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AUDIX® Voice Power™ Lodging

Release 3.0

MAP/5 Installation

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Acknowledgment

This document was prepared by the GBCS Product Documentation Development group, AT&T Bell Laboratories, Denver, CO 80234-2703.

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About This Document

Purpose

This document, *AUDIX® Voice Power™ Lodging MAP/5 Installation* (585-310-117), contains the information needed in order to plan for and to install a new AUDIX Voice Power Lodging system on MAP/5 hardware.

Intended Audience

This document is intended for sales project managers and customer project coordinators who are responsible for planning and implementing the new system and individuals performing the AUDIX Voice Power Lodging MAP/5 installation. This document is also intended for AT&T support services.

How This Document is Organized

This document is organized into the following chapters:

- Chapter 1 — *Introduction and Planning*

This chapter presents general information for new system planning, worksheets to record information necessary for the installation, and MAP/5 site survey and planning information.

- **Chapter 2 — *Checklists for Installation***

This chapter contains checklists for both Assembled, Loaded, and Tested (ALT) and Non-ALT MAP/5 installation.
- **Chapter 3 — *Hardware Installation***

This chapter presents the information needed to physically install the MAP/5 hardware platform, circuit cards, and peripherals such as the maintenance modem and switch integration device (SID).
- **Chapter 4 — *Software Installation***

This chapter presents the procedures needed to load the software into the MAP/5. It also contains the procedures necessary to verify the software installation.
- **Chapter 5 — *Initial Administration and Test***

This chapter presents the procedures used to begin AUDIX Voice Power Lodging MAP/5 operations. These procedures include mapping channels and extensions, assigning services for test, performing basic call-through tests, and re-assigning services for operation.
- **Chapter 6 — *Acceptance Testing***

This chapter presents the procedures used to acceptance test both AUDIX Voice Power Lodging and AUDIX Voice Power.
- **Chapter 7 — *Cut-to-Service Procedures***

This chapter presents the procedures used to move AUDIX Voice Power Lodging to a fully operational system.
- **Appendix A — *Troubleshooting***

This chapter presents a troubleshooting strategy and identifies causes and remedies for minor problems.
- ***Abbreviations***

This section provides a list of abbreviations and acronyms used with the AUDIX Voice Power Lodging and AUDIX Voice Power systems.
- ***Glossary***

The Glossary provides a definition of terms and acronyms used with the AUDIX Voice Power Lodging and AUDIX Voice Power systems.
- ***Index***

The Index provides an alphabetical listing of principal subjects covered in this document.

Conventions Used

The following conventions are used in Intuity documentation

- Rounded boxes represent keyboard keys that you press.

For example, an instruction to press the enter key is shown as:

Press [ENTER].

- Square boxes represent phone pad keys that you press.

For example, an instruction to press zero on the phone pad is shown as:

Press [0].

- The word "enter" means to type a value and press [ENTER].

For example, an instruction to type y and press [ENTER] is shown 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 and/or third key) are shown as a rounded box that contains two or more words separated by hyphens. For example, an instruction to press and hold [ALT] while typing the letter d is shown as:

Press [ALT-d]

- Commands and text you type or enter appear in **bold**.

- Values, instructions, and prompts that you see on the screen appear as:

Press any key to continue.

- Variables that the system supplies or that you must supply appear in *italics*.

For example, an error message including one of your filenames appears as:

The file *filename* is formatted incorrectly

Trademarks and Service Marks

The following trademarked products are mentioned in this document:

Trademarks	Origin
AUDIX®	registered trademark of AT&T
DEFINITY®	registered trademark of AT&T
Hayes®	registered trademark of Hayes Microcomputer Products
OPTIMA™	registered trademark of Hayes Microcomputer Products
Phillips®	registered trademark of the Phillips Screw Co.
Smartmodem™	registered trademark of Hayes Microcomputer Products
UNIX®	registered trademark of UNIX Systems Laboratories, Inc.
Voicepower™	registered trademark of AT&T
Voice Power™	registered trademark of AT&T

Related Resources

In addition to this document, you may need to reference the following documents:

Document	Document #
Multi-Application Platform/5 User's Guide	585-211-110
AUDIX Voice Power System Release 3.0 Maintenance	585-310-113
AUDIX Voice Power System Release 3.0 Switch Integration to System 75, DEFINITY Communications system Generic 1 and 3	585-310-118
AUDIX Voice Power Lodging Property Management Specifications	585-310-128
AUDIX Voice Power system Release 3.0 Switch Integration to the NEC NEAX 2400 Switch	585-310-201
AUDIX Voice Power System Release 3.0 System and Feature Description	585-310-202
AUDIX Voice Power System Release 3.0 Switch Integration to the Northern Telecom SL-1	585-310-205
AUDIX Voice Power System Release 3.0 Switch Integration to ROLM 8000, 9000, and 9751 CBX	585-310-206
AUDIX Voice Power Lodging Administration	585-310-525
AUDIX Voice Power System Release 3.0 Administration	585-310-532
AUDIX Voice Power Lodging Guest Quick Reference Artwork	585-310-707
AUDIX Voice Power System Release 3.0 Portable User's Guide	585-310-711
AUDIX Voice Power System Release 3.0 Quick Reference	585-310-712
AUDIX Voice Power System Release 3.0 Quick Reference Artwork Package	585-310-713
AUDIX Voice Power System Release 3.0 Wallet Card	585-710-714
AUDIX Voice Power System Release 3.0 Business Card Sticker	585-310-715

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AUDIX Voice Power Lodging MAP/5 Installation
585-310-117

This chapter contains the following information for AUDIX Voice Power Lodging installation and planning:

- Introduction
- Configuration
- AUDIX Voice Power Lodging Planning
- AUDIX Voice Power Planning
- Telephone/PBX requirements
- Security Issues
- MAP/5 (Multi-Application Platform 5) description and planning

This chapter also contains the following worksheets:

- Channel Number and Distribution
- Channel and Service Assignments
- AUDIX Voice Power Lodging System Parameters
- AUDIX Voice Power Lodging Property Management System Parameters
- AUDIX Voice Power System Parameters
- AUDIX Voice Power Subscribers

Before installing the AUDIX Voice Power Lodging MAP/5, review the contents of this chapter and complete the required worksheets. Also complete "Switch Integration Planning" in the PBX documentation that shipped with your MAP/5.



NOTE:

The worksheets for system parameters are optional. Standard installations install the system using system defaults, or as determined by contract. The worksheets list these defaults.

Introduction to AUDIX Voice Power Lodging and AUDIX Voice Power

This document is to be used to plan for and to install:

- AUDIX Voice Power Lodging, Release 3.0
- AUDIX Voice Power, Release 3.0

The possible basic configurations (setups) for these products include:

- AUDIX Voice Power Lodging Release 3.0, only
- AUDIX Voice Power Lodging Release 3.0 and AUDIX Voice Power Release 3.0, together

When both of these Voice Power products are loaded and operating on the same computer, they defined as coresident.

AUDIX Voice Power Lodging, Release 3.0

AUDIX Voice Power Lodging Release 3.0 is a voice mail system for guests of lodging establishments such as hotels. This system provides an electronic mailbox for each guest room. This electronic mailbox, a storage area on the Voice Power computer's hard disk, stores recorded messages for guests who do not answer their extensions. Guests may retrieve these messages later, at their convenience. This type of voice mail is especially important for business travelers who are used to having office voice mail systems or for individuals who are away from the hotel for long periods of time. AUDIX Voice Power Lodging is like having a private answering machine for each guest.

AUDIX Voice Power Lodging is easy to operate. Users are greeted with spoken prompts that guide them in pressing touch-tone buttons to make choices. Because touch tones are not needed to leave a message for a guest, outside callers may use rotary phones.

AUDIX Voice Power Lodging also provides you with a way to record the arrival of other types of messages such as facsimile transmissions or text messages.

AUDIX Voice Power, Release 3.0

AUDIX Voice Power Release 3.0 is an automated voice messaging system that provides service to callers and subscribers. Callers, both internal and external, are defined as anyone attempting to reach an extension served by AUDIX Voice Power. Subscribers are defined as individuals who have a voice mailbox. A voice mailbox is a storage area on the computer's hard disk created specifically for an

individual subscriber. This storage area holds the subscriber' messages. The subscriber may delete, store, or forward the messages.

AUDIX Voice Power provides 5 different services for callers and subscribers. If you wish, you may assign different people to serve as administrators for these different features. These are:

- **Call answer**

The call answer service answers the phone for subscribers who do not answer their extensions, plays a message for the callers, and records the callers' message. After recording a message, the call answer service starts a stutter tone or lights an MWL (message waiting lamp) to inform subscribers that they have a voice mail message. The MWL is a small flashing light located on the telephone.

- **Voice mail**

The voice mail service allows subscribers to retrieve their recorded messages and send or forward messages to other subscribers. Subscribers call the main extension to retrieve their messages. After entering a password, AUDIX Voice Power greets the subscribers with the number of messages that they have and provides instructions for retrieval.

- **Message drop**

The message drop service is an answering service that plays a prerecorded message for callers and then allows the caller to record a message. This service provides a way to collect information such as feedback, requests for product information, or orders.

- **Information service**

The information service allows callers to listen to a prerecorded message containing information that the business would like to distribute such as hours of operation or area attractions, and then disconnects the callers.

- **Automated attendant**

The automated attendant service answers incoming calls with a prerecorded announcement and routes the callers to different destinations. Callers indicate their desired destination by entering touch-tone numbers after prompts.

Automated Attendants may be used to play pre-recorded information about the area, area programs, hotel offerings, rates, and specials for guests or outside callers who want information and/or to make a reservation. The following figure, Figure 1-1, illustrates these possible uses for an automated attendant in the lodging industry. The center top box illustrates the menu of options that the system plays for incoming calls. The arrows from each selection illustrate the destinations and options for each menu item.

For more information about installing an Automated Attendant, refer to *AUDIX Voice Power Administration (585-310-532)*, Chapter 6, "Automated Attendant Administration."

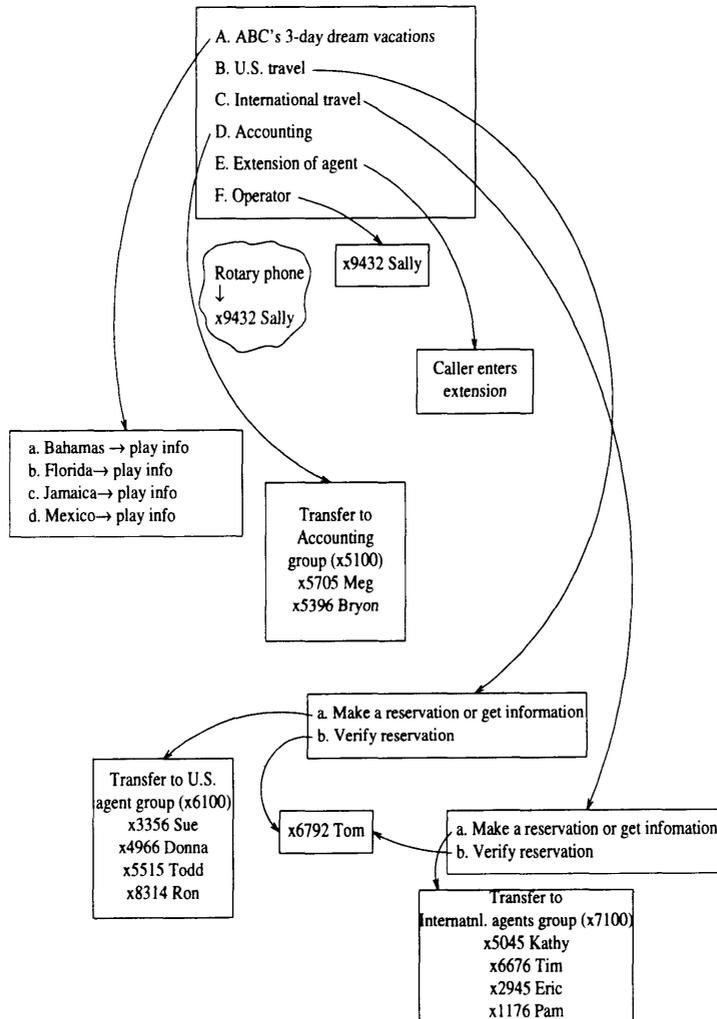


Figure 1-1. Automated Attendant Path Illustration

For additional information about AUDIX Voice Power features, refer to *AUDIX Voice Power R3.0 Administration (585-31-532)*.

AUDIX Voice Power Lodging Configurations

The following four configurations are possible on the AUDIX Voice Power Lodging MAP/5:

1. AUDIX Voice Power Lodging, only
2. AUDIX Voice Power Lodging with a PMS integration
3. AUDIX Voice Power Lodging with AUDIX Voice Power coresidency
4. AUDIX Voice Power Lodging with AUDIX Voice Power coresidency and PMS integration

AUDIX Voice Power Lodging operates with or without a Property Management System (PMS). PMS software integrates the operation of the AUDIX Voice Power Lodging system and the system that performs your reservations, checkins, checkouts, and billing. Hotel employees that have PMS integrations perform the checkin and checkout tasks on the PMS console. Hotel employees without a PMS integration administer the AUDIX Voice Power Lodging system directly through the AUDIX Voice Power Lodging console.

For information about the Property Management System for your lodging establishment, contact your PMS vendor.

AUDIX Voice Power Lodging and AUDIX Voice Power may also have different configurations for communications with Private Branch Exchanges (PBXs). These configurations include the following:

- Switch integration device (SID), one for a single application, two for a coresidency, to a non-AT&T PBX
- Switch integration device (SID), one for both AUDIX Voice Power Lodging and AUDIX Voice Power, with AT&T's ICSS software supplement installed¹, to an AT&T PBX
- Switch integration device (SID) for AUDIX Voice Power Lodging and a Digital Communications Protocol Card (DCP) for AUDIX Voice Power, to an AT&T PBX²

-
1. ICSS software, a specialized software supplement that allows both AUDIX Voice Power Lodging and AUDIX Voice Power to operate with 1 SID, is available only with the MAP/5 and only operational with AT&T switches. This software may not be installed onto MAP/40s because of port number limitations.
 2. For additional information about installing and using the DCP circuit card for AUDIX Voice Power, refer to *AUDIX Voice Power System R3.0 Switch Integration to System 75, DEFINITY® Generic 1 and DEFINITY Generic 3* (585-310-203).

AUDIX Voice Power Lodging MAP/5s may be configured so that both applications operate using 1 SID. If you are not installing the specialized ICSS software, you must use a SID for AUDIX Voice Power Lodging and the DCP circuit card for AUDIX Voice Power when integrating with an AT&T PBX.

AUDIX Voice Power Lodging and AUDIX Voice Power may be integrated with the following AT&T PBXs:

- System 75
- DEFINITY G1
- DEFINITY G3

Channel and Voice Port Configuration

Before Installing the AUDIX Voice Power Lodging MAP/5 with or without an AUDIX Voice Power coresidency, you will need to determine the:

- Number of channels needed
- Number of channels that need to be assigned to each application for a coresidency or the total number of ports that need to be used if you are installing the specialized ICSS software supplement
- PBX extensions for the channels
- Channel service assignment
- Hunt group for message retrieval

The PBX document that you received with your system also contains planning information. Before installing the AUDIX Voice Power MAP/5, you must also complete "Switch Integration Planning," in the PBX document.

Determine Channel Needs and Distribution

Refer to the tables below. If you are installing AT&T's specialized ICSS software supplement, refer to the ICSS channel distribution table, Table 1-1 and use "Determine Channels for Systems Using ICSS Supplemental Software." If you are not installing ICSS, refer to Table 1-2 and Table 1-3 and use "Determine AUDIX Voice Power Lodging and AUDIX Voice Power Channels" below.

Determine Channels for Systems Using ICSS Supplemental Software

1. Select the distribution of hotel guests and hotel staff that best matches your lodging establishment. These numbers should describe the maximum capacity of the lodging establishment. Refer to Table 1-1 below.

⇒ **NOTE:**

Hotel staff and hotel guests are not equivalent. Different time and call frequency averages for hotel guests and hotel staff were used to determine the amount of traffic that the AUDIX Voice Power Lodging system will support. Do not subtract from one column in order to support another. For example, you may not add 25 additional hotel staff to the system if you are 25 hotel guests short of the maximum in a hotel guest category.

Table 1-1. Number of Required Channels for AUDIX Voice Power Lodging and AUDIX Voice Power Systems Using ICSS Software Supplement

Number of Hotel Guests	Number of Hotel Staff	Number of Channels Required
1 – 150	1 – 50	5
151 – 250	1 – 50	6
251 – 500	1 – 50	8
251 – 500	51 – 100	9
501 – 750	51 – 100	11

2. Record the number of channels required to support the both hotel staff members and guests on Worksheet 1-1 on Page 1-20, "Channel Number and Distribution," in the total row.

The number of channels that the MAP/5 can support is 12. If your channel total exceeds 12, you will need to purchase a larger AUDIX Voice Power Lodging system, or operate 2 MAP/5s.

**Determine AUDIX Voice Power Lodging and
AUDIX Voice Power Channels**

Use the following procedure if you are not installing AT&T's ICSS software.

1. Locate the number of hotel guests that reflects the capacity of your lodging establishment. Refer to Table 1-2 below:

Table 1-2. Number of Required Channels for AUDIX Voice Power Lodging

Number of Hotel Guests	AUDIX Voice Power Lodging Channels Required
1 – 150	4
151 – 250	5
251 – 500	7
501 – 750	9
751 – 1000	11
1001 – 1500	15

2. Record the number of channels required to support the guests on Worksheet 1-1 on Page 1-20, "Channel Number and Distribution."

If you will not be installing an AUDIX Voice Power coresidency, go to Step 6.

(This procedure continued on the following page.)

3. Locate the number of staff members or employees (subscribers) who will have AUDIX Voice Power services if you are installing a coresident system. Refer to Table 1-3 below:

Table 1-3. Number of Required Channels for AUDIX Voice Power

Number of Hotel Staff or Employees	AUDIX Voice Power Channels Required
1 – 50	3
51 – 100	4
101 – 150	5
151 – 200	6
201 – 250	7
251 – 300	8

4. Record the number of channels required to support the subscribers on Worksheet 1-1 on Page 1-20, "Channel Number and Distribution."
5. Add the two channel totals together.
6. Record the total number of channels that you will need for the system on Worksheet 1-1 on Page 1-20.

The number of channels that the MAP/5 can support is 12. If your channel total exceeds 12, you will need to purchase a larger AUDIX Voice Power Lodging system, or operate 2 MAP/5s.

Assign PBX Extension

Record the PBX extensions that you will use for each voice port in the column headed "PBX Extension" on Worksheet 1-2 on Page 1-20. For the number of extensions, refer to Worksheet 1-1, "Channel Number and Distribution."

Assign Testing Services

If you will be using AT&T's ICSS software supplement with your MAP/5, record **ldg_ni_ca** for the testing service assignments for the voice ports in the column headed "Testing Service" on Worksheet 1-2 on Page 1-20.

If you are installing AUDIX Voice Power Lodging and AUDIX Voice Power without ICSS software supplement, record the following testing services for each voice port in the column headed "Testing Service" on Worksheet 1-2 on Page 1-20:

For all AUDIX Voice Power Lodging Channels: **ldg_ni_vm**

For all AUDIX Voice Power Channels: **info_service**

Assign Operating Services

Services dictate channel behavior by providing specific operating guidelines for a channel. These guidelines may specify a single or a multiple service operation. For example, a channel assigned to message drop (**message_drop**) from a coresident AUDIX Voice Power will provide only message drop service, while a channel assigned to **lodging** will provide only AUDIX Voice Power Lodging service. A channel assigned to AUDIX Voice Power's **CA+VM+AA**, however, will support call answer, voice mail, and automated attendant services.

To assign channels for operation, follow the guidelines and definitions presented below. If your system will be using AT&T's ICSS supplemental software, refer to the first section below. If your system will be using the standard service assignments, refer to the second section "Assign Standard AUDIX Voice Power Lodging and AUDIX Voice Power Operating Services."

Assign Services for Systems Using ICSS Supplemental Software

AUDIX Voice Power Lodging systems with AT&T's ICSS software supplement installed provide the **icss_univ** service, in addition to all of the standard AUDIX Voice Power Lodging and coresident AUDIX Voice Power services. Therefore, you may assign services by using one of 2 methods:

1. Assign all channels to **icss_univ**.
2. Assign part of the channels to **icss_univ**, and one or more of the remaining channels to AUDIX Voice Power Lodging or AUDIX Voice Power services.

If you select the second method, you will need to ensure and verify that your switch assignments match the channel assignment, and that the PBX/SID arrangement will support the assignments.

Assign all Channels to **icss_univ** Service

AT&T's ICSS supplemental software provides the following additional service to the system: **icss_univ**. This service allows each voice port assigned to **icss_univ** to provide either AUDIX Voice Power Lodging or coresident AUDIX Voice Power services, depending upon the call information received from the PBX. The information from the PBX identifies whether the call is

- an attendant call
- call from a guest
- call from a staff subscriber
- an external or an internal unassigned extension call

from a guest extension or a staff extension tells AUDIX Voice Power Lodging the origination of the telephone call, guest or staff, and the AUDIX Voice Power Lodging system presents the caller with the appropriate service.

The ICSS software supplement allows you to assign one telephone number as the message retrieval number for both AUDIX Voice Power Lodging and AUDIX Voice Power. The PBX sends call information to this number when it redirects an unanswered telephone call, and the AUDIX Voice Power Lodging system, using the **icss_univ** service, responds to the call based upon the information from the PBX. This information identifies the call as a:

- Call to an AUDIX Voice Power Lodging extension from an internal or external telephone

When guests do not answer their extensions, the PBX sends the calls to coverage. The PBX routes each coverage call to the AUDIX Voice Power Lodging system, and the AUDIX Voice Power Lodging system answers the incoming call. The caller hears the greeting, a brief set of instructions, and

a tone to start recording. The caller may then leave a message. When a message is left, AUDIX Voice Power Lodging lights the message waiting lamp (MWL) on the guest extension telephone.

This is an integrated service; the caller does not have to enter the guest's extension number in order to leave a message.

- Call from an AUDIX Voice Power Lodging extension to the main AUDIX Voice Power Lodging/AUDIX Voice Power message retrieval number

If you call from a guest extension that has been assigned to AUDIX Voice Power Lodging (checkin guest procedure) the system will provide fully integrated AUDIX Voice Power Lodging voice mail services. Therefore, guests who have a flashing MWL may call the message retrieval number directly from their room extension. The PBX will route the call to the AUDIX Voice Power Lodging system. AUDIX Voice Power Lodging will answer the guest's call, play a greeting, announce the number of voice mail messages, and if the guest has facsimile³ or text messages, notifies the guest that he or she has fax and/or text and provide instructions about retrieving the messages.

This is an integrated service; the guest who is retrieving messages does not have to enter the room extension number.

- Call from an AUDIX Voice Power Lodging attendant extension

Hotel guests who wish to retrieve their messages from outside the hotel must go through the attendant when all of the voice channels are assigned to **icss_univ**⁴. Similarly, AUDIX Voice Power subscribers, hotel staff members who have been assigned to an AUDIX Voice Power extension, must also go through the attendant or an operator if they wish to retrieve their messages from outside the hotel or from an extension not their own.

The AUDIX Voice Power Lodging system allows you to designate extension numbers as attendant extensions. Attendant extensions have special privileges that allow callers from these extensions to perform services for guests or staff members who are calling in to check their messages. When AUDIX Voice Power Lodging receives a telephone call from an attendant extension, the system presents Lodging non-integrated voice mail services to the attendant. The attendant hears a request for the extension number for the guest for whom the attendant wishes to retrieve

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3. If you are using a Property Management System, your property management system must support this feature. For more information about your PMS, contact your PMS vendor. Attendants for lodging establishments that are not integrated with a PMS system, may enter additional message notifications directly through the AUDIX Voice Power Lodging system console.
 4. To allow guests to retrieve messages from the lobby or from an outside extension without going through an attendant, you may wish to assign a channel to the Lodging non-integrated voice mail (**ldg_ni_vm**) service. For additional information, refer to the next section "Assign Channels to **icss_univ** and other Services."

messages and a request for the guest or the attendant password⁵. The attendant then connects the call, and the system plays the guest messages for that extension.

Attendants wishing to connect a caller to a guest's extension so that the caller may leave a message may transfer the call to the guest's extension. If the guest does not answer, the PBX sends the call to coverage, and AUDIX Voice Power Lodging will answer and record the caller's message.

An AUDIX Voice Power subscriber who wishes to retrieve voice mail messages from an extension other than the subscriber's own, must call the operator or attendant, be transferred to their own extension, allow the AUDIX Voice Power Lodging system to answer with the subscriber's personal greeting, and, after the greeting, press *7 to access the AUDIX Voice Power voice mail menu and retrieve their messages.⁶ An attendant must transfer this type of call to the subscriber extension; attendants may not directly access the coresident AUDIX Voice Power system by calling the main message retrieval number from the attendant extension.

- Call to a coresident AUDIX Voice Power extension from an internal or external telephone

When hotel staff members do not answer their extensions, the PBX sends the calls to coverage. The PBX routes each coverage call to the AUDIX Voice Power Lodging system, and the AUDIX Voice Power Lodging system answers the incoming call with the coresident AUDIX Voice Power call answer service. The caller hears the personal greeting and a tone to begin recording. The caller may then leave a message. When a message is left, AUDIX Voice Power lights the message waiting lamp (MWL) on the hotel staff member's telephone.

This is an integrated service; the caller does not have to enter the guest's extension number in order to leave a message. If an outside caller wishes to leave a message for a hotel staff member, an attendant or operator may transfer the call to the staff member's extension. The unanswered call will go to coverage, and the coresident AUDIX Voice Power will record the message.

- Call from an AUDIX Voice Power extension to the main AUDIX Voice Power Lodging/AUDIX Voice Power message retrieval number

Hotel staff with AUDIX Voice Power extensions are AUDIX Voice Power subscribers. Subscribers calling from their extensions that have been assigned to the AUDIX Voice Power system will receive fully integrated AUDIX Voice Power voice mail services. Subscribers may call the message retrieval number directly from their extensions. The PBX will

5. Keep the attendant passwords and all system passwords secure.

6. If you wish, you may assign a channel to the **voice_mail** service to allow subscribers to call AUDIX Voice Power directly to retrieve their mail messages.

route each call to the AUDIX Voice Power Lodging system. The system will identify the call as an AUDIX Voice Power call, answer, play the AUDIX Voice Power greeting, and the login prompt. After the subscriber has entered the extension and password, the system presents a menu of options for the subscriber to use in order to send or to retrieve messages.

This is an integrated service; subscribers who are retrieving messages from their own extensions may enter just a pound sign in place of the extension number. However, subscribers must still enter their full passwords.

- Call to the main message retrieval number from an unassigned extension for AUDIX Voice Power Lodging

If a caller reaches the message retrieval number from an internal extension that has not been assigned to the system, the AUDIX Voice Power Lodging system presents the caller with the non-integrated voice mail Lodging (**ldg_ni_vm**) service. These callers hear a request for the guest extension and the password for that extension from which they wish to retrieve messages.

Hotel guests who wish to retrieve their messages from outside the lodging establishment, however, must go through the attendant when all of the system's voice channels are assigned to **icss_univ**.⁷

- Call to the main message retrieval number from an unassigned extension for AUDIX Voice Power System

The AUDIX Voice Power Lodging system answers all telephone calls from unassigned extensions with Lodging non-integrated voice mail service. Subscribers who call the main message retrieval number from an unassigned extension will not be able to reach the coresident AUDIX Voice Power.

An AUDIX Voice Power subscriber who wishes to retrieve voice mail messages from outside the lodging establishment must call the operator or attendant, be transferred to their own extension, allow the AUDIX Voice Power Lodging system to answer with the personal greeting, and, during the greeting, press *7 to access the AUDIX Voice Power voice mail menu and retrieve their messages.⁸ Subscribers who are calling from an extension inside the lodging establishment may call their own extension, and during their personal greeting, press *7 to access the voice mail menu.

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7. To allow guests to retrieve messages from the lobby or from an outside extension without going through the attendant, you may wish to assign a channel to the Lodging non-integrated voice mail service (**ldg_ni_vm**). For additional information, refer to the next section "Assign Channels to **icss_univ** and other Services."
8. If you wish, you may assign a channel to the **voice_mail** service to allow subscribers to call AUDIX Voice Power directly to retrieve their mail messages.

Record **icss_univ** for the operating service for all of the voice channels that your system will use for operation in the far right column on Worksheet 1-2, "Channel and Service Assignments."

Assign Channels to **icss_univ and Other Services**

You may assign a mixture of **icss_univ** service and standard services to your AUDIX Voice Power Lodging system. However, when you assign a service other than **icss_univ** to a voice channel, the voice channel becomes dedicated to that service. It may provide only that service; it will not respond to calls for other services. Dedicating channels may require that the system be equipped with more ports. If you dedicate channels, your system administrator should monitor the traffic for the channels and watch for caller complaints about hearing excessive ringing before the voice mail system answers a call.

These symptoms may indicate a need to re-assign services to include more **icss_univ** voice channels or to purchase additional ports. If you re-assign services, be sure to make the corresponding changes to your PBX.

Although you may use any of the standard AUDIX Voice Power Lodging or coresident AUDIX Voice Power services, the following may be helpful when they are used in addition to the **icss_univ** service:

- **ldg_ni_vm**

This service provides lodging non-integrated voice mail operations. Channels with non-integrated service require that the users enter the extension number and a password before retrieving their messages. This service assignment will allow hotel guests to retrieve messages without being connected through the hotel attendant.

Outside callers reaching a voice channel assigned to this service will receive the same service as an internal caller.

- **ldg_ni_ca**

This service provides lodging non-integrated call answer operations. Channels with non-integrated service require that the caller enters the extension number before leaving a message. This service assignment will allow hotel attendants to call AUDIX Voice Power Lodging and leave a message for a guest without ringing the guest's hotel room.

Outside callers reaching a voice channel assigned to this service will receive the same service as an internal caller.

- **auto_attend**

This service dedicates a channel to automated attendant. All callers specifying this extension receive the automated attendant.

Choose the service that you want for each channel and record the service for operation in the far right column on Worksheet 1-2, "Channel and Service Assignments.

Assign Standard AUDIX Voice Power Lodging and AUDIX Voice Power Operating Services

The services available for AUDIX Voice Power Lodging are:

- **ldg_ni_ca**

This service provides lodging non-integrated call answer operations. Channels with non-integrated service require that the caller enters the extension number before leaving a message. This service assignment will allow hotel attendants to call AUDIX Voice Power Lodging and leave a message for a guest without ringing the guest's hotel room.

- **ldg_ni_vm**

This service provides lodging non-integrated voice mail operations. Channels with non-integrated service require that the users enter the extension number and a password before retrieving their messages. This service assignment will allow hotel guests to retrieve messages without being connected through the hotel attendant.

- **lodging**

This service provides integrated lodging call answer and voice mail operations. Integrated service does not require that the user enter the extension number before leaving or retrieving messages.

The services available from AUDIX Voice Power if you have an AUDIX Voice Power coresident⁹ system are:

- **CA+VM+AA**

Channels assigned to this service are accessed through the main message retrieval number. This service provides AUDIX Voice Power integrated call answer and voice mail for internal callers. For external callers, this service provides an automated attendant that offers menu options so that the AUDIX Voice Power system may direct their call to an appropriate destination; external callers who want to retrieve their voice mail pres *7 (star seven) to start the voice mail menus and bypass the automated attendant.

9. AUDIX Voice Power coresidency requires either AT&T's ICSS Software Supplement or a Digital Communications Protocol (DCP) circuit card and software in order to operate. Systems without ICSS software or the DCP circuit card will only be able to operate AUDIX Voice Power Lodging. For additional information about installing the DCP circuit card, refer to *AUDIX Voice Power System R3.0 Swtch Integration to System 75, DEFINITY Generic 1 and DEFINITY Generic 3* (585-310-203).

- **CA+VM**

Channels assigned to this service are accessed through the main message retrieval number. This service provides AUDIX Voice Power integrated call answer and voice mail for internal callers. This service does not provide an automated attendant for external callers. All users calling the extension number that connects to this service will receive the voice mail prompts. Coverage calls, calls directed to AUDIX Voice Power because the subscriber does not answer his or her extension, receive the greeting for call answer calls.

- **auto_attend**

This service dedicates a channel to automated attendant. All callers specifying this extension receive the automated attendant.

- **call_answer**

This service dedicates a channel to call answer service. All callers reaching this service receive non-integrated call answer service. Callers need to enter the extension in order to leave a message.

- **info_service**

This service dedicates a channel to the information service. Information service is also called the bulletin board service. All callers specifying this extension hear a pre-recorded message. After AUDIX Voice Power plays the message, the system disconnects the caller.

- **message_drop**

This service dedicates a channel to the message drop. The message drop service causes the channel to function like a home answering machine. Callers hear a brief announcement and then they leave a message after the tone.

This service is the same for inside and outside callers provided that the PBX has been administered to allow an internally dialed extension to match the externally dialed version of the extension. For example, 1234 and 555-1234.

- **voice_mail**

This service dedicates a channel to voice mail service. All callers reaching this service receive non-integrated voice mail service. Subscribers must enter their extension number and password in order to retrieve their voice mail messages.

Choose the service that you want for each channel and record the service for operation in the far right column on Worksheet 1-2, "Channel and Service Assignments."

Message Retrieval Number

At the bottom of Worksheet 1-2 "Channel and Service Assignments," record the message retrieval number(s) that will be used for message retrieval. If you are installing AT&T's ICSS software supplement, you may use the same main message retrieval telephone number for both AUDIX Voice Power Lodging and AUDIX Voice Power retrievals. If you are not using ICSS, you must use a separate message retrieval number for each application, one for the switch integration device (SID) for AUDIX Voice Power Lodging and one for the Digital Communications Protocol (DCP) circuit card link for AUDIX Voice Power.

Worksheet 1-1. Channel Number and Distribution

System	Number of Channels
AUDIX Voice Power Lodging	
AUDIX Voice Power	
Total	

Worksheet 1-2. Channel and Service Assignments

✓	Card Number	Port Number	Channel Number	PBX Extension	Service for Testing	Service for Operation
	Card 0 (slot #3)	0	0			
		1	1			
		2	2			
		3	3			
	Card 1 (slot #4)	4	4			
		5	5			
		6	6			
		7	7			
	Card 2 (Slot #6)	8	8			
		9	9			
		10	10			
		11	11			

AUDIX Voice Power Lodging message retrieval number: _____

AUDIX Voice Power message retrieval number: _____

AUDIX Voice Power Lodging Planning

Before the AUDIX Voice Power Lodging system is cut-to-service (converted to a fully operation system):

1. Perform pre-cut-to-service tasks
2. Review the system and PMS parameters

For explanations of parameters and the administrator's pre-cut-to-service tasks, refer to Chapter 3 "AUDIX Voice Power Lodging Administrator's Activities" and Chapter 9 "System Tuning" in *AUDIX Voice Power Lodging Administration (585-310-525)*.

AUDIX Voice Power Lodging System Parameters

The following worksheet lists the system parameters and their possible values. Record the attendant extensions, primary attendant extension, and any changes that you would like to make, or review the system defaults that will be in use. For a description of each of these parameters, refer to Chapter 9 “System Tuning” in *AUDIX Voice Power Lodging Administration* (585-310-525).

Worksheet 1-3. AUDIX Voice Power Lodging System Parameters

System Parameter	Possible Values	Default	Desired
Attendant Extensions (1)	1 to 7 digits	none	
Attendant Extensions (2)	1 to 7 digits	none	
Attendant Extensions (3)	1 to 7 digits	none	
Attendant Extensions (4)	1 to 7 digits	none	
Attendant Extensions (5)	1 to 7 digits	none	
Attendant Extensions (6)	1 to 7 digits	none	
Attendant Extensions (7)	1 to 7 digits	none	
Hunt Group of Primary Attendant	1 to 7 digits	none	
Mailbox Size	1 to 99 minutes	6 minutes	
Pause For TT Input	1 to 9 seconds	4 seconds	
Maximum Extension Length	1 to 7 digits	4 digits	
Maximum Message Length	30 to 360 seconds	120 seconds	
Allow Guests To Save Messages?	yes or no	no	
Lamp ON For New Messages Only?	yes or no	no	
Automatic Transfer to Operator At End Of Call?	yes or no	no	
Message Lamp Controlled By:	PMS or AVPL	PMS	
When PMS Link Is Down, Calls For Guest Handled By:	Attendant or AVPL	Attendant	

Property Management System Parameter Administration

Property Management Systems (PMS) are optional for AUDIX Voice Power Lodging. The following worksheet lists the optional PMS software parameters and their possible values. Record any changes that you would like to make, or review the system defaults that will be in use. For additional information about these parameters, contact your PMS vendor.

Worksheet 1-4. Property Management System Parameter Administration

PMS Parameter	Possible Values	Default	Desired
Device for link	any serial port	/dev/tty01	/dev/tty01
Maximum Link Error	0 to 50 errors	50 errors	
Link Acknowledgment Timeout	5 to 20 seconds	20 seconds	
Link Idle Timeout	5 to 20 seconds	20 seconds	
Maximum Retransmission	1 to 5	5	
Maximum Retransmission Request	1 to 5	5	
Baud Rate	1200 to 9600	9600	

AUDIX Voice Power Lodging Training and Personnel

Before the AUDIX Voice Power Lodging system is cut-to-service, the system administrator will need to:

1. Review the AUDIX Voice Power Lodging administrator's duties
2. Create Guest Quick Reference Cards
3. Copy the troubleshooting worksheet
4. Train the attendants
5. Inform current guests about AUDIX Voice Power Lodging

The information to perform these tasks is located in *AUDIX Voice Power Lodging Administration* (585-310-525).

AUDIX Voice Power Planning

Before the AUDIX Voice Power Lodging system is cut-to-service (converted to a fully operation system):

1. Perform pre-cut-to-service tasks
2. Determine a security policy for the use of AUDIX Voice Power
3. Review the system parameters
4. Create a subscriber list

AUDIX Voice Power System Parameters

The following worksheet lists the system parameters and their possible values. Record the System Operator Extension, the Maximum Extension Length, and any changes that you would like to make, or review the parameter defaults if they will be used for initial system operation. These parameters govern the behavior of the system. Each of these parameters is fully described in Chapter 13 "System Tuning" in *AUDIX Voice Power System R3.0 Administration* (585-310-532).

Worksheet 1-5. AUDIX Voice Power System Parameters

System Parameter	Possible Values	Default	Desired
System Operator Extension	up to 6 digits	none	
Pause For Touch Tone Input	4 – 9 seconds	7 seconds	
Maximum Extension Length	1 – 6 digits	4 digits	
Transfer to Subscribers Only?	yes or no	yes	
System Mode of Addressing	extension or name	extension	
Maximum Message Length	30 – 360 seconds	120 seconds	
General Mailbox Owner Extension	up to 6 digits	none	
Enable General Mailbox for Call Answer?	yes or no	no	
Allow Voice Mail/Call Answer transfers?	yes or no	yes	
Touch-Tone Gate Active – Day?	yes or no	no	
Touch-Tone Gate Active – Night?	yes or no	no	
Auto Attendant Time-out Action – Day?	transfer, message, disconnect	transfer	
Auto Attendant Time-out Action – Night	transfer, message, disconnect	transfer	
Auto Attendant Menu Plays	1–9	2	
Fax Transfer Number	16 characters	none	
Present Options Before Leaving Message	yes or no	yes	

Create a Subscriber List

Create a list of subscribers for the AUDIX Voice Power system. Use the following worksheet to describe your subscribers. Subscriber entry is a part of cutting to service. Your installation contract will determine whether installation of the system administrator will enter the subscribers into the system.

For a complete description of each of the subscriber parameters, refer to Chapter 10 "Subscriber Administration" in *AUDIX Voice Power Administration* (585-310-534).

AUDIX Voice Power Training and Personnel

The AUDIX Voice Power system requires preparation in the following 2 areas before the system is cut to service:

- Administrative Personnel
- Subscribers

Administrative Personnel

AUDIX Voice Power administration tasks can be classified as:

- Computer-based
- Telephone-based

Telephone-based tasks involve using AUDIX Voice Power from a telephone or controlling AUDIX Voice Power telephone functions. AUDIX Voice Power allows several different service administrators to be assigned to five of AUDIX Voice Power system's features: call-answer, automated attendant, voice mail, information service, and message drop. Being assigned to these features gives a service administrator distinct privileges for that feature. For example, a voice mail administrator can customize the voice mail greeting and broadcast messages. No other person will be able to do this unless they have access to the voice mail administrator's login and password. For more information about this optional feature, refer to Chapter 4, "System Administration Planning," in *AUDIX Voice Power System R3.0 Administration* (585-310-532).

Computer-based tasks involve using AUDIX Voice Power system from the computer or a terminal or controlling AUDIX Voice Power computer functions. These tasks include monitoring AUDIX Voice Power system traffic and resources, maintaining the printer and modem, and working with a remote maintenance center to troubleshoot the system. For additional information about these tasks, refer to *AUDIX Voice Power Administration* (585-310-532).

Subscribers

Subscribers, anyone who has a voice mailbox assigned on the AUDIX Voice Power system, should be trained to use the system. To assist with training subscribers, AT&T offers the following documentation:

- *AUDIX Voice Power System R3.0 Portable User's Guide* (585-310-711)

This portable user's guide is a comprehensive guide to all features available to AUDIX Voice Power subscribers. It provides step-by-step instructions for listening and responding to messages, creating mailing lists, recording customized greetings, and more. It addresses both the basic and advanced AUDIX Voice Power subscriber.

