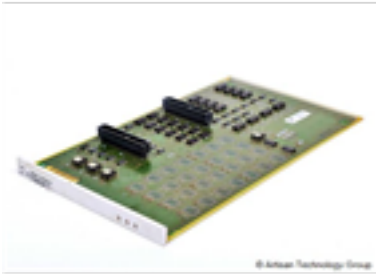
AT&T CPP1

Memory Expansion Module



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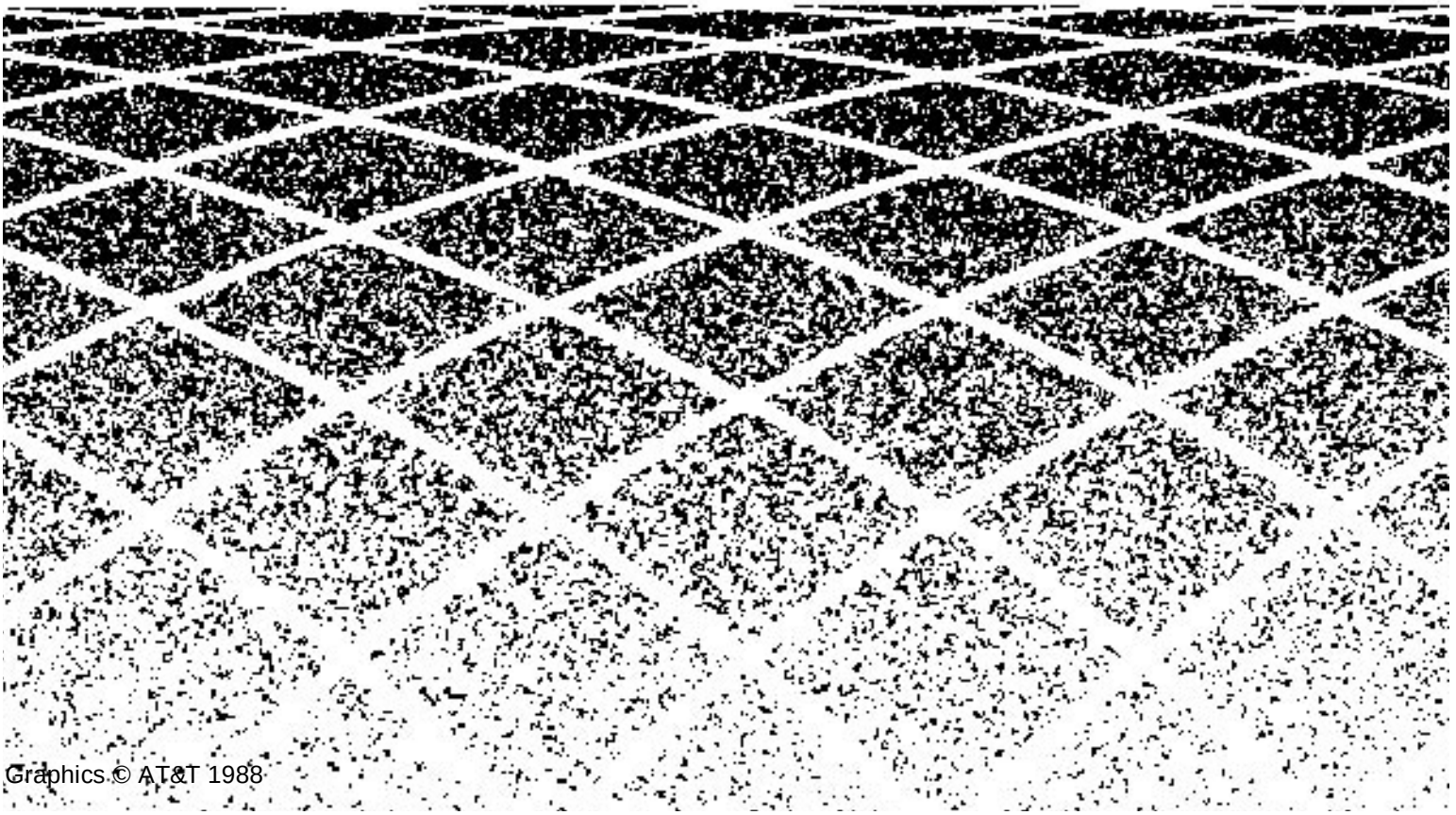
Issue 5
September, 1994

DEFINITY AUDIX
Installation and Upgrades



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About This Document

Overview

This document describes the installation and initial administration procedures for the hardware and software comprising the DEFINITY® AUDIX® Voice Messaging System. The procedures are described in the form of specific tasks that should be completed in sequence.

Intended Audiences

This document contains information primarily for people installing the DEFINITY AUDIX System hardware, Software Specialists (SS), Software Associates (SA), and other persons (such as factory personnel and customers) responsible for performing initial administration and cut-to-service procedures. Secondarily, this document contains information for Field Support and the Technical Service Organization (TSO).

Prerequisite Skills and Knowledge

Although the information in this document assumes no prerequisite training, it will be substantially easier to assimilate by persons with DEFINITY AUDIX system installation training.

Organization of This Document

This document is organized as follows:

- Chapter 1 — *Prerequisites*, identifies site requirements, required tools, safety considerations, and supported configurations.
- Chapter 2 — *Hardware Installation*, describes all the tasks required for installing the DEFINITY AUDIX system hardware and the associated peripherals.
- Chapter 3 — *Initial System Administration*, describes all the tasks required to initially administer the DEFINITY AUDIX system.
- Chapter 4 — *Confidence Checks*, describes the tasks required to verify the DEFINITY AUDIX system installation and operation.
- Chapter 5 — *Initial Subscriber Administration*, describes how to add the initial set of subscribers to the DEFINITY AUDIX system database.
- Chapter 6 — *Customer Acceptance*, describes the tasks that the Project Manager should conduct with the customer to demonstrate the DEFINITY AUDIX system.
- Appendix A, — *Software Upgrade Instructions*, describes considerations and procedures to upgrade the DEFINITY AUDIX system.
- Appendix B, — *Announcement Set Considerations and Installation*, describes customized announcement and fragment sets, and adding new language sets.
- Appendix C, — *Option Settings*, contains lists of the option settings for supported terminals, modems, data sets, and printers.
- Appendix D, — *Change Switch-Integration Mode*, describes how to change the DEFINITY AUDIX system from the digital-port (DP) switch-integration mode to the control-link (CL) mode, and vice versa.
- Appendix E, *Ordering Information*, contains a list of the Price Element Codes (PECs) for DEFINITY AUDIX system and peripheral hardware and software, including a description of the contents and Comcodes for each PEC.

A list of abbreviations, a glossary, and an index are also provided.

How to Use This Document

Hardware installers and SS/SAs should reference the tasks within the entire document, including the appendices.

Field Support, TSO, and factory personnel should read the entire document to gain a thorough overview of the DEFINITY AUDIX system installation procedures.

Conventions Used in This Document

The following typographic conventions are used in this document:

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

  Press RETURN.

- The word *enter* means to type a value or command and then press the RETURN key. For example, an instruction to type **y** and press RETURN is shown in this document as:

  Enter **y** to continue.

  NOTE:
  To send the information to the DEFINITY AUDIX system, the RETURN key (located on the right side of your keyboard) must be pressed after you type a command or a response to a prompt. On some keyboards, this key is labeled ENTER instead RETURN your .If keyboard has *both* a RETURN key and ENTER key (as on the 513 and 615 keyboards), use the RETURN key.

