AT&T

AUDIX™ Voice Power Lodging R1.1 Installation

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Contents

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LIST OF FIGURES

LIST OF TABLES

About This Document

AUDIX™ Voice Power Lodging R1.1 Installation (585-310-106) describes the AUDIX Voice Power Lodging (AUDIX VPL) configurations (AUDIX VPL only and coresident with other packages) and procedures for installing the hardware and software.

INTENDED AUDIENCES

This document is primarily for AT&T tier 1 technicians, Software Specialists (SS), Software Associates (SA), and other persons (such as, factory Assembly, Load and Test personnel and the AUDIX VPL administrator) responsible for installing hardware and software and performing initial administration and cut-to-service procedures. This document also contains information for tier 4, and the technical support center (TSC).

PREREQUISITE SKILLS AND KNOWLEDGE

Although the information in this document assumes no prerequisite training, it will be easier for persons with formal AUDIX Voice Power Lodging installation training.

ORGANIZATION OF THIS DOCUMENT

This document is organized as follows:

- Chapter 1, *Prerequisites,* identifies site requirements, required tools, safety considerations, AT&T factory Assembly, Load and Teat (ALT) procedures, and supported configurations.

- Chapter 2, *Hardware Installation,* describes the tasks for installing the hardware for AUDIX VPL R1.1 and any coresident applications. It also identifies the configurations each task applies to.

Ž Chapter 3, *Software lnstallation,* describes the tasks for installing the software for AUDIX VPL R1. 1 and any coresident applications. It also identifies the configurations each task applies to.

• Chapter 4, *Switch Administration,* is a place holder for the switch administration tasks. This chapter does not describe the switch tasks but identifies the point at which they should be performed. The switch tasks are detailed in the switch document which is part of your AUDIX VPL documentation set.

• Chapter 5, *Initial Administration,* describes the tasks for initial administration. for AUDIX VPL R1.1.

• Chapter 6, *Acceptance Tests,* describes the tasks for varifying the AUDIX VPL installation and operation of the system.

Ž Chapter *7, Cut-to-Service,* describes the tasks for cutting the system into service. It includes procedures for systems integrated with Properly Management Service (PMS) and those that are not integrated with PMS.

Ž Appendix A, *Upgrades,* describes the tasks to upgrade an AUDIX VPL system from R1.O to R1.1.

Ž Appendix B, *Adding a Second Disk* describes how to install and setup a second disk.

Ž Appendix **C,** *IPC-900 Pinouts,* identifies the pinouts for IPC-900 and COM2 connectors for PMS integrations.

Ž Appendix D, *Troubleshooting,* provides troubleshooting procedures for certain installation problems.

• Appendix E, *Price Element Codes,* contains a list of the price element codes (PECs) for AUDIX VPL and coresident hardware and software, including a description of the contents of each PEC.

A list of abbreviations and an index are also included in this document.

HOW TO USE THIS DOCUMENT

Tier 1 technicians, and SS/SAs should reference the tasks within the entire document, including the appendixes. (If someone other than the tier 1 technician will be installing and preadministering the software, the tier 1 technician can skip Chapters 4 and 5).

Others responsible for installing and administering the AUDIX VPL R1.1 software and associated packages should read Chapters 1, 3, 4, 5, 6, and 7. They should also read Appendix A if this is a system upgrade.

Tier 4, TSC, and factory ALT personnel should read the entire document for an overview of the AUDIX VPL R1.1 installation and upgrade procedures.

CONVENTIONS USED IN THIS DOCUMENT

The following typographic conventions are used in this document:

Ž Terminal keys that you press are shown in rounded boxes. For example, an instruction to press the enter, carriage return, or equivalent key is shown in this document as:

> Press **ENTER**

• The word *enter* means to type a value and press **ENTER.** For example, an instruction to type y and press **ENTER** is shown in this document as:

> Enter y to continue.

• Two or three keys that you press at the same time (that is, you hold down the first key while pressing the second key and, if appropriate, the third key as well) are shown together in a rounded box and are seperated by hyphens. For example, an instruction to press and hold **ALT** while typing the letter *d* is shown in this document as:

> Press **ALT-d**

Ž Information that is displayed on your terminal screen — including screen displays, field names, prompts, and error messages — is shown in typewriter-style constant-width type. Information that you enter from your keyboard is shown in bold type. Here is an example:

> At the Login ID? prompt, enter **audix**

• Variables that the system supplies or that you must supply are shown in italic type. For example, an error message that is displayed on the screen with one of your specific filenames might be shown generically in this document as:

> Your file *filename* is formatted incorrectly.

• The word *select* is used in this document to mean the following: move to the desired menu item using the arrow keys and press **ENTER.**

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• UNIX® is a registered trademark of UNIX System Laboratories, Inc.

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RELATED RESOURCES

This section lists all resources related to AUDIX VPL R1.1 and its use.

- For a complete list of all the tasks required to install upgrade to AUDIX VPL R1.1, see *Installer's Checklist* (585-310-126).

- For complete details *on* administering AUDIX VPL R1.1, see *AUDIX Voice Power Lodging Administration   (585-310525).*

- Ž For hardware, software, switch administration and planning procedures that are specific to the switch that the AUDIX VPL R1.1 system is integrated see the AUDIX Voice Power Lodging R1.1 switch interface document for the various switches supported by AUDIX VPL.

- Ž For complete details on AUDIX VP R2.1.1, see the AUDIX Voice Power R2.1.1 documentation set.

- Ž For complete details on IVPAA R2.1, see the Integrated Voice Power Automated Attendant R2.1.1 documentation set.

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1. Prerequisites

This chapter describes prerequisites to installing AUDIX Voice Power Lodging R1.1. These include

1. Verifying the selected site
2. Gathering required tools
3. Reviewing safety considerations
4. Identifying preassembled (or ALT) systems
5. Determining your configuration

Before beginning the installation, make sure you have completed these prerequisites.

TASK 1: VERIFYING THE SELECTED SITE

Verify that the site selected for the AUDIX VPL R1.1 equipment provides the following

- Easy access for cabling
- Good workspace for the system administrator and attendants
- A grounded, nonswitched outlet providing 115 VAC, 50-60 Hz, and 220W to be used exclusively by the AUDIX VPL work group station (WGS)

  In areas with volatile power (brown-outs or frequent power surges), surge protection and power backup should also be provided.
- Temperature range of 50 to 100° F (10 to 38° C)
- Humidity range of 20 to 80%, noncondensing

In addition, make sure the site is secure and provides protection from excessive sunlight, heat, cold, chemicals, static electricity, magnetic fields, vibration, and grime.

TASK 2: GATHERING REQUIRED TOOLS

To install the AUDIX VPL R1.1 hardware, you must have the following tools:

- No. 1 or no. 2 phillips screwdriver
- Medium width, flat blade screwdriver
- 3/16-inch nut driver (recommended)
- Antistatic grounded wrist strap
- Antistatic grounded work mat

TASK 3: REVIEWING SAFETY CONSIDERATIONS

 Elecronic equipment can be damaged by electrostatic discharge. Do not touch any electronic component unless you are properly grounded.

To prevent damage to the equipment and yourself, do to the following

- Make sure you are familiar with the procedures necessary to prevent electrostatic damage to equipment.

- Shut off all power and remove all cables from equipment.

Ž Properly ground a work mat and wrist strap.

Ž Place the equipment on the work mat.

- Place the grounded wrist strap on your bare wrist. (Your wrist strap must contact your bare skin directly-do not wear it over your clothes.)

TASK 4: IDENTIFYING PREASSEMBLED SYSTEMS

If your customer ordered the complete hardware platform (an AT&T 6386 WGS) with the AUDIX VPL R1.1 package (and any coresident packages), the AT&T factory ships the 6386 WGS to the site with much of the hardware and software already assembled, loaded, and tested (ALT). The factory identifies ALT systems by placing an orange sticker over the door of the floppy disk drive. This sticker is to indicate to you that you do not need to reload the software.

Before beginning the installation, look for this sticker. If it is present, skip the corresponding hardware and software installation tasks. However, you need to perform the tasks that were not completed during ALT (for example, connecting the voice and data lines, setting up and cabling the peripherals, and installing switch communication software). See the *AUDIX VPL R1.1 Installer's Checklist* (585-310 126) for those tasks.

TASK 5: DETERMINING YOUR CONFIGURATION

The following is a list of the AUDIX VPL configurations.

 Ž Conjuration 1: AUDIX VPL R1.1 only

 • Configuration 2: Configuration 1 with PMS

 • Configuration 3: AUDIX VPL R1.1 coresident with AUDIX Voice Power (AUDIX VP) R2.1.1

 • Configuration 4: Configuration 3 with PMS

 • Configuration 5: AUDIX VPL R 1.1 coresident with Integrated Voice Power Automated Attendant (IVPAA) R2.1.l

 • Configuration 6: Configuration 5 with PMS

Determine which of these configurations you will be installing, then refer to the *Prerequisites* chapter, in the switch document in the AUDIX VPL documentation set to find the corresponding connectivity diagram and components checklist. Use the connectivity diagram for your configuration to understand how the system is connected, Use the components checklist to make sure you have all the required components.

2. Hardware Installation

This chapter describes the tasks installing the AUDIX VPL R1.1 hardware, as well as hardware for any coresident applications.

Although all possible hardware installation tasks are listed in this chapter, do only those tasks required for the configuration you are installing (each task identifies the configurations for which it is required) and that have not already been completed by ALT.

The hardware installation tasks include

- Removing the WGS cover (all configurations)

- Installing additional memory (all configurations with fewer than 8 Mbytes)

Ž Installing RAM and COM2 jumpers on the mother board (the RAM jumper is required on the 6386/25 and 6386/33 if you have added memory; the COM2 jumper is required when you install a DCP card for configurations 3 and 4)

- Replacing the air deflector and disk cables (if removed to access the mother board)

- Installing the VDC600 card (not required on 6386/SX WGS)

- Configuring and installing the IVP4 cards (all configurations)

- Configuring and installing the IPC-900 card (required for configuration 4, optional for configurations 2 and 6, or for additional I/O ports)

- Connecting the AUDIX VPL WGS to the switch

- Connecting voice lines between the IVP4 cards and the connector block (all configurations)

Ž Connecting the peripherals (required for monitor, keyboard and modem; optional for printer and additional terminals)

- Connecting to PMS (required for configurations 2,4, and 6)

- Running the power-on self test (all configurations)

- Running the setup utility (all configurations)

ALT SYSTEMS

For new systems shipped from the AT&T factory, some hardware installation tasks may have been completed in the ALT process (identified by an orange sticker placed over the door of the floppy disk drive). If you have an ALT system, remove the WGS cover (task 1) and verify the installed hardware. Then, skip to the *Replace the Cover* task in the *Hardware Installation* chapter of the switch document supplied with the AUDIX VPL documentation set for further instructions.

TASK 1: REMOVING THE WGS COVER

This task is requried for all configurations and varies from model to model. The proceudre for each supported WGS is described in the following subsections. Find and follow the procedure for the model you have.

On a 6386/SX WGS

1. Loosen the three screws securing the main cover on the back panel (as shown in Figure 2-l).

2. Slide the cover off the WGS by pulling it forward until it clears the back half of the chassis. Then tilt it up and remove it. Take care not to catch the cover on any internal cables or wires.

   Slot numbers are referenced throughout this document. Slot numbers are stamped on the back of the the 6386/SX WGS chassis just above the long rectangular card identification holes.

3. Continue with task 2, *Installing Additonal Memory.*

On a 6386/25 WGS

1. Loosen the five screws securing the main cover (as shown in Figure 2-1) on the back panel.

2. Slide the cover off the WGS by pulling it forward until it clears the back half of the chassis. Then tilt it up and remove it. Take care not to catch the cover on any internal cables or wires.

   Slot numbers are referenced throughout this document Slot numbers are stamped on the back of the the 6386/25 WGS chassis just below the long rectangular card identification holes.

3. Continue with task 2, *Installing Additional Memory.*

On a 6386/33 WGS

1. Remove the top cover (or media access door as shown in Figure 2-1) by lifting it from the rear.

2. Loosen the cover retaining screw on the bottom front.

3. Slide the cover off the chassis by pulling it forward.

4. Remove the retaining screws from the expansion slot cover.

5. Slide the expansion slot cover forward and away from the chassis.

6. If you will be installing additional memory, disconnect all cables that cover the air deflector, then remove the air deflector by gently pulling it outward to release it from the chassis.

   Slot numbers are referenced throughout this document. Slot numbers are stamped on the top of the the 6386/33 WGS chassis just below the long rectangular card identification holes.

7. Continue with task 2, *Installing Additional Memory.*

6386/SX

COVER SCREWS

6386/25

COVER SREWS

6386/33

MEDIA ACCESS DOOR

EXPANSION
SLOT COVER
SCREWS

COVER SCREW

EXPANSION
SLOT COVER
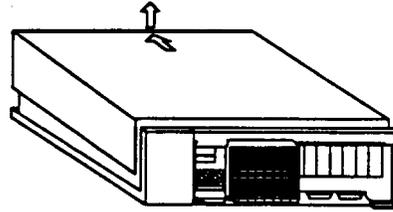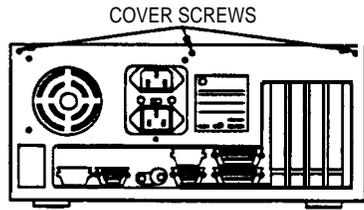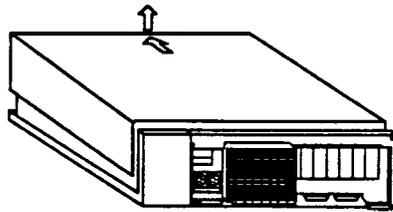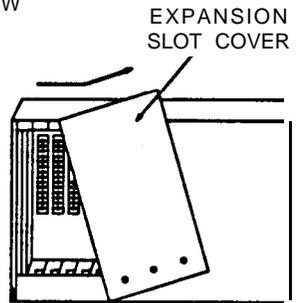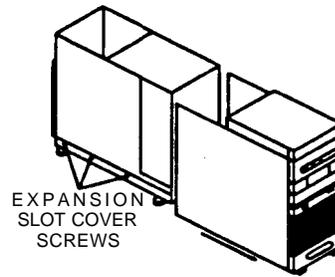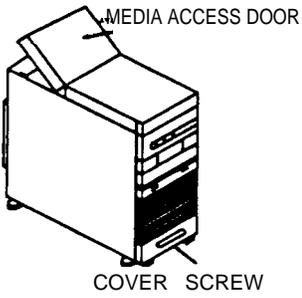
Figure 2-1. Removing the Cover

TASK 2: INSTALLING ADDITIONAL MEMORY

This task is required on all configurations with fewer than 8 Mbytes of RAM. Check your parts list. If memory kits for the additional memory are included, perform the following steps. Otherwise, skip to the next task required for your configuration.

1. Locate the empty single in-line memory module (SIMM) sockets on the WGS mother board.

   The location differs for each WGS model; see the figure corresponding to your WGS model for the SIMM socket location.

   NOTE   There are two different versions of the 6386/25 mother board. Compare your mother board to Figures 2-3 and 2-4 to determine which version you have.
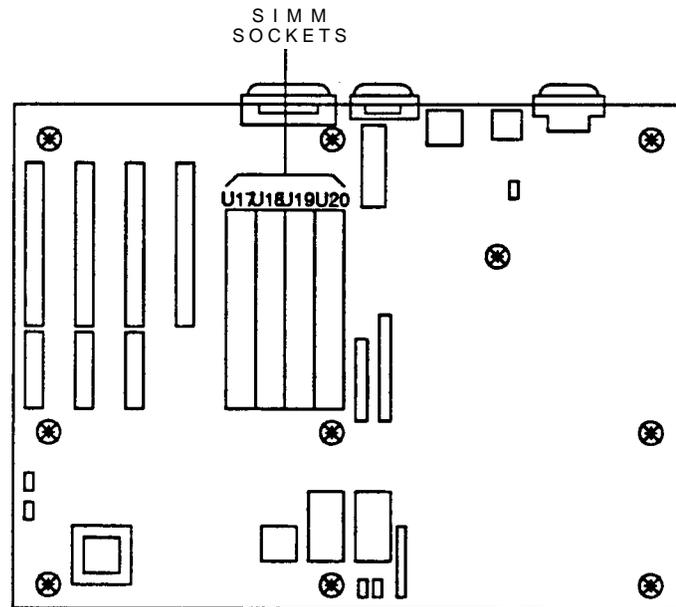
Figure 2-2. 6386/SX SIMM Socket Locations
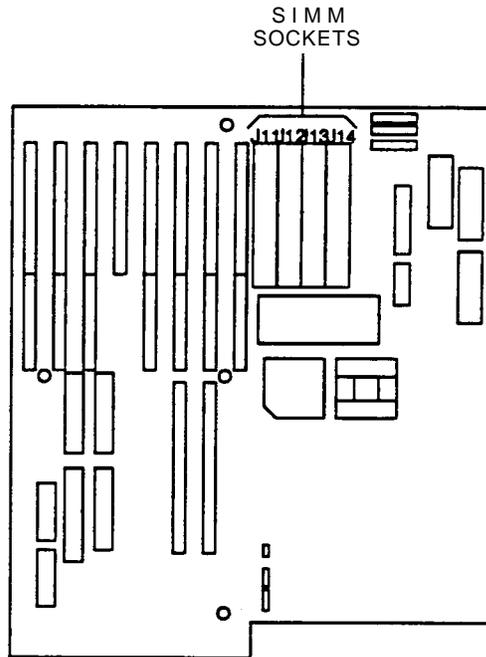
Figure 2-3. 6386/25 Version 1 SIMM Socket Locations
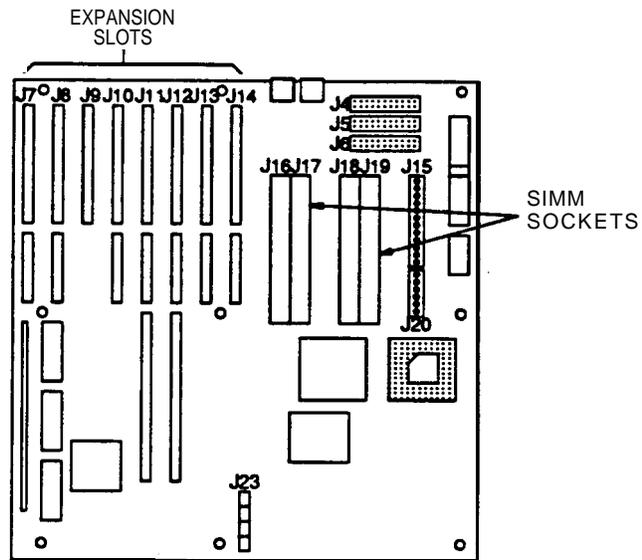
Figure 2-4. 6386/25 Version 2 SIMM Socket Locations
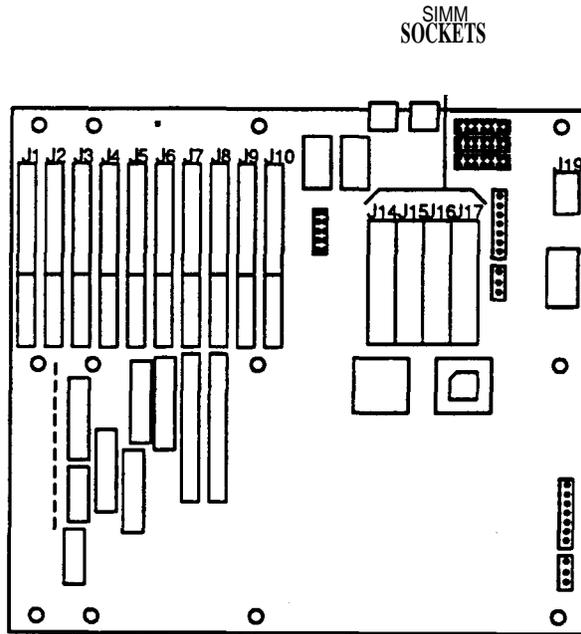
SIMM
SOCKETS

Figure 2-S. 6386/33 SIMM Socket Locations

2. If necessary, remove the cables connected to the hard drive and floppy drive, and fold them out of the way (near the disk controller circuit card) to gain access to the SIMM sockets.

3. Using Figure 2-6 as a guide, insert the SIMMs into empty sockets as follows:
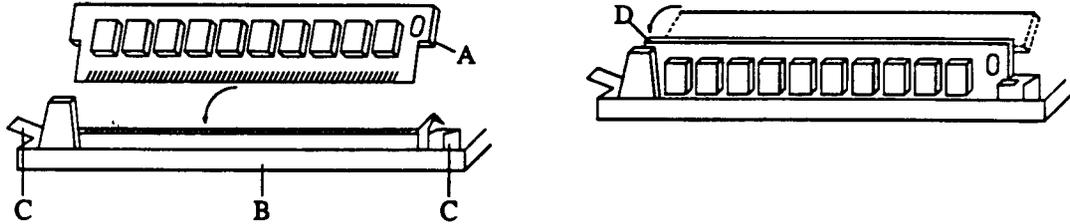
Figure 2-6. Inserting the SIMMs into Sockets

a. Holding the SIMM only by the edges (A) as shown in Figure 2-6, align the first SIMM with the leftmost slot of the first socket (B).

Each socket has two slots, left and right. Always insert the first SIMM in the left slot and the second SIMM in the right slot of each socket.

b. Insert the contact edge into the Socket first (the chips should be on the left side of the SIMM) and, holding the SIMM at an angle (as shown in Figure 2-6), press down firmly until you feel the SIMM seat in the socket (you will feel only a slight difference when the SIMM seats).

Use extreme care when inserting the SIMMs. You can easily break the plastic retaining clips (C) by using too much force.

If you do not think the SIMM is seated correctly, gently spread the retaining clips just enough to pull the top edge of the SIMM away from the clips. Then reseat the SIMM.

c. When the SIMM is seated, gently push the top edge of the SIMM into a vertical position (toward the top edge of the slot retaining clips) until it snaps into place (D).

d. Repeat steps a through c to insert the second SIMM into the right slot of the same socket.

e. Repeat steps a through d for the remaining SIMMS, if applicable.

4. Choose one of the following.

* If you have either a 6386/25 or 6386/33 WGS, continue with task 3, *Installing Jumpers on the Mother board.*

* If you have a 6386/SX WGS, continue with task 4, *Replacing the Air Deflector and Disk Cables* (if you removed either of them), a task 6, *Configuring and Installing IVP4 Cards* (neither task 3 nor task 5 are required for the 6386/SX WGS).

TASK 3: INSTALLING JUMPERS ON THE MOTHER BOARD

There are two parts to this task.

 A. Installing/moving the total on board RAM jumper to indicate 8 Mbytes (required only if you added memory)

 B. Moving the COM2 (second serial port) jumper to disable COM2 (required only if you are installing a DCP card)

Refer to Figures 2-7,2-8, and 2-9 for the jumper locations on the 6386/25 version 1, 6386/25 version 2, and 6386/33, respectively. Then follow the steps for your WGS model.
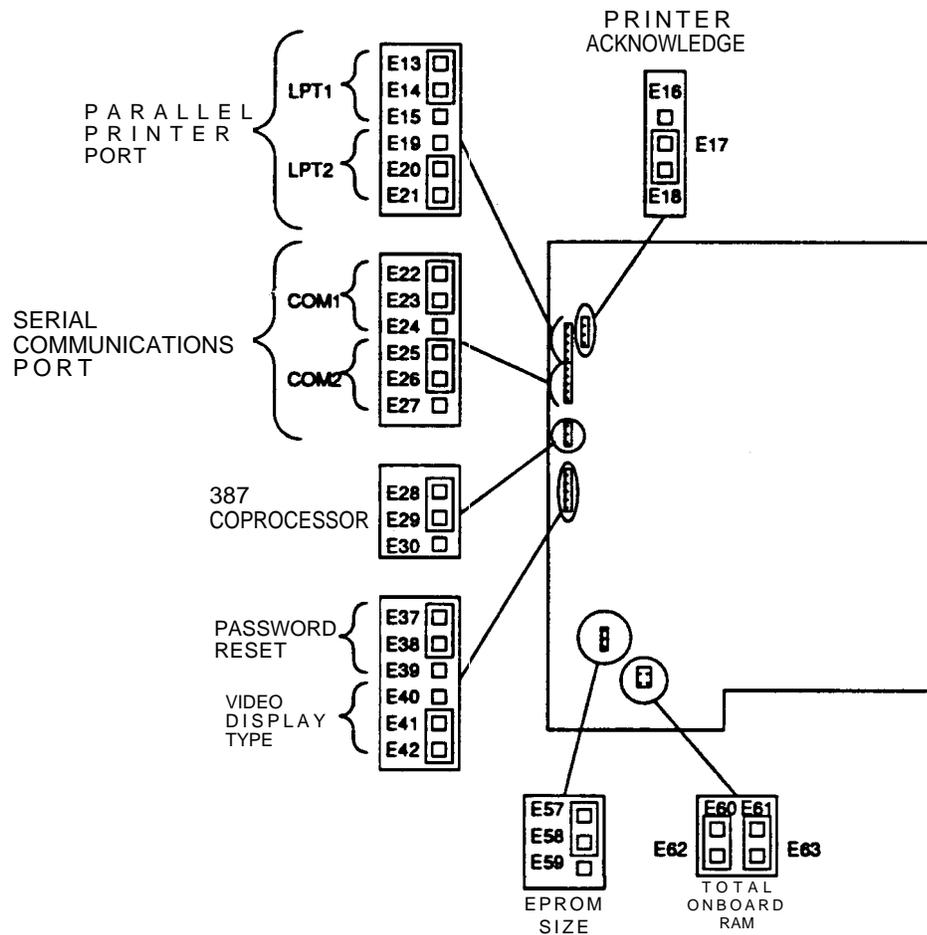
Figure 2-7. 6386/25 Version 1 Mother board Jumper Location and Settings
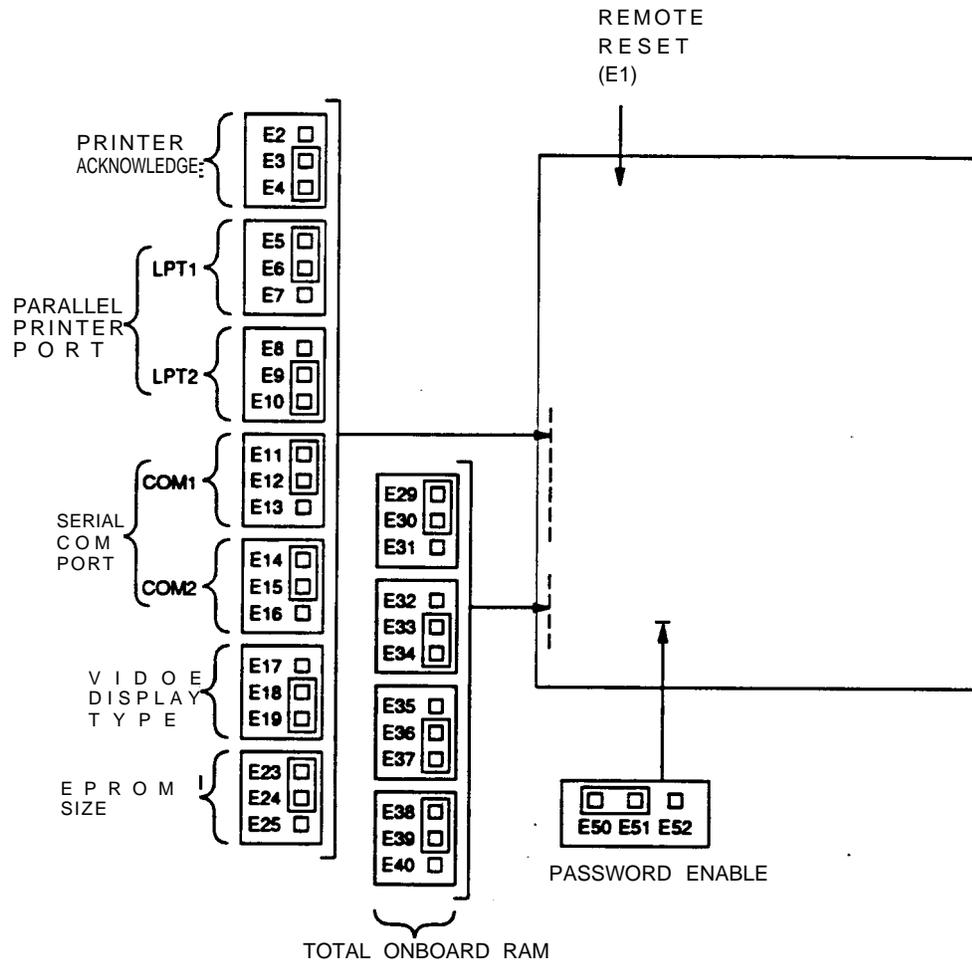
Figure 2-8. 6386/25 Version 2 Mother board Jumper Location and Settings
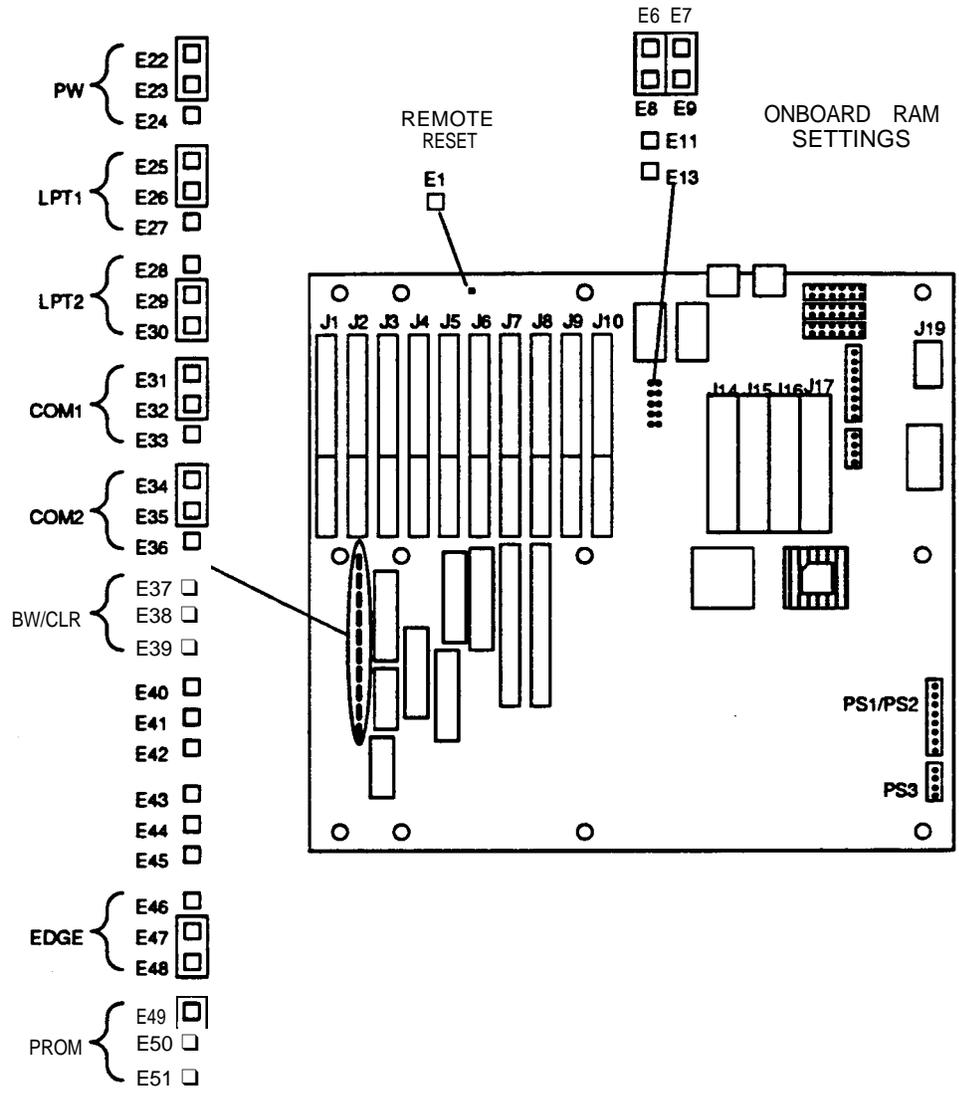
Figure 2-9. 6386/33 Mother board Jumper Location and Settings

Task 3A: Installing/Moving the Total Onboard RAM Jumper

This task is required only if you added memory.

