

NEC

NVM-2000
Installing Port Cards

This manual has been developed by NEC America, Inc. It is intended for the use of its customers and service personnel, and should be read in its entirety before attempting to install or program the system. Any comments or suggestions for improving this manual would be appreciated. Forward your remarks to:

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Introduction

This supplement provides instructions for installing Port Cards.

You can install either 2-Port or 4-Port Cards to provide you with the number of ports you need. In systems with software version 8.00 or higher, you can have a maximum of 24 ports. In systems with software version below 8.00, you can have a maximum of 16 ports.

Note: To have 24 ports in your Voice Mail, you must remove the Modem Card and enable COM 2 in BIOS (see *24 Port Systems* on page 8). If your Voice Mail also has a Network (LAN) Card installed, the LAN Card must be removed and its device driver disabled (see *24 Port Systems* on page 8).

Tools and Materials Needed

- An NVM-2000 Voice Mail System (with a monitor and keyboard) installed and running
- Port Card(s):
 - 2-Port Card(s) (P/N 17503A)
 - OR**
 - 4-Port Card(s) (P/N 17501A)
- NVM 2000 Device Driver Software Upgrade disk (Version 5.54)
- ESD Wrist Strap (to be worn on wrist and attached to a grounded metal object at all times)
- Phillips-head screw driver.
- 3 1/2 inch floppy disk(s) (Required for backing up the Voice Mail database.) Four or more diskettes may be required depending on the system's number of mailboxes, greetings, Welcome messages and Instruction messages.

Important Note

- When it is not being used, keep Port Card in its anti-static container.
- Perform all card-handling on a work surface covered with or composed of a grounded static-dissipating material.
- All work must be performed by a qualified technician.

Overview of Installation

This supplement will explain how to perform the following:

1. Backing up the current Voice Mail database
2. Configuring the jumpers on the Port Card(s)
3. Installing the Port Card(s)
4. Installing the device driver software
5. Configuring 24 Port systems
6. Connecting the Port Card(s) to your phone system
7. Installing and removing ports from service
8. Customizing the Port Options

Installing Port Cards

Locally Backing Up the Voice Mail Database

Locally Backing Up the Voice Mail Database

You should back up the current Voice Mail database as a precaution before you install a Port Card(s). Backing up the database should be performed locally and not through a modem. During the procedure, you will have the option to back up messages for individual mailboxes. This is a lengthy and extensive process. For this reason, it is recommended that you suggest to users that they delete as many (if not all) of their messages. This will save you time and reduce the number of messages that you will have to back up.

To locally back up the Voice Mail database:

Note: Instructions assume you are in the **Full Screen Editor** mode.

1. Insert a floppy disk into the Voice Mail's floppy disk drive.
 2. From the **Main Menu**, select **Install**, and press **Enter**.
 3. If requested, type the system password (default is CTL), and press **Enter**.
 4. Select **View Current Settings**, and press **Enter**.
 5. Write down the phone system that is installed with the Voice Mail as well as the following settings:
 - Number of Voice Mail Ports**
 - Voice Compression Rate**
 - Mailbox Default Security Code**
 - Default Bilingual Mode**
 - Mailbox Range**
 - Extension Range**
 6. Return to the Main Menu, select **Maintenance**, and press **Enter**.
 7. If the system requests it, type the system password (default is CTL), and press **Enter**.
 8. Select **Local Backup** and press **Enter**.
The system prompts you through the backup procedure:
Select the files to be processed:
 - System Database D**
 - Mailbox Messages M****File Type (enter Q to Quit)? [D]**
 9. Default is **D** (which is the selection you need). Press **Enter**.
The system provides you with information about the Backup Utility.
 10. When you see the prompt, *Do you wish to continue? [Y/N]*, enter **Y**. The Voice Mail System will shut down and exit to the **SYSTEM SAVE FILE CREATION** utility in DOS.
 11. When you see the prompt, *Do you wish to save the history data at this time? [Y/N]*, enter **N**.
 12. The system displays prompts as the Backup Utility progresses. When you see the prompt, *Press any key to continue...*, press any key.
 13. The system displays status prompts as the data files are copied onto the floppy disk. When complete, you will see a list of files on your disk as well as a list of files to compare them against. These are the files that should be copied onto your disk.
- Note:** If all files were not copied, complete this procedure through step 13 to reboot the Voice Mail. Repeat steps 5 through 13 to try to back up the files again.
14. Remove the disk from the disk drive.
 15. When you see the prompt, *Press any key to continue...* (and after you removed the disk from the disk drive), press any key. The Voice Mail will reboot.