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

  Press CONTROL -D.

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

  At the login : prompt, enter **`audix`**.

- Variables whose values are supplied by you or the system are shown in italic type. For example, an error message that is displayed on the screen with one of your specific filenames might be shown generically in this document as:

  The filesystem *filename* is out of space.

Shadowed text indicates alternative procedures, the choice of which depends on the particular configuration of the DEFINITY AUDIX system you are installing.

Trademarks and Service Marks

The following trademarks are mentioned throughout this document:

- AUDIX® is a registered trademark of AT&T.
- DEFINITY® is a registered trademark of AT&T.
- Intuity™ is a trademark of AT&T.

Related Resources

The following documents are related to DEFINITY AUDIX system installation.

- For all DEFINITY AUDIX system planning information, including the worksheets needed for installation, see *Planning for DEFINITY AUDIX System*, 585-300-904.
- For complete details on ongoing administration of a DEFINITY AUDIX system, see *DEFINITY AUDIX System — Administration*, 585-300-507.
- For switch administration procedures, see *Switch Administration for DEFINITY AUDIX System*, 585-300-509.
- For complete details on the DEFINITY AUDIX system, see *DEFINITY AUDIX System — System Description*, 585-300-205.
- For all maintenance procedures, see *DEFINITY AUDIX System — Maintenance*, 585-300-110.
- For installation and operation information on the G3-MA (SAT-PC), see *DEFINITY Communications System Generic 3 Management Applications Station Provisioning*, 555-229-202.
- For installation and operation information on Intuity Message Manager, see *Intuity Message Manager User Guide*, 585-310-725.

To order additional AT&T documents from within the USA, call the AT&T Customer Information Center, 1-800-432-6600, and request each item by the appropriate document number.

How to Get Help

If problems arise during installation of the DEFINITY AUDIX System that cannot be resolved locally, call one of the following numbers for help:

Help Numbers	
Inside the USA, call the Technician's Help Line	1-800-248-1234
Outside the USA (including Canada and Puerto Rico),call the ITAC Hot Line	International access to US 0+ 2303-538-4666

How to Make Comments About This Document

The reader comment card is located after the title page. While we have tried to make this document fit your needs, we are interested in your suggestions for improving it and urge you to fill one out.

If the reader comment card has been removed from this document, please send your comments to:

AT&T
Product Documentation Development Department
Room 22-2C11
11900 North Pecos Street
Denver, Colorado 80234

Prerequisites

1

This chapter describes prerequisites for installing a DEFINITY AUDIX system. These include:

"Task 1: Verify the Selected Site"

"Task 2: Gather Required Tools"

"Task 3: Review Safety Considerations"

"Task 4: Verify the Components and Connectivity". Before beginning the installation, make sure you have completed these prerequisites.

Digital-Port and Control-Link Modes

The DEFINITY AUDIX system can be connected to the switch in one of two integration modes: digital-port (DP) mode or control-link (CL) mode. The installation procedures for these two modes are the same except for differences required by the following characteristics:

- The CL mode requires an external connection from the switch to an RS-232C port on the multifunction board (MFB) of the DEFINITY AUDIX system.
- The CL mode can support up to 16 voice ports; the DP mode can support up to 8 voice ports.

The procedural differences due to these different characteristics are clearly defined in the tasks and diagrams that follow. However, you need to know which integration mode — DP or CL — to set up for this installation. If you do not know whether this system is to be installed in DP or CL mode, contact the project manager or the TSO before proceeding.

Task 1: Verify the Selected Site

NOTE:
Although defining and ensuring that the site meets the DEFINITY AUDIX system requirements is the responsibility of the Project Manager and the customer, and must be *completed before* you install the DEFINITY AUDIX system, the guidelines are listed here so that you are aware of these requirements.

Verify that the site selected for the switch and the DEFINITY AUDIX system provides the following:

- For a DEFINITY AUDIX system being installed in an existing switch, five (four for a G3vs) contiguous slots in a switch carrier to house the DEFINITY AUDIX system (see *Planning for the DEFINITY AUDIX System*, 585-300-904, for switch reconfiguration details)
- Easy access for cabling
- Good workspace for the system administrator and/or operators
- Temperature range of 50 to 100° F (10 to 38° C), with the ideal range being 50 to 80° F
- Humidity range of 20 to 80%, noncondensing In addition, make sure the site is secure and provides protection from excessive sunlight, heat, cold, chemicals, static electricity, magnetic fields, vibration, and grime.

Task 2: Gather Required Tools

To install an DEFINITY AUDIX system, you must have the following tools:

- No. 1 or No. 2 Phillips screwdriver
- Narrow width, flat blade screwdriver
- 1/4-inch nut driver (recommended)
- Antistatic grounded wrist strap

Task 3: Review Safety Considerations

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

DANGER:
Do not touch the switch backplane while installing the DEFINITY AUDIX system. The backplane contains dangerous voltages and current.

To prevent damage to the equipment and yourself, adhere to the following:

- Make sure you are familiar with the procedures necessary to prevent electrostatic damage to the equipment.
- Properly ground a wrist strap.
- Place the grounded wrist strap on your bare wrist. (The wrist strap must contact your bare skin directly—do *not* wear it over your clothes.)
- Do not remove the DEFINITY AUDIX System assembly from the polyethylene bag until:
  - — Your wrist strap is on your wrist and properly grounded
  - — You have made room in the switch carrier and you are ready to insert the DEFINITY AUDIX System assembly in the carrier.
- If you need to work on the DEFINITY AUDIX System assembly — that is, disassemble it — place the assembly on a grounded antistatic work mat.

Task 4: Verify the Components and Connectivity

Review the connectivity diagrams in Figures 1-1 (for CL Mode), 1-2 (for DP Mode), and 1-3 (for LAN connection) on the following pages to gain a general understanding of how the DEFINITY AUDIX system is to be connected. Refer to the diagrams in Tasks 7 and 8 in Chapter 2, *Hardware Installation*, for connectivity details.

Then compare the Price Element Code (PEC) list contained in Appendix E with the actual parts you received to make sure that all the required parts have been ordered and shipped correctly. In addition to the orderable components listed in Appendix E, other terminals, modems, and printers are supported and may be used in the DEFINITY AUDIX system configuration.