- *AUDIX Voice Power System R3.0 Quick Reference* (585-310-712)

This quick reference is a concise summary of the most commonly used AUDIX Voice Power features. It provides simple instructions for activities such as logging in, retrieving messages, and transferring by name.

- *AUDIX Voice Power System R3.0 Quick Reference Artwork Package* (585-310-713)

The artwork package is a collection of camera-ready subscriber documentation, including: *AUDIX Voice Power System R3.0 Quick Reference*, *AUDIX Voice Power System R3.0 Wallet Card*, and the *Outcalling* subscriber page. The documentation contained in this package may be photocopied or commercially reproduced for distribution to subscribers.

- *AUDIX Voice Power System R3.0 Wallet Card* (585-310-714)

The wallet card is a single-fold quick reference which contains a brief list of options and commands. This card is designed to assist subscribers who may be traveling or who may periodically call into AUDIX Voice Power from home.

- *AUDIX Voice Power System R3.0 Business Card Sticker* (585-310-715)

These stickers may be attached to a subscriber's business card. They are designed to assist people in returning telephone calls to AUDIX Voice Power subscribers. It provides instructions for transferring by name, replaying the recorded message, and getting help.

At a minimum, provide each subscriber with a letter or memo describing when the new system will arrive, and how it will perform. Refer to Appendix A, "Job Aids." in *AUDIX Voice Power System R3.0 Administration* (585-310-532) for sample letters and a quick reference intended for operator use.

If you wish to order any of the subscriber documentation, contact:

Customer Information Center
1-800-432-6600

Please have the ordering number ready when you are calling.

Telephone Requirements

For AUDIX Voice Power Lodging and AUDIX Voice Power to work properly with the telephone system, certain features must be present and enabled at the PBX:

- Station line must be compatible with industry standard tip/ring analog telephones (AT&T 2500 or equivalent).
- The PBX must recognize a 500-millisecond on-hook interval (switchhook flash) as a request to transfer a call. After a switchhook flash, AUDIX Voice Power Lodging/AUDIX Voice Power will send the digits of the selected extension using touch-tone signaling.
- Each analog voice channel on the Integrated Voice Power (IVP4) boards must be associated with an extension number or switch group administered on the PBX. The PBX is responsible for transferring the calls to AUDIX Voice Power Lodging/AUDIX Voice Power as part of a coverage path when there is no answer or a busy signal is detected.

The following must be provided in order for installation to occur:

1. The customer must provide an analog port on the PBX for each IVP4 voice port purchased. For example, if the configuration includes 2 IVP4 circuit cards, the customer is responsible for having 8 analog ports available for connection to AUDIX Voice Power Lodging/AUDIX Voice Power. Note that the length of the IVP4 cable is 16 feet; the analog port or modular plug (wall jack) should be within this range.

Designate the extensions for these analog lines before installation. Refer to Chapter 3 in your PBX document and Worksheet 1-2, "Channel and Service Assignments" in this document.



CAUTION:

For AT&T PBXs, do not put all of the AUDIX Voice Power Lodging/AUDIX Voice Power analog lines on one pack, as service problems may occur. Spread the analog lines over several analog packs. For non-AT&T switch integrations, refer to the documentation provided for the PBX.

2. If the configuration requires that hotel guests, callers, and subscribers be able to access AUDIX Voice Power Lodging/AUDIX Voice Power from outside, the appropriate outside trunks need to be established with the local telephone company.

As a part of AUDIX Voice Power Lodging/AUDIX Voice Power installation, the phone number through which subscribers will retrieve messages must be specified. A Direct Inward Dial (DID) line, trunk line, or another type of direct dialing line will have to be designated so that outside callers may access their messages. This extension can be the same as the inside

extension for message retrieval. For example, if the direct dial line is 555-1234, then people retrieving messages inside should be able to dial 1234 to retrieve voice messages.

3. An additional analog line is required for the maintenance modem.
4. The maximum extension length permitted in a subscriber's/guest's extension is from 1 to 6. The default value is 4 digits. Specify the length of the extensions from the dial plan.

Test Telephone Requirements

Installation requires one test phone for AUDIX Voice Power Lodging installation. This test telephone must be located so that the installer may view the AUDIX Voice Power Lodging system monitor while placing the test calls.

Installation also requires two test guests for AUDIX Voice Power Lodging installation. 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 message waiting lamp (MWL).
- Rooms should be close to the AUDIX Voice Power Lodging 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).

The test guest rooms may be assigned the day of the installation in order to use current vacancies. If necessary, be sure that 2 guest rooms are reserved for the day of the installation. When the room numbers and extensions are known, record the numbers in Table 6-1 in Chapter 6 of this document.

Installation requires two test subscribers for AUDIX Voice Power installation. Two telephone sets must be set up near the AUDIX Voice Power Lodging Computer for testing. These test telephones must meet the following requirements:

- Two different extensions are needed, one for each telephone set.
- Test subscriber extensions should not currently be in use by employees.
- Test subscriber extensions should be administered to represent typical employee telephones for coverage path purposes.

PBX Requirements

It is expected that all necessary PBX installation (additional analog lines, etc.) and administration will be performed before AUDIX Voice Power Lodging/AUDIX Voice Power installation, unless otherwise specified by contract. The standard AT&T demarcation point for AUDIX Voice Power Lodging/AUDIX Voice Power is with the SID (switch integration device) for non-AT&T PBXs. It is the responsibility of the customer to perform the necessary PBX preparation to connect the system. This preparation includes providing the necessary telephone connections with appropriate jacks, including the additional PBX, ACD, or telephone facilities, and telephone wiring.

The documentation for AUDIX Voice Power Lodging/AUDIX Voice Power includes a PBX (switch) document. This document explains the necessary switch administration required before installation. Complete or review all of the tasks in the following chapters in the PBX document before installation:

- Switch Integration Planning
- Administration
- Acceptance Tests

Security Issues

AUDIX Voice Power Lodging and the AUDIX Voice Power system customers need to consider 2 areas of security:

- Password
- System Administration

It is recommended that system administrators either formulate or review an existing security policy. Do not operate voice mail systems without a security policy. Make your employees aware of your policy.

For information about system security, refer to:

- *AUDIX Voice Power Lodging (585-310-525), Chapter 2 "AUDIX Voice Power Lodging Basics"*
- *AUDIX Voice Power System R3.0 Administration (585-310-532), Chapter 2, "Security"*

Toll Fraud

Toll fraud attempts through voice messaging systems and automated attendant systems have grown dramatically. Toll fraud "hackers" access a voice mail or automated attendant system, transfer through the system, and gain access to a corporation's interface to a long distance network. This is a security risk that can affect every PBX with a voice mail or automated attendant system.

While AT&T is not responsible for the billing resulting from this toll fraud, we wish to assist you in dealing with this problem. To diminish the risk of toll fraud occurrences, we recommend limiting transfers. The Transfer to Subscribers Only parameter allows you to impose a limitation while still allowing callers and subscribers to utilize AUDIX Voice Power transfer capabilities.

By setting the Transfer to Subscribers Only parameter to yes on the System Parameters window, you can restrict transfers to registered subscribers only in all features (Voice Mail, Call-Answer, and Automated Attendant).

When a caller is instructed to enter an extension number from an automated attendant or a caller presses *T (star T) and enters an extension number from the Voice Mail or Call-Answer features, the extension entered is validated against the subscriber database of AUDIX Voice Power. If the extension entered is not in the subscriber database, the caller will hear "That is not a valid extension," the transfer is denied, and the caller will not have an opportunity to gain access to the outgoing facilities of the PBX. For more information on this parameter, refer to Chapter 13, "System Tuning," in *AUDIX Voice Power System R3.0 Administration* (585-31-532). If the above transfer restriction is used, you should not assign non-resident subscribers (users with a mailbox but no telephone on the switch) to extension numbers that start with the same digit(s) as switch trunk access codes (e.g., 9).

To enhance security for the outcalling feature, you can turn off outcalling on a per-subscriber basis via the Subscriber Administration screen. You can also restrict the number of digits that may be used for outcalling on a system-wide basis via the Outcalling Administration screen. For more information, see Chapter 10, "Subscriber Administration," in *AUDIX Voice Power System R3.0 Administration* (585-310-532).

If your AUDIX Voice Power system is intended to serve only a subset of the switch's station users, the remaining station users may be administered as AUDIX Voice Power subscribers with restricted mailboxes, to insure that transfers to these stations are possible. The restricted mailbox means that little space will be allocated for these mailboxes, and that although the extension will technically be registered subscribers, they cannot send or receive messages. Other subscribers may address messages to these users, but the limited mailbox size will prevent most messages from being delivered. For more information on restricted mailboxes, see the "Other Subscribers" section of Chapter 10, "Subscriber

Administration," in *AUDIX Voice Power System R3.0 Administration* (585-310-532).

Protecting your AUDIX Voice Power system is a vital and important part of your responsibility as system administrator. You should take every precaution to protect your company's assets from both internal and external security breaches.

⇒ **NOTE:**

AT&T does not warrant that this product will prevent and AT&T will not be responsible for unauthorized use (or charges for such use) of common carrier telecommunication services or facilities accessed through or connected to AUDIX Voice Power Lodging or AUDIX Voice Power.

The customer is responsible for administering AUDIX Voice Power to prevent such unauthorized use. Therefore, it is necessary that the person to whom the customer assigns this responsibility read all documents associated with AUDIX Voice Power and understand AUDIX Voice Power features that enable the administrator to reduce exposure to unauthorized use.

Detecting Toll Fraud

Once you have instituted the appropriate security measures, monitor call traffic for the following signals of possible hacker activity:

- Employees cannot get outside lines
- Customers have difficulty getting through to your 800 number
- Usage is higher than normal
- Heavy call volume on nights and weekends
- Operators report frequent hangups
- Telephone bill shows calls made to different countries or areas where you do not normally do business

AT&T Toll Fraud Crisis Intervention and Reporting

If you suspect that you are being victimized by toll fraud or theft of service and need technical support or assistance, call the AT&T GBCS Technical service Center (TSC) immediately:

DEFINITY/System 75/85 PBX Repair
1-800-242-2121

AUDIX Help Line
1-800-562-8349

Whether or not immediate support is required, please report all toll fraud incidents perpetrated on AT&T services to AT&T Corporate Security. In addition to recording the incident, AT&T Corporate Security is available for consultation on product issues, investigation support, law enforcement, and education programs. Charges may apply.

MAP/5 Planning and Site Preparation

This section describes site preparation steps that should be taken prior to installing the MAP/5. These steps include:

- Verifying environmental, space, and power requirements for the MAP/5
- Prewiring for pinout connections
- Reviewing regulatory agency guidelines

If possible, project managers should inspect the customer site as a part of planning to help the customer determine if any modifications to the site need to be made in order to support the AUDIX Voice Power Lodging MAP/5.

Customers are responsible for providing the environment for the MAP/5 including space, power, and analog ports. The site selected for the MAP/5 should observe all installation area concerns, as indicated in this chapter.

Determine System Arrangement and Location

You may install the MAP/5 as a desktop unit, as shown in the figure below.¹⁰ You should position the unit with a minimum of six-inch clearance on all sides of the equipment to provide for adequate cooling. Be sure that the power supply fan exhaust will not be blocked.

You will also need space for the remote maintenance modem and an appropriate power connection.

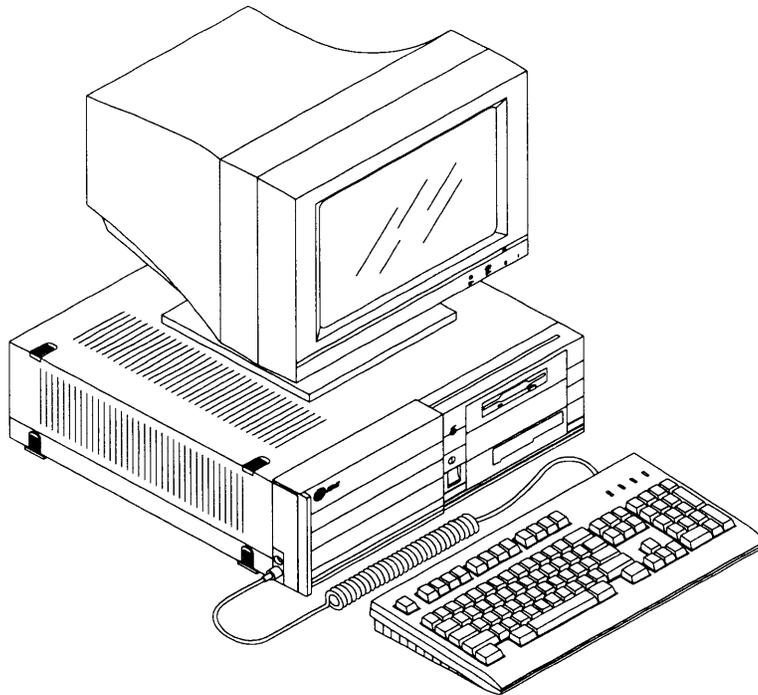


Figure 1-3. View of the Assembled MAP/5

10. Figure 1-3 shows the table-top configuration. The MAP/5 may also be configured as a tower.

The table below lists the weight and size of the major MAP/5 components:

Table 1-4. Space Requirements

Equipment	Weight (lbs.)	Height (in.)	Width (in.)	Length (in.)
Base Unit	30.8	6.5	21.5	22.5
Monitor	29	16	18	19
Keyboard	6	2.5	8.25	21.5

Review Environmental Considerations

Place the MAP/5 in an area where the following environmental requirements are maintained:

Table 1-5. Environmental Considerations

Operating State	Temperature	Humidity
Operating	+5 to +35 °C (+41 to +95 °F)	20% to 80%, noncondensing
Non-operating	-40 to +60 °C (-40 F to 140 °F)	5% to 92%, noncondensing



NOTE:

The MAP/5 operates at an altitude of no more than 10,000 feet (3050 m), maximum. Noise levels cannot exceed 45 dBA, maximum.

Review Installation Area Considerations

Consider the following attributes when deciding where to place the MAP/5:

- Install the MAP/5 in an area that provides protection from excessive sunlight, heat, cold, chemicals, static electricity, magnetic fields, vibration, dust, and grime.
- Do not install the unit in the same area as copier machines, because of the paper particles created by such equipment.
- Enclose the equipment room to maintain an air distribution system that provides adequately cooled, filtered, and humidity-controlled air.
- Do not install the unit in an area with high-power electrical equipment.
- Do not install telephone jacks in wet locations unless the jack is specifically designed for wet locations.
- Provide surge protection and power backup in areas with volatile power (brown-outs or frequent power surges).
- Plan cable paths between the system unit, the communications system, and the optional printer. Do not run cables near potential causes of electromagnetic or radio frequency interference such as elevators, radio transmitters, television sets, copy machines, or heating and air conditioning equipment. Route cables away from personnel and equipment traffic.
- Leave at least 6 inches around all sides of the system unit case for air circulation.
- Place all components on a flat, stable surface.
- Place the monitor at or below eye level, and away from windows or other sources of glare.
- To reduce muscle strain, place the keyboard at or below elbow level.

Verify Power Requirements

The maximum power output of a MAP/5 is 200 watts. The MAP/5 powers the monitor through an interface cable. Connect the monitor to the receptacle on the video controller card located in Slot 5. Connect the keyboard to the left front side of the MAP/5.



NOTE:

The MAP/5 monitor is powered from the MAP/5.

Make the following power requirements available:

Table 1-6. Power Requirements

Attributes	MAP/5
Volts AC	115-130VAC (Preset) or 200-230VAC
Hertz (Hz)	47 - 63Hz
Phase	Single
Amps(RMS)	6

In addition to making the necessary power requirements available, follow the recommendations below:

- Locate each unit and printer within 9 feet of its power receptacle.
- Ensure that communication cables are kept separate from power cables.
- Install communication and power cables in accordance with National Electric Codes.
- Use only shielded cables and shielded equipment with the MAP/5.

Determine Analog Line Connections

Pinout connections for telephone lines, switch integration, and asynchronous connections are described.

Telephone Line Connections - Tip/Ring Circuit Card

Connections to attendant telephones are provided over telephone lines that may come from the local private branch exchange (PBX). The customer must arrange with the local provider of telephone service to install the correct number and type of lines required for system operation.

If your applications do a large amount of flash-hook transfers or if you have a large amount of out-calling, you need to be sure that there are enough dial tone registers available. You will need to ensure that switch engineering has equipped the switch to handle the additional load placed on it by AUDIX Voice Power Lodging.

Connecting the Tip /Ring Lines

The tip/ring circuit card used for AUDIX Voice Power Lodging and AUDIX Voice Power operations is the IVP4 (AYC6B)¹¹. IVP4 circuit cards are each equipped with 2 voice ports. Each port is capable of supporting 2 channels for a total support of 4 analog channels per IVP4 circuit card. You may connect from 1 to 4 channels for each circuit card; it is not necessary to equip all of the channels on each card for operation. For a listing of cards and channels, refer to Worksheet 1-2, "Channel and Service Assignments."



CAUTION:

Do not put all of the AUDIX Voice Power Lodging/AUDIX Voice Power analog lines on one pack, as service problems may occur. spread the analog lines over several analog packs.

The IVP4 circuit card uses two 6-pin modular jacks. You may connect the IVP4 Tip/Ring circuit card to telephone lines in one of two different ways:

- Direct cable connection from the Tip/Ring card to the telephone line
- Cable connection from the Tip/Ring card through an 885A line splitter and then to the telephone lines

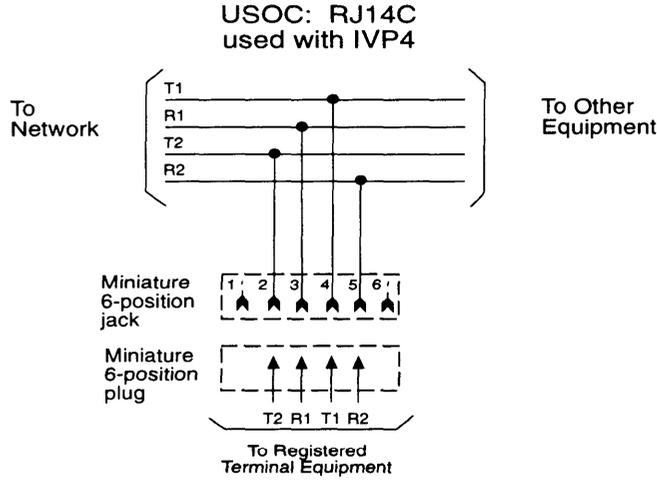
These cable connections are explained in the next sections.

Direct Cable Connection

If you make a direct connection from the Tip/Ring card to the telephone line, only one telephone line or channel, rather than 2, in the 4-conductor modular cord will be active. When you connect one line, Channel 1, pins 3 and 4 will be active.

Figure 1-4 illustrates the wiring and pin diagram for the tip/ring card.

11. Do not use earlier versions of the AYC6B circuit cards with active audio jacks.



USOC: RJ14C - surface or flush mounted jack.
 Mechanical Arrangement: miniature 6-position jack.

Figure 1-4. Wiring and Pin Diagram for IVP4 Circuit Cards

Cable Connection Using the Line Splitter

Use the 884A Adapter (line splitter) for the IVP4 tip/ring cards in order to use both channels or telephone lines in the 4-conductor modular cord.

CAUTION:
There is a magnet on the back of the 884A adapter. Do not place this near a hard disk drive, circuit card, or floppy diskette.

Use the figure on the next page to determine how to use the line splitter.

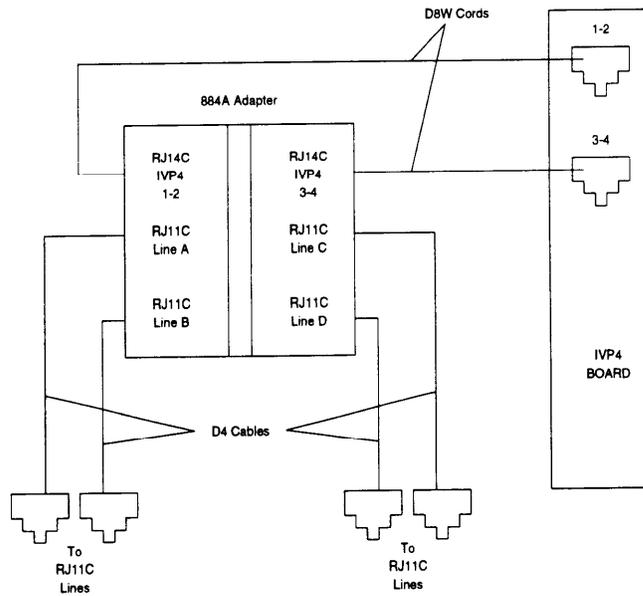


Figure 1-5. 884A Adapter — Line Splitter for the IVP4 Tip/Ring Card

Record the circuit card slot number and telephone extension numbers on the 884A adapter.

Determine Serial Port Connections

Serial port connections for the AUDIX Voice Power Lodging MAP/5 are:

- COM1 (Serial Port 1)
- COM2 (Serial Port 2)
- IPC-900 or GEMINI-1000 ports

Two asynchronous ports, COM1 (Serial Port 1) and COM2 (Serial Port 2), are provided on the back of every MAP/5. The IPC-900 or the GEMINI-1000 provides additional serial ports. In the AUDIX Voice Power Lodging MAP/5, the serial ports are assigned as follows:

- COM1 (Serial Port 1): Switch Integration Device (SID)¹²
- COM2 (Serial Port 2): Property Management System (PMS)
- IPC-900 or GEMINI-1000 port: Remote Maintenance Modem

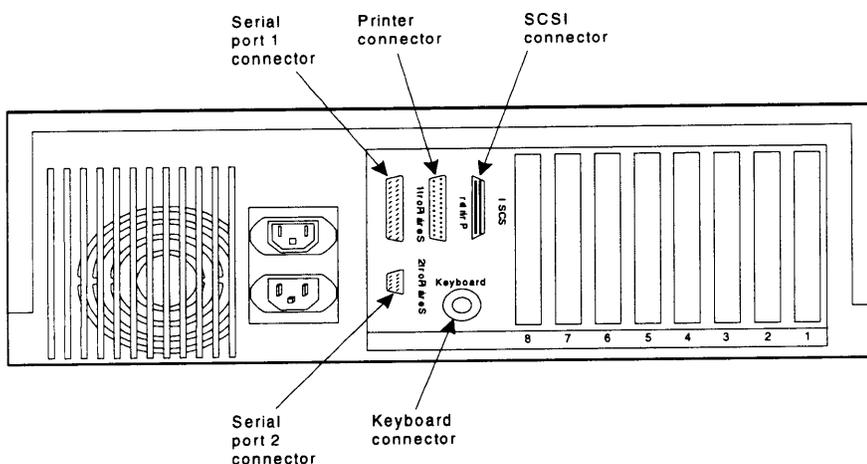


Figure 1-6. COM1 and COM2 Location on the Back of the MAP/5

A 9-pin D-subminiature male connector, located on the back of the MAP/5, is provided for COM1 (Serial Port 1). COM1 (Serial Port 1) supports asynchronous host connections running at 300-19200 BAUD. The pinouts for the COM1 (Serial Port 1) connector are illustrated in the following table.

12. If you are installing a DCP circuit card for AUDIX Voice Power, you must disable COM2 during installation to avoid an interrupt conflict. Therefore, connect the following if you have a DCP circuit card: COM1 to the SID; IPC-900 Port 1 to the PMS; IPC-900 Port 2 to the maintenance modem.

The pinout connections for each of these ports are:

Table 1-7. COM1 Pinouts (25-Pin)

Pin	Signal
1	Chassis Ground
2	Transmitted Data
3	Received Data
4	Request to Send
5	Clear to Send
6	Data Set Ready
7	Signal Ground
8	Received Line Signal Detector
9 – 19	NC
20	Data Terminal Ready
21	NC
22	Ring Indicator
23 – 25	NC

Table 1-8. COM2 Pinouts Serial Port 2 (9-Pin)

Pin	Signal
1	Carrier Detect
2	Received Data
3	Transmitted Data
4	Data Terminal Ready
5	Signal Ground
6	Data Set Ready
7	Request to Send
8	Clear to Send
9	Ring Indicator

**Table 1-9. RJ-45 Type Modular Jack Pin Identification for the IPC-900/
Gemini-1000**

Pin	Signal Name	Signal Flow
1	Reserved	—
2	Ring Indicator (RI)	Input
3	Data Carrier Detect (DCD)	Input
4	Data Terminal Ready	Output
5	Signal Ground	Bidirectional
6	Receive Data (RD)	Input
7	Transmit Data	Output
8	Clear to Send (CTS)	Input
9	Request to Send (RTS)	Output
10	No Connection	—

Review System Grounding Connections

Customer premise provided outlets should be grounded in accordance with the local and National Electrical Codes (NEC).

To maintain electro-magnetic interference (EMI) protection, personal protection, and circuit noise immunity, each MAP/5 must be grounded to a solid, stable, single point ground. Ground AC units via the third wire of a three-prong grounded receptacle that is free from random connections to foreign, unstable ground current surges.



CAUTION:

Use extreme care when making power and ground connections.

Review Regulatory Agency Guidelines

Follow the installation procedures in this document to ensure compliance with the current FCC rules regarding radio frequency devices (FCC Rules, Part 15) FCC rules and FCC rules regarding connection of terminal equipment to the telephone network (FCC Rules, Part 68).

FCC/CSA Part agency compliance label(s) for the MAP/5 system card and individual network interface cards are located on the chassis rear surface or individual circuit card.

This chapter presents the following installation checklists for MAP/5 installations:

- Planning Checklist
- Hardware Installation Checklist
- Software Installation Checklist
- Initial Administration Procedures Checklist
- Cut-to-Service Checklist

These checklists are divided into 2 types:

- Assembled, Loaded, and Tested (ALT) Checklists
- Non-ALT checklists

ALT systems are systems that the factory has already assembled the hardware, loaded the software, and tested the system. These systems are marked with an orange sticker on the disk drive door. If you are installing an ALT system, use the checklists beginning on Page 9.

If the system that you are installing does not have an orange sticker on the disk drive door, you will need to assemble the hardware and load the software. If you are installing a non-ALT system, use the checklists that begin on Page 3.

⇒ **NOTE:**

If you are installing an AUDIX Voice Power coresidency, perform all of the AUDIX Voice Power tasks. If you are not installing an AUDIX Voice Power coresidency, skip all AUDIX Voice Power tasks.

Checklist References

These checklists contain a reference column intended to direct you to the documentation resource that supports the task. The documents referred to in the checklists are:

- Switch Document

Each AUDIX Voice Power Lodging system ships with a document that supports the PBX to which you are installing the AUDIX Voice Power Lodging system. Each of these guides is unique to the respective PBX.

Refer to the document shipped with your system.

- Lodging Administration

AUDIX Voice Power Lodging Administration (585-310-525)

- Administration¹

AUDIX Voice Power System R3.0 Administration (585-310-532)

- MAP/5 Guide²

Multi-Application Platform/5 User's Guide (585-211-110)

-
1. This document is only shipped if you have ordered AUDIX Voice Power R3.0 as a co-residency.
 2. This guide ships with the MAP/5 platform.

Checklist A: Planning Tasks

✓	Task #	Planning Tasks	Reference
		Review Voice Power Configurations	Chapter 1
		Determine Channel Needs and Distribution	Chapter 1
		Assign PBX Extensions	Chapter 1
		Assign Testing Services	Chapter 1
		Assign Operating Services	Chapter 1
		Review AUDIX Voice Power Lodging System Parameters	Chapter 1
		Review AUDIX Voice Power Lodging Property Management Parameters	Chapter 1
		Review AUDIX Voice Power Lodging Training and Personnel Needs	Lodging Administration
		Review AUDIX Voice Power System Parameters	Chapter 1
		Create AUDIX Voice Power Subscriber List	Chapter 1
		Review AUDIX Voice Power Training and Personnel Needs	Administration
		Review Telephone Requirements	Chapter 1
		Review Test Telephone Requirements	Chapter 1
		Review PBX Requirements	Switch Document
		Perform PBX Planning	Switch Document
		Review Security Issues	Chapter 1
		Perform MAP/5 Site Survey	Chapter 1
		Determine System Arrangement and Location	Chapter 1
		Review Environmental Considerations	Chapter 1
		Review Installation Area Considerations	Chapter 1
		Review Power Requirements	Chapter 1
		Determine Analog Line Connections	Chapter 1
		Determine Serial Port Connections	Chapter 1
		Review System Grounding Connections	Chapter 1

Checklist B: Hardware Installation

✓	Task #	Task Description	Reference
		Review Warnings and ESD Precautions	Chapter 3
		Gather Tools and Test Equipment	Chapter 3
		Save Packing Materials	Chapter 3
		Unpack the System	Chapter 3
		Remove the Front Panel	Chapter 3
		Remove the Top Cover	Chapter 3
		Locate Slot Positions on the MAP/5	Chapter 3
		Install the IPC-900/Gemini-1000 Circuit Card	Chapter 3
		Install the IVP4 Circuit Card(s)	Chapter 3
		Replace the Top Cover and Front Panel	Chapter 3
		Install the T-Adapter for the IPC-900/Gemini-1000	Chapter 3
		Determine System Orientation	MAP/5 Guide
		Cable the System	Chapter 3
		Cable the IVP4 Circuit Cards	Chapter 3
		Cable the Peripherals	Chapter 3
		Connect System Components	Chapter 3
		Verify the Chassis Cooling System	Chapter 3
		Apply Power to the System	MAP/5 Guide

Checklist C: Software Installation

✓	Task #	Task Description	Reference
		Review General Software Installation Instructions and Tips	Chapter 4
		Install the UNIX Base System Package	Chapter 4
		Verify the Disk Partitioning	Chapter 4
		Install the FMLI Package	Chapter 4
		Install the Face Package	Chapter 4
		Install the FACE Help Package	Chapter 4
		Install the UNIX Editing Package	Chapter 4
		Install the Remote Terminal Package	Chapter 4
		Install IPC-900 Software	Chapter 4
		Install IVPSS R3.0	Chapter 4
		Create the Attendant Logins	Chapter 4
		Install AUDIX Voice Power Application Software R3.0 Speech (Optional)	Chapter 4
		Install AUDIX Voice Power Application Software Software (Optional)	Chapter 4
		Install AUDIX Voice Power Lodging Release R3.0 Software	Chapter 4
		Install Switch Integration Software	Chapter 4 or Switch Document
		Install AT&T's ICSS Software (Optional)	Chapter 4
		Install Property Management System Integration Software Package Release 3.0 (Optional)	Chapter 4
		Install Guest Interface Packages (Optional)	Chapter 4
		Verify the Software Installation	Chapter 4
		Reboot the System	Chapter 4
		Confirm IVP4 Circuit Card Recognition	Chapter 4

Checklist D: Initial Administration and Test

✓	Task #	Task Description	Reference
		Set Up the Peripherals	Chapter 5
		Set Up the Remote Maintenance Modem Software Options	Chapter 5
		Set the Printer Software Options	Chapter 5
		Check the System Clock	Chapter 5
		Map PBX Extensions to Channels	Chapter 5
		Assign Services for Testing	Chapter 5
		Verify Channel State	Chapter 5
		Verify Extensions and Channels	Chapter 5
		Administer AUDIX Voice Power Lodging System Parameters	Chapter 5
		Administering AUDIX Voice Power System Parameters	Chapter 5
		Administer Switch Parameters	Chapter 5
		Reassign Services	Chapter 5
		Stop and Start the Voice System	Chapter 5

Checklist E: Acceptance Testing

✓	Task #	Acceptance Testing	Reference
		Prerequisites for Acceptance Testing	Chapter 6
		AUDIX Voice Power Lodging Acceptance Tests	Chapter 6
		Check In Test Guests	Chapter 6
		Administer the Switch	Chapter 6
		Viewing the System Monitor	Chapter 6
		Leave a Call Answer Message	Chapter 6
		Transfer to the Attendant	Chapter 6
		Check the MWL and Retrieve Messages	Chapter 6
		Retrieve a Message Through the Attendant	Chapter 6
		Instructions for the Attendant	Chapter 6
		Remove Test Guests	Chapter 6
		Administer the Switch	Chapter 6 and Switch Document
		AUDIX Voice Power Acceptance Tests	Chapter 6
		Administer Test Subscribers for AUDIX Voice Power	Chapter 6
		Add AUDIX Voice Power Test Subscribers to the Switch	Chapter 6
		View the System Monitor	Chapter 6
		Leave a Call-Answer Message	Chapter 6
		Check the MWL and Retrieve the Messages	Chapter 6
		Remove AUDIX Voice Power Test Subscribers	Chapter 6
		Log Off	Chapter 6
		Remove AUDIX Voice Power Test Subscribers from the Switch	Chapter 6
		Verify the Remote Maintenance Modem	Chapter 6

Checklist F: Cut-to-Service Procedures

✓	Task #	Task Description	Reference
		AUDIX Voice Power Lodging Cut-to-Service Procedures	Chapter 7
		Verify Preparation for Cut-to-Service	Chapter 7
		Prepare to Cable the PMS to AUDIX Voice Power Lodging (Optional)	Chapter 7 and PMS Vendor
		Cable the PMS to AUDIX Voice Power Lodging (Optional)	Chapter 7 and PMS Vendor
		Integrated-PMS Systems: Ensure Database Synchronization	Chapter 7
		Verify Automatic Database Synchronization	Chapter 7
		Adjust AUDIX Voice Power Lodging System Parameters (Optional)	Chapter 7
		Register the AUDIX Voice Power Lodging Administrator	Chapter 7
		Administer the Switch	Switch Document
		AUDIX Voice Power Cut-to-Service Procedures	Chapter 7
		Prerequisites for AUDIX Cut-to-Service	Chapter 7
		Log On	Chapter 7
		Adjust System Parameters (Optional)	Chapter 7
		Add Subscribers	Chapter 7
		Log Off	Chapter 7
		Administer the Switch for Cutover	Switch Document

Checklist ALT-A: Planning Tasks

✓	Task #	Planning Tasks	Reference
		Review Voice Power Configurations	Chapter 1
		Determine Channel Needs and Distribution	Chapter 1
		Assign PBX Extensions	Chapter 1
		Assign Testing Services	Chapter 1
		Assign Operating Services	Chapter 1
		Review AUDIX Voice Power Lodging System Parameters	Chapter 1
		Review AUDIX Voice Power Lodging Property Management Parameters	Chapter 1
		Review AUDIX Voice Power Lodging Training and Personnel Needs	Lodging Administration
		Review AUDIX Voice Power System Parameters	Chapter 1
		Create AUDIX Voice Power Subscriber List	Chapter 1
		Review AUDIX Voice Power Training and Personnel Needs	Administration
		Review Telephone Requirements	Chapter 1
		Review Test Telephone Requirements	Chapter 1
		Review PBX Requirements	Switch Document
		Perform PBX Planning	Switch Document
		Review Security Issues	Chapter 1
		Perform MAP/5 Site Survey	Chapter 1
		Determine System Arrangement and Location	Chapter 1
		Review Environmental Considerations	Chapter 1
		Review Installation Area Considerations	Chapter 1
		Review Power Requirements	Chapter 1
		Determine Analog Line Connections	Chapter 1
		Determine Serial Port Connections	Chapter 1
		Review System Grounding Connections	Chapter 1

Checklist ALT-B: Hardware Installation

✓	Task #	Task Description	Reference
		Review Warnings and ESD Precautions	Chapter 3
		Gather Tools and Test Equipment	Chapter 3
		Save Packing Materials	Chapter 3
		Unpack the System	Chapter 3
		Remove the Front Panel	Chapter 3
		Remove the Top Cover	Chapter 3
		Locate Slot positions on the MAP/5	Chapter 3
		Verify the IPC-900/Gemini-1000 Circuit Card	Chapter 3
		Verify the IVP4 Circuit Card(s)	Chapter 3
		Replace the Top Cover and Front Panel	Chapter 3
		Install the T-Adapter for the IPC-900/Gemini-1000	Chapter 3
		Determine System Orientation	MAP/5 Guide
		Cable the System	Chapter 3
		Cable the IVP4 Circuit Cards	Chapter 3
		Cable the Peripherals	Chapter 3
		Connect System Components	Chapter 3
		Verify the Chassis Cooling System	Chapter 3
		Apply Power to the System	MAP/5 Guide

Checklist ALT-C: Software Installation

⇒ NOTE:

If you are installing an already assembled, loaded, and tested (ALT) system (ALT), you do not need to re-install the system software. Perform only the verification steps.

✓	Task #	Task Description	Reference
		Review General Software Installation Instructions and Tips	Chapter 4
		Verify the Disk Partitioning	Chapter 4
		Verify the Software Installation	Chapter 4
		Reboot the System	Chapter 4
		Confirm IVP4 Circuit Card Recognition	Chapter 4

Checklist ALT-D: Initial Administration and Test

✓	Task #	Task Description	Reference
		Set Up the Peripherals	Chapter 5
		Set Up the Remote Maintenance Modem Software Options	Chapter 5
		Set the Printer Software Options	Chapter 5
		Check the System Clock	Chapter 5
		Map PBX Extensions to Channels	Chapter 5
		Assign Services for Testing	Chapter 5
		Verify Channel State	Chapter 5
		Verify Extensions and Channels	Chapter 5
		Administer AUDIX Voice Power Logging System Parameters	Chapter 5
		Administering AUDIX Voice Power System Parameters	Chapter 5
		Administer Switch Parameters	Chapter 5
		Reassign Services	Chapter 5
		Stop and Start the Voice System	Chapter 5

Checklist ALT-E: Acceptance Testing

✓	Task #	Acceptance Testing	Reference
		Prerequisites for Acceptance Testing	Chapter 6
		AUDIX Voice Power Lodging Acceptance Tests	Chapter 6
		Check In Test Guests	Chapter 6
		Administer the Switch	Chapter 6
		Viewing the System Monitor	Chapter 6
		Leave a Call Answer Message	Chapter 6
		Transfer to the Attendant	Chapter 6
		Check the MWL and Retrieve Messages	Chapter 6
		Retrieve a Message Through the Attendant	Chapter 6
		Instructions for the Attendant	Chapter 6
		Remove Test Guests	Chapter 6
		Administer the Switch	Chapter 6 and Switch Document
		AUDIX Voice Power Acceptance Tests	Chapter 6
		Administer Test Subscribers for AUDIX Voice Power	Chapter 6
		Add AUDIX Voice Power Test Subscribers to the Switch	Chapter 6
		View the System Monitor	Chapter 6
		Leave a Call-Answer Message	Chapter 6
		Check the MWL and Retrieve the Messages	Chapter 6
		Remove AUDIX Voice Power Test Subscribers	Chapter 6
		Log Off	Chapter 6
		Remove AUDIX Voice Power Test Subscribers from the Switch	Chapter 6
		Verify the Remote Maintenance Modem	Chapter 6

Checklist ALT-F: Cut-to-Service Procedures

✓	Task #	Task Description	Reference
		AUDIX Voice Power Lodging Cut-to-Service Procedures	Chapter 7
		Verify Preparation for Cut-to-Service	Chapter 7
		Prepare to Cable the PMS to AUDIX Voice Power Lodging (Optional)	Chapter 7 and PMS Vendor
		Cable the PMS to AUDIX Voice Power Lodging (Optional)	Chapter 7 and PMS Vendor
		Integrated-PMS Systems: Ensure Database Synchronization	Chapter 7
		Verify Automatic Database Synchronization	Chapter 7
		Adjust AUDIX Voice Power Lodging System Parameters (Optional)	Chapter 7
		Register the AUDIX Voice Power Lodging Administrator	Chapter 7
		Switch Tasks	Switch Document
		AUDIX Voice Power Cut-to-Service Procedures	Chapter 7
		Prerequisites for AUDIX Cut-to-Service	Chapter 7
		Log On	Chapter 7
		Adjust System Parameters (Optional)	Chapter 7
		Add Subscribers	Chapter 7
		Log Off	Chapter 7
		Administer the Switch for Cutover	Switch Document

This chapter describes the information necessary for Voice Power hardware installation on the MAP/5. This information includes the following:

- Warnings
- System packing
- Opening the MAP/5
- Installing circuit cards for Voice Power operation
- Closing the MAP/5
- Voice port cabling

Heed Warnings

Dangers, warnings and cautions appear throughout this chapter as needed when describing procedures. These admonishments let you know when the actions you are about to perform can harm you or the equipment, unless you follow procedural steps as listed.

The dangers and warnings that occur within this book are listed here as well for your information:



WARNING:

The system unit power supply contains AC voltage at levels that can cause injury or death on contact. Before removing any system unit covers, turn off the system and unplug the power cord from the AC outlet.



WARNING:

Never install telephone wiring during a lightning storm.

-  **WARNING:**
Never install telephone jacks in wet locations unless the jack is specifically designed for wet locations.
-  **WARNING:**
Never touch uninsulated telephone wires or terminals unless the telephone line has been disconnected at the network interface.
-  **WARNING:**
Use caution when installing or modifying telephone lines.
-  **WARNING:**
The 884A adapter, used with tip/ring cards, has a magnet on the back of the adapter. Do not place the adapter on or near circuit cards or disk drives or floppy diskettes. Magnets can damage the circuitry.
-  **WARNING:**
Perform a "soft" shutdown of the UNIX operating system, if on-line, before shutting off power to the system. Use the shutdown command at the UNIX prompt.
-  **WARNING:**
Shut off the main power switch on the back of the unit, only after executing a "soft" system shutdown. Disconnect the power cord before opening the MAP/5 to work within it.
-  **WARNING:**
Observe proper electrostatic discharge precautions when handling computer components. Wear a ground wrist strap on your bare skin and connect to a ground.
-  **WARNING:**
The manufacturer(s) does not accept liability for a damaged unit if the unit is not returned in the original packing materials and carton. The carton has been designed to ensure product warranty and to prevent damage.