Locally Backing Up the Voice Mail Database (cont'd)

Note: If you do not remove the disk in step 14, when the Voice Mail tries to reboot, the system prompts with a Non-system disk or disk error.

16. Insert a floppy disk into the Voice Mail's floppy disk drive.
17. Repeat steps 6 through 8 to begin backing up messages in a mailbox.
18. At the prompt:
Select the files to be processed:
 -System Database **D**
 -Mailbox Messages **M**
 File Type (enter Q to Quit?) **[D]**

Enter **M** and **Enter**. Follow the screen prompts.

19. When finished, return to the Voice Mail's Main Menu.
20. Go to *Configuring the Jumpers on Port Card(s)* on page 4.

Installing Port Cards

Configuring the Jumpers on Port Card(s)

Configuring the Jumpers on Port Card(s)

Depending on the number of available slots in your Voice Mail cabinet and your system software, you can install 2-Port and 4-Port Cards to provide you with the number of ports you need. A maximum of 24 ports is allowed.

Port Cards have jumpers (labeled EJ1) that determine address and interrupt settings.

To change the settings when installing 2 Port or 4-Port Cards:

Refer to Figure 1 which depicts a 4-Port Card. The jumper configuration on EJ1 is identical for both 2-Port and 4-Port Cards. The settings may already be set on the card when it was shipped from the factory. However, you should verify that they are correct according to the illustration below.

Note: Your Voice Mail should already have a 2-Port or 4-Port Card pre installed. If the Port Card that is installed does not have jumpers, it should only be installed in slot 1 (Ports 1-4). The addition of more Port Cards and the jumper configurations for them, would take this into account.