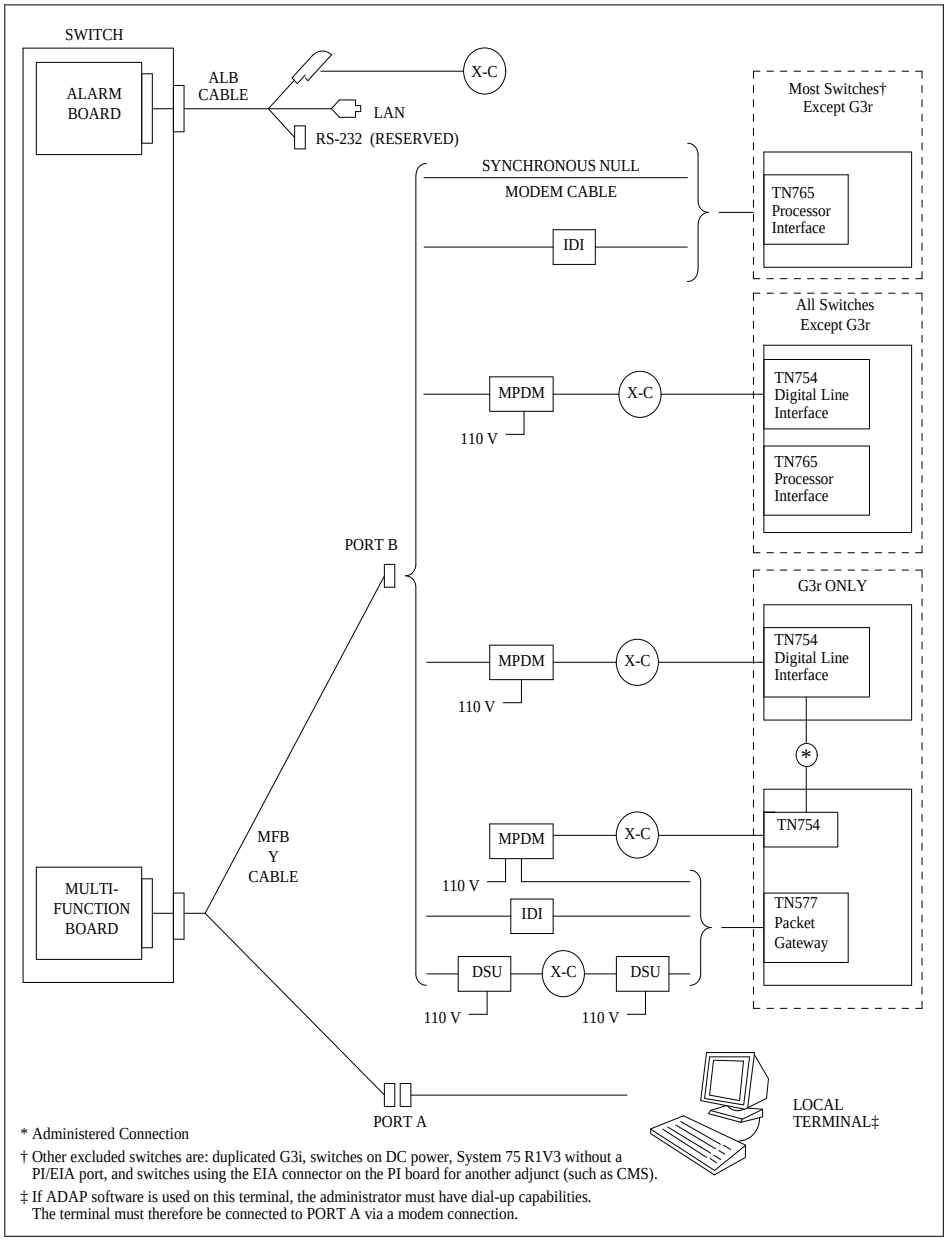


Figure 1-1. DEFINITY AUDIX System Connectivity Diagram — CL Mode

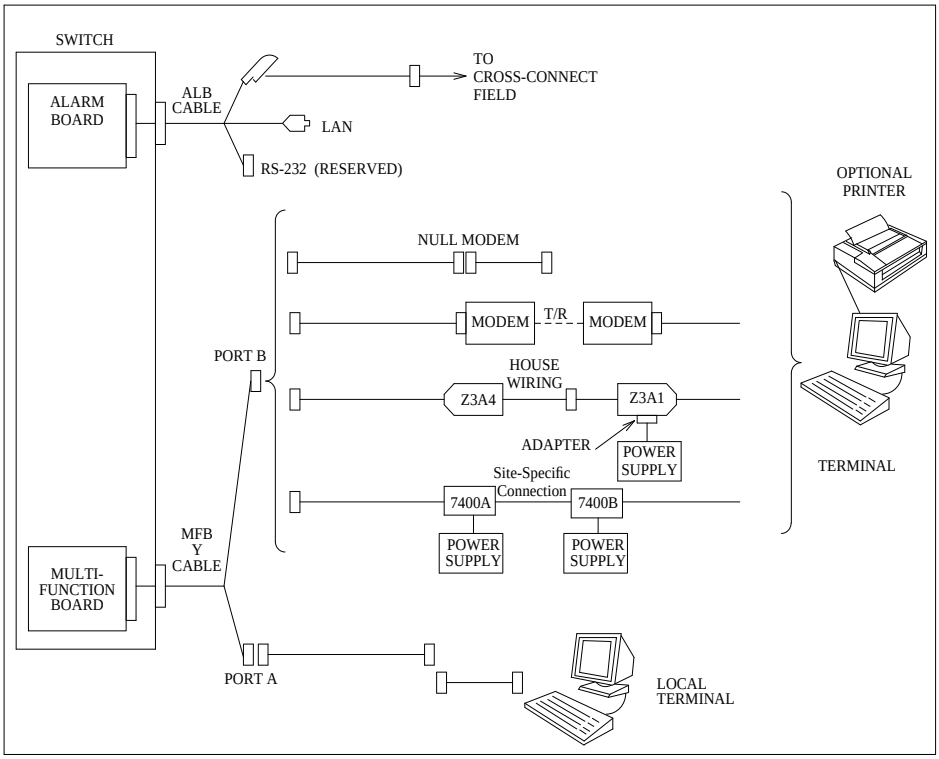


Figure 1-2. DEFINITY AUDIX System Connectivity Diagram — DP Mode

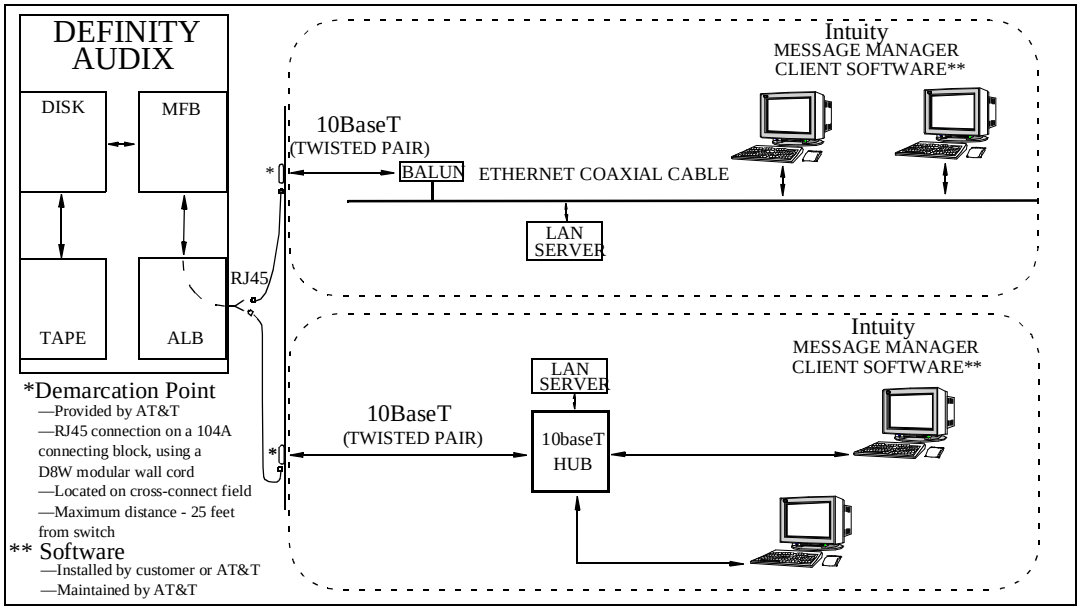


Figure 1-3. DEFINITY AUDIX LAN Connectivity

If you did not receive (or do not have on hand) all the required parts, follow the Streamlined Implementation claims procedure with the factory to acquire the missing parts. After you have reviewed the connectivity diagram and have verified the DEFINITY AUDIX system components, proceed to the tasks in Chapter 2, *Hardware Installation*.