On a 6386/25 Version 1 WGS

1. Leave the jumper on pins E60 and E62 in place.

2. Place a jumper on pins E61 and E63. (Spare jumpers are packed in the plastic bag with the power cord.)

3. Continue with task 3B.

On a 6386/25 Version 2 WGS

1. Leave the jumpers on the following pins in place:

    l E29 and E30

    l E36 and E37

    l E38 and E39

2. Move the jumper from pins E33 and E34 to pins E32 and E33.

3. Continue with task 3B.

On a 6366/33 WGS

1. Leave the jumper on pins E6 and E8

2. Move the jumper from pins Ell and E13 and place it on pins E7 and E9.

3. Continue with task 3B.

Task 3B: Moving the COM2 Jumper to Disable Second Serial Port

This task is required only if you are installing a DCP card.

On a 6386/25 Version 1 WGS

Move the jumper from pins E25 and E26 and place it on pins E26 and E27.

On a 6386/25 Version 2 WGS

Move the jumper from pins E14 and E15 and place it on pins E15 and E16.

On a 6386/33 WGS

Move the jumper from pins E34 and E35 and place it on pins E35 and E36.

Continue with task 4, *Replacing Air Deflector and Disk Cables* (if you have removed either of them) or task 5, *Installing the VDC600 Card.*

TASK 4: REPLACING AIR DEFLECTOR AND DISK CABLES

This task is required only if you removed either the air deflector or disk cables when installing additional memory.

1. Slide the air deflector in to place.

2. Connect the hard disk data cable (the wide gray cable with two connectors — one on the end and one a few inches from the end) to the disk I/O controller board.

    Attach either the end-cable or midcable connector (whichever reaches between the controller and drive better) to the matching connector on the disk I/O controller board. Make sure there are no twists in the cable between the controller and the drive. Otherwise, the disk will not be recognized when you reboot the system.

3. Connect the hard disk control cable (the narrow gray cable) to the hard disk.

    Attach the end connector on this cable to the marching connecter on the hard disk.

4. Connect the floppy control and data cable (another two-comnnector wide gray cable that is connected near the bottom of the disk controller) to the floppy drive.

    Attach the end connector (not the midconnector) to the matching connector on the floppy disk drive.

5. Route and fold the cables so that they are not in the way when you replace the WGS cover.

6. If you are installing a 6386/SX WGS, continue with task 6, *Configuring and installing the IVP4 Cards.* Otherwise, continue with task 5, *Installing the VDC600 Card.*

TASK 5: INSTALLING THE VDC600 CARD

This task is required for all configurations using either a 6386/25 or 6386/33 WGS (it is not required on the 6386/SX).

For additional information, see the *Video Display Controller Installation Guide packed with the card.*

1. Check the settings on the DIP switch and jumpers on the VDC600. They should be set as shown in Figure 2-10.
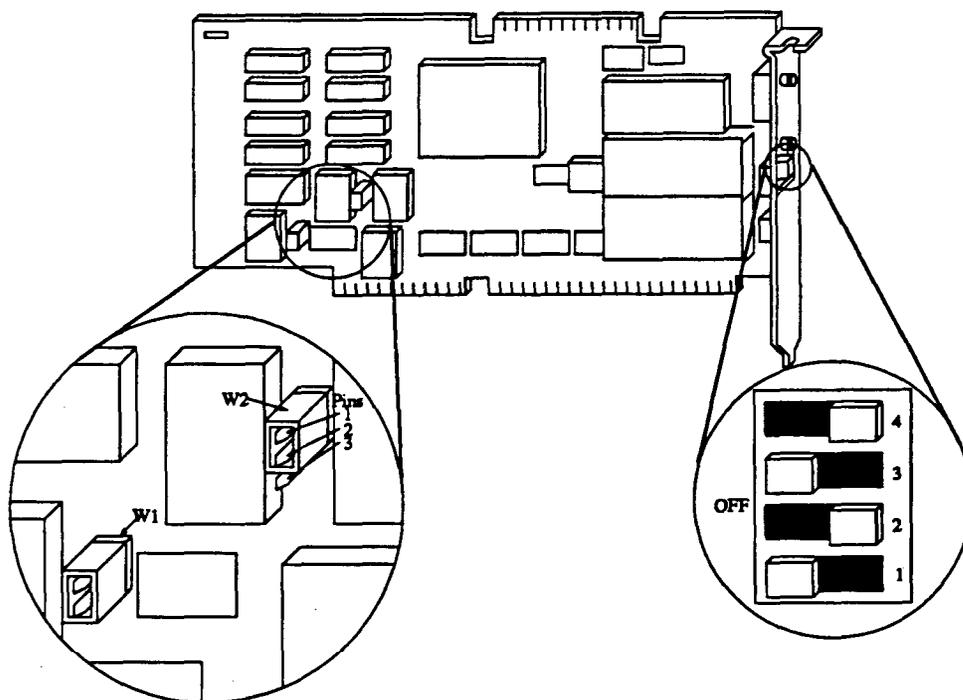
Figure 2-10. VDC600 Switch and Jumper Locations and Settings

2. Install the VDC600 card in an open 16-bit expansion slot as far to the left (or to the rear on floor models) as possible

    a. Remove the screw from the metal cover of the expansion slot that you selected (Figure 2-11). Lift out the metal cover. Set the screw aside.
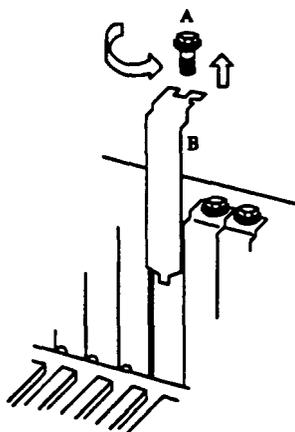
Figure 2-11. Removing Expansion Slot Cover

b. Hold the VDC600 card by each end and insert it into the expansion slot (Figure 2-12).

If your system has pressure tabs (to help hold the expansion boards), gently push down on these tabs as you slide thc board into the slot.
Make sure the connector on the VDC600 card is aligned wiht the expansion slot socket.
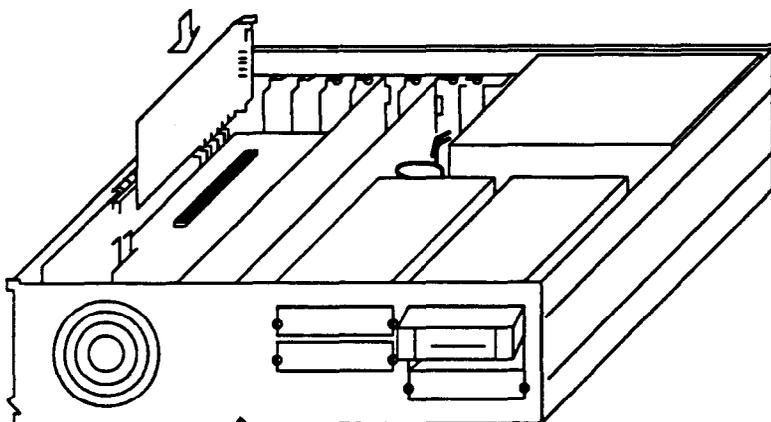
Figure 2-12. Inserting Card into Expansion Slot on a 6386/25

c. Press firmly along the top (or front) edge of the VDC600 card until it locks into place and is flush with the frame of the WGS.

d. Make sure that the card is properly aligned in the slot

e. Secure the VDC600 card in the slot with the screw from the metal expansion slot cover.

3. Continue with task 6, *Configuring and Installing IVP4 Cards.*

TASK 6: CONFIGURING AND INSTALLING IVP4 CARDS

This task is required for all configurations.

The AUDIX VPL R1.1 system installed on either a 6386/SX or 6386/33 WGS can support up to 6 IVP4 cards. Because of power consumption, on a 6386/25 WGS, the AUDIX VPL R1.1 system can only support up to 3 IVP4 cards. In this procedure the IVP4 cards are called card 0 through card5 (to correspond with the messages in Chapter 3, task 13, *Confirming IVP4 Card Recognition).*

Before you install the IVP4 cards you must set the termination impedance and I/O address switches (SW1.1 and SW12.1, respectively) on each IVP4 card. The location of the switchcs is shown in Figure 2-13.
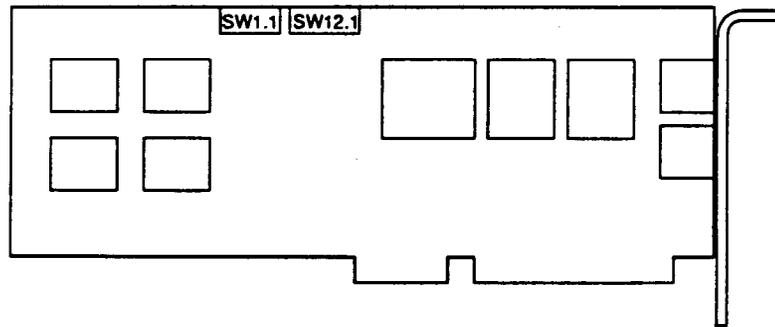
Figure 2-13. IVP4 Card Switch Locations

IVP4 cards have one of three types switches. Slide style A has slide switches whose OPEN setting is at the top of the switch. Rocker style B has rocker switches whose OPEN setting is at the bottom of the switch. Slide style B has slide switches whose OPEN setting is at the bottom of the switch. To determine which type of switch an IVP4 board has, compare its default (factory settings) with Figure 2-14; SW1.1 default settings are in the left column and SW12.1 default settings are in the right column.
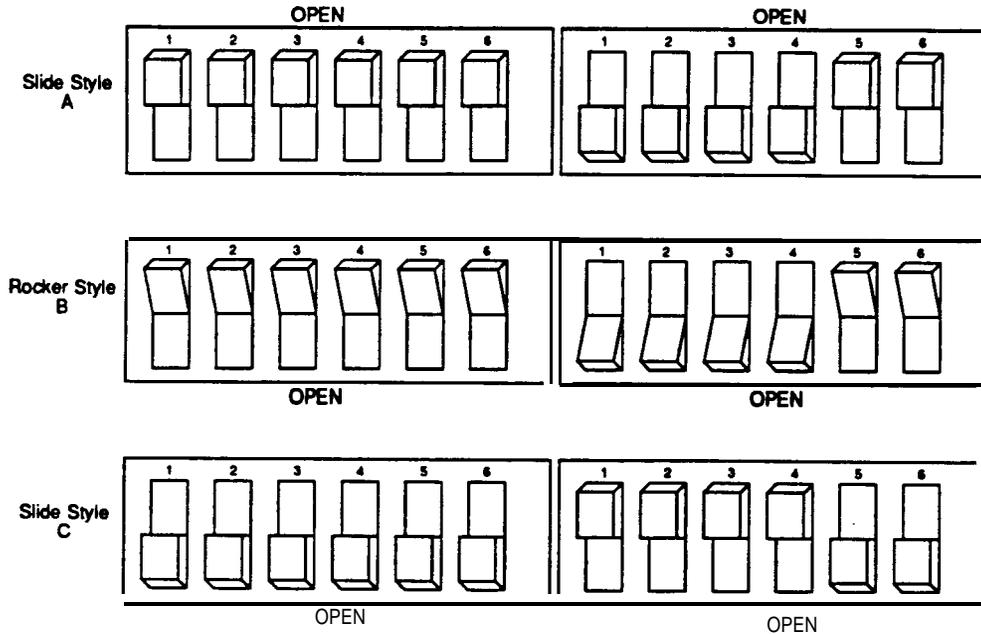
Figure 2-14. Default IPV4 SW1.1 and SW12.1 Settings

Task 6A: Setting SW1.1 and SW12.1

This task is required for all configurations.

1. Leave the switches of SW1.1 in the factory default position (OPEN).

2. Set SW12.1 using Table 2-1 and Figure 2-15.

TABLE 2-1. IVP4 SW12.1 Settings

IVP4 Card #	SW12.1 Settings					
	1	2	3	4	5	6
0*	CLOSED	CLOSED	CLOSED	CLOSED	OPEN	OPEN
1	OPEN	CLOSED	CLOSED	CLOSED	OPEN	OPEN
2	CLOSED	OPEN	CLOSED	CLOSED	OPEN	OPEN
3	OPEN	OPEN	CLOSED	CLOSED	OPEN	OPEN
4	CLOSED	CLOSED	OPEN	CLOSED	OPEN	OPEN
5	OPEN	CLOSED	OPEN	CLOSED	OPEN	OPEN

This is the default address that is set at the factory.
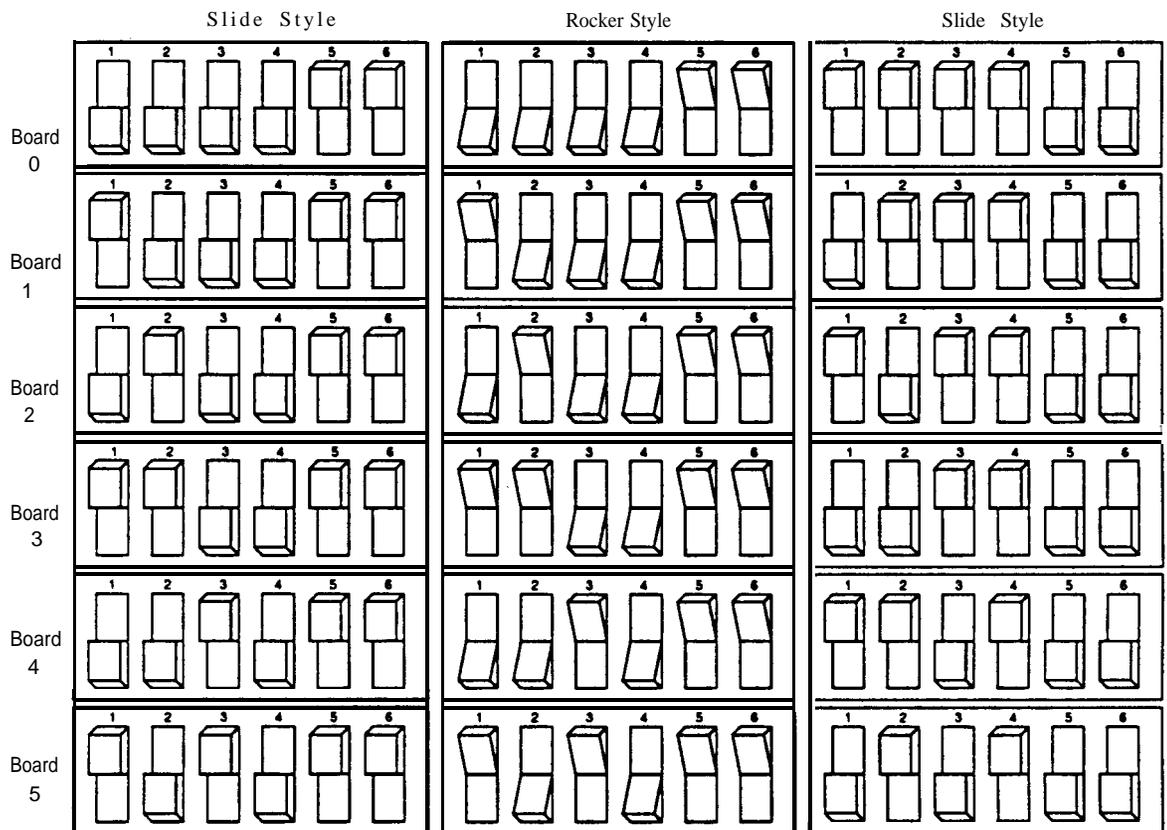
Figure 2-15. IVP4 SW12.1 Settings

3. On the Installation Worksheet that is a part of the AUDIX VPL R1.1 Installer's Checklist, record
    the board type (IVP4). Also, after you have verified or set the SW1.1 and SW12.1 switch
    positions, make a check mark in the SW1.1 and SW12.1 blanks. Make sure you record the
    information on the same line as the slot number in which you will be installing this IVP4 card.

    The form also has a telephone numbers field. You will fill in these numbers where you connect
    the voice lines to the IVP4 cards (see task 8).

4. Repeat this procedure for each IVP4 card.

5. Continue with task 6B.

Task 6B: Installing the IVP4 Cards

This task is required for all configurations.

1. Install each of the IVP4 boards in an 8-bit expansion slot, as follows. (The IVP4 board can be installed in a 16- or 32-bit slot, but using an 8-bit slot may prevent reconfiguration problems in future installations.)

   a. Remove the screw from the metal cover of the expansion slot that you selected Lift out the metal cover. Set the screw aside. See Figure 2-11 for an illustration of this step.

      Make sure the slot number you select matches the slot number you entered on the *Installation Worksheet* (see step 3 in task 6A).

   b. Hold the IVP4 card by each end and insert it into the expansion slot. See Figure 2-12 for an illustration of this step.

      If your system has pressure tabs (to help hold the expansion boards), gently push down on these tabs as you slide the board into the slot.

      Make sure the connector on the IVP4 card is aligned with the expansion slot socket. Also, make sure the back edge of the board fits into the plastic guide (or card support bracket).

   c. Press firmly along the top (or front) edge of the IVP4 card until it locks into place and is flush with the frame of the PC.

   d. Make sure that the card is properly aligned in the slot.

   e. Secure the IVP4 card in the slot with the screw from the metal expansion slot cover.

2. Repeat steps a through e for each IVP4 card.

3. If you are installing an IPC-900 card, continue with task 7, *Configuring and Installing the IPC-900 Card.* Otherwise, continue with *Switch Tasks* on connecting AUDIX VPL WGS to the switch.

TASK 7: CONFIGURING AND INSTALLING IPC-900 CARD

This task is optional for configurations 2, 4, and 6, as well as for additional I/O devices.

Before installing the IPC-900 card, you must set the following

 l Input/output (I/O) starting address

 l Controller memory starting address

 l Interrupt request level

Task 7A: Setting the I/0 Starting Address

1. Locate SWITCH1 on the IPC-900 card (see Figure 2-16). This is the I/O address switch.

SWITCH 1   SWITCH 2

Figure 2-16. IPC9OO Switch Location

2. Check the switch setting.

   The factory should have set SWITCH1 to the I/O starting address of 290H (H designates hexadecimal), as follows

SW1 I/O Starting Address Settings								
Address **(in hexadecimal)**	**Switch Segments**							
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
290-29F	ON	OFF	ON	ON	OFF	ON	OFF	ON

3. Continue with task 7B.

Task 7B: Setting the Controller Starting Address

1. Locate SWITCH2 on the IPC-900 card (see Figure 2-16). This is the controller starting address switch.

2. Check the switch setting.

   The factory should have set SWITCH2 to a controller starting address of D0000H (H designates hexadecimal), as follows

SW2 Controller Starting Address Settings								
Address	**Switch Segments**							
(in hexadecimal)	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
D0000-D1FFF	**ON**	**ON**	**ON**	**ON**	**OFF**	**ON**	**OFF**	**OFF**

3. Continue with task 7C.

Task 7C: Setting the Interrupt Request Level Jumper

1. Locate the interrupt request (IRQ) jumpers on the IPC-900 card (see Figure 2-17).

2. Move the jumper from the factory default setting of IRQ3 to IRQ5.
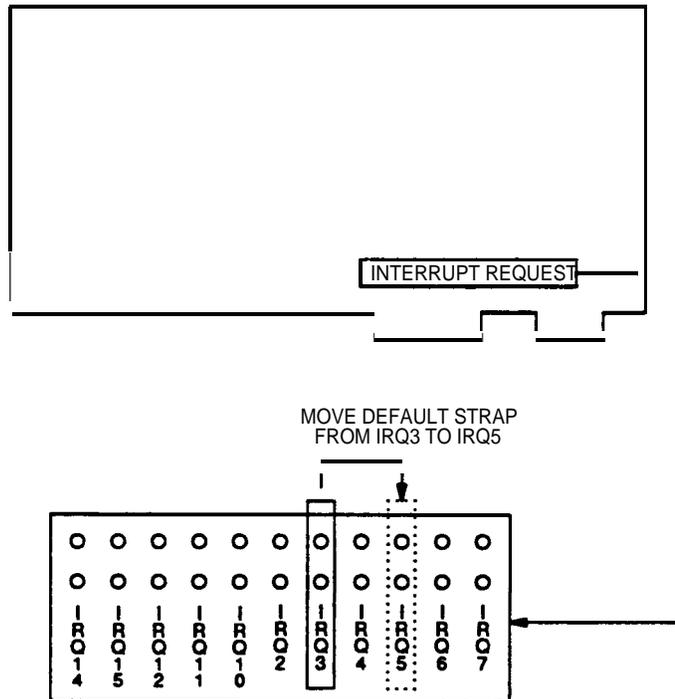
Figure 2-17. IPC-900 Interrupt Request Jumper Location

3. Continue with task 7D.

Task 7D: Installing the IPC-900 Card

Install the IPC900 card in either a 16- or 32-bit expansion slot, as follows.

1. Remove the screw from the metal cover of the expansion slot that you selected. Lift out the metal cover. Set the screw aside. See Figure 2-11 for an illustration of this step.

2. Hold the WC-9(M) card by each end and insert it into the expansion slot. See Figure 2-12 for an illustration of this step.

   If your system has pressure tabs (to help hold the expansion boards), gently push down on these tabs as you slide the board into the slot.

   Make sure the connector on the IPC-900 card is aligned with the expansion slot socket. Also, make sure the back edge of the board fits into the plastic guide (or card support bracket).

3. Press firmly along the top (or front) edge of the IPC-900 card until it leeks into place and is flush with the frame of the PC.

4. Make sure that the card is properly aligned in the slot.

5. Secure the IPC-900 card in the slot with the screw from the metal expansion slot cover.

6. Attach the T-connector (supplied with the IPC-900 card) to the connector on the top of the IPC-900 card.

7. Record the slot number, I/O starting address, controller address and IRQ on the *Installation Worksheet.*

8. Continue with the *Switch Tasks* on the next page.

SWITCH TASKS

These tasks are required for all configurations.

At this point you must connect the AUDIX VPL WGS to the switch. Since this procedure varies from switch to switch, refer to the *Hardware Installation* chapter of the switch document supplied with the AUDIX VPL documentation set for instructions.

TASK 8: CONNECTING VOICE LINES TO IVP4 PORTS

This task is required for all configurations.

This task describes how to cable the voice lines from the IVP4 cards to 103A connect blocks.

Refer to Figure 2-18 when performing this task.

1. Connect one of the D4 cables from the 103A connect block to the RJllC jack labeled LINE A on the 884A adapter.

    If you are connecting only one line to the IVP4 card, connect the line directly to the line jack labeled 1-2 on the IVP4 card, bypassing the 884A adapter. Then skip to step 5.

    > **WARNING**
    >
    > There is a magnet on the back of the 884A adapter. Be sure that you *do not* place it near the hard drive or floppy disks.

2. Connect subsequent D4 cables between the 103A connect blocks and LINES B, C, and D, respectively, on the 884A adapter.

3. Connect one end of the first D8W 4-conductor cord (labeled 1-2 on each end) to the RJ14C jack with the matching label (l-2) on the 884A adapter. Connect the other end to the line jack with the matching label (l-2) on the IVP4 card. (Two of these 4-conduct or cords are included with each IVP4 card.)

4. Connect the second D8W cord (labeled 3-4 on each end) to the matching jacks on both the 884A adapter and the IVP4 card.

5. Record the telephone numbers of the lines connected to the IVP4 cards next to the correct card slot on the *Installation Worksheet.*

6. Continue with task 9, *Connecting the Peripherals.*
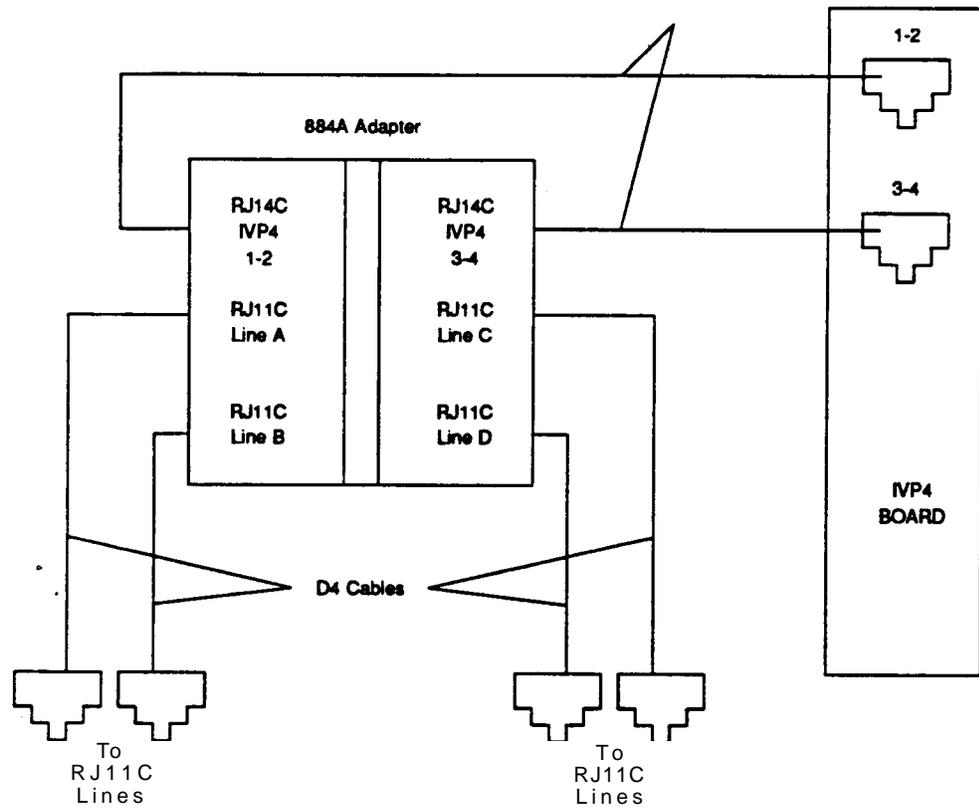
Figure 2-18. Connecting voice Lines to IVP4 card

TASK 9: CONNECTING THE PERIPHERALS

This task is required for all Configurations.

There are three parts to this task:

   9A. Connecting the monitor and keyboard

   9B. Connecting the remote access modem

   9C. Connecting and setting up the printer (optional)

Figures 2-19.2-20. and 2-21 show the connectors on the 6386/SX, 6386/25, end 6386/33 WGS, respectively. " Refer to the appropriate figure when performing these tasks.
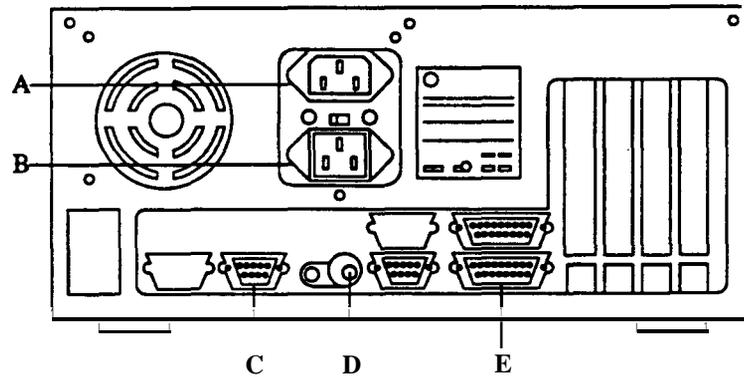
Figure 2-19. 6386/SX WGS Peripheral Connectors
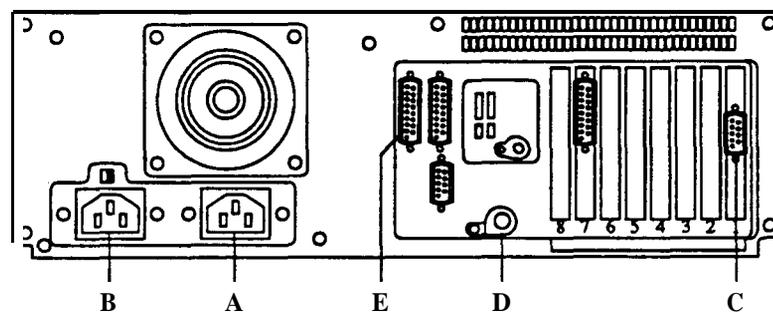
Figure 2-20. 6386/25 WGS Peripheral Connectors
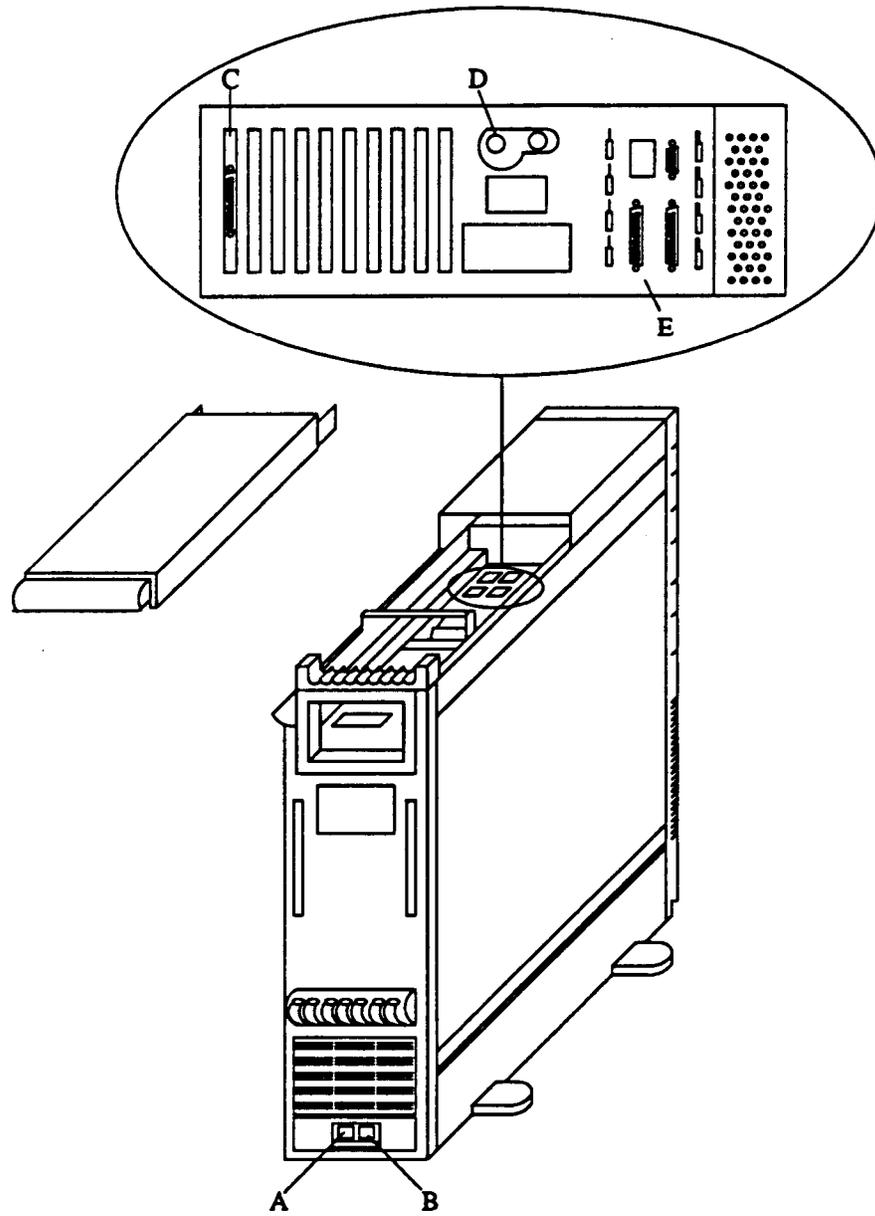
Figure 2-21. 6386/33 WGS Peripheral Connectors

Task 9A: Connecting the Monitor and Keyboard

1. Connect the line cord to the AC power-in socket (A) on the WGS.

2. Connect one end of the video monitor power cord to the video monitor and the other end to the monitor power outlet (B) on the WGS.