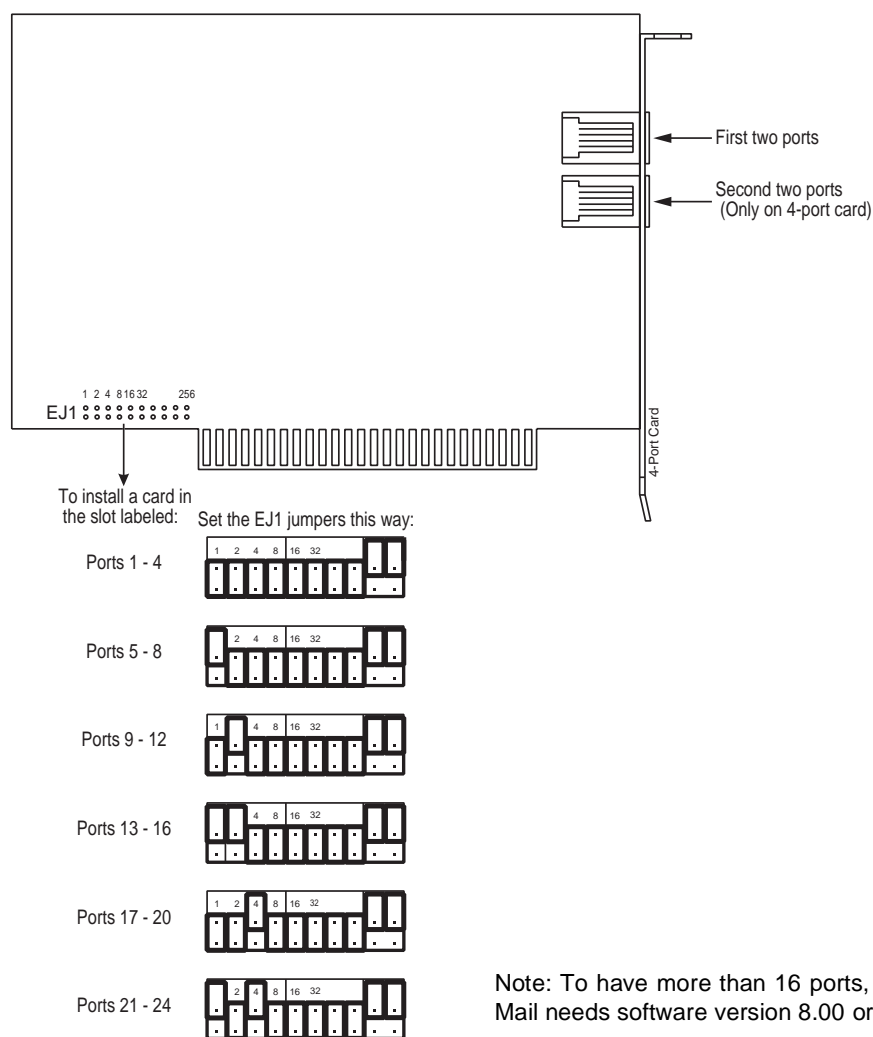


Figure 1: 2-Port or 4-Port Card Settings

Installing Port Card(s)

WARNING

Do not turn off the Voice Mail without first shutting it down. If you do not shut down first, you may corrupt the Voice Mail database when you turn it off.

To Install a Port Card:

Note: Instructions assume you are in the **Full Screen Editor** mode.

1. From the Voice Mail Main Menu, select **Exit**, and type the system password.
2. Select **Shutdown Voice Mail System** to shut down the Voice Mail.
3. After the Voice Mail shuts down, turn off the system power.
4. Refer to Figure 2 and remove and retain the five hex-head screws from the rear of cabinet.

Note: Your cabinet may not appear exactly as shown in the figure.

5. Remove the cabinet cover by sliding it towards you and lifting it up.
6. If you are installing 2-Port Card(s) (P/N 17503A) or 4-Port Card(s) (P/N 17501A):
 - The unit should have at least one pre-installed port card as shown in Figure 2.
 - Install the Port Card in any available slot, making sure that the jumpers are set correctly. See Figure 3.

Note: When you increase the capacity of the unit beyond 20 voice ports and an internal modem is already installed, the Modem Card must be removed.

When a Port Card (providing ports 21-24) has taken the place of the internal modem, an external modem can be used. See Figure 4 for a 24-Port system.

7. Unless you are installing 24 ports, replace the cabinet cover.
8. Do not turn on system power. Go to the next section, *Installing the Device Driver Software* on page 7.

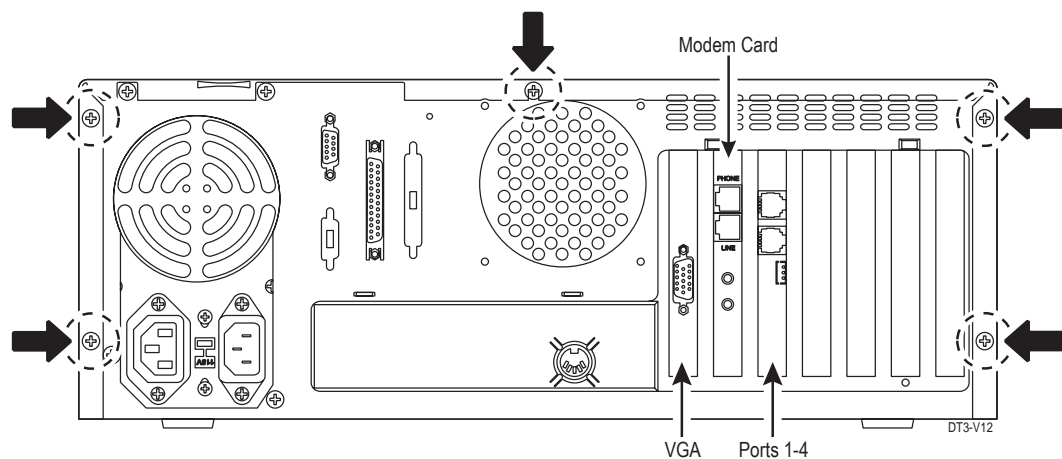


Figure 2: Back View of the Voice Mail Cabinet

Installing Port Cards

Installing Port Card(s)