NOTE:
If DEFINITY AUDIX is to be used as a server for Local Area Network (LAN) applications such as Intuity Message Manager, it is required that a LAN connection be available to the system prior to hookup. This connection to the LAN is provided by AT&T at an agreed-upon demarcation point.

Hardware Installation

2

This chapter describes the tasks needed to install the DEFINITY AUDIX system hardware and peripheral hardware.

You can install the DEFINITY AUDIX system in any of the following switches.

- System 75 R1V3
- DEFINITY Communications System Generic 1 (G1)
- DEFINITY Communications System Generic 3 (G3i, G3s, G3vs, G3V2, G3V3, and G3r)

Hardware Installation Tasks

The DEFINITY AUDIX system installation tasks are virtually the same for all switch types. Therefore only one set of tasks is provided, with any differences for switch types indicated in the instructions. These installation tasks include:

"Task 5: Install the DEFINITY AUDIX System Assembly"

"Task 6: Connect the Alarm Board Cable"

"Task 7: Install the Terminals"

"Task 8: Install the Control-Link Cable"

"Task 9: Install the Printer (Optional)"

"Task 10: Finalize and Test the Hardware"

Worksheets Needed

Before beginning these tasks, make sure you have the following worksheets from *Planning for the DEFINITY AUDIX System*, 585-300-904.

- A-1, *Port Slot Assignments (Before Carrier Rearrangement)*
- A-2, *Port Slot Assignments (For Carrier Rearrangement)*
- A-3, *Port Slot Locations for the DEFINITY AUDIX System Assembly*
- A-4, *Control Link Cable-Connection Configuration*
- E-1, *Terminals*

The Project Manager or Software Specialist (SS) should have provided you with these worksheets.

Task 5: Install the DEFINITY AUDIX System Assembly

This task is required for all installation scenarios.

WARNING:
To prevent damage to the DEFINITY AUDIX system assembly, make sure that you (or the factory for new switches) have connected the DEFINITY AUDIX system assembly adaptor cables to the port connectors on the back of the switch (as described in Step 3) before you insert the DEFINITY AUDIX system assembly in the switch carrier.

You can install the DEFINITY AUDIX system assembly in the switch when the switch is powered on or off. When the assembly is inserted in the slots of the switch carrier, it will automatically power up, run diagnostics, and boot. To avoid a disk crash, never remove the assembly without first completing the shutdown procedure to shut down the DEFINITY AUDIX system (and allowing the disk to completely spin down).

For the same reason, do not power cycle the switch (for example, during switch acceptance tests) once the DEFINITY AUDIX system assembly is inserted unless you have first shut down the DEFINITY AUDIX system. Refer to Chapter 1 in DEFINITY AUDIX System — Maintenance, 585-300-110 for a description of the shutdown procedure.

Slot and Carrier Restrictions

If rearrangement of circuit packs in the PBX is required to accommodate the DEFINITY AUDIX system assembly, rearrange the packs as indicated on Worksheet A-2, *Port Slot Assignments*, before proceeding.

If you are installing the DEFINITY AUDIX system in a System 75 XE or in a single-carrier cabinet of a DEFINITY G1, G3i, G3r or G3s, slots 14 (or slots 13 in an EPN control cabinet) should not be used for the DEFINITY AUDIX system assembly.

See Appendix A, *PBX Carrier Configuration Worksheets*, of *Planning for the DEFINITY AUDIX System*, 585-300-904, for detailed information on the rearrangement of circuit packs and on slot restrictions.

DEFINITY AUDIX System Slots

The DEFINITY AUDIX system assembly requires five (four for G3vs) contiguous port slots in the switch carrier. In this description, the five slots are referred to as *the 1st through the 5th slot*, with the understanding that they can be any five contiguous port slots.

The slots are numbered from left to right on the front panel of the switch cabinet, and from right to left on the rear panel as shown in Figure 2-1, *Connecting the Adaptor Cables Rear-Panel View*. The five port slots are occupied by the DEFINITY AUDIX system assembly as follows:

- The 1st and 2nd slots are covered by the DEFINITY AUDIX disk and tape drives and are not connected to the DEFINITY AUDIX assembly
- The 3rd slot is connected to the DEFINITY AUDIX system ALB
- The 4th slot is connected to the DEFINITY AUDIX system MFB
- The 5th slot remains vacant to provide added clearance for certain components on the MFB.

NOTE:
The *G3vs switch* has a single carrier with 10 slots.

For this switch, the DEFINITY AUDIX system assembly occupies only four slots — the fifth (clearance) slot is not needed. The assembly *must* be installed in slots 7-10 — the DEFINITY AUDIX system ALB occupies slot 9 and the MFB occupies slot 10.

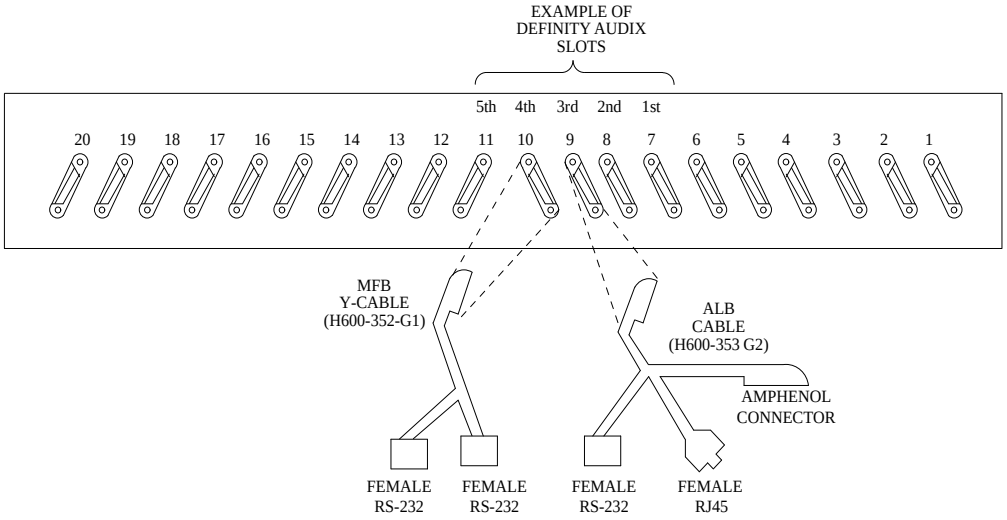


Figure 2-1. Connecting the Adaptor Cables Rear-Panel View

If the DEFINITY AUDIX system was shipped in a new switch, skip to Step 7 of this task.

Installation Steps

Using Worksheet A-3, *Port Slot Locations for the DEFINITY AUDIX System Assembly*, follow the steps below to install the DEFINITY AUDIX system assembly.

1. Remove the amphenol connectors from the third and fourth slots of the five (four for G3vs) contiguous slots reserved for the DEFINITY AUDIX system. For example, if you are to install the DEFINITY AUDIX system in slots 7 through 11 of carrier A in the switch, remove the amphenol connectors on the Group 300 cables from slots 9 and 10. (These are the two slots that provide connectivity to the DEFINITY AUDIX system circuit packs.)
2. Dress down the cable you removed from the 4th slot to the wall field. (Do not dress down the cable from the 3rd slot, you will use it in the next task to cable the alarm origination.)
3. Referring to Figure 2-1 and Steps 3a and 3b below, connect the DEFINITY AUDIX system assembly adaptor cables to the port connectors on the back of the switch.