3. Connect the video monitor signal cable to the connector (C)on the VDC600 card (in the leftmost expansion slot) on the 6386/33 and 6386/25. On the 6386/SX connect the video monitor cable to the monitor port (C).

4. Connect the keyboard cable to the keyboard interface port (D).

5. Continue with task 9B.

Task 9B: Connecting the Remote Access Modem

This task is for connecting the modem hardware. You will set up the modem software outions in tssk 14, *Setting Up the Modem Software Options,* of Chapter 3, *Software Installation.*

1. Place the modem near a power source, a telephone line modular jack, and the WGS.

2. Connect the male end of the RS232 M/F cable to COM1 (or serial port 1) on the WGS and connect the female end to the modem.

3. Plug one end of an RJl1 telephone cord (D4 cord) into the modular telephone jack and plug the other end into the TO LINE jack on the back panel of the modem.

4. If you plan to share the telephone line between the modem and a telephone, connect a second RJl1 telephone cable into the telephone set and plug the other end into the TO PHONE jack on the back panel of the modem.

5. Plug one end of the power cord into the POWER jack on the back panel of the modem and plug the other end into an AC outlet.

6. Continue with one of the following.

   • If you are connecting a printer, continue with task 9C.

   • If you are not connecting a printer and are connecting PMS, continue with task 10, *Connecting to PMS.*

   • *If* you are not connecting a printer or PMS, continue with task 11, *Running the Power-On Self Test.*

Task 9C: Connecting and Setting up the Printer

This task is for connecting and selling up AT&T 570 or 571 printer hardware. You will setup the printer software options in task 15, Setting Up the Printer Software Options, of Chapter 3, Software Installation.

For other printers, refer to the manual provided with the printer for installation instructions.

Refer to Figure 2-22 when performing this task.

1. Unpack and setup the printer according to the instructions in the manual supplied with the printer.

2. Be sure that the printer has paper, the ribbon is properly installed, and the cover is closed. (The printer will not enter set up mode if it is out of paper or if the cover is open.)

3. Set the printer default values, as follows:

    a. While holding down the FUNCTION and scroll ↓ switches, turn the power ON.

       The printer runs a set of self test functions. When the self test functions are complete, the printer displays setup function number 99.

    b. Press Scroll ↑ to select setup function number 98 (set default values).

    c. Press Menu to enter menu mode.

    d. Press Scroll ↓ to select menu item 02.

    e. Press Function to set the default values.

    f. Turn the power OFF.

4. Connect the printer to the WGS as follows.

    a. Plug the 25-pin connector end of the DB25 parallel printer cable into the parallel port (E) on the WGS. Secure the connector with the captive screws.

    b. Connect the other end of the parallel printer cable to the matching Centronics port on the printer. Secure it using the spring clips.

5. If you are connecting PMS, continue with task 10, Connecting to PMS. Otherwise, continue with task 11, *Running the Power-On Self Test.*
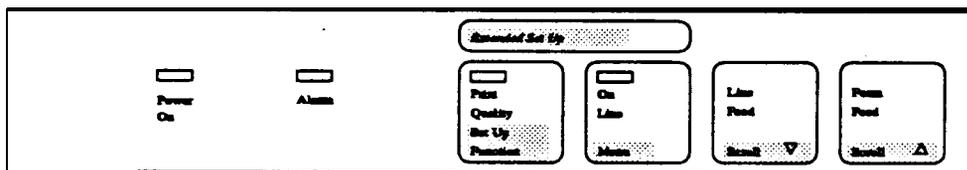
Figure 2-22. Location of Printer Switches

TASK 10: CONNECTING TO PMS

This task is required for conjurations 2,4, and 6.

There are two ways to connect PMS to the WGS.

  A. Via the COM2 port

  B. Via an IPC-9OO port

If you are not sure which of these connections you are to make, first refer to the connectivity diagrams for configurations 2,4, and 6 in the *Prerequisites* chapter of the switch document supplied with your AUDIX VPL documentation set. Next, check the cables and connectors supplied with the system to see which connection should be made.

Once you determine whether you are connecting to COM2 or to the IPC-900 card, follow the procedure under the appropriate sub-task to complete the connection.

Task 1OA: Connecting to COM2

1. Write COM2 in the PMS Physical Connection field on the *Installation Worksheet.*

   The point of demarcation for the PMS vendor is the 9-pin male COM2 port. The customer may have ordered the connectors and cables necessary to provide a 25-pin interface to the PMS. If these connectors and cables are supplied with the system, continue with step 2. Otherwise, continue with task 11, *Running the Power-On Self Test.*

2. Plug the 9-pin female connector on the J-45-to-female D8-9 adapter into the COM2 port.

3. Plug one end of the lo-connector modular cable into the modular connector on the same adapter. Plug the other end into the modular connector on the RJ-45-to-male DB25 DTE adapter.

4. If you have a gender changer, connect the gender changer to the male connector of the DB25 adapter. Otherwise, you have completed the AT&T portion of the PMS connection.

   The point of demarcation of the PMS vendor is either the male connector on the RJ-45-to-male DB25 DTE adapter or the female connector of the gender changer.

5. Continue with task 11, *Running the Power-On Self Test.*

Task 10B: Connecting to an IPC-900 Port

1. Check for an available port on the IPC-900 card and write the port number in the PMS Physical Connection field on the *Installation Worksheet.*

2. Plug one end of the l0-conductor modular cable into the port you selected on the IPC-900 card. Plug the other end into the modular connector on the RJ-45-to-male DB25 DTE adapter.

3. If you have a gender changer, connect the gender changer to the male connector of the DB25 adapter. Otherwise, you have completed the AT&T portion of the PMS connection.

    The point of demarcation for the PMS vendor via either the male connection on the RJ-45-to-male DB25 DTE adapter or the female connector of the gender changer.

4. Continue with task 11, *Running the Power-On Self Test.*

TASK 11: RUNNING THE POWER-ON SELF TEST

This task is required for all configurations.

1. Plug one end of the power cord into the jack (labelled A Figures 2-19,2-20, and 2-21) on the back panel of the WGS and plug the other end into an AC outlet.

2. Reboot the system either by powering it on. If it is already powered on press the Ctrl-Alt-Del keys simultaneously.

   The system runs the power-on self test (POST). While POST is running, it displays the PASS/FAIL results of each component and the amount of memory in the system.

   The following is a list of some of the components that POST tests.

   • CPU

   • CMOS RAM

   • ROM checksum

   • Memory refresh

   • DMA controllers

   • Interrupt controller

   • Keyboard

   Ž Dedicated memory

   • Base memory

   • Extended memory

   Ž Total memory

   Ž Calendar/clock

   • Floppy disk

   • Hard disk

3. If all tests PASS, continue with task 12, *Running SETUP Utility.* Otherwise, refer to Appendix D, *Troubleshooting,* to determine the problem before continuing.

TASK 12: RUNNING SETUP UTILITY

This task is required for all Configurations.

Before beginning the software installation, you must run the SETUP utility from the customer test diskette (supplied with the 6386 WGS) to update the system configuration information stored in CMOS, and to pea-form the following.

  A. Determine disk partitioning for root, usr, and swap (based on the size of the hard disk).

  B. Configure base memory to 512K.

Task 12A: Determining Disk Partitioning

  1. Insert the customer test diskette into the floppy drive A.

  2. Reboot the system by pressing the Ctrl-Alt-Del keys   simultaneously.

      The system reboots from the customer test diskette. When the reboot is complete, the system displays the CUSTOMER TEST INTRODUCTION screen.

  3. Press Enter to continue. The system displays the customer test main menu.

```
        Configuration  Check
        Setup  Utility
        Test  All  Modules
        Test  One  Module
        Disk  Utilities
        Password  Utilities
        Customization  Screen
        Exit  the  Program
```

  4. Using the down arrow key, move the highlight to Setup Utility and press Enter

      The system displays a menu showing the current system settings.

      The following is a sample of this menu (the settings on your screen may be the same for all fields).

.

```
System Date                     10-10-91 Thu
System Time                     10:52:59
Base Memory Size                640 kB
Base Memory Configuration       All Enabled
Extended Memory                 7168 kB
Floppy Drive A:                 3.5 inch, 1.44 MB
Floppy Drive B:                 Not Present
Hard Disk #1                    ESDI - 141 MB
Hard Disk #2                    Not Present
80387 Numeric Coprocessor       Not Present
3167 Numeric Coprocessor        Not Present
Video Display                   EGA or VGA
Keyboard                        Present
System Serial Port #1           Enabled as Corn 1
System Serial Port #2           Enabled as Corn 2
ROM BIOS Map Address            1 MB Only
```

5. Find the settings listed for Hard Disk #l and write down the drive type and number of megabytes in the *Disk Information* secion on the *Installation Worksheet.*

6. From Table 2-2, find the entry that matches the number of megabytes for your hard drive and write down the correspondning sizes for the root, usr, and swap file systems in the spaces provided on the *Installation Worhsheet.*

> NOTES
>
> The sizes for root, usr, and swap in Table 2-2 are specified in cylinders (which you will need when installing the UNIX opcrating system). The sizes are based on disk partitioning requirements for coresident applications. However, use these same sizes even if you are not installing a coresident application. Table 2-2 represents all hard drives for AUDIX VPL.

7. Use the arrow keys to move to Extended Memory and press <u>ENTER.</u>

8. Use the arrow keys to move to 7 and press @.

TABLE 2-2. File system Sizes for Disk Partitioning

Drive Type	# of Cyl	# of Mbytes	root (in Cyl)	usr (in Cyl)	swap (in Cyl)
24	820	136	109	127	36
25	1021	135	136	159	45
31	814	304	49	57	17
32	977	81	220	256	74
33	1021	84	219	257	73
34	949	141	122	142	41
36	965	80	218	254	73

9. Continue with task 12B.

Task 12B: Changing Base Memory Size

1. With the system settings menu (shown in task 12A) still displayed, find Base Memory Size. If it is set to 512 KB, skip to step 3. Otherwise, move the highlight to Base Memory Size and press **ENTER.**

   The system displays a choices menu containing valid base memory sizes.

2. Move the highlight to 512K and press **ENTER.**

3. Find Base Memory Configuration. If it is set to Above 512 KB Disables, skip to step 5. Otherwise, move the highlight to Base Memory Configuration and press **ENTER.**

   The system displays the following choices menu.

   ```
   All Base memory Enabled
   Above 512 KB Disabled
   ```

4. Move the highlight to Above 512 KB Disabled and press **ENTER.**

5. Press **ESC** to return to the Customer Test main menu.

6. Move the highlight to Exit the Program.

   The system displays the following menu.

   Want to Quit?

   ```
   No    Yes
   ```

7. Move the highlight to Yes and press **ENTER.**

   The system prompts you to reboot the system.

8. Remove the Customer Teat diskette from the drive.

9. Press **ESC** to reboot the system.

   The system begins the reboot sequence showing the new settings. When the reboot is complete, the system displays the Console Login prompt.

This is the end of the hardware installation tasks. Continue with the tasks in Chapter 3, *Software Installation.*

3. Software Installation

This chapter describes the tasks required to install the AUDIX VPL R1.1 software, as well as software required for any coresident applications.

For new systems shipped from the AT&T factory, many of these tasks may have been completed in the ALT process. However, perform the steps in task 1, *Checking the Loaded Software,* to verify exactly what software is loaded before continuing with other tasks.

Although all possible software installation tasks are described in this chapter, complete only those tasks required for the configuration you are installing (each task identifies the configurations for which it is required) and that have not already been completed by ALT.

The software installation tasks include:

Ž Checking the loaded software, all configurations

• Installing the UNIX foundation set, all configurations, which includes:

   — UNIX base system package

   — Filesystem modification package (not a part of the UNIX foundation set)

   — FMLI package

   — FACE package

   — FACE HELP package

   — Editing package

   — Remote terminal package

• Verifying UNIX system installation, all configurations

• Creating logins, all configurations, which includes:

   — Administrator login

   — Attendant logins

• Installing IPC-900 software (required if IPC-900 card is installed)

Ž Installing network interface software

• Installing IVP22 R2.0, all configurations

Ž Installing AUDIX VP R2.1.l software, configurations 3 and 4, which includes

   — AUDIX VP speech

   — AUDIX VP application software

• Installing IVPAA R2.1.l software, configurations 5 and 6

• Installing AUDIX VP switch integration software, configurations 3 and 4

- Installing AUDIX VPL R1.1 software, all configurations
- InstaUng AUDIX VPL switch integration software, all configurations
- Installing PMS integration R1.1 software, configurations 2, 4, and 6
- Installing Guest Interface Package software (optional)
- Verifying the software installation all configurations
- Confirming IVP4 card recognition, all configurations
- Setting up the modem software options, all configurations
- Setting up the printer software options (optional for report printers)
- Rebooting the system

TASK 1: CHECKING THE LOADED SOFTWARE

This task is required for all configurations.

1. If this is an existing customer WGS, or if the packing slip indicates that software is loaded, verify what is loaded and that it is correct for your customer's order, as follows:

    a. At the Console Login prompt type root and press **ENTER.** The system responds with the Password prompt.

    b. Press **ENTER.**

       The system responds with the UNIX system prompt (#).

    c. Type displaypkg and press **ENTER.**

       The system displays a list of the software residing on the hard drive.

    d. Compare the displayed list against the software components list for your customer's configuration in the *Prerequisites* chapter of the switch document supplied with the AUDIX VPL documentation set.

    e. If any software in the software components list is not already installed, continue with the tasks (in order) for the missing software, described in the remaining sections in this chapter.

    f. Check the current disk partitioning by typing /etc/dfspace and pressing **ENTER.**

       The system responds with the file system space allocation.

    g. Verify that the space allocated for root is at least 18Mbytes and that the space allocated for /usr is at least 21Mbytes.

    h. If the disk is partitioned correctly, continue with the next task required for your configuration. Otherwise, continue with task 2, *Installing the UNIX Foundation Set to* reinstall UNIX and repartition the disk.

TASK 2: INSTALLING THE UNIX FOUNDATION SET

This task is required for all configurations that do not already have the UNIX Operating System V/386 Release 3.2.2 Foundation Set loaded or that have the disk partitioned incorrectly for AUDIX VPL R1.1.

NOTE   If you are reinstalling the UNIX operating system or to repartition the disk, make sure the AUDIX VPL administrator has backed up any required files before you continue. As you install the UNIX Base System Package, you will destroy any files currently on the disk.

The procedures for installing the UNIX foundation set are as follows.

Task 2A: Installing the UNIX Base System Package

1. Insert diskette 1 of 7 of the UNIX base system package into the floppy drive and press **RESET.**

    The system boots from the disk in the floppy drive and begins the power-on self test (POST). When POST is complete, the system displays the following prompt.

    Strike **E N T E R** to install the UNIX system on your hard disk.

2. Press **ENTER** to begin the installation.

    If the system has previously been loaded with the UNIX operating system, the system responds with the prompt.

    Is this a new installation or a release upgrade to your existing system? (Strike 'n' (new) or 'u' (upgrade) followed by **ENTER)**

3. Type n and press **ENTER.** (You want to completely reload the UNIX software as if it were a new installation.)

    The system responds with the prompt.

    WARNING: A new installation of the UNIX system will destroy all files currently on the system.
    Do you wish to continue (y or n) ?

4. Type y and press **ENTER.**

   The system resonds with the DISK PARTITIONS OPTIONS menu, as follows:

   Total hard disk size is *xxxxx* cylinders

   ```
                                       Cylinders
   Partition  Status  Type    Start  End  Length  %
   ======     =====   ===     =====  ===  =====   ==
   ```

   One of the following messages is displayed with the list of options

   1 Active UNIX SYS 0 *xxx yyy* 1 0 0

   or

   THERE ARE NO PARTITIONS CURRENTLY DEFINED

   then

   SELECT ONE OF THE FOLLOWING:

   1. Create a partition
   2. Change Active (Boot from) partition
   3. Delete a partition
   4. Exit (Update disk configuration and exit)
   5. Cancel (Exit without updating disk configuration)

   Enter Selection:

5. If the message indicates that there are no partitions currently defined, skip to step 6. If there are one or more partitions defined perform the following:

   a. Type 3 and press **ENTER** to select Delete a partition.

      The system responds with the following prompt.

      Enter the number of the partition you want to delete (or enter x to exit) :

   b. Type the first partition nurnber listed in the DISK PARTIONS OPTIONS menu and press **ENTER.**

      The system responds with the following message.

      Do you want to delete partition x?
      This will erase all files and programs in
      this partition (type "y" or "n").

   c. Type y and press **ENTER.**

      The system redisplays the DISK PARTIONING OPTION menu (shown in step 4).

6. Once there are no defined partitions, type 1 and press **ENTER** to select Create a partition.

The system responds with the following prompt.

> Indicate the type of partition you want to create
> (l=UNIX System, 2=DOS only, 3=Other, x=Exit)

7. Type l and press **ENTER** to select UNIX System

The system responds with the following prompt.

> The UNIX System partition must use at least $xx\%$ of the hard disk.
> Indicate the percentage $(xx$ -1OO) of the hard disk you want this
> partition to use (or enter "c" to specify in cylinders) :

8. Type 100 and press **ENTER.**

The system responds with the following prompt.

> Do you want this to become the Active partition?
> If so, it will be activated each time you reset
> your computer or when you turn it on again.
> Please type "y" or "n".

9. Type y and press **ENTER.**

The system again displays the DISK PARTITIONING OPTIONS (showing partition 1 as the active partition).

10. Type 4 and press **E N T E R** to select Exit (Update disk configuration and exit).

The System responds with the following message.

> Hard disk partitioning complete.
>
> A surface analysis will now be done.
> This will destroy all data on the hard disk.
> Strike ENTER to continue or DEL to abort.

11. Press **ENTER.**

The surface analysis takes 10 to 60 minutes, depending on the size of the disk During the analysis, the system displays results. When complete, the system displays the following messages.

```
The UNIX System partition has xxxx cylinders
assigned to it.

1 cylinder will be used for alternate sectors.
This leaves xxxx cylinders (xxxxxxxx bytes)
available.

The following seems like a reasonable
partitioning of your UNIX system disk space.

A root filesystem of xxx cylinders (xxxxxx
bytes), a user (/usr) filesystem of xxx cylinders
(xxxxxx bytes), an extra user filesystem (/usr2)
of xxx cylinders (xxxxx bytes), and
a swap/paging area of xxx cylinders (xxxxx
bytes) .

Is this allocation acceptable to you (y/n)?
```

12. Type n and press **ENTER.**

The system responds with the following prompt.

```
Do you wish to have separate root and usr filesystems (y/n)?
```

13. Type y and press **ENTER.**

The system responds with the following prompt.

```
Do you want an additional /usr2 filesystem (y/n)?
```

14. Type y and press **ENTER.**

The system responds with the following prompt.

```
Do you want to allocate a crash/dump area on your disk? If
you do not, the swap/paging area will be used to save the
memory image in the event of a system panic (y/n)?
```

15. Type n and press **ENTER.**

The system responds with the following prompt.

```
You    will    now    be    given    the    opportunity  to  specify  size  in
cylinders  of  each  filesystem.   (One  megabyte  of  disk  space  is
approximately  2  cylinders.)

How many cylinders would you like for swap/paging (1 - xxxx)?
```

16. Turn to the *Disk Information* section in the *Installation Worksheet* (at the back of the *AUDIX VPL R1.1 Installer's Checklist)* and find the value that you wrote down (from task 12 in Chapter 2) for swap and enter that value in response to the prompt. (The values you wrote down are in cylinders. The equivalent values in megabytes are: swap = 6Mbytes, root = 18Mbytes, and /usr = 21 Mbytes.)

The system responds with the following prompt.

    How many cylinders would you like for root
    (1-xxxx) ?

17. From the Installation Worksheet, find the value you wrote down for root. Type that value in response to the prompt and press **ENTER.**

The system responds with the following prompt.

    How many cylinders would you like for /usr
    (l-xxxx) ?

18. Again from the Installation Worksheet, find the value you wrote down for /usr. Type that value in response to the prompt and press **ENTER.**

The system responds with the following message.

    The remaining *xxxx* cylinders will be assigned to /usr2.

The system then displays the disk allocation values you just assigned, followed by the prompt,

    Is this allocation acceptable to you (y/n) ?

19. If it is correct type y and press **ENTER.** Otherwise, type n and press **ENTER** ,then reallocate the cylinders.

After it completes allocating the cylinders, the system displays the following message.

    UNIX   filesystem   (s)   will   now   be   created   on   your   hard   disk.

It takes approximately 25 minutes to create these file systems. During *this* time, the system displays messages about the process When complete, the system responds with the following prompt,

    Reboot the system now.

20. Remove diskette 1 from the floppy drive and press the **Ctrl-Alt-Del** keys simultaneously to reboot the system.

> NOTES Make sure you press the **Del** key located on the number pad to reboot. Pressing the **Delete** key does not work.

When the reboot is complete, the system responds with the following message.

    Please indicate the installation medium you intend to use.

    Strike "c" to install from CARTRIDGE TAPE or "F" to install from FLOPPY DISKETTE .

    Strike ESC to stop.

21. Type f to select Floppy Diskette.

    The system responds with the following prompt.

        Please insert the UNIX System "Base System Package"
        Floppy Disk x of y and then strike ENTER.

22. Insert the next diskette in the floppy drive and press@ to continue.

    The system responds with the following message.

        Installation is in progress- do not remove floppy disk.

    This installation takes 3 to 5 minutes per disk.

    When the system has loaded this diskette, it prompts you to install the next diskette.

23. Remove the current diskette and repeat step 22 for the remaining base system diskettes.

    After the last UNIX base set diskette is installed, the system responds with the following prompt.

        UNIX System files have been copied to the hard disk. It is now safe to remove the floppy disk. Additional files systems will now be setup. Please stand by. . .

        System time is: *day, date, time*

        Enter a password for the 'root' or super user.
        (Note: This password must be kept EXTREMELY secure) :
        New Password:

24. If you have not already done so, remove the last base set diskette from the drive. Then press **ENTER** in response to the prompt (which assigns no password for root).

25. Turn to the Logins and Passwords section of the *Installation Worksheet* at the back of the *AUDIX VPL R1.1 Installer's Checklist* and write *none* (or some indication that you did not assign a root password) in the space provided for the root password. (Even though you did not assign a password, keep this and all passwords secure.)

The system then prompts you to reenter the password.

    Re-enter the new password:

26. Press **ENTER** again.

The system responds with a prompt for the install password.

    Enter a password for the ' install' user.
     (Note: This password must be kept EXTREMELY secure and should be
    different from the root password) :
    New Password:

27. Press **ENTER** in response to the prompt (which assigns no password for install).

28. Turn to the Logins and Passwords section of the *Installation Worksheet* at the back of the *AUDIX VPL R1.1 Installer's Checklist* and write *none* (or some indication that you did not assign an install password) in the space provided for the install password. (Even though you did not assign a password keep this and all passwords secure.)

The system then prompts you to reenter the password.

    Re-enter the new password:

29. Press **ENTER** again.

The system responds with the following message.

    The UNIX system will now be rebuilt.
    This will take approximately 2 minutes. Please wait.

After 2 minutes the system prompts you to reboot

30. Make sure the floppy drive is empty, then press the **Ctrl-Alt-Del** keys simultaneously to reboot the system.

When the reboot is complete, the system displays the Console Login prompt.

31. The UNIX base system package installation is complete. Continue with task 2B.

Task 2B: Installing the Filesystem Modification Software

The UNIX base system package installation is complete. Note that the filesystem modification software is not a part of the UNIX foundation set. Now, install the AUDIX Voice Power Lodging Filesystem Modification Software.

CAUTION

Make sure that you install the AUDIX Voice Power Lodging Filesystem Modification diskette. A similar diskette is part of the AUDIX Voice Power software set (configurations 3 and 4); you will *not* install this diskette.

1. In response to the Console Login prompt type root and press **ENTER.**

   The system responds with the Password prompt.

2. Press **ENTER.**

   The system responds with the standard UNIX system prompt (#).

3. Type **installpkg** and press **ENTER.**

   The system responds with the following message.

   > Confirm
   >
   > Please insert the floppy disk.
   >
   > If the program installation requires more than one floppy disk, be sure to insert the disks in the proper order, starting with disk number 1. After the first floppy disk, instructions will be provided for inserting the remaining floppy disks.
   >
   > Strike ENTER when ready
   > or ESC to stop.

   Insert the AUDIX Voice Power Lodging filesystem modification diskette into the floppy drive and press **ENTER.**

   The system displays messages about the installation. Then after approximately 30 to 60 seconds, depending on the size of your filesystem, the system displays the following message.

   > The UNIX Filesystem Modification procedure is complete.

5. Press **ENTER** to return to the UNIX system prompt (#).

6. Remove the AUDIX Voice Power Lodging filesystem modification diskette from the drive and continue with task 2C.

NOTE

The AUDIX Voice Power Lodging Filesystem Modification Software does not show up in a displaypkg listing.

Task 2C: Installing the FMLI Package

At the UNIX system prompt (#), type installpkg and press **ENTER.**

The system responds with the following message.

Confirm

Please insert the floppy disk.

If the program installation requires more than one floppy disk, be sure to insert the disks in the proper order, starting with disk number 1. After the first floppy disk, instructions will be provided for inserting the remaining floppy disks.

Strike ENTER when ready
or ESC to stop.

1. Insert the FMLI diskette into the floppy drive and press **ENTER.**

The system displays messages about the installation. Then after approximately 2 minutes the system displays the following message.

The installation of the FMLI Version 1.2 is now complete.

2. Remove the FMLI diskette from the drive and continue with task 2D).

Task 2D: Installing the FACE Package

1. At the UNIX system prompt (#), type **installpkg** and press **ENTER.**

    The system responds with the following message.

    Confirm

    Please insert the floppy disk.

    If the program installation requires more than one floppy disk,
    be sure to insert the disks in the proper order, starting with
    disk number 1. After the first floppy disk, instructions will
    be provided for inserting the remaining floppy disks.

    Strike ENTER when ready
    or ESC to stop.

2. Insert diskette l of 2 of the FACE l.2 package into the floppy disk drive and press **ENTER.**

    When the system has copied the first FACE diskette, it displays the following message.

    Reached end of medium on input.
    You may remove this floppy disk.
    To continue-insert floppy disk number 2 and strike <ENTER> key
    To QUIT-strike <q> followed by <ENTER>

3. Remove diskette l of 2 and insert diskette 2 of 2.

4. Press **ENTER.**

    When the installation is complete, the system displays the UNIX system prompt (#).

5. Remove diskette 2 of 2 and continue with task 2E.

Task 2E: Installing the FACE HELP Package

1. At the UNIX system prompt (#), type installpkg and press **ENTER.**

   The system responds with the following message.

   > Confirm
   >
   > Please insert the floppy disk.
   >
   > If the program installation requires more than one floppy disk, be sure to insert the disks in the proper order, starting with disk number 1. After the first floppy disk, instructions will be provided for inserting the remaining floppy disks.
   >
   > Strike ENTER when ready
   > or ESC to stop.

2. Insert diskette 1 of 1 of FACE HELP in the floppy drive and press **ENTER.**

   The system responds with the following FACE HELP menu:

   > 1 Install Office HELP Files ONLY.
   > 2 Install System Administration HELP Files ONLY.
   > 3 Install Printer Operations HELP Files ONLY.
   > 4 Install ALL HELP Files.
   > 5 Terminate Installation.
   >
   > Type the number that Corresponds to the option desired and strike the ENTER key:

3. Type 4 and press **ENTER** to select Install ALL HELP Files.

   The system installs all the FACE HELP files. When the HELP files are installed the system displays the FACE HELP menu again.

4. Type 5 and press **ENTER** to select Terminate Installation.

   When the installation is complele, the system displays the UNIX system prompt (#).

5. Remove the FACE HELP diskette and continue with task 2F.

Task 2F: Installing the UNIX Editing Package

1. At the UNIX system prompt (#), type installpkg and press **ENTER.**

    The system responds with the following message.

    Confirm

    Please insert the floppy disk.

    If the program installation requires more than one floppy disk,
    be sure to insert the disks in the proper order, starting with
    disk number 1. After the first floppy disk, instructions will
    be provided for inserting the remaining floppy disks.

    Strike ENTER when ready
    or ESC to stop.

2. Insert the UNIX editing package diskette in the floppy drive and press **ENTER.**

    When the installation is complete, the system displays the UNIX system prompt (#).

3. Remove the UNIX editing package diskette and continue with task 2G.

Task 2G: Installing the Remote Terminal Package

1. At the UNIX system prompt (#), type installpkg and press **ENTER.**

    The system responds with the following message.

    Confirm

    Please insert the floppy disk.

    If the program installation requires more than one floppy disk,
    be sure to insert the disks in the proper order, starting with
    disk *number 1.* After the first floppy disk, instructions will
    be provided for inserting the remaining floppy disks.

    Strike ENTER when ready
    or ESC to stop.

2. Insert the remote terminal package diskette in the floppy drive and press **ENTER.**

    The system responds with the following menu.

    > Please install the terminal files you wish from the diskette.
    > Selective installation of the Remote Terminal Package V2.O
    > database.
    >
    >   0 Terminate   Installation
    >   1 Install terminfo file(s)
    >   2 Locate a specific terminal within terminfo file(s)
    >   3 Compile a SINGLE terminal entry
    > Enter option:

3. Type 1 and press **ENTER** to select Install terminfo file(s).

    The system responds with a list of all the terminfo files for you to select for installing, followed by the prompt

    > Enter a file name, 'all', 'done', or 'files':

4. Type all and press **ENTER.**

    The system displays messages about creating and linking thcse files. When all the files are installed, the system repeats the prompt,

    > Enter a file name, 'all', 'done', or 'files':

5. Type done and press **ENTER.**

    The system again displays the REMOTE TERMINAL PACKAGE menu

6. Type 0 and press **ENTER** to select Terminate Installation.

    The system responds with the following message.

    > The installation of Remote Terminal Package Version 2.0 is now complete.

7. Remove the remote terminal package floppy diskette.

8. At the UNIX system pmmpt (#), type exit and press **ENTER** to log off the system.

    You must log off before continuing with the next task so that the UNIX environment that you just installed will be running when you logon again.

9. You have completed the installation of the UNIX operating system foundation set. Continue with task 3, *Verifying UNIX System Instalation.*

TASK 3: VERIFYING UNIX SYSTEM I N S T A L L A T I O N

This task is required for all configurations.