Installing Port Card(s) (cont'd)

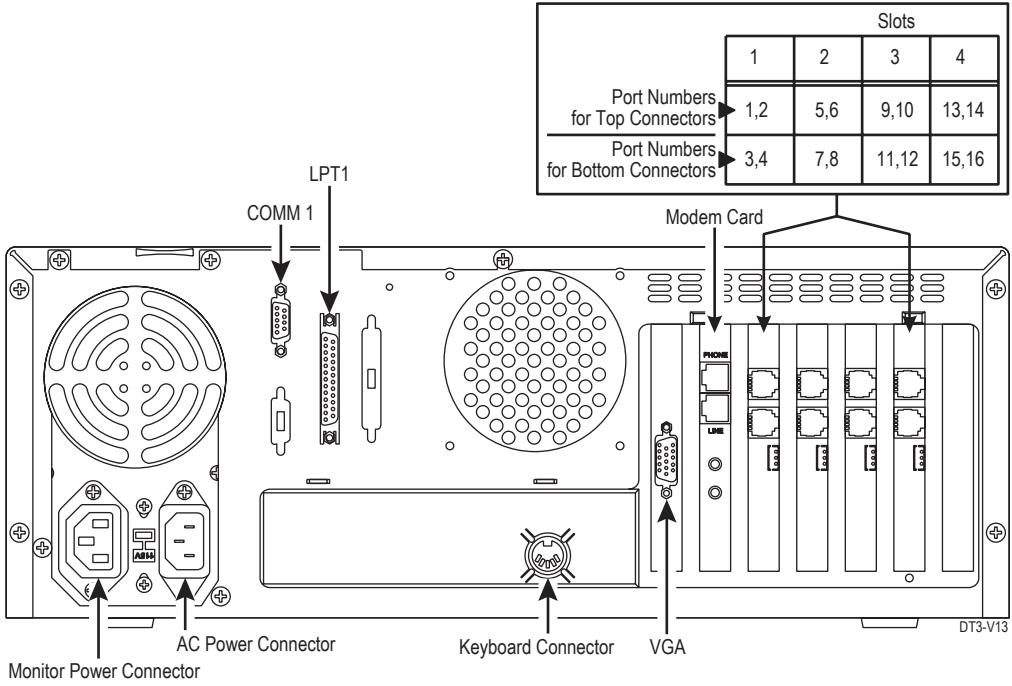


Figure 3: 16-Port System

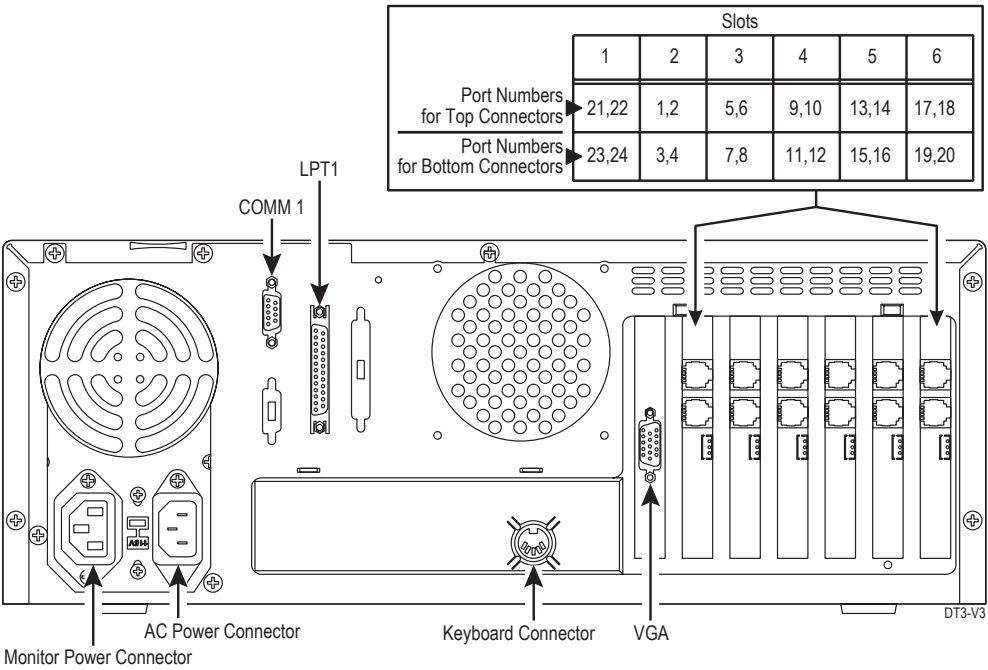


Figure 4: 24-Port System with Internal Modem Removed

Installing the Device Driver Software

If your Voice Mail has software version below 6.00 (but not including version 6.00) you must install the NVM-2000 Device Driver software upgrade (v5.54).

To install the device driver software:

1. The NVM 2000 Voice Mail should already be shut down, and power turned off. If not, perform steps 1 through 3 on page 5. If power is turned off, go to step 2.
2. Insert the NVM 2000 Device Driver software upgrade installation disk (v5.54) into the floppy drive of the Voice Mail.
3. Turn on the Voice Mail's power switch.
4. Follow the instructions on the screen.
5. Remove the disk when the device driver software installation is complete.
6. Press the reset button or turn the system power off and then on again to restart the system.

24 Port Systems

In order for you to install 24 ports in your Voice Mail System, the Modem Card will have to be removed and COM 2 enabled in BIOS. If a Network (LAN) Card is also installed, the LAN Card will have to be removed and its device driver disabled. See Figure 5 for a Voice Mail system with a Modem Card and a LAN Card installed.

Installing 24 Ports when a Modem Card is installed

After completing the previous instructions in this document, do the following:

Note: The following instructions apply to Voice Mail systems that have a Pentium MMX motherboard installed. If your system does not have a Pentium MMX motherboard installed or you are not sure what motherboard is installed, please call CTL's Technical Support Department for assistance.

To remove the Modem Card:

1. The cabinet cover should be removed at this time, but if not, refer to steps 4 and 5 under *To Install a Port Card*: on page 5.
2. Remove and retain the screw that secures the Modem Card to the inside of the cabinet. See Figure 5 for a Voice Mail cabinet with a Modem Card installed.
3. Remove the Modem Card, replace with a 2-Port or 4-Port Card and secure with the screw.
4. Turn on the power switch to your Voice Mail system.
5. When you see the prompt at the bottom of the screen, *Press DEL to enter Setup*, press **Delete**.
6. From the **ROM PCI/ISA BIOS** window, highlight **INTEGRATED PERIPHERALS** using the direction arrows on your keyboard, press **Enter**.
7. Using the direction arrows on your keyboard, highlight **Onboard UART 1**.
8. Using the plus (+) or minus (-) keys on your keyboard, select **3FB/IRQ4**.
9. Press the down arrow on your keyboard once. **Onboard UART 2** should be highlighted.
10. Using the plus (+) or minus (-) keys on your keyboard, select **2FB/IRQ3**.
11. Press **ESC**.
12. Press **F10**.
13. When you see the prompt, *Save to CMOS and EXIT [Y/N]?*, press **Y**, press **Enter**.
14. From the **Full Screen Editor**, shutdown the Voice Mail system and turn off system power.
15. If a LAN Card is also installed, proceed to the next section; otherwise, replace the cabinet cover and secure with the five hex head screws.

Installing 24 Ports when a LAN Card is installed

After completing the previous instructions in this document, do the following:

Note: The following instructions apply to Voice Mail systems that have a Pentium MMX motherboard installed. If your system does not have a Pentium MMX motherboard installed or you are not sure what motherboard is installed, please call CTL's Technical Support Department for assistance.