NOTE:
You must connect these adaptor cables directly to the port connectors on the switch. If you install another cable between the switch and the cables, the DEFINITY AUDIX system will not operate correctly (either now or in the future).

a. Attach the male D-type amphenol connector on the alarm board (ALB) cable (the one with two amphenol connectors, one RJ45 LAN connector, and one 25-pin RS-232 connector) to the ALB (TN2170), the third slot of the five DEFINITY AUDIX system slots.

b. Attach the male D-type amphenol connector on the multifunction board (MFB) Y-cable (the one with one amphenol and two RS-232 connectors) to the MFB (TN566B), the fourth slot of the five DEFINITY AUDIX system slots.

If you are installing the DEFINITY AUDIX system in a DC-powered switch, perform the following steps to install the opto-isolators. Otherwise, skip to Step 5.

4. Install the 116A opto-isolators.

   a. Attach the male end of a null modem (supplied with the DEFINITY AUDIX system PEC) to the RS-232C connector labeled PORT A on the MFB Y-cable. Attach the male connector of the 116A opto-isolator to the other end of the null modem.

If the DEFINITY AUDIX system is to run in the DP integration mode *and* two terminals are to be installed, install the second opto-isolator. Otherwise, proceed to Step 5.

   b. Attach the male end of another null modem to the RS-232C connector labeled *PORT B* on the MFB Y-cable. Attach the male connector of the second 116A opto-isolator to the other end of the null modem.

5. Insert the DEFINITY AUDIX system assembly (see Figure 2-2., DEFINITY AUDIX System Assembly) into the switch cabinet as follows:

   Holding the DEFINITY AUDIX system assembly by the outside edges of the faceplate, line up the alarm board (ALB) and the multifunction board (MFB) with the bottom guides of the third and fourth slots, respectively, of the five reserved port slots in the switch carrier.

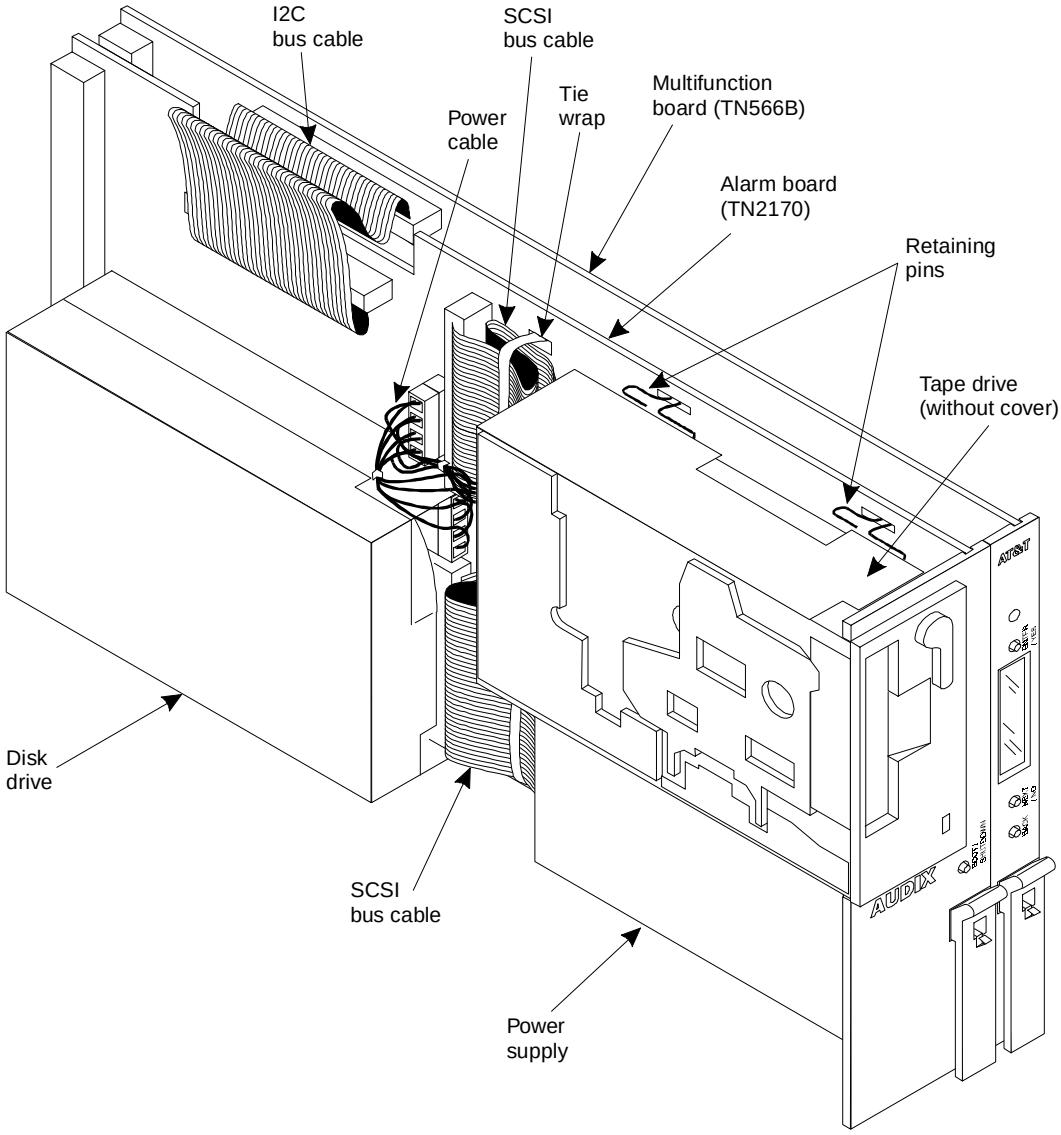


Figure 2-2. DEFINITY AUDIX System Assembly

WARNING:
The DEFINITY AUDIX system will automatically boot when seated in the slots. Damage to the disk could occur if the assembly is removed while booting. Therefore, you should try to avoid the need to adjust or reinsert the assembly after the first attempt to insert it; make sure that the assembly is properly aligned in the slot, then insert it with a single firm push.

6. Insert the assembly and lock it in place by pushing up the securing latches on the two circuit packs. (It is normal for the two circuit packs to feel loosely connected to each other. This is to allow some give when you are seating them into the two slots of the backplane.) If the switch is powered on, the DEFINITY AUDIX system will boot automatically.

If the switch is not powered on, wait until it is and then proceed to Step 7.

7. As the DEFINITY AUDIX system comes up, watch the LCD on the faceplate (see Figure 2-3., DEFINITY AUDIX System LCD Display). The LCD display identifies the states and alarms for the DEFINITY AUDIX system.

