- service mode options 6 -40
- trunk data 6 -38

Line type 6 -37

Link feature access 6 -52

Link time 6 -13

LNR 6 -52

Logging off 3 -7

Logging on 3 -7

Loopback tests 10 -9

Loss package 6 -38

M

Maintenance

- clock sources 10 -13
- connectivity test 10 -5
- CSU statistics 10 -14
- module status 10 -15
- network log 10 -12
- port status 10 -2
- provision status 10 -8
- System Admin log 10 -11
- System Test log 10 -9
- system version number 10 -2

Menus

- about 2 -7
- cascade 2 -8
- screen 2 -7
- symbols 2 -8

Message indicate 6 -53

Miscellaneous

- alarm set 6 -13
- auto DN 6 -13
- background music 6 -14
- daylight savings 6 -14
- direct dial number 6 -13
- direct dial set 6 -15
- DISA DN 6 -13
- ECAP sets 6 -15
- external line code 6 -13
- host delay 6 -13
- line pool codes 6 -14
- link time 6 -13
- receiver volume 6 -14
- set relocation 6 -14
- supervision time 6 -13

Miscellaneous, system programming 6 -12, 6 -14

Mobility programming 6 -66

- cells 6 -69
- mobility setup 6 -68
- portable registration 6 -67
- re-evaluation 6 -71
- software codes 6 -72
- system LID 6 -68

Mobility setup 6 -68

- antenna 6 -68
- cell 6 -68
- radio credits 6 -68
- UTAM status 6 -68

Modem init string 3 -9

Module status, checking 10 -15

N

Name

- line 6 -6

- set 6 -6

- target line 6 -6

Navigating data fields 2 -9

Neighbors

- cell 6 -70
- radio 6 -70

Network Log 10 -12

Norstar Manager

- defaults 3 -9
- installation 3 -4
- installing 3 -4
- language 3 -11

Norstar programming 6 -1

Norstar system

- adding to database 4 -7, 4 -8
- backup 7 -1
- changing information 4 -1
- copying information 8 -1
- grouping 4 -7
- restore 7 -1
- startup 4 -4

Norstar Voice Mail programming 6 -78

O

On hold feedback 6 -12

On-line connection

- Auto-Attendant 5 -3
- changing information 5 -1
- direct 5 -3
- making 5 -3, 5 -5
- operator assisted 5 -2
- remote 5 -2
- types 5 -2

Operator assisted connection 5 -2, 5 -4

Organization, guide 1 -1

Other documents 1 -2

Overview, system 2 -1

P

Page 6 -50, 6 -54

Page timeout 6 -12

Page tone 6 -11

Page zone 6 -50, 6 -54

Passwords

- administration 6 -25
- changing 3 -6
- configuration 6 -25
- COS 6 -25
- entering 3 -7
- RAD 4 -3
- system 6 -24

PC requirements 3 -1

- Peripheral programming 6 -78
- Personal speed dials 6 -59
- Pickup group 6 -50, 6 -54
- Port status, querying 10 -2
- Portable registration 6 -67
 - allow registration 6 -67
 - registration password 6 -67
- Pre-dial mode 6 -55
- Prime line 6 -48
- Prime set 6 -37
- Printing
 - reports 8 -1, 8 -3
- Priority call 6 -50, 6 -54
- Programming
 - can't access Compact ICS 11 -4
 - line 4 -5, 6 -36
 - mobility 6 -66
 - peripheral 6 -78
 - RAD 6 -73
 - set 4 -5, 6 -45
 - system 4 -5, 6 -9
- Programming records
 - completing 4 -2
- Provision status 10 -8

Q

- Querying, port status 10 -2
- Queue, Job 7 -6
- Quick connect 5 -6
- Quick keys 2 -6

R

- RAD password 4 -3
- RAD programming 6 -73
- Radio credits 6 -68
- Radio neighbors 6 -70
- Received number
 - change individual 6 -6
 - change length 6 -34
- Receiver Volume 6 -14
- Redirect ring 6 -50, 6 -54
- Re-Evaluation 6 -71
- Registration password 6 -67
- Remote access packages 6 -27
- Remote connection 5 -2, 5 -3
- Remote package 6 -40
- Remote Tools
 - directory for installation 3 -4
 - installation ??-3 -5
- Remote Utilities, Norstar
 - icons 3 -5
 - program group 3 -5

- window 3 -5
- Reports, printing 8 -1, 8 -3
- Requirements, PC 3 -1
- Restore
 - archive copy 7 -6
 - cautions 7 -2
 - checking status 7 -9
 - deleting 7 -9
 - performing 7 -2
 - resubmitting 7 -9
 - running 7 -8
 - running immediately 7 -6
 - scheduling 7 -3
- Restrictions 6 -22
 - adding 6 -22
 - deleting 6 -23
 - editing 6 -22
- Ring
 - type 6 -55
 - volume 6 -55
- Ring service 6 -18
- Ringing groups 6 -18, 6 -42
- Ringing lines
 - adding 6 -47
 - deleting 6 -47
- Routing table 6 -31
- RS-232 5 -3