Technical Support Information

In the event that repairs are needed for the MAP/5, repairs should be performed by an authorized representative. Your maintenance contract will determine the amount of support that you will receive without charge.

If you are a field service representative and cannot solve a problem, contact the Technical Support Center (TSC) at 1-800-562-8349. When you call this number, you will be greeted with a menu. Enter the appropriate selection. You may use this number to answer questions, solve installation problems, or order replacement parts.

Customers with questions about MAP/5 AUDIX Voice Power Lodging systems should follow their service path according to their contract. The telephone number for technical support from the Technical Support Center (AUDIX Helpline) is 1-800-56-AUDIX.

Avoid Electrostatic Discharge Damage to Circuit Cards

The human body can collect thousands of volts of destructive static electricity from ordinary activities, for example, walking on a rug, handling synthetic materials, or wearing synthetic clothes. When this static electricity discharges onto another surface at a different voltage potential, it is called electrostatic discharge or ESD.

A person cannot feel ESD below approximately 3500 volts. However, only 30 volts are needed to damage ESD-sensitive electronic components.

Circuit cards and packaging materials that contain ESD-sensitive components are often marked with a yellow and black warning symbol. Proper grounding techniques prevent the discharge of damaging static electricity from your body into these ESD-sensitive components during handling.

There is no quick method of testing for ESD damage. Components that are damaged may simply fail after a brief period of normal operation.



CAUTION:

Never lay a circuit card down on a surface other than that provided by a static mat. Always keep circuit cards in their ESD-protective bag until you are ready to install them.

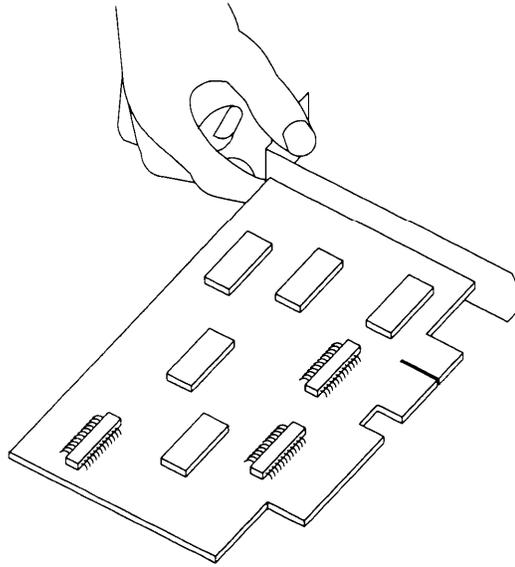


Figure 3-1. How to Hold a Short Circuit Card

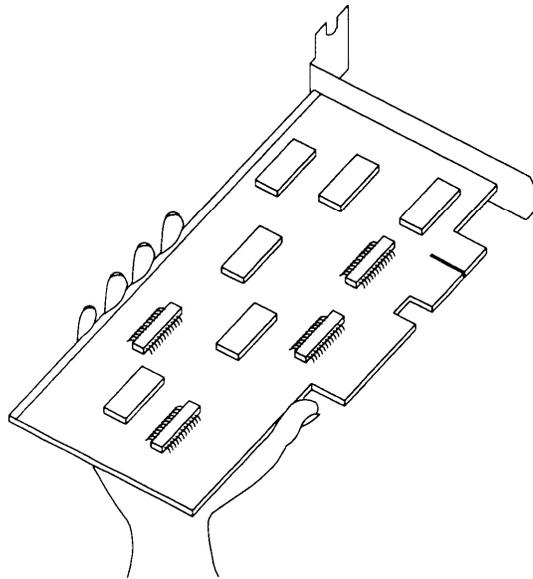


Figure 3-2. How to Hold a Large Circuit Card

To avoid damaging ESD-sensitive components, follow these rules:

- Handle ESD-sensitive circuit cards only after you have attached a wrist strap to the bare skin of your wrist. Attach the other end of the wrist strap to a ground that terminates at the system ground, such as any unpainted metallic chassis surface.
- Handle a circuit card by the faceplate or side edges only. Do not touch components, leads, or connector areas (gold finger pins). Review the Figures 3-1 and 3-2 on the opposite page.



CAUTION:

Ensure palm is not in contact with the wiring side of the circuit card.

- Keep circuit cards away from plastics and other synthetic materials such as polyester clothing.
- Do not hand circuit cards to another person unless that person is grounded at the same potential level.
- Hold devices such as a hard disk, floppy drive, or streaming tape as you would a large circuit card.

The ESD sensitive area of these components is located on the bottom surface. Hold these drives on the areas recommended below.

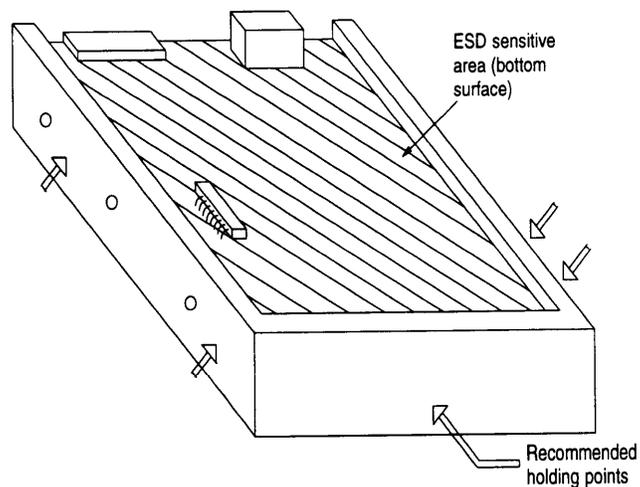


Figure 3-3. Electronic Component ESD Sensitive Areas

Gather Tools and Test Equipment

To assemble and disassemble the MAP/5 hardware, you need the following tools:

- Medium width flat-blade screwdriver
- No. 2 Phillips screwdriver
- Magnetic-tip Phillips screwdriver
- Small pair of needle-nose pliers
- Small pair of wire cutters
- A sharp, pointed instrument such as a pen



CAUTION:

Do not use a lead pencil point. The graphite can damage a circuit card, causing problems such as electrical shorts.

- 5/32 inch open-end wrench
- 1/2 inch end or box wrench
- Antistatic grounded wrist strap
- Antistatic grounded work mat
- Standard electronic test equipment such as a digital multi-meter is recommended to be available.

Save Packing Materials

Save the shipping carton and all packing materials to use in the event the unit needs to be returned to the manufacturer. Packing materials include anti-static bags and bubble wrap as well as cardboard and foam inlays. This also applies to shipping cartons for the keyboard and monitor. If you have ordered multiple MAP/5s, saving one carton and packing materials should be sufficient.



CAUTION:

The manufacturer does not accept liability for a damaged unit if the unit is not returned in the original packing materials and carton. The carton has been designed to ensure product warranty and to prevent damage.

If you do need to return a MAP/5, complete the yellow GBCS return repair tag and attach it to the unit. The factory information packet included in the MAP/5 carton contains the yellow return repair tag.

Unpack the System



WARNING:

To avoid possible injury use proper methods for lifting heavy objects when you are lifting and moving the MAP/5.

Unpack the contents of each box carefully. As described previously, save boxes and packing materials should you ever need to move or ship the system.

Verify that all items are present and in good condition. If anything is missing or damaged, contact your technical support center immediately. You should have the following items:

- AUDIX Voice Power Lodging MAP/5 hardware installation instructions (this chapter)
- System unit
- System unit power cord
- Keys for the system unit case lock
- Keyboard with attached cable and user's guide
- Monitor with power cord, cable, and user's guide



NOTE:

The *Multi-Application Platform/5 User's Guide* (585-211-110) is shipped with the platform. Use this document if you need to run diagnostics on the platform itself, or if you need to replace any system hardware components such as the power supply or a computer circuit card.

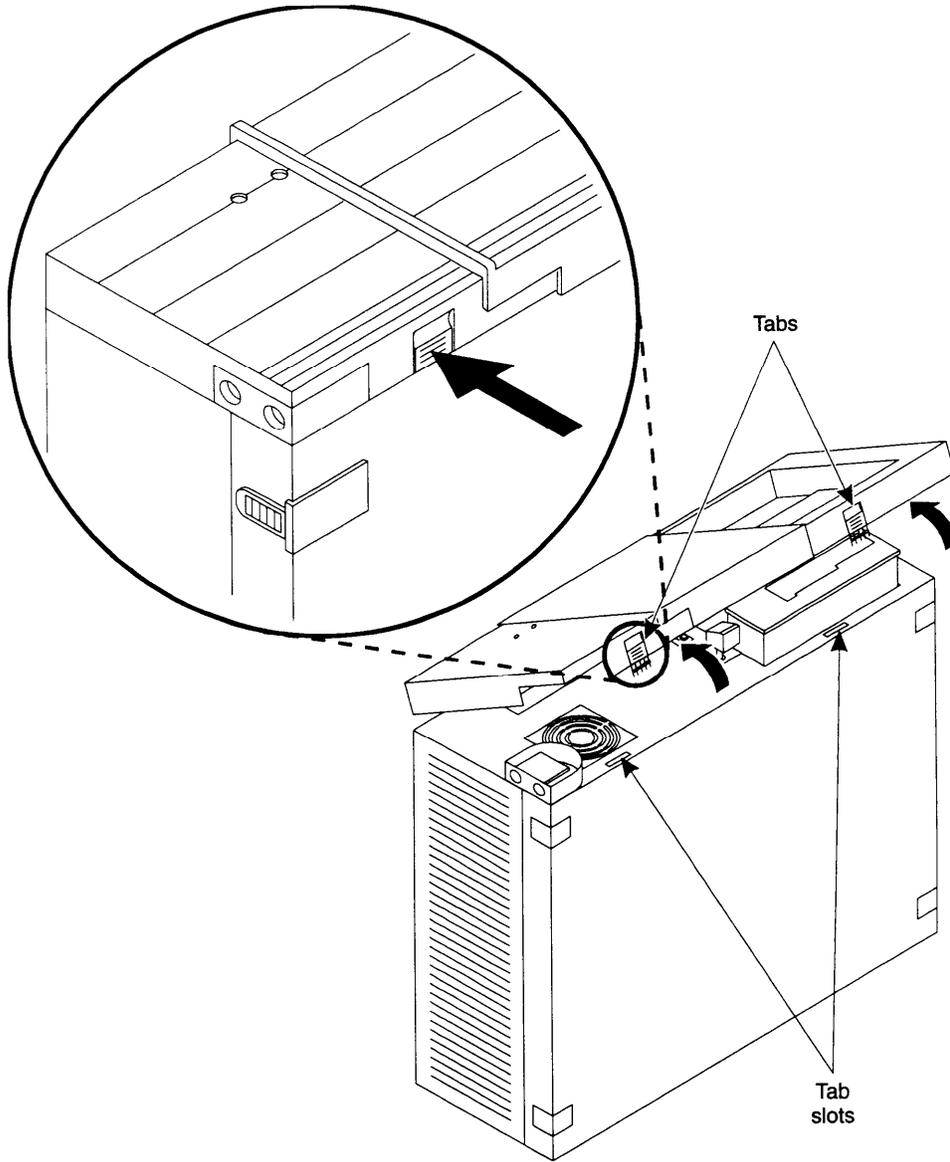


Figure 3-4. Remove the MAP/5 Front Panel

Remove the Front Panel

You must remove the front panel before removing the top cover for access to the inside of the system. The front panel covers the front of the unit and has a slide panel attached to it which can cover the disk drives. This procedure assumes you have already shutdown the system. Refer to Figure 3-4 and follow the steps below.

⇒ **NOTE:**

If you are replacing a component, adding another voice card, or verifying circuit card option settings on a powered-up system with an operating UNIX system, perform "Preparing a Working System for Hardware Procedures" at the end of this chapter before you remove power from the system.

1. Turn off the front power switch and remove the incoming AC line. Also disconnect keyboard and monitor cords.
2. Place the system unit on its rear panel. The bottom of the unit should face toward you. The front panel latches should also face you.

⚠ **CAUTION:**

Do not place the MAP/5 on its rear panel if you have the T-adaptor attached to an installed IPC-900. If you are re-opening the system after initially installing the hardware, remove the T-bar and any cabling before removing the front panel. Do not position the MAP/5 in such a way that it could fall.

3. Push inward and upward on the two front panel latches to release the bottom edge of the front panel. Refer to Figure 3-4.
4. The front panel is flexible enough for you to press one latch and then the other.
5. When the bottom of the front panel is loose, rotate the panel away from you and lift it to remove.
6. Return the unit to its correct desktop position.
7. Continue with the next section, "Remove the Top Cover."

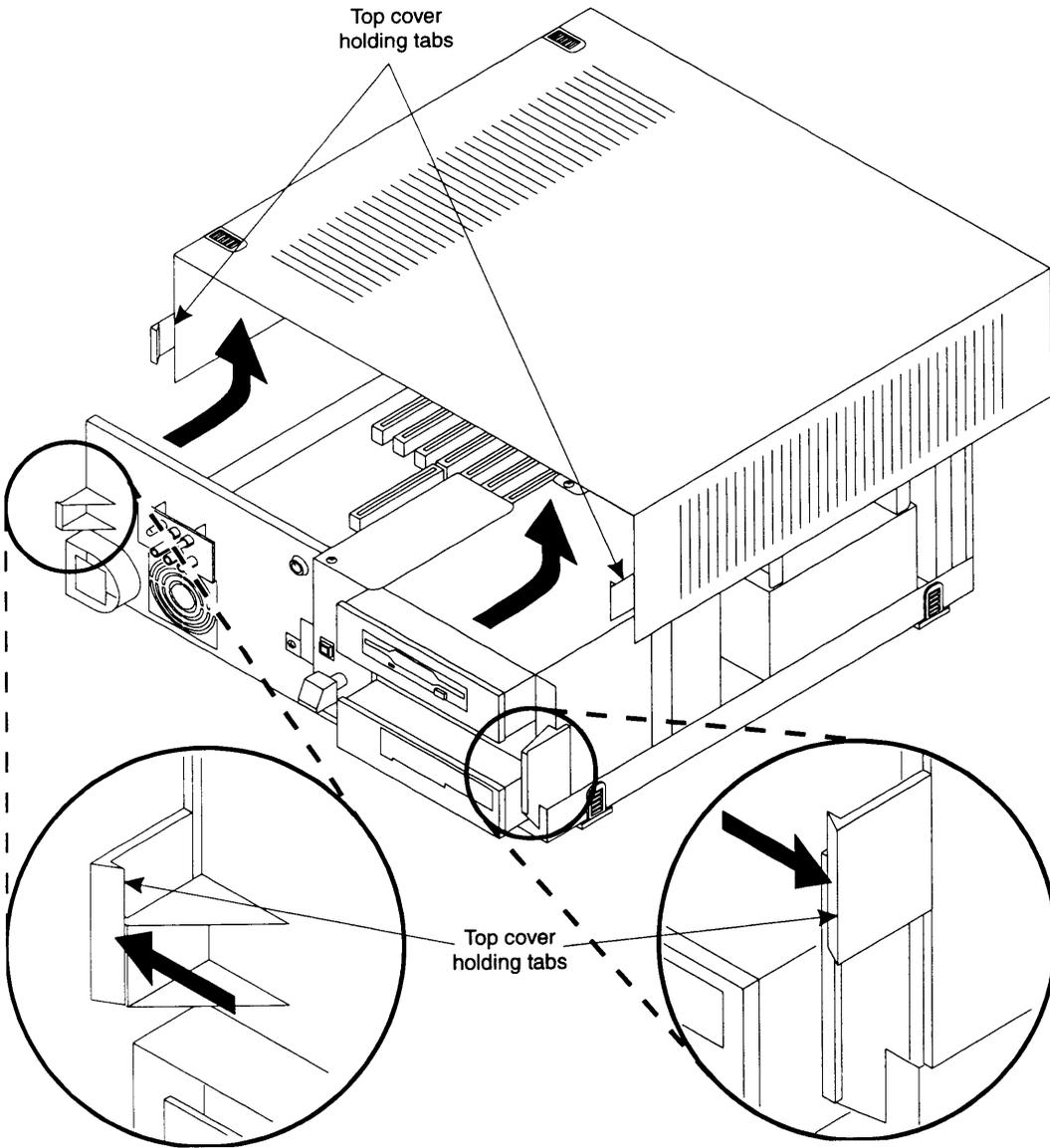


Figure 3-5. Remove the Top Cover on the MAP/5

Remove the Top Cover

This procedure assumes that you have already performed a shutdown of the system and removed the front panel. Refer to Figure 3-5 and follow the steps below to remove the top cover:

1. Unlock the system unit by inserting the key in the lock and turning it counter-clockwise to the unlocked position.

A case lock is located in the top center of the front of the unit. Refer to Figure 3-5 for the location of the lock. Keys are included with the system. The case lock must be in the open position in order to remove the top cover.

2. Press the locking tabs outward while pushing the top cover away from you. See the figure on the next page.

The locking tabs are located on either side of the front of the unit.

3. Slide the top cover as far back as it will go, which is about ½-inch.
4. Lift the top cover straight up to remove.

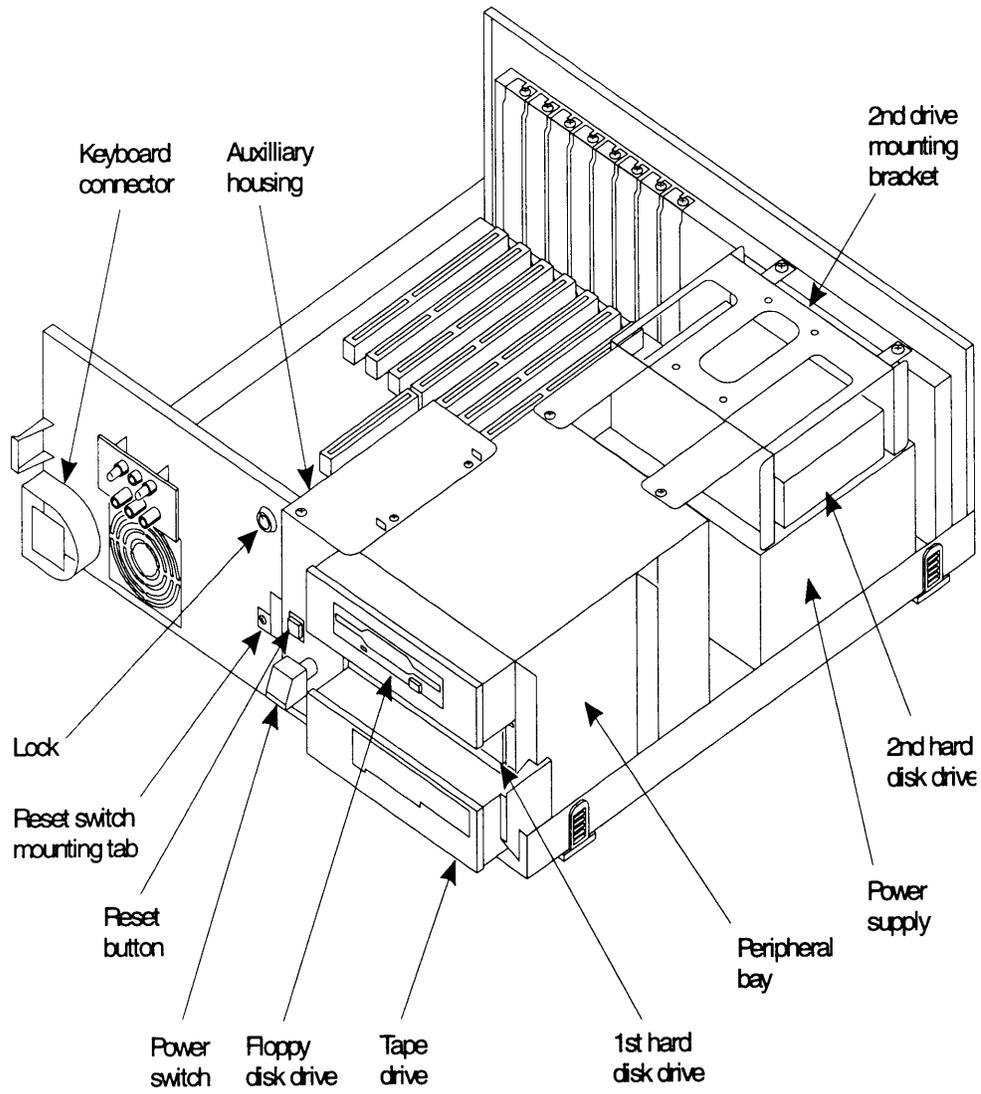


Figure 3-6. Locate MAP/5 Components

Locate Slot Positions on the MAP/5

Now that you can view the MAP/5, use the following diagram to locate key components on the unit. For AUDIX Voice Power Lodging installations, you will only need to locate the position and numbers of the slots. To do this, use Figure 3-6 on the opposite page, and Figure 3-7, below.

This hardware installation chapter assumes a standard installation. As such, it only documents those procedures used for the actual AUDIX Voice Power Lodging and/or AUDIX Voice Power coresidency installation. If you need to replace system components, use the diagnostics diskette, or refer to a complete listing of computer addresses and interrupts, refer to *Multi-Application Platform/5 User's Guide* (585-211-110). This guide is shipped with the MAP/5 platform.

NOTE:

The Voice Power MAP/5 uses an IDE drive. It does not use a SCSI connector or hard disk drive. Also, Voice Power applications do not use or support the tape drive, and consequently, the tape drive is non-operational on the AUDIX Voice Power Lodging MAP/5.

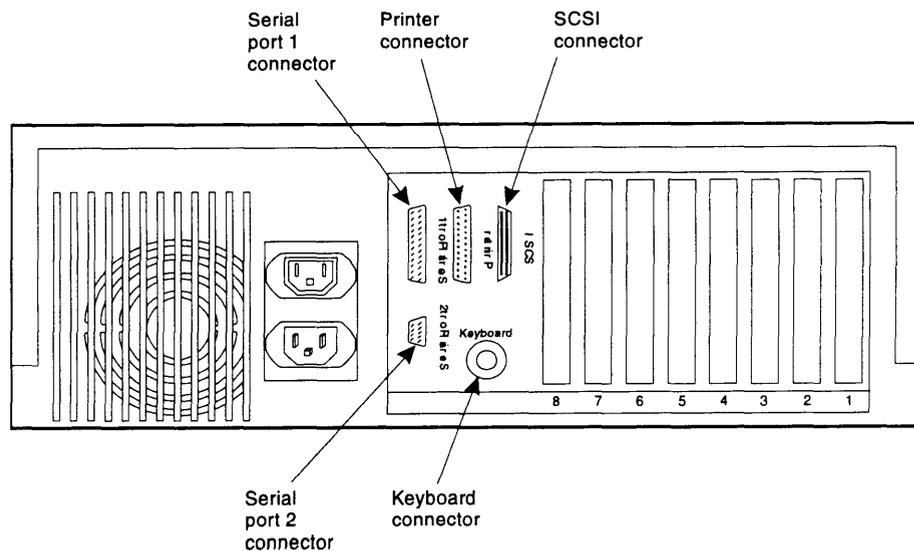


Figure 3-7. Back View of the MAP/5

The slot numbers for the MAP/5 are located on the outside cabinet, below each slot. The slot assignments for the MAP/5 are located in Table 3-1, on the following page. The IRQ assignments for Voice Power MAP/5 systems, in numerical order, are located in the following table, Table 3-2.

Table 3-1. MAP/5 Slot Assignments for AUDIX Voice Power Lodging Systems*

Slot Number	Circuit Card	IRQ
1	IPC-900	IRQ 10
2	Tape Drive Controller	IRQ 5
3	IVP4, Card # 0	IRQ 2
4	IVP4, Card # 1	IRQ 2
5	VDC (Video Display Controller)	N/A
6	IVP4, Card #2	IRQ 2
7	empty or the optional DCP circuit card	DCP IRQ 3
8	empty	

*. The MAP/5 supports a maximum of 12 voice channels, 3 IVP4 circuit cards. Equipping the system with more than 3 IVP4 circuit cards in order to increase the number of voice channels will void the warranty and possibly cause system failure.

Table 3-2. MAP/5 IRQ Assignments for Voice Power Systems

IRQ	Circuit Card or Port
1	Keyboard
2	IVP4
3	COM 2 or DCP circuit card*
4	COM 1
5	Tape Controller
6	Diskette Controller
7	Parallel Port
8	Clock
9	Cascaded to INT OAH (IRQ 2)
10	IPC-900
11	SCSI (Not Used)
12	empty

*. If you install the DCP circuit card, you must disable COM2 through the AT&T FACE screens and the system setup.

Install the IPC-900 or Gemini-1000 Circuit Card

The IPC-900¹ Eight-Port Asynchronous Communications card provides additional asynchronous ports to the platform. The maintenance modem for the MAP/5 Voice Power system is plugged into this circuit card.

If you are installing an assembled, loaded, and tested system (ALT) AUDIX Voice Power Lodging MAP/5, use the ALT-B Hardware Installation checklist from Chapter 2. You will need only to verify that the IPC-900 or Gemini-100 is firmly seated and correctly positioned in Slot 1. If you are installing a non-ALT AUDIX Voice Power Lodging MAP/5, follow the steps in Checklist B, Hardware Installation and physically install the circuit card.

This circuit card requires three settings:

- IRQ jumpers
- I/O switches
- Memory address switches

Place the IPC-900 circuit card into Slot 1.

Use the procedure below to install the IPC-900 circuit card into a new MAP/5. If you are replacing a card into an existing system, perform the procedures in "Preparing a Working System for Hardware Procedures," located at the end of this chapter before performing the procedures below.



WARNING:

Never install any circuit cards in a working system or a system that has its power cords connected. Shutdown and power-off the system. Disconnect any power cords.



WARNING:

Observe proper electrostatic discharge precautions when handling computer components. Wear a ground wrist strap on your bare skin and connect to a ground.

1. A Gemini-1000 Eight-Port Asynchronous Communications card may also be installed. If you are using a Gemini-1000, set the card using the settings for the IPC-900. They are identical.

1. Locate the 3 resource options on the IPC-900 circuit card.

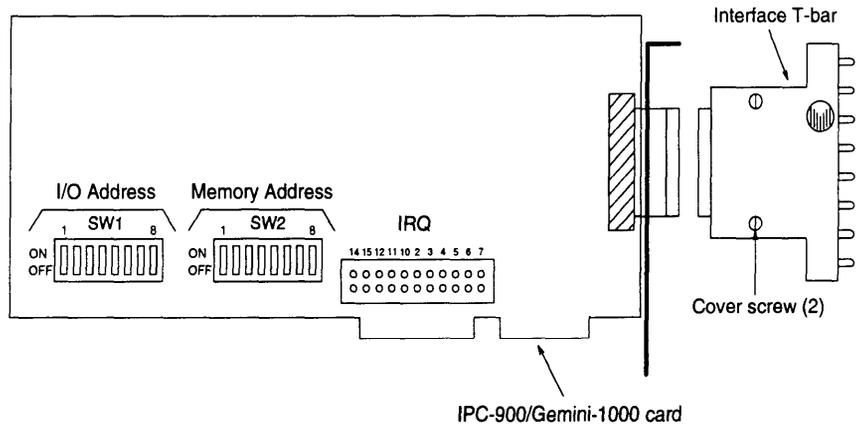


Figure 3-8. IPC-900 Eight-Port Asynchronous Communications Circuit Card

2. Check and set the IRQ setting. The IRQ should be set to 10. Refer to Figure 3-9 below for the jumper position.

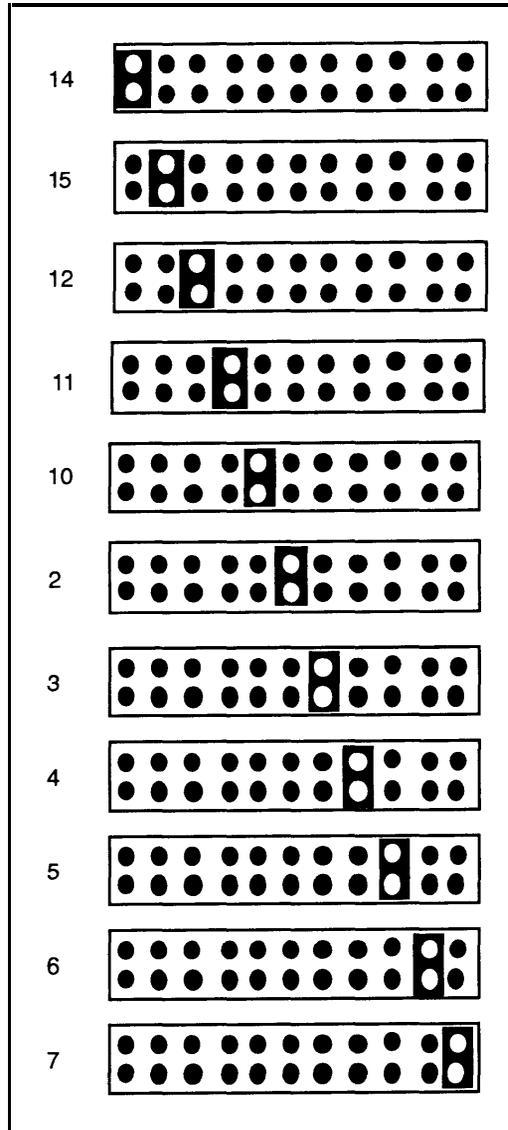


Figure 3-9. Interrupt Jumper Settings for the IPC-900 Asynchronous Card

3. Check and set the I/O switches, Switch Bank 1 (SW1). the I/O for the asynchronous circuit card should be 290, the default setting. Refer to Figure 3-10 below for the settings.

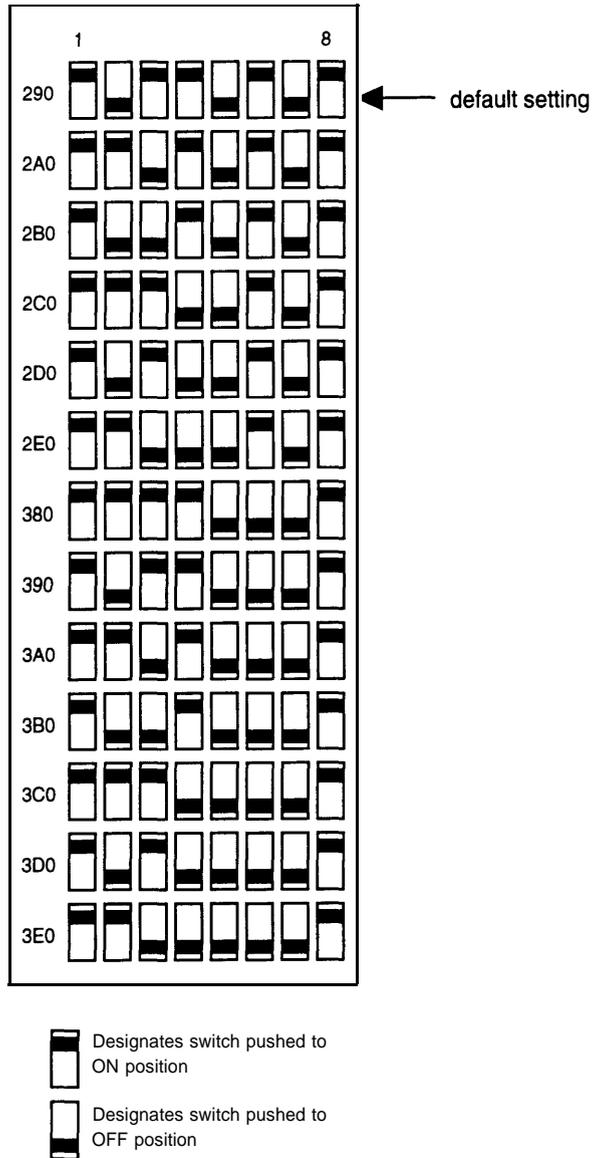


Figure 3-10. Base I/O Address Settings for IPC-900 Asynchronous Circuit Card

4. Check and set the memory switch, Switch Bank 2 (SW2). These switches should be set to D0000. Refer to Figure 3-11 below to determine the position of the switches. The D0000 setting is shown below the default setting arrow.

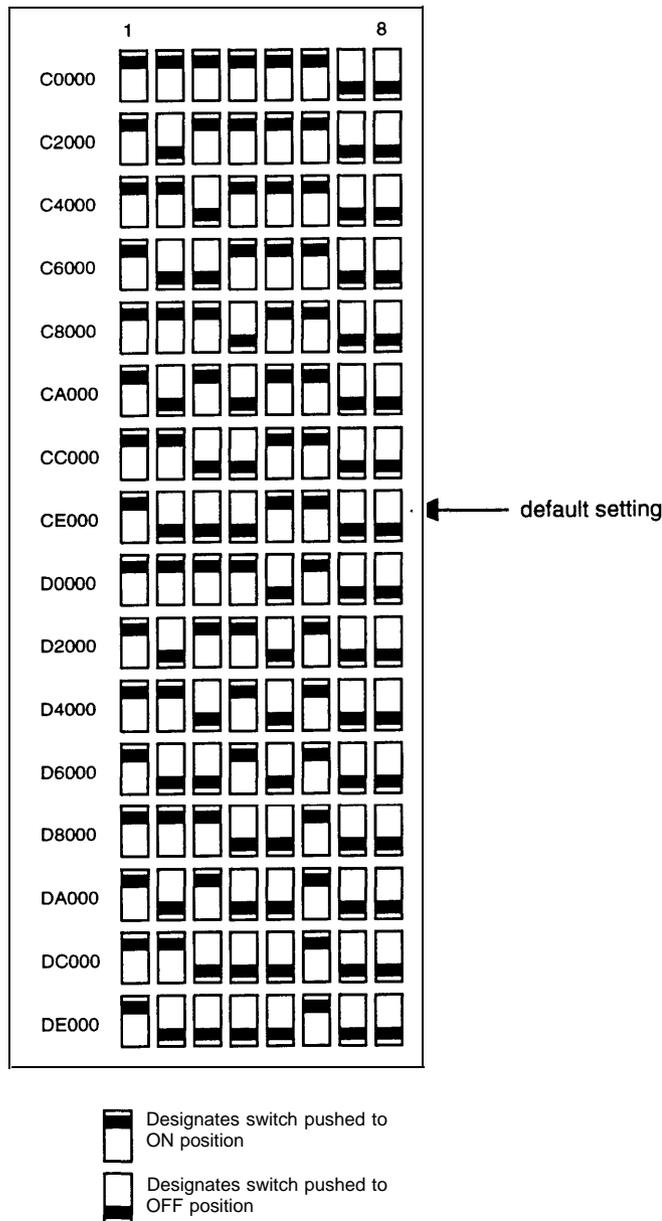


Figure 3-11. Memory Address Settings (8 Kbyte) for IPC-900 Asynchronous Card

5. Determine the location of the cards in the expansion slots.
6. Remove any retaining screws and/or slot covers from the selected slot.
7. Hold the IPC-900 card by its top corner edges and place it into the expansion slot. Do not try to insert the card through the back of the unit. Place the IPC-900 card so that the electrical contacts are aligned with the receptacle in the expansion slot.
8. Press the edge of the IPC-900 card until you feel it fit into place. Apply gentle, firm pressure to seat the card. Be sure that the card is firmly seated. The card is in place when the metal faceplate on the end of the card is flush with the frame of the computer.
9. Replace the retaining screws.

⇒ **NOTE:**

After replacing the cover, you will need to install the T-adapter. The T-adapter is also referred to as the T-bar.

10. Continue with the next section, "Install the IVP4 Circuit Cards"

Install the IVP4 Circuit Cards

The Integrated Voice Power (IVP4) circuit cards installed into the MAP/5 serve as the interface between the Voice Power system and the customer premise telephone lines.



CAUTION:

Use only the IVP4s that are AYC6Bs. Do not use earlier vintage IVP cards as they will not operate with the system.

The maximum number of IVP4 circuit cards that may be installed into the MAP/5 is 3. These 3 circuit cards will provide a maximum of 12 channels for the MAP/5 Voice Power system.² IVP4 circuit cards may be installed into the following slots on the MAP/5:

- IVP4 Card # 0: Slot 3
- IVP4 Card # 1: Slot 4
- IVP4 Card # 2: Slot 6

Use the procedure below to install the IVP4 circuit cards into a new MAP/5. If you are installing an assembled, loaded, and tested system (ALT) AUDIX Voice Power Lodging MAP/5, use the ALT-B Hardware Installation checklist from Chapter 2. You will need only to verify that the IPC-900 or Gemini-100 is firmly seated and correctly positioned in Slot 1. If you are installing a non-ALT AUDIX Voice Power Lodging MAP/5, follow the steps in Checklist B, Hardware Installation and physically install the circuit card. If you are installing a card into an existing system, perform the procedures in "Preparing a Working System for Hardware Procedures," located at the end of this chapter before performing the procedures below.



WARNING:

*Never install any circuit cards in a working system or a system that has its power cords connected. Shutdown using the **shutdown -g0 -y -i0** command and power-off the system. Disconnect any power cords.*



WARNING:

Observe proper electrostatic discharge precautions when handling computer components. Wear a ground wrist strap on your bare skin and connect to a ground.

2. The MAP/5 supports a maximum of 12 voice channels, 3 IVP4 circuit cards. Equipping the system with more than 3 IVP4 circuit cards in order to increase the number of voice channels will void the warranty and possibly cause system failure.

1. Locate the TDM SIPs or slots on the IVP circuit card.

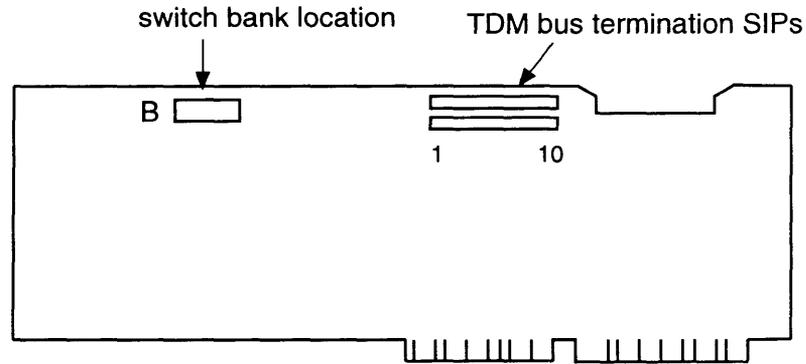


Figure 3-12. IVP4 Circuit Card (AYC6B)

2. Verify that the IVP card that you are installing has either both TDM SIP terminating resistor present or both absent. Cards with TDM SIPs should have the resistors lined up as shown in Figure 3-12. If only 1 TDM SIP is present, either add a second TDM SIP or remove the existing TDM SIP. Do not install the IVP with only one TDM SIP present.

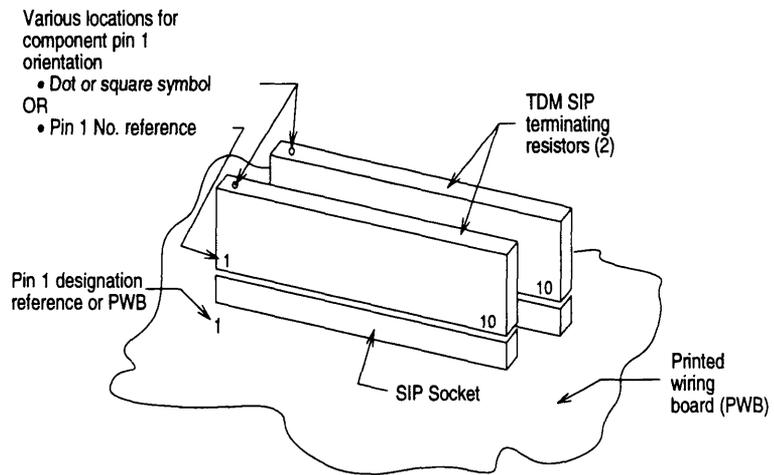


Figure 3-13. Terminator SIPs on the TDM Bus

3. Locate the switch bank on the IVP card (SW12.1).

⇒ **NOTE:**

If the card that you are installing has more than 1 switch bank, it is an older edition of the circuit card. Do not use older IVP circuit cards in the MAP/5 Voice Power Release 3.0 system.

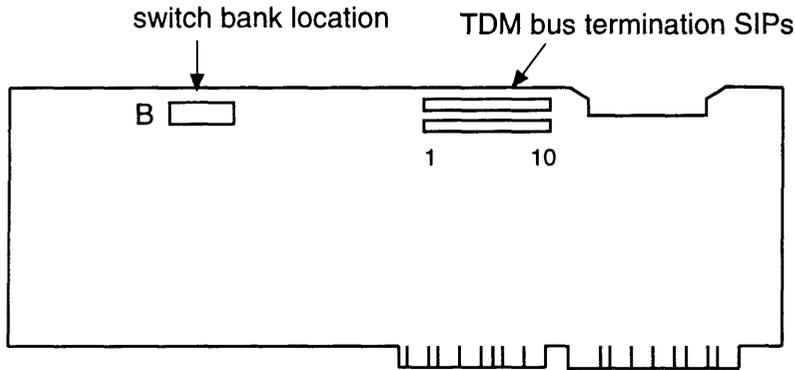


Figure 3-14. IVP4 Circuit Card (AYC6B)

4. Set the switch bank according to the diagram on the next page.

The diagram below shows three different types of switches, A, B, and C. Select the switch type that matches your circuit card. Use the appropriate setting to indicate the address for Card # 0, Card # 1, or Card # 3. You may only use a maximum of 3 circuit cards in your system.