1. At the Console Login prompt, type root and press **ENTER.**

    The system responds with the Password prompt.

2. Press **ENTER.**

    The system responds with messages showing the available space in / (which is the same as root) and in /usr, followed by the UNIX system prompt (#).

3. Verify that the screen displays the size of / (root) as approximately 18 Mbytes and /usr as approximately 21Mbytes. (These values may be within 2 to 3 Mbytes.)

    If the values are close, continue with step 4. If the values are not close, repeat task 2, *lnstalling the UNIX Foundation Set,* to reinstall the UNIX system and repartition the disk.

4. Type uname -a and press **ENTER.**

    If the UNIX operating system is installed correctly, the system responds with the following message:

    ```
    unix unix 3.2 2.2 i386
    ```

5. Type df -t and press **ENTER.**

    This displays several lines of information. Look for /usr on the left-hand side of the screen.

6. Verify that the /usr file system has approximately 17,000 *total* i-nodes.

    Make sure you verify the total number of i-nodes not the number of available i-nodes. This indicates that the file system modification software has been installed. If the /usr file system does not have approximately 17,000 total i-nodes, perform Task 2B.

7. Continue with task 4, *Creating Logins.*

TASK 4: CREATING LOGINS

This task is required for all configurations.

Before installing the AUDIX VP or AUDIX VPL software, you must assign both the administrator and attendant logins, as describcd in the following sections.

Task 4A: Creating the Administrator Login

1. At the UNIX system prompt (#), type face and prcss ENTER.

    The system responds with the AT&T FACE main menu.

    ```
    ┌─────────────────────────────┐
    │    AT&T  FACE                │
    ├─────────────────────────────┤
    │  > Office of root           │
    │    Printer Operations       │
    │    Programs                 │
    │    System Administration    │
    │    UNIX System              │
    │    Exit                     │
    └─────────────────────────────┘
    ```
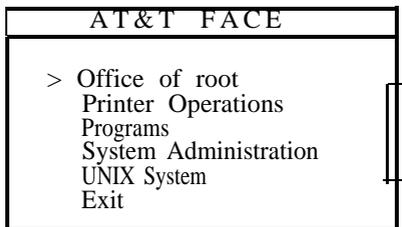
2. From the AT&T FACE main menu pick the following sequence

    > System Administration
    > User Logins
    > Add

    The system displays the LOGIN NAME AND FULL NAME menu.

3. With the cursor at the Login Name field type audix

4. Move the cursor to the Full Name field type AUDIX Voice Adm.

5. Move the cursor to the Privileges field, press the **CHOICES** (F2) function key to display
    yes, and press **ENTER.** This assigns system administrative privileges to the administrator login.

6. Press the **SAVE** (F3) function key.

    The system displays a login confirmation window.

7. Press the **CONT** (F3) function key to confirm the login information.

    The system responds with the following prompt.

    > Enter a password *for* a u d i x

8. Press **ENTER**

    The system responds with the following prompt

    > Re-enter the new password

9. Press **ENTER** again.

10. Turn to the Logins and Passwords section of the *Installation Worksheet* at the back of the *AUDIX VPL R1.1 Installer's Checklist* and fill in the information for the Administrator Login. This will provide the customer with a record of the login and password you assigned. (Even though you did not assign a password keep this and all passwords secure.)

11. Press **ENTER** to continue.

    The system displays the following confirmation message.

    > Confirmation
    >
    > User audix has been added to the system.

12. Press **ENTER** (F3).

    The system returns you to the USER LOGIN menu.

13. Continue with task 4B.

Task 4B: Creating the Attendant Logins

1. With the cursor at Add on the USER LOGIN menu, press **ENTER.**

    The system displays the LOGIN NAME AND FULL NAME menu.

2. With the cursor at the Login Name field and type a suitable attendant name (for example, atten1 for the first attendant).

3. Move the cursor to the Full Name field and type **AUDIX Voice Atten1.**

4. Leave No as the response in the Privileges field. (You do not assign system administrative privileges to the attendants.)

5. Press the **SAVE** (F3) function key.

    The system displays a login confirmation window.

6. Press the **CONT** (F3) function key to confirm the login information.

    The system responds with the following prompt.

    > Enter a password for atten1

7. Press **ENTER.**

    The system responds with the following prompt.

    > Re-enter new password

8. Press **ENTER** again.

9. Turn to the Logins and Passwords section of the *Installation Worksheet at the back* of the *AUDIX VPL R1.1 Installer's Checklist* and fill in the information for the Attendant Login. This will provide the customer with a record of the login and password you assigned. (Even though you did not assign a password keep this and all passwords secure.)

10. Press **ENTER** to continue.

The system displays the following message.

Confirmation

User atten1 has been added to the system.

11. Press CONT (F3) to continue.

The system returns you to the USER LOGIN menu.

12. Repeat steps 1 through 11 for four additional attendants, changing the names for each (for example, **atten2, atten3, atten4 and atten5).**

Even though the customer may not have this many attendants, it is more difficult for the administrator to add attendants after the AUDIX VPL software is installed.

13. When you have added all five attendants, press the **CANCEL** (F6) function key twice to return you to the AT&T FACE main menu.

14. Select Exit.

15. Press the **CONT** (F3) function key to return to the UNIX system prompt (#).

If you have installed an IPC-900 card, continue with task 5, *Installing IPC-900 Software.*

If you have not installed an IPC-900 card, type exit at the UNIX system prompt (#), and continue with the network interface *Switch Tasks.*

TASK 5: INSTALLING IPC-900 SOFTWARE

This task is required when you have installed an IPC-900 card (for configurations 2, 4, and 6, and for other I/O devices).

1. At the UNIX system prompt (#), type installpkg and press **ENTER.**

   The system responds with the following message.

   > Confirm
   >
   > Please insert the floppy disk.
   >
   > If the program installation requires more than one floppy disk, be sure to insert the disks in the proper order, *starting* with disk number 1. After the first floppy disk, instructions will be provided for inserting the remaining floppy disks.
   >
   > Strike ENTER when ready
   > or ESC to stop.

2. Insert the intelligent ports card (IPC-900) software diskette in the floppy drive and press **ENTER.**

   While installing this diskette, the system displays the following prompt.

   > The current system configuration will allow for up to 4 IPC-802/900 controller boards to be installed. How many IPC-802/900 controller boards will you be installing? (l-4, Q to quit)

3. Type 1 and press **ENTER.**

   The system responds with the following prompt.

   > Please enter the ports card type for Board 1:
   > The valid ports card types are:
   >
   >   IPC-900 (default)
   >   IPC-802
   >
   > Type the ports card type and strike the ENTER key or type Q to cancel installation. Striking the ENTER alone will select the default.

4. Press **ENTER** to select PC-9(X) (the default).

The system responds with the following prompt.

    Please enter the following system configuration information
    for IPC-900 Board 1:
    The available interrupts for the IPC-900 Board 1:

        IRQ 2
        IRQ 3 (default)
        IRQ 4
        IRQ 5
        IRQ 10
        IRQ 11
        IRQ 12
        IRQ 15

    Type the interrupt number and strike the ENTER key or type
    Q to cancel installation. Striking the ENTER alone will
    select the default.

5. Type 5 and press **ENTER.**

(This matches the IRQ number that you jumped where you installed the PC-900 card.)

The system responds with the following prompt.

    Please enter the following system configuration information
    for IPC-900 Board 1:
    The available starting 1/0 addresses for the IPC-900 Board
    1 are:

        Starting I/0 address: 290 (default)
        Starting I/0 address: 2A0
        Starting I/0 address: 2B0
        Starting I/0 address: 2C0
        Starting I/0 address: 2D0
        Starting I/0 address: 2E0
        Starting I/0 address: 2F0
        Starting I/0 address: 380
        Starting I/0 address: 390
        Starting I/0 address: 3A0
        Starting I/0 address: 3E0

    Type the starting I/0 address and strike the ENTER key or
    type Q to cancel installation. Striking the ENTER alone
    will select the default.

6. Press **ENTER** to select 290 (the default).

   The system then responds with the following prompt.

   ```
   Please enter the following system configuration information
   for IPC-900 Board 1:
   The available starting controller memory addresses for the
   IPC-900 Board 1 are:

       C2000              C4000              C6000
       C8000              CA000              CC000
       CE000              D0000  (default)   D2000
       D4000              D6000              D8000
       DA000              DC000              DE000
       E0000              E2000              E4000
       E6000              E8000              EA000
       EC000              EE000

   Type the starting controller memory address and strike the
   ENTER key or type Q to cancel installation.  Striking the
   ENTER alone will select the default.
   ```

7. Press **ENTER** to select D0000 (the default).

   The system responds with a confirmation message displaying your choices and a confirmation prompt.

   ```
   Board 1 configuration :
       Ports Card Type = IPC-900
       Interrupt number = 5
       I/0 ports Starting address = 290
       Controller Memory Starting address = D0000

   Is this configuration acceptable? (y or n)
   ```

8. If the displayed configuration is correct type y and press **ENTER.** Otherwise, type n and press **ENTER,** then repeat steps 2 through 8.

   Once you accept the configuration, the system completes the installation by rebuilding the UNIX operating system and displays the following messages.

   ```
   The UNIX Operating System will now be rebuilt.  This will take
   approximately 2 minutes. Please wait.
   ```

   After approximately 2 minutes, the system displays the following message.

   ```
   The UNIX kernel has been rebuilt.

   Confirm

   To complete the install/remove process a shutdown is now
   being initiated automatically.

   Make sure your floppy drive is empty.  If you are
   installing or removing controller boards you may power
   down the system after the shut down is completed.

   Strike ENTER when ready
   or ESC to stop.
   ```

9. Remove the IPC-900 software diskette from the drive and press **ENTER** to begin the automatic shutdown.

   When the shutdown is complete, the system prompts you to reboot.

10. Press the **Ctrl-Alt-Del** keys simultaneously to reboot the system.

    When the reboot is complete, the system responds with the Console Login prompt.

11. Continue with the *Switch Tasks* on the next page.

SWITCH TASKS

These tasks are required for all configurations.

At this point you must install any network interface software which may be required by the switch. Since this procedure varies from switch to switch, refer to the *Software Installation* chapter of the switch document supplied with the AUDIX VPL documentation set for instructions.

TASK 6: INSTALLING IVPSS R2.O

This task is required for all configurations.

1. If you are already logged in as root, skip to step 3. Otherwise, at the Console Login prompt, type root and press **ENTER.**

   The system responds with the Password prompt.

2. Press **ENTER.**

   The system responds with the UNIX system prompt (#).

3. At the UNIX system prompt (#), type installpkg and press **ENTER.**

   The system responds with the following prompt.

   > Confirm
   >
   > Please insert the floppy disk.
   >
   > If the program installation requires more than one floppy disk, be sure to insert the disks in the proper order, starting with disk number 1.
   > After the first floppy disk, instruction will be provided for inserting the remaining floppy disks.
   >
   > Strike ENTER when ready
   > or ESC to stop.

4. Insert diskette 1 of 4 of the Integrated Voice Power System Software R2.O in the floppy drive and press **ENTER.**

   When this diskette is installed, the system beeps and responds with the following prompt.

   > Reached end of medium or input.
   > You may remove this floppy disk.
   > To QUIT - strike <q> followed by <ENTER>
   > To continue - insert floppy disk number *x* and strike the <ENTER> key.

5. Remove the diskette currently in the drive.

6. Repeat steps 4 and 5 for IVPSS diskettes 2, 3, and 4.

While installing diskette 4, the system displays the following message and prompt.

```
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

First serial port uses interrupt level 4
Second serial port uses interrupt level 3
Parallel port uses interrupt level 7
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *


If you wish to reclaim some of these interrupts for other
devices, you may DISABLE some of these ports.
However, at least ONE serial port must be enabled at all times.

For serial ports, would you like to:

    1) ENABLE both first and second serial port.
    2) DISABLE first and ENABLE second serial port.
    3) ENABLE first and DISABLE second serial port.

Please enter your selection [1, 2 or 3]:
```

7. If you have installed a DCP card type 3 and press **ENTER.** Otherwise, type 1 and press **ENTER.**

The system responds with the following prompt.

```
For the parallel port (interrupt level 7) would you like to:

    1) ENABLE the parallel port.
    2) DISABLE the parallel port.

Please enter your selection [1 or 21:
```

8. Type 1 and press **ENTER.**

Tbe system displays a message confirming your selection, then displays the following prompt.

```
Select interrupt number for TR boards.
Press <Enter> for default value [21 or one of [2, 3, 15]
or q to quit:
```

9. Press ENTER to assign the default 2. (The TR, for tip/ring, boards are the same as the IVP4 boards.)

The System responds with the following prompt.

```
Press <Enter> to confirm or any other key to reject:
```

10. Press **ENTER.**

The system responds with the following message.

Moving files for IVPSS Software!   It will take a few minutes!

When the system finishes moving the IVPSS files, it displays the following prompt.

Select the monitor type:

1) Color (AT386)
2) Monochrome (at 386-m)

Enter selection:

11. Type the number corresponding to the type of monitor you are using then press **ENTER.**

The system responds with the following prompt.

Confirm: you are using monitor type x. [y/n]

12. Type y and press **ENTER** if the confirmation message displays the correct monitor type Otherwise, type n and press **ENTER** to reassign the monitar type.

After you confirm the monitor selection, the system responds with the following prompt.

Select the time zone for this installation.
1) Eastern
2) Central
3) Mountain
4) Pacific

Enter selection

13. Type the number corresponding to the time zone in which the system is being installed and press **ENTER.**

The system responds with the following prompt.

Confirm: the installation time zone number is *x*. (y/n)

14. Type y and press **ENTER.**

The system responds with the following prompt.

Is Daylight Savings ever used? (y/n)

15. Type y or n as appropriate for the area in which the system is being installed and press ENTER.

    The IVPSS R2.O install script then attempts to determine the memory configuration. If it is unsuccessful in determining the memory configuration, the system displays the following prompt.

    ```
    Select the appropriate memory
    configuration:

    1.   4 Megabytes
    2.   8 Megabytes
    3.   12 Megabytes

    Enter Selection:
    ```

16. If the above prompt is not displayed, skip to step 18. Otherwise, type 2 to select 8 Megabytes and press **ENTER.**

    The system responds with the following confirmation prompt..

    ```
    Confirm:   You have 8 megabytes of memory [y/n]
    ```

17. Type y and press **ENTER.**

    The System responds with a list of the iiles as they are copied to the hard disk, then the system displays the following prompt.

    ```
    Reserving a disk slice for speech.
    Disk O Slice 4 will be reserved for speech. [y/n) ]
    ```

18. In response to the prompt shown in step 17, type y and press **ENTER.**

    The System responds with the following prompt.

    ```
     A speech filesystem does not exist on slice 0s4.   Confirm: A
    speech filesystem will now be built on slice 0s4 [y/n]
    ```

NOTE	The prompts in steps 18 and 19 are displayed only on new installations, not upgrades.

19. Type y and press **ENTER.**

    The system responds with the following prompt.

    ```
    Building speech filesystem slice 0s4.
    Do you want to overwrite existing phrases in /dev/rdsk/0s4?
    (y/n)
    ```

20. Type y and press **ENTER.**

    When the speech file system is built the system responds with a series of messages describing the remaining installation processes. When the insulation is complete, the system displays a message informing you that it will initiate an automatic shutdown followed by the prompt

    ```
    Strike ENTER when ready
    or ESC to stop.
    ```

21.   Remove IVPSS R2.O diskette 4 of 4 from the drive and press **ENTER** to begin the automatic shutdown.

When the shutdown is complete, the system prompts you to reboot.

22.   Press the **Ctrl-Alt-Del** keys simultaneously to reboot the system.

When the reboot is complete, the system displays the Console Login prompt.

23.   Continue with the next task for your particular configuration.

TASK 7: INSTALLING AUDIX VP R2.1.1 SOFTWARE

This task is required for configurations 3 and 4 (AUDIX VPL coresident with AUDIX VP).

There are two parts of this task:

 A Installing the AUDIX VP speech

 B. Installing the AUDIX VP application software

Make sure you perform these tasks in order.

Task 7A: Installing the AUDIX VP Speech File Systems

1. At the UNIX system prompt (#), type installpkg and press **ENTER.**

    The system responds with the following prompt.

    > Confirm
    >
    > Please insert the floppy disk.
    >
    > If the program installation requires more than one floppy disk, be sure to insert the disks in the proper order, starting with disk number 1.
    > After the first floppy disk, instructions will be provided for inserting the remaining floppy disks.
    >
    > Strike ENTER when ready
    > or ESC to stop.

2, Insert diskette 1 of 3 of the AUDIX VP speech file systems into the floppy dirve and press **ENTER.**

    When this diskette is installed, the system beeps and responds with the following prompt.

    > Reached end of medium or input.
    > You may remove this floppy *disk.*
    > To QUIT - strike <q> followed by <ENTER>
    > To continue - insert floppy disk number *x* and strike the >ENTER> key.

3. Remove the diskette currently in the drive.

4. Repeat steps 2 and 3 for speech diskettes 2 and 3.

    While installing diskette 3 of 3, the system displays a series of dots. Each dot represents a phrase added to the speech database.

    When the installation is complete, the system displays the following message.

    > You may now remove the floppy disk.
    >
    > The installation of the AUDIX Voice Power Application Software R2.1.1 Speech is now complete.

5. Remove diskette 3 of 3 from the drive and continue with task 7B.

Task 7B: Installing AUDIX VP Application Software

1. At the UNIX system prompt (#), type installpkg and press **ENTER.**

    The system responds with the following prompt.

    > Confirm
    >
    > Please insert the floppy disk.
    >
    > If the program installation requires more than one floppy disk, be sure to insert the disks in the proper order, starting with disk number 1.
    > After the first floppy disk, instructions will be provided for inserting the remaining floppy disks.
    >
    > Strike ENTER when ready
    > or ESC to stop.

2. Insert diskette 1 of 2 of the AUDIX VP application software into the floppy drive and press **ENTER.**

    When this diskette is instal1ed thc system beeps and responds with the following prompt.

    > Reached end of medium or input.
    > You may remove this floppy disk.
    > To QUIT - strike <q> followed by <ENTER>.
    > To continue - insert floppy disk number *x* and strike the <ENTER> key.

3. Remove the diskette l of 2 and insert diskette 2 of 2.

    The system responds with the following prompt.

    > Enter the login of the Voice System Administrator:

4. Type y and and press **ENTER.**

    The system responds with the following prompt.

    > Confirm: The Voice System Administrator login id is audix? (y/n)

5. Type y and press **ENTER.**

    The system displays a series of filenames as they are installed on the hard disk.

    When the installation is complete, the system prompts you to remove the disk

6. Remove diskette 2 of 2 of the AUDIX VP application software and continue with the *Switch Tasks* for the AUDIX VP switch integration software.

TASK 8: INSTALLING IVPAA R2.1.1 SOFTWARE

This task is required for configurations 5 and 6 (AUDIX VPL coresident with Integrated Voice Power Automated Attendant).

1. At the UNIX system prompt (#), type installpkg and press **ENTER.**

    The system responds with the following prompt.

    > Confirm
    >
    > Please insert the floppy disk.
    >
    > If the program installation requires more than one floppy disk, be sure to insert the disks *in* the proper order, starting with disk number 1.
    > After the first floppy disk, instructions will be provided for inserting the remaining floppy disks.
    >
    > Strike ENTER when ready
    > or ESC to stop.

2. Insert diskette 1 of 3 of the Integrated Voice Power Automated Attendant (IVPAA) R2.1.l software into the floppy drive and press **ENTER.**

    When this diskette is installed the system beeps and responds with the following prompt.

    > Reached end of medium or input.
    > You may remove this floppy disk.
    > To QUIT - strike <q> followed by <ENTER>
    > To continue - insert floppy disk number x and strike the <ENTER> key.

3. Remove the diskette currently in the drive.

4. Repeat steps 2 and 3 for IVPAA diskette 2 and 3.

    While installing diskette 3 of 3, the system responds with the following prompt.

    > Enter login id of the Voice System Administrator:

-5. Type audix and press **ENTER.**

    The system displays the following prompt,

    > Confirm: The Voice System Administrator login id is audix? (y/n)

6. Type y and press **ENTER.**

    The system displays a series of filenames that are being installed on the hard disk

    When the installation is complete, the system prompts you to remove the disk.

7. Remove diskette 3 of 3 of the IVPAA software and continue with task 9, *Installing AUDIX VPL R1.1 Software.*

SWITCH TASKS

These tasks are required for configurations 3 and 4.

At this point you must install the AUDIX VP switch integration software. Since this procedure varies from switch to switch, refer to the *Software Installation* chapter of the switch document supplied with the AUDIX VPL documentation set for instructions.

TASK 9: INSTALLING AUDIX VPL R1 .1 SOFTWARE

This task is required for au configurations.

1. If you are already logged in as root, skip to step 3. Otherwise, at the Console Login prompt, type root and press **ENTER.** The system responds with the Password prompt.

2. Press **ENTER.**

   The system responds with the UNIX system prompt (#).

3. Type installpkg and press **ENTER.**

   The system responds with the following prompt.

   > Confirm
   >
   > Please insert the floppy disk.
   >
   > If the program installation requires more than one floppy disk, be sure to insert the disks in the proper order, starting with disk number 1.
   > After the first floppy disk, instructions will be provided for inserting the remaining floppy disks.
   >
   > Strike ENTER when ready
   > or ESC to stop.

4. Insert diskette 1 of 4 of the AUDIX VPL application software into the floppy drive and press ENTER.

   When this diskette is installed, the system beeps and responds with the following prompt..

   > Reached end of medium or input.
   > You may remove this floppy disk.
   > To QUIT - strike <q> followed by <ENTER>
   > To continue - insert floppy disk number x and strike the <ENTER> key.

5. Remove the diskette currently in the drive.

6. Repeat steps 4 and 5 for AUDIX VPL diskette 2, 3, and 4.

   While installing diskette 4 of 4, the system responds with the prompt.

   > Enter the login id of the Lodging Administrator:

7. Type audix and press **ENTER.**

   The system responds with the following confirmation prompt.

   > The Lodging Administrator's login id is audix? (y/n)

8. Type y and press **ENTER.**

    The system responds with the following prompt.

    > You will now enter the login id(s) of the Lodging Attendant(s) .
    > When you have no more attendants to be entered, press the
    > <Enter> key to proceed with the installation.

    > Enter the login id of the first attendant (or press <Esc>) :

    NOTE   The previous prompt is displayed for new installations only. For AUDIX VPL
    upgrades, the system displays a list of assigned attendant logins instead of the
    prompt.

9. Referring to the list of attendant login IDs on the *Installation Worksheet.* type the login ID of the
    first attendant and press **ENTER.**

    The system redisplays the prompt.

10. Repeat step 9 for each attendant.

11. When you have entered all attendant login ID, press= m response to the prompt.

    The system responds with the following prompt,

    > Do you wish to reenter the list of attendants (y/n) ?

12. If you are sure you entered the list of attendant login IDs correctly, type n and press **ENTER.**
    Otherwise, type y and press ENTER the login IDs.

    When you have entered the attendant login IDS correctly, the system responds with messages
    about stopping the voice system and creating files, then displays the following prompt.

    > Is this software being installed on an SX system? (y/n)

13. If you installing the software on a 638/SX WGS, type y and press **ENTER** Otherwise, type n
    and press **ENTER.**

    The system responds with the following confirmation prompt.

    > Entering the wrong value will result in the system 'freezing' at
    > the next reboot; the system can only be 'unfrozen' by reloading
    > the system beginning with the UNIX foundation set.

    > Confirm: Your reply was *x* is that correct; (y/n)

    NOTE   The previous message is displayed during new installations. It may be different for
    AUDIX VPL upgrades.

14. Type y and press **ENTER** to confirm, or type n and press **ENTER** to repeat step 13.

    When you have confirmed the SX prompt, the system completes the installation and prompts you
    to remove diskette 4.

15. Remove diskette 4 of 4 of the AUDIX VPL software and continue with the *Switch Tusks* on the
    next page.

.

SWITCH TASKS

These tasks are required for all configurations.

At this point you must install the AUDIX VPL switch integration software. Since this procedure varies from switch to switch, refer to the *Software Installation* chapter of the switch document supplied with the AUDIX VPL documentation set for insructions.

TASK 10: INSTALLING PMS R1.1 INTEGRATION SOFTWARE

This task is required for configurations 2, 4, and 6.

 1. At the UNIX system prompt (#), type installing and press **ENTER.**

   The system responds with the following prompt.

>   Confirm
>
>   Please insert the floppy disk.
>
>   If the program installation requires more than one floppy disk, be sure to insert the disks in the proper order, starting with disk number 1.
>   After the first floppy disk, instructions will be provided for inserting the remaining floppy disks.
>
>   Strike ENTER when ready
>   or ESC to stop.

 2. Insert the PMS integration R1.1 software diskette in the floppy drive and press **ENTER.**

   The system displays messages about the installation then it rcsponds with the prompt:

>   The AUDIX Voice Power Lodging (AVPL) system will use the serial port device ttyxx for the Property Management System (PMS) connection. Do you wish to change this serial port device for the PMS connection? (y/n)

 3. If you are connecting the PMS system to COM2 on the WGS and the above message specifies tty0l as the serial port, type n and prcss ENTER. Otherwise, type y and press ENTER.

   The system responds with one of the following.

    • If you entered n, the system responds with the following message.

>   The PMS serial port device will be retained as ttyxx.

    • If you entered y, the system responds with the following prompt.

>   Please   enter   serial   port   device name   (e.g.,
>   tty00, tty0l, ttys0l)

4. If you responded to step 3 with n, skip to step 5. Otherwise, type one of the following in response to the serial port prompt.

    • If you are connecting to COM2, type tty01 and press **ENTER**

    • If you are connecting to a port on an IPC-900 card, type ttys and the number of the port on the IPC-900 card, as follows.

    — ttys0l for port 1

    — ttys02 for port 2

    — ttys03 for port 3

    — ttys04 for port 4

    — ttyso5 for port 5

    — ttysO6 for port 6

    — ttys07 for port 7

    — ttys08 for port 8

    The system responds with the following message.

        The serial port ttyxx will be used.

5. The system displays messages about the installation.

    When the installation is complete, the system responds with the following message.

        AVPL PMS Integration Package R1.1 has been successfully installed.

        The installation of the AVPL PMS Integration Software Package RI. 1 is now complete.

6. Remove the PMS integration software diskette.

7. If you are installing one or both of the AUDIX VPL guest interface packages, continue with task 11, *Installing AUDIX VPL Guest Interface Packages.* Otherwise, continue with task 12, *Verifying the Software Installation.*

TASK 11: INSTALLING GUEST INTERFACE PACKAGES

This task is optional for all configurations. Check with the AUDIX VPL administrator to determine if either or both of these packages is to be installed.

 1.   At the UNIX system prompt (#), type installpkg and press **ENTER.**

The system responds with the following prompt.

> Confirm
>
> Please insert the floppy disk.
>
> If the program installation requires more than one floppy disk, be sure to insert the disks in the proper order, starting with disk number 1.
> After the first floppy disk, instructions will be provided for inserting the remaining floppy disks.
>
> Strike ENTER when ready
> or ESC to stop.

 2.   Insert either the Spanish or Japanese guest interface R1.0 diskette in the floppy drive and press **ENTER.**

The system displays messages about creating files, then if the voice system is running, the system responds with the following prompt (if the voice system is not running, the prompt is not displayed).

> The voice system will be stopped now to continue the installation. Do you want to continue? (y/n)

 3.   Type y and press **ENTER.**

The system responds with messages about the installation, followed by a series of dots. Each dot indicated that a phrase has been added to the speech database.

When the speech database is loaded, the system displays the message:

> You may now remove the floppy disk. The voice system is not presently running. Use the "start_vs" command to start the voice system.
>
> The installation of the AUDIX Voice Power Lodging *Spanish/Japanese* Guest Interface Package Software R1.0 is now complete.

 4.   Remove the guest interface package diskette.

 5.   If you are installing the other guest interface package, repeat this task for the other language diskette. Otherwise, continue with task 12, *Verifying the Software Installation.*

TASK 12: VERIFYING THE SOFTWARE INSTALLATION

This task is required for all configurations.

1. At the UNIX system prompt (#) type displaypkg and press **ENTER.**

   The system responds with a list of currently installed software packages.

2. Compare the displayed list with the software identified for your particular configuration in the *Components Checklist* in Chapter 1, *Prerequisites,* of the switch document supplied with the AUDIX VPL documentation set

3. If the displayed list is correct, press **ENTER.**

4. Continue with the task 13, *Confirming IVP4 Card Recognition.*

TASK 13: CONFIRMING IVP4 CARD RECOGNITION

This task is required for all configurations.

1. At the UNIX system prompt (#), type /vs/bin/display card all | pg and press **ENTER.** The system displays a screen similar to the following.

```
Card  0 is IVP4        O. S. Index: 0    Function: TipRing
                       State:  Inserv    Options: masterl, no tdm, tt

CHN   CD. PT   STATE   STATE-CHNG-TIME   SERVICE-NAME   PHONE   GROUP   OPTS   TYPE
 0     0.0     INSERV Aug 28 19:24:25                             2     Talk  IVP4
 1     0.1     INSERV Aug 28 19:24:25                             2     Talk  IVP4
 2     0.3     INSERV Aug 28 19:24:25                             2     Talk  IVP4
 3     0.4     INSERV Aug 28 19:24:25                             2     Talk  IVP4


Card 1 is IVP4         O. S. Index: 1    Function:  TipRing
                       State:  Inserv    Options: masterl, no tdm, tt

CHN   CD. PT   STATE   STATE-CHNG-TIME   SERVICE-NAME   PHONE   GROUP   OPTS   TYPE
 4     1.0     INSERV Aug 28 19:24:25                             2     Talk  IVP4
 5     1.1     INSERV Aug 28 19:24:25                             2     Talk  IVP4
 6     1.3     INSERV Aug 28 19:24:25                             2     Talk  IVP4
 7     1.4     INSERV Aug 28 19:24:25                             2     Talk  IVP4


Card 2 is IVP4         O. S. Index:  2   Function: TipRing
                       State:  Inserv    Options: masterl, no tdm, tt

CNN   CO. PT   STATE   STATE-CHNG-TIME   SERVICE-NAME   PHONE   GROUP OPTS TYPE
 8     2.0     INSERV Aug 28 19:24:25                             2     Talk  IVP4
 9     2.1     INSERV Aug 28 19:24:25                             2     Talk  IVP4
10     2.3     INSERV Aug 28 19:24:25                             2     Talk  IVP4
11     2.4     INSERV Aug 28 19:24:25                             2     Talk  IVP4
```

2. Verify that the the Card number and the 0.S. Index number match for each board. For example Card number is 0 should have an O. S. Index number of 0. Also verify that the number of cards displayed by the command is equal to the number of boards Wed.

NOTE   The screen can hold information for up to 3 IVP4 cards. If there are more than 3 IVP4 cards, press ENTER to see the next set. EOF signals the end of the file; press ENTER to return to the UNIX system prompt (#).

3. If all the IVP4 cards are recognized correctly, continue with task 14, *Setting the Modem Software Options.*

   If you do not have a modem, continue with task 15, *Setting the Printer Software Options.*

   If you do not have a modem or a printer, continue with task 16, *Rebooting the System.*

4. If any of the IVP4 cards are configured incorrectly, do the following.

   a. Make sure the floppy drive is empty.

   b. Type **shutdown -g0 -y** to shut down the system.

   c. Turn the power off.

   d. Remove the cover of the 6386 WGS (Chapter 2, task 1).

   e. Remove the incorrectly configured IVP4 cards. Refer to the *Installation Worksheet* for the slot numbers of each IVP4 card.

   f. Correct the switch settings for each incorrectly configured IVP4 cards and reinstall the cards (Chapter 2, task 6).

   g. Power on the system.