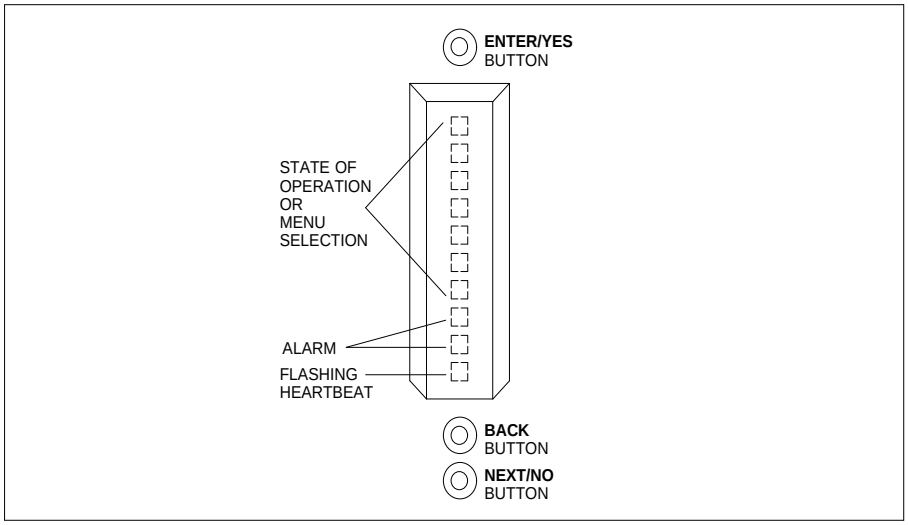


Figure 2-3. DEFINITY AUDIX System LCD Display

The following list describes the positions of the LCD.

- Standing to the right of the faceplate and reading from bottom to top, the first position contains the DEFINITY AUDIX system heartbeat.
- The second and third positions display two letters indicating the following types of alarms: warnings (WN), minor (MN) and major (MJ). These positions are blank if there are no alarms.
- The remaining positions indicate the DEFINITY AUDIX system states or menu selections.

See *DEFINITY AUDIX System — Maintenance,* 585-300-110 for a complete description of the LCD display.

When the DEFINITY AUDIX system is coming up, the LCD should display the following states (in order):

BTEST	(Firmware board tests)
BOOT	(Booting the operating system)
OSINIT	(Operating system initialization)
OS	(Operating system)
AINIT	(DEFINITY AUDIX system initialization)
ADX	(DEFINITY AUDIX system state)

If the DEFINITY AUDIX system does not come up to the AUDIX state within 30 minutes (10 to 15 minutes is average), write down the state displayed on the LCD, then refer to the associated troubleshooting procedures in *DEFINITY AUDIX System — Maintenance*, 585-300-110.

NOTE:
If the red LED at the top of the faceplate is flashing after you have inserted the DEFINITY AUDIX system assembly, ignore it at this time. A flashing LED indicates a software error which, at this time, is probably a port board alarm that should resolve itself when you administer the ports.

8. If you are installing the DEFINITY AUDIX system in an existing switch, insert the 1/2-inch blank faceplate adaptor into the fifth DEFINITY AUDIX system slot.
9. Proceed to ‘‘Task 6: Connect the Alarm Board Cable’’.

Task 6: Connect the Alarm Board Cable

The Alarm Board cable has three connectors available for outside connections:

- Alarm Origination
- Local Area Network (LAN) used for Intuity Message Manager (IMM)
- Reserved

Refer to Figure 2-4, *Alarm Board Cable Connections*, to connect the cables

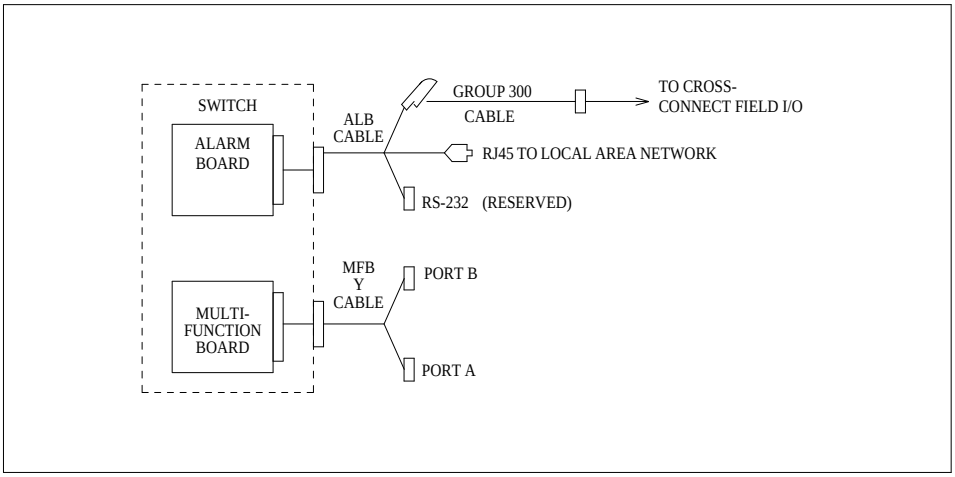


Figure 2-4. Alarm Board Cable Connections

Alarm Origination Connection

This task is required for all installation scenarios.

Alarm origination is normally set up through the internal AUDIX modem. Alarm origination can also be set up through the switch in addition to or instead of through the AUDIX modem. In either case, you need to perform the connections described in the *DEFINITY AUDIX Connection* section below. If alarm origination through the switch is indicated on Worksheet C-9, you must also perform the connections described in the *SWITCH Connection* section.

DEFINITY AUDIX Connection

1. Connect the DEFINITY AUDIX system ALB cable to the cross-connect field.

   Attach the male amphenol connector on a Group 300 cable (on an existing switch, the one that you disconnected from the third DEFINITY AUDIX system slot in the previous task) to the female amphenol connector labeled *ALARM* on the ALB cable (the cable that is now connected to the third DEFINITY AUDIX system slot). The other end of the Group 300 cable should already be attached to the cross-connect field.

Perform the cross-connects for the alarm origination connection using the pin-outs listed below.

Pin	Definition
26	Tip (W/BL)
1	Ring (BL/W)

If the DEFINITY AUDIX system is going to originate alarms, skip the following *Switch Connection* section and continue with the LAN connection.

In Task 16, you will set the Alarm Origination Active? field in the SYSTEM-PARAMETERS MAINTENANCE screen to **n** if alarm origination is to be activated only on the switch, or to **y** if alarm origination is to be activated on both the switch and DEFINITY AUDIX. (See Worksheet C-9 to determine which alarm origination setup is desired.)

Switch Connection

1. Connect the REMOTE ALARM connector from the switch to the yellow cross-connect field (Trunk/Auxiliary Field).

   Six adjunct alarm circuits appear at the cross-connect field as listed below.

Block Pins (Color)	Designation
1,2 (W/BL, BL/W)	1M (or ap1), ground
3,4 (W/O, O/W)	1m (or ap2), ground
5,6 (W/G, G/W)	2M (or ap3), ground

7,8 (W/BR, BR/W)	2m (or ap4), ground
9,10 (W/S, S/W)	3M (or ap5), ground
11,12 (R/BL, BL/R)	3m (or ap6), ground

2. Perform the cross-connects for the alarm origination connection using the pin-outs listed below.

   a. Select an unused major alarm circuit off the REMOTE ALARM cable of the switch (for example, 1M). Patch the circuit to the DEFINITY AUDIX system major alarm circuit.

   b. Select an unused minor alarm circuit off the REMOTE ALARM cable of the switch (for example, 1m). Patch the circuit to the DEFINITY AUDIX system minor alarm circuit.

Pin	Definition
44	Minor RTN* (O/V)
19	Minor (R/S)
47	Major RTN (V/BR)
22	Major (BL/BK)

* RTN is the return or ground.

Figure 2-5, *Switch Connection to DEFINITY AUDIX Alarm Link*, shows a schematic of the connections for both AUDIX and the switch.