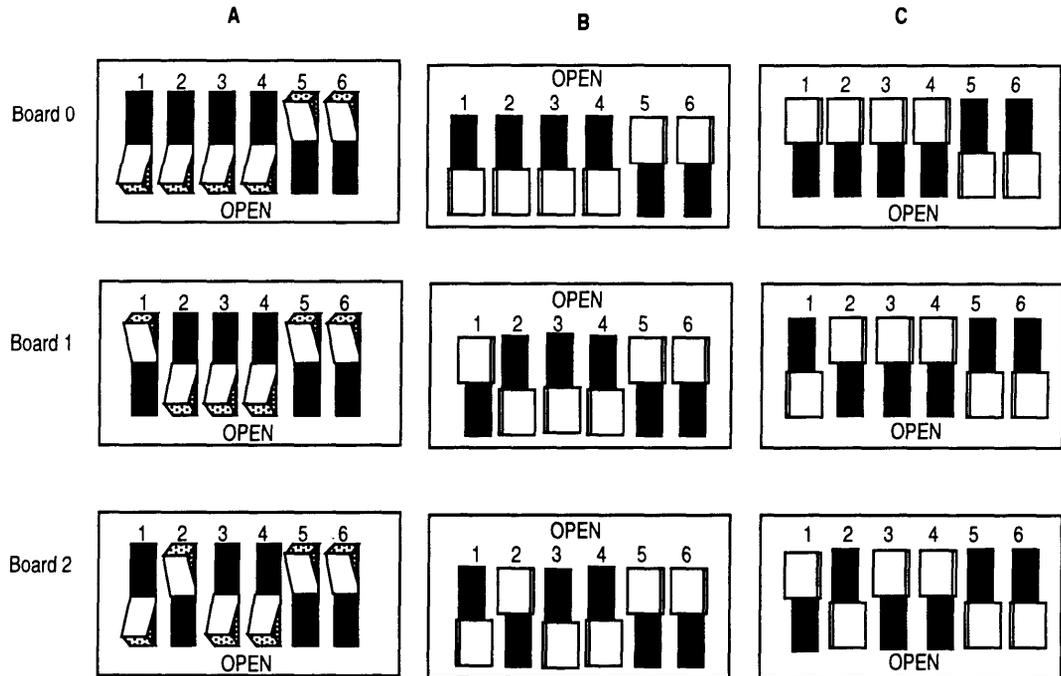


Figure 3-15. Settings for Switch Bank B (SW12.1)

5. Determine the location of the card in the expansion slots.
6. Remove any retaining screws and/or slot covers from the selected slot.
7. Hold the IVP card by its top corner edges and place it into the expansion slot. Do not try to insert the card through the back of the unit. Place the IVP card so that the electrical contacts are aligned with the receptacle in the expansion slot.
8. Press the edge of the IVP card until you feel it fit into place. Apply gentle, firm pressure to seat the card. Be sure that the card is firmly seated. The card is in place when the metal faceplate on the end of the card is flush with the frame of the computer.
9. Replace the retaining screws.
10. Repeat Steps 5 through 9 for each remaining IVP card.
11. Continue with the next section, "Replace the Top Cover and Front Panel."

Replace the Top Cover and Front Panel

Follow the instructions below to replace the top cover and front panel of the unit.

1. Align the top cover with the unit so that the front of the top cover is about 1/2-inch from the front of the unit.
2. Lower the cover over the unit until the cover is parallel with the bottom of the unit.
3. Pull the top cover toward you until it snaps into the locking tabs located on either side of the front of the unit.
4. Lock the system unit by inserting the key into the lock and turning clockwise to the locked position.
5. Place the unit on its rear panel. The bottom of the unit will be facing you.
6. Align the front panel with the front of the unit and hook the top flanges of the panel underneath the top cover.
7. Lower the panel and snap into position so that the panel latches have caught.
8. Return the unit to its correct desktop position.

Install the T-Adapter for the IPC-900

After replacing the top and front panels on the MAP/5, you will need to install the T-adapter. This adapter is also referred to as a T-bar.

The T-adapter on the eight-port card has 8 RJ-45 type modular jack, each jack representing one of the eight ports. The figure below shows the T-adapter:

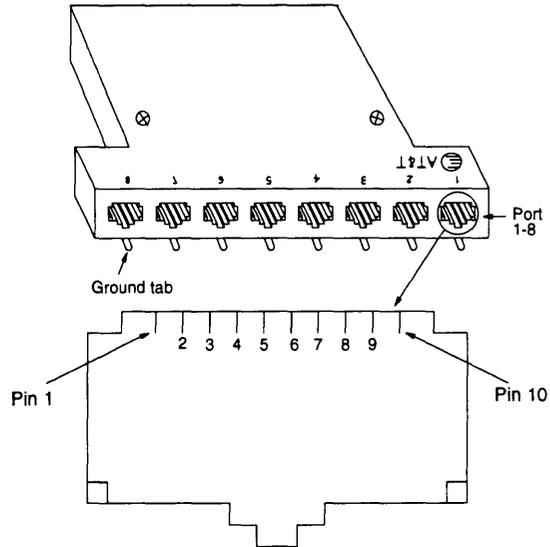


Figure 3-16. RJ-45 Type Modular Jack Connector Pin Identification

Two mounting screws secure the T-adapter to the circuit card faceplate inside the T-adapter. You must open the T-adapter to locate these screws.

The pinouts for the T-adapter are:

Table 3-3. RJ-45 Type Modular Jack Pin Identification

Pin	Signal Name	Signal Flow
1	Reserved	—
2	Ring Indicator (RI)	Input
3	Data Carrier Detect (DCD)	Input
4	Data Terminal Ready	Output
5	Signal Ground	Bidirectional
6	Receive Data (RD)	Input
7	Transmit Data	Output
8	Clear to Send (CTS)	Input
9	Request to Send (RTS)	Output
10	No Connection	—

1. Use a Phillips #2 screwdriver to remove the 2 T-adapter cover screws.
2. Carefully open the T-adapter so as not to drop the screws inside.
3. Locate the screws and set aside.
4. Plug the interface T-adapter into the circuit card faceplate 34-pin connector.
5. Secure the T-adapter in place with the two screws.
6. Reassemble and secure the interface T-adapter cover.
7. Continue with the next section, "Determine System Orientation."

Determine System Orientation

1. Determine if the Voice Power MAP/5 will be used in a deskside or tower configuration.
2. Refer to *Multi-Application Platform/5 User's Guide* (585-211-110), Chapter 1, "Getting Started," the section "Tower/Desktop System Unit Setup."
3. Install the movable feet in order to orient the unit correctly.
4. Continue with the next section, "Cable the System."

Cable the System

Make the following cable connections:

1. Cable the IVP4 circuit cards
2. Cable the peripherals

The following pages contain information necessary for cabling.

⇒ **NOTE:**

The point of demarcation for the PMS is the serial port connection on the back of the AUDIX Voice Power Lodging MAP/5. Cable the PMS after you have acceptance tested the system. Refer to Chapter 7, "Cut-To-Service" for additional information.

Refer to Worksheet 1-2 "Channel and Service Assignments" for the extension assignments for the ports.

Cable the IVP4 Circuit Cards

Each IVP4 (AYC6B) tip/ring circuit card has two 6-position modular jacks. Each of these modular jacks is used to connect two voice lines in the RJ14C configuration. Use the top jack for line pairs 1 and 2, connecting into pins 2 and 3, and pins 4 and 5. Use the bottom jack for line pairs 3 and 4, again connecting into pins 2 and 3 and pins 4 and 5. This is illustrated in Figure 3-17, below.

If you run the line pairs two per jack (RJ14C), use two standard, 4-conductor modular cables.

If you run the line pairs individually via USOC (RJ11C), a type 884A adapter can be used to consolidate the four individual line pairs into two pairs (RJ14C) in each of two cables.

⚠ WARNING:
There is a magnet on the back of the 884A adapter. Be sure that you do not place this adapter near hard disk drives or floppy diskettes.

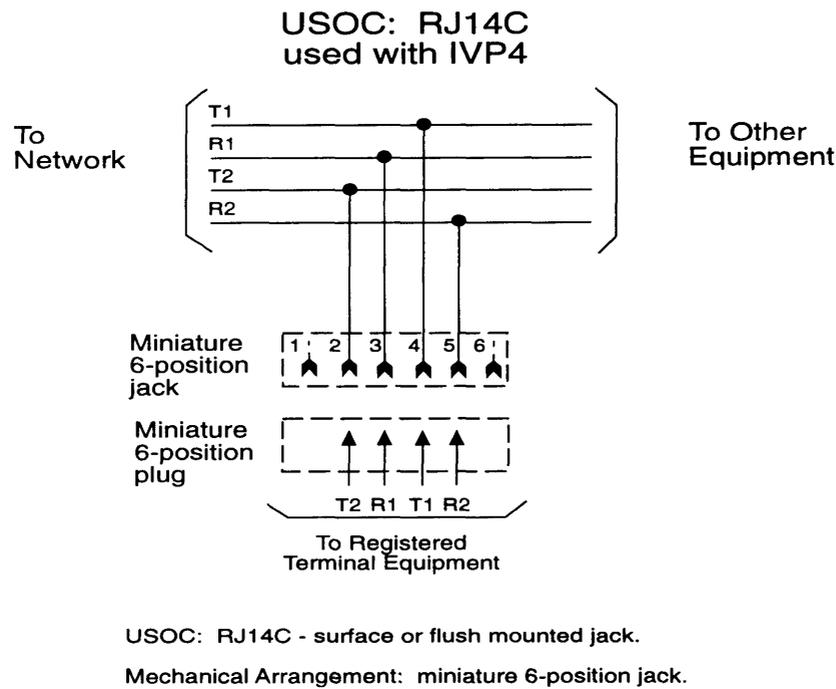


Figure 3-17. Wiring and Pin Diagram for IVP4 (AYC6B) T/R Circuit Cards

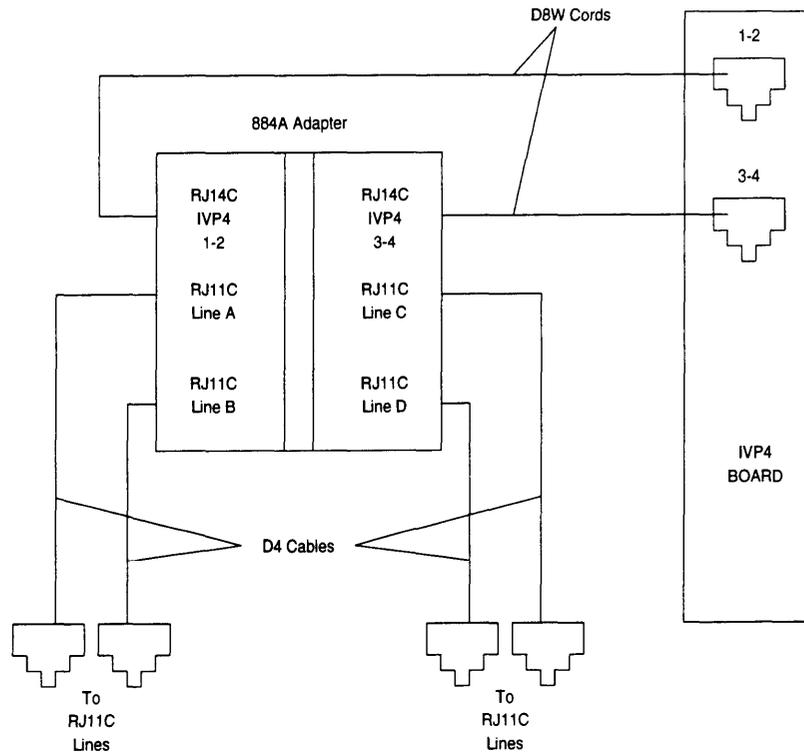


Figure 3-18. Typical Line Connection from IVP4 (AYC6B) T/R Card

The following procedure describes how to cable the voice lines from the IVP4 circuit cards to 103A connect blocks:

1. Connect one end of a D4 cable from the 103A connect block to the RJ11C jack labeled "LINE A" on the 884A adapter.
If you are connecting only one line to the IVP4 circuit card, connect it directly to the line jack labeled "1-2" on the IVP4 circuit card, bypassing the 884A adapter, Then skip to Step 5.
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 D8W four-conductor cord to the RJ14C jack with the label "1-2" on the 884A adapter. Connect the other end to the line jack with the label "1-2" on the board. (Two of these four-conductor cords are included with each IVP4 circuit card.)

4. Connect the second D8W cord to the hacks on both the 884A adapter and the IVP4 circuit card.
5. Maintain a record of the telephone numbers of the lines connected to the IVP4 circuit cards.

Cable the Peripherals

Cable the peripherals to the following locations for systems using AT&T's ICSS supplemental software:

Table 3-4. MAP/5 Peripheral Locations

Location	Peripheral
COM1 (Serial Port 1)	SID
COM2 (Serial Port 2)	PMS
IPC-900 (Port 1)	maintenance modem
Parallel Port	Optional Printer

COM1 to SID (Switch Integration Device)

Serial Port 1 (see Figure 3-19 on Page 3-34) is a DB-25P connector.

COM2 to PMS (Property Management System)

Serial Port 2 (see Figure 3-19 on Page 3-34) is a DB-9P connector.

IPC-900 Port 1 to the Maintenance Modem

IPC-900 Port 1, located on the T-adaptor on the IPC-900 circuit card in Slot 1, is an RJ-45 type modular jack connector.

Parallel Port to Optional Printer

The parallel port is a DB-25S (sockets) connector.

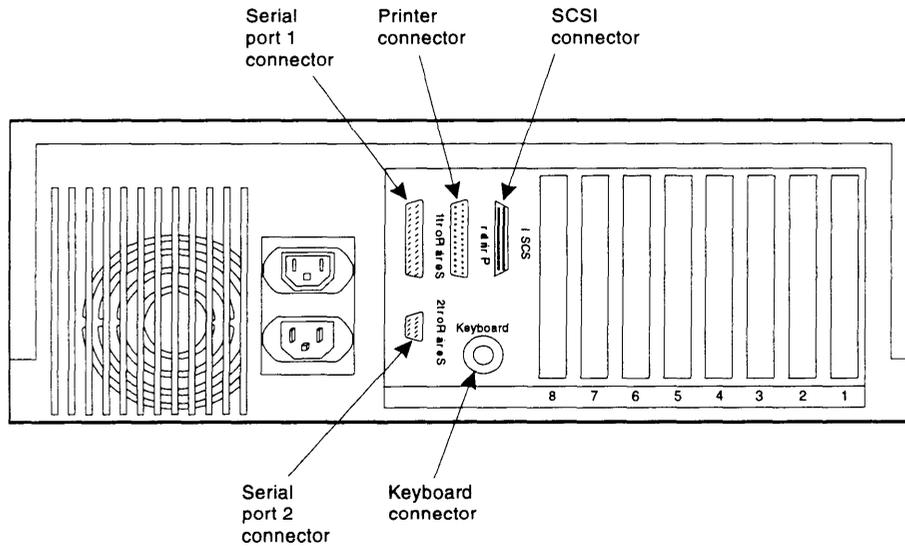


Figure 3-19. Back View of the MAP/5

The software options for the serial port assignments are:

- **Device Type**
Modem, Terminal, Computer, Other, None
- **Device Speed**
300, 1200, 2400, 4800, 9600, 19200
- **Flow Control**
Generic, Software, Hardware

Refer to the procedures in Chapter 5, "Initial Administration and Test," for instructions for peripheral administration for AUDIX Voice Power Logging.

Table 3-5. MAP/5 Peripheral Software Assignments

Port	TTY	Device	Speed	Flow Control
COM 1	tty00	SID	1200	Generic
COM 2	tty01	PMS	1200	Generic
IPC-900 Port 1	ttyh01, ttys01	maintenance modem	2400	Software
Parallel Port		Optional Printer		

Peripheral Connections with an Optional DCP Circuit Card

Cable the peripherals to the following locations if you are installing a DCP circuit card to support an AUDIX Voice Power coresidency. If you are using AT&T's ICSS supplemental software, you may not install a DCP circuit card.

Table 3-6. MAP/5 Peripheral Locations

Location	Peripherals with a DCP Circuit Card Installed
COM1 (Serial Port 1)	SID
COM2 (Serial Port 2)	disable
IPC-900 (Port 1)	PMS
IPC-900 (Port 2)	maintenance modem
Parallel Port	Optional Printer

Connect System Components

Connect the following system components:

1. Connect the keyboard.

The keyboard may be connected either at the rear of the unit (see Figure 3-19 on Page 3-34) or to the Keyboard/Mouse Connector Swivel located on the bottom left-hand front corner of the Voice Power MAP/5.

If you wish to use the Keyboard/Mouse Connector Swivel, refer to *Multi-Application Platform/5 User's Guide* (585-211-110), Chapter 1, "Getting Started," the section "Tower/Desktop System Unit Setup," for instructions.

2. Connect the monitor.

Refer to *Multi-Application Platform/5 User's Guide* (585-211-110), Chapter 1, "Getting Started," the section "Connecting the Components."

3. Connect the power cord.

Verify that the power selector switch is set for 110 v. Refer to *Multi-Application Platform/5 User's Guide* (585-211-110), Chapter 1, "Getting Started," the section "Connecting the Components."

Verify the Chassis Cooling System

The AUDIX Voice Power Lodging MAP/5 fans maintain airflow in the unit to prevent components from overheating. Overheating can cause a component to malfunction.

1. Verify that there is nothing blocking the fan vent at the rear of the AUDIX Voice Power Lodging MAP/5. This vent is located on the left-hand side of the computer.
2. Verify that you have left a minimum six-inch clearance around the AUDIX Voice Power Lodging MAP/5 so that the air can circulate.
3. Verify that you have tightly closed all covers on the AUDIX Voice Power Lodging MAP/5.



CAUTION:

Keep the covers closed on the MAP/5 when you are not working inside the platform in order for the cooling system to function properly. Do not operate the MAP/5 without the covers in place.

Apply Power to the System

When power is applied to the AUDIX Voice Power Lodging MAP/5, the system performs a series of diagnostics. Watch the screen as the system executes the power up diagnostics, checking for any failures.

Should your system experience a problem during power up, refer to the *Multi-Application Platform/5 User's Guide* (585-211-110) that is shipped with the computer.

⇒ NOTE:

If you are installing a Digital Communications Protocol (DCP) circuit card, disable the second serial port as you power up. Refer to *Multi-Application Platform/5 User's Guide* (585-211-110) in order to enter setup and disable COM2. Only disable the second serial port if you are using a DCP. Later, after you have verified the software installation, enter the AT&T FACE menu, System Administration, Peripherals Setup, and Enable/Disable Second Serial Port to disable the second serial port (COM2) under the FACE screens.

Preparing a Working System for Hardware Procedures

In order to perform hardware repairs on a working AUDIX Voice Power MAP/5, you should shutdown the system gracefully, if possible.

AUDIX Voice Power Lodging systems maybe shutdown using either of 2 methods:

1. Use the shutdown command from the system command line

1. Enter **audix** at the Console Login prompt.

The system responds with the Password prompt.

2. Press [ENTER] or the audix **password** at the Password prompt.

The system displays the following:

```
IUPSS R3.0
>AT&T FACE
Voice System Administration
Exit
```

3. Slect AT&T FACE.

The system responds with the AT&T FACE menu:

```
1 AT&T FACE
>Office of root
Printer Operations
Programs
System Administration
UNIX System
Exit
```

4. From the AT&T FACE main menu, select the following:

```
> UNIX System
```

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

5. Enter **shutdown -y -g0 -i0**

The system shutdowns the voice and UNIX systems. When shutdown if finished, the system instructs you to reboot using CNTRL-ALT-DEL.

⇒ **NOTE:**

If you wish to leave UNIX and return to the screens, type exit.

6. Turn off the power by using the switch on the front of the MAP/5.
7. Remove the power cords and cables.

This chapter describes the procedures to partition the system disk and install the base and application software necessary for AUDIX Voice Power Lodging operations. The base software includes the following:

- UNIX 3.2.2 and supporting packages
- IPC-900 software¹
- Integrated voice Power system software (IVPSS) Release 3.01

This chapter also describes the procedures used to install the following application packages:

- AUDIX Voice Power Release 3.0²
- AUDIX Voice Power Lodging Release 3.0
- Property Management System (PMS) Integration Software (Optional)
- Spanish or Japanese Language Packages (Optional)

The optional language packages and the Property Management System (PMS) software only interact with AUDIX Voice Power Lodging Release 3.0. They do not influence the behavior of AUDIX Voice Power Release 3.0.

Both AUDIX Voice Power and AUDIX Voice Power Lodging may operate as either stand-alone or coresident systems. If you will be installing a coresident system, install AUDIX Voice Power software packages first and AUDIX Voice Power Lodging second, after you have completed installing the base software.

To install the software, follow the installation steps in the checklist from Chapter 2, "Checklist C: Software Installation." If the system that you are installing, however, has an orange sticker on the disk drive door, your system is an assembled.

-
1. IPC-900 software also operates both the IPC-900 and the Gemini-1000 circuit cards.
 2. Optional. Do not install these packages unless you are installing an AUDIX Voice Power coresidency.

loaded, and tested (ALT) system. You do not have to load the software. Follow the installation steps in the checklist from Chapter 2, "Checklist ALT-C: Software Installation."

General Software Installation Instructions and Tips

The following information is helpful during the software installation:

- Enter

When **enter x** appears in an installation instruction, type the indicated word or command (**x**) and then press [ENTER]. The [ENTER] key is located on the keyboard. Do not use the [ENTER] (F3) function key for this type of command entry.

- Function Keys

Under AUDIX Voice Power Lodging and AUDIX Voice Power, the computer's function keys (F1, F2, F3, etc.) take on special meanings for the software. They present options or commands to apply to menu choices or screens. When a box with an option in it appears, followed by a function key designation, for example [ENTER] (F3), press the corresponding function key from the upper row of keys on the keyboard.

Press [ENTER] (F3) means to press function key F3.

- Console terminal type is at386

If the system asks you for a console terminal type, for example "TERM= , " enter **at386**. The console terminal type is at386.

If you are remotely logged in, enter the appropriate terminal type.

- Moving the cursor or highlight menu items

Use the up and/or down arrow keys to highlight menu items. To select a menu item, highlight the item that you want and press [ENTER].

To move the cursor from field-to-field in a form, press the [ENTER] key, the [TAB] key, or use the up and/or down arrow keys.

The bottom of the screen above the function key map will sometimes display instructions.

- Menu item highlight shortcut

Menu items may also be highlighted by typing the letter of the first word in the selection name. For example, to highlight "System Administration," type the letter "s."

If there is more than 1 selection that begins with the same letter, type the letters of the word. As soon as the system encounters a different letter that distinguishes the 2 words, the system will move the highlight bar to the selection.

Install the UNIX Base System Package



CAUTION:

As you install the UNIX base system package, you will destroy any files currently on the disk.

If you are reinstalling the UNIX operating system or reallocating space on the disk, ensure that the Voice Power administrator has backed up any required files before you continue. To backup the necessary files, follow the steps in "Procedure for Backup" in Appendix A.

You may restore these files to the Voice Power system after you have reloaded all of the software. Reloading UNIX will require you to reload all of the AUDIX Voice Power Lodging and AUDIX Voice Power software.

1. Insert diskette 1 of 7 of the UNIX System V386 Foundation Set Base System Package into the floppy drive. This floppy is labeled "Base System Boot Floppy."
2. Press the reset button with the floppy disk in the drive.

The system responds by performing the power on self-test (POST). These messages are a way for the system to demonstrate that it recognizes its drives and memory. These messages are scrolled very quickly.

The POST messages are:

```
486SX BIOS V1.2R1.5tt1 see m5 bk
```

```
xxxxxx KB Memory Good
```

```
xxxxxx KB Shadow RAM
```

```
xxxxxx KB Cache RAM
```

```
1 Diskette Drive
```

```
1 Fixed Drive
```

```
1 Parallel Port
```

```
2 Serial Port(s)
```

```
Memory cache on
```

```
Booting the UNIX System ...
```

```
Then total real mem = 825736
```

```
total avail mem = 7225344
```

```
UNIX System v/386 Release 3 .2.2
```

These messages are followed by copyright announcements.

When POST is complete, the system displays the following prompt:

```
Strike ENTER to install the UNIX system on your hard disk.
```

3. Press [**ENTER**] to begin the new installation.

The system responds:

```
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. Enter **y** to continue with the installation.

If no partition is present, the system displays the Disk Partitioning Options menu, as follows:

```
      Total hard disk size is xxx cylinders

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

For new installations, the system also displays:

```
THERE ARE NO PARTITIONS CURRENTLY DEFINED
```

and then asks you to choose from the following list of options:

```
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:

For new installations, go to Step 5.

For systems previously loaded with the UNIX operating system, the system also displays:

```
  1  Active UNIX SYS 0   xxx yyy  100
```

and then asks you to choose from the following list of options:

```
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:

If the message indicates that one or more partitions are defined, complete the following steps a through d:

- a. Enter **3** 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. Enter the first partition number listed under the Partition heading.

The system responds with the following prompt:

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

- c. Enter **y**

The system responds:

```
Partition x has been deleted.
```

If this was the active partition, the system responds:

```
Partition x has been deleted. This was the active parti-
tion.
```

- d. Repeat Steps a, b, and c until all existing partitions are deleted.

⇒ **NOTE:**

After each partition has been deleted, the system redraws the Disk Partitions Options screen to show the remaining partitions. If no partitions are listed under the Partition heading, all of the partitions have been deleted.

- e. Go to Step 5 when all existing partitions are deleted.

5. Enter **1** to create a partition.

The system responds:

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

6. Enter **1** for UNIX.

The UNIX System partition must use at least 5% of the hard disk.

```
Indicate the percentage (5-100) of the hard disk you
want this partition to use (or enter "c" to specify in
cylinders):
```

7. Enter **100** for 100%.

The system responds:

```
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".
```

8. Enter **y** to make this the active partition.

The system responds:

```
Partition 1 is now the Active partition.
```

The system also updates the Disk Partitioning Options menu to show Partition 1 as the active partition:

```
Total hard disk size is xxx cylinders
```

Partition	Status	Type	Cylinders		Length	%
			Start	End		
=====	=====	=====	=====	===	=====	===
1	Active	UNIX Sys	0	x	y	100

```
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:
```

9. Enter **4** to update the configuration and exit.

The system responds:

```
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.
```

10. Press [ENTER] to continue with the surface analysis.

The system responds:

```
Checking for bad sectors in the UNIX System partition...
Checking cylinder: xx
```

The surface analysis takes 10 to 35 minutes depending on the size of the disk. The rate is approximately 1 cylinder per second.

After completing the surface analysis, the system displays the following message:

```
The UNIX System partition has xxx cylinders assigned to it.  
1 cylinder will be used for alternate sectors.  
This leaves xxx cylinders (xxxxxxxx bytes) available.
```

The following seems like a reasonable partitioning of your UNIX System disk space:

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

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

11. Copy the number of cylinders shown on the screen in the line:

```
This leaves xxx cylinders (xxxxxxxx bytes) available.
```

into the space provided in the appropriate blanks in Step 16, Page 9, of this chapter.

12. Determine and copy the number of Mbytes available from the line:

```
This leaves xxx cylinders (xxxxxxxx bytes) available.
```

into the space provided in the appropriate blanks in Step 16, Page 9, of this chapter.

To determine the number of Mbytes, use the first 3 numbers from the bytes available. For example,

```
This leave 988 cylinders (509902848 bytes) available.
```

indicates that there are 509 Mbyte of hard disk drive space available.

13. Enter **n**, the allocation is not acceptable.

The system responds:

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

14. Enter **n**, you do not wish to have separate root and user filesystems.

The system responds:

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

15. Enter **y**, you want an additional /usr2 filesystem.

The system responds:

```
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)?
```

16. Enter **n**, you do not want to allocate a crash/dump area.

The system responds:

You will now be given the opportunity to specify the 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)?

Using the values you wrote down for the hard disk size (in megabytes and cylinders), complete the following steps to determine the number of cylinders to allocate for the swap file system:

- a. Divide the number of cylinders by the number of megabytes.

_____ # Cylinders ÷ _____ # Mbytes

- b. Round the result upward to the nearest whole number. Enter this number in the first blank in Step c.

- c. Multiply the number you wrote down by 6.

Write the number from 16 b here: _____ x 6 = _____

17. Enter that value from Step 16c at the prompt for swap/paging.

The system responds:

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

18. Multiply the value from Step 16b (# cylinders divided #Mbytes and rounded) by 75.

Step 18 b value _____ x 75 = _____

19. Enter the value from Step 18 in response to the prompt.

The system responds:

The remaining xxxx cylinders will be assigned to /usr2.

The system then displays the disk allocation values you just assigned and the following prompt:

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

20. Verify the allocations. Be sure that you have assigned at least 75 Mbytes for the combined root/usr/filesystem.

If it is not correct, enter **n** and reallocate the cylinders. Return to Step 14.

If the allocation is correct, enter **y**.

When the system has reallocated the cylinders, it displays the following message:

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

This takes approximately 10 to 25 minutes to create these file systems.

During this time, the system displays messages about the process:

```
UNIX System file system(s) have been created in your active
UNIX System partition. A UNIX System will now be installed on
your hard disk .....
Please standby.
```

```
When you are prompted to reboot your system,
remove the floppy disk from the diskette drive,
and strike CTRL-ALT-DEL.
please wait for the prompt.
```

When creation of the file systems is complete, the system responds with the following prompt:

```
Reboot the system now.
```

21. Remove diskette 1 of 7 from the floppy drive and press Ctrl-Alt-Del to reboot the system.

⇒ **NOTE:**

Use the [DEL] key located on the number pad to reboot. Pressing the key labeled [DELETE] does network.

When the reboot is complete, the system responds:

```
Confirm.
```

```
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.
```

22. Enter **f** to select Floppy Diskette.

The system responds:

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

23. Insert the next diskette into the floppy drive.

⇒ **NOTE:**

Each message will indicate the number of the disk to be inserted.

24. Press [ENTER]

The system responds:

```
Installation is in progress -- do not remove floppy disk.
```

When the system has loaded this diskette (this will take from 3 to 5 minutes), it "beeps" and prompts you to install the next one.

25. Remove the current diskette and repeat Step 23 and Step 23 for the remaining base system diskettes.

When you have installed the last UNIX base system diskette, the system responds with the following messages and prompt:

```
UNIX System files have been copied to the hard disk. It is now
safe to remove the floppy disk. Additional file systems will
now be set up.
```

```
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:
```

26. Remove UNIX base system diskette 7 of 7 from the drive, if you have not already done so.

27. Press [ENTER] in response to the password prompt.

This action assigns no password for the root login.

Turn to the logins and passwords worksheet. This is located on the last page of this chapter. Write "none assigned" in the space provided for the root password.

⇒ **NOTE:**

Even though you did not assign a password, keep this information and all passwords secure.

The system responds:

```
Re-enter the new password:
```

28. Press [ENTER] again.

The system responds:

```
Enter a password for the 'install' user.
```

```
(Note: This password must be kept EXTREMELY secure):
```

```
New password:
```

29. Press [ENTER] in response to the prompt.

This action assigns no password for install.

Turn to the logins and passwords worksheet. This is located on the last page of this chapter. Write "none assigned" in the space provided for the install password.

The system responds:

```
Re-enter the new password:
```

30. Press [ENTER] again.

The system responds:

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

⇒ **NOTE:**

You do not have to disable any of the serial ports.

After approximately 2 minutes, the system prompts you to reboot:

```
Be sure the floppy drive is empty and strike CTRL-ALT-DEL to  
reboot your newly configured UNIX System.  
Reboot the system now.
```

31. Make sure the floppy drive is empty.
32. Press Ctrl-Alt-Del simultaneously to reboot the system.

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

```
Welcome to the AT&T 386 UNIX System  
Console Login:
```

33. Continue with the next section, "Verify the Disk Partitioning."

Verify the Disk Partitioning

1. Enter root at the Console Login prompt.

The system responds with the Password prompt.

2. Press [**ENTER**] at the password prompt.

The system responds with the following message showing the file system space allocation:

```
/      :   Disk Space : x  MB of  x  MB available ( x %).  
/usr2 :   Disk Space : x  MB of  x  MB available ( x %).  
Total Disk Space:      x  MB of  x  MB available ( x %).
```

⇒ **NOTE:**

If the system does not respond with the file system space allocation in response to steps 1 and 2, enter **/etc/dfspace** at the UNIX prompt (#) to obtain it.

3. Verify that at least 75 Mbytes of space is allocated for the root (/) file system.

⇒ **NOTE:**

The value shown is acceptable if it is within 2 Mbytes.

If the disk space is not allocated correctly, repeat all of the procedures in the previous section "Install the Unix Base System Package" to reinstall the UNIX base system package, ensuring that you allocate at least 75 Mbytes of space for the root file system.

4. Enter **uname -a** at the UNIX (#) prompt.

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

```
unix unix 3.2 2.2 i386
```

If this message appears exactly as shown, the UNIX operating system is correctly installed.

5. If the disk space is allocated correctly and the system name is correct:
 - a. If you are installing a factory-assembled (ALT) system, continue with Confirming IVP4 Board Recognition at the end of this chapter, "Verifying the Software Installation."
 - b. If you are not installing a factory-assembled (ALT) system, continue with the next section, "Install the FMLI Package."

Install the FMLI Package

Use the procedure below to install the Forms and Menu Language Interpreter Package (FMLI).

1. Enter **installpkg** at the UNIX prompt (#).

The system responds:

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 the FMLI package into the floppy drive.

3. Press [ENTER]

The system responds:

Installation in progress - do not remove disk.

The system then displays messages about the installation.

When the installation is finished, the system displays the following message and the UNIX prompt(#):

The installation of the FMLI Version 1.2 is now complete.

4. Remove diskette 1 of 1 of the FMLI package from the floppy drive.
5. Continue with the next section, "Install the FACE Package."

Install the Face Package

Use the procedure below to install the Framed Access Command Environment Package (FACE).

1. Enter **installpkg** at the UNIX prompt (#).

The system responds:

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 FACE package into the floppy drive.

3. Press [ENTER]

The system responds:

Installation in progress - do not remove disk.

The system then displays messages about the installation.

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 QUIT - strike <q> followed by <ENTER>

To continue - insert floppy disk number 2 and strike <ENTER> key.

4. Remove diskette 1 of 2 from the floppy drive.

5. Insert diskette 2 of 2 of the FACE package into the floppy drive.

6. Press [ENTER]

The system responds by presenting messages about the installation.

When the installation is finished, the system displays the following message and the UNIX prompt(#):

The installation of the FACE Version 1.2.1 is now complete.

7. Remove diskette 2 of 2 of the FACE package from the floppy drive.

8. Continue with the next section, "Install the FACE Help Package."

Install the FACE Help Package

Use the following procedure to install the Framed Access Command Environment Help Package, Version 1.2.

1. Enter **installpkg** at the UNIX system prompt (#).

The system responds:

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 the FACE Help package into the floppy drive.

3. Press [ENTER]

The system responds:

Installation in progress - do not remove disk.

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:

4. Enter **4** to install all help files.

The system installs all of the FACE HELP files.

When the installation is complete, the system displays the FACE HELP menu again.

5. Enter **5** to terminate the installation.

When the installation is finished, the system displays the following message and the UNIX prompt(#):

The installation of the FACE HELP Version 1.2 is now complete.

6. Remove FACE HELP diskette 1 of 1 from the floppy drive.

7. Continue with the next section, "Install the UNIX Editing Package."

Install the UNIX Editing Package

Use the procedure below to install the UNIX Editing Package.

1. Enter **installpkg** at the UNIX system prompt (#).

The system responds:

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 the UNIX Editing package into the floppy drive.

3. Press [ENTER]

The system responds:

Installation in progress - do not remove disk.

The system then displays messages about the installation.

When the installation is finished, the system displays the following message and the UNIX prompt(#):

The installation of the Editing Package Version 2.0 is now complete.

4. Remove diskette 1 of 1 of the UNIX editing package diskette 1 of 1 from the floppy drive.
5. Continue with the next section, "Install the Remote Terminal Package."

Install the Remote Terminal Package

Use the procedure below to install the Remote Terminal Package.

1. Enter **installpkg** at the UNIX system prompt (#).

The system responds:

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 the Remote Terminal Package package into the floppy drive.

3. Press [ENTER]

The system responds:

Installation in progress - do not remove the floppy disk.

The system then displays messages about the installation, including:

Please install the terminal files you wish from the diskette.

Selective installation of the Remote Terminal Package Version 2.0 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:

4. Enter **1** to select Install terminfo file(s).

The system responds with a list of the terminfo files for you to select for installation and displays the following prompt:

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

5. Enter **all** to install all terminal types.

The system displays messages about creating and linking these files.

When all the files are installed, the system again displays the following prompt:

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

6. Enter **done**

The system again displays the Remote Terminal Package menu and prompts you to enter an option.

7. Enter **0** (zero) to terminate the installation.

The system displays the following message and the UNIX prompt (#):

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

8. Remove the remote terminal package diskette 1 of 1 from the floppy drive.

9. Enter exit at the UNIX prompt (#) to log off the system.

⇒ **NOTE:**

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

10. Continue with the next section, "Install the IPC-900 Software."

Install the IPC-900 Software

Use the procedure below to install the Intelligent Ports Card Software 802/900 (IPC-900) Software. If you are already logged in, begin with Step 3.

1. At the console login prompt, enter **root**

The system responds with the password prompt.

2. Press [**ENTER**] at the password prompt.

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

3. Enter **installpkg** at the UNIX system prompt (#).

The system responds:

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 1 of the IPC-900 (intelligent Ports Card) software package into the floppy drive.

5. Press [**ENTER**]

The system responds:

Searching for the Size file.

Install in progress.

The system then displays messages about the installation, including:

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?
(1-4, Q to quit)

6. Enter **1** to install one IPC-900 or Gemini-1000 circuit card.

(This procedure continued on the following page.)

The system responds:

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.

7. Press [ENTER] to select IPC-900 (the default).

The system responds:

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

IRQ 2 (default)
IRQ 5
IRQ 10
IRQ 11
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.

8. Enter **10** to select IRQ 1 for the IPC-900 card.

⇒ **NOTE:**

This matches the IRQ number that you jumpered when you installed the IPC-900 card.

The system responds:

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

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

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

9. Press [ENTER] to select 290 (the default).

The system responds:

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.

10. Enter **D000** to use D0000.

The system responds with a confirmation message displaying the choices and a confirmation prompt:

```
*****
Board 1 configuration:
  Ports Card Type = IPC-900
  Interrupt number = 10
  I/O ports Starting address = 290
  Controller Memory Starting address = D0000
*****
```

Is this configuration acceptable? (y or n)

11. If the displayed configuration is correct, enter **y**

If any of the information is incorrect, enter **n** and return to Step 7.

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.

12. Remove the IPC-900 software diskette from the floppy drive.

13. Press [ENTER] to begin the automatic shutdown.

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

The system is down.
Reboot the system now.

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

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

15. Continue with the next section, "Install IVPSS R3.0."

Install the IVPSS R3.0

Use the procedure below to install the Integrated Voice Power System Software (IVPSS) Release 3.0. If you are already logged in as root, begin with Step 3.

1. At the console login prompt, enter **root**

The system responds with the password prompt.

2. Press [**ENTER**] at the password prompt.

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

3. Enter **installpkg** at the UNIX system prompt (#).

The system responds:

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 IVPSS R3.0 in the floppy drive.

5. Press [**ENTER**]

The system responds:

Install in progress.

When the system has copied the diskette, the system beeps and provides the following prompt:

Reached end of medium on input.

You may remove this floppy disk.

To QUIT - strike <q> followed by <ENTER>

To continue - insert floppy disk number 2 and strike <ENTER> key.

6. Remove diskette from the floppy drive.

7. Repeat Step 4 through Step 6 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 serial port must be enabled at all time.

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]:

- 8. Enter 1 to enable both first and second serial ports.

⇒ NOTE:

MAP/5s using AT&T's ICSS supplemental software do not include a DCP card (for integration with the System 75/DEFINITY G1 or G3 Communications System and AUDIX Voice Power). If, however, you are using a DCP card for an AUDIX Voice Power coresidency, select 3 to disable the second serial port.

The system responds:

Serial port 1 is now ENABLED
Serial port 2 is now ENABLED.

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 2]:

- 9. Enter 1 to enable the parallel port.

The system displays a message confirming your selection, and then displays the following prompt:

The parallel port is now ENABLED.

Select interrupt number for TR boards.

Press <Enter> for default value [2] or one of [2, 3, 15] or q to quit:

- 10. Press [ENTER] to assign the default 2.

⇒ NOTE:

The TR (tip/ring) cards are the same as the IVP4 cards.

The system responds:

Interrupt number 2 will be used for TR boards.

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

11. Press [**ENTER**] to confirm the use of interrupt number 2 for the IVP4 cards.

The system responds:

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:

12. Enter **1** to select the color AT386.

The system responds:

Confirm: you are using monitor type 1. [y/n]

13. Enter **y** to confirm the monitor type the confirmation message is correct.

Otherwise, enter **n** to reassign the monitor type.

After you confirm the monitor selection, the system responds:

Select the time zone for this installation.

- 1) Eastern
- 2) Central
- 3) Mountain
- 4) Pacific

Enter selection:

14. Enter the number of the time zone in which this system will be operating.

The system responds:

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

15. Enter **y** if this is the correct time zone.

The system responds:

Is Daylight Savings ever used? (y/n)

16. Enter **y** or **n** for the area in which you are installing.

(This procedure continued on the next page.)

⇒ **NOTE:**

If the IPSS R3.0 install script is unable to determine the memory configuration, the system will respond by asking for the configuration:

```
Select the appropriate memory
configuration:
1. 4 Megabytes
2. 8 Megabytes
3. 12 Megabytes
Enter Selection:
```

Enter 2 to select 8 Megabytes and y to confirm that the system has 8 Mbytes of memory for the MAP/5 if this message appears. The system will then respond with the disk slice information.