5. Renumber the IVP4 cards as follows.

   a. In response to the Console Login prompt, type audix and press **ENTER** to log in as the AUDIX VPL administrator.

      The system responds with the Password prompt.

   b. Press **ENTER.**

      The system responds with the IVPSS R2.0 menu.

   c. From the IVPSS R2.0 menu. pick the following sequence.

      ```
      Voice System Administration
      Configuration Management
      System Control
      Renumber Voice Channels
      ```

   d. Press **ENTER** to continue.

      The system displays the atop and start process and renumbers the voice channels.

   e. Press the **CANCEL** (F6) function key 3 times to return to the IVPSS R2.0 main menu.

   f. Move the highlight to Exit and press **ENTER.**

      The system responds with the Console Login prompt.

   g. Type root and press **ENTER.**

      The system responds with the Password prompt.

   h. Press **ENTER.**

      The system responds with the UNIX system prompt (#).

i. Type **/vs/bin/display card all | pg** and press ENTER.

The system redisplays the IVP4 card information.

j. Verify that the IVP4 cards are now configured correctly (as described in step *2)*.

If the cards are still not recognized correctly by the software and the DIP switches do not appear to be the problem, contact the next tier of support.

6. Once all the IVP4 cards are recognized correctly, continue with task 14, Setting the *Modem Software Options.*

If you do not have a modem, continue with task 15, *Setting the Printer Software Options.*

If you do not have a modem or a printer, continue with task 16, *Rebooting the System.*

TASK 14: SETTING THE MODEM SOFTWARE OPTIONS

This task is required if you are connecting to a DM224 modem.

1. At the UNIX system prompt (#), type face and press **ENTER.**

   The system displays the AT&T FACE main menu.

   ```
   ┌─────────────────────────────────────┐
   │             AT&T FACE               │
   ├─────────────────────────────────────┤
   │                                     │
   │  > office of root              ┌┐   │
   │    Printer Operations          ││   │
   │    Programs                    ││   │
   │    System Administration       ││   │
   │    UNIX System                 └┘   │
   │    Exit                             │
   │                                     │
   └─────────────────────────────────────┘
   ```
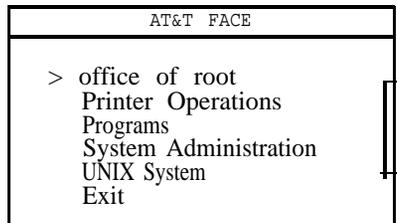
2. Pick the following sequence.

   ```
   System Administration
   Peripherals Setup
   Serial Ports Setup
   ```

   The system displays the following serial port fields:

   ```
   Serial Port Number :

   Device Type:

   Device Speed:

   Flow Control:
   ```

3. Leave the default value for the Serial Port Number field as 01 (/dev/tty00).

4. Use the down arrow key to move to the Device Type field then press the **CHOICES** (F2) function key.

   The system displays a CHOICES menu.

5. Move the cursor to Computer and press **ENTER.**

6. Move the cursor to the Device Speed field and press the **CHOICES** (F2) function key.

   The system displays another CHOICES menu.

7. Move the cursor to 2400 and press **ENTER.**

   The system returns you to the SERIAL PORTS SETUP menu.

8. Press the **SAVE** (F3) function key.

   The system displays the following two fields.

   ```
   Device Name:

   Device Connection:
   ```

9. Enter **direct**

10. Move the cursor to the Device Connection field and press the **CHOICES** (F2) function key until Outgoing calls only is displayed.

11. Press the **SAVE** (F3) function key.

    The system responds with a confirmation message.

12. Press the **CONT** (F3) function key.

    The system returns you to the PERIPHERALS SETUP menu.

13. Press the **CANCEL** (F6) function key until you return to the AT&T FACE main menu.

14. Move the cursor to Exit and press **ENTER.**

15. Press **CONT** (F3) to return to the UNIX system prompt (#).

16. Set the modem DIP switches as follows.

    a. Remove the right portion of the front panel of the modem.

       To remove the front panel use your thumb to press in and slide the front panel down until it comes off.

    b. Set switches 1, 3, and 4 in the down or OFF position.

    c. Set switch 2 in the up or ON position.

17. Power the modem off and then on.

18. At the UNIX system prompt (#), type cu -1 /dev/tty00 and press **ENTER.** (Make sure you type a lower case L, not a one, in the above command.)

19. When the modem is in command mode, at the UNIX system prompt (#) type at&f and press **ENTER.**

    The modem responds with OK. (In command mode, the modem acknowledges all valid input with OK. If the modem does not respond with OK, it may not be in command mode.)

20. Type **ats0=l** and press **ENTER.**

    The modem responds with OK.

21. Type **at&c2** and press **ENTER.**

    The modem responds with OK.

22. Type **at\n1** and press **ENTER.**

    The modem responds with OK.

23. Type **at\q0** and press **ENTER.**

    The modem responds with OK.

24. Type **at&w** and press **ENTER.**

    The modem responds with OK.

25. On the modem DIP switches, change segment 1 to the up or ON position.

26. Power down the modem.

27. Replace the modem switch front panel.

28. Power up the modem again.

29. At the UNIX system prompt (#), type **face** and press **ENTER.**

    The system displays the AT&T FACE main menu.

30. From the AT&T FACE main menu, pick the following sequence.

        System Administration
        Peripheral   Setup
        Serial Port Setup

31. Leave the default value for the Serial Port Number field as 01 (/dev/tty00).

32. Move the cursor to the Device Type field, then press the **CHOICES** (F2) function key

    The system displays a CHOICE menu.

33. Move the cursor to Modem and press **ENTER.**

34. Leave the Device Speed field as 2400.

35. Press the **SAVE** (F3) function key.

    The system displays the following two fields.

        Modem Name :

        Device Connection:

36. With the cursor at the Modem Name field, press the **CHOICES** (F2) function key.

37. Move the cursor to Hayes Smartm 2400 and press **ENTER.**

38. Move the cursor to the Device Connection field and press the **CHOICES** (F2) function key
    until Incoming calls only is displayed.

39. Press the **SAVE** (F3) function key.

    The system responds with a confirmation message.

40. Press the **CONT** (F3) function key.

    The sytem returns you to the PERIPHERALS SETUP menu.

41. If you have insalled a printer, continue with task 15, *Setting the Printer Software Options.*
    Otherwise, continue with the remaing steps in this task.

42. Press the **CANCEL** (F6) function key until you return to the AT&T FACE main menu.

43. Move the cursor to Exit and press **ENTER.**

44. Press **CONT** (F3) to return to the UNIX system prompt (#).

    The modem connection is complete, but it will not be operational until the voice system is started
    You will test the modem in Chapter 6, *Acceptance Tests.*

45. Continue with task 16, *Rebooting the System.*

TASK 15: SETTING THE PRINTER SOFTWARE OPTIONS

This task is required if you are connecting to a printer to the AUDIX VPL WGS.

1. If you are at the PERIPHERAL SETUP menu, skip to step 2 and begin selecting after the PERIPHERAL SETUP menu. Otherwise, at the UNIX system prompt (#), type face and press **ENTER.**

    The system displays the AT&T FACE main menu.

    ```
                   AT&T  FACE

        >   Office of root
            Printer operations
            Programs
            System  Administration
            UNIX System
            Exit
    ```

2. Pick the following sequence.

    ```
        System Administration
        Peripherals Setup
        Printer Setup
        Parallel Printer Port Setup
    ```

3. With the cursor at the Port Number field type the number corresponding to the parallel port to which the report printer is connected

    The default port number is 0l (corresponding to the parallel port on the WGS). If the printer is connected to a port other than 01 (i.e., to a port on a multi-port board), press the **CHOICES** (F2) function key to display the othcr valid parallel port numbers. Then move the cursor to the correct port number.

4. If a device has been configured for this port type the name of tbe device configured for the port. If no device has been configured, None is displayed.

5. To setup a different or new printer, other than the one that is displayed in the Printer Type field use the following procedure.

    a. Move the cursor to the Printer Type field and press the **CHOICES** (F2)) function key.

       The system displays a list of available printers.

    b. Move the cursor to the name of the printer model you have connected then press **ENTER.**

6. Move the cursor the the Printer Name field and type the name provided by the AUDIX VPL administrator for the printter and press **ENTER.**

    If the AUDIX VPL administrator did not provide a name, type **none.**

7. If the printer performs its own filtering, perform the following. Otherwise, skip to step 8.

    a. Move the cursor to the Should filter be used field and press **ENTER.**

    b. Press teh **CHOICES** (F2) function key to choose No.

    c. Press **ENTER.**

8. Press the **SAVE** (F3) function key.

   The system displays a confirmation message.

9. Press the **CONT** (F3) function key to confirm.

   The system returns you to the PRINTER SETUP menu.

10. Press the **CANCEL** (F6) function key three times to return to the AT&T FACE main menu.

11. Move the cursor to Exit and press **ENTER.**

12. Press **CONT** (F3) to return to the UNIX system prompt (#).

13. Type **exit** to return to the Console Login prompt.

14. Write down all the printer assignments in the *Printer Information* on the *Installation Worksheet* at the back of the AUDIX VPL R1.1 Installer's Checklist.

15. Continue with the task 16, Rebooting the System.

TASK 16: REBOOTING THE SYSTEM

This task is required for all configurations.

To complete the software installation, reboot the system.

1. At the UNIX system prompt (#), type shutdowa -g0 -y -.6 and press ENTER to Shutdown and reboot the system.

   (Mak sure that there is no diskcttes in the floppy drives.)

   When the reboot is complete, the system displays the Console Login prompt.

2. Continue with the tasks in Chapter 4, *Switch   Administration.*

4. Switch Administration

These tasks are required for all configurations.

At this point you must perform any switch administration tasks required by the switch. Since these procedures vary from switch to switch, refer to the *Switch Administration* chapter of the switch document supplied with the AUDIX VPL documentation set for instructions.

5. Initial Administration

Initial administration tasks are performed for AUDIX VPL after the hardware and software have been installed. These tasks bring the system to a state in which acceptance tests can be performed. Initial administration tasks are required for all configurations. Perform the initial administration tasks in the order described in this chapter.

- Mapping PBX extensions to channels
- Assigning services to channels
- verifying channel state
- Verifying extensions and channels
- Associating application and switch packages
- Administering system parameters
- Stopping and starting the voice system

NOTE   The tasks in this chapter describe generally how to administer AUDIX VPL. The values you arc asked to enter are not always explained in detail. Details on the tasks in this chapter are in Chapter 9, *System Tuning,* in *AUDIX Voice Power Lodging Administration (585-310-525).*

TASK 1: MAPPING PBX EXTENSIONS TO CHANNELS

To map PBX extensions to AUDIX VPL channels, do the following.

1. At the Console Login prompt, type audix and press ENTER.

    The system responds with the Password prompt.

2. Press **ENTER.**

    The system displays the IVPSS R2.0 menu.

```
┌──────────────────────────────────┐
│            IVPSS R2.0          1  │
├──────────────────────────────────┤
│                                  │
│   AT&T FACE                  ╓─╖  │
│   Voice System Administration║ ║ │
│   Exit                       ║ ║ │
│                              ╙─╜  │
│                                  │
└──────────────────────────────────┘
```
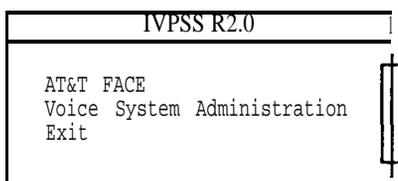
3. Either ask the PBX administrator for the extensions of the analog lines that run to the IVP4 cards
    or locate them in the *Card Information* section of the *Installation Worksheet,* and write them in
    Table 5-1. (T'able 5-1 is included for those who find it easier to work fom the pages of this
    chapter. However, you can use the form in the *Installation Worksheet* if you prefer.)

    The table has spaces for up to 24 channels; your site may have fewer. You will fill in the service
    field of this table in the next task.

TABLE 5-1. Channel/PBX Extensions/Services

IVP4 Card Number	Port Number	Channel Number	PBX Extension	Service
Card 0	Port 0	0		
	3	*2*		
	4	*3*		
Card 1	Port 0	4		
	1	5		
	3	6		
	4	7		
Card 2	Port 0	8		
	1	*9*		
	3	10		
	4	11		
Card 3	Port 0	12		
	1	13		
	3	14		
	4	15		
Card 4	Port 0	16		
	1	17		
	3	18		
	4	19		
Card 5	Port 0	20		
	1	21		
	3	22		
	4	23		

4. Begin at the IVPSS R2.0 menu and pick the following sequence.

```
Voice System Administration
Configuration Management
System Control
Stop Voice System
```

The system displays the WAIT TIME window.

5. Type 60

This is the number of seconds the system waits for activity to complete before stopping the voice system.

6. Press **SAVE** (F3).

When the process is finished, the system displays the following message.

```
The Voice System has stopped
```

7. Press **ENTER** to continue.

8. Press CANCEL (F6) to exit the SYSTEM CONTROL window.

9. Pick Voice Equipment from the CONFIGURATION MANAGEMENT window.

```
┌──────────────────────────────────────────────────────────────────────────┐
│                              Voice  Equipment                              │
│                                                                            │
│  CHN   CD. PT   STATE   STATE-CNNG-TIME   SERVICE-NAME   PHONE   GROUP   OPTS   TYPE │
│   0    0.0    INSERV   Aug 28 19:24:25                            2     Talk  IVP4  │
│   1    0.1    INSERV   Aug 28 19:24:25                            2     Talk  IVP4  │
│   2    0.3    INSERV   Aug 28 19:24:25                            2     Talk  IVP4  │
│   3    0.4    INSERV   Aug 28 19:24:25                            2     Talk  IVP4  │
│   4    1.0    INSERV   Aug 28 19:24:25                            2     Talk  IVP4  │
│   5    1.1    INSERV   Aug 28 19:24:25                            2     Talk  IVP4  │
│   6    1.3    INSERV   Aug 28 19:24:25                            2     Talk  IVP4  │
│   7    1.4    INSERV   Aug 28 19:24:25                            2     Talk  IVP4  │
│   8    2.0    INSERV   Aug 28 19:24:25                            2     Talk  IVP4  │
│   9    2.1    INSERV   Aug 28 19:24:2S                            2     Talk IVP4   │
│  10    2.3    INSERV   Aug 28 19:24:25                            2     Talk IVP4   │
│  11    2.4    INSERV   Aug 28 19:24:25                            2     Talk IVP4   │
│                                                                            │
└──────────────────────────────────────────────────────────────────────────┘
```

10. Press CHG-KEYS (F8), then ASSIGN (F3).

11. From the ASSIGN menu, select Channel to PBX Extension.

```
┌────────────────────────────────┐
│ Channel to PBX Extension       │
│                                │
│   PBX Extension:               │
│        Channel:                │
│                                │
└────────────────────────────────┘
```

12. Using Table 5-1 (or the *Installation Worksheet),* move the cursor to the PBX Extension field and type the PBX extension for channel 0 (or the first channel number that is filled in in the table).

13. Move the cursor to the Channel field and type 0 (or the channel number matching the extension number you just typed).

14. Press SAVE (F3).

    The system displays an information window confirming that the PBX extension has been mapped to the channel.

NOTE	The VOICE EQUIPMENT window will not be updated until the CHANNEL TO PBX EXTENSION window is Closed.

15. Press ENTER to continue.

16. Repeat steps 12 through 15 for each channel.

17. When you are finished mapping PBX extensions to all of the channels, press **CANCEL** (F6)

18. Continue with task 2, *Assigning Services to Channels.*

TASK 2: ASSIGNING SERVICES TO CHANNELS

To assign services to channels, do the following. Note the instructions presented here for assigning services to channels are just guidelines, not steadfast rules.

1. Complete the service column of Table 5-1 (or in the *Installation Worksheet),* as follows.

   - If you are installing an AUDIX VPL stand-alone system (configuration 1 or *2),* write lodging in the service column for all channels in the table you will assign all channels to the lodging service), and continue with step 2

   - If you are installing AUDIX VPL coresident with AUDIX VP (configuration 3 or 4), perform the following.

     a. With help from the AUDIX VPL administrator, determine the number of rooms and the number of employees that each respective application will serve.

     b. In Table 5-2 find the number of rooms that you determined in step a, then circle the corresponding number of channels in the AUDIX VPL channels column.

     c. In Table 5-3 find the number of employees that you determined in step a, then circle the corresponding number of channels in the AUDIX VP channels column.

     d. In Table 5-1 (or in the *Installation Workduet)* beginning with channel 0 (or the first channel for which you have an extension), write info_service/call_answer in the service column next to each of the number of channels you need assigned to AUDIX VP. (The info_service service is used to test the channel. These channels are later reassigned to the call_answer service.) For example, if you need to assign 4 channels to AUDIX VP, write call_answer/info_service in the service column for channels O, 1, 2, and 3.

     e. For all remaining channels, write lodging (the name of the AUDIX VPL service) in the corresponding service column, and continue with step 2

   - If you are installing AUDIX VPL coresident with IVPAA (configuration 5 or 6), perform the following.

     a. With the help of the AUDIX VPL administrator, determine the number of rooms the respective applications will serve.

     b. In Table 5-2 find the number of rooms that you determined in step a, then circle the corresponding number of channels in the AUDIX VPL channels column and in the IVPAA channels column.

     c. In Table 5-1 (or in the *Installation Worksheet),* beginning with channel 0 (or the first channel for which you have an extension), write lodging (the name of the AUDIX VPL service) in the service column next to each of the number of channels you need assigned to AUDIX VPL. For example, if you need to assign 4 channels to AUDIX VPL, write lodging in the service column for channels O, 1, 2, and 3.

     d. For all remaining channels, write Auto_attend (the name of the IVPAA service) in the corresponding service column, and continue with step 2

TABLE 5-2 Number of Required Channels for AUDIX VPL and IVPAA

Number of Rooms	AUDIX VPL Channels	IVPAA Channels
1-60	2	2
61-249	4	2
250-469	6	2
470-719	8	3
720-979	10	3
980-1259	12	4
1260-1539	14	4
1540-1844	16	N/A
1845-2160	20	N/A
2161-2500	24	N/A

TABLE 5-3. Number of Required Channels for AUDIX VP

Number of Employees	AUDIX VP Channels
1-40	2
41-91	3
92-153	4
154-221	5
222-293	6
294-300	7

2. From the ASSIGN menu, select Services to Channels.

```
Assign Service to Voice Channels


     S e r v i c e :
   C h a n n e l s :

```

3. Press **CHOICES** (F2).

This displays all possible services.

4. Select the first service (lodging, info_service or Auto_attend) that you wrote in Table 5-1 (or in the *Installation Worksheet).*

5. In the Channels field, type the number of channels to be assigned to the service you selected in step 4.

    You may type a single channel number, a range of channels (for example 0-4), or all (to assign all channels to the selected service) based on the information you wrote in Table 5-1 (or in the *Installation Worksheet).*

6. Press **SAVE** (F3).

    The system displays a COMMAND OUTPUT WINDOW verifying the channels and their assigned services.

7. Press **CANCEL** (F6).

8. If all channels have not been assigned to a service, press **CHG-KEYS** (F8), then press **ASSIGN** (F3). Repeat steps 2 through 7.

9. Once all channels have been assigned a service, continue with task 3, *Verifying Channel State.*

TASK 3: VERIFYING CHANNEL STATE

To verify the state of the channels, do the following.

1. Look at the STATE field on the VOICE EQUIPMENT for all channels. If it reads Inserv for all channels, go to step 2.

    If it reads FOOS for any channel, the line is not properly connected to the IVP4 card. Check the connection of the line at both ends, then perform the *Diagnosing Equipment* procedure detailed in Appendix D, *Troubleshooting.*

    If it reads MANOOS, perform the *Diagnosing Eguipment* procedure detailed in Appendix D, *Troubleshooting.*

2. When all of the channels read Inserv, press **CANCEL** (F6) to exit the VOICE EQUIPMENT window.

3. Continue with task 4, *Verifying Extensions and Channels.*

TASK 4: VERIFYING EXTENSIONS AND CHANNELS

To verify the IVP4 extensions and channels, perform the following steps in order.

1. Begin at the CONFIGURATION MANAGEMENT menu and pick the following sequence.

    > System Control
    > Start Voice System

    When the process is finished, the system displays the following message.

    > Startup of the Voice System is complete

2. Press **ENTER** to continue.

3. Press **CANCEL** (F6) two times to return to the VOICE SYSTEM ADMINISTRATION menu.

4. Pick System Monitor.

5. Verify that all channels read On-Hook.

    If the state of a Channel reads Initing, wait a few seconds. When the initialization is complete, the state changes to On-Hook.

6. Call each channel number using the extensions that you wrote in Table 5-1 (or in the Installation Worksheet).

7. Looking at the SYSTEM MONITOR window, verify that the call comes through on the proper channel. On-Hook should change to Talking, and the name of the assigned service, for example lodging or info_service will appear in the Voice Service field.

    For channels assigned to the lodging service, you will hear "This call is experiencing technical difficulties."

    For channels assigned to info_service, you will hear "Information announcement."

    For channels assigned to Auto_attend you will hear "The automated attendant is not in service. Please call back later."

    If you get a reorder tone (holler tone), cheek the Class of Restriction (COR) for that extension. Refer to the switch document which is part of your AUDIX VPL documentation set for more information. If you get a busy signal or nothing, the channel likely needs to be replaced.

8. When you are finished verifying channels, press **CANCEL** (F6).

9. If you are installing an AUDIX VP coresident system (configuration 3 or 4), change all channels assigned to the info_service service to the call_answer by doing the following.

   a. Begin at the VOICE SYSTEM ADMINISTRATION menu and pick the following sequence.
```
Configuration  Management
Voice Equipment
```

   b. Press **CHG-KEYS** (F8) then **ASSIGN** (F3).

   c. Using Table 5-1, execute steps 2 through 7 in task 2, *Assigning Services to Channels* to change the info_service channels to call_answer channels.

10. Press **CANCEL** (F6) several times to return to the IVPSS R2.0 menu.

11. Continue with the *Switch Tasks* on the next page.

SWITCH TASKS

These tasks are required for all configurations.

At this point you must associate application software with switch interface software. Since this procedure varies from switch to switch, refer to the *Software Installation* chapter of the switch document supplied with the AUDIX VPL documentation set for instructions.

TASK 5: ADMINISTERING SYSTEM PARAMETERS

1. Begin at the IVPSS R2.0 menu and pick the following sequence.

```
Voice System Administration
Application Package Administration
AUDIX Voice Power Lodging
System Parameter Administration
```

2. Enter individual attendant extensions in the blanks provided at the top of the window.

```
┌─────────────────────────────────────────────┐
│      System  Parameter  Administration        │
│                                               │
│         Attendant Extensions:                 │
│      ____      ____      ____        ____      │
│      ____      ____      ____                  │
│                   Hunt Gro up Or              │
│                Primary  Attendant:    ____     │
│             Voice  Mail  Parameters           │
│                     Mailbox Size:    __ min    │
│               Pause For TT Input:    __ sec    │
│         Maximum Extension Length:    ____      │
│           Maximum Message Length:    ___sec    │
│      Allow Guests To Save Messages?:  ____     │
│      Lamp ON For New Massages Only?  _  _      │
│               Automatic Transfer To           │
│            Operator At End Of Call?   ____     │
│           PMS Integration Parameters          │
│         Message Lamp Controlled By:   ____     │
│         When PMS Link Is Down, Calls          │
│             For Guests Handled By:    ____     │
│                                               │
└─────────────────────────────────────────────┘
```

NOTE   For non-PMS systems, the PMS Integration Parameters (the last two parameters shown on the example screen) are not displayed ⁻

3. If an attendant hunt group exists, enter its extension in the Hunt Group or Primary Attendant field.

   If an attendant hunt group does not exist, enter one of the individual attendant extensions as the primary attendant.

   This field specifies the hunt group or attendant extension that callers or guests will be transferred to when they press ⓪.

4. Determine how many digits compose valid guest extensions and enter that number in the Maximum Extension Length field.

5. Enter a (AVPL) for the Message Lamp Controlled By: parameter.

6. Enter av (AVPL) for the When PMS Link Is Down Calls For Guests Handled By: parameter.

   The previous two parameters are changed from their defaults so that acceptance tests can be performed. Later you will change them back.

   The defaults for all other fields are sufficient for this installation.

7. Press **SAVE** (F3).

8. Enter y to confirm your choice of saving the parameter.

   The system displays a confirmation window informing you that the parameters have been saved.

9. Press **ENTER**

10. Press **CANCEL** (F6) two times to return to the VOICE SYSTEM ADMINISTRATION menu.

11. Continue with task 6, *Stopping and Starting the Voice System.*

TASK 6: STOPPING AND STARTING THE VOICE SYSTEM

To stop and start the voice system, perform the following steps in order.

1. Begin at the VOICE SYSTEM ADMINISTRATION menu and pick the following sequence.

        Configuration Management
        System Control
        Stop Voice System

    The system displays a WAIT TME window.

2. Type 60

    This is the number of seconds the system will wait for activities to complete before stopping the voice system.

3. Press **SAVE** (F3).

    When the process is finished the system displays the following message.

        The Voice System has stopped

4. Press **ENTER** to continue.

5. From the SYSTEM CONTROL menu, pick Start Voice System.

    When the process is finished, the system displays the following message.

        Startup of the Voice System is complete

6. Press **ENTER** to continue.

7. Press **CANCEL** (F6) several times to return to the IVPSS R2.0 menu.

8. Continue with task 7, *AUDIX VP and IVPAA Initial Administration.*

TASK 7: ADMINISTERING AUDIX VP AND IVPAA

This task is required for configurations 3, 4, 5, and 6.

If this AUDIX VPL system is coresident with AUDIX Voice Power or Integrated Voice Power Automated Attendant (IVPAA), perform the initial administration for these products as explained in their respective documentation. Continue with the tasks m Chapter 7, *Acceptance Tests.*

6. Acceptance Tests

Acceptance teats are performed to ensure that the AUDIX VPL system is functioning properly after installation and are required for all configurations. Acceptance testing involves several different tasks that should be executed in the order described in this chapter. These acceptance tests should be performed with the customer.

- Preparing for acceptance tests
- Running power-on self test (POST)
- Checking in test guests
- Administering switch for acceptance tests
- Viewing system monitor
- Creating a call answer message
- Transferring to attendant
- Checking MWL and retrieving message
- Retrieving message through attendant
- Removing test guests
- Removing switch administration for test guests
- Performing coresidency acceptance tests
- Logging out
- Verifying remote terminal modem

> **NOTE**   These tasks assume that there is a telephone near the AUDIX VPL computer. If not, ask if one can be connected.

TASK 1: PREPARING

To perform these acceptance tests, you need two test guest rooms. The two test guest rooms should meet the following criteria..

- Guest rooms should be unoccupied. (There should not be an actual guest residing in this room.)

- Guest telephone sets must have a MWL.

- Rooms should be close to the AUDIX VPL computer location so that the MWL can be checked

- Rooms should be unlocked for easy access.

- Rooms should represent typical guest accommodations (for coverage path purposes).

Ask the AUDIX VPL administration to provide the extensions and room numbers for the two test guests. Write this information in Table 6-1.

TABLE 6-1. Test Guests

Guest	Extension	Room Number	Password
1			1111
2			2222

Continue with task 2, Runnng the Power-On Self Test.

TASK 2: RUNNING POWER-ON SELF TEST

The power-on self test (POST) is a set of internal diagnostics that the computer runs each time it is powered on.

To run the POST, do the following.

1. If you are already logged in as audix, skip to step 3. Otherwise, at the Console Login prompt, type audix and press **ENTER.**

    The system displays the Password prompt.

2. Press **ENTER.**

    The system displays the IVPSS R2.0 menu.

3. Begin at the IVPSS R2.0 menu and pick the following sequence.

        Voice System Administration
        Configuration Management
        System Control
        Shutdown System

4. Make sure that there is no diskette(s) in the floppy drive(s).

5. From the SYTEM CONTROL menu, pick Shutdown System

    A WAIT TIME window is presented.

6. Enter 0

    This is the number of seconds the system will wait before shutting down.

7.   Press **SAVE** (F3).

    The following message appears.

    Do you want to continue? (y or n) :

8. Type **y**

    When the system is completely shut down, you will see the following message.

    The system is down.
    Reboot the system now.

9. Press the **Ctrl-Alt-Del** keys simultaneously to reboot the system.

    While booting, the system will perform a POST. Information is presented in to columns on your screen. The first column lists various hardware components. The second column presents a status of the tests performed on components in the first column. If a FAIL printed m the second column for any component record the component's name and escalate to the next tier.

    When it is finished, you will be presented with the following prompt.

    The WGS will run the POST. When POST is initiated, the screen displays the PASS/FAIL results of the tests on each component.

The following is a list of some of the components that POST tests.

- CPU

- CMOS RAM

- ROM checksum

- Memory refresh

- DMA controllers

- Interrupt controller

- Keyboard

- Dedicated memory

- Hard disk

- Floppy disk

If all tests pass, the system displays PASS next to all tests, then completes the reboot and displays the Console Login prompt. If any test fails, the system displays FAIL next to that test.

10. If all tests pass, continue with the task 3, Checking *In Test Guests.* Otherwise, refer to Appendix D, *Troubleshooting,* to determine the problem.

TASK 3: CHECKING IN TEST GUESTS

Using the information obtained from the AUDIX VPL administrator on the two test guest rooms, check them in using the AUDIX VPL computer.

To check a guest in, do the following steps in order.

1. At the Console Login prompt type audix and press **ENTER.**

   The system displays the Password prompt.

2. Press **ENTER.**

   The system displays the IVPSS R2.0 menu.

```
┌─────────────────────────────┐
│        IVPSS R2.0           │
├─────────────────────────────┤│
│                             ││
│  AT&T FACE                  ││
│  Voice System Administration││
│  Exit                       ││
│                             ││
└─────────────────────────────┘│
```

3. From the IVPSS R2.0 menu, pick the following sequence.

   ```
   Voice System Administration
   Application Package Administration
   AUDIX Voice Power Lodging
   Guest Mailbox Administration
   Mailbox
   ```

4. Enter guest #1's extension in the Guest Extension field.

```
┌──────────────────────────────────────────┐
│               Mailbox                     │
├──────────────────────────────────────────┤
│                                           │
│          Guest Extension:  _____       │
│       Guest Room Number:   _____       │
│             Guest Name:    _____       │
│          Guest Password :  _____       │
│          Guest  Language:  _____       ││
│                                           ││
│          MessagesWaiting                  ││
│                 Voice:                    ││
│                   Fax:                    ││
│                  Text:                    ││
│     Mailbox Capacity Usage:               │
│  Suite Mailbox Extension:                 │
│               Comments:    _____       │
│                                           │
└──────────────────────────────────────────┘
```

5. Enter guest #1's room number in the Guest Room Number field

6. Enter **guest #1** in the Guest Name field

7. Enter **1111** in the Guest Password field.

8. When you are finished entering information, press <u>**CHG-KEYS**</u> (F8), then <u>**CHECKIN**</u> (F1).

   A confirmation message is shown.

9. Press any key to continue.

10. Enter guest #2's extension in the Guest Extension field.

11. Enter guest #2's room number in the Guest Room Number field.

12. Enter **guest #2** in the Guest Name field.

13. Enter **2222** in the Guest Password field.

14. When you are finished entering information, press <u>**CHECKIN**</u> (F1).

   A confirmation message is shown.