To remove the LAN Card:

1. Remove and retain the screw that secures the LAN Card to the inside of the cabinet. See Figure 5 for a Voice Mail cabinet with a LAN Card installed.
2. Remove the LAN Card, replace with a 2-Port or 4-Port Card and secure with the screw.
3. Turn on the power switch to your Voice Mail system.
4. When you see the prompt, *Program will terminate in 5 sec. 1---5----10---15*, press **Enter**.
5. Press **Enter** repeatedly until you see the prompt, *Do you want to enable network drivers? Y - Enable Else - Disable*, press **n**, press **Enter**.
6. From the **Full Screen Editor**, shutdown the Voice Mail system and turn off system power.
7. Replace the cabinet cover and secure with the five hex head screws.

24 Port Systems (cont'd)

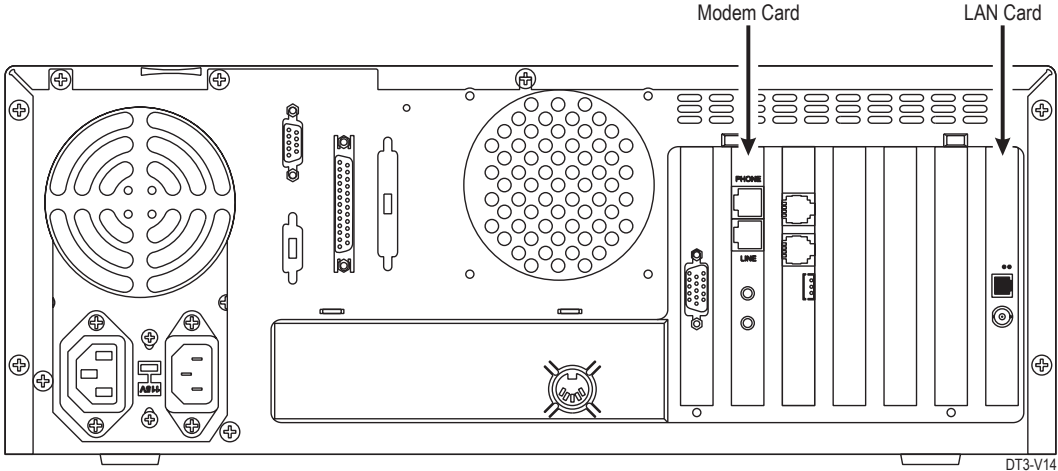


Figure 5: Back View of the Voice Mail Cabinet with a Network (LAN) Card and Modem Card Installed

Connecting the Port Card(s) to the Phone System

Refer to the NVM-2000 System Guide (P/N 17500INS05 or higher) when connecting the Port Cards to the phone system.

Required Programming for the Voice Mail Ports

After you install a Port Card, you must install the Voice Mail ports in system software. You must install the Voice Mail ports if this is a new installation or if you are just adding a Port Card.

You must also remove any Voice Mail ports that are not physically installed. This is required if you do not use all of the ports that are available on the Port Card. For example, if you are only using ports 1 and 2, then you should remove ports 3 and 4 from service. Be sure that Message Waiting and Message Notification are on for at least one port (**CU-Customize** ⇒ **PO-Port Options**)

Installing Ports into System Software

To install the Voice Mail ports into system software:

Note: Instructions assume you are in the **Full Screen Editor** mode.

1. From the **Main Menu**, select **Install**, and press **Enter**.
2. If requested, type the system password (default is CTL), and press **Enter**.
3. Make sure **Install Voice Mail** is highlighted, and press **Enter**.
4. Make sure your phone system is highlighted, and press **Enter**.
5. Press **Tab** until **Number of Ports** is highlighted.
6. Enter the number of ports you added.

Note: You program the Voice Mail based on port position rather than the number of ports. For example, if you have a 2-Port Card and you are adding a 4-Port Card in the second position, you must enter 8 ports in this step. Ports 3 and 4 will then have to be removed (see *Removing Ports from Service*).