S

- Saved number redial 6 -53
- Screens
 - help 2 -10
 - menus 2 -7
 - moving within 2 -5
- Selecting
 - items 1 -3
 - multiple items 2 -6
- Service mode options 6 -40
 - auxiliary ringers 6 -41
 - control sets 6 -41
 - ringing group 6 -42
 - ringing sets 6 -41
- Service modes 6 -17
 - extra dial-0 set 6 -17, 6 -18
 - mode times 6 -17, 6 -18
 - name 6 -17, 6 -18
 - overflow 6 -18
 - rest serv 6 -18
 - ring service 6 -18
 - ringing groups 6 -18
 - rout serv 6 -18
 - start time 6 -17, 6 -18
 - stop time 6 -17, 6 -18

- TAFAS 6 -17, 6 -18
 - type 6 -17
- Set abilities 6 -49, 6 -51, 6 -53
 - allow redirect 6 -50, 6 -54
 - ATA answer timer 6 -53
 - ATA tones 6 -50
 - auto handsfree 6 -49, 6 -53
 - auxiliary ringer 6 -50, 6 -54
 - call forward no answer 6 -50, 6 -52
 - call forward on busy 6 -50, 6 -52
 - control set ID 6 -51, 6 -54
 - direct dial set 6 -50, 6 -54
 - DND on busy 6 -51, 6 -54
 - full handsfree 6 -49, 6 -53
 - handsfree answerback 6 -50, 6 -54
 - hotline 6 -51, 6 -52
 - last number redial (LNR) 6 -52
 - Link 6 -52
 - message indicate 6 -53
 - page 6 -50, 6 -54
 - page zone 6 -50, 6 -54
 - pickup group 6 -50, 6 -54
 - priority call 6 -50, 6 -54
 - redirect ring 6 -50, 6 -54
 - Saved number redial (SNR) 6 -53
 - set filter 6 -50
 - set lock 6 -50, 6 -54
- Set filter 6 -50
- Set filters, adding 6 -47
- Set lock 6 -50, 6 -54
- Set programming 4 -5, 6 -45
 - abilities 6 -49, 6 -51, 6 -53
 - autodial, inside 6 -57
 - autodial, outside 6 -57
 - button assignment, adding 6 -56
 - button assignment, deleting 6 -56
 - button assignment, exchanging 6 -58
 - buttons 6 -54
 - call services 6 -61
 - CAP buttons 6 -59
 - contrast 6 -55
 - copy sets 6 -63
 - dual memory buttons 6 -58
 - feature, assigning 6 -56
 - initialize 6 -9
 - line access 6 -46
 - name 6 -6
 - personal speed dials 6 -59
 - status 6 -54
 - type of set 6 -6
- Set relocation 6 -14
- Set status 6 -55
- Signal, trunk data 6 -39
- SMDR programming 6 -78

- SNR 6 -53
- Software codes 6 -72
- Speed dial
 - personal 6 -59
 - system 6 -25
- Start DN 6 -8
- StarTalk programming 6 -78
- Startup template 6 -8
- Supervision time 6 -13
- Symbols, menu 2 -8
- System Admin log 10 -11
- System information 4 -4
- System LID 6 -68
- System overview 2 -1
- System passwords 6 -24
- System programming 4 -5, 6 -9
 - call handling 6 -11
 - Centrex 6 -16
 - change DN length 6 -34
 - change individual DN 6 -33
 - date and time 6 -20
 - destination codes 6 -32
 - filters 6 -20
 - initialize 6 -7
 - language 4 -4
 - miscellaneous 6 -12, 6 -14
 - passwords 6 -24
 - remote access packages 6 -27
 - routing table 6 -31
 - service modes 6 -17
 - speed dials 6 -25
 - system ID 4 -2
 - system templates 6 -7
 - trunk cartridges 6 -28
- System speed dials 6 -25
 - bypass 6 -26
 - line 6 -26
 - name 6 -26
 - phone number 6 -26
 - show 6 -26
- System startup 4 -4
- System templates 6 -7
- System Test log 10 -9
- System version number 10 -2
- System, copying 8 -1
- System, deleting 4 -9

T

- Tasks, choosing 2 -6
- Time and date 6 -20
- Transfer callback delay 6 -11
- Troubleshooting
 - autodial 11 -4

- background music 11 -5
- dial tone absent 11 -4
- display unreadable 11 -4
- music on hold 11 -5
- personal speed dial 11 -4
- telephone dead 11 -5

Trunk cartridges

- answer timer 6 -29, 6 -30
- carrier fail 6 -29
- CSU line build 6 -29
- disconnect timer 6 -29, 6 -30
- DSX1 build 6 -29
- framing format 6 -29
- internal CSU 6 -29
- KSU parameters 6 -28
- line coding 6 -29
- module parameters 6 -30
- programming 6 -28
- type 6 -28

Trunk data 6 -38

- ANI number 6 -39
- answer mode 6 -38
- answer with DISA 6 -38
- dialing mode 6 -38
- DNIS number 6 -39
- full autohold 6 -38
- gain 6 -39
- loss package 6 -38
- signal 6 -39
- trunk mode 6 -38

Trunk mode 6 -38

Types, data fields 2 -8

U

- uninstall program 3 -5

Upgrade system

- Centrex+ to Centrex R1 8 -4
- Modular DR5 to Modular R1 8 -4

- UTAM status 6 -68

V

- VMI programming 6 -78

Voice mail programming

- Norstar Voice Mail 6 -78
- SMDR 6 -78
- StarTalk 6 -78
- VMI 6 -78

- Voice message center number 6 -40

- Voice message center telephones 6 -11

W

- window

- installation 3 -4

- wizard, InstallShield 3 -4