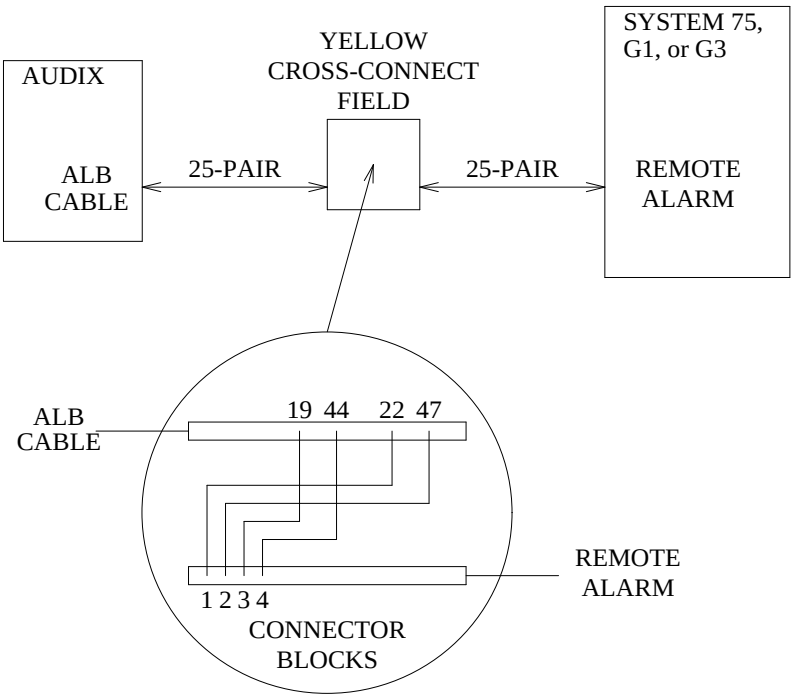


Figure 2-5. Switch Connection to DEFINITY AUDIX Alarm Link

LAN Connection

If DEFINITY AUDIX will be a server for multimedia applications such as Intuity Message Manager, Worksheet C-2 will indicate the need to provide a LAN connection and to activate the IMM feature. The feature is activated on the `system-parameters customer options` and `system-parameters imapi-options` screens.

Prior to administration of Intuity Message Manager, the following connections must be made.

- A 10BaseT twisted pair cable with a male RJ-45 connector must be present at the wall field, no further than 25 feet from the back of the switch where DEFINITY AUDIX resides. The customer is responsible for this LAN connection.
- A 104A connecting block will be mounted on the wall within reach of this connector. This is supplied by AT&T. Eight wires must be hard-connected across the two mounting blocks inside the 104A prior to mounting it to the wall, as shown in Figure 2-6, *104A Mounting Block*. The ends of each wire

are stripped of insulation. A punch-down tool is used to press the ends of these eight wires into the mounting blocks. Four protector caps snap over the top of the mounting blocks.

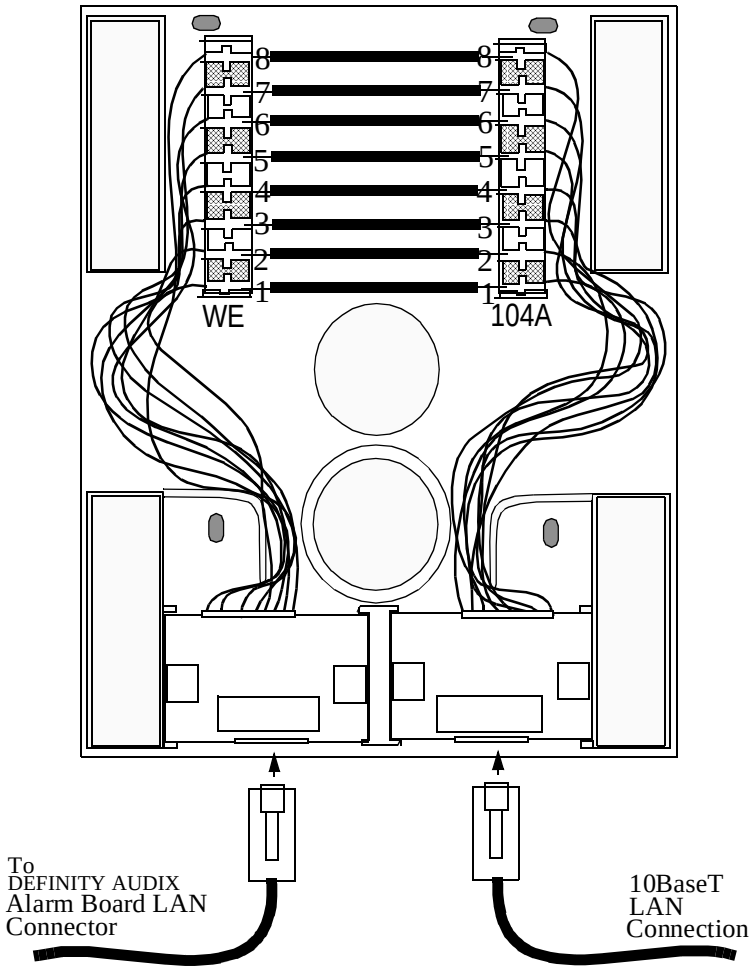


Figure 2-6. 104A Mounting Block

- A D8W modular wall cord (up to 25 feet long) is used to connect the Alarm Board RJ45 connector to the 104A connecting block. This connection is made whether or not Intuity Message Manager is activated on the `system-parameters imapi-options` screen.

Reserved RS-232 Connection

Do not connect the RS-232 connector on the ALB Y-cable at this time. The standard alarm origination circuit uses an on-board DEFINITY AUDIX system modem that is internally wired to the amphenol connector on the ALB cable. The RS-232 connector on the cable is reserved for future use.

Proceed to Task 7, *Install the Terminals*.

Task 7: Install the Terminals

This task is required for all installation scenarios.

You will install one or two system-access terminals used to perform administration and maintenance operations. One system-access terminal connected to Port A is required. This terminal is usually connected via a direct cable connection to Port A but can be connected remotely if desired. If the DEFINITY AUDIX system is being installed in the DP integration mode, a second, optional terminal can be connected to Port B.

The terminals can be connected to Ports A and B in one of four ways:

- Via a direct connection
- Via modems
- Via asynchronous data units (ADU)
- Via 7400A data sets

The connectivity for all supported terminals is similar. Therefore, the subtasks for this task are the same for all supported terminals, with differences identified as required for different terminal types. See the *DEFINITY AUDIX System — System Description*, 585-300-205 for a list of the supported terminals and modems.

If you are connecting a PC using G3-MA software (formerly called SAT-PC) as a DEFINITY AUDIX system administration/maintenance terminal, see *DEFINITY Communications System Generic 3 Management Applications Station Provisioning*, 555-229-202 for installation instructions. Keep in mind that the DEFINITY AUDIX system is data terminal equipment (DTE), and the switch is data communications equipment (DCE). Therefore, you may need to install a null modem to complete the DTE/DCE pair when connecting the PC.

MFB Port Usage for DP and CL Modes

The Multifunction Board (MFB) Y-cable has two RS-232C connectors labeled Port A and Port B.

In DP mode, both the Port A and Port B connectors can be used for either administration or maintenance and both can be connected to a system-access

terminal either locally (directly) or remotely. The primary system-access terminal should be connected to Port A. The only difference between Port A and Port B is that some system diagnostic messages, created only when the system is booting, are sent to Port A but not to Port B. These additional messages are not useful during normal operation of the system.