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

```
Reserving a disk slice for speech.
```

```
Disk 0 Slice 4 will be reserved for speech. [y/n]
```

17. Enter **y** in response to the prompt shown at the end of Step 16.

The system responds:

```
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 16 and 17 are displayed only on new installations, not upgrades.

18. Enter **y** to confirm that you want a speech filesystem to be built on slice 0s4.

The system responds:

```
Building speech filesystem slice 0s4.
```

```
Do you want to overwrite existing phrases in /dev/rdisk/0s4?
(y/n)
```

19. Enter **y** to overwrite any existing information.

When the speech file system is built, the system presents a series of messages describing the remaining installation processes. When the installation has been completed, the system displays:

```
The Integrated Voice Power System Software has been
successfully installed.
```

```
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.

20. Remove the IVPSS diskette 4 of 4 from the drive.

21. 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 responds with the Console Login prompt:

Welcome to the AT&T 386 UNIX System
Console Login:

23. Continue with the next section, "Create Logins."

Create Logins

Before installing the AUDIX Voice Power or AUDIX Voice Power Lodging software, you must assign both the administrator and attendant logins. Use the procedures below to create the necessary logins.

⇒ **NOTE:**

These logins must be set up before installing the Voice Power software. If these logins are not present, the installation will fail.

Create both the administrator and the attendant Logins, even if your system will be fully operational with a Property Management System (PMS).

Create the Administrator Login

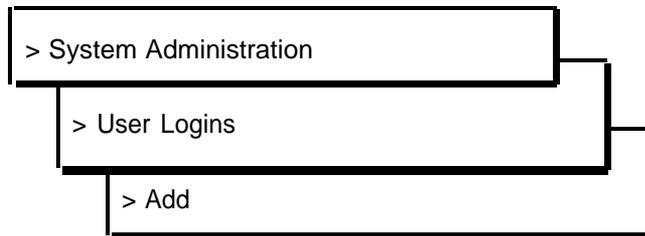
Use the procedure below to create a login for *audix*. If you are already logged in, begin with Step 3.

1. Enter **root** at the console login prompt.
The system responds with the password prompt.
2. Press [**ENTER**] at the password prompt.
The system responds with the UNIX system prompt (#).
3. Enter **face** at the UNIX prompt (#).
The system responds with the AT&T FACE main menu:

```
1 AT&T FACE
>Office of root
Printer Operations
Programs
System Administration
UNIX System
Exit
```

(This procedure continued on the next page.)

- From the AT&T FACE main menu, select the following sequence:



⇒ **NOTE:**

You may select this sequence by pressing the letter **s**, the letter **u**, and the letter **a** on your keyboard.

The system displays the Login Name and Full Name menu:

```
4 Login Name and Full Name
Login Name: █
Full Name: _____
Login ID Number: _____
HOME Directory: /usr/_____
System Administration Privileges: No
Voice System Security Class: Administration
```

- Enter **audix**. The cursor should be in the first field, "Login Name."

The system responds by moving the cursor to the next field. This may take 1 or 2 seconds.

⇒ **NOTE:**

If you need to return to a previous field, or if you wish to skip over a field, use the up and down arrow keys.

- Enter **AUDIX Voice Adm** in the Full Name field.

The system responds by moving the cursor to the Login ID Number field.

⇒ **NOTE:**

The system automatically numbers the logins.

7. Press [ENTER] to accept the default for the Login ID Number field.
The system responds by moving the cursor to the HOME Directory.
8. Press [ENTER] to accept the default for the HOME Directory field.
The system responds by moving the cursor to the System Administration Privileges field.
9. Press the [CHOICES] (F2) once with the cursor in the System Administration Privileges field.
The system responds by displaying the word "yes" in the System Administration Privileges field.
10. Press [ENTER] to accept "yes" for system administration privileges.
The system assigns system administrative privileges to the administrator login, and moves the cursor to the Voice System Security Class field.
11. Press [SAVE] (F3).
The system displays a login confirmation window:

```
5 Confirm login for audix
Login Name: audix
Full Name: AUDIX Voice Adm
Login ID Number: 102
HOME Directory: /usr/audix
System Administration Privileges: Yes
Voice System Security Class: Administration
```

12. Press [CONF] (F3) to confirm the login information.
The system responds:
Enter a password for audix:
13. Press [ENTER] at the password prompt.
The system responds:
Re-enter the new password:
14. Press [ENTER] again.
15. Turn to the logins and passwords worksheet. This is located on the last page of this chapter. Write "none assigned" in the space provided for the audix password.

16. Press [ENTER] to continue.

The system responds with a confirmation screen:



17. Press [ENTER] (F3) to continue.

⇒ **NOTE:**

Use the [ENTER] function key which is F3 at the top of the keyboard to perform this step. The key labeled [ENTER] on your keyboard will not work for this step.

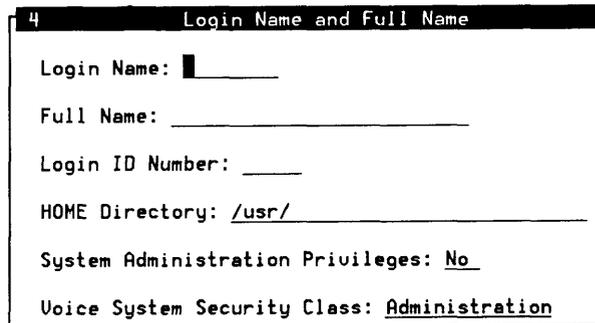
The system returns you to the User Login menu.

18. Continue with "Create the Attendant Logins."

Create the Attendant Logins

1. Press [ENTER] with the cursor at Add on the User Login menu.

The system displays the Login Name and Full Name menu:



2. Enter a name for the attendant. Attendants are usually named **attenx**. The **x** represents the attendant number, such as **atten1**, **atten2**, or **atten3**. The cursor should be in the first field, "Login Name."

The system responds by moving the cursor to the next field. This may take 1 or 2 seconds.

⇒ NOTE:

If you need to return to a previous field, or if you wish to skip over a field, use the up and down arrow keys.

3. Enter **AUDIX Voice Attenx** in the Full Name field.

The system responds by moving the cursor to the Login ID Number field.

4. Press [**ENTER**] (F3) to use the defaults for the remaining settings, including no system administration privileges and Administration for Voice System Security Class.

⇒ NOTE:

Attendants do not have system administration privileges. If you need to display **no** in the System Administration Privileges field, move the cursor to the field with the up and down arrow keys and press [**CHOICES**] (F2) with the cursor in this field. The system will change the entry to **no**.

The system displays a login confirmation window:

```
5 Confirm login for atten1
Login Name: atten1
Full Name: AUDIX Voice Atten1
Login ID Number: 103
HOME Directory: /usr/atten1
System Administration Privileges: No
Voice System Security Class: Administration
```

5. Press [**CONT**] (F3) to confirm the login information.

The system responds:

Enter a password for attenx:

6. Turn to the logins and passwords worksheet. This is located on the last page of this chapter. Write the password for the attendant in the space provided for the attendant password. Passwords should be between 6 and 8 characters.

7. Enter a password.

The system responds:

Re-enter the new password:

8. Enter the same password.

⇒ **NOTE:**

If the 2 passwords do not match, the system will prompt you for the new password again.

9. Press [ENTER] to continue.

The system responds with a confirmation message:

```
6 Confirmation
ser atten1 has been added to the system.
```

10. Press [CONT] (F3) to continue.

⇒ **NOTE:**

Use the [ENTER] function key which is F3 at the top of the keyboard to perform this step. The key labeled [ENTER] on your keyboard will not work for this step.

The system returns you to the User Login menu.

11. Repeat Step 2 through Step 10 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 Voice Power Lodging software is installed.

12. Press [CANCEL] (F6) when you have finished adding all of the attendants.

The system responds by returning to the System Administration screen.

13. Press [CANCEL] (F6) to return you to the AT&T FACE main menu.

14. Select Exit from the AT&T FACE main menu. Use the up and/or down arrow keys to move the cursor.

15. Move the cursor to Exit by using the up and down arrow keys.

16. Press [ENTER] with Exit highlighted.

The system responds with the Conform Exit screen.

17. Press [CONT] (F3) once to return to the UNIX prompt (unix#).

18. Continue with the next section, "Install AUDIX Voice Power Application Software R3.0: Speech (Optional)" if you are installing a coresident system.

If you are not installing a coresident system, continue with "Install AUDIX Voice Power Lodging."

Install AUDIX Voice Power Application Software R3.0 Speech (Optional)

Use the procedure below to install AUDIX Voice Power Application Software Release 3.0: Speech. *This task is only necessary for systems having an AUDIX Voice Power coresidency.*

⇒ **NOTE:**

Speech must be installed before AUDIX Voice Power Application Software Release 3.0: Software.

If you are already logged in as root, begin with Step 3.

1. At the console login prompt, enter **root**

The system responds with the password prompt.

2. Press [ENTER] at the password prompt.

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

3. Enter **installpkg** at the UNIX system prompt (unix#).

The system responds:

```
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 3 of the AUDIX Voice Power Application Software: Speech into the floppy drive.

5. Press [ENTER]

The system responds:

```
Installation in progress -- do not remove the floppy disk.
```

```
Searching for Size file.
```

```
Install in progress.
```

When the system has copied the diskette, the system beeps and provides the following prompt:

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

6. Remove diskette from the floppy drive.
7. Repeat Step 4 through Step 6 for AUDIX Voice Power Application Software: 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. This takes approximately 5 minutes.

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  
R3.0: Speech is now complete.  
  
unix#
```

8. Remove diskette 3 of 3 from the drive.
9. Continue with the next section, "Install AUDIX Voice Power Application Software R3.0: Software (Optional)."

Install AUDIX Voice Power Application Software Software (Optional)

Use the procedure below to install AUDIX Voice Power Application Software Release 3.0: Software. *This task is only necessary for systems having an AUDIX Voice Power coresidency.*

⇒ **NOTE:**

AUDIX Voice Power Application Software Release 3.0: Speech must be installed before AUDIX Voice Power Application Software Release 3.0: Software.

1. Enter **installpkg** at the UNIX prompt (unix#).

The system responds:

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 4 of the AUDIX Voice Power Application Software R3.0: Software into the floppy drive.
3. Press [ENTER] to install the software.

The system responds:

Installation in progress -- do not remove the floppy disk.

Searching for Size file.

Install in progress.

When the system has copied the diskette, the system beeps and provides the following prompt:

Reached end of medium on input.

You may remove this floppy disk.

To QUIT - strike <q> followed by <ENTER>

To continue - insert floppy disk number x and strike <ENTER> key.

4. Remove diskette from the floppy drive.
5. Repeat Step 4 through Step 6 for AUDIX Voice Power Application Software R3.0: Software diskettes 2, 3, and 4.

While installing diskette 4 of 4 of AUDIX Voice Power Application Software R3.0: Software, the system responds with the following prompt after approximately 90 seconds:

Type the login of the Voice System Administrator:

6. Enter **audix**

The system responds:

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

```
Is this correct? [press <Enter> for yes]
```

7. Press [ENTER] to accept audix as the Voice System Administrator login.

The system responds by running a series of audits.

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

```
You may now remove the floppy disk.
```

```
Successful enable of automatic starting voice system.
```

```
The installation of the AUDIX Voice Power Application Software
R3.0: Software is now complete.
```

8. Remove diskette 4 of 4 of the AUDIX Voice Power Application Software R3.0: Software.
9. Continue with the next section, "Install AUDIX Voice Power Lodging Release R3.0 Software."

Install AUDIX Voice Power Lodging Release R3.0 Software

Use the procedure below to install AUDIX Voice Power Lodging Release 3.0 Software.

⇒ **NOTE:**

If you are installing a coresident system, you must install AUDIX Voice Power before AUDIX Voice Power Lodging.

1. Enter **installpkg** at the UNIX prompt (unix#).

The system responds:

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 Voice Power Lodging application software into the floppy drive.

3. Press [ENTER] to install the software.

The system responds:

Install in progress.

When the system has copied the diskette, the system beeps and provides the following prompt:

Reached end of medium on input.

You may remove this floppy disk.

To QUIT - strike <q> followed by <ENTER>

To continue - insert floppy disk number x and strike <ENTER> key.

4. Remove diskette from the floppy drive.
5. Repeat Step 4 through Step 6 for AUDIX Voice Power Lodging diskettes 2 and 3.

While installing diskette 3 of 3, the system presents information about starting processes and draws a series of dots. These dots represent phrases that have been added to the speech database.

When this has been completed, the system presents the prompt:

Enter the login id of the Lodging Administrator:

6. Enter **audix**

The system responds:

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

7. Enter **y** to accept audix as the Lodging Administrator.

The system responds for new installations:

Creating new user mailboxes.

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:**

For AUDIX Voice Power Lodging upgrades, the system displays a list of assigned attendant logins instead of the prompt.

8. Referring to the list of attendant login IDs on the installation Worksheet, the last page in this chapter, enter the attendant login ID.

The system responds by redisplaying the prompt.

9. Repeat Step 8 for each attendant until you have entered all of the attendant IDs.

10. Press [ENTER] when you are finished entering all of the attendant IDs.

The system responds:

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

11. Enter **n** if you are sure you entered the list of attendant login IDs correctly. If you need to re-enter the attendant IDs, enter **y** and return to Step 8.

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

Successful enable of automatic starting voice system.
No switch interface packages installed yet for this application. The "AUDIX Voice Power Lodging Application Software R3.0" has been successfully installed

You may now remove the floppy disk

The installation of the AUDIX Voice Power Lodging Application Software R3.0 is now complete.

12. Remove diskette 4 of 4 of the AUDIX Voice Power Logging software.
13. Continue with the next section, "Install Switch Integration Software."

Install Switch Integration Software

The following procedure is the procedure to install the AT&T Switch Integration Software. Use this procedure only if you are installing a system that will integrate with an AT&T switch through a SID (switch interface device).

For all other switch integrations, refer to the switch integration documentation that came with the SID.

1. Enter **installpkg** at the UNIX prompt (unix#).

The system responds:

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 the AUDIX Voice Power SID Switch Integration Software R3.0 for AT&T System 75 and DEFINITY software into the floppy drive.
3. Press [**ENTER**] to install the software.

The system responds:

Install in progress -- do not remove the diskette.

Searching for Size file.

Install in progress

(This procedure continued on the following page.)

After the system has moved some files, it presents a Switch Integration Devices table:

Switch Integration Devices			
	Serial Port	Baud Rate	Comments
1		1200	
2		1200	
3		1200	
4		1200	
5		1200	
6		1200	
7		1200	
8		1200	

4. Press [CHOICES] (F2) to get a list of TTY devices.
5. Select **/dev/tty00**. Use the up and down arrow keys to highlight the selection.
6. Press [ENTER] with /dev/tty00 highlighted.
7. Press [ENTER] twice to move the cursor to the comments line.
8. Type **AT&T SID device**.
9. Press [SAVE] (F3).

The system responds by completing the installation. When the installation is completed, the system presents the following information:

```
ATT Switch Integration Package R3.0 has been successfully
installed
```

```
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 SID
Switch Integration Software R3.0 for AT&T System 75 and
DEFINITY is now complete.
```

```
unix#
```

10. Remove diskette from the floppy drive.
11. Continue with the next section, "Install ICSS Software," if you are installing ICSS software. If you are installing a Digital Communications Protocol (DCP) circuit card, refer to *AUDIX Voice Power System R3.0 Switch Integration to System 75, DEFINITY Generic 1 and DEFINITY Generic 3* (585-310-203) for instructions for loading AUDIX Voice Power Switch Integration Software for AT&T system 75 or DEFINITY G1 or G3 PBX software. This software contains the DCP software.

Install AT&T's ICSS Software (Optional)

ICSS software is optional. Use this procedure only to load ICSS software for specialized MAP/5 installations in which the MAP/5 integrates with an AT&T PBX. For additional information about ICSS software, refer to Chapter 1, "Installation and Planning."

1. Enter **installpkg** at the UNIX prompt (unix#).

The system responds:

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 the ICSS software into the floppy drive.
3. Press [ENTER] to install the software.

The system responds:

Install in progress -- do not remove the diskette.

Searching for Size file.

Install in progress

The software continues to install. When it is finished loading, you will see the UNIX prompt.

4. Continue with the next section, "Install Property Management System Integration Software Package Release 3.0."

If you are not installing a PMS, continue with "Install Guest Interface Packages (Optional)" or "Verify Software Installation."

Install Property Management System Integration Software Package Release 3.0

Use the following procedure to install the Property Management System (PMS) Integration Software Release 3.0, There is 1 disk.

If you are already logged in as *root*, begin with Step 3.

1. At the console login prompt, enter **root**

The system responds with the password prompt.

2. Press [**ENTER**] at the password prompt.

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

3. Enter **installpkg** at the UNIX system prompt (#).

The system responds:

```
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 the PMS integration R3.0 software diskette in the floppy drive.
5. Press [**ENTER**] install the software.

The system responds:

```
Installation in progress -- do not remove the diskette.
```

```
Install in progress
```

The system then displays messages about the installation, and presents the prompt:

```
The AUDIX Voice Power Lodging (AVPL) system will use the  
serial port device tty01 for the Property Management System  
(PMS) connection.
```

```
Do you wish to change this serial port device for the PMS  
connection? (y/n)
```

6. Enter **n** to accept COM 2³, serial port tty01, for the PMS connection. The MAP/5 uses COM 2 (tty01) for the PMS connection.

⇒ **NOTE:**

If you need to make a change to this address, enter **y** to change the setting. The system will respond:

```
Please enter serial port device name (e.g., tty00, t-  
ty01, ttys01)
```

Enter the port that you want to use. However, COM 2 (tty01) should be used unless you are installing a DCP circuit card.

The system will respond:

```
The serial port ttyxx will be used.
```

The system displays messages about the installation. When the installation is complete, the system responds with the following message:

```
AVPL PMS Integration Package R3.0 has been successfully  
installed.
```

```
The installation of the AVPL PMS Integration Software Package  
R3.0 is now complete.
```

7. Remove the PMS integration software diskette.
8. Continue with the next section, "Install Guest Interface Packages (Optional)," if your system will be using optional guest languages.

If you do not wish to use the optional guest interface language packages, continue with the following section, "Verify Software Installation."

3. If you are installing a DCP circuit card for AUDIX Voice Power, you will need to specify ttys01 for the IPC-900 Port 1. The installation of a DCP circuit card requires that COM2 be disabled.

Install Guest Interface Packages (Optional)

This task is optional. Check with the AUDIX Voice Power Lodging administrator to determine if either or both of these packages is to be installed.

If you are already logged in as *root*, begin with Step 3.

1. At the console login prompt, enter **root**

The system responds with the password prompt.

2. Press [**ENTER**] at the password prompt.

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

3. Enter **installpkg** at the UNIX system prompt (*unix#*).

The system responds:

```
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 the either the Spanish or Japanese guest interface R3.0 diskette in the floppy drive.

5. Press [**ENTER**] to install the guest interface package.

The system displays messages about creating files, and then if the voice system is running, the system responds:

```
Installation in process -- do not remove the floppy diskette.
```

```
Searching for Size file.
```

```
Install in progress.
```

```
Installing the AUDIX Voice Power Lodging x Guest Interface  
Package Software R3.0
```

```
The voice system will be stopped now to continue the  
installation.
```

```
Do you want to continue? (y/n)
```

⇒ NOTE:

If the voice system is not running, the voice system prompt is not displayed.

6. Enter **y** to stop the voice system.

The system responds with messages about the installation, followed by a series of dots. Each dot indicates that a phrase has been added to the speech database. When the speech database is loaded, the system displays:

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 x
Guest Interface Package Software R3.0 is now complete.

⇒ **NOTE:**

X in the above message will be either Spanish or Japanese.

7. Remove the guest interface package diskette.
8. If you are installing the other guest interface package, repeat this task for the other language diskette.

Otherwise, continue with the next section, "Verify Software Installation."

Verify the Software Installation

1. Enter **displaypkg** at the UNIX system prompt(#).

The system responds with a list of currently installed software packages. Compare the displayed list to the following list:

```
AUDIX Voice Power Application Software R3.0: Speech
AUDIX Voice Power Application Software R3.0: Software
AUDIX Voice Power Lodging Application Software R3.0
AUDIX Voice Power Lodging SID Switch Integration Software R3.0
for AT&T System 75 and DEFINITIY4
AUDIX Voice Power Lodging Japanese Guest Interface Package
software R3.05
AUDIX Voice Power Lodging Spanish Guest Interface Package
Software R3.06
AVPL PMS Integration Software Package R3.0
Editing Package Version 2.0
FACE HELP Version 1.2
FACE Version 1.2.1
FMLI Version 1.2
ICSS Low End Voice Mail Software R1.07
Integrated Voice Processing system Software R3.0
Intelligent Ports Card Driver Package (8-ports) - Version 4.0
Remote Terminal Package Version 2.0
```

2. Press [**ENTER**] to return to the UNIX prompt (unix#).
3. Continue with the next section, "Reboot the System" if all of the software has been correctly installed.

If any of the software is missing, refer to *AUDIX Voice Power Lodging Administration* (585-310-525, Issue 2, October 1993), Appendix B "Maintenance Procedures," Page B-25 for information about removing and restoring software.

-
4. Either this integration or another switch integration package must be contained in this list.If you are installing a DCP circuit card, however, you will have an AT&T switch package for the SID and an AT&T switch package for the DCP circuit card.
 5. Optional.
 6. Optional.
 7. Optional. Used to support an AUDIX Voice Power coresidency on MAP/5 systems with limited voice ports.

Reboot the System

To complete the software installation, reboot the system.

1. Verify that there are no floppy diskettes in the floppy drive.
2. Enter **shutdown -y -g0 -i6** at the UNIX prompt (`unix#`).

The system responds:

```
Shutdown started.  Day Month Day Time Year
```

The system then shuts down and brings back up the system.

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

```
Welcome to the AT&T 386 UNIX System  
Console Login:
```

Continue with the tasks in Chapter 4, Switch Administration.

3. Continue with the next section, "Confirm IVP4 Circuit Card Recognition."

Confirm IVP4 Circuit Card Recognition

The AUDIX Voice Power Lodging R3.0 system supports up to three IVP4 boards. In this procedure, the IVP4 circuit cards (also referred to as "boards") are numbered 0 through 2.

1. At the console login prompt, enter **root**

The system responds with the password prompt.

2. Press [**ENTER**] at the password prompt.

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

3. Enter **/vs/bin/display** card all at the UNIX prompt (unix#).

The system displays a screen similar to the following:

```
Card 0 is IVP4          O. S. Index: 0      Function:  TipRing
                        State:  Inserv   Options:  master1, no tdm, tt

CD.PT; CHN; 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:  master1,no tdm, tt

CD.PT;CHN;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:  master1,no tdm, tt

CD.PT;CHN;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
```

4. Verify that the Card number and the O.S. Index number match for each card.

For example, Card number 0 must have an O.S. Index number of 0.

5. Also verify that the number of cards displayed by the command is equal to the number of boards installed.

If all the IVP4 boards are recognized correctly, continue with the Chapter 5, "Initial Administration."

If any of the IVP4 boards are configured incorrectly, complete the following steps a through h:

- a. Make sure the floppy drive is empty.
- b. Enter **shutdown -y -g0 -i0** to shut down the system.

The system responds with the following prompt:

```
The system is down.  
Reboot the system now.
```



CAUTION:

The system may take several minutes to complete the shutdown. Do not go on to the next step until you see the above prompt.

- c. Turn the power off.
- d. Remove the cover of the AUDIX Voice Power computer. Refer to Chapter 3, "Hardware Installation," in this book for instructions.
- e. Remove the incorrectly configured IVP4 circuit cards.
- f. Refer to Table x in Chapter 3 for the slot number of each IVP4 circuit card.
- g. Correct the switch settings for each incorrectly configured IVP4 board and reinstall the boards. Refer to Chapter 3, "Hardware Installation," in this book for instructions.
- h. Power on the system.

Renumber the IVP4 boards by completing the following steps a through h after you have corrected any improperly configured IVP4 circuit cards.

- a. Enter **audix** at the Console Login prompt to log in as the AUDIX Voice Power administrator.

The system responds with the Password prompt.

- b. Press [**ENTER**] at the password prompt.

The system responds with the IVPSS R3.0 menu:

```
IVPSS R3.0
> AT&T FACE
Voice System Administration
Exit
```

c. From the IVPSS R3.0 menu, select the following sequence:

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

d. Press [ENTER] to continue.

The system displays the stop and start process and rennumbers the voice channels.

e. Press [CANCEL] (F6) three times to return to the IVPSS R3.0 main menu.

f. Select Exit.

g. Press [ENTER] to confirm the exit.

The system responds with the Console Login prompt.

h. Confirm the IVP4 circuit card recognition. Repeat Step 1 through Step 5 above.

If the boards 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.

Once all the IVP4 boards are recognized correctly, continue with Chapter 5, "Initial Administration."

Console Logins and Passwords Worksheet

Use the worksheet below to record the passwords assigned to the logins for the Voice Power system. If you have assigned a return (no password) for a login write "return" for the login.

When you are finished installing the system, give this worksheet to the customer.

⇒ **NOTE:**

To the customer:

After the system has been installed and accepted, change the passwords for the logins listed on this sheet. Keep all passwords secure; do not allow the system to run with any passwords as a carriage return for security purposes.

To change the passwords:

- a. Login as root.
- b. Press return at the password prompt.
- c. Enter the command **passwd loginname**

For example, enter **passwd atten1** to change the password for attendant 1.

The system will respond by prompting for the new password.

- d. Enter the new password.

The system responds by prompting you to re-enter the new password.

- e. Re-enter the new password.

If these two entries do not match, the system will re-prompt you.

- f. Repeat the above steps for each login.

These new passwords become effective as soon as you have completed entering the new password and returned to the Unix prompt (`unix#`).

Be sure to complete all initial activities listed in Chapter 3, "AUDIX Voice Power Lodging Administrator's Activities," in *AUDIX Voice Power Lodging Administration* (585-310-525, Issue 2, October 1993).

The password worksheet is located on the next page.

Table 4-1. Console Passwords and Logins Worksheet

Login	Password
root	
install	
audix	
atten1	
atten2	
atten3	
atten4	
atten5	
atten6	
atten7	



CAUTION:

Change all console passwords within 24 hours of receiving the system.

Initial administration procedures are performed for the AUDIX Voice Power Lodging system after the hardware and software have been installed. These procedures bring the system to a state in which acceptance tests can be performed and the system then cut into service. Perform the following initial administration procedures in the order described in the checklist from Chapter 2:

- Mapping PBX extensions to channels
- Assigning channels to the lodging and info_service services
- Verifying channel state and extensions to channels
- Administering system parameters
- Checking the system clock
- Setting switch parameters on the AUDIX Voice Power Lodging system
- Reassigning services to channels
- Stopping and starting the voice system

The procedures in this chapter provide for a generic administration of an AUDIX Voice Power Lodging with or without an AUDIX Voice Power system. For detailed information on system administration, refer to Chapter 9, "System Tuning," in *AUDIX Voice Power Lodging Administration* (585-310-525) or Chapter 13, "System Tuning," in *AUDIX Voice Power System R3.0 Administration* (585-310-532)

⇒ **NOTE:**

To complete the procedures in this chapter, you will need information from Worksheet 1-2 "Channel and Service Assignments" in Chapter 1, "Introduction and Planning." You will also need initial switch administration information, which should have been completed as part of the installation planning process using the planning section of the switch document. If you do not have the completed planning worksheet for this site, contact the system administrator and refer to Chapter 1.

Set Up the Peripherals

This section describes the following procedures:

- Set the remote access maintenance modem software options
- Set the printer software options

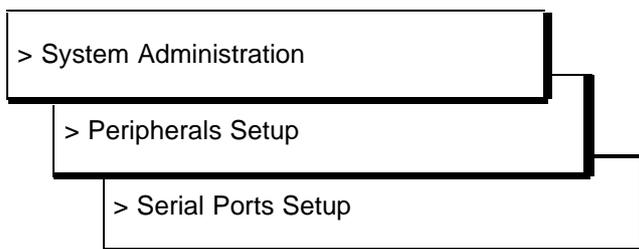
Set Up the Remote Maintenance Modem Software Options

Use the following procedure to set software options for the remote maintenance modem:

1. Enter **root** at the console login prompt.
The system responds with the password prompt.
2. Press [**ENTER**] at the password prompt.
The system responds with the UNIX prompt (unix#).
3. Enter **face** at the UNIX prompt (unix#).
The system responds with the AT&T FACE menu:

```
1 AT&T FACE
>Office of root
Printer Operations
Programs
System Administration
UNIX System
Exit
```

4. Power up the modem.
5. From the AT&T FACE main menu, select the following sequence:



The system displays the Serial Ports Setup screen:

```

4      Serial Ports Setup
Serial Port Number: 01 (/dev/tty00)
Device Type: None
Device Speed: 1200

```

6. Press [CHOICES] (F2) with the cursor in the Serial Port Number field.

The system presents a list of serial port choices¹:

```

5      Choices
>01 (/dev/tty00)      06 (/dev/ttyh04, ttys04)
02 (/dev/tty01)      07 (/dev/ttyh05, ttys05)
03 (/dev/ttyh01, ttys01) 08 (/dev/ttyh06, ttys06)
04 (/dev/ttyh02, ttys02) 09 (/dev/ttyh07, ttys07)
05 (/dev/ttyh03, ttys03) 10 (/dev/ttyh08, ttys08)

```

7. Highlight 03 (/dev/ttyh01, ttys01)². Use the up and/or down arrow keys to select the port.
8. Press [ENTER] to use Serial Port03, ttyh01, ttys01.

⇒ **NOTE:**

Serial Port 03 is the first serial port on the IPC-900/Gemini-100 circuit card.

9. Move the cursor to the Device Type field. Use the up and/or down arrow keys to move the cursor from field-to-field.
10. Press [CHOICES] (F2) with the cursor in the Device Type field.
- The system displays a menu that lists the devices that may be used on the serial ports.
11. Highlight modem.
12. Press [ENTER] to use a modem on Serial Port 03.
13. Enter 2400 for the Device Speed.

1. If you have not correctly installed the IPC-900/Gemini-1000 or the IPC-900 software, the system will only present the first 2 choices.

2. If you are installing a DCP circuit card, you will need to enter 04 (/dev/ttyh01, ttys01) for IPC-900/Gemini-1000 Port 2.

14. Verify that the Flow Control is set to software.
15. Press [SAVE] (F3).

The system responds with the Connect to Modem screen:

```

5          Connect to Modem
Modem Name: _____
Device Connection: _____
    
```

16. Press [CHOICES] (F2) with the cursor at the Modem Name field.

The system responds with the modem type Choices menu:

```

6          Choices
) AT&T 2212C      Hayes Smartm 1200B
  AT&T 2212D      Hayes Smartm 2400
  AT&T 2224A      Hayes Smartm 2400B
  AT&T 2224B      Multitech 224
  AT&T 2224CED    Multitech 224PC
  AT&T 2224E      Penril 1200
  AT&T 2224G      Prometheus 1200
  AT&T 2248A      Qubie 212A/1200E
  AT&T 2296A      Racal VADIC
  AT&T 4000 1A02  Rixon Usr Courier 2400
  AT&T 4024       Ventel 1200 PLUS
  AT&T 4112       Ventel 1200-EC
  Cermetek 1200   Ventel EC1200-31
  Cermetek 1200PC Ventel MD212 Plus LE
  Hayes Smartm 1200 Non-Autodialing
    
```

17. Move the cursor to Hayes Smartm 2400. Use the up and/or down arrow keys to move the cursor.
18. Press [ENTER] to use Hayes Smartmodem 2400 as the device type.
19. Move the cursor to the Device Connection field and press [CHOICES] (F2) until Incoming calls only is displayed.
20. Press [SAVE] (F3) to save this configuration.

The system responds with the following prompt:

```

6          Confirmation
Serial port 03 is now set up for Modem Hayes Smartm 2400.
    
```

21. Press [CONT] (F3) to return to the Peripherals Setup menu.

If you have installed a printer, you have completed this procedure. Continue with the next section, "Setting the Printer Software Options."

If you have not installed a printer, continue with the remaining steps in this section.

22. Press [CANCEL] (F6) twice to return to the System Administration screen.

The modem connection is complete, but it will not be operational until you have stopped and started the voice system. This procedure will be performed as the last step of the acceptance tests.

⇒ **NOTE:**

You will test the modem in Chapter 6, "Acceptance Tests".

If you have not installed a printer, continue with "Check the System Clock," on Page 9 of this chapter.

Set the Printer Software Options

This procedure is required if you are connecting a printer to the AUDIX Voice Power Lodging computer.

If you are at the Peripheral Setup menu, select Printer Setup, followed by Parallel Printer Port Setup, and begin with Step 6.

1. Enter **root** at the console login prompt.

The system responds with the password prompt.

2. Press [ENTER] at the password prompt.

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

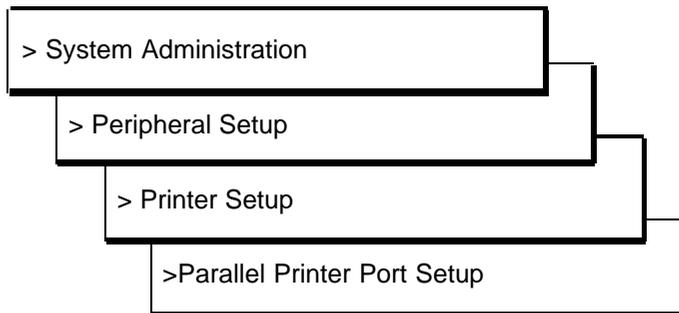
3. Enter **face** at the UNIX prompt (unix#).

The system responds with the AT&T FACE menu:

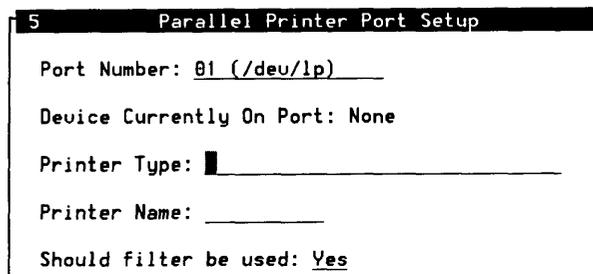
```
1 AT&T FACE
)Office of root
Printer Operations
Programs
System Administration
UNIX System
Exit
```

4. Power up the modem.

5. From the AT&T FACE main menu, select the following sequence:



The system responds with the Parallel Printer Port Setup screen:



6. Verify that the Port Number is 01 (/dev/lp).

⇒ **NOTE:**

If you need to change the port number assignment, press the [CHOICES] (F2) key for a listing of the port numbers, highlight the correct port number, and press [ENTER].

7. Move the cursor to the Printer Type field. Use the up and/or down arrow keys to place the cursor in the field.

8. Press [CHOICES] (F2) to display a listing of printer types.

(This procedure continued on the next page.)

The system responds with a Choices menu for printer types:

6 Choices		
X) AT&T473	DIABLO-1620	AT&T-40C-132W-6
AT&T478	SPRINT	AT&T-40C-132W-8
EPSON	DAISY-450	AT&T-40C-80W-6
IBM-GRAPHICS	AT&T435	AT&T-40C-80W-8
IBM-COLOR	HPTHINKJET	AT&T-43ro
IBM-PROPRINTER	NEC	AT&T442
OKIDATA-ML	TOSHIBA	AT&T444
AT&T5310	AT&T475	AT&T446
AT&T5320	AT&T476	AT&T447
AT&T474	AT&T470	AT&T477-IBMcolor
AT&T479	AT&T471	AT&T477-IBMgraphics
AT&T477-470	CITOH	AT&T477-QUME
AT&T455	HPLASERJET	AT&T477-455
AT&T457	AT&T495-HP	DIABLO-630
AT&T458	AT&T495-IBM	Unknown-Type
QUME	AT&T495-QUME	none
OLUIDV	HP-7475	

9. Highlight your printer type. Use the up and/or down arrow keys to select the correct printer.
10. Press [ENTER] with the correct printer type highlighted.
The system responds by filling in the form with the printer type.
11. Move the cursor the Printer Name field. Use the up and/or down arrow keys to move the cursor to the field.
12. Enter the name provided by the AUDIX Voice Power administrator for the printer.
If the AUDIX Voice Power administrator did not provide a name, enter none.
If your printer does not perform its own filtering, skip to Step x, and accept the default of yes.
If your printer does perform its own filtering, complete the following steps a through c:
 - a. Move the cursor to the Should filter be used field. Use the up and/or down arrow keys to move the cursor to the field.
 - b. Press [CHOICES] (F2).
The system displays no in the field.
 - c. Press [SAVE] (F3) to save the configuration.
The system displays a confirmation message.
 - d. Press [CONT] (F3) to confirm.
The system returns you to the Printer Setup menu.

13. Press [CANCEL] (F6) two times to return to the System Administration screen.
14. Write down all printer assignments in the Printer Information section of Appendix B, Technician Worksheets, of AUDIX Voice Power R3.0 Planning.
15. Continue with the next section, "Check the System Clock."

Check the System Clock

AUDIX Voice Power Logging and AUDIX Voice Power systems use the system clock to time stamp the incoming messages. The AUDIX Voice Power system also uses the clock setting to automatically purge old messages after the retention period has expired.

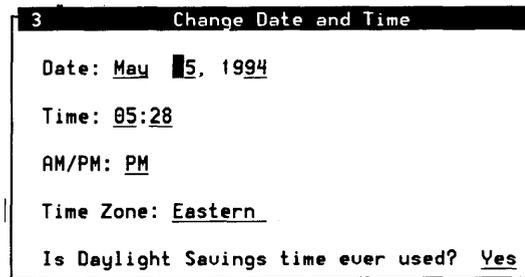
Complete the following procedure to check the operation of the AUDIX Voice Power system clock:

⇒ **NOTE:**

If you are not logged in, follow Steps 1 through 3 on Page 5-2 and select System Administration.

1. Select Date and time from the System Administration menu. Use the up and/or down arrow keys, or type the letter "d" to highlight the selection.

The system responds with the:



```
3 Change Date and Time
Date: May 5, 1994
Time: 05:28
AM/PM: PM
Time Zone: Eastern
Is Daylight Savings time ever used? Yes
```

2. Verify the date and time information.

If you need to correct any inaccuracies:

- a. Press [IAB] or the up and/or down arrow keys to move the cursor to the field that needs to be changed. The [IAB] key moves the cursor forward; the up arrow key moves the cursor back.
- b. Type in the correct information or press [CHOICES] (F2) to display the options for the field.
To use the Choices options, highlight the desired selection and press [ENTER] to place the choice in the field form.
- c. Press [SA~~V~~E] (F3) to save your changes.

The system responds with a confirmation message showing the date and time.

(This procedure continued on the following page.)

- d. Press [CONT] (F3).
 - e. Continue with Step 4.
3. Press [CANCEL] (F6) to exit the Date and Time screen without making any changes.
 4. Press [CANCEL] (F6) to return to the AT&T FACE menu.
 5. Select Exit from the AT&T FACE menu. Use the up and/or down arrow keys to select Exit.
 6. Press [CONT] (F3).

The system responds with the Console Login prompt:

```
Welcome to the AT&T 386 UNIX System  
Console Login:
```

7. Continue with the next section, "Map PBX Extensions to Channel."

Map PBX Extensions to Channels

For a listing of channel assignments, refer to Worksheet 1-2 "Channel and Service Assignments" from Chapter 1.

1. Enter **audix** at the Console Login prompt.
The system responds with the Password prompt.
2. Press [ENTER] at the Password prompt.
The system displays the following:

```
IVPSS R3.0
>AT&T FACE
Voice System Administration
Exit
```

3. Begin at the IVPSS R3.0 menu and select the following sequence:

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

The system displays the Wait Time window.

4. Enter **60** at the Seconds: prompt.
This is the number of seconds the system waits for activity to complete before stopping the voice system.
5. Press [SAVE] (F3).

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

```
The Voice System has stopped
Use the "Start voice System" choice from the System Control
Menu to restart the Voice System
Press ENTER to continue...
```

6. Press [ENTER] to continue.
7. Press [CANCEL] (F6) to exit the System Control window.
8. Select Voice Equipment from the Configuration Management window.

The system displays the Voice Equipment window with information similar to that shown in the following example:

Voice Equipment							
CHN	CD.PT	STATE	STATE-CHNG-TIME	SERVICE-NAME	PHONE	GROUP	OPTS TYPE
0	0.0	Inseru	May 25 13:41:46	lodging	-	2	talk IUP4
1	0.1	Inseru	May 25 13:41:46	lodging	-	2	talk IUP4
2	0.3	Foos	May 25 13:41:46		-	2	talk IUP4
3	0.4	Foos	May 25 13:41:46		-	2	talk IUP4

9. Press [CHG-KEYS] (F8)
10. Press [ASSIGN] (F3).
11. From the Assign menu, select Channel to PBX Extension.

The system displays the Channel to PBX Extension:

Channel to PBX Extension	
PBX Extension:	<input type="text"/>
Channel:	<input type="text"/>

12. Move the cursor to the PBX Extension field. Use the up and/or down arrow keys to move the cursor between fields.
13. Enter the PBX extension for channel 0 or the next channel to be administered.

⇒ **NOTE:**

For a listing of the channels and extensions, refer to Worksheet 1.2 in Chapter 1, "Introduction and Planning."

14. Move the cursor to the Channel field. Use the up and/or down arrow keys to move the cursor to different fields.

15. Enter **0** or **the channel number** matching the extension number that you just typed.

16. Press [SAVE] (F3).

The system displays an information screen 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 screen is closed.