15. Press any key to continue.

16. Press <u>**CHG-KEYS**</u> (F8), then <u>**CANCEL**</u> (F6) to exit the MAILBOX window end end the check-in process.

17. Continue with the *Switch Tasks* on the next page.

SWITCH TASKS

These tasks are required for all configurations.

At this point you must administer the switch so that acceptance tests can be performed Since this procedure varies from switch to switch, refer to the *Acceptance Tests* chapter of the switch document supplied with the AUDIX VPL documentation set for instructions.

TASK 4: VIEWING SYSTEM MONITOR

Watching the SYSTEM MONITOR window while performing acceptance tests may help you to isolate errors later. The system monitor is a dynamic (changing) report screen that shows the activity on the AUDIX VPL channels.

To view the system monitor, do the following.

1. Press **CANCEL** (F6) to exit the GUEST MAILBOX ADMINISTATION window.

2. Press **CANCEL** (F6) to exit the AUDIX VOICE POWER LODGING window.

3. Press **CANCEL** (F6) to exit the APPLICATION PACKAGE ADMINISTRATION window.

4. Pick System Monitor from the VOICE SYSTEM ADMINISTRATION window.

   All channels should read On-Hook in the Service Status field.

   As you make calls to the test guests, you will see them come through on channels via this screen. When a call comes through on a channel assigned to the lodging service, you will see the Service Status field change from On-Hook to another status (for example, Talking).

5. Continue with task 5, *Leaving a Call-Answer Message.*

TASK 5: LEAVING A CALL ANSWER MESSAGE

In this task, you leave a message for guest#1 that can later be used for MWL and retrieval tasks.

1. Using the information you wrote in Table 6-1, call guest#l.

2. Let the telephone ring until it goes to AUDIX VPL coverage.

3. Leave a message. For example, This is a test message for guest#l from AT&T services."

4. Hang up.

5. Continue with task 6, *Transferring to the Attendant.*

If the call does not go to AUDIX VPL coverage a you experience other difficulties in leaving a message for this guest, refer to Appendix D, *Troubleshooting in AUDIX Voice Power Lodging Administration* (585-310-525).

TASK 6: TRANSFERRING TO ATTENDANT

In this task, you leave a message for guest#2 that can later be used for MWL and retrieval tasks.

1. Using the information you wrote in Table 6-1, call guest#2.

2. Let the telephone ring until it goes to AUDIX VPL average.

3. Leave a message. For example, "This is a test message for guest#2 from AT&T services."

4. After speaking the message, press 0 to transfer to a hotel operator (attendant hunt group or primary attendant).

5. When the attendant answers, inform him/her that you are testing the voice mail system.

6. Hang up.

7. Continue with task 7, Checking MWL. and *Retrieving Message.*

If the call does not go to AUDIX VPL coverage or you experience other difficulties in leaving a message for this guest, refer to Appendix D, *Troubleshooting in AUDIX Voice Power Lodging Administration* (585-310-525).

TASK 7: CHECKING MWL AND RETRIEVING MESSAGE

This acceptance test ensures that the (attendant hunt group or primary attendant) voice mail message and MWL signal processed properly for guest#1.

After you have left test messages for both test guests, do the following.

1. Go to guest#1's room and make sure that the MWL has been turned on.

    In guest#l's room, retrieve guest#1's message by doing the following.

2. Dial the integrated message retrieval number (AUDIX VPL hunt group extension)

    Listen to message retrieval greeting and the notification of the number and type of messages (voice, text, and/or fax): "You have one voice mail message."

    The message is played. It is prefaced with the time, day, and date when it was received

3. After the message is played, press 3 to delete it.

    If you have created more than one message for this guest, delete all of them.

4. When there are no more messages to retrieve, hang up.

5. Continue with task 8, *Retrieving* Message *Through Attendant.*

If the MWL is not on or if you have difficulty m retrieving this guest's message, refer to Appendix D, *Troubleshooting in AUDIX Voice Power Lodging Administration* (585-310-525).

TASK 8: RETRIEVING MESSAGE THROUGH ATTENDANT

This acceptance test ensures that the voice mail message and MWL signal were processed properly for guest#2 and that attendants can connect guests with their voice mailboxes.

Make sure you notify the operator of the test you are performing. If the attendant is not familiar with starting a function, it might be helpful for you to make a copy of the next page, complete the missing information, and review it together.

1. Go to guest#2's room and make sure that the MWL has been turned on.

2. Go back to telephone near the AUDIX VPL computer to retrieve guest#2's message through the attendant.

3. Call the attendant.

4. Tell him/her you need to be connected to your voice mailbox.

   Listen for the confirmation message "Ready for message retrieval."

5. Press ⒈ to listen.

   Listen to message retrieval greeting and the notification of the number and type of messages (voice, text and/or fax): "You have one voice mail message."

   The message is played, prefaced with the time, day, and date it was received.

6. After the message is played, press ⒊ to delete it.

   If you have created more than one message for this guest, delete all of them.

7. When there are no more messages to retrieve, hang up.

8. Continue with task 9, *Removing Test Guests.*

If *the* MWL is not on or if the attendant has difficulty in connecting you to this guest's mailbox, refcr to Appendix D, *Troubleshooting* in *AUDIX Voice Power Lodging Administration* (585-310-525).

For the Attendant

To connect the AT&T services technician to the voice mailbox, do the following.

1. Ask for the room extension _____

2. Start function.

    Start function means that you are going to perform a sub-task while keeping the caller on the line. The caller should not be able to hear what you are doing, but when you release the call, the two will be connected

3. Dial the integrated message retrieval number (AUDIX VPL hunt group extension)

    _____

4. When you hear the message retrieval greeting, enter the guest's room extension.

    A confirmation message states that this is a "current guest."

5. When you are prompted for the guest's password enter ****

6. Release.

    Release means to connect the two calls in progress (technician with voice mailbox).

If you cannot connect the technician to the guest mailbox, write down the message that the system speaks and inform the technician.

TASK 9: REMOVING TEST GUESTS

When the acceptance tests have been successfully completed remove the test guests from the system.

To remove the two test guests, do the following.

1. Press **CANCEL** (F6) to exit the SYSTEM MONITOR window.

2. Begin at the VOICE SYSTEM ADMINISTRATION menu and pick the following sequence.

    ```
    Application Package Administration
    AUDIX Voice Power Lodging
    Guest Mailbox Administration
    Mailbox
    ```

3. Enter guest#l's extension in the Guest Extension field.

```
┌─────────────────────────────────────────────┐
│                  Mailbox                      │
├─────────────────────────────────────────────┤
│                                               │
│           Guest Extension:   _____         │
│        Guest Room Number:    _____         │
│               Guest Name:    _____         │
│           Guest Password:    _____         │
│           Guest Language:    _____       │
│                                               │
│           Massages  Waiting                   │
│                   Voice :                      │
│                     Fax :                      │
│                    Text :                      │
│    Mailbox Capacity Usage:   %                │
│   Suite Mailbox Extension:                     │
│                 Comments:    _____       │
│                                               │
└─────────────────────────────────────────────┘
```

4. Press **CHG-KEYS** (F8), then **CHECKOUT** (F2).

5. Type **y** to confirm your choice of checking the guest out.

    A confirmation message appears informing you that the guest has been checked out.

6. Press any key to continue.

7. Enter guest#1's extension in the Guest Extension field

8. Press **DEL-EXTN** (F6).

    A confirmation message appears informing you that the extension has been deleted from the mailbox database.

9. Press **ENTER**

10. Enter guest#2's extension in the Guest Extension field

11. Press **CHECKOUT** (F2).

12. Type **y** to confirm your choice of checking the guest out.

    A confirmation message appears informing you that the guest has been checked out.

13. Press any key to continue.

14. Enter guest#2's extension in the Guest Extension field

15. Press **DEL-EXTN** (F6).

    A confirmation message appears informing you that the extension has been deleted from the mailbox database.

16. Press **ENTER**

17. Press **CHG-KEYS** (F8), then **CANCEL** (F6) to exit the GUEST MAILBOX window.

18. Press CANCEL (F6) to exit the GUEST MAILBOX ADMINISTRATION window.

19. Pick System Parameter Administration from the AUDIX VOICE POWER LODGING window.

20. Enter **p** (PMS) for the Message Lamp Controlled By: parameter.

    If you are performing an upgrade set this parameter accodording to the information you wrote on the *Installation Worksheet* in task 2 of Appendix A. Enter **p** (PMS) or enter **a** (AVPL).

21. Enter **at** (Attendant) for the When PMS Link Is Down Calls For Guests Handled By: parameter.

    If you are performing an upgrade set this parameter according to the information you wrote on the Installation Worksheet in task 2 of Appendix A. Enter **at** (Attendant) or enter **av** (AVPL).

22. Press **SAVE** (F3).

23. Enter y to confirm your choice of saving the parameters.

    The system displays a confirmation window informing you that the parameters have been saved.

24. Press **ENTER** to continue.

25. Press **CANCEL** three times to return to the IVPSS R2.0 menu.

26. Pick Exit from the IVPSS R2.0 menu.

    The system logs you off of IVPSS R2.O and displays the Console Login prompt.

27. Type **root** and press **ENTER.**

    The system responds with the Password prompt,

28. Press **ENTER.**

    The system displays the UNIX system prompt (#).

29. At the UNIX system prompt (#) type **cat** /usr/lgdb/ .pwdb and press **ENTER.**

It is extremely important that this file is empty. If this file is not empty, determine the extension, then repeat the steps in this task to check out and delete any extension that remains in the . pwdb file.

30. Continue with the *Switch Tasks* on the next page.

SWITCH TASKS

These tasks are required for all configurations.

At this point you must remove the administration on the switch that allowed acceptance tests to be performed. Since this procedure varies from switch to switch, refer to the *Acceptance Tests* chapter of the switch document supplied with the AUDIX VPL documentation set for instructions. This task is specific to the switch to which the AUDIX VPL system is integrated. Therefore, refer to Chapter 7, *Acceptance Tests,* of the switch document supplied with the AUDIX VPL documentation set for details on this task.

TASK 10: PERFORMING CORESIDENCY ACCEPTANCE

This task is required for configurations 3,4,5, and 6.

If this AUDIX VPL system is coresident with AUDIX Voice Power or Integrated Voice Power Automated Attendant (IVPAA), perform the acceptance tests for these products as explained in their respective documentation.

When you are finished with coresident acceptance testing, continue with task 11, *Logging Out.*

TASK 11: LOGGING OUT

If you have not already logged out, when the acceptance tests have been performed successfully, log out of IVPSS R2.0 as follows.

1. Press repeatedly until the system returns you to the IVPSS R2.0 menu.

2. Select Exit and press **ENTER.**

   The system displays the Console Login prompt.

3. Continue with task 12, *Verifying the Remote Terminal Modem*

TASK 12: VERIFYING THE REMOTE TERMINAL MODEM

To make sure the modem for the remote maintenance terminal is installed and configured correctly, perform the following.

 1. Call the Technical Support Center (TSC).

 2. Request that they dial into the AUDIX VPL system via the remote maintenance terminal to verify the connection.

    If the TSC cannot dial in, return to Chapter 2, task 9B, *Connecting the Remote Access Modem* and Chapter 3, task 14, *Setting the Modem Software Options,* to verify the hardware and software setup, respectively.

    If the connection works correctly, this is the end of the acceptance tests, which is also the end of your (the AT&T technician and software specialist/software associate) responsibilities. Be sure to leave all documents including the *AUDIX VPL R1.1 Installer's Checklist* at the site.

    The cut-to-service tasks described in the next chapter are targeted to the customer. However, in some instances you may assist the customer with these tasks.

7. Cut-to-Service

Cut-to-service tasks take the AUDIX VPL system from the installation cut-over point to a fully administered and operating voice mail system. These tasks are required for all configurations.

The tasks in this chapter are to be performed by you, the AUDIX VPL administrator. Although cut-to-service is part of *AUDIX Voice Power Lodging Installation,* AT&T personnel are not required to perform these tasks. These tasks are performed after the AT&T service technicians, software specialists and softare associates at your site have installed AUDIX VPL and have performed, with you, acceptance tests to verify that the system is working properly.

Before beginning these tasks, please read *Safety Considerations* in Chapter 1, Prerequisites to make sure you do not harm yourself or the AUDIX VPL system.

> NOTE   Both the integrated and non-integrated PMS cut-to-service procedures involve performing at least one task on the switch (PBX). If you are unfamiliar with performing administrative tasks on the switch, ask your AT&T service technician how you can have these tasks done for you.

This chapter has three sections.

- Preparing for cut-to-service, all configurations

Ž Performing integrated PMS cut-service, configurations 2, 4, and 6

Ž Pcrfonning non-PMS cut-to-service, configurations 1, 3, and 5

Read the information in *Preparing for Cut-to-Service,* then follow the cut-to-service procedure for your configuration only (integrated PMS or non-integrated PMS). If you do not know which configuration you have, refer to Chapter 2, *AUDIX VPL Basics* in *AUDIX Voice Power Lodging Administration.*

PREPARING FOR CUT-TO-SERVICE

Regardless of which configuration you have (integrated PMS or non-integrated PMS), you should prepare your guests and attendants for voice maile service. Be sure to read and perform the following tasks in Chapter 3, *Administrator's Activities in AUDIX* Voice *Power Lodging Administration* before doing my cut-to-service tasks.

* *Training Attendants*

* *Creating Guest Quick Reference Cards*

* *Irtforming Guests About AUDIX VPL*

Ž *Copying Troubleshooting Worksheet*

INTEGRATED PMS CUT-TO-SERVICE

Cut-to-service in the integrated PMS configuration involves four tasks.

1. Cabling PMS to AUDIX VPL

2. Verifying automatic database synchronization

3. Registering AUDIX VPL administrator

4. Administering switch

NOTE   It is a good idea to have your PMS vendor on site when you connect AUDIX VPL to the PMS.

Task 1: Cabling PMS to AUDIX VPL

This task is required for configurations 2, 4, and 6.

It is your responsibility to supply the cable between the PMS and AUDIX VPL. To meet the Electronic Industries Association (EIA) standards, this cable is to be no longer than 50 feet. If the systems are separated by more than 50 feet you must physically move one of the systems closer to the other. The hardware link between the AUDIX VPL system and the PMS is an electrical Electronic Industries Association (EIA) RS 232-C serial data electrical interface.

When the AT&T service technician installed the hardware and software on the AUDIX VPL computer, he/she specified a particular port through which AUDIX VPL would communicate with PMS. (See the *Installation Worksheet* in the *AUDIX VPL R1.1 Installer's Checklist* the technician left at your site for the PMS physical port information.)

The AUDIX VPL port to which you cable PMS depends on your configuration.

- If you have an AUDIX VPL R1.1 only system (configuration 2) or if you have an AUDIX VPL RI. 1 coresident with IVPAA (configuration 6), you can connect the PMS cable to either communications port #2 (COM2) or to an IPC-900 port.

- If you have an AUDIX VPL R1.1 coresident with AUDIX VP R2.1.l system (configuration 4), you must connect the PMS cable to an IPC-900 port.

  If the IPC-900 port is to be used for PMS connection it will have the following cables and adapters connected to it.

  — 10 foot, l0-pin modular cable with ground

  — l0-pin to 25-pin connector (only nine pins used)

Look at the back of the AUDIX VPL WGS and determine which port your PMS will connect to, then connect the two systems.

Continue with task 2, *Ensuring Database Synchronization.*

Task 2: Ensuring Database Synchronization

This task is required for configurations *2, 4,* and 6. Once the two systems are physically connected, database synchronization should start automatically. (Automatic database synchronization is the method by which PMS puts information in the AUDIX VPL database.) However, if the PMS connection to AUDIX VPL does not link correctly, the database may not automatically synchronize. Therefore, there are two parts to this task.

  A. Verifying automatic database synchronization

  B. Restarting PMS link to retry automatic synchronization

First perform task 2A to see if automatic database synchronization between the PMS and AUDIX VPL has taken place. If it has, continue with task 3, *Registering the AUDIX VPL Administrator.* If the database did not automatically synchronize, perform task 2B.

Task 2A: Verifying Automatic Database Synchronization

  1. If you are already logged in as audix, skip to step 3. Otherwise, at the Console Login prompt, type audix and press **ENTER.**

  The system responds with the Password prompt.

  2. Press **ENTER.**

  The system responds with the IVPSS R2.0 menu

```
        IVPSS  R2.0

   AT&T FACE
   Voice System Administration
   Exit
```

  3. Begin at the IVPSS R2.0 menu and pick the following sequence.
        Voice System Administration
        Reports
        System Reports
        Event Log Report

  4. Press **CHG-KEYS** (F8), then **DISPLAY** (F2).

  The system displays the Event Log.

  Press the **END** key (on the key pad).

  This causes the system to go to the last page of the Event Log (most recent).

5. The following message should appear near the end of the report if automatic database synchronization has begun.

    PMS:WTR:link is up; automatic database synchronization started

    Depending on the number of rooms at your lodging establishment, database synchronization may take several minutes. Therefore, wait several minutes, then continue with step 6 to redisplay the Event Log. However, if database synchronization does not occur, continue with task 2B, *Restarting the PMS Link to Retry Automatic Synchronization.*

6. Press **CHG-KEYS** (F8), then **CANCEL** (F6)

7. Pick Event Log Report from the SYSTEM REPORTS window.

8. Press **CHG-KEYS** (F8), then **DISPLAY** (F2).

9. Press the **END** key (on the key pad) to cause the system to go to the end of the Event Log.

    When database synchronization is complete, the system writes the following message at the end of the report.

    PMS:WTR:automatic   database   synchronization   completed

10. Press **CHG-KEYS** (F8).

11. Press **CANCEL** (F6) three times to return to the VOICE SYSTEM ADMINISTRATION menu.

12. Continue with task 3, *Registering the AUDIX VPL Administrator.*

Task 2B: Restarting PMS Link to Retry Automatic Synchronization

If automatic database synchronization does not take place when you connect the two systems, initiate a request to restart the PMS link on AUDIX VPL by doing the following.

1. Begin at the VOICE SYSTEM ADMINISTRATION menu and pick the following sequence.

   ```
   Application Package Administration
   AUDIX Voice Power Lodging
   ```

2. Press **CMD-MENU** (F7).

3. Pick AVPL/PMS Link Restart.

   When the PMS restart request has been issued, you will see the following messages

   ```
   The PMS wtr process has been successfully restarted.
   The PMS rdr process has been successfully restarted.
   ```

   Executing a PMS restart request also issues a database synchronization request.

4. Press **ENTER.**

5. Press **CANCEL** (F6) three times to return to the VOICE SYSTEM ADMINISTRATION menu.

6. Begin at step *3* in the *Verifying Automatic Database Synchronization* procedure in this section to see if the restart request initiated automatic database synchronization.

If the request to restart the PMS link does not initiate database synchronization, consult your PMS vendor.

Task 3: Registering the AUDIX VPL Administrator

This task is required for configurations 2, 4, and 6.

Registering the AUDIX VPL administrator gives a particular extension administrative privileges, such as broadcasting messages to all guests.

1. Check in the administrator's extension on the PMS terminal as you would a regular guest.

   This helps to eliminate some potential database and MWL problems with this extension.

2. At the AUDIX VPL terminal, begin at the VOICE SYSTEM ADMINISTRATION menu and pick the following sequence.

   ```
   Application Package Administration
   AUDIX Voice Power Lodging
   Lodging Administrator Registration
   ```

3. Enter the administrator's extension in the Administrator Extension field.

4. Enter a 4-digit phone-based password for the administrator in the Administrator Password field.

   The administrator must enter this password whenever he/she logs on to AUDIX VPL using the telephone.

```
        Lodging Administrator Registration

    Administrator Extension:   _____
    Administrator Password:    _____
       Attendant Password:     _____
```

5. Enter a 4-digit phone-based password for all attendants m the Attendant Password field

   The attendant phone-based password allows attendants, for example, to help guests who have forgotten their passwords connect to their mailboxes.

6. Press **SAVE** (F3).

7. Type **y** to confirm your choice of saving registration parameters.

   A confirmation window appears.

8. Press any key to continue.

9. Press **CANCEL** (F6) twice to return to the VOICE SYSTEM ADMINISTRATION menu.

10. Continue with the *Switch Tasks* on the next page.

Switch Tasks

These tasks are required for configurations 2,4, end 6.

At this point you perform switch administration tasks which allow the system to cut over. Since these procedures vary from switch to switch, refer to the *Integrated PMS* section of the *Cut-To-Service* chapter of the switch document supplied with the AUDIX VPL documentation set for instructions.

NON-PMS CUT-TO-SERVICE

These tasks are required for configurations 1,3, and 5.

Cut-to-service in the non-PMS environment involves two main tasks.

Ž Registering the AUDIX VPL administrator

• Administering the switch

Task 1: Registering the AUDIX VPL Administrator

This task is required for configurations 1,3, and 5.

Registering the AUDIX VPL administrator gives a particular extension administrator privileges, such as broadcasting messages to all guests.

1. At the AUDIX VPL terminal, begin at the IVPSS R2.0 menu and pick the following sequence.

   ```
   Voice System Administration
   Application Package Administration
   AUDIX Voice Power Lodging
   Lodging Administrator Registration
   ```

2. Enter the administrator's extension in the Administrator Extension field.

3. Enter a 4-digit phone-based password for the administrator in the Administrator Password field.

   The administrator must enter this password whenever he/she logs on to AUDIX VPL using the telephone.

```
┌─────────────────────────────────────────────────────┐
│            Lodging  Administrator  Registration       │
│                                                       │
│     Administrator Extension:   _____               │
│     Administrator Password:    _____                 │
│        Attendant Password:     _____                 │
│                                                       │
│                                                       │
└─────────────────────────────────────────────────────┘
```

4. Enter a 4-digit phone-based password for all attendants in the Attendant Password field.

   The attendant phone-based password allows attendants, for example, to help guests who have forgotten their passwords to connect to their mailboxes.

5. Press **S A V E** (F3).

6. Type **y** to confirm your choice of saving registration parameters.

   A confirmation window appears.

7. Press any key to continue.

8. Press CANCEL (F6) twice to return to the VOICE SYSTEM ADMINISTRATION menu.

   Continue with the *Switch Tasks* on the next page.

Switch Tasks

These tasks are required for configurations 1, 3, and 5.

At this point you perform switch administration tasks which allow the system to cut over. Since these procedures vary from switch to switch, refer to the *Non-PMS* section of the *Cut-To-Service* chapter of the switch document supplied with the AUDIX VPL documentation set for instructions.

A. Upgrades

This appendix describes the tasks for upgrading AUDIX VPL from R1.0 to R1.1. It also includes the tasks for upgrading associated (and coresident) software.

These tasks include

- Recording current information and isolating system
- Cutting the system from service
- Backing up AUDIX VPL R1.0 database and speech file systems
- Installing the AUDIX VPL file system modification software
- Restoring the AUDIX VPL R1.0 database and speech file systems
- Checking /usr file system space
- Removing existing software
- Verifying the remaining Software.
- Installing the new software
- Associating AUDIX VPL R1.1 with the switch integration software
- Readministering the system
- Stopping and starting the voice system
- Performing acceptance tests
- Cutting the system into service

NOTE	To do an upgrade, you must take the system out of service. Make sure that the AUDIX VPL administrator and hotel attendants know that the system will be out of service. Hotel operators will have to take messages for guests that are busy or unavailable. In the integrated PMS environment attendants can continue to use the PMS to check in and check out guests. In the non-PMS environment (except for those establishments using the open mailbox concept), attendants should keep a list of all check ins and check outs that occur while AUDIX VPL is down. This list will make it much easier to cut the system back into service once it is upgraded.

TASK 1: RECORDING CURRENT INFORMATION

This task is required for all upgrades.

1. Ask the AUDIX VPL administrator to write down all the AUDIX VPL mailing lists (group lists) that he or she has created.

    When the AUDIX VPL database and speech are restored, these lists are not saved. Therefore, the AUDIX VPL administrator will have to recreate these lists after the AUDIX VPL database and speech file systems have been restored.

2. If you are already logged in as `root,` go to step 4. Otherwise, at the `Console Login` prompt, type `root` and press **Enter.**

    The system responds with the `Password` prompt.

3. Type the `root` password and press **Enter.**

    The system responds with the UNIX system prompt (#).

4. If the AUDIX VPL system is not integrated with PMS, skip to step 6. If the AUDIX VPL system is integrated with PMS, type `cat  /usr/lgdb/.pmsparam` and press **Enter.** at the UNIX system prompt (#).

    The system displays a list of PMS parameters.

5. Copy the serial port number that is assigned to PMS (for example, `tty01,   ttys01,  ttys02)` in the space provided for PMS parameter information on the *Installation Worksheet.*

6. Type exit and press **Enter** to exit the `root` login.

    The system responds with the `Console Login` prompt.

7. At the `Console  Login` prompt, type audix and press **Enter.**

    The system responds with the `Password` prompt.

8. Type the password for the audix login and press **Enter.**

    The system responds with the USER LOGIN window.

9. Begin at the USER LOGIN menu and select the following.

    ```
    Voice System Administration
    Configuration Management
    Voice Equipment
    ```

The following is an example of the VOICE EQUIPMENT window.

```
┌─────────────────────────────────────────────────────────────────────────┐
│                            Voice   Equipment                              │
│                                                                           │
│  CHN   CD.PT   STATE   STATE-CHNG-TIME   SERVICE   PHONE      TYPE         │
│   0    0.0    INSERV  Aug 28 19:24:25    lodging    2003   tr, tt, talk    │
│   1    0.1    INSERV  Aug 28 19:24:25    lodging    2004   tr, tt, talk    │
│   2    0.3    INSERV  Aug 28 19:24:25    lodging    2001   tr, tt, talk    │
│   3    0.4    INSERV Aug 28 19:24:25     lodging    2002   tr, tt, talk    │
│   4    1.0    INSERV Aug 28 19:24:25     lodging    2005   tr, tt, talk    │
│   5    1.1    INSERV Aug 28 19:24:25     lodging    2006   tr, tt, talk    │
│   6    1.3    INSERV Aug 28 19:24:25     lodging    2007   tr, tt, talk    │
│   7    1.4    INSERV Aug 28 19:24:25     lodging    2008   tr, tt, talk    │
│   8    2.0    INSERV Aug 28 19:24:25     lodging    2009   tr, tt, talk    │
│   9    2.1    INSERV  Aug 28 19:24:25    lodging    2010   tr, tt, talk    │
│  10    2.3    INSERV  Aug 28 19:24:25    lodging    2011   tr, tt, talk    │
│  11    2.4    INSERV Aug 28 19:24:25     lodging    2012   tr, tt, talk    │
│                                                                           │
└─────────────────────────────────────────────────────────────────────────┘
```

10. Copy the servces and telephone numbers assigned to all channels into the spaces provided in the *IVP4 Card Information Table (in the Installation Worksheet* in the back of the *AUDIX VPL R1.1 Installer's checklist).*

11. Press **Cancel** (F6) twice to retum to the VOICE SYSTEM ADMINISTRATION menu.

12. From the VOICE SYSTEM ADMINISTRATION menu, select the following.

    ```
    Application  Package  Administration
    AUDIX  Voice  Power  Lodging
    System Parameter Administration
    ```

13. Copy the entries for the two PMS Coresident parameters in the spaces provided for *PMS Integration Information* on the *Installation Worksheet.*

14. Press **Cancel** (F6) four times to return to the USER LOGIN main menu.

15. Move the highlight to Exit and press **Enter.** The system responds with the Console   Login prompt.

16. Label all IVP4 lines with card and channel numbs then unplug them from the IVP4 cards.

    For more information on IVP4 lines, refer to Chapter *2, Hardware Installation.*

17. Label the PMS cable with its port location then unplug it from the system.

    For more information on the PMS cable, refer to Chapter 2, *Hardware   Installation.*

18. Continue with the *Switch Tasks* on the next page.

SWITCH TASKS

These tasks are required for all upgrades.

Before performing an upgrade, it is important to take the current system out of service. Since this procedure varies from switch to switch, refer to the *Cut-from-Service* section of the *Cut-to-Service* chapter of the switch document supplied with the AUDIX VPL documentation set for instructions. Then continue with task *2, Backing Up AUDIX VPL RI .0.*

TASK 2: BACKING UP AUDIX VPL R1.0

This task is required for all upgrades.

An AUDIX VPL backup requires formatted floppy diskettes. To format floppy diskettes, refer to the *Formatting a Floppy Diskette* section of Appendix B, *Maintenance Procedures* in *AUDIX Voice Power Lodging Administration.*

1. At the `Console Login,` type root and press **Enter.**

    The system responds with the Password prompt.

2. Type the root password and press **Enter.**

    The system responds with the UNIX system prompt (#).

3. Type `face` and press **Enter.**

    The system displays the AT&T FACE menu.

    ```
    ┌─────────────────────────────────────────┐
    │              AT&T FACE                   │
    ├─────────────────────────────────────────┤
    │                                         │
    │   >  Office of root                     │
    │      Printer Operations                 │
    │      Programs                           │
    │      system Administration              │
    │      UNIX System                        │
    │      Exit                               │
    │                                         │
    └─────────────────────────────────────────┘
    ```

4. From the AT&T FACE menu, backup the administrative files by picking the following sequence.

    ```
    System Administration
    Backup to Removable Media
    Personal Backup
    Selective Backup of Files Under /
    ```

    If you have more than one floppy disk drive, the system displays the SELECT REMOVABLE MEDIUM menu.

5. Make your choice and press **Enter.**

    The system displays the SELECTIVE BACKUP FILES UNDER / SCREEN

6. If this is an AUDIX VPL stand-alone system, type `/usr/lgdb  /ldg/data`

    If this is an AUDIX Voice Power or Integrated Voice Power Automated Attendant coresident system, type

    `/usr/lgdb  /ldg/data  /usr/vmdb  /usr/ocdb  /avp/data`

7. Press **S A VE** (F3).

    The system calculates the number of diskettes required and the amount of time the backup will take.

8. When prompted, insert the first formatted diskette end press **Enter.**

    The system begins the backup.

9. When the backup is complete, remove the lest diskette end press **Enter.**

    The system returns to the BACKUP TO REMOVABLE MEDIA menu.

10. From the BACKUP TO REMOVABLE MEDIA menu, backup the speech files by picking the following Sequence.

        Speech Backup
        All Talkfiles/Phrases

11. Press **S A V E** (F3).

    If you have more than one floppy diskette drive, the system displays the SELECT REMOVABLE MEDIUM menu.

12. Make your Choice and press **Enter.**

    The system calculates the number of diskettes required and the emount of time the backup will take.

13. When prompted insert the first formatted diskette and press **Enter.**

    The system begins the speech backup.

14. When the backup is complete, remove the last diskette end press **Enter.**

    The system returns to the SPEECH BACKUP menu

15. Press **CANCEL** (F6)   repeatedly to return to the AT&T FACE menu.

16. Move the cursor to Exit and press **Enter.**

17. Press **CONT** (F3) to continue.

18. Continue with task 3, *Installing Filesystem Modification Software.*

TASK 3: INSTALLING FILE SYSTEM MODIFICATION

This task is required for all upgrades.

To install the **AUDIX Voice** Power Lodging Filesystem modification software package, do the following steps in order.
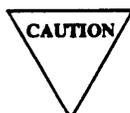
> ⚠ **CAUTION**
>
> Make sure that you install the AUDIX Voice Power Lodging Filesystem Modification diskette. A similar diskette is part of the AUDIX Voice Power software set (configurations 3 and 4); you will *not* install this diskette.

1. If you are already logged in as `root,` `skip to step` 3, Otherwise, at the `Console Login,` enter
   root

   `The` system responds with the `Password` prompt.