7. Press the down arrow on your keyboard until **Ports** is highlighted, and press **Enter**.
8. When you see the prompt **Install the Number of Ports Shown Above? [Y/N]**, press **Y**.
9. Verify that the screen indicates the installation of your Voice mail ports is complete, and press any key to continue.
10. Press **Esc** until you have returned to the **Main Menu**.

Removing Ports from Service

To remove the Voice Mail ports from service:

Note: Instructions assume you are in the **Full Screen Editor** mode.

1. From the **Main Menu**, select **Maintenance**, and press **Enter**.
2. If requested, type the system password (default is CTL), and press **Enter**.
3. From the **Maintenance Menu**, press **Tab** until **Port In/Out of Service** is highlighted, and press **Enter**.
4. From the previous example, press **Tab** until port 3 is highlighted, press **N**, and press **Enter**.
5. From the previous example, press **Tab** until port 4 is highlighted, press **N**, and press **Enter**.
6. Press **Esc** until you have returned to the **Main Menu**.

Required Programming for the Voice Mail Ports (cont'd)

Customizing the Ports

You can now customize each of the newly installed ports. One of these options is assigning extension numbers to the ports.

To customize each port:

Note: Instructions assume you are in the **Full Screen Editor** mode.

1. From the **Main Menu**, select **Customize**, and press **Enter**.
2. If requested, type the system password (default is CTL), and press **Enter**.
3. From the **Customize Database Menu**, select **Port Options**, and press **Enter**.
4. From the **Port Selection Menu**, enter the **Starting Port** number.
5. Press **Tab** and enter the **Ending Port** number.
6. Press **Tab**, make sure **OK** is highlighted, and press **Enter**.
7. From the **Port Options Menu**, setup each option for the newly installed port. For additional information, refer to the **NVM-2000 System Guide** (P/N 17500INS05 or higher).

Note: For each of the following options, pressing **F5** (Previous) or **F6** (Next) will enable you to scroll through the list of newly installed ports and enter the appropriate information for each port.

8. For **In Service**:
 - If entry is **Y**, press **Enter**.
 - If not, press **Y**, and press **Enter**.
9. For **Allow Lamp Callouts**:
 - If the port should be used to update **Message Waiting** lamps, press **Y**, and press **Enter**.
 - If not, entry should be **N** (default), and press **Enter**.
10. For **Allow Notification/Wake-Up Callouts**:
 - If the port should be used for **Notification/Callouts**, press **Y**, and press **Enter**.
 - If not, entry should be **N** (default), and press **Enter**.
11. For **Tenant**:
 - Enter the tenant number (1-4, N) that should be assigned to the port, and press **Enter**.
12. For **Extension**:
 - Enter the number of the phone system extension that is physically connected to the port, and press **Enter**.

Note: To verify that you have entered the correct extension number, connect a 2500 set to the port and call a display phone. The called phone should display the extension number that was entered.

13. For **Answering Schedule Table**:
 - Enter the number of the **Answering Schedule Table** (1-16, N) that should be assigned to the port, and press **Enter**.
14. For **Status Monitor**:
 - If the port will be used as a **Status Monitor**, press **Y**, and press **Enter**.
 - If not, entry should be **N** (default), and press **Enter**.

Required Programming for the Voice Mail Ports (cont'd)

15. For **Self Test**:

- If you wish to perform a **Self Test** on the port, press **Y**, and press **Enter**.
- If not, entry should be **N** (default), and press **Enter**.

Note: After you perform a **Self Test** on a port, it is recommended that you disable the **Self Test** option.

- To disable the **Self Test** option, press **N**, and press **Enter**.

16. For **Clear Port's Failure**:

Note: This option should only be enabled (**Y**) if there has been a port failure.

- To clear a port failure, press **Y**, and press **Enter**.
- After the port failure has been cleared, press **N**, and press **Enter**.

Note: As a precaution to avoid losing important customized port data, backing up the System Database is recommended. See *Locally Backing Up the Voice Mail Database* on page 2.

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