17. Press [ENTER] to continue.

The system returns you to the Channel to PBX Extension screen.

18. Repeat Step 12 through Step 17 for each channel.

19. When you are finished mapping PBX extensions to all of the channels, press [CANCEL] (F6).

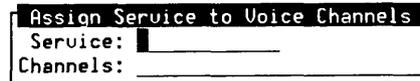
20. Continue with the next section, "Assign Services for Testing".

Assign Services for Testing

If you are installing a standard AUDIX Voice Power Lodging system without AT&T's ICSS software, use this procedure to assign all AUDIX Voice Power Lodging channels to the *lodging* service, and all AUDIX Voice Power channels to the *info_service* service so that the channel can be tested. If you are installing a system with ICSS, assign the channels to **ldg_ni_ca**. Later, you will reassign the channels to other services for normal system operations.

1. Select Services to Channels from the Assign screen.

The system displays the Assign Service to Voice Channels screen:



```
Assign Service to Voice Channels
Service: [ ]
Channels: [ ]
```

2. Press [CHOICES] (F2) to display all of the possible services for the channels.

The system displays all possible services.

3. Refer to Worksheet 1-2, "Channel and Service Assignments."

4. Select a service shown in the worksheet and press [ENTER].

5. In the Channels field, enter the channel numbers or a range or channels that will be for this service.

If you are installing an AUDIX Voice Power coresidency, go to Step 6. If you are not installing an AUDIX Voice Power system as a coresidency, continue with Step 14.

6. Press [SAVE] (F3) to save the configuration.

The system responds with a Command Output screen confirming your assignments.

7. Press [CANCEL] (F6) to close the confirmation screen.

The system responds by closing the Assign screen and activating the Configuration Management screen.

8. Press [CHG-KEYS] (F8).

9. Press [ASSIGN] (F3).

The system displays the Assign screen.

10. Press [CHOICES] (F2) to display all of the possible services for the channels.

The system displays all possible services.

11. Refer to Worksheet 1-2, "Channel and Service Assignments."

12. Select another service from the worksheet. Use the up and/or down arrow keys to highlight the info_service selection, and press [ENTER].
13. In the Channels field, enter the channel numbers or a range or channels that will be assigned to this service.
14. Press [SAVE] (F3) to save the configuration.
The system displays a Command Output Window verifying the channels and their assigned services.
15. Press [CANCEL] (F6).
16. Repeat Steps 8 through 14 for each remaining service.
17. Continue with the next section, "Verify Channel State."

Verify Channel State

Use this procedure to ensure that all of the purchased channels are ready to provide service.

1. Locate the STATE field on the Voice Equipment for all channels. This field is the third column on the form.
2. Verify that all of the channels display Inserv for their states.

The possible channel states are:

- a. Inserv (in-service)

Inserv indicates that the channels are ready for testing and operation.

Continue with Step 3 if all of the channels are Inserv.

- b. FOOS (facility out-of-service)

FOOS indicates that the IVP4 is not detecting loop current: the line is not properly connected to either the IVP4 circuit card or the switch. If the channel is FOOS:

1. Attempt to change the channel state:

With the system displaying the Voice Equipment screen, press [CHG-KEYS] (F8).

Press [CHGSTATE] (F2).

Enter i in the New State field.

Enter the channel numbers into the Equipment Number field.

Enter y to change state immediately in the Change immediately field.

Press [SAVE] (F3) to attempt to force the channels into Inserv.

Re-examine the STATE fields for the channels to verify that all of the purchased channels are Inserv.

2. Check the connection of the line at both ends.
3. Perform IVP4 circuit card diagnostics:

Press [CANCEL] (F6) to return to the Configuration Management screen.

Highlight System Control.

Press [ENTER].

Select Diagnose Equipment from the System Control menu.

Press [ENTER].

Press [CHOICES] (F2) to display a list of equipment choices.

Select your choice.

Press [ENTER].

Enter the card or channel number for the channels.

Enter y for immediate diagnosis.

Press [SAVE] (F3) to start the diagnostic procedure.

Press **y** to confirm that you wish to diagnose the equipment immediately. When it is finished, the system displays the results of the diagnosis.

Press [CANCEL] (F6) until you reach the Configuration Management screen.

Select Voice Equipment.

Press [ENTER] to display the Voice Equipment screen.

Re-examine the STATE fields for the channels to verify that all of the purchased channels are Inserv.

4. Contact your remote support center if the above procedures fail.

c. MANOOS (manually out-of-service)

MANOOS indicates that the channel has been placed out-of-service.

If you have MANOOS listed as a channel state, perform procedures 1 to change the channel state and/or 3 to diagnose the equipment boards. These procedures start on the previous page under FOOS.

d. BROKEN

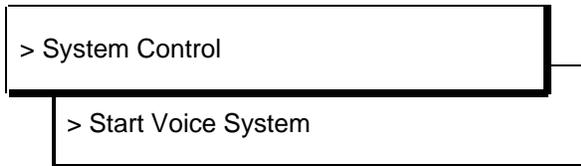
Contact your remote maintenance center for support.

3. When all of the channels read Inserv, press [CANCEL] (F6) to exit the Voice Equipment window.
4. Continue with the next section, "Verify Extensions and Channels."

Verify Extensions and Channels

This procedure explains how to make call-through tests on the IVP4 channels.

1. Begin at the Configuration Management menu and select the following sequence:



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) twice to return to the Voice System Administration screen.
4. Select System Monitor.

The system responds with the System Monitor screen:

System Monitor - Voice Channels					
Channel	Calls Today	Voice Service	Service Status	Caller Input	Dialed Digits
0	0		*On Hook		
1	0		*On Hook		
2	0		*Foos		
3	0		*Foos		

5. Verify that all purchased channels read On-Hook. On-Hook should be listed for each channel in the Service Status column on the System Monitor screen.

If the state of a channel reads Initing, wait a few seconds. When the initialization is complete, the state changes to On-Hook. If the state of the channel reads something other than Initing or On-Hook, perform the IVP4 circuit card diagnostics. This procedure is located in Appendix A, "Troubleshooting," in this document.

6. Place a telephone call to each channel number using the extensions you mapped to the channels as part of the Mapping PBX Extensions to Channels procedure.

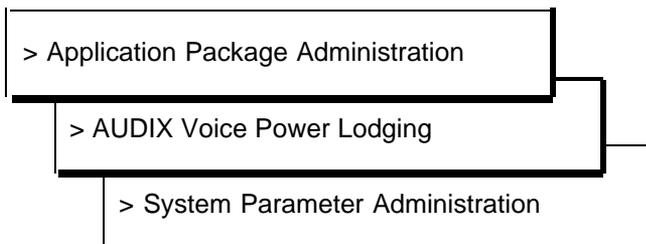
For a listing of channels and extensions, refer to Worksheet 1-2 "Channel and Service Assignments."

7. Looking at the System Monitor screen, verify that the call comes through on the proper channel. On-Hook will change to Talking, and the name of the assigned service, info_service or lodging, will appear in the Voice Service field. For channels assigned to the info_service service, you will hear the words "information service." If you get a reorder tone (howler tone), check the class of restriction (COR) on the PBX for that extension. (Refer to the switch integration document included with the AUDIX Voice Power Lodging documentation set for more information on COR).
8. When you are finished verifying channels, press [CANCEL] (F6) to return to the Voice System Administration screen.
9. Continue with the next section, "Administer AUDIX Voice Power Lodging System Parameters."

Administer AUDIX Voice Power Lodging System Parameters

Use the following procedure to set the AUDIX Voice Power Lodging administration parameters. These parameters are specific to the AUDIX Voice Power Lodging application.

1. Begin at the Voice System Administration screen and select the following sequence:



The system displays the following:

```
System Parameter Administration
Attendant Extensions:
-----
Hunt Group Or
Primary Attendant: _____

Voice Mail Parameters
Mailbox Size: 6 min
Pause For TT Input: 4 sec
Maximum Extension Length: 4
Maximum Message Length: 120 sec
Allow Guests To Save Messages?: No
Lamp ON For New Messages Only?: No
Automatic Transfer to
Operator At End Of Call?: No
PMS Integration Parameters
Message Lamp Controlled By: PMS
When PMS Link Is Down, Calls
For Guests Handled By: Attendant
```



NOTE:

For non-PMS systems, the PMS Integration Parameters (the last two parameters shown on the example screen) are not displayed.

2. Enter individual attendant extensions in the blanks provided at the top of the window. Refer to Worksheet 1-3, "AUDIX Voice Power Lodging System Parameters."
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
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.

⇒ **NOTE:**

If you do not have Property Management System software installed on your system, these parameters will not appear. Continue with Step 7.

6. Enter **av** (AVPL) for the When PMS Link Is Down Calls For Guests Handled By: parameter.

⇒ **NOTE:**

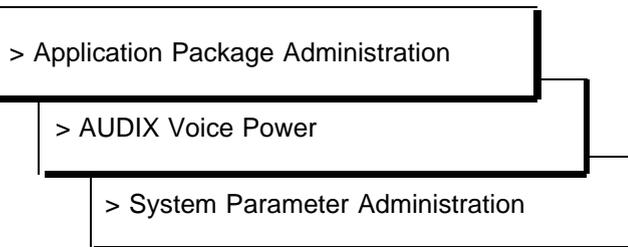
The previous two parameters are changed from their defaults so that acceptance tests can be performed. Later you will change them back. The defaults for all other fields are sufficient for this installation.

7. Press [SAVE] (F3).
8. Enter **y** to confirm your choice of saving the parameters.
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 screen.
11. Continue with the next section, "Administering AUDIX Voice Power System Parameters" if you are installing a coresident system, "Administer Switch Parameters" if you are installing only AUDIX Voice Power Lodging.

Administer AUDIX Voice Power System Parameters

The following procedure is used to establish the system parameters for AUDIX Voice Power if you are installing a coresident system. Do not use this procedure if you are installing an AUDIX Voice Power Lodging stand-alone system.

1. Begin at the Voice System Administration window and select the following sequence:



The system displays the System Parameter Administration screen:

```

System Parameter Administration
System Operator Extension: _____
Pause for Touch Tone Input: 7 sec
Maximum Extension Length: 4
Transfer to Subscribers Only?: Yes
System Mode of Addressing: Extension
Maximum Message Length: 120 sec
General Mailbox Owner Extension: _____
Enable General Mailbox for Call Answer?: No
Allow Voice Mail/Call Answer Transfers?: Yes

Automated Attendant Parameters
Touch-tone Gate Active?: Day: No Night: No
Automated Attendant Timeout Action: Day: Transfer Night: Transfer
Automated Attendant Menu Plays: 2
Fax Transfer Number: _____
Present Options Before Leaving Message?: Yes
  
```

2. Enter the system operator's extension or operator switch group in the System Operator Extension field. Refer to Worksheet 1-5, "AUDIX Voice Power System Parameters." This field specifies the switch group or operator extension to which callers are transferred when they press 0.
3. Determine the number of digits composing a valid subscriber extension. Refer to Worksheet 1-5, "AUDIX Voice Power System Parameters."

4. Enter that number in the Maximum Extension Length field.

⇒ **NOTE:**

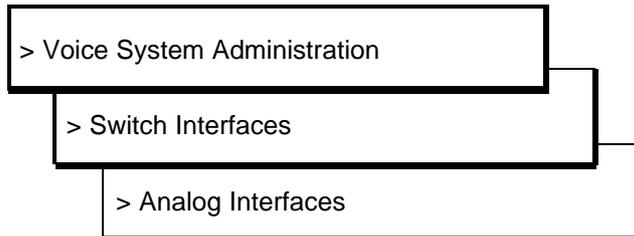
For this initial administration, use the default values for all other fields. Do not enter values for the remaining parameters at this time.

5. Press [SA VE] (F3).
6. Enter **y** to confirm your choice of saving the parameters.
The system displays a confirmation window informing you that the parameters have been saved.
7. Press [EN TE R].
8. Press [CA NC EL] (F6) twice to return to the Voice System Administration screen.
9. Continue with the next section, "Administer Switch Parameters."

Administer Switch Parameters

At this point, set message-waiting-lamp parameters and administer the switch integration package. Since these procedures are switch specific, refer to the switch integration document that came with your documentation.

To reach the screen to administer the information for your switch, select:



The system will respond with a screen similar to:

```
          Analog Interfaces
NEAX2400 UTG Switch Integration Package R3.0
Switch Hook Flash Duration: 600
Wink Disconnect Interval: 300
      Type of Signaling: TT
Incoming Speech Volume: 4000
Outgoing Speech Volume: 1000

      Dial-Tone Training: Yes
```

When you have completed verifying or changing the information for this screen, return to this document and continue with the next section in this chapter, "Stop and Start the Voice System."

Reassign Services

Earlier you assigned the channels to testing services. To perform acceptance tests and cut the system into service, you must now reassign the channels to their operating service.

1. The first step in this process is to determine which service to reassign to each channel. This information is recorded in Worksheet 1-2 "Channel and Service Assignments," from Chapter 1 of this document.
2. Begin at the Voice System Administration screen and select the following sequence:



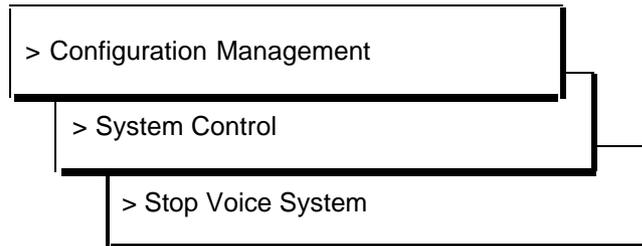
3. Press [CHG-KEYS] (F8).
4. Press [ASSIGN] (F3).
5. From the Assign menu, select Services to Channels.
6. Press [CHOICES] (F2).
The system displays all possible services.
7. Select the service for channel 0 (or the next channel to be administered).
8. Move the cursor to the Channels field.
9. In the Channels field, enter the channel numbers you will assign to the designated service. These numbers are recorded in Worksheet 1-2, "Channel and Service Assignments," from Chapter 1 of this document. You can enter the channel numbers in several forms:
 - A single channel number (1)
 - A range of channels (0-4)
 - A list of single channels and ranges (1,4-7,9)
 - The word all (to assign all channels to the designated service)
10. Press [SAVE] (F3).
A Command Output screen verifies that the designated channels are assigned the specified service.
11. Press [CANCEL] (F6).

12. To reassign more services to channels, repeat Steps 3 through 11.
13. When you have assigned all channels a service, press [CANCEL] (F6) to exit the Voice Equipment window.
14. Continue with the next section, "Stop and Start the Voice System."

Stop and Start the Voice System

To store phone-to-channel mapping information into memory, you must stop and start the voice system.

1. Begin at the Voice System Administration screen and select the following sequence:



The system displays a WAIT TIME window.

2. Enter **60**

This is the number of seconds the system will wait for activities to complete before stopping the voice system.

3. Press [SA VE] (F3).

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

The Voice System has stopped

4. Press [EN TE R] to continue.

5. From the System Control screen, select Start Voice System.

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

Startup of the Voice System is complete

6. Press [EN TE R] to continue.

7. Press [CA NC EL] (F6) several times to return to the IVPSS R3.0 menu.

Acceptance tests are performed to ensure that the AUDIX Voice Power Lodging system is functioning properly after installation. Acceptance testing involves several different procedures that should be executed in the order described in the checklists from Chapter 2 of this document. You may wish to perform these acceptance tests with the customer:

- Preparing for acceptance tests
- 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

These tasks assume that there is a telephone near the AUDIX Voice Power Lodging computer. If not, ask if one can be connected.

When you are finished testing AUDIX Voice Power Lodging, perform the procedures for AUDIX Voice Power Release 3.0 if you are installing a coresident system.

Prerequisites for Acceptance Testing

The following prerequisite must be met before you begin acceptance testing for AUDIX Voice Power Lodging:

- There must be a working telephone installed somewhere near the AUDIX Voice Power computer.

To perform these acceptance tests, you will 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 Voice Power Lodging 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).

Check with the system administrator or hotel management for the necessary information before you perform the AUDIX Voice Power Lodging Acceptance test. Record the room numbers and the extensions for the two test guests in the following table:

Table 6-1. Test Guest Assignments

Guest Number	Room Number	Extension Number
guest#1		
guest#2		

For AUDIX Voice Power Release 3.0, you will need two "test" subscribers, defined by the system administrator. The test subscribers must be administered on the switch. Refer to the Acceptance Tests chapter of the switch integration document included with the documentation set for information about administering the PBX for the test subscribers.

AUDIX Voice Power Lodging Acceptance Tests

Use the following procedures to perform the acceptance tests for AUDIX Voice Power Lodging:

Check In Test Guests

Using the information obtained from the AUDIX Voice Power Lodging administrator on the two test guest rooms, check them in using the AUDIX Voice Power Lodging computer.

If you are already logged in as *audix*, begin with Step 3.

1. Enter **audix** at the console login prompt.

The system responds with the password prompt.

2. Press [**ENTER**] at the password prompt.

The system responds with the IVPSS R3.0 menu.

```
IVPSS R3.0
>AT&T FACE
Voice System Administration
Exit
```

3. Begin at the IVPSS R3.0 menu and pick the following sequence:

```
> Voice System Administration
> Application Package Administration
> AUDIX Voice Power Lodging
> Guest Mailbox Administration
> Mailbox
```

The system responds with the AUDIX Voice Power Lodging mailbox:

```

Mailbox
Guest Extension: _____
Guest Room Number: _____
Guest Name: _____
Guest Password: *_____
Guest Language: American English

Messages Waiting
Voice:
Fax:
Text:
Mailbox Capacity Usage: %
Suite Mailbox Extension:
Comments: _____
    
```

4. Enter guest#1's extension in the Guest Extension field.

⇒ **NOTE:**

To move from field to field, use the up and/or down arrow keys.

5. Enter guest#1's room number in the Guest Room Number field.
6. Enter **guest1** in the Guest Name field.
7. Enter **1111** in the Guest Password field.
8. Press [CHG-KEYS] (F8) when you are finished entering the information.
9. Press [CHECKIN] (F1).

AUDIX Voice Power Lodging displays a confirmation message.

10. Press [ENTER] to continue.
11. Enter guest#2's extension in the Guest Extension field.
12. Enter guest#2's room number in the Guest Room Number field.
13. Enter guest2 in the Guest Name field.
14. Enter **2222** in the Guest Password field.

15. Press [CHECKIN] (F1) when you are finished entering information.

AUDIX Voice Power Lodging displays a confirmation message.

16. Press [ENTER] to continue.
17. Press [CHG-KEYS] (F8).
18. Press [CANCEL] (F6) three times to exit the Mailbox window, end the check-in process, and return to the Voice System Administration screens.
19. Continue with the next section, "Administer the Switch."

Administer the Switch

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 Voice Power Lodging documentation set for instructions.

View the System Monitor

Watching the System Monitor screen 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 Voice Power Lodging channels.

If you are not logged in as *audix*, refer to "Check in Test Guest," Steps 1 and 2.

1. From the Voice System Administration screen, select System Monitor.

The system responds with the System Monitor – Voice Channels screen:

System Monitor - Voice Channels					
Channel	Calls Today	Voice Service	Service Status	Caller Input	Dialed Digits
0	0		*On Hook		
1	0		*On Hook		
2	0		*Foos		
3	0		*Foos		

2. Locate the Service Status column on the System Monitor – Voice Channels screen.
3. Verify that all channels 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, such as Talking.

4. Watch the system monitor as you place the test calls.
5. Continue with the next section, "Leave a Call-Answer Message."

Leave 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. Call guest#1. Use the information you wrote in Table 6-1.
2. Let the telephone ring until it goes to AUDIX Voice Power Lodging coverage.

⇒ **NOTE:**

If the call does not go to AUDIX Voice Power Lodging coverage or you experience other difficulties in leaving a message for this guest, refer to Appendix A, "Troubleshooting" in this document or to Appendix D, "Troubleshooting" in AUDIX Voice Power Lodging Administration (585-310-525).

3. Leave a message. For example, "This is a test message for guest#1 from installation."
4. Hang up.
5. Continue with the next section, "Transfer to the Attendant."

Transfer to the Attendant

In this task, you leave a message for guest#2 that can later be used for MWL and retrieval tasks.

1. Call guest#2. Use the information you wrote in Table 6-1.
2. Let the telephone ring until it goes to AUDIX Voice Power Lodging coverage.

If the call does not go to AUDIX Voice Power Lodging coverage or you experience other difficulties in leaving a message for this guest, refer to Appendix A, "Troubleshooting" in this document or Appendix D, "Troubleshooting" in AUDIX Voice Power Lodging Administration (585-310-525).

3. Leave a message. For example, "This is a test message for guest#2 from installation services."
4. After speaking the message, press 0 on the telephone keypad 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 the next section, "Check the MWL and Retrieve Messages."

Check the MWL and Retrieve Messages

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:

Go to guest#1's room and make sure that the MWL has been turned on. In guest#1's room, retrieve guest#1's message.

1. Go to guest#1's room.
2. Verify that the MWL has been turned on.



NOTE:

If the MWL is not on or if you have difficulty in retrieving this guest's message, refer to Appendix A, "Troubleshooting" in this document or Appendix D in AUDIX Voice Power Lodging Administration (585-310-525).

3. Dial the integrated message retrieval number (AUDIX Voice Power Lodging hunt group extension).
4. Listen to the following:
 - a. The message retrieval greeting
 - b. The notification of the number of messages.
 - c. The type of messages (voice, text, and/or fax).
 - d. The phrase: "You have one voice mail message."
 - e. The day, date, and time that the message was received.
 - f. The message that you left for guest#1.
5. Press 3 to delete the message that you just heard.



NOTE:

If you have created more than one message for this guest, delete all of them.

6. Hang up when you have finished deleting all messages.
7. Continue with the next section, "Retrieve a Message Through the Attendant."

Retrieve a Message Through the 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, "Instructions for the Attendant," 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.

⇒ **NOTE:**

If the MWL is not on or if the attendant has difficulty in connecting you to this guest's mailbox, refer to Appendix A, "Troubleshooting" in this document or Appendix D, "Troubleshooting" in AUDIX Voice Power Lodging Administration (585-310-525).

2. Go back to telephone near the AUDIX Voice Power Lodging computer to retrieve guest#2's message through the attendant.
3. Call the attendant.
4. Tell the attendant that you need to be connected to your voice mailbox.
5. Listen for the confirmation message: "Ready for message retrieval."
6. Listen to the following:
 - a. The message retrieval greeting
 - b. The notification of the number of messages.
 - c. The type of messages (voice, text, and/or fax).
 - d. The phrase: "You have one voice mail message."
 - e. The day, date, and time that the message was received.
 - f. The message that you left for guest#1.
7. Press 3 to delete the message that you just heard.

⇒ **NOTE:**

If you have created more than one message for this guest, delete all of them.

8. Hang up when you have finished deleting all messages.
9. Continue with, "Remove Test Guests."

Instructions for the Attendant

To connect the installation 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 such as a switchhook transfer 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 Voice Power Lodging hunt group extension).

The integrated message number is: _____

4. Listen for the message retrieval greeting.
5. Enter the guest's room extension after the message retrieval greeting.

A confirmation message states that this is a "urrent guest."

6. When you are prompted for the guest's password or the attendant password, enter ****
7. Release.

Release means to connect the two calls in progress, the technician's call with voice mailbox.

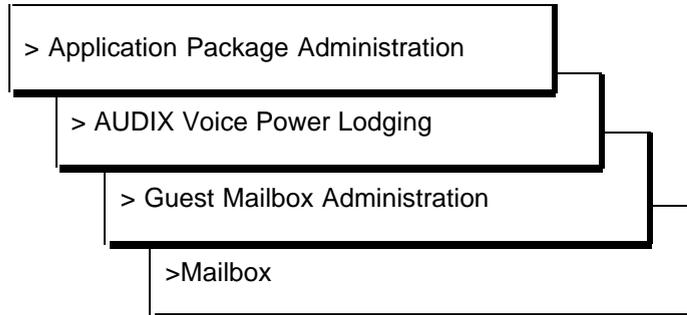
⇒ **NOTE:**

If you cannot connect the technician to the guest mailbox, write down the message that the system speaks and inform the technician.

Remove 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 screen and pick the following sequence:



The system responds with the Mailbox screen:

```
Mailbox
Guest Extension: _____
Guest Room Number: _____
Guest Name: _____
Guest Password: * _____
Guest Language: American English
Messages Waiting
  Voice:
  Fax:
  Text:
Mailbox Capacity Usage: %
Suite Mailbox Extension: _____
Comments: _____
```

3. Enter guest#1's extension in the Guest Extension field.
4. Press [CHG-KEYS] (F8).
5. Press [CHECKOUT] (F2).
6. Enter **y** to confirm your choice of checking the guest out.
A confirmation message appears informing you that the guest has been checked out.
7. Press [ENTER] to continue.

8. Enter guest#1's extension in the Guest Extension field.
9. Press [DEL-EXTN] (F6).

A confirmation message appears informing you that the extension has been deleted from the mailbox database.
10. Press [ENTER] to continue.
11. Enter guest#2's extension in the Guest Extension field.
12. Press [CHECKOUT] (F2).
13. Enter **y** to confirm your choice of checking the guest out.

AUDIX Voice Power Lodging displays a confirmation message informing you that the guest has been checked out.
14. Press [ENTER] to continue.
15. Enter guest#2's extension in the Guest Extension field.
16. Press [DEL-EXTN] (F6).

AUDIX Voice Power Lodging displays a confirmation message informing you that the extension has been deleted from the mailbox database.
17. Press [ENTER] to continue.
18. Press [CHG-KEYS] (F8).
19. Press [CANCEL] (F6) twice to return to the AUDIX Voice Power Lodging screen.
20. Pick System Parameter Administration from the AUDIX Voice Power Lodging screen.
21. Enter **p** (PMS) for the Message Lamp Controlled By: parameter.

⇒ **NOTE:**
If you did not install the Property Management System (PMS) software on the system, these parameters will not appear. Go to Step 27.
22. Enter **p** (PMS) or enter **a** (AUDIX Voice Power Lodging).
23. Enter **at** (Attendant) for the When PMS Link Is Down Calls For Guests Handled By: parameter.
24. Press [SAVE] (F3).
25. Enter **y** to confirm your choice of saving the parameters.

AUDIX Voice Power Lodging displays a confirmation window informing you that the parameters have been saved.
26. Press [ENTER] to continue.
27. Press [CANCEL] until you reach the IVPSS R3.0 menu.

28. Pick Exit from the IVPSS R3.0 menu.

The system logs you off of IVPSS R3.0 and displays the Console Login prompt:

```
Welcome to the AT&T 386 UNIX System
Console Login:
```

29. Enter **root** at the console login prompt.

The system responds with the password prompt.

30. Press [**ENTER**] at the password prompt.

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

31. The system displays the UNIX prompt (unix#).

32. Enter **cat /usr/lgdb/.pwdb** at the UNIX system prompt (unix#)

33. Verify that this file is empty.

It is extremely important that this file is empty. If this file is not empty, determine the extension, then repeat the steps in this procedure to check out and delete any extension that remains in the .pwdb file.

34. Continue with the "Switch Tasks" on the next page.

Administer the Switch

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 documentation set for instructions. This procedure is unique to the switch to which the AUDIX Voice Power Lodging system is integrated.

Therefore, refer to Chapter 7, "Acceptance Tests," of the switch document supplied with the AUDIX Voice Power Lodging documentation set for details on this task.

When you have finished the switch tasks, continue with the AUDIX Voice Power Release 3.0 acceptance tests if you are installing a coresident system, or if you are installing AUDIX Voice Power Lodging only, continue with "Verify the Remote Maintenance Modem" at the end of this chapter.

AUDIX Voice Power Acceptance Tests

Perform the following procedures if you are installing AUDIX Voice Power Release 3.0 with AUDIX Voice Power Lodging:

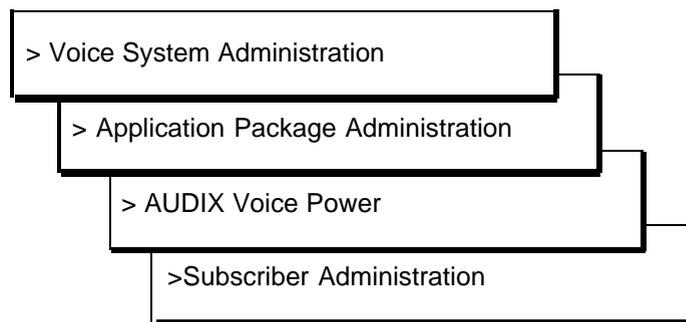
Administer Test Subscribers for AUDIX Voice Power

Use the information provided by the system administrator on the two test subscribers to administer them on AUDIX Voice Power.

1. Enter **audix** at the Console Login prompt.
The system displays the Password prompt.
2. Press [ENTER]
The system displays the IVPSS R3.0 menu:

```
IVPSS R3.0
>AT&T FACE
Voice System Administration
Exit
```

3. From the IVPSS R3.0 menu, select the following sequence:



The system displays the Subscriber Administration form:

```

Subscriber Administration
Extension: _____
Name: _____
Password: _____
Name Addressing Identifier: _____
TT Equivalent of Name Addressing Identifier: _____
Mode of Addressing: Extension
Mailbox Size: _____ min
Personal Operator: _____
Comments: _____

Class of Service: 1

Custom Class of Service Parameters
Does the Subscriber Have Switch Call Coverage?: Yes
If No Call Coverage, Enter Maximum Rings: _____
Coverage Service: Call Answer
Outcalling Allowed?: Yes

```

4. Enter the first test subscriber's extension in the Extension field.
5. Enter the first test subscriber's full name in the Name field. Use **test subscriber**.
For the second test subscriber, enter **second test**.
6. Enter the first test subscriber's extension in the Password field.
7. Enter the first test subscriber's last name in the Name Addressing Identifier field.
8. Enter **5** in the Mailbox Size field.
9. Use the default values for all other fields. You do not have to make any entries into the fields using defaults.
10. When you are finished entering information for the first test subscriber, press [ADD] (F1).
A window appears confirming that the new subscriber was added to the subscriber database.
11. Press [ENTER] to continue.
12. Repeat Step 4 through Step 11 to administer the second test subscriber.
13. Press [CANCEL] (F6) three times to return to the Voice System Administration screen.
14. Continue with the next section, "Add AUDIX Voice Power Test Subscribers to the Switch."

Add AUDIX Voice Power Test Subscribers to the Switch

Verify that the 2 test subscribers have been set up on the switch. These must be present before you can continue with the acceptance testing. Refer to the switch document shipped with your system to determine the procedures necessary to add the test subscribers to the switch.

After you are finished removing the test subscribers from the switch, continue with the next section, "View the System Monitor."

View the System Monitor

The system monitor is a dynamic (changing) report screen that shows the activity on the AUDIX Voice Power channels.

If you are already logged in as *audix*, begin with Step 3.

1. Enter **audix** at the Console Login prompt.
The system displays the Password prompt.
2. Press [ENTER]

The system displays the IVPSS R3.0 menu:

```
IVPSS R3.0
> AT&T FACE
Voice System Administration
Exit
```

3. From the IVPSS R3.0 menu, select the following sequence:

```
> Voice System Administration
> System Monitor
```

The system responds with the System Monitor – Voice Channels screen:

System Monitor - Voice Channels					
Channel	Calls Today	Voice Service	Service Status	Caller Input	Dialed Digits
0	0		*On Hook		
1	0		*On Hook		
2	0		*Foos		
3	0		*Foos		

4. Locate the Service Status column on the System Monitor – Voice Channels screen.
5. Verify that the Service Status field for each channel reads On-Hook.
6. Make calls to the test subscribers.
7. Watch the system monitor.
8. When a call comes through on a channel assigned to the CA+VM service, verify that the Service Status field changes from On-Hook to another status, such as talking or coding.
9. Continue with the next section, "Leave a Call-Answer Message."

Leave a Call-Answer Message

The message you leave now for the first test subscriber will be used again later to test the message waiting lamp (MWL) and message retrieval.

Using any telephone and the information you entered as part of the Administering Test Subscribers procedure:

1. Call the first test subscriber.
2. Let the telephone ring until AUDIX Voice Power coverage begins.
3. Leave a message. For example, "This is a test message for test subscriber #1 from installation."
4. Hang up.
5. Repeat Step 1 through Step 4 for the second test subscriber.

⇒ **NOTE:**

If the call does not go to AUDIX Voice Power coverage or you experience other difficulties in leaving a message for this subscriber, Refer to Chapter 2 "Trouble and Failure Indications" in *AUDIX Voice Power System R3.0 Maintenance* (585-310-113).

6. Continue with the next section, "Check the MWL and Retrieve the Messages."

Check the MWL and Retrieve the Messages

This procedure assumes that the subscribers' or other telephones you use for testing are equipped with message waiting lamps (MWLs). If they are not, complete the procedure, but ignore the steps that refer to MWLs.

1. Ensure that the MWL on the first test subscriber's telephone is turned on.
2. From the first test subscriber's telephone, dial the AUDIX Voice Power telephone number to retrieve the message you left as part of the previous procedure.
3. Enter the first test subscriber's extension followed by # (pound sign).
4. Enter the first test subscriber's password followed by # (pound sign).
5. Listen for the voice mail greeting and the notification of the number of messages: "You have one voice mail message."
6. Press 2 to retrieve the message.
7. The message header (time, day, and date when message was received) is played.
8. Verify that it matches or approximates the time you sent the message.
9. Press 0 (zero) to listen to the message.
10. After listening to the message, press *D (star D) to delete it.
11. If you have created more than one message for this test subscriber, delete all of them.
12. When there are no more messages to retrieve, hang up.
13. Repeat Steps x through x for the second test subscriber, using that subscriber's telephone, extension, and password.

⇒ **NOTE:**

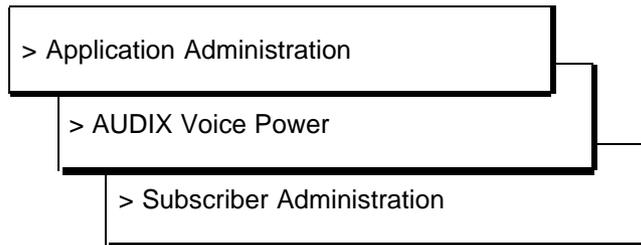
If the MWL is not turned on or if you have difficulty in retrieving this subscriber's message, refer to AUDIX Voice Power System R3.0 Maintenance for troubleshooting help.

14. Continue with the next section, "Remove AUDIX Voice Power Test Subscribers."

Remove AUDIX Voice Power Test Subscribers

Perform this procedure only if you are installing a coresident AUDIX Voice Power.

1. Press [CANCEL] (F6) to exit the System Monitor window.
2. Begin at the Voice System Administration screen and select the following sequence:



The system responds with the Subscriber Administration screen:

```

Subscriber Administration
Extension: _____
Name: _____
Password: _____
Name Addressing Identifier: _____
TT Equivalent of Name Addressing Identifier: _____
Mode of Addressing: Extension
Mailbox Size: _____ min
Personal Operator: _____
Comments: _____

Class of Service: 1

Custom Class of Service Parameters
Does the Subscriber Have Switch Call Coverage?: Yes
If No Call Coverage, Enter Maximum Rings: _____
Coverage Service: Call Answer
Outcalling Allowed?: Yes
    
```

3. Enter the first test subscriber's extension in the Extension field.
4. Press [DISPLAY] (F4).
5. Verify that this is the first test subscriber you created.
6. Press [DELETE] (F2).
7. Enter **y** to confirm that you want to delete this subscriber.
A confirmation window appears stating that the subscriber is deleted.
8. Press [ENTER] to continue.

9. Repeat Step 3 through Step 9 to delete the second test subscriber.
10. Continue with the next section, "Log Off."

Log Off

When you have completed the acceptance tests to your satisfaction and that of the customer, use the following procedure to log off of the AUDIX Voice Power computer:

1. Press [CANCEL] (F6) repeatedly until the system returns you to the IVPSS R3.0 menu.
2. Select Exit.
3. Press [ENTER] to exit the IVPSS R3.0 menu.

The system displays the Console Login prompt:

```
Welcome to the AT&T 386 UNIX System
Console Login:
```

4. Continue with the next section, "Remove AUDIX Voice Power Test Subscribers from the Switch."

Remove AUDIX Voice Power Test Subscribers from the Switch

Refer to the switch document shipped with your system to determine the procedures necessary to remove the test subscribers from the switch.



CAUTION:

Never leave unassigned mailboxes or test subscribers in the AUDIX Voice Power system. Always delete mailboxes not currently in use. Administrators who would like to use test mailboxes for training purposes should always add the mailbox immediately before training and remove the mailboxes immediately after training.

After you are finished removing the test subscribers from the switch, continue with the next section, "Verify the Remote Maintenance Modem."

Verify the Remote Maintenance Modem

To make sure the modem for the remote maintenance terminal is installed and configured correctly, perform the following procedure:

1. Call your remote maintenance center.
2. Ask someone from the remote maintenance center to dial into the AUDIX Voice Power Logging system via the remote maintenance terminal to verify the connection.
3. If the connection to the remote maintenance center functions correctly, your next step will be one of the following:

If the connection to the remote maintenance center does not function correctly, verify the hardware and software set up by referring to the following:

- To verify the hardware set up, refer to Connecting the Maintenance Modem in Chapter 3, "Hardware Installation," in this book.
 - To verify the software set up, refer to "Setting the Modem Software Options" in Chapter 5, "Initial Administration and Test," in this document.
 - If the hardware and software setup is correct but the modem is still not operational, it is possible that the factory-default profile was configured incorrectly. Refer to the documentation shipped with the modem for assistance.
4. When you have completed these tests, continue the next chapter, "Cut-to-Service Procedures."

Cut-to-service procedures take the Voice Power system from the installation cut-over point to a fully administered and operating voice mail system. This chapter covers the following cut-to-service procedures for both AUDIX Voice Power Lodging and AUDIX Voice Power:

- Preparing for cut to service
- Property Management System (PMS) integration
- Logging on
- Adding subscribers
- Logging off
- Administering the switch for cutover

The installation contract specifies whether cut-to-service procedures are performed by services personnel or the customer.

Your cut-to-service tasks will depend upon which configuration you are installing:

1. AUDIX Voice Power Lodging, only
2. AUDIX Voice Power Lodging with a PMS integration
3. AUDIX Voice Power Lodging with AUDIX Voice Power coresidency
4. AUDIX Voice Power Lodging with AUDIX Voice Power coresidency and PMS integration

To perform the cut-to-service:

1. Perform all AUDIX Voice Power Lodging procedures
2. Perform all AUDIX Voice Power procedures

AUDIX Voice Power Lodging Cut-to-Service Procedures

Cut-to-service tasks take the AUDIX Voice Power Lodging system from the installation cut-over point to a fully administered and operating voice mail system. These tasks are performed after the service technicians, software specialists, and/or software associates at your site have installed AUDIX Voice Power Lodging and have performed the acceptance tests to verify that the system is working properly.

The cut-to-service procedures required for your system are determined by whether or not are installing a Property Management System (PMS) with your AUDIX Voice Power Lodging. Systems using PMS require an additional set of procedures, "Procedures for Integrated-PMS Cut-to-Service."

Both the integrated and non-integrated PMS cut-to-service procedures involve performing at least one task on the switch (PBX). Refer to the PBX/switch documentation provided with your new system for information about PBX/switch tasks.

AUDIX Voice Power Lodging cut-to-service involves preparing for cut-to-service and performing the procedures necessary to cut-to-service either a system integrated with PMS, or a non-integrated system. Read the information in "Verify Preparation for Cut-to-Service," and then follow the cut-to-service procedure for your configuration only (integrated PMS or non-integrated PMS). Chapter 2, "AUDIX Voice Power Lodging Basics" in *AUDIX Voice Power Lodging Administration* (585-310-525) provides additional information about integrated and non-integrated PMS environments.

Verify Preparation for Cut-to-Service

Regardless of the configuration that you have (integrated PMS or non-integrated PMS), you should prepare your guests and attendants for voice mail service. System administrators should read and perform the following tasks in Chapter 3, "AUDIX Voice Power Lodging Administrator's Activities," "Activities Before Cut-To-Service," in *AUDIX Voice Power Lodging Administration* (585-310-525) before doing any cut-to-service tasks:

- Create guest quick reference cards
- Copy troubleshooting worksheet
- Train attendants
- Inform current guests about AUDIX Voice Power Lodging

Procedures for Integrated-PMS Cut-to-Service

Cut-to-service in the integrated PMS configuration involves four tasks:

1. Cable the PMS to AUDIX Voice Power Lodging
2. Verify automatic database synchronization
3. Adjust system parameters (optional)
4. Register AUDIX Voice Power Lodging administrator
5. Administer switch



NOTE:

It is a good idea to have your PMS vendor on site when you connect the PMS to AUDIX Voice Power Lodging.

Prepare to Cable the PMS to AUDIX Voice Power Lodging

Use the following procedures to prepare AUDIX Voice Power Lodging for the PMS cable:

1. Enter **shutdown -y -g0 -i0** from the UNIX prompt (`unix#`) to shutdown the system.
2. Power off the system.
3. Remove all power cords from the system.
4. Attach the PMS cable using the instructions below.
5. Reconnect the power cords.
6. Power up the AUDIX Voice Power Lodging system.
7. Observe the Power-On Self Test by watching the monitor.]



CAUTION:

Do not plug cables into a live system. Doing so could cause electrostatic discharge damage (ESD). Always observe ESD precautions when working with the AUDIX Voice Power Lodging system.

Cable the PMS to AUDIX Voice Power Lodging

This procedure is required for configurations with an integrated PMS system. If you are cutting to service a non-PMS system, continue with "Adjust AUDIX Voice Power Lodging System Parameters (Optional)".