2. **Enter the root password.**

   The system responds with the UNIX system prompt `(unix#).`

3. Type **stop_vs** and press **(Enter).**

   When the voice system has stopped, you are returned to the UNIX system prompt (#).

4. Type **installpkg** and press **(Enter).**

   The system responds with the following message.

   ```
   Confirm

   Please insert the floppy disk.

   If the program installation requires more than one floppy disk ,
   be sure to insert the disks in the proper order, starting with
   disk number 1.  After the first floppy disk, instructions will
   be provided for inserting the remaining floppy disks.

   Strike ENTER when ready
   or ESC to stop.
   ```

5. Insert the AUDIX Voice Power Lodging Filesystem modification diskette into the floppy drive and press **Enter.**

   The system displays the following.

   ```
   This software will now modify /usr file system.
   Make sure you back up all talkfiles/phrases.

   Do you want to continue with the installation?
   <enter y for Yes and n for No>
   ```

6. Type y and press **Enter.**

   The system displays messages about the installation. Then after approximately 30 to 60 minutes depending on the size of your file system, the system displays the following message.

   ```
   The UNIX File System Modification procedure is complete.
   ```

7. Press **Enter** to return to the UNIX system prompt (#).

8. Remove the AUDIX Voice Power Lodging filesystem modification diskette from the drive.

9. At the UNIX system prompt (#), type shutdown -g0 -y -i6 and press **Enter** to shutdown and reboot the system.

   When the reboot is complete, the System displays the Console Login prompt.

10. Continue with task 4, Restoring File System.

NOTE   The AUDIX Voice Power Lodging File system Modification Software does not show up in a displaypkg listing.

TASK 4: RESTORING FILE SYSTEMS

This task is required for all upgrades.

1. From the `Console Login` prompt., enter audix

   The system responds with the `Password` prompt.

2. Enter the administrator's terminal-based password prompt.

3. Begin at the IVPSS R2.2 menu and pick the following sequence.
   ```
        Voice System Administration
        Configuration Management
        System Control
        Report Voice System Status
   ```

   A window appears. If the following message is displayed in the window, the voice system has been started.

   `The voice system is up and running at run level 4.`

   If the following message is displayed in the window, the voice system has been stopped

   `The voice system is down and stopped at run level 2.`

4. If the voice system is already running, skip to step 6. If the voice system is not running, continue with step 4.

5. From the SYSTEM CONTROL menu, pick `Start Voice System`

   When the startup process is finished the system displays the following message.

   `    Startup of the Voice System is complete`

6. Press **Enter** to continue.

7. Press **CANCEL** (F) several times to retum to them IVPSS 2.0 main menu.

8.   Move the cursor to `Exit` and press **Enter.**

9.   Press **CONT** (F3) to continue.

The system returns you to the `Console Login` prompt.

10.   At the `Console Login` prompt enter `root`

The system responds with the `Password` prompt.

11.   Enter the root password.

The system displays the UNIX system prompt (unix#).

12.   Enter `face`

The system displays the AT&T FACE menu.

13.   Begin at the AT&T FACE menu, and pick the following.
```
        System Administration
        Restore from Removable Media
        Personal Restore
        Restore Files under /
```

14.   If you have more than one floppy diskette drive, the system displays the SELECT REMOVABLE MEDIA menu. Make your choice and press **Enter.**

The system displays the DISK RESTORE form asking if existing files on disk should be overwritten with files being restored.

15.   Enter `y`

16.   Press **S A V E** (F3).

The system displays a confirmation message telling you to insert the diskette containing the files that you want to restore.

17.   Insert the diskette and press **Enter.**

After it begins the restore, the system displays the following message.

```
    Restore in progress.
```

18.   When the system informs you that it has completed the restore, remove the last diskette and press **Enter.**

19.   At the RESTORE FROM REMOVABLE MEDIA menu, restore the speech files by picking the following.
```
        Speech Restore
        Restore All Talkfiles and Phrases
```

20.   If you have more than one floppy disk drive, the system displays the SELECT REMOVABLE MEDIA menu. Make your choice and press **ENTER.**

The system displays a confirmation message telling you to insert the diskette containing files you want to restore.

21.   Insert the diskette and press **Enter.**

After the system begins the restore, the system displays the following message.

```
    Restoring speech
```

22. When the system informs you that it has completed the restore, remove the last diskette and press **Enter.**

23. Press **CANCEL** (F6) repeatedly to return to the AT&T FACE menu.

24. Move the cursor to Exit and press **Enter.**

25. Press **CONT** (F3) to continue.

26. At the UNIX system prompt (unix#) enter exit

27. From the Console Login prompt enter audix

   The system responds with the Password prompt.

28. Enter the administrator's terminal-based password.

29. Begin at the IVPSS R2.0 menu and pick the following sequence.

   ```
   Configuration Management
   System Control
   Stop Voice System
   ```

   A WAIT TIME Window appears.

30. Enter 60

   This is the number of seconds the system waits before stopping the voice system.

31. Press SAVE (F3).

   When the process is finished, you see the following message: The Voice System has stopped

32. Press **Enter** to continue.

33. Pick Start Voice System from the SYSTEM CONTROL menu.

   When the process is finished you see the following message: Startup of the Voice System is complete

34. Press **Enter.**

35. Press **CANCEL** (F6) several times to return to the IVPSS 2.0 main menu.

36. Select Exit from the IVPSS R2.0 menu.

   You are returned to the Console Login: prompt.

37. At the Console Login prompt type root and press **Enter.**

   The system responds with the Password prompt.

38. Type the root password and press **Enter.**

   The system responds with the UNIX system prompt (#).

39. Continue with task *5, Checking the Available /usr Space.*

TASK 5: CHECKING THE AVAILABLE /usr SPACE

This task is required for all upgrades.

1. If you are already logged in as `root`, go to step 3. Otherwise, at the `Console   Login` prompt type `root` and press **Enter.**

    The system responds with the `Password` prompt.

2. Type the `root` password and press **Enter.**

    The system responds with the UNIX system prompt (#).

3. Type `/etc/dfspace` and press **Enter.**

    The system displays a message showing the amount of available space in `/usr` file system.

4. If the available space in `/usr` is fewer than 5Mbytes place an X in the `Fewer   than 5Mbytes` line below. If the available space in `/usr` is more than 5Mbytes, place an X in the `More than 5Mbytes` line below.

    Fewer than 5Mbytes ──────────────

    More than 5Mbytes ──────────────

    How much space is available in `/usr` determines how prompts are answered and which tasks are performed during the rest of this upgrade procedure.

5. Continue with task 6, *Removing Existing Software.*

TASK 6: REMOVING EXISTING SOFTWARE

This task is required for all upgrades.

1. If you are already logged in as `root,` skip to step 3. otherwise, at the `Console  Login` prompt type `root` and press **Enter.**

    The system responds with the Password prompt.

2. Type the password for root and press **Enter.**

    The system responds with the UNIX system prompt (#).

3. Type `stop_vs` and press **Enter.**

    When the voice system has stopped, you are returned to the UNIX system prompt (#).

4. Type `removepkg` and press **Enter.**

    The system displays a numbered, alphabetical list of the software applications installed on the system, followed by the prompt.

        Select a number (1-xx) from the list to remove:

5. Type the number of the software package to be removed.

    The first time you perform this step, select the AVPL PMS Integration software Package R1.0, if it is and press **Enter.** If PMS is not, type the number corresponding to AUDIX Voice Power Lodging Application Software R1.0 and press **Enter.**

    The system responds with the following confirmation message.

        Do you really want to remove "package name"?
        Strike ENTER when ready
        or ESC to stop.

6. Press **Enter** again.

    When the removal is complete, the system displays the following message.

        The "package name" is now removed.

7. Repeat steps 4 through 6 for the AUDIX Voice Power Lodging Application Software R1.0. (If you removed AUDIX Voice Power Lodging Application Software R1.0 in step 4, go to the next step.)

    During the removal of AUDIX Voice Power Lodging Application Software R1.0, the system displays the following prompt.

        Do you wish to save voice messages and configuration data? (y/n)

    If you have more than 5Mbytes (as determined in task5), type `y` and press **Enter.** If you have less then 5Mbytes type n and press **Enter.**

8. Repeat steps 4 through 6 for the AUDIX Voice Power Switch Integration Software (for AT&T S75/G1): Patch 1 if it is listed. Otherwise, go to step 9.

9. Repeat steps 4 through 6 for the Integrated Voice Power Application Software R1.1: Patch 1 if it is listed. Otherwise, go to step 10.

10. Repeat steps 4 through 6 for the AUDIX Voice Power Application Software R2.0 Patch 1 if it is listed. Otherwise, go to step 11.

11. Repeat steps 4 through 6 for the AUDIX Voice Power Switch Integration Software (for AT&T S75/Gl) if it is listed. Otherwise, go to step 12 to remove the AUDIX Voice Power Application software R2.0.

    When removing the AUDIX VP switch integration software, the system displays the following message.

    ```
    To complete the install/remove process a shutdown is now being
    initiated  automatically.

    Make sure your floppy drive is empty.  If you are installing or
    removing controller boards, you may power down the system after
    the shutdown is complete.

    Strike ENTER when ready
    or ESC to stop.
    ```

    Press **Enter** shutdown the system.

    At the end of the shutdown, the system prompts you to reboot the system.

    Press the **Ctrl-Alt-Del** keys Simultaneously to reboot.

    When the reboot is complete, the system displays the `Console Login` prompt.

12. Repeat steps 1 through 6 for the AUDIX Voice Power Application Software R2.0.

    Dining the removal of this package, the system displays the following prompt.

    ```
    Do you wish to save voice messages, personal names and greetings
    and subscriber database information? (y/n)
    ```

    If you have more than 5Mbytes (as determined in task 5), type y and press **Enter.** If you have less then 5Mbytes, type n and press **Enter.**

    The system then prompts you for an automatic shutdown.

13. Press **Enter** to shutdown the system.

    At the end of the shutdown, the system prompts you to reboot the system.

    Press the **Ctrl-Alt-Del** keys simultaneously to reboot

    When the reboot is Complete the system displays the `Console Login` prompt

14. Repeat steps 1 through 6 for the integrated Voice Power System Software R1.1.

    During the removal of this package, the system displays the following prompt.

    ```
    Save speech filesystems? (y/n)
    ```

    If you have more than 5Mbytes (as determined in task 5), type y and press **Enter.** If you have less than 5Mbytes, type n and press **Enter.**

    The system then prompts you for an automatic shutdown.

15. Press **Enter** to shutdow the system.

    At the end of the shutdown, the system prompts you to reboot the system.

    Press the **Ctrl-Alt-Del** keys simultaneously to reboot.

    When the reboot is Complete the System displays the `Console  Login` prompt

16. Continue with task 7, *Verifying the Remaining Software.*

TASK 7: VERIFYING THE REMAINING SOFTWARE

This task is required for all upgrades.

1. At the `Console Login` prompt type `root` and press **Enter.**

   The system responds with the `Password` prompt.

2. Type the password for `root` and press **Enter.**

   The system responds with the UNIX system prompt (#).

3. Type `displaypkg` and press **Enter.**

   If all the software packages were removed correctly, the system displays the following list.

   ```
   Editing Package Version 2.0
   FACE HELP Version 1.2
   FACE Version 1.2
   FMLI Version 1.2
    Intelligent Ports Card Driver Package (8-ports) Version 4.0
   Remote Terminal Package Version 2.0
   x.25 Network Interface-Version-1.2.1 SL1.51.1.25
   or
   AVPL x.25 Network Interface Version 1.0
   ```

   (The Intelligent Ports Card Driver Package is only listed if your system has an IPC card installed.)

4. If the list on your screen has any software displayed othcr than what is listed above, remove it as described intask 6.

   > **NOTE**
   >
   > The AUDIX Voice Power Lodging File system Modification Software does not show up in a `displaypkg` listing.

5. Continue with task 8, *Installing the New Square.*

TASK 8: INSTALLING THE NEW SOFTWARE

This task is required for all upgrades.

Complete the tasks (in the order listed below) from Chapter 3, Software Installation, to install the new AUDIX VPL R1.1 software.

Some of the tasks listed below are for AUDIX VPL R1.1 systems that will be coresident with either AUDIX VP R2.1.l or IVPAA R2.0. If your system is not to be coresident you will not have that Software; therefore, go to the associated task.

1. Plug the IVP4 lines back into the IVP4 cards according to the labels on the lines.

   For more information on IVP4 lines, refer to Chapter 2, *Hardware Installation.*

2. Chapter 3, task 6, Installing IVPSS R2.0

3. Chapter 3, task 7, Installing AUDIX VP R2.1.l and the *Switch Tasks* which follow task 7 (for configurations 3 and 4 only)

4. Chapter 3, task 8, installing IVPAA (for configurations 5 and 6 only)

5. Chapter 3, task 9, Installing AUDIX VPL R1.1 and the *Switch Tasks* which follow task 9

6. Chapter 3, task 10, Installing PMS Integration R1.1 Software (for configurations 2,4, and 6 only)

7. Chapter 3, task 11, installing AUDIX VPL Guest interface Packages (optional, install these packages if they are included)

8. Chapter 3, task 12, Verifying the Software Installation

   Do not perform tasks 13, 14, and 15 in chapter 3

When all the new software is installed, shutdown and reboot the system to make sure the system recognizes all the new software and to restart the voice system, as follows.

1. Make sure that your floppy drive is empty.

2. At the UNIX system prompt (#), type shutdown -g0   -i6 -y and press **Enter** to Shutdown and reboot the system.

   When the reboot is complete, the system displays the Console Login prompt.

3. If you have fewer than 5Mbytes (as determined in task 5), continue with task 9, Restoring and *Converting AUDIX VPL R1.0 File Systems.*

   If you have more than 5Mbytes, do the following.

   a. At the Console Login prompt, enter audix

      The system responds with the Password prompt.

   b. Enter the administrator's terminal-based password.

      The IVPSS R2.0 menu is displayed.

   c. Continue with the *Switch Tasks* for associating the application and the switch.

TASK 9: RESTORING AND CONVERTING FILE SYSTEMS

This task is only required if you have less than 5Mbytes (as determined in task 5).

1. Restore the back up as detailed in task 4.

NOTE	If you have less than 5Mbytes the back up made in task 2 is restored twice, once in task 4 and here in task 9.

2. After restoring, type `/ldg/bin/lgdb_conv` and press **Enter** at the UNIX system prompt (#) to convert the backed up files to AUDIX VPL R1.1 format.

3. Type `exit` at the UNIX system prompt (#).

4. At the `Console Login` prompt, enter `audix`

    The system responds with the Password prompt.

5. Enter the administrator's terminal-bascd password.

    The IVPSS R2.0 menu is displayed.

6. Continue with the Switch Tasks on the next page.

SWITCH TASKS

This task is required for all upgrades.

This task associates (integrates) applications with the switch. Since this procedure varies from switch to switch, refer to the *Software Installation* chapter of the switch document supplied with the AUDIX VPL documentation set for instructions. Then continue with task 10, *Readministering the System.*

TASK 10: READMINISTERING THE SYSTEM

There are two parts to this task

 A. Reentering PMS integration parameters

 B. Reentering extensions, channels, and services

Task 10A: Reentering PMS integration Parameters

This task is only required when your AUDIX VPL system is integrated with PMS.

 1. Begin at the IVPSS R2.0 menu and pick the following sequence.

```
Voice System Administration
Application Package Administration
AUDIX Voice Power Lodging
System Parameter Administration
```

 2. Enter a (AVPL) for the Message Lamp Controlled By: parameter.

 3. Enter av (AVPL) for the When PMS Link is Down Calls For Guests Handled By: parameter.

   The previous two parameters are changed from their defaults so that acceptance tests can be performed. Later you will change them back.

 4. Press **SAVE** (F3).

 5. Enter y to confirm your choice of saving the parameters.

   The system displays a confirmation window informing you that the parameters have been saved.

 6. Press **Enter** to Continue.

 7. press **CANCEL** (F6) three times to return to the IVPSS R2.0 menu.

 8. Continue with task 10B.

Task 10B: Recentering Extensions, Channels and Services

This task is required for all upgrades.

1. Begin at the IVPSS R2.0 menu and pick the following sequence.

        Voice System Administration
        Configuration Management
        System Control
        Stop Voice System

    The system displays the Wait Time window.

2. Type 60 and press **Enter.**

    This is the number of seconds the system waits for activity to complete before stopping the voice system.

3. Press **SAVE** (F3).

    When the process is finished, the system displays the following message.

        The Voice System has stopped

4. Press **Enter** to continue.

5. Press **CANCEL** (F6) to exit the SYSTEM CONTROL window.

6. Pick Voice Equipment from the CONFIGURATION MANAGEMENT window.

```
                              Voice  Equipment

  CHN    CD.PT     STATE    STATE-CHNG-TIME   SERVICE-NAME   PHONE   GROUP   OPTS   TYPE
   0      0.0     INSERV Aug 28 19:24:25                               2     Talk IVP4
   1      0.1     INSERV Aug 28 19:24:25                               2     Talk IVP4
   2      0.3     INSERV Aug 28 19:24:25                               2     Talk IVP4
   3      0.4     INSERV Aug 28 19:24:25                               2     Talk IVP4
   4      1.0     INSERV Aug 28 19:24:25                               2     Talk IVP4
   5      1.1     INSERV Aug 28 19:24:25                               2     Talk IVP4
   6      1.3     INSERV Aug 28 19:24:25                               2     Talk IVP4
   7      1.4     INSERV Aug 28 19:24:25                               2     Talk IVP4
   8      2.0     INSERV Aug 28 19:24:25                               2     Talk IVP4
   9      2.1     INSERV Aug 28 19:24:25                               2     Talk IVP4
  10      2.3     INSERV Aug 28 19:24:25                               2     Talk IVP4
  11      2.4     INSERV Aug 28 19:24:25                               2     Talk IVP4
```

7. Press **CHG-KEYS** (F8), then **ASSIGN** (F3).

8. From the ASSIGN menu, select Channel to PBX Extension.

```
       Channel  to  PBX  Extension

    PBX  Extension:
            Channel:
```

9. Using the channel/phone information you wrote in task 1 of the upgrade procedure on the *lnstallation Worksheet,* move the cursor to the `PBX Extension` field and type the PBX extension for channel 0 (or the first channel number that is filled in in the table).

10. Move the cursor to the `Channel` field and type 0 (or the channel number matching the extension number you just typed).

11. Press **SAVE** (F3).

   The system displays an information window confirming that the PBX extension has been mapped to the channel.
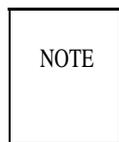
NOTE	The `VOICE EQUIPMENT` window is not updated until the `CHANNEL TO PBX EXTENSION` window is closed.

12. Press Enter to continue.

13. Repeat Steps 8 through 11 for each Channel.

14. When you are finished mapping PBX extensions to the channels, press **CANCEL** (F6).

15. From the ASSIGN menu, select Services to Channels.

16. Press **CHOICES** (F2).

   This displays all possible services.

17. Select the first service (for example `lodging,  info_service, or Auto_attend`) that you wrote in task 1 on the *Installation Worksheet.*

18. In the `Channels` field, type the number of the channels to be assigned to the service you just selected.

   You can type a single channel number, a range of channels (for example 0-4), or all (to assign all channels to the selected service) based on the information you wrote in task 1.

19. Press **SAVE** (F3).

   The system displays a `COMMAND OUTPUT WINDOW` verifying the channels and their assigned services.

20. Press **CANCEL** (F6).

21. If all channels have not been assigned to a service, press **CHG-KEYS** (F8), then press **ASSIGN** (F3) and repeat steps 14 through 19 to assign services to the remaining channels.

22. Press **CANCEL** (F6) twice to return to the `VOICE SYSTEM ADMINISTRATION` menu.

23. Continue with task 11, *Starting the Voice System.*

TASK 11: STARTING THE VOICE SYSTEM

This task is required for all upgrades.

To start the voice system, perform the following steps in order.

1. Begin at the VOICE SYSTEM ADMINISTRATION menu and pick the following sequence.

        Configuration Management
        System Control
        Start Voice System

    When the startup process is finished, the system displays the following message.

        Startup of the Voice System is complete

2. Press **Enter** to continue.

3. Continue with the task 12, *Performing Acceptance Tests.*

TASK 12: PERFORMING ACCEPTANCE TESTS

This task is reqired for all upgrades.

since acceptance tests for upgrades are the same as those for new installations, see Chapter 6, *Acceptance Tests,* for instructions on performing these tests.

Continue with task 13, *Cutting the System into Service.*

TASK 13: CUTTING THE SYSTEM INTO SERVICE

This task is required for all upgrades

Determine the customer's environment (integrated PMS or non-PMS), then cut the system into service accordingly using task 13A or task 13B.

Task 13A: Integrated PMS Cut-to-Service

Perform the following cut-to-service tasks in chapter 7, *cut-to-service.*

1. Inform the AUDIX VPL administrator that you are ready to put the system back in service and have him or her read the *Preparing for Cut-to-Service* section of Chapter 7.

2. Plug the PMS cable back into its port

    For more information on the PMS cable, refer to Chapter 2, *Hardware Installation.*

3. Chapter 7, task 2, Ensuring Database Synchronization

4. Chapter 7, Switch Task for configurations 2,4, and 6

5. This task ends your (AT&T technician and software specialist/software associate) AUDIX VPL R1.1 upgrade responsibilities. Be sure to leave all documents including the AUDIX VPL R1.1 *Installer's Checklist* at the site.

Task 13B: Non-PMS Cut-to-Service

Perform the following cut-to-service tasks in Chapter 7, *Cut-to-Service.*

1. Inform the AUDIX VPL administrator that you are ready to put the system back in service and have him or her read the *Preparing for Cut-to-Service* section of Chapter 7.

2. Chapter 7, Switch Task for configurations 1,3, and 5

3. Once the system is back in service the AUDIX VPL administrator should perform check ins and check outs on the AUDIX VPL system that occurred during the downtime.

4. This task ends your (AT&T technician and software specialist/software associate) AUDIX VPL R1.1 upgrade responsibilities. Be sure to leave all documents including the *AUDIX VPL R1.1 Installer's Checklist* at the site.

B. Installing A Second Hard Disk

To increase the voice message space of the AUDIX VPL system, you can add a second hard disk the same size as the first. For example, if the first hard disk is 135 Mbytes, you add a 135 Mbytes second disk.

To install the second hard disk and make it operational do the following.

1. At the UNIX system prompt (#), type `/etc/shutdown -y -g0` and Press **Enter** to shut down the AUDIX VPL system.

2. Power down and unplug the AUDIX VPL WGS.

3. Follow the instructions packaged with the disk or in the appropriate AT&T WGS service manual to install the disk hardware.

4. If you have not already done so, plug in the AUDIX VPL WGS.

5. Insert the Customer Test diskette (supplied with the 6386 WGS) in the floppy drive and power up the system.

    The system boots from the Customer Test diskette.

6. When Prompt press **Enter** to continue.

    The system displays the Customer Test main menu.

7. Using the down arrow key, highlight `Setup Utility` and press **Enter.**

    The system displays a list of current system settings.

8. Move the cursor to `Hard Disk #2` and press **Enter.**

    The system displays the choices you can assign to disk #2.

9. Move the cursor to the choice that matches the entry for `Hard Disk #1` and press **Enter.**

10. Press **Esc** to retum to the main menu.

11. Move the cursor to `Exit` and press **Enter.**

12. The system responds with the following prompt

        Want to Quit? No   Yes

13. Move the cursor to yes and press **Enter.**

14. Remove the diskette and press **Enter** to reboot the system.

    The system reboots showing the new settings for the second disk

    When the reboot is complete, the system displays the Console Login prompt.

NOTE   It may be necessary to perform a low-level format on the second disk before continuing.

15.   At the `Console Login` prompt type `root` and press **Enter.**

The system responds with the `Password` prompt.

16.   Type the currently assigned password for the `root` login and press **Enter.**

The system responds with the UNIX system prompt (#).

17.   Type `/vs/bin/stop_vs` and press **Enter** to stop the voice system.

18.   Type `/vs/bin/util/addspdisk` and press **Enter** to activate the second hard disk.

19.   Type `/vs/bin/start_vs` and press **Enter** to start the voice system again.

The second disk is now in service for storing AUDIX VPL messages.

C. IPC-900 Pinouts

The following tables show pinouts for PMS connections to the following.

- An IPC 900 card with an RJ45 (10) to male DB25 (DTE) adapter
- COM2's serial 9-pin connector

TABLE C-1. IPC-900 RS232 DTE Pin Assignments

Pin	Description
1	Frame Ground (FG)
2	Transmit Data (TD)
3	Receive Data (RD)
4	Request to Send (RTS)
5	Clear to Send (CTS)
6	Data Set Ready (DSR)
7	Signal Ground (SG)
8	Data Card Detect (DCD)
20	Data Terminal Ready (DTR)
22	Ring Indicator (RI) NO CONNECTION

TABLE C-2 RJ45 (10) To Male DB25 Adapter DTE Cable Pinouts

RJ45 (10) To Male DB25 Adapter (DTE)

IPC 900					RS232 Pin Assignment	
Reserved		1		6	Data Set Ready	(DSR)
Ring Indicator	(RI)	2		22	Ring Indicator (NO CONNECTION)	(RI)
Data Carrier Detect	(DCD)	3		20	Data Terminal Ready	(STR)
Data Terminal Ready	(DTR)	4		8	Data Carrier Detect	(DCD)
Signal Ground	(SG)	5		7	Signal Ground	(SG)
Receive Data	(RD)	6		2	Transmit Data	(TD)
Transmit Data	(TD)	7		3	Receive Data	(RD)
Clear to Send	(CTS)	8		4	Request to Send	(RTS)
Request to Send	(RTS)	9		5	Clear to Send	(CTS)
Frame Ground	(FG)	10		1	Frame Ground	(FG)

TABLE C-3. COM2's Serial 9-Pin Connector Pinouts (DCE)

Pin	Description
1	Data Carrier Detect (DCD)
2	Receive Data (RD)
3	Transmit Data (TD)
4	Data Terminal Ready (DTR)
5	Ground
6	Data Set Ready (DSR)
7	Request to Send (RTS)
8	Clear to Send (CTS)
9	Ring Indicator (RI) NO CONNECTION

D. Troubleshooting

This chapter provides troubleshooting information to help you isolate and correct problems that may occur with the AUDIX VPL system. The following troubleshooting areas are covered

- *Troubleshooting Strategy* lists several tasks you should perform before escalating the problem.

- *Call Handling Problems* identifies problems based on error messages that you hear on the phone.

- *System Initiation Problems* helps remedy problems that may occur, for example, when logging on to the AUDIX VPL.

- *Message Waiting Lamp (MWL) Problems* explains problems that may occur with the MWLs on guest administrator, and attendant phones.

- *Property Management System (PMS) Problems* details difficulties that may occur in the integrated PMS environment such as the PMS link going down.

- *Hardware Problems* covers problems with the AUDIX VPL WGS and related connections.

- Software *Problems* covers problems that may occur during the installation of AUDIX VPL and related Software.

- The *Procedures section* provides step-by-step instructions for troubleshooting remedies, such as rebooting the system.

TROUBLESHOOTING STRATEGY

Problems with AUDIX VPL can be caused by something as minor as someone unplugging the monitor's power cord or as major as a damaged hard disk. The information in this chapter will help you fix the minor problems.

Below is a list of troubleshooting steps to narrow the problem, then fix it.

1. Gather and record information about the problem, such room extension or message or sound which signaled problem. Try to recreate the problem to confirm your data. Make test calls from guest phones, attendant phones, and the administrator's phone.

2. Either by process of elimination or by scanning this chapter, try to narrow the problem to one of the following call handling, system initiation, MWL, PMS, or hardware.

3. Go to the sections in this chapter that correspond to the problems you have pinpointed Under each heading, the trouble is shown in bold letters. One or more possible reasons and remedies are listed below the problem. If there is more than one reason/remedy, the most commonly encountered is listed first. Try all remedies before proceeding.

4. If you try all the remedies and nothing works, escalate to the next support tier. Because AUDIX VPL works with PMSs and other vendors' PBXs, make sure that the problem is with AUDIX VPL before escalating.

CALL HANDLING PROBLEMS

This section helps you troubleshoot problems in the phone interface. Many of the symptoms in this section are prompts spoken by AUDIX VPL signaling a problem.

The guest hears "login incorrect" and is unable to access his/her mailbox.

Possible Reason:	The guest has entered the wrong extension and/or password.
Remedy:	Ask for the guest's extension and voice mail password. Use the AUDIX VPl terminal to verify that these are correct. Call the voice mail retrieval number. Enter the guest's extension and password. If you hear "invalid extension" or "invalid password refer to that symptom in this section.

Possible Reason:	The guest is attempting to retrieve messages from a hotel lobby phone and the number of digits in the guest's extension exceeds the `Maximum Extension Length` System parameter.
Remedy:	Determine the Maximum Extension Length by going to the SYSTEM PARAMETER window. (See Chapter 9, *System Tuning.)* Then, check the number of digits in the guest's extension. If the number of digits in the guest's extension exceeds the `Maximum Extension Length,` increase the extension length to accommodate the guest's extension. Note the implications of increasing this value listed in Chapter 9, *System Tuning.*

"Invalid extension" or "invalid password" is heard when an attendant is attempting to connect a guest with his/her voice mailbox or when a guest is attempting to retrieve voice mail messages from a lobby phone.

Possible Reason:	The extension and/or password entered using the phone interface is different from the extension and/or password used to check in the guest.
Remedy:	Verify that guest is checked in using the correct extension.

Possible Reason:	In the integrated PMS environment the PMS link was down where the guest checked in. Therefore, the guest has not been assigned a voice mailbox.
Remedy:	When the PMS link is restored and automatic database synchronization is completed, the guest will have a voice mailbox. To verify the PMS link's state, refer to the *Property Management System Problems* section of this chapter.

Possible Reason:	A pound sign (#) has been recorded as the guest's password. This allows access to the mailbox only from the guest's assigned room.
Remedy:	If the guest does not wish to use this feature, ask him/her to choose a password and update the guest's mailbox accordingly. In the non-PMS environment, see Chapter 5, *Attendant Terminal-Based Activities.*

Possible Reason:	The attendant is attempting to restore a deleted message for a checked-out guest-
Remedy:	Deleted messages are purged from the AUDIX VPL system when a guest checks out and cannot be restored.

Caller hears "Transfer failed. Please try again later."

Possible Reason:	The PBX failed to make a successful transfer. The attendant hunt group or attendant queue length may be misadministered.
Remedy:	Refer to your vendor's PBX documentation.

Caller hears "No one is checked in to the room you dialed" and is unable to leave a voice mail message.

Possible Reason:	The attendant transferred the caller to the wrong extension.
Remedy:	Use the AUDIX VPL remind to verify that the guest the caller is trying to reach is checked in. Try the transfer again.

Possible Reason:	In the non-PMS environment the guest is not checked in.
Remedy:	Check the guest in using the procedure in Chapter *5, Attendant Terminal-Based Activities.*

Possible Reason:	The wrong extension was used to check in the guest.
Remedy:	Verify that guest has been checked in using the correct extension.

Possible Reason:	In the integrated PMS environment the PMS link was down when the guest checked in, and the guest has not be assigned a voice mailbox.
Remedy:	When the PMS link is restored and automatic database synchronization is completed, the guest will have a voice mailbox. To verify the state of the PMS link, refer to the *Property Management System Problems* section of this chapter.