The first step is to cable the PMS to AUDIX Voice Power Lodging. It is your responsibility to supply the cable between the PMS and AUDIX Voice Power Lodging. The hardware link between the AUDIX Voice Power Lodging system and the PMS is an electrical Electronic Industries Association (EIA) RS 232-C serial data electrical interface. 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.



CAUTION:

Do not attach the PMS cable while the system is operating. Perform the shutdown procedures at the end of Chapter 3.

The serial port connection for the AUDIX Voice Power Lodging MAP/5 PMS connection, is COM2 (Serial Port 2). Serial Port 2 is a DB-9P connection. For the location of COM 2 (Serial Port 2), refer to the figure below.

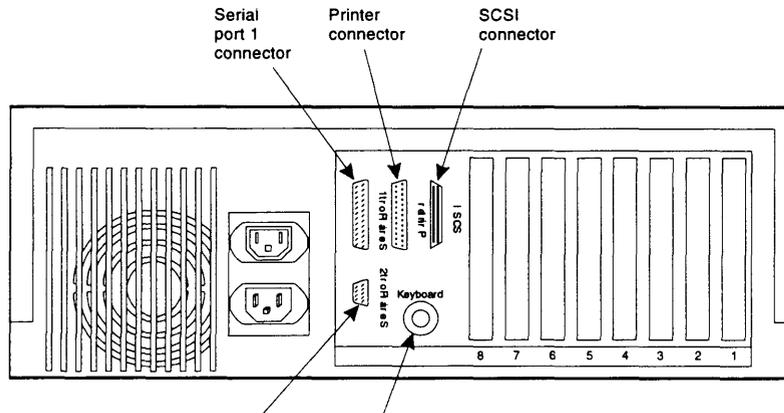


Figure 7-1. Back View of the MAP/5

➡ **NOTE:**
Connecting the PMS system to a spare IPC-900/Gemini-1000 port is not recommended for the MAP/5.

Continue with the next section, "Ensure Database Synchronization" after you have cabled the PMS to the AUDIX Voice Power Lodging MAP/5.

Integrated-PMS Systems: Ensure Database Synchronization

These procedures are required for all AUDIX Voice Power Lodging configurations with a PMS integration.

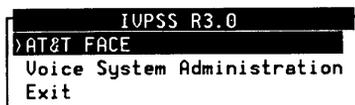
Once the two systems are physically connected, database synchronization should start automatically. Automatic database synchronization is the method by which PMS puts information in the AUDIX Voice Power Lodging database. If the PMS connection to AUDIX Voice Power Lodging does not link correctly, the database may not automatically synchronize. Therefore, you need to verify that the database has automatically synchronized. If the automatic synchronization has not occurred, you will need to restart the PMS link in order to retry the automatic

database synchronization. If the automatic database synchronization does not occur after the link has been restarted, contact your PMS vendor and remote maintenance center.

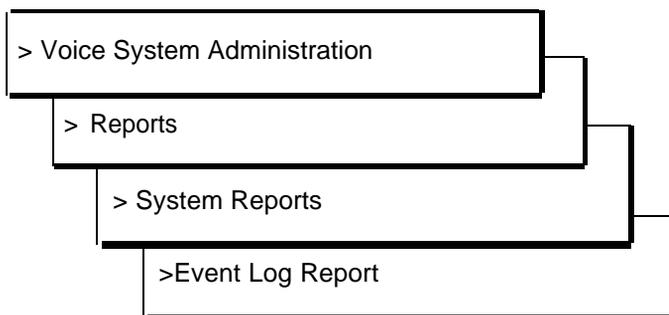
Verify Automatic Database Synchronization

If you are already logged in as *audix*, begin with Step 3.

1. Enter **audix** at the console login prompt.
The system responds with the password prompt.
2. Press [ENTER] at the password prompt.
The system responds with the IVPSS R3.0 menu.



3. Begin at the IVPSS R3.0 menu and pick the following sequence:



4. Press [CHG-KEYS] (F8).
5. Press [DISPLAY] (F2).

The system displays the Event Log Report. The messages that are immediately displayed on the screen are the oldest.

The fields for the Event Log Report are Priority, Time, Sender, Msg_id (Message ID), and Target.

⇒ **NOTE:**

To obtain an explanation of a Message ID, refer to AUDIX Voice Power Lodging Administration (585-310-525), Appendix A, "Event Messages" or use [EXPLAIN] (F3). To use [EXPLAIN] (F3):

- a. Press [CHG-KEYS] (F8), if the function key display at the bottom of the screen is not displaying F3 as [EXPLAIN].
If F3 is displayed as [EXPLAIN], go to Step b.
- b. Press [EXPLAIN] (F3).

The system responds with the Explain Form:



The screenshot shows a terminal window titled "Explain Form". Below the title is a prompt "Enter Message ID:" followed by a blank line with a cursor, indicating where the user should enter a message ID.

- c. Enter the Message ID number that you wish to have explained.
Use the number from the Msg_id column in the Event Log Report.
 - d. Press [SAVE] (F3).
The system responds with an Explanation of Event Message screen.
 - e. Press [CANCEL] (F6) 2 times to return to the Event Log Report.
 - f. Press [CHG-KEYS] (F8) to redisplay the [EXPLAIN] (F3) and [DISPLAY] (F2) keys.
6. Press the [END] key on the key pad.
This causes the system to go to the last page of the Event Log. The [END] key causes AUDIX Voice Power Lodging to display the most recent events.
7. Verify that the following message appears near the end of the report:
- ```
PMS:WTR:link is up; automatic database synchronization started
```
- This message appears if the automatic database synchronization has begun. Continue with the next step.  
If this message does not appear, go to, "Restarting the PMS Link to Retry Automatic Synchronization" below.
8. Wait several minutes for the database synchronization. The amount of time required depends upon the number of rooms at your lodging establishment.
9. Press [ DISPLAY ] (F2) to redisplay the Event Log.



**NOTE:**

Press [ CHG-KEYS ] (F8) if you need to display the [ DISPLAY ] (F2) key.

10. Press the [ END ] key on the key pad to display the most recent messages.

If database synchronization is complete, the system writes the following message at the end of the report:

```
PMS:WTR:automatic database synchronization completed
```

If this message does not appear, wait a few more minutes and repeat Step 9 and Step 10 to redisplay the event log and check for the message again. If after several attempts you fail to locate this message, go to the next procedure, "Restarting the PMS Link to Retry Automatic Synchronization."

11. Press [ CHG-KEYS ] (F8) to display the [ CANCEL ] (F6) key.
12. Press [ CANCEL ] (F6) three times to return to the Voice System Administration menu.
13. Continue with the next section, "Register the AUDIX Voice Power Lodging Administrator."

### Restart the PMS Link to Retry Automatic Synchronization

Use this procedure only if you did not see the automatic database synchronization messages in the Event Log Report.

If automatic database synchronization does not take place when you connect the two systems, initiate a request to restart the PMS link on AUDIX Voice Power Lodging by doing the following:

If you are already logged in as *audix*, begin with Step 3.

1. Enter **audix** at the console login prompt.

The system responds with the password prompt.

2. Press [ **ENTER** ] at the password prompt.

The system responds with the IVPSS R3.0 menu.

```
IVPSS R3.0
>AT&T FACE
Voice System Administration
Exit
```

3. Begin at the IVPSS R3.0 menu and pick the following sequence:

```
> Voice System Administration
> Application Package Administration
> AUDIX Voice Power Lodging
```

The system responds with the AUDIX Voice Power Lodging menu:

```
AUDIX Voice Power Lodging
>Guests Mailbox Administration
Lodging Administrator Registration
PMS Parameter Administration
System Parameter Administration
```

4. Press [ CMD-MENU ] (F7).
5. Select AUDIX Voice Power Lodging/PMS Link Restart from the Lodging Menu Commands screen.

The system responds:

```
AVPL/PMS Link Restart
<Press the <Enter> key to continue>
```

6. Press [ ENTER ] to continue.

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.
```

⇒ **NOTE:**

Executing a PMS restart request also issues an automatic database synchronization request.

Press [ ENTER ].

7. Press [ CANCEL ] (F6) three times to return to the Voice System Administration menu.

Repeat the "Verify 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, check your hardware connections, and retry the database synchronization. If the database synchronization continues to fail, consult your PMS vendor.

## Adjust AUDIX Voice Power Lodging System Parameters (Optional)

This is an optional installation step. If you rely on the system defaults, you will have the following settings:

| System Parameter                                   | Possible Values   | Default     |
|----------------------------------------------------|-------------------|-------------|
| Mailbox Size                                       | 1 to 99 minutes   | 6 minutes   |
| Pause For TT Input                                 | 1 to 9 seconds    | 4 seconds   |
| Maximum Extension Length                           | 1 to 7 digits     | 4 digits    |
| Maximum Message Length                             | 30 to 360 seconds | 120 seconds |
| Allow Guests To Save Messages?                     | yes or no         | no          |
| Lamp ON For New Messages Only?                     | yes or no         | no          |
| Automatic Transfer to Operator At End Of Call?     | yes or no         | no          |
| Message Lamp Controlled By:                        | PMS or AVPL       | PMS         |
| When PMS Link Is Down, Calls For Guest Handled By: | Attendant or AVPL | Attendant   |
| Mailbox Size                                       | 1 to 99 minutes   | 6 minutes   |
| Pause For TT input                                 | 1 to 9 seconds    | 4 seconds   |
| Maximum Extension Length                           | 1 to 7 digits     | 4 digits    |
| Maximum Message Length                             | 30 to 360 seconds | 120 seconds |
| Allow Guests To Save Messages?                     | yes or no         | no          |
| Lamp ON For New Messages Only?                     | yes or no         | no          |
| Automatic Transfer to Operator At End Of Call?     | yes or no         | no          |

| System Parameter                                    | Possible Values   | Default   |
|-----------------------------------------------------|-------------------|-----------|
| Message Lamp Controlled By:                         | PMS or AVPL       | PMS       |
| When PMS Link is Down, Calls For Guests Handled By: | Attendant or AVPL | Attendant |

For additional information about each parameter, please refer to Chapter 9, "System Tuning," in AUDIX Voice Power Administration (585-310-525). Also refer to Worksheet 1-3, "AUDIX Voice Power Lodging System Parameters," from Chapter 1 in this document.

If you are already logged in as *audix*, begin with Step 3.

1. Enter **audix** at the console login prompt.

The system responds with the password prompt.

2. Press [ ENTER ] at the password prompt.

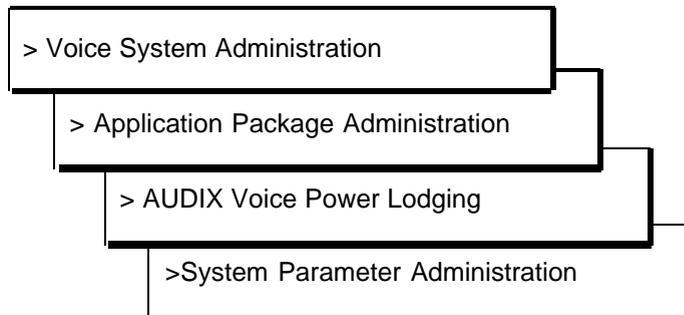
The system responds with the IVPSS R3.0 menu.

```

IVPSS R3.0
>ATT FACE
Voice System Administration
Exit

```

3. Begin at the IVPSS R3.0 menu and pick the following sequence:



The system displays the System Parameter Administration screen:

```

System Parameter Administration
Attendant Extensions:

Hunt Group Or
Primary Attendant: _____

Voice Mail Parameters
Mailbox Size: 6 min
Pause For TT Input: 4 sec
Maximum Extension Length: 4
Maximum Message Length: 120 sec
Allow Guests To Save Messages?: No
Lamp ON For New Messages Only?: No
Automatic Transfer to
Operator At End Of Call?: No
PMS Integration Parameters
Message Lamp Controlled By: PMS
When PMS Link Is Down, Calls
For Guests Handled By: Attendant

```

4. Select the field that you want to change. To select a field, use either the up and/or down arrow keys, or press the tab key.
5. Enter the value that you desire. To enter a value, either type in the information, or press [ CHOICES ] (F2) to see what is available. When using a choices screen, use the up and/or down arrow keys to highlight your selection and press [ ENTER ] to enter your choice.

⇒ **NOTE:**

Press [ CANCEL ] (F6) to exit a choices screen without making any selections. You may also press [ CANCEL ] (F6) if you want to leave the System Parameter Administration screen without making any changes.

6. Move to the next field that you want to change.
7. Repeat Steps 4 through 6 for each field that you want to change.
8. Press [ SAVE ] (F3) to save your changes.

The system responds with a confirmation screen stating:

```
System Parameters Updated
```

9. Press [ ENTER ] to continue.

The system responds by returning you to the AUDIX Voice Power Lodging screen.

## **Register the AUDIX Voice Power Lodging Administrator**

---

This task is required for configurations AUDIX Voice Power Lodging systems, both PMS-integrated and non-PMS.

Registering the AUDIX Voice Power Lodging administrator gives a particular extension administrative privileges, such as broadcasting messages to all guests. 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.

⇒ **NOTE:**

The voice system must be running in order to perform this procedure.

Also register your administrator on the PMS system, if you are installing a PMS-integration.

If you are already logged in as audix, begin with Step 3.

1. Enter **audix** at the console login prompt on the AUDIX Voice Power Lodging terminal.

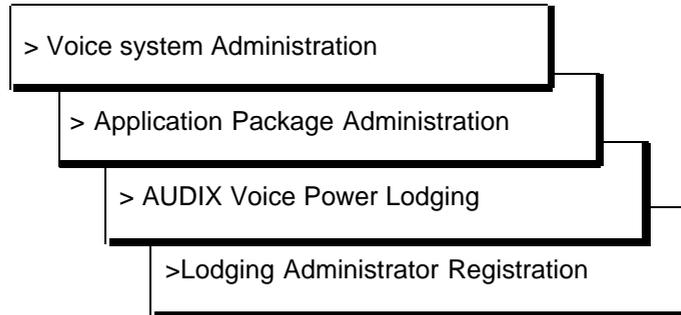
The system responds with the password prompt.

2. Press [ **ENTER** ] at the password prompt.

The system responds with the IVPSS R3.0 menu.

```
IVPSS R3.0
> AT&T FACE
Voice System Administration
Exit
```

3. Begin at the IVPSS R3.0 menu and pick the following sequence:



The system responds with the Lodging Administrator Registration screen.

4. Enter the administrator's extension in the Administrator Extension field. Use the up and/or down arrow keys to move from field to field.

⇒ **NOTE:**

The length of the administrator's extension may not exceed the Maximum Extension Length for the system. The Maximum Extension Length for the system is located under System Parameter Administration on the AUDIX Voice Power Lodging menu.

5. Enter a 4-digit phone-based password for the administrator in the Administrator Password field.

The administrator must enter this password whenever he or she logs onto AUDIX Voice Power Lodging using the telephone. You may wish to use a combination of letters that spell a brief word. Do not use the same digits as the administrator's extension.

 **CAUTION:**

*Keep this and all passwords secure. Do not share these passwords with unauthorized individuals. Do not write these passwords down.*

6. 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 connect to their mailboxes. You may wish to use a combination of letters that spell a brief word. Do not use the same digits as the administrator's extension.

7. Press [ SAVE ] (F3).

The system responds:

Are you sure you want to save these  
registration parameters?

Press <y> to confirm.

Press <n> to cancel.

8. Enter **y** to confirm your choice of saving registration parameters.

The system responds with a confirmation screen.

9. Press [ ENTER ] to continue.

The system responds by returning you to the AUDIX Voice Power Lodging  
menu.

10. Press [ CANCEL ] (F6) three times to return to the IVPSS R3.0 menu.

11. Continue with the next section, "AUDIX Voice Power Cut-to-Service  
Procedures" on the next page if you are installing a coresident system.

## **Administer the Switch**

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 Voice Power Lodging documentation set for instructions.

## **AUDIX Voice Power Cut-to-Service Procedures**

---

Use the following procedures to cut the AUDIX Voice Power system to service:

### **Prerequisites for AUDIX Voice Power Cut-to-Service**

---

Before performing any cut-to-service procedures, ensure that the system administrator has completed the tasks necessary for the cut.

For AUDIX Voice Power:

- Preparing and distributing subscriber documentation
- Compiling the subscriber list
- Training subscribers
- Writing the in-service letter

For more information about these tasks, refer to the planning sheets from Chapter 1, "Introduction and Planning."

When you have verified that these activities have been completed, continue with the next section, "Log On".

---

1. AUDIX Voice Power subscriber documentation is available through AT&T Customer Information Center (CIC). For additional information, refer to Chapter 1, "Introduction and Planning."

## Log On

---

The administrator's login and password have special privileges that other logins do not. You must follow this procedure to log on as the administrator.

1. Enter **audix** at the console login prompt.

The system responds with the password prompt.

2. Press [ **ENTER** ] at the password prompt.

The system displays the following screen when you are logged onto the system:

```

IUPSS R3.0
> AT&T FACE
Voice System Administration
Exit

```

## Adjust System Parameters (Optional)

---

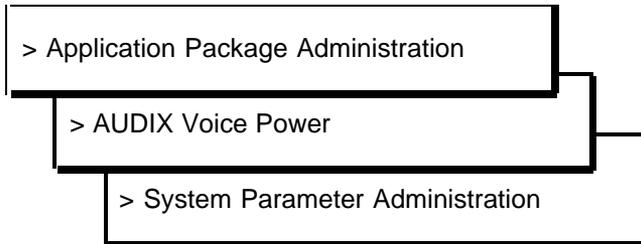
This is an optional installation step. If you rely on the system defaults, you will have the following settings:

| System Parameter                        | Possible Values   | Default     |
|-----------------------------------------|-------------------|-------------|
| System Operator Extension               | up to 6 digits    | none        |
| Pause For Touch Tone Input              | 4 – 9 seconds     | 7 seconds   |
| Maximum Extension Length                | 1 – 6 digits      | 4 digits    |
| Transfer to Subscribers Only?           | yes or no         | yes         |
| System Mode of Addressing               | extension or name | extension   |
| Maximum Message Length                  | 30 – 360 seconds  | 120 seconds |
| General Mailbox Owner Extension         | up to 6 digits    | none        |
| Enable General Mailbox for Call Answer? | yes or not        | no          |

| System Parameter                        | Possible Values               | Default  |
|-----------------------------------------|-------------------------------|----------|
| Allow Voice Mail/Call Answer transfers? | yes or no                     | yes      |
| Touch-Tone Gate Active – Day?           | yes or no                     | no       |
| Touch-Tone Gate Active – Night?         | yes or no                     | no       |
| Auto Attendant Time-out Action – Day?   | transfer, message, disconnect | transfer |
| Auto Attendant Time-out Action – Night  | transfer, message, disconnect | transfer |
| Auto Attendant Menu Plays               | 1 – 9                         | 2        |
| Fax Transfer Number                     | 16 characters                 | none     |
| Present Options Before Leaving Message  | yes or no                     | yes      |

For additional information, refer to Chapter 13, "System Tuning," in *AUDIX Voice Power R3.0 Administration* (585-310-532). Also refer to Worksheet 1-5, "AUDIX Voice Power System Parameters," from Chapter 1 in this document.

1. Begin at the Voice System Administration menu and select the following sequence:



The system displays the System Parameter Administration screen:

```

System Parameter Administration
System Operator Extension: _____
Pause for Touch Tone Input: 7 sec
Maximum Extension Length: 4
Transfer to Subscribers Only?: Yes
System Mode of Addressing: Extension
Maximum Message Length: 120 sec
General Mailbox Owner Extension: _____
Enable General Mailbox for Call Answer?: No
Allow Voice Mail/Call Answer Transfers?: Yes

Automated Attendant Parameters
Touch-tone Gate Active?: Day: No Night: No
Automated Attendant Timeout Action: Day: Transfer Night: Transfer
Automated Attendant Menu Plays: 2
Fax Transfer Number: _____
Present Options Before Leaving Message?: Yes

```

2. Select the field that you want to change. To select a field, use either the up and down arrow keys, or press the tab key.
3. Enter the value that you desire. To enter a value, either type in the information, or press [ CHOICES ] (F2) to see what is available. When using a choices screen, use the up and down arrow keys to highlight your selection and press [ ENTER ] to enter your choice.

⇒ **NOTE:**

Press [ CANCEL ] (F6) to exit a choices screen without making any selections. You may also press [ CANCEL ] (F6) if you want to leave the System Parameter Administration screen without making any changes.

4. Move to the next field that you want to change.
5. Repeat Steps 2 through 4 for each field that you want to change.
6. Press [ SAVE ] (F3) to save your changes.

The system responds with a confirmation screen stating:

```
System Parameters Updated
```

7. Press [ ENTER ] to continue.

The system responds by returning you to the AUDIX Voice Power screen.

8. Continue with "Add Subscribers."

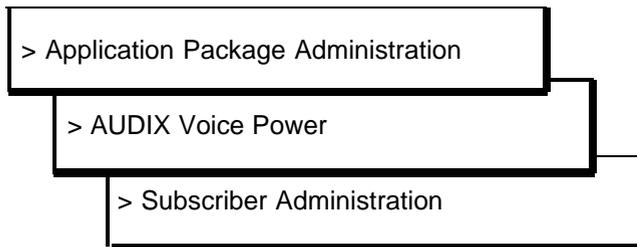
## Add Subscribers

A complete list of subscribers should have been compiled by the AUDIX Voice Power administrator prior to installation. Use the Chapter 1 worksheet, "AUDIX Voice Power Subscribers" and the following procedure to add those subscribers to the AUDIX Voice Power database.

⇒ **NOTE:**

For a complete explanation of each field on the Subscriber Administration screen, refer to Chapter 10, "Subscriber Administration", in *AUDIX Voice Power System R3.0 Administration (585-310-532)*.

1. Begin at the Voice System Administration menu and select the following sequence:



The system displays the Subscriber Administration screen:

```
Subscriber Administration
Extension: _____
Name: _____
Password: _____
Name Addressing Identifier: _____
TT Equivalent of Name Addressing Identifier: _____
Mode of Addressing: Extension
Mailbox Size: _____ min
Personal Operator: _____
Comments: _____

Class of Service: 1

Custom Class of Service Parameters
Does the Subscriber Have Switch Call Coverage?: Yes
If No Call Coverage, Enter Maximum Rings:
Coverage Service: Call Answer
Outcalling Allowed?: Yes
```

2. Enter the subscriber's extension in the Extension field.

This field allows up to 6 digits. No two subscribers on the system may have the same extensions. The number of digits in a subscriber's extension should not exceed the Maximum Extension Length system parameter. If the number of digits exceeds this length, callers will be unable to transfer to the extension. Do not use single digit extensions if you will be allow transfers to the operator.

⇒ **NOTE:**

To move from field to field in the Subscriber Administration screen, use the up and/or down arrow keys.

3. Enter the subscriber's full name in the Name field.

This field allows up to 20 characters. You may use both letters and numbers.

⇒ **NOTE:**

If you are running AUDIX Voice Power with a System 75, DEFINITY G1 or DEFINITY G3 PBX, you should enter the subscriber's name exactly as it appears in the switch's records.

4. Enter the subscriber's extension in the Password field.

Does this system use pound sign for the password default or does this still lock the mailbox?

5. Enter the subscriber's last name in the Name Addressing Identifier field.

6. Enter 5 in the Mailbox Size field.

7. For this initial installation, use the default values for all other fields.

8. When you are finished entering the subscriber information, press [ ADD ] (F1).

A window appears confirming that the new subscriber was added to the subscriber database.

9. Press [ ENTER ] to continue.

10. To add another subscriber, repeat Steps 2 through 8. When you are finished adding subscribers, continue with Step 11.

11. Press [ CANCEL ] (F6) several times to return to the IVPSS R3.0 window.

12. Continue with the next section, "Log Off."

## **Log Off**

The AUDIX Voice Power administrator's login and password allow you access to confidential information and special functions. Therefore, when you are finished adding subscribers, always perform the following procedure to log off of the AUDIX Voice Power system:

1. Press [ CANCEL ] (F6) until you reach the IVPSS R3.0 menu.
2. Move the cursor to Exit, using the up and/or down arrow keys.
3. Press [ ENTER ].

The system displays the Console Login prompt:

```
Welcome to the AT&T 386 UNIX System
Console Login:
```

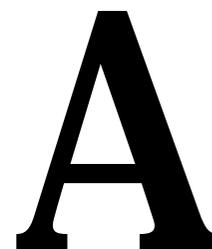
## **Administer the Switch for Cutover**

The next step is to perform certain switch administration procedures necessary for the cutover of the system. These procedures are switch specific. Therefore, you must now turn to the Cut-To-Service chapter of the switch integration document supplied with the AUDIX Voice Power documentation set for instructions.

If you are an AT&T customer and are unfamiliar with performing administrative tasks on the switch, ask your AT&T project manager how to have these switch administration procedures performed for you.

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# AUDIX Voice Power Lodging Troubleshooting



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This chapter provides troubleshooting information to help you isolate and correct problems that may occur with the AUDIX Voice Power Lodging system. The troubleshooting areas covered are:

- **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 in the process of bringing a system to a predetermined operation state. These problems include failure to boot, parity errors during boot, POST failure, and forgotten logins and passwords.
- **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 hardware and related connections.
- **Software Problems:** covers problems that may occur during the installation of AUDIX Voice Power Lodging and related software.
- **Procedures:** provides step-by-step instructions for troubleshooting remedies, such as rebooting the system.

If you are experiencing problems with AUDIX Voice Power, refer to:

- "Trouble and Failure Indications," Chapter 2, *AUDIX Voice Power System R3.0 Maintenance* (585-310-113)
- "System Tuning," Chapter 13, *AUDIX Voice Power System R3.0 Administration* (585-310-532)

For Event Log listings, refer to:

- "System Message Listings," Chapter 3, *AUDIX Voice Power System R3.0 Maintenance* (585-310-113)
- "Event Messages," Appendix A, *AUDIX Voice Power Lodging Administration* (585-310-525)

## **Troubleshooting Strategy**

---

Problems with AUDIX Voice Power Lodging 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 or eliminate the minor problems. For major problems, you will need to follow your service path.

Below is a list of troubleshooting steps used identify possible problems and solutions:

1. Gather and record information about the problem, such as the room extension or the message that signaled problem.
2. Try to recreate the problem to confirm your data. Make test calls from guest phones, attendant phones, and the administrator's phone.
3. Either by process of elimination or by scanning this chapter, try to narrow the problem to one of the following:
  - call handling
  - system initiation
  - message waiting lamp (MWL)
  - Property Management System (PMS)
  - hardware
4. Go to the sections in this chapter that correspond to the problems you have pinpointed. One or more possible reasons and remedies are listed below the problem. The most commonly encountered reasons and remedies are listed first in each sections. Try all of the remedies before proceeding.
5. If you try all of the remedies and nothing works, escalate your remote maintenance center. The remote maintenance center may login using the maintenance modem or tell you which procedures to follow.

⇒ **NOTE:**

Because the system works with PMSs and other vendors' PBXs, make sure that the problem is with AUDIX Voice Power Lodging or AUDIX Voice Power before escalating.

## Call Handling Problems

---

This section helps you troubleshoot problems in the phone interface.

⇒ **NOTE:**

Many of the symptoms in this section are prompts spoken by AUDIX Voice Power signaling a problem.

### "Login Incorrect"

Description:

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:

1. Ask for the guest's extension and voice mail password. Use the AUDIX Voice Power Lodging terminal to verify that these are correct.
2. Call the voice mail retrieval number.
3. 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:

1. Determine the Maximum Extension Length by going to the System Parameter window. Refer to "Adjust AUDIX Voice Power Lodging System Parameters (Optional)" in Chapter 7, "Cut-to-Service Procedures."
2. 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. The implications of increasing this value are listed in Chapter 9, "System Tuning," in *AUDIX Voice Power Lodging Administration* (585-310-525).

## **"Invalid Extension" or "Invalid Password"**

Description:

"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:

1. Verify that guest is checked in using the correct extension.

Possible Reason:

In the integrated PMS environment, the PMS link was down when the guest checked in. Therefore, the guest has not been assigned a voice mailbox.

Remedy:

1. When the PMS link is restored and automatic database synchronization is completed, the guest will have a voice mailbox.
2. Verify the PMS link's state. Refer to the "Properly 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:

1. 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," in *AUDIX Voice Power Lodging Administration* (585-310-525).

Possible Reason:

The attendant is attempting to restore a deleted message for a checked-out guest.

Remedy:

1. Deleted messages are purged from the AUDIX Voice Power Lodging system when a guest checks out and cannot be restored.

**"Transfer failed. Please try again later."**

Description:

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:

1. Refer to your vendor's PBX documentation.

**"No one is checked into the room you dialed"**

Description:

Caller hears "No one is checked into 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:

1. Use the AUDIX Voice Power Lodging terminal 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:

1. Check the guest in using the procedure in Chapter 5, "Attendant Terminal-Based Activities," in *AUDIX Voice Power Lodging Administration* (585-310-525).

Possible Reason:

The wrong extension was used to check in the guest.

Remedy:

1. 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:

1. When the PMS link is restored and automatic database synchronization is completed, the guest will have a voice mailbox.
2. Verify the state of the PMS link. Refer to the "Property Management System Problems" section of this appendix.

Possible Reason:

The number of digits in the guest's extension exceeds the Maximum Extension Length system parameter.

Remedy:

1. Determine the Maximum Extension Length by going to the System Parameter window. Refer to "Adjust AUDIX Voice Power Lodging System Parameters (Optional)" in Chapter 7, "Cut-to-Service Procedures."
2. 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. The implications of increasing this value as listed in Chapter 9, "System Tuning," in *AUDIX Voice Power Lodging Administration* (585-310-525).

### **"No one is available to receive your call."**

Description:

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:

1. Specify the primary attendant extension or attendant hunt group number on the System Parameter window.

Possible Reason:

All of the attendant extensions are busy and the queue is full.

Remedy:

1. The caller or guest can try to reach the attendant later. If this problem is reported often, you may consider adding more attendant extensions.

### **Incorrect Transfer**

Description:

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:

1. Refer to the switch document in your AUDIX Voice Power Lodging documentation set and to your PBX vendor's documentation for instructions on administering call coverage paths.

### **AUDIX Voice Power Lodging Does Not Answer**

Description:

A guest dials the integrated message retrieval number. It rings, but AUDIX Voice Power Lodging never answers.

Possible Reason:

The analog line is not properly connected to the channel.

Remedy:

1. Perform the Diagnosing Equipment procedure in this chapter.
2. Identify and record which card and which channel do not pass the diagnostics.
3. Verify that each analog line is securely connected to the IVP4 adapters.

To do this, look at the back of the AUDIX Voice Power Lodging 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. 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:

1. Verify that all channels have services assigned using the "Reassign Services" procedure at the end of Chapter 5 to view the Voice Equipment screen.

### **"This call is experiencing technical difficulties."**

Description:

Caller hears: "This call is experiencing technical difficulties."

Possible Reason:

The PBX link is down.

Remedy:

1. Refer to the switch document in your AUDIX Voice Power Lodging documentation set for possible troubleshooting procedures.

Possible Reason:

The switch integration packages are not assigned to the proper application.

Remedy:

1. Verify that the switch integration-to-application association is correct. Refer to your switch documentation.

Possible Reason:

The phone to channel mapping is incorrect.

Remedy:

1. Verify that the phone to channel mapping is correct. Refer to "Reassign Services" procedure at the end of Chapter 5 to view the Voice Equipment screen.

Possible Reason:

The system is heavily loaded.

Remedy:

1. Try the call again later. If this problem persists, you may need to evaluate the number of channels needed at your establishment. Talk to your sales representative about increasing your system size. You may need an additional IVP4 circuit card or to move to the next size system.

Possible Reason:

At large hotels, database synchronization is in progress.

Remedy:

1. When automatic database synchronization is completed, all service will return to normal.
2. To verify the progress of the database synchronization, refer to the "Property Management System Problems" section of this chapter.

Possible Reason:

The AUDIX Voice Power Lodging 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:

1. No action. The message is automatically deleted by an AUDIX Voice Power Lodging process.

**"Due to technical difficulties, your call is being transferred."**

Description:

Caller hears: "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 screen defines that all coverage calls are to be handled by the attendant.

Remedy:

1. No action. When the PMS link is back up, callers will no longer hear this message.
2. Verify the state of the PMS link. Refer to the "Property Management System Problems" section this chapter,
3. For more information on system parameters, refer to Chapter 9, "System Tuning," in *AUDIX Voice Power Lodging Administration* (585-310-525).

## **Truncated (Shortened or Cutoff) Messages**

Description:

Messages are truncated.

Possible Reason:

There was excessive background noise when caller was leaving the message. Installer was using a speaker phone in an area with excessive background noise.

Remedy:

1. Record the test message with using the handset.
2. 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:

1. Inform the caller or guest of this feature. This feature is called "talk-off." It allows callers to interrupt messages, or give the system instructions without listening to an entire set of instructions.
2. Attempt to leave the message again.

Possible Reason:

When recording the message, the caller's voice simulated a touch tone. This terminated the recording.

Remedy:

1. Inform the caller or guest that this is a rare occurrence.
2. Attempt to leave the message again.

Possible Reason:

The incoming trunk lines are noisy.

Remedy:

1. Call you local phone company and ask them to check your lines.

### **"Message terminated by transfer to the operator."**

Description:

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:

1. Callers must speak their entire message before pressing any touch tones.

### **Incorrect Room Extension Number Prompt**

Description:

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:

1. 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:

1. Determine the Maximum Extension Length by going to the System Parameter window. Refer to "Adjust AUDIX Voice Power Lodging System Parameters (Optional)" in Chapter 7, "Cut-to-Service Procedures."
2. 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," in *AUDIX Voice Power Lodging Administration* (585-310-525).

**"There is no room in the mailbox to leave a message."**

Description:

Caller hears "There is no room in the mailbox to leave a message."

Possible Reason:

The guest's mailbox is full of messages.

Remedy:

- 1 . Inform the guest that they must delete unneeded messages. For more information on mailbox size, refer to Chapter 9, "System Tuning," in *AUDIX Voice Power Lodging Administration* (585-310-525).
- 2 . You may also want to examine the Guest Over Mailbox Limit report. Refer to Chapter 7, "Reports," in *AUDIX Voice Power Lodging Administration* (585-310-525).

**"The speech database is full."**

Description:

Caller hears "The speech database is full."

Possible Reason:

The AUDIX Voice Power system is extremely low on disk space.

Remedy:

- 1 . Perform the Stopping and Starting Voice System procedure in this chapter. This will rid the speech database of unrestrained messages, if any.
- 2 . 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.
- 3 . You may also want to examine the Guests Over Mailbox Limit and Mailbox Usage reports. Refer to Chapter 7, "Reports," in *AUDIX Voice Power Lodging Administration* (585-310-525). If this happens often, you may want to consider increasing your disk space. Talk to your sales representative.

## **Busy Signal**

---

Description:

When the integrated message retrieval number is dialed, a busy signal is heard.

Possible Reason:

The Diagnosing Equipment procedure is in progress.

Remedy:

1. Retry the call later.

Possible Reason:

All channels are currently in use and the queue is full.

Remedy:

1. Retry the call later. If this happens often, you may want to consider adding more channels for AUDIX Voice Power Lodging. Talk to your sales representative.

Possible Reason:

Channels are not in service.

Remedy:

1. Verify that all channels are in the INSERTV 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:

1. Verify that the correct extensions are mapped to their corresponding channels. Refer to the "View Voice Equipment Screen" procedure at the end of this appendix and Worksheet 1-2 "Channel and Service Assignments" from Chapter 1 for more information.

Possible Reason:

The AUDIX Voice Power Lodging computer is not on.

Remedy:

1. Perform the Visual Inspection detailed in this chapter.

## **Multiple Logins**

Description:

Caller or guest hears the phrase "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:

1. Try calling again later. If the problem persists, stop and start the voice system. Refer to "Stop and Start the Voice System" in Chapter 5, "Initial Administration."

Possible Reason:

Two people are trying to access the mailbox at the same time, probably, the guest and the attendant.

Remedy:

1. Try the call again later.

## **Answering Delay**

Description:

AUDIX Voice Power Lodging is taking a long time to answer.

Possible Reason:

All channels are busy.

Remedy:

1. If this problem occurs often, talk to your sales representative 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 PMS--database synchronization AUDIX Voice Power Lodging's response time.

Remedy:

1. When the synchronization is complete, response time will return to normal.

### **Delayed Transfers**

Description:

Attendants are experiencing delays when transferring calls.

Possible Reason:

Your lodging establishment has extensions with different numbers of digits.

Remedy:

1. The Maximum Extension Length parameter should be set as low as possible while still accommodating all rooms. See Chapter 9, "System Tuning," in *AUDIX Voice Power Lodging Administration* (585-310-525) for more information.

### **Reorder Tone**

Description:

Caller or guest hears the reorder tone (holler tone).

Possible Reason:

Channel is not administered properly in the PBX.

Remedy:

1. Refer to the switch document in your AUDIX Voice Power Lodging 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 Voice Power Lodging system or attempt to login.

### **Forgotten Passwords**

---

Description:

Unable to login to the AUDIX Voice Power computer as *root* or *audix*.

Possible Reason:

User has forgotten password. This is an extremely serious problem.

Remedy:

1. Escalate immediately to the next support tier.

⇒ **NOTE:**

You will need to know your system's root login and password if you are calling for a forgotten password for *audix*.

### **Cannot Login**

---

Description:

User is unable to login at the console prompt.

Possible Reason:

The user is typing with capital letters.

Remedy:

1. 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 lower-case letters.

Possible Reason:

The user is entering the wrong password.

Remedy:

1. Attempt to login, verifying that the user does not have the Caps Lock key on while entering the password.
2. Follow the "Forgotten Password" procedure above.

### **System Will Not Boot**

Description:

The AUDIX Voice Power Lodging computer fails to start up or return a console login prompt.

Possible Reason:

There is a diskette in the floppy drive that does not have bootable data.

Remedy:

1. Remove the diskette, and press Ctrl-Alt-Del to reboot.

Possible Reason:

There is a hardware problem.

Remedy:

1. Refer to the "Hardware Problems" section of this chapter.

### **Parity Errors During Boot**

Description:

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:

1. Record the errors printed on your screen then escalate to the next support tier.

## **POST Failure**

---

Description:

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:

- 1 . 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 Voice Power Lodging provides a system parameter that allows you to specify either PMS or AUDIX Voice Power Lodging as the controller of the MWL. Refer to Chapter 9, "System Tuning," in *AUDIX Voice Power Lodging Administration* (585-310-525) for information.

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. It is best to discourage attendants from activating the MWL from the console, because it complicates troubleshooting.

### **Guest Has Messages But MWL Is Not On**

Description:

Guest room MWL does not indicate that the guest has waiting messages.

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:

1. When the PMS link is back up, MWLs are automatically updated to correct downtime inconsistencies.
2. 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," in *AUDIX Voice Power Lodging Administration* (585-310-525).

Possible Reason:

The PBX link is down and the System Parameter window specifies that the MWL is controlled by the AUDIX Voice Power Lodging.

Remedy:

1. Refer to the switch document in your AUDIX Voice Power Lodging documentation set.

Possible Reason:

The PBX administration of the MWL is incorrect.

Remedy:

1. Refer to the switch document in your AUDIX Voice Power Lodging 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:

1. Check the phone set connection. When you insert the phone line into the phone set, it will click when properly in place.
2. 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.

## **MWL Not Synchronized**

Description:

The administrator's and attendants' MWLs are not synchronized (on when they are supposed to be off and vice versa).

Possible Reason:

The Administrator and attendant extensions are not checked-in guests.

Remedy:

1. Check in the administrator's extension and attendants extensions as regular guests. Refer to the Initial Activities section of Chapter 3, "Administrator's Activities," in *AUDIX Voice Power Lodging Administration* (585-310-525).

## Multiple Complaints of Non-Synchronized MWLs

---

Description:

You receive many complaints that MWLs are not synchronized. The MWLs are on when they are supposed to be off and vice versa.

Possible Reason:

In the integrated PMS environment, the PMS link is down.

Remedy:

1. When the PMS link is back up, MWLs are updated automatically to correct downtime inconsistencies.
2. 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:

1. 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:

1. Refer to your PMS vendor's manual for possible remedies.

Possible Reason:

The PBX link is down and AUDIX Voice Power Lodging controls of the MWLs.

Remedy:

1. Refer to the switch document in your AUDIX Voice Power Lodging documentation set. For more information on MWL control, refer to Chapter 9, "System Tuning," in *AUDIX Voice Power Lodging Administration* (585-310-525).

Possible Reason:

In the non-PMS environment and in the integrated PMS environment, the MWL queue is malfunctioning.

Remedy:

1. Stop and start the voice system. Refer to "Stop and Start the Voice System" in Chapter 5, "Initial Administration."

Possible Reason:

Control of the MWL was changed on the System Parameters window.

Remedy:

1. Change the control back to its original setting. Refer to Chapter 9, "System Tuning," in *AUDIX Voice Power Lodging Administration* (585-310-525).

## **AUDIX Voice Power Lodging Property Management System (PMS) Problems**

The link between the PMS and the AUDIX Voice Power Lodging system is extremely important. Each system (PMS and AUDIX Voice Power Lodging) keeps its own database of information. The link allows the PMS and AUDIX Voice Power Lodging to talk and update each other's databases. For example, PMS automatically tells AUDIX Voice Power Lodging when it checks guests in so that AUDIX Voice Power Lodging can add those guests to its database and give them voice mailboxes.

AUDIX Voice Power Lodging automatically tells PMS when guests receive voice messages so that PMS can update those guests' voice message tallies.

### **PMS—Link Down**

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 procedure 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 backup and the databases have been automatically desynchronized.