Possible Reason:	The number of digits in the guest's extension exceeds the `Maximum Extension Length` system parameter.
Remedy:	Determine the `Maximum Extension Length` by going to the SYSTEM PARAMETER window. (See Chapter 9, *System Tuning.)* Check the number of digits in the guest's extension. If the number of digits in the guest's extension exceeds the `Maximum Extension Length,` increase the extension length value to accommodate the guest's extension. Note the implications of increase this value as listed in Chapter 9, *System Tuning.*

Caller or guest hears "No one is available to receive your call," after pressing 0 to transfer to an attendant.

Possible Reason:	No attendant extension is specified.
Remedy:	Specify the primary attendant extension or attendant hunt group number on the SYSTEM PARAMETER window. See Chapter 9, *System Tuning,* for more information.

Possible Reason:	All of the attendant extensions are busy and the queue is full.
Remedy:	The caller or guest can try to reach the attendant later. If this problem is reported often you may consider adding more attendant extensions. See Chapter *9, System Tuning,* for more information.

The caller is never transferred to the voice mailbox or is transferred to an attendant when no one answers the phone in a guest's room.

Possible Reason:	The call coverage path for the extension has been incorrectly administered in the PBX.
Remedy:	Refer to the switch document in your AUDIX VPL documentation set and to your PBX vendor's documentation for instructions on administering call coverage paths.

A guest dials the integrated message retrieval number. It rings but AUDIX VPL never answers.

Possible Reason:	The analog line is not properly connected to the channel.
Remedy:	Perform the *Diagnosing Equipment* procedure in this chapter. Identify and record which card and which channel do not pass the diagnostics. Look at the back of the AUDIX VPL computer. Outside the computer case, hanging in the middle of six cables, is a small gray adapter labeled IVP4. There is one IVP4 adapter per IVP4 card. Verify each analog line is securely connected to the IVP4 adapters. When you insert an analog line into the adapter, it will click when properly in place.

Possible Reason:	No services are assigned to the channels.
Remedy:	Verify that all channels have services assigned using Chapter 9, *System Tuning.*

"This call is experiencing technical difficulties."

Possible Reason:	The PBX link is down.
Remedy:	Refer to the switch document in your AUDIX VPL documentation set for possible troubleshooting procedures.

Possible Reason:	The switch integration packages are not assigned to the proper application.
Remedy:	Verify that the switch integration-to-application association is correct. Refer to Appendix B, *Maintenance Procedures,* for more information.

Possible Reason:	The phone to channel mapping is incorrect
Remedy:	Verify that the phone to channel mapping is correct. See Appendix B, *Maintenance.*

Possible Reason:	The system is heavily loaded.
Remedy:	Try the call again later. If this problem persists, you may need to evaluate the number of channels needed at your establishment (if currently less than 24). Talk to your AT&T account team.

Possible Reason:	At large hotels, database synchronization is in progress.
Remedy:	When automatic database synchronization is completed all service will return to normal. To verify the progress of the database synchronization, refer to the *Property Management System Problems* section of this chapter.

Possible Reason:	The AUDIX VPL administrator has sent a message to a mailing list of guests. One or more of those guests has a full mailbox and the administrator receives the following return message. "Undelivered message to extension xxxx." The actual message sent to the guest can then be played. When the administrator attempts to delete the returned message, the "technical difficulties" phase is heard.
Remedy:	Message is automatically deleted by an AUDIX VPL process.

"Due to technical difficulties your call is being transferred."

Possible Reason:	In the integrated PMS environment the PMS link is down, and the SYSTEM PARAMETER window defines that all coverage calls are to be handled by the attendant
Remedy:	When the PMS link is back up, callers will no longer hear this message. To verify the state of the PMS link, refer to the *Property Management System Problems* section this chapter. For more information on system parameters, refer to Chapter 9, *System Tuning.*

Messages are truncated.

Possible Reason:	There was excessive background noise when caller was leaving the message.
Remedy:	The caller needs to speak up or eliminate background noise.

Possible Reason:	The caller pressed a touch tone while recording the voice mail message. This terminated the recording.
Remedy:	Inform the caller or guest of this feature.

Possible Reason:	When recording the message, the caller's voice simulated a touch tone. This terminated the recording.
Remedy:	Inform the caller or guest that this is a rare occurrence.

Possible Reason:	The incoming trunk lines are noisy.
Remedy:	Call your local phone company and ask them to check your lines.

Guest hears "Message terminated by transfer to the operator."

Possible Reason:	The caller pressed a touch tone while recording the message, which transferred them to the operator.
Remedy:	Callers must speak their entire message before pressing any touch tones.

System prompts for room extension when a guest is retrieving messages from his/her own room.

Possible Reason:	No one is checked into that room.
Remedy:	Verify that the correct room extension was entered at check in.

Possible Reason	The number of digits in the guest's extension exceeds the `Maximum Extension Length` System parameter.
Remedy	Determine the `Maximum Extension Length` by going to the SYSTEM PARAMETER window. (See Chapter 9, *System Tuning.*) Check the number of digits in the guest's extension. If the number of digits in the guest's extension exceeds the `Maximum Extension Length,` increase the extension length value to accommodate the guest's extension. Note the implications of increasing this value as listed in chapter *9, System Tuning.*

Caller hears "There is no room in the mailbox to leave a message"

Possible Reason	The guest's mailbox is full of messages.
Remedy	Inform the guest that they must delete unneeded messages. For more information on mailbox size, refer to Chapter 9, *System Tuning.* You may also want to examine the Guest Over Mailbox Limit report (See Chapter 7, *Reports.)*

Caller hears "The speech database is full."

Possible Reason:	The AUDIX VPL system is extremely low on disk space.
Remedy	Perform the *Stopping and Starting Voice System* procedure in this chapter. This will rid the speech database of unreferenced messages, if any.
	Purge all old mailboxes, then broadcast a message asking guests to delete any unneeded messages. Both of these tasks are detailed in Chapter 3, *Administrator's Activities.* You may also want to examine the Guests Over Mailbox Limit and Mailbox Usage reports. (See Chapter 7, *Reports.)* If this happens often, you may want to consider increasing your disk space. Talk to your AT&T account team.

When tbe integrated message retrieval number is dialed, a busy signal is heard.

Possible Reason	The Diagnosing Equipment procedure is in progress.
Remedy	Retry the call later.

Possible Reason	All channels are currently in use and the queue is full.
Remedy	Retry the call later. If this happens often, you may want to consider adding more channels for AUDIX VPL. Talk to your AT&T account team.

Possible Reason:	Channels are not in service.
Remedy:	Verify that all channels are in the INSERV state. See the *Verifying Channels Procedure* in this chapter. If the problem persists, try to narrow the problem to a specific channel and card by performing the Diagnosing Equipment procedure in this chapter.

Possible Reason:	Phone-to-channel mapping is incorrect.
Remedy:	Verify that the correct extensions are mapped to their corresponding channels. Refer to Appendix B, *Maintenance Procedures,* for more information.

Possible Reason:	The AUDIX VPL computer is not on.
Remedy:	Perform the *Visual Inspecrion* detailed in this chapter.

Caller or guest hears "multiple logins."

Possible Reason:	After retrieving messages, the guest does not do a full hang up, then immediately tries to call the system again.
Remedy:	Try calling again later. If the problem persists, stop and start the voice system. See the *Stopping and Starting Voice System* section of this chapter.

Possible Reason:	Two people are trying to access the mailbox at the same time, probably, the guest and the attendant.
Remedy:	Try the call again later.

AUDIX VPL is taking a long time to answer.

Possible Reason:	All channels are busy.
Remedy:	If this problem occurs often, talk to your AT&T account team about evaluating the number of channels needed at your establishment.

Possible Reason:	In the integrated PMS environment PMS automatic database synchronization is in process. This can slow AUDIX VPL's response time.
Remedy:	When the synchronization is complete, response time will return to normal.

Attendants are experiencing delays when transferring calls.

Possible Reason:	Your lodging establishment has extensions with different numbers of digits.
Remedy:	The Maximum Extension Length parameter should be set as low as possible while still accommodating all rooms. See Chapter 9, *System Tuning,* for more information.

Caller or guest hears the reorder tone (holler tone).

Possible Reason:	Channel is not administered properly in the PBX.
Remedy:	Refer to the switch document in your AUDIX VPL documentation set and your to PBX documentation for channel administration instructions.

SYSTEM INITIATION PROBLEMS

This section details problems that may occur when you start up the AUDIX VPL system.

Forgotten root password.

Remedy: This is an extremely serious matter. Escalate to the next support tier.

Forgotten terminal-based passwords (other than root).

Remedy: Escalate to the next support tier. You will need to know your system's root login and password.

Cannot login.

Possible Reason: The user is typing with capital letters.

Remedy: Check the **Caps Lock** key. UNIX is a case-sensitive operating system, so *AUDIX* means something different from *audix.* Your logins and passwords were created using all lower-case letters. Make sure that you enter them using all lowercase letters.

System will not boot.

Possible Reason:	There is a diskette in the floppy drive that does not have bootable data.
Remedy:	Remove the diskette, and press **Ctrl-Alt-Del** to reboot.

Possible Reason:	There is a hardware problem.
Remedy:	Refer to the *Hardwure Problems* section of this chapter.

The screen shows UNIX system or console parity errors during boot up.

Possible Reason: A condition such as a power outage caused an ungraceful shutdown of the system. An ungraceful shutdown is when the proper shutdown procedure has not been followed and the computer loses power. (See the *Rebooting the System* section of this chapter for the proper shutdown procedure.)

Remedy   Record the errors printed on your screen then escalate to the next support tier.

When booting, a hardware component fails the power-on self test (POST).

Possible Reason: There is hardware damage. For more information on the POST, refer to the *Rebooting the System section* of this chapter.

Remedy   Note which component failed and escalate to the next support tier.

MESSAGE-WAITING LAMP PROBLEMS

This section covers some of the problems related to message-waiting lamps (MWLs). MWL problems may also be discussed in other parts of this chapter.

MWL signals have three components: PMS, AUDIX, and leave word calling (LWC). (LWC is turning the MWL on from the attendant console). Any one of these components can turn the MWL on. However, only the component that turns the MWL on can turn it off. For example, if a guest complains that his or her MWL is on but there are no messages, the attendant cannot turn off the MWL from the console, unless the MWL was turned on by the console. If the MWL was turned on by the PMS, then the PMS must send the command to turn it off.

When a MWL trouble is encountered, attempt to determine which component controls of the MWL. AUDIX VPL provides a system parameter that allows you to specify either PMS or AUDIX VPL as the controller of the MWL. (Refer to Chapter 9, *System Tuning.) Since the* attendant console is independent of these two, ask the attendant if the MWL was activated from the console.

Once you have determined which system controls the MWL, try the appropriate remedies.

| NOTE | It is best to discourage attendants from activating the MWL from the console. It complicates troubleshooting. |

Guest has messages but MWL is not on.

Possible Reason:	In the integrated PMS environment, the PMS link is down, and SYSTEM PARAMETER window specifies that the MWL is controlled by the PMS.
Remedy:	When the PMS link is back up, MWLs are automatically updated to correct downtime inconsistencies. To verify the state of the PMS link, refer to the *Property Management System Problems* section this chapter. For more information on system parameters, refer to Chapter 9, *System Tuning.*

Possible Reason:	The PBX link is down and the SYSTEM PARAMETER window specifies that the MWL is controlled by the AUDIX VPL.
Remedy:	Refer to the switch document in your AUDIX VPL documentation set.

Possible Reason:	The PBX administration of the MWL is incorrect.
Remedy:	Refer to the switch document in your AUDIX VPL documentation set and to your vendor's PBX documentation to verify that the MWL for that extension is enabled and is the appropriate type (LED or neon).

Possible Reason:	The phone line is not properly connected to the guest's phone set or the MWL bulb is burned out.
Remedy:	Check the phone set connection. When you insert the phone line into the phone set it will click when properly in place. Test the bulb manually by sending a message-waiting call via the attendant console. If the bulb does not light, replace the bulb or the phone set.

The administrator's and attendants' MWLs are out of sync (on when they are supposed to be off and vice versa).

Possible Reason:	The Administrator and attendant extensions are not checked-in guests.
Remedy:	Check in the administrator's extension and attendants extensions as regular guests. Refer to the *Initial Activities* section of Chapter 3, *Administrator's Activities.*

You receive many complaints that MWLs are out of sync (on when they are supped to be off and vice versa).

Possible Reason:	In the integrated PMS environment, the PMS link is down.
Remedy:	When the PMS link is back up, MWLs are updated automatically to correct downtime inconsistencies. To verify the state of the PMS link, refer to the *Property Management System Problems* section of this chapter.

Possible Reason:	The PMS automatic database synchronization is in process. This can slow MWL updates.
Remedy:	When the synchronization is complete, all MWL should be updated to the correct state.

Possible Reason:	In the integrated PMS environment the PMS is not communicating to the switch.
Remedy:	Refer to your PMS vendor's manual for possible remedies.

Possible Reason:	The PBX link is down and AUDIX VPL controls of the MWLs.
Remedy:	Refer to the switch document in your AUDIX VPL documentation set. For more information on MWL control refer to Chapter 9, *System Tuning.*

Possible Reason:	In the non-PMS environment and in the integrated PMS environment, the MWL queue is malfunctioning.
Remedy:	Perform the *Stopping and Starting the Voice System* procedure in this Chapter.

Possible Reason:	Control of the MWL was changed on the SYSTEM PARAMETERS window.
Remedy:	Change the control back to its original setting. Refer to Chapter 9, *System Tuning.*

PROPERTY MANAGEMENT SYSTEM (PMS) PROBLEMS

The link between the PMS and the AUDIX VPL system is extremely important. Each system (PMS and AUDIX VPL) keeps its own database of information. The link allows the PMS and AUDIX VPL to talk and update each other's databases. For example, PMS automatically tells AUDIX VPL when it checks guests in so that AUDIX VPL can add those guests to its database and give them voice mailboxes. AUDIX VPL automatically tells PMS when guests receive voice messages so that PMS can update those guests' voice message tallies.

Occasionally this link may go "down," that is, stop functioning. Both systems are still up and running, but they are not communicating. This is usually not serious and usually the PMS link fixes itself without human intervention. However, it may cause some temporary service problems.

It may not always be obvious that the PMS link is down. Your PMS *may* print an error message on the PMS terminal screen and/or new guests might complain that callers have been unable to leave voice messages for them. Problems that result are probably covered in the *Call Handling Problems* section of this chapter. If the trouble could be related to the integrated PMS environment *Call Handling Problems* refers you to this section.

Below are two troubleshooting paths based on PMS link problems. To determine which path to follow, perform the *Using the Event Log* procdure in this chapter. *If the PMS link is down,* one of the following event messages appears near the end of the event log report.

```
#6301 P_LINK_IDLE PMS: Link idle timeout, current LIT value: xxx

#6304 P_MRR_EXCED PMS: MRR reached, current MRR value: xxx
```

If the following event message numbers appear after PMS link down events (#6301 and #6304 above), then *the PMS link has come back up* and the databases have been automatically resynchronized.

```
#6341 P_LINKUP PMS:WTR:link is up; automatic database
synchronization

#6342 P_DBSYNC_END PMS:WTR: automatic database synchronization
completed
```

If the AUDIX VPL/PMS Link is Down

If the PMS link is down, perform the following steps in order.

1. Check the physical connection between the AUDIX VPL computer and the PMS computer. Make sure that the cable is secure at both ends.

2. Wait 5 minutes for the PMS link to come back up. The event log report states the time that the PMS link went down.

3. Check the PMS Link Idle Timeout on both systems. For AUDIX VPL, refer to Appendix B, *Maintenance Procedures.*

4. Read the *While the PMS Link is Down* section in this chapter.

5. If the PMS does not revive itself, determine which system (AUDIX VPL or PMS) is malfunctioning. Examine the event log for event numbers in the 6300 range. If you find an error in the 6300 range, use the **EXPLAIN** key to see if the error points to a particular stem. (Refer to the *Using the Event Log* section of this chapter for more information on the **Explain** key.)

6. Refer to your PMS vendor's documentation for troubleshooting paths.

7. It is recommended that you follow your PMS vendor's service path before escalating to the next support tier.

If the AUDIX/PMS Link is Up

If the PMS link is up and you are experiencing problems with the voice mail system, determine which system (AUDIX VPL or PMS) is malfunctioning. Examine the event log for event numbers in the 6300 range. If you find an error in the 6300 range, use the **EXPLAIN** key to see if the error points to a particular system. (Refer to the *Using the Event Log* section of this chapter for more information on the **EXPLAIN** key.)

You may also want to consult your PMS vendor's manual for troubleshooting paths.

If it is the time of day where the system experiences a low volume of usage, perform the *Restarting the PMS Link* procedures in this chapter.

It is recommended that you follow your PMS vendor's service path before following your AT&T service path.

While the Link is Down

When the link goes down, you should keep in mind several items.

Because the PMS is still up and running, you can perform administrative tasks at this terminal. All phone-based tasks also are operable. Guests who were checked in before the link went down can retrieve messages normally. However, new guests that check in while the link is down do not have voice mailboxes. Also, if a guest check out and a new guest checks into that room, the new guest can access the previous guest's messages.

You have a choice of which system answers coverage calls where the PMS link is down: AUDIX VPL can continue to take voice messages, or all coverage calls can be transferred to the attendant (See Chapter 9, *System Tuning.*)

If AUDIX VPL handles coverage calls while the link is down, guests can check out and AUDIX VPL continues to take messages for them. In addition, if the PMS controls the MWL, it may not be turned on for new voice messages taken while the link is down. MWL control is an AUDIX VPL administrator option. (See Chapter 9, *System Tuning.*)

If the attendant handles coverage calls while the link is down, attendants have to take text messages from callers when guests are not in their rooms or are busy. Attendants should continue to add these text messages to guests' tallies on the PMS system.

HARDWARE PROBLEMS

This section provides information on how to troubleshoot problems with AUDIX VPL hardware and related connections. If you suspect that a problem is hardware related, you should always do a visual inspection first.

Visual Inspection

A visual inspection involves looking for external signs of trouble in and around the AUDIX VPL hardware.

1. Make sure that the computer and monitor are getting power by checking the power cord connection at the unit and at the outlet. Check the status of the power lights located on the front of the computer case and on the front of the monitor. They should be lit.

   If the outlet is controlled by a wall switch or if the outlet is controlled by a dimmer switch, use a different outlet. If your computer is plugged into a power strip with an on/off switch, make sure the switch is on.

2. Verify that the power switch on the computer is in the *on* position. The `Console  Login:` prompt will appear if the system has booted properly.

3. The floppy disk drive and hard disk drive lights are on or flashing while the disks are accessed When there is no disk activity, the lights are off.

4. Make sure that all connectors and cables are firmly attached to the unit and to their destination.

5. Visually check the operation of the fan on the system controller. Look at the rear of the unit. The fan blades should be rotating. Hold your hand several inches in front of the fan to see if the fan is blowing. If the fan is not operating, replace it.

6. Verify that the **Caps Lock** key is not on.

Customer Test Diagnostics Diskette

A customer test diagnostic diskette is provided with the WGS and may be helpful in isolating hardware problems. For more information on the customer test diagnostic diskette refer to the service manual or user's guide for your processor.

Specific Card Diagnostics

If you suspect that a particular card does not work properly and that card came with a diagnostic diskette, run the tests on the diskette. Refer to the card's user guide for more information.

IVP4 cards can be diagnosed using the *Diagnosing Equipment* procedure in this chapter. The following are symptoms that indicate a problem with the IVP4 card or channels.

 • Touch tones are not being recognized. For example, playback does not stop when the correct touch tone is entered.

 • Speech is abruptly truncated during playback.

Changing the setting of the SW1.1 segment on troublesome channels from OPEN (default) to CLOSED may remedy certain IVP4 card problems. Task 6 in the *Hardware Installation* chapter explains how to change the SW1.1 setting.

AUDIX VPL monitor is blank.

Possible Reason:	Monitor is not on.
Remedy:	Make sure that the monitor is getting power by checking the power cord connection in the back of the monitor and at the outlet. Turn the monitor on. Verify that the monitor's indicator light (usually found at the base of the screen) is illuminated.

Possible Reason:	Brightness control is turned down.
Remedy:	Most monitors have two dials that control brightness. One controls the brightness of the characters on the screen. The other controls the brightness of the background. Rotate these dials to see if anything appears on the screen.

Possible Reason:	The video display card, monitor, or power supply are not functioning properly.
Remedy:	Escalate to the next support tier.

Power outage.

Possible Reason:	Loss of power can cause an ungraceful shutdown of the system. Proceed cautiously after a power outage.
Remedy:	Turn off the computer and the monitor. Unless you have a surge protector, disconnect the computer and the monitor from the power supply. When the local power is back on, plug the computer and monitor in and turn them on. If the system boots to the `Console Login:` prompt, call the system and try to leave a message and retrieve a message. If the system does not boot, escalate to the next support tier.

During backup your terminal displays an FD:Write failed error message

Possible Reason:	The system cannot write to the floppy drive.
Remedy:	Escalate to the next support tier.

Console presents I/O or Panic errors.

Possible Reason: There is a hardware problem.

Remedy: Perform the *Rebooting the System* procedure in this chapter. If the
                        messages persist, write them down, then escalate to the next support tier.

Your terminal displays a hard disk controller error message.

Possible Reason: The hard disk has crashed. The read/write heads may be damaged or some
                        dirt on the disk has caused it to malfunction.

Remedy: Escalate to the next support tier.

SOFTWARE PROBLEMS

This section provides information on how to troubleshoot problems while installing AUDIX VPL and related software.

During the installation of AUDIX VPL application software of AUDIX VP application software, you are prompted to enter the administrator's login. However, you have not created one yet.

Possible Reason: You skipped the procedure in which adminstrative logins are created through the `AT&T FACE` menu.

Remedy: Stop the installation by pressing the **<u>DELETE</u>** key and create the necessary logins using the procedure detailed in Chapter 3, *Software Installation.*

PROCEDURES

This section provides several step-by-step procedures for troubleshooting. Do not perform these procedures unless instructed to do so by this document.

Rebooting the System

The procedure described in this section is called a *warm boot* because it is performed while the computer is on. A *cold boot* involves turning the computer off, then back on again.

Only do a reboot if it is the time of day where the system experiences a low volume of usage.

To do a warm reboot of the AUDIX VPL system, perform the following steps in order.

1. Make sure that there are no diskettes in the floppy drives.

2. Begin at the IVPSS R2.0 menu and pick the following sequence.
   ```
   Voice System Administration
   Configuration Management
   System Control
   Shutdown System
   ```

   A WAIT TIME window is presented.

3. Enter 0

   This is the number of seconds the system waits before shutting down.

4. Press **<u>SAVE</u>** (F3).

   The following message appears.

   ```
   Do you want to continue? (y or n):
   ```

5. Type y

   When the system is completely shut down, you will see the following message.

   ```
   The system is down.
   reboot the system now.
   ```

   This procedure is continued on the next page.

6. Press **Ctrl-Alt-Del** to reboot.

   While booting, the system performs a power-on self test (POST). Information is presented in two columns on your screen. The first column lists various hardware components. The second column presents a status of the tests performed on components in the first column. If FAIL appears in the second column for any component, record the component's name and escalate to the next support tier.

   When it is finished, you see the following prompt.

   ```
   Welcome to AT&T 386 UNIX System
   Console Login:
   ```

Verifying Channels

To verify the state of the IVP4 cards and channels, perform the following steps in order.

1. Begin at the IVPSS R2.0 menu and pick the following sequence.
   ```
        Voice System Administration
        Configuration Management
        Voice  Equipment
   ```

2. Look at the STATE field for all channels. If it reads Inserv for all channels, go to step 3.

   If it reads FOOS for any channel, the digital line is not properly connected to the IVP4 card. Check the connection of the digital line at both ends, then perform the *Diagnosing IVP4 Card* procedure detailed in this chapter.

   If it reads MANOOS, perform the *Diagnosing IVP4 Card procedure detailed in this chapter.*

3. When all of the channels read Inserv, press **CANCEL** (F6) to exit the VOICE EQUIPMENT window.

4. Record the information in the CHN field PHONE field and SERVICE-NAME field VOICE EQUIPMENT window) on the next page.

   This procedure is continued on the next page.

Channel Number	Phone	Service
0		
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		

5. Press CANCEL (F6) to exit the VOICE EQUIPMENT window.

6. Press CANCEL (F6) to exit the CONFIGURATION MANAGEMENT window.

7. Pick System Monitor from the VOICE SYSTEM ADMINISTRATION window.

8. Verify that all channels read On-Hook.

9. Call each channel number using the table you filled in above.

10. Looking at the SYSTEM MONITOR window, verify that the call comes through on the proper channel. On-Hook should change to Talking.

   YOU will hear "This call is experiencing technical difficulties."

Stopping and Starting the Voice System

Only stop and start the voice system if it is the time of day where the system experiences a low volume of usage.

To stop and start the voice system, perform the following steps in order.

1. Begin at the IVPSS R2.0 menu and pick the following sequence.
   ```
   Voice System Administration
   Configuration Management
   System  Control
   Stop Voice System
   ```

   A `WAIT TIME` window appears.

2. Enter `6 0`

   This is the number of seconds the system will wait before shutting down.

3. Press **SAVE** (F3).

   When the process is finished, you will see the following message: `The  Voice  System  has stopped`

4. Press **Enter** to continue.

5. From the `SYSTEM CONTROL` menu, pick `Start  Voice  System`

   When the process is finishd, you will see the following message `Startup of the Voice System is complete`

6. Press **Enter.**

If you are unsure of the voice system status, do the following.

1. Begin at the IVPSS R2.0 menu and pick the following sequence.
   ```
   Voice System Administration
   Configuration Management
   System  Control
   Report Voice System Status
   ```

   A window appears. If the following message is displayed in the window, the voice system has been started.

   `The voice system is up and running at run level 4.`

   If the following message is displayed in the window, the voice system has been stopped.

   `The voice system is down and stopped at run level 2.`

The System Monitor

The system monitor is a dynamic (changing) report screen that shows the activity on the AUDIX VPL channels. To view the system monitor, do the following.

1. Begin at the IVPSS R2.0 menu and pick the following sequence.
   ```
   Voice System Administration
   System Monitor
   ```

The report window appears on your screen. It displays new information as calls are made. For more information on the system monitor, refer to Chapter 7, *Reports.*

Restarting The PMS Link

Only do a PMS restart if it is the time of day where the system experiences a low volume of usage.

To initiate a request to the PMS to restart the link, perform the following steps in order.

1. Begin at the IVPSS R2.0 menu and pick the following sequence.
   ```
   Voice System Administration
   Application Package Administration
   AUDIX Voice Power Lodging
   ```

2. Press **CMD-MENU** (F7).

3. Pick `AVPL/PMS  Link  Restart`.

   When the PMS restart request has been issued, you will see the following messages.
   ```
   The PMS wtr process has been successfully restarted.
   The PMS rdr process has been successfully restarted.
   ```

4. Press **Enter.**

Executing a PMS restart request also issues a database synchronization request.

PMS Database Synchronization

To initiate a request to the PMS to synchronize the AUDIX VPL and PMS databases, perform the following steps in order.

1. Begin at the IVPSS R2.0 menu and pick the following sequence.
   ```
   Voice System Administration
   Application Package Administration
   AUDIX Voice Power Lodging
   ```

2. Press **CMD-MENU** (F7).

3. Pick `AVPL/PMS Database Synchronization`.

   If database synchronization is initiated, the systems begin updating each others' database. The AUDIX VPL terminal beeps each time an inconsistency is found.

   If the PMS link is down a message asks you to try database synchronization again later.

4. Press **Enter.**

Diagnosing Equipment (IVP4 Cards and Channels)

This procedure diagnoses the IVP4 cards and channels. To diagnose other hardware components, refer to the *Hardware Problem* section of this chapter.

To diagnose IVP4 cards and channels, perform the following steps in order.

1. Begin at the IVPSS R2.0 menu and pick the following sequence.
    ```
    Voice System Administration
    Configuration Management
    System  Control
    Diagnose Equipment
    ```

    A DIAGNOSE EQUIPMENT window appears.

2. Enter card as the equipment to diagnose.

3. Enter all as the equipment number.

4. Enter n to diagnose equipment when it is free of calls.

NOTE	Diagnosing IVP4 cards immediately will disconnect all calls in progress. You should not enter y unless the call traffic is extremely low. If you enter n , the IVP4 cards will be diagnosed when they are free of calls. Diagnosing equipment only when cards are free may take longer, but no calls will be disconnected.

5. Press **SAVE** (F3).

6. Type y to confirm your choice of diagnosing IVP4 cards immediately, regardless of calls in progress.

   The diagnostic process may take several minutes.

   The results are printed in a text window for viewing. This procedure diagnoses one card at a time. Each card has four channels.

   If the diagnosis shows a lack of a dial tone on more than one channel (No Dial Tone Found) on a card or if the card analysis reads Failed, the card probably needs to be replaced. Otherwise, the IVP4 cards are probably not the source of your problem and you should continue troubleshooting.

Restoring Backups

To restore an administrative or speech backup, see Appendix B, *Maintenance Procedures.*

Using the the Event Log

The event log is a report that compiles all event messages generated by the AUDIX VPL system. To view an event log, perform the following steps in order.

1. Begin at the IVPSS R2.0 menu and pick the following sequence.
```
        Voice System Administration
        Reports
        System Reports
        Event  Log  Report
```

2. Press **CHG-KEYS** (F8), then **DISPLAY** (F2).

   This displays the Event Log.

   Use the arrow keys to page through the report. The **END** key (on the key pad) goes to the last page of the report (most recent).

   The date and time that the event occurred are shown in the `Time` field.

   To see a more detailed explanation of an event message, press the **EXPLAIN** key, then enter the event number. A brief explanation appears on the screen.

The event log report is intended mainly for AT&T support personnel and development. If everything is functioning properly, *do not* escalate to the next support tier based on a message in the Event Log.

For more information on the Event Log, refer to Chapter 7, *Reports.*

E. Price Element Code Explosions

To be provided.

Abbreviations

A L T	assembly load and test
AT&T	American Telegraph and Telephone
AUDIX	Audio Information Exchange
AUDIX VP	AUDIX Voice power
AUDIX VPL	AUDIX Voice Power Lodging
CDH	call data handling
C O	central office
COM2	serial communications equipment
COR	class of restriction
COS	class of service
D C E	data communications equipment
DCP	Digital Communications Protocol
DID	direct inward dialing
DIO	disk input/output
DIP	data interface process
DTE	data terminal equipment
E I A	Electronic Industries Association
ET	error tracker
FACE	framed access command environment
F M L I	form and menu language interpreter
FOOS	facility out of service
GPSC-AT/E	general-purpose synchronous controller AT-enhanced
I/O	input/output
IPC-900	intelligent ports card model 900
I R Q	interrupt request
I V P 4	Integrated Voice Power board (4 channels)
IVPAA	Integrated Voice Power Automated Attendant
IVPSS	Integrated Voice Power system software
K	kilobytes
LAT	link acknowledgement timeout

L E D	light emitting diode
L G D I P	lodging data interface process
L I T	link idle timeout
LWC	leave word calling
MANOOS	manually out of service
Mbytes	megabytes
MPDM	modular processor data module
MR	maximum retransmissions
MRR	maximum retransmission requests
MTC	maintenance
MWL	message-waiting lamp
PBX	private branch exchange
PC	personal computer
PEC	price element code
PMS	property management system
POST	power-on self test
RAM	random access memory
ROM	read-only memory
SA	software associate
SCI	Switch Communication Interface
SIMM	single in-line memory module
SS	software specialist
TRIP	tip/ring input process
TSC	technical support center
TSM	transaction state machine
VDC600	video display card 600
VROP	voice response output process
WGS	work group systems

Index