```
#6341 P_LINKUP PMS:WTR:link is up; automatic database
synchronization
```

```
#6342 P_DBSYNC_END PMS:WTR:automatic database
synchronization completed
```

## **AUDIX Voice Power Lodging/PMS Link Down**

If the PMS link is down, perform the following steps in order:

1. Check the physical connection between the AUDIX Voice Power Lodging 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.

⇒ **NOTE:**

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 Voice Power Lodging, refer to Appendix B, "Maintenance Procedures" in *AUDIX Voice Power Lodging Administration* (585-310-525).
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 Voice Power Lodging 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 "Verify Automatic Database Synchronization" in Chapter 7 for the path to reach the Event Log and an explanation of the EXPLAIN key. Chapter 7 "Reports" and Appendix A "Event Messages" in *AUDIX Voice Power Lodging Administration* (585-310-525) also contain information about the Event Log.
6. Refer to your PMS vendor's documentation for troubleshooting paths.

⇒ **NOTE:**

It is recommended that you follow your PMS vendor's service path before escalating to the next support tier.

## **AUDIX/PMS Link Up**

If the PMS link is up and you are experiencing problems with the voice mail system, determine which system (AUDIX Voice Power Lodging 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 "Verify Automatic Database Synchronization" in Chapter 7 for the path to reach the Event Log and an explanation of the EXPLAIN key. Chapter 7 "Reports" and Appendix A "Event Messages" in *AUDIX Voice Power Lodging Administration* (585-310-525) also contain information about the Event Log.



**NOTE:**

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, restart the PMS link. Use "Restarting the PMS Link to Retry Automatic Synchronization" in Chapter 7 "Cut-to-Service Procedures," or refer to Appendix B "Maintenance Procedures" in *AUDIX Voice Power Lodging Administration* (585-310-525).

It is recommended that you follow you PMS vendor's service path before following your service path.

### **While the Link is Down**

When the link goes down, you should remember:

- 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 checks 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 when the PMS link is down:
  1. AUDIX Voice Power Lodging can continue to take voice messages, or
  2. all coverage calls can be transferred to the attendant.

Refer to Chapter 9, "System Tuning," in *AUDIX Voice Power Lodging Administration* (585-310-525) for additional information.

If AUDIX Voice Power Lodging handles coverage calls while the link is down, guests can check out and AUDIX Voice Power Lodging 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 Voice Power Lodging administrator option. Refer to Chapter 9, "System Tuning," in *AUDIX Voice Power Lodging Administration* (585-310-525) for additional information.

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 Voice Power Lodging 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 Voice Power Lodging hardware.

Use the following steps to perform a visual inspection:

1. Make sure that the computer and monitor are getting power by checking the power cord connection at the unit and at the outlet.
2. 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.
3. Verify that the power switch on the computer is in the on position. The Console Login prompt will appear if the system has booted correctly.
4. 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.
5. Make sure that all connectors and cables are firmly attached to the unit and to their destination.
6. Verify that the MAP/5 is covered. Do not operate the MAP/5 without the covers in place.
7. Listen for the operation of the fan. Look at the rear of the unit. Be sure that the unit has adequate ventilation space. There should be a minimum of 6 inches for adequate air flow.

⇒ **NOTE:**

The AUDIX Voice Power Lodging MAP/5 has 1 exhaust fan. This fan is located near the power supply.

8. Verify that the Caps Lock key is not on.

## Customer Test Diagnostics Diskette

Refer to the *Multi-Application Platform/5 User's Guide* (585-211-110) that was shipped with your system.

## IVP4 Circuit 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.

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 (shortened or stopped) during playback.

If you are encountering either of these problems, run diagnostics for the IVP4 circuit cards:

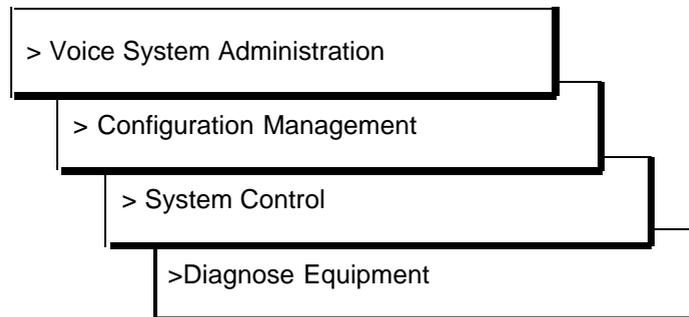
1. Enter **audix** at the Console Login prompt.  
The system responds with the Password prompt.
2. Press [ **ENTER** ] at the Password prompt or enter your password if a password has been assigned.

The system displays the following:

```
IVPSS R3.0
VAT&T FACE
Voice System Administration
Exit
```

*(This procedure is continued on the following page.)*

3. Begin at the IVPSS R3.0 menu and select the following sequence:



The system responds with the Diagnose Equipment screen.

4. Press [ CHOICES ] (F2) to display a list of equipment choices with the cursor on the Equipment to diagnose field.
5. Select your choice.
6. Press [ ENTER ].
7. Enter the card or channel number for the channels.
8. Enter y for immediate diagnosis.

⇒ **NOTE:**

You may wish to delay diagnostics until a low-traffic period.

9. Press [ SAVE ] (F3) to start the diagnostic procedure.
10. Press **y** to confirm that you wish to diagnose the equipment immediately. When it is finished, the system displays the results of the diagnosis.
11. Press [ CANCEL ] (F6) until you reach the Configuration Management screen.
12. Select Voice Equipment.
13. Press [ ENTER ] to display the Voice Equipment screen.
14. Examine the STATE fields for the channels to verify that all of the purchased channels are Inserv.
15. Press [ CANCEL ] (F6) until you reach the IVPSS R3.0 menu if you wish to exit the system.

You may also wish to verify that the hardware settings for the IVP4 circuit card are correct. To do this, refer to Chapter 3, "Hardware Installation," in this document.

### **AUDIX Voice Power Lodging Monitor is Blank**

Description:

AUDIX Voice Power Lodging monitor does not display system information.

Possible Reason:

Monitor is not on.

Remedy:

1. Make sure that the monitor is getting power by checking the power cord connection in the back of the monitor and at the outlet.
2. 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:

1. 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:

1. Escalate to the next support tier.

Possible Reason:

Loss of power can cause an ungraceful shutdown of the system. Proceed cautiously after a power outage.

Remedy:

1. 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.

### **FD:Write failed**

Description:

During backup your terminal displays an FD:Write failed error message.

Possible Reason:

The system cannot to write to the floppy drive.

Remedy:

1. Escalate to the next support tier.

### **I/O or Panic Errors**

Description:

Console presents I/O or Panic errors.

Possible Reason:

There is a hardware problem.

Remedy:

1. Perform the Rebooting the System procedure in this chapter.
2. If the messages persist, write them down, and then escalate to the next support tier.

### **Hard Disk Controller Error**

Description:

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:

1. Escalate to the next support tier.

## **Software Problems**

---

This section provides information about troubleshooting problems while installing AUDIX Voice Power Lodging and related software.

### **No Administrator Login**

---

Description:

During the installation of AUDIX Voice Power Lodging application software of AUDIX Voice Power application software, you are prompted to enter the administrator's login. However, you have not created one yet.

Possible Reason:

Administrative logins were not created through the AT&T FACE menu.

Remedy:

1. Stop the installation by pressing the [ **DELETE** ] key and create the necessary logins using the procedure detailed in Chapter 4, "Software Installation," in this document.

## Procedure to View the Voice Equipment Screen

---

Use this procedure to view the phone to channel mapping. If you need to re-assign channels and extensions, use "Map PBX Extensions to Channels" in Chapter 5, "Initial Administration and Test," in this document.

1. Enter **audix** at the Console Login prompt.

The system responds with the Password prompt.

2. Press [ **ENTER** ] at the Password prompt.

The system displays the following:

```
IVPSS R3.0
> AT&T FACE
Voice System Administration
Exit
```

3. Begin at the IVPSS R3.0 menu and select the following sequence:

```
> Voice System Administration
 > Configuration Management
 > Voice Equipment
```

*(This procedure continued on the following page.)*

The system displays the Voice Equipment window with information similar to that shown in the following example:

| Voice Equipment |       |        |                 |              |       |       |      |      |
|-----------------|-------|--------|-----------------|--------------|-------|-------|------|------|
| CHN             | CD.PT | STATE  | STATE-CHNG-TIME | SERVICE-NAME | PHONE | GROUP | DPTS | TYPE |
| 0               | 0.0   | Inserv | May 25 13:41:46 | lodging      | -     | 2     | talk | IUP4 |
| 1               | 0.1   | Inserv | May 25 13:41:46 | lodging      | -     | 2     | talk | IUP4 |
| 2               | 0.3   | Foos   | May 25 13:41:46 |              | -     | 2     | talk | IUP4 |
| 3               | 0.4   | Foos   | May 25 13:41:46 |              | -     | 2     | talk | IUP4 |

4. Verify that your PBX extensions are correctly mapped to your channels. Refer to Worksheet 1-2 "Channel and Service Assignments" from Chapter 1 for a complete listing of the extensions and channels.

## Procedure for Backup

Before re-installing the UNIX operating system or reallocating space on the disk, ensure that the AUDIX Voice Power Lodging/AUDIX Voice Power Administrator has backed up any required files before you continue with loading the software. For additional instructions, refer to "Backing Up AUDIX Voice Power Lodging Files" in *AUDIX Voice Power Lodging Administration (585-310-525)*.

⇒ **NOTE:**

You may wish to format floppies before beginning this procedure. To format floppies, go to the AT&T FACE menu and select: System Administration, Disk Operations, Format 1.44 floppy.

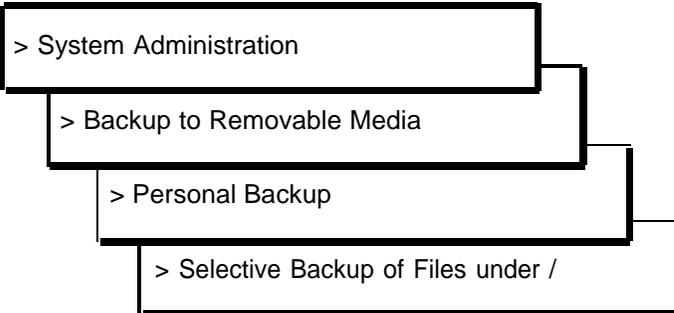
To backup files:

1. Stop the voice system. Refer to the procedure at the end of Chapter 5, "Initial Administration and Test."
2. Access the backup screen:
  - a. Enter **root** at the console login prompt.  
The system responds with the password prompt.
  - b. Press [ ENTER ] or enter the root password at the password prompt.  
The system responds with the UNIX prompt (unix#).
  - c. Enter **face** at the UNIX prompt (unix#).  
The system responds with the AT&T FACE menu:

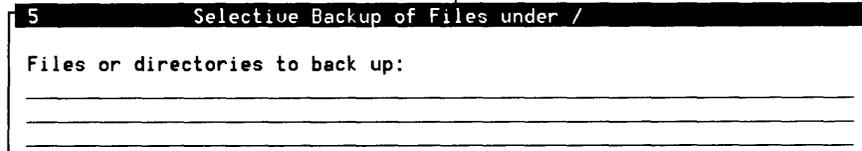
```
1 AT&T FACE
)Office of root
Printer Operations
Programs
System Administration
UNIX System
Exit
```

*(This procedure continued on the following page.)*

d. From the AT&T FACE main menu, select the following sequence:



The system displays the Selective Backup of Files under / screen:



3. List all files that you want to backup at one time and press [ SAVE ] (F3):

a. Backup the AUDIX Voice Power Lodging files:

**/usr/lgdb**

**/ldg/data**

**/gendb**

b. If your system has an AUDIX Voice Power coresidency, backup:

**/usr/vmdb**

**/usr/ocdb**

4. After backing up the above files, press [ CANCEL ] (F6) to return to the Backup to Removable Media menu. From this menu, select Speech Backup and then, Slective Backup of talkfiles/phrases.

a. ,For AUDIX Voice Power Lodging, **talkfile 101**

b. If your system has an AUDIX Voice Power coresidency, backup all speech in **talkfile 46, talkfile 47**

5. After re-installing the software, you may re-load the backed-up files in the reverse order. For instructions about restoring files, refer to *AUDIX Voice Power Lodging Administration* (585-310-525), Appendix B, "Maintenance Procedures."
6. Stop and re-start the voice system. Refer to the procedure at the end of Chapter 5, "Initial Administration and Test."

---

# Abbreviations

---

## A

### AC

alternating current

### ACD

automatic call distribution

### ADU

asynchronous data unit

### ALT

assembly load and test

### AUDIX®

Audio Information Exchange

---

## B

### BIOS

basic input/output system

### bps

bits per second

### BTU

British thermal unit

---

## C

### CDH

call data handling process

### CIC

customer information center

### CO

central office

### COM1

serial communications port 1

### COM2

serial communications port 2

---

**COR**

class of restriction

**COS**

class of service

**CPU**

central processing unit

**CTS**

clear to send

---

**D****DC**

direct current

**DCE**

data communications equipment

**DCIU**

data communications interface unit

**DCP**

digital communications protocol

**DID**

direct inward dialing

**DIP**

data interface process

**DMA**

direct memory access

**DTE**

data terminal equipment

**DTMF**

dual tone multifrequency

**DTR**

data terminal ready

---

**E****EIA**

Electronic Industries Association

**ESD**

electrostatic discharge

---

---

## **F**

### **FACE**

framed access command environment

### **FIFO**

first-in first-out

### **FMLI**

form and menu language interpreter

### **FOOS**

facility out of service

---

## **G**

### **GBCS**

Global Business Communications Systems

---

## **H**

### **Hz**

hertz

---

## **I**

### **I/O**

input/output

### **IPC-900**

intelligent ports card model 900

### **IRQ**

interrupt request

### **ISDN**

integrated services network

### **IVP4**

Integrated Voice Processing Card (4 channels)

### **IVPSS**

Integrated Voice Power system software

---

## **K**

### **Kbps**

kilobits per second

### **Kbyte**

kilobyte (1024 bytes)

### **kHz**

kilohertz

---

## **L**

### **LAT**

link acknowledgment timeout

### **LED**

light-emitting diode

### **LIT**

Lodging data interface process

### **LWC**

leave word calling

---

## **M**

### **MANOOS**

manually out of service

### **Mbyte**

megabyte (one million bytes)

### **MHz**

megahertz

### **modem**

modulator/demodulator

### **MPDM**

modular processor data module

### **MR**

maximum retransmissions

### **MRR**

maximum retransmission requests

### **ms**

millisecond

---

**MTC**  
maintenance

**MWL**  
message-waiting lamp

---

**O**

**OA&M**  
operations, administration, and maintenance

**OS**  
operating system

---

**P**

**PBX**  
private branch exchange

**PC**  
power converter or personal computer

**PEC**  
price element code

**PMS**  
property management system

**POST**  
power-on self test

---

**R**

**RAM**  
random-access memory

**REN**  
ringer equivalence number

**ROM**  
read-only memory

**RTS**  
request to send

---

## **S**

### **SCI**

Switch Communications Interface

### **SCSI**

small computer systems interface

### **SID**

switch integration device

### **SIMM**

single in-line memory module

### **SMSI**

simplified message service interface

---

## **T**

### **TDM**

time division multiplex

### **TIR**

tip/ring

### **TRIP**

tip/ring input process

### **TSM**

transaction state machine

### **TSC**

AT&T's Technical Services Center

---

## **U**

### **UCD**

uniform call distribution

### **UPS**

uninterrupted power supply

---

## **V**

### **VROP**

voice response output process

---

# Glossary

---

## A

**accessed message**

A voice mail message that was received and scanned (either the entire message or just the header).

**ACD**

See *automatic call distribution*.

**activity menu**

The list of options voiced to AUDIX® Voice Power™ subscribers when they first access the system. Selecting an activity is the starting point for all user operations.

**address**

AUDIX Voice Power subscriber identification, containing the subscriber's extension and machine, that indicates where the system needs to deliver a voice mail message. An address may include several subscribers or mailing lists.

**adjunct**

A separate system closely integrated with a switch.

**administration**

The process of setting up a system (such as a switch or a voice messaging system) to function as desired. Options and defaults are normally set up (translated) by the system administrator or service personnel.

**alarms**

Hardware, software, or environmental problems that may affect system operation. Alarms are classified as major, minor, or warning.

**alphanumeric**

Alphabetic, numeric, or punctuation symbols.

**ampere (amp)**

The unit of measurement of electric current. One volt of potential across one ohm causes a current flow of one amp.

**analog signal**

A communications path that, in teleprocessing usage, usually refers to a voice-grade telephone line.

**announcement**

A spoken message. After an announcement is played, for example in an automated attendant or in the information service, the caller is disconnected.

**antistatic**

A material that is treated to prevent the build-up of static electricity.

**asynchronous communication**

A method of data transmission in which bits or characters are sent at irregular intervals and bits or characters are spaced by start and stop bits and not by time. See also *synchronous communication*.

**asynchronous transmission**

A form of serial communications where each transmitted character is bracketed with a start bit and one or two stop bits.

**attendant**

See **operator**.

**Audio Information Exchange (AUDIX)**

A complete voice messaging system accessed and operated by touch-tone telephones and integrated with a switch.

**audit**

A software program that resolves filesystem incompatibilities and updates restored filesystems to a workable level of service. Audits are done automatically on a periodic basis, or can be performed on demand.

**AUDIX**

See *Audio Information Exchange*.

**automated attendant**

A feature that allows a users of an AUDIX Voice Power system to set up a main extension number with a menu of options that routes callers to an appropriate department or message at the touch of a button.

---

**B**

**backup**

A duplicate copy of files and directories saved on a removable media such as floppy diskette or tape. The backup filesystem may be copied back (restored) if the active version is damaged (corrupted) or lost.

**basic input/output system (BIOS)**

A system that contains the buffers for sending information from a program to the actual hardware device the information should go to.

**baud**

A unit of measurement that describes the speed of transferred information.

**baud rate**

Transmission signaling speed.

**binary digit (bit)**

Two-number notation that uses the digits 0 and 1. Low-order bits are on the right (for example, 0001 =1, 0010=2, and so forth). Four bits make a nibble; eight bits make a byte.

**BIOS**

See *basic input/output system*.

**bit**

See *binary digit*.

**boot**

The operation to start a computer system by loading programs from disk to main memory (part of system initialization). Booting is typically accomplished by physically turning on or restarting the system.

**boot filesystem**

The filesystem from which the system loads its initial programs.

**bps (bits per second)**

The number of binary units of information (1s or 0s) that can be transmitted per second. Mbps refers to a million bits per second; Kbps refers to a thousand bits per second.

**broadcast messaging**

A feature that enables the system administrator and other designated users to send a voice mail message to all subscribers automatically.

**bulletin board**

Feature that allows a message to be played to callers who dial the extension. Callers cannot leave a message since it is a listen-only service. Also called *information service*.

**bus**

An electrical connection/cable allowing two or more wires, lines, or peripherals to be connected together.

**busy-out/release**

To remove a device from service (make it appear busy or in use), and later restore it to service (release it). The switch data link or voice ports maybe busied out if they appear faulty or if maintenance tests are run.

**byte**

A unit of storage in the computer. On many systems, a byte is eight bits (binary digits), the equivalent of one character of text.

---

**C**

**call-answer**

A feature that allows the system to answer a call and record a message when the subscriber is unavailable. Callers may be redirected to the system through the call coverage or call forwarding switch features. Subscribers may record a personal greeting for these callers.

**call coverage**

A switch feature that defines a preselected path for calls to follow if the first (or second) coverage points are not answered. The system may be placed at the end of a coverage path to handle redirected calls through call coverage, send all calls, go to cover, etc.

**call-distribution group**

The set of analog port cards on the switch that connects subscribers and users to the system by distributing new calls to idle ports. This group (or split) is called automatic call distribution (ACD) on System 85, Generic 2, and Generic 3 and uniform call distribution (UCD) on System 75, Generic 1, and Generic 3. See also *automatic call distribution* and *uniform call distribution*.

**central office (CO)**

An office or location in which large telecommunication machines such as telephone switches and network access facilities are maintained. In a CO, private customer lines are terminated and connected to the public network through common carriers.

**central processing unit (CPU)**

The component of the computer that manipulates data and processes instructions coming from software.

**channel**

A telecommunications transmission path for voice and/or data.

**channel capacity**

A measure of the maximum bit rate through a channel.

**class of service (COS)**

The standard set of features given to AUDIX Voice Power subscribers when they are first administered (set up with a voice mailbox).

**clear to send (CTS)**

Located on Pin 5 of the 25-conductor RS-232 interface, CTS is used in the transfer of data between the computer and a serial device.

**CO**

See *central office*.

**comcode**

AT&T's numbering system for telecommunications equipment. Each comcode is a nine digit number that represents a specific piece of hardware, software, or documentation.

**command**

An instruction or request given by the user to the software to perform a particular function. An entire command consists of the command name and options. Also, one- or two-key touch tones that control a voice mailbox activity or function.

**computer-based**

Using AUDIX Voice Power from the computer or a terminal or pertaining to AUDIX Voice Power computer functions. See also **phone-based**.

**configuration**

The particular combination of hardware and software components selected for a system, including external connections, internal options, and peripheral equipment.

**controller circuit card**

A circuit card used on a computer system that controls its basic functionality and makes the system operational. These cards are used to control magnetic peripherals, video monitors, and basic system communications.

**coresident**

Two applications sharing the same hardware platform. AUDIX Voice Power may be coresident with AUDIX Voice Power Lodging.

**COS**

See *class of service*.

**coverage call**

A call that is redirected from an unanswered extension after a specified number of rings, or from an extension that is busy, and sent along a designated coverage path, for example to the AUDIX Voice Power computer.

**coverage path**

An ordered sequence of points to which calls to a busy or unanswered extension are redirected. A typical coverage path for a subscriber would include AUDIX Voice Power and for hotel guests, AUDIX Voice Power Lodging.

**CPU**

See *central processing unit*.

**cross connection**

The connection of one wire to another, usually by anchoring each wire to a connecting block and then placing a third wire between them so that an electrical connection is made.

**CTS**

See *clear to send*

**custom prompt**

The parts of AUDIX Voice Power's prompts, messages, and speech that you can change. For example, you can customize the call-answer greeting for AUDIX Voice Power to include your company name.

**cut-from-service**

The set of tasks which take the AUDIX Voice Power Lodging system out-of-service.

**cut-to-service**

The set of tasks which take the AUDIX Voice Power Lodging system from installation to an operational voice mail system.

---

**D**

**database**

A structured set of files, records, or tables. Also, a collection of filesystems and files in disk memory that store the voice and nonvoice (program data) necessary for system operation.

**data communications equipment (DCE)**

Standard type of data interface normally used to connect to data terminal equipment (DTE) devices. DCE devices include the data service unit (DSU), the isolating data interface (IDI), and the modular processor data module (MPDM).

**data link**

A term used to describe the communications link used for data transmission from a source to a destination. For example, a phone line for data transmission.

**data terminal equipment (DTE)**

Standard type of data interface normally used for the endpoints in a connection. Normally the AUDIX Voice Power Lodging system, most terminals, and the switch data link are DTE devices.

**data terminal ready (DTR)**

A control signal sent from the data terminal equipment (DTE) to the data communications equipment (DCE) that indicates the DTE is on and ready to communicate.

**DCE**

See *data communications equipment*.

**DCP**

See *digital communications protocol*.

**debug**

See *troubleshoot*.

**dedicated line**

A communications path that does not go through a switch. A dedicated (hard-wired) path maybe formed with directly connected cables. MPDMs or other devices may also be used to extend the distance that signals can travel directly through the building wiring.

**default**

A value that is automatically supplied by the system if no other value is specified.

**delivered message**

A voice mail message that has been successfully transmitted to a recipient's incoming mailbox.

**demand testing**

Testing performed on request (usually by service personnel).

**diagnostic testing**

A program run for testing and determining faults in the system.

**dial-ahead/dial-through**

The act of interrupting or preceding AUDIX system announcements by typing (buffering) touch-tone commands in the order the system would normally prompt for them.

**digital**

Discrete data or signals such as 0 and 1 or on and off.

**digital communications protocol (DCP)**

A 64 Kbps digital data transmission code with a 160 Kbps bipolar bit stream divided into two information (I) channels and one signaling (S) channel.

**DIP switch**

See *dual in-line package switch*.

**direct call**

A call made directly to the AUDIX Voice Power computer, usually for voice mail retrieval.

**direct inward dialing (DID)**

A feature that allows an incoming call from the public network to reach a specific telephone without attendant help.

**direct memory access (DMA)**

A quick method of moving data from a storage device directly to RAM, which speeds processing.

**display terminal**

A data terminal with a screen and keyboard used for displaying screens and performing maintenance or administration activities.

**distribution list**

See *mailing list*.

**DMA**

See *direct memory access*.

**DSR**

See *data set ready*.

**DSU**

See *data service unit*.

**DTE**

See *data terminal equipment*.

**DTR**

See *data terminal ready*.

**dual in-line package (DIP) switch**

A very small switch, usually attached to a printed circuit card, in which there are only two settings: on or off (or 0 or 1). DIP switches are used to configure the card in a semipermanent way.

---

**E**

**electrostatic discharge (ESD)**

Discharge of a static charge on a surface or body through a conductive path to ground. An ESD can be damaging to integrated circuits.

**enabled/disabled**

The state of a hardware device that indicates whether or not the system can use it. Devices must be equipped before they can be enabled (made active). See also *equipped/unequipped*.

**error message**

A message on the screen indicating that something is wrong and possibly suggesting how to correct it.

**errors**

Problems detected by the system during operation and recorded in a log. Errors can produce an alarm if they exceed a threshold.

**escape to attendant**

A feature that allows a subscriber with the call answer feature to have a personal attendant or operator administered to potentially pickup an unanswered call. A system-wide extension could also be used to send callers to a live agent.

**ESD**

See *electrostatic discharge*.

**events**

Informational messages about the system's activities. For example, an event is logged when the system is rebooted. Events may or may not be related to errors and alarms.

**extension number**

A 1 to 7 digit number that routes a call to a subscriber or some other location at a company.

---

**F**

**field**

An area on a screen, menu, or report where information can be typed or displayed.

**file**

A collection of data treated as a basic unit of storage.

**filename**

Alphanumeric characters used to identify a particular file.

**filesystem**

A collection of related files (programs or data) stored on disk that are required to initialize a system and provide full service.

**F key**

See *function key*

**format**

To set up a disk, floppy diskette, or tape with a predetermined arrangement of characters so that the system can interpret meaningful information.

**form window**

See **window, form**

**function**

Individual steps or procedures within a voice mailbox activity.

**function key (F key)**

A key on a computer keyboard that performs a defined function when pressed. The user interface for the AUDIX Voice Power Lodging system defines keys F1 through F8.

---

**G**

**Generic 1, 2, or 3**

AT&T switch system software releases. Generic 1, Generic 3i, and Generic 3s correspond to the new generation of System 75-based software. Generic 2 and Generic 3r correspond to the new release of System 85-based software.

---

## H

### **hard disk drive**

A high-capacity data storage/retrieval device that is located inside a computer platform. A hard disk drive stores data on non-removable high-density magnetic media based on a predetermined format for retrieval by the system at a later date.

### **hardware**

The physical components of a computer system. The central processing unit, disks, tape and floppy drives are all hardware.

### **header**

Information that the system creates to identify a message. A message header includes the originator or recipient, type of message, creation time, and delivery time.

### **help**

A command run by pressing [ H ] to show the options available at your current screen position. In the AUDIX Voice Power system, press [ \* ] [ H ] on the telephone keypad to get a list of options. See also *on-line help*.

### **hertz (Hz)**

A measurement of frequency in cycles per second. A hertz is one cycle per second.

### **host switch**

The switch directly connected to the system over the data link.

### **hunt group**

A group of analog ports on a switch usually administered to search for available ports in a circular pattern.

### **Hz**

See *hertz*.

---

## I

### **IDI**

See *isolating data interface*.

### **INADS**

See *initialization and administration system*.

### **information service**

See *bulletin board*.

### **initialization**

The process of bringing a system to a predetermined operational state. The start-up procedure tests hardware; loads the boot filesystem programs; locates, mounts, and opens other required filesystems; and starts normal service.

### **initialization and administration system (INADS)**

A computer-aided maintenance system used by remote technicians to track alarms.

**initialize**

To start up the system for the first time.

**input**

A signal fed into a circuit or channel.

**integrated services digital network (ISDN)**

A network that provides end-to-end digital connectivity to support a wide range of voice and data services.

**integrated voice processing card**

The IVC6 card.

**interface**

The device or software that forms the boundary between two devices or parts of a system, allowing them to work together.

**interrupt request (IRQ)**

A device that signals the data bus and the CPU that it needs attention.

**I/O address**

input/output address.

**IRQ**

See *interrupt request*.

---

**J**

**jumper**

Pairs or sets of small prongs on circuit cards and mother boards that allow the user to instruct the computer to select one of its available operation options. When two pins are covered, an electrical circuit is completed.

---

**K**

**Kbps**

kilobits per second. One thousand bits per second.

---

**L**

**label**

The name assigned to a disk device (either a removable tape cartridge or permanent drive) through software. Cartridge labels may have a generic name (such as 3:3) to show the software release or a descriptive name if for backup copies (such as back01). Disk drive labels usually indicate the disk position (such as disk00 or disk02).

**LCD**

See *liquid crystal display*.

**leave word calling (LWC)**

A switch feature that allows the calling party to leave a standard (nonvoice) message for the called party using a feature button or dial access code.

**LED**

See *light emitting diode*.

**light emitting diode (LED)**

A light indicator on the hardware platform that shows the status of operations.

**liquid crystal display (LCD)**

The 10-character alphanumeric display that shows status of the system, including alarms.

**load**

To read software from external storage (such as disk) and place a copy in system memory.

**local installation**

A switch, adjunct, or peripheral equipment installed physically near the host switch or system.

**login**

A unique code used to gain approved access to the system. See also *password*.

**login announcement**

A feature enabling the system administrator and other designated users to create a voice mail message that is automatically played to all AUDIX subscribers every time they login to the system.

---

## M

**magnetic peripherals**

Data storage devices that use magnetic media to store information. Such devices include hard disk drives, floppy disk drives, and cartridge tape drives.

**mailbox**

A portion of disk memory given to each AUDIX Voice Power subscriber for creating and storing outgoing and incoming voice mail messages.

**mailing list**

A group of AUDIX Voice Power subscriber addresses. A mailing list may be used to simplify sending messages to several subscribers.

**maintenance**

The process of identifying system errors and correcting them, or taking steps to prevent problems from occurring.

**major alarm**

An alarm detected by the software that indicates a service-affecting condition or that no service is available.

**megabyte**

A unit of memory equal to 1,048,576 bytes (1024 x 1024). It is often rounded to one million.

**memory**

A device which can store logic states such that data can be accessed and retrieved. Memory may be temporary (such as system RAM) or permanent (such as disk).

**message categories**

Groups of messages in AUDIX Voice Power subscribers' mailboxes. Categories include new, unopened, and old for the incoming mailbox and delivered, accessed, undelivered, undeliverable (not deliverable), and file cabinet for the outgoing mailbox.

**message delivery**

An optional feature that permits subscribers to send recorded messages to any touch-tone telephone, as long as the telephone number is in the range of allowable numbers.

**message-waiting lamp (MWL)**

An indicator that alerts subscribers that they have received new voice mail messages. An MWL can be LED, neon, or audio (stutter dial tone).

**minor alarm**

An alarm detected by maintenance software. Minor alarms may indicate problems that could lead to service failure.

**modem**

A device that converts data from a form that is compatible with data processing equipment (digital) to a form compatible with transmission facilities (analog), and vice-versa.

**modular**

A term that describes equipment made of plug-in units that can be added together to make the system larger, improve its capabilities, or expand its size.

**modular processor data module (MPDM).**

A data device that converts RS-232C or RS-449 protocol signals to digital communications protocol (DCP) used by System 75/85, Generic 1, and Generic 3 switches. MPDMs may connect the system to a switch DCIU or SCI link or connect terminals to a switch port card.

**MPDM**

See *modular processor data module*.

**MWL**

See *message-waiting lamp*.

---

**N**

**numeric**

Composed of numbers.

---

## O

### **on-line help**

A feature that provides information about the AUDIX Voice Power user interface screens by pressing a predetermined key. See also *help*.

### **operating system (OS)**

The set of programs that runs the hardware and interprets software commands.

### **option**

A choice selected from a menu, or an argument used in a command line to modify program output by modifying the execution of a command. When you do not specify any options, the command will execute according to its default options.

### **OS**

See *operating system*.

### **outcalling**

A feature that allows the AUDIX Voice Power system to dial subscribers' numbers to inform them they have new messages.

### **outgoing mailbox**

A storage area for subscribers to keep copies of messages for future reference or action.

### **outside caller**

someone calling into the company phone system from outside the PBX.

---

## P

### **parameter**

A variable for which you can enter a value. The typical form window contains 2 or more parameters. A line where you can enter the parameter's value (field) may follow the parameters description.

### **password**

A code assigned to every terminal user and subscriber for security reasons. After dialing the system, subscribers must dial their personal password correctly to log on. Passwords are also assigned to local and remote networked machines to identify the machines or the network. See also *login*.

### **PBX**

See *private branch exchange*.

### **PDM (processor data module)**

See *modular processor data module (MPDM)*.

### **peripheral device**

Equipment external to the AUDIX Voice Power cabinet, such as printers or terminals, necessary for full operation and maintenance of the system. Peripheral devices include modems and printers. Also called *peripherals*.

**personal directory**

An AUDIX Voice Power feature allowing each subscriber to create a private list of customized names.

**phone-based**

Using AUDIX Voice Power from a telephone or pertaining to AUDIX Voice Power telephone functions. See also *computer-based*.

**pinouts**

The signal description per pin number for a particular connector.

**port**

A jack on the faceplate of the IVP4 circuit card that accepts telephone line connections.

**private branch exchange (PBX)**

An analog, digital, or electronic system where data and voice transmissions are not confined to fixed communications paths, but are routed among available ports or channels. A private switching system. See also *switch*.

**processor data module (PDM)**

See *modular processor data module (MPDM)*.

**processor interface (PI)**

A System 75, Generic 1, Generic 3i, Generic 3s, and Generic 3vs switch data link. Also called *processor interface board (PIB)*.

**programmed function key**

See *function key*

**prompts**

A request by the system for information. A phone-based prompt is spoken and requests touch-tone input. A computer-based prompt is shown on the computer screen and requests keyboard input.

**protocol**

A set of conventions or rules governing the format and timing of message exchanges (signals) to control data movement and the detection and possible correction of errors.

---

**R**

**RAM**

See *random access memory*

**random access memory (RAM)**

The primary memory in a computer that can be overwritten with new information.

**reboot**

To instruct a system to reinitialize. If the system has been fully operational, you will need to perform a graceful shutdown using the shutdown command. See also *boot*.

**remote access**

Sending and receiving data to and from a computer or controlling a computer with terminals or PCs connected through communications links.

**remote installation**

A system, site, or piece of peripheral equipment that is installed in a different location from the host switch or system.

**remote service center**

An AT&T or AT&T-certified organization that provides remote support to customers. Your remote maintenance center depends upon the terms of your contract.

**remote terminal**

A terminal connected to a computer over a phone line.

**REN**

See *ringer equivalence number*.

**reply to sender**

An AUDIX Voice Power feature that allows subscribers to immediately place a call to the originator of an incoming message if that person is in the switch's dial plan.

**request to send (RTS)**

One of the control signals on a RS-232 connector that places the modem in the originate mode so that it can begin to send.

**restart**

The reinitialization of certain software, such as restarting the voice system.

**restore**

The process of recovering lost or damaged files by retrieving them from available backup tapes, floppy diskette, or another disk device.

**retention time**

The amount of time voice mail messages are saved on disk before being automatically deleted from a subscriber's mailbox.

**ringer equivalence number (REN)**

A number required in the United States for registering your telephone equipment with the phone company.

**RTS**

See *request to send*.

---

**S**

**sales representative**

An AT&T or AT&T-certified person who assists you in the purchasing, planning, and implementation of AT&T equipment and solutions.

**SCA**

See *switch communications adapter*.

**SCSI**

See *small computer system interface*.

**serial transmission**

The transmission of one bit at a time over a single wire.

**service administrator**

A person who has specific phone-based privileges such as customizing greetings based on the service he or she is assigned to: call-answer, automated attendant, voice mail, information service, or message drop.

**service path**

The procedure customers follow when they cannot fix an AUDIX Voice Power Lodging or AUDIX Voice Power problem.

**shielded cables**

Cables that are protected from interference with metallic braid or foil.

**SID**

See *switch integration device*.

**SIMMs**

See *single in-line memory modules*.

**single in-line memory modules (SIMMs)**

A method of containing random access memory (RAM) chips on narrow circuit card strips that attach directly to sockets on the CPU circuit card. Multiple SIMMs are sometimes installed on a single CPU circuit card.

**small computer systems interface (SCSI)**

An interface standard defining the physical, logical, and electrical connections to computer system peripherals such as tape and disk drives.

**split**

Group (or queue) of analog ports on the switch. See also *call-distribution group*.

**subscriber**

An AUDIX Voice Power user who has been assigned the ability to access the voice messaging system.

**support path**

See *service path*.

**surge**

A sudden voltage rise and fall in an electrical circuit.

**surge protector**

A device that plugs into the phone system and the commercial AC power outlet. It is designed to protect the phone system from high voltage surges that could be damaging to the phone system.

**switch**

An automatic telephone exchange that allows the transmission of calls to and from the public telephone network. See also *private branch exchange (PBX)*.

**switch integration device (SID)**

An interface that allows the AUDIX Voice Power Lodging and AUDIX Voice Power system to communicate with a non-AT&T switch. These may also be used with the AUDIX Voice Power Lodging MAP/5 to interface with an AT&T switch in place of the standard AT&T switch interface circuit cards.

**switched access**

A connection made from one endpoint to another through switch port cards. This allows the endpoint (such as a terminal) to be used for several applications.

**switch group**

A group of analog ports on the PBX usually administered to search for available ports in a circular pattern.

**switch hook**

The device at the top of most telephones which is depressed when the handset is resting in the cradle (on hook). This device is raised when the handset is picked up (the phone is off hook).

**switch hook flash**

A signaling technique in which the signal is originated by momentarily depressing the switch hook.

**switch network**

Two or more interconnected switching systems.

**synchronous communication**

A method of data transmission in which bits or characters are sent at regular time intervals, rather than being spaced by start and stop bits. See also *asynchronous communication*.

**synchronous transmission**

A type of data transmission where the data characters and bits are exchanged at a fixed rate with the transmitter and receiver synchronized. This allows greater efficiency and supports more powerful protocols.

**system configuration**

See *configuration*.

**system prompt**

AUDIX Voice Power Lodging and AUDIX Voice Power messages that lead callers and subscribers through options. See also *custom prompt*.

---

## T

**tape cartridge**

One or more spare removable cartridges required to back up system information.

**tape drive**

The physical unit that holds, reads, and writes magnetic tape.

**terminal**

See *display terminal*.

**terminal type**

A number indicating the type of terminal being used to log on to the AUDIX Voice Power Lodging system. Terminal type is the last required entry before gaining access to the display screens.

**terminating resistor**

A grounding resistor placed at the end of bus, line, or cable to prevent signals from being reflected or echoed.

**tip/ring**

A term used to denote the analog telecommunications interface.

**tone generator**

A device acoustically coupled to a rotary phone, used to produce touch-tone sounds when voice mail subscribers cannot use a regular touch-tone generating voice terminal.

**traffic**

The flow of attempts, calls, and messages across a telecommunications network.

**translations**

Software assignments that tell a system what to expect on a certain port or data link, or how to handle incoming data. They customize the system and switch features for users.

**troubleshoot**

The process of locating and correcting errors in computer programs. Also called *debug*.

---

**U**

**UCD**

See *uniform call distribution*.

**Unequipped**

See *equipped/unequipped*.

**uniform call distribution (UCD)**

The type of call-distribution group (or hunt group) of analog port cards on some switches that connects subscribers and users to the system. System 75, Generic 1, Generic 3, and some central office switches use UCD groups. See also *call-distribution group*.

**UNIX operating system**

A multi-user, multi-tasking computer operating system.

**user population**

A combination of light, medium, and heavy voice mail users on which configuration guidelines are based.

---

**V**

**value**

The information that you enter into a field. Values may be numeric or alphanumeric.

**vector**

A customized program in the switch for processing incoming calls.

**voice link**

The analog connection(s) to a call-distribution group (or hunt group) of analog ports on the switch.

**voice mail**

See *voice message*.

**voice mailbox**

See *mailbox*.

**voice message**

Digitized voice information stored by the system to disk memory. Also called *voice mail*

**voice port**

The IVP4 port that provides the voice interface between the system and the analog ports on the switch.

**voice terminal**

A telephone used for spoken communications with the system. A touch-tone telephone with a message-waiting lamp is recommended.

**voicing**

Either speaking a message into the system during recording, or having the system playback a message or prompt to a subscriber.

**volt**

The unit of measurement of electromotive force. One volt is the force required to product a current of one ampere through a resistance of one ohm.

---

**W**

**watt**

A unit of electrical power that is required to maintain a current of one amp under the pressure of one volt.

**window, form**

A series of related prompts and fields presented on 1 area of the computer screen. Forms are like paper forms that you can fill out with a pencil. The typical form window contains 2 or more parameters; each parameter is accompanied by a short description.

**window, menu**

A list of user-selectable items. The items maybe actions or choices to fill in a field.

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