In CL mode, Port B is used for the connection to the switch and is not available for a system-access terminal. In this case, only one terminal is used and it is connected to Port A. This terminal is usually connected locally but can be connected remotely, if desired. Should ADAP software be used with this terminal, the terminal must be connected to Port A via a modem connection (See task 7B).

Perform one of the four Subtasks, 7A, 7B, 7C, or 7D — (depending on the connection type) to connect a system-access terminal to Port A, and, if desired, to connect a second (DP mode only) terminal to Port B. Use Worksheet E-1, *Terminals*, to determine which tasks to complete.

NOTE:
The descriptions of Tasks 7B, 7C, and 7D assume that you are connecting a remote terminal to Port B. You can also use these tasks for a remote connection to Port A by substituting *A for B* in the descriptions.

Task 7A: Install a Terminal via a Direct Connection

Refer to Figures 2-7, *Installing a Terminal via Direct Connection*, and 2-8, Installing a Terminal via Direct Connection (DC Switch Only) while performing this task.

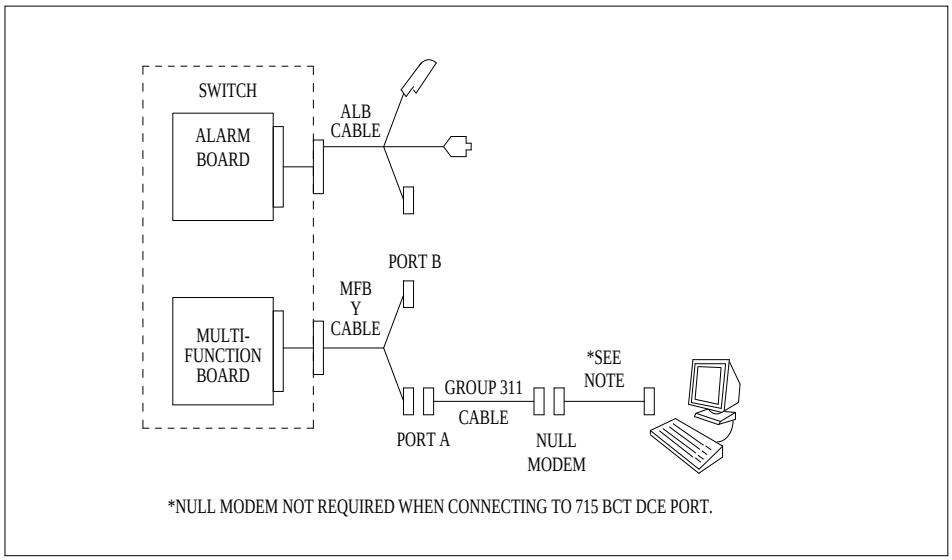


Figure 2-7. Installing a Terminal via Direct Connection

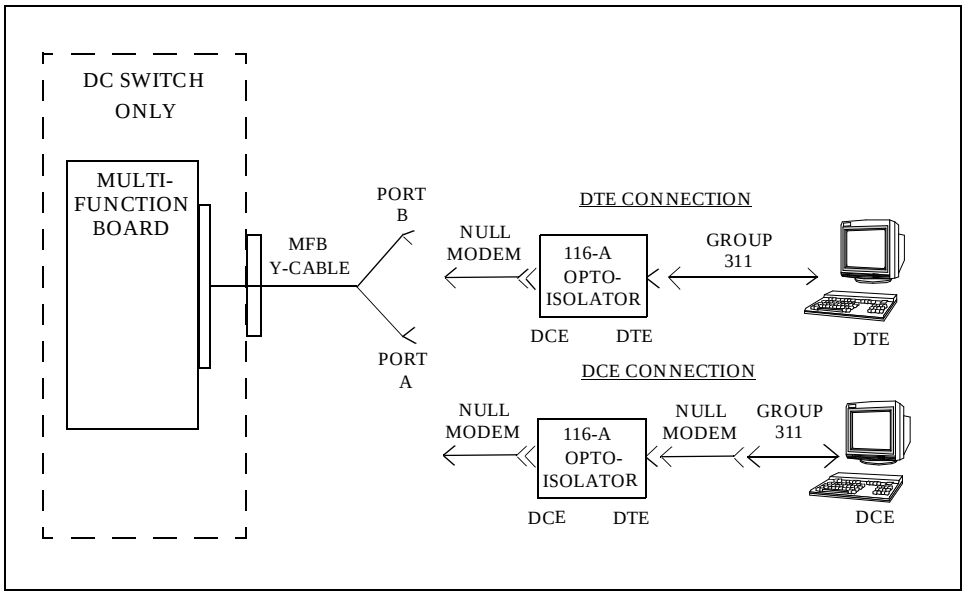


Figure 2-8. Installing a Terminal via Direct Connection (DC Switch Only)

1. If you are installing a new terminal, unpack it according to the instructions supplied with the terminal.
2. Place the terminal on a suitable table within 15 feet of the switch cabinet if you have a 20-foot Group 311 cable, or within 45 feet if you have a 50-foot Group 311 cable, and connect the keyboard.
3. Connect a Group 311 cable between the DEFINITY AUDIX system MFB and the terminal:
    a. Attach one end of a Group 311 cable (supplied with the DEFINITY AUDIX system PEC) to the RS-232 connector labeled PORT A on the MFB Y-cable (or PORT B if you are installing a second terminal).
    b. If you connected an opto-isolator to the PORT A and/or PORT B connectors on the Y-cable (in Task 4), attach the Group 311 cable to the opto-isolator (for a DTE connection). For a DCE connection, attach another null modem to the opto-isolator, and attach the Group 311 cable to the other end of the null modem.
    c. For a 715 BCT, attach the other end of the Group 311 cable to the DCE connector on the back of the terminal. Then skip to Step 4.

       For a 513 or equivalent BCT, attach the other end to the female connector on an H600-258 Group 1 null modem.
    d. Connect the male connector on the null modem to an RS-232 serial port connector on the back of the terminal.
4. Plug the terminal power cord into a wall outlet and power on the terminal.
5. Set the terminal options. See Appendix C, *Option Settings*, for a complete list of option settings for supported terminals.

   NOTE:
   When installing a serial printer on all but a 610 or 615 BCT, set the options on the printer as described in the manual supplied with the printer, then set the corresponding options on the terminal to match. On the 610/615, set the terminal options first, then set the printer options.

   If the terminal is installed correctly (and the DEFINITY AUDIX system is in either *ADX*, *OAM*, *OS* or *AINIT* state), the screen displays the login prompt.

   If the terminal does not display the login prompt when the DEFINITY AUDIX system is in one of the above states, try pressing the RETURN key a few times. If the login prompt still does not appear, write down the state displayed on the LCD then see the troubleshooting procedures for terminal connections in *DEFINITY AUDIX System — Maintenance*, 585-300-110.
6. For CL mode, proceed to ‘‘Task 8: Install the Control-Link Cable’’. For DP mode, proceed to "Task 9: Install the Printer (Optional)".

Task 7B: Install a Terminal via Modems

This task describes how to connect a terminal via a modem to Port B (DP mode only) of the MFB. (This task can also be used for remote connection to Port A, in either DP or CL mode.)

To make sure the modems that you are installing are on the list of supported peripherals, refer to *DEFINITY AUDIX System — System Description,* 585-300-205.

Refer to Figure 2-9, *Connecting a Terminal to the MFB via a Modem*, when performing this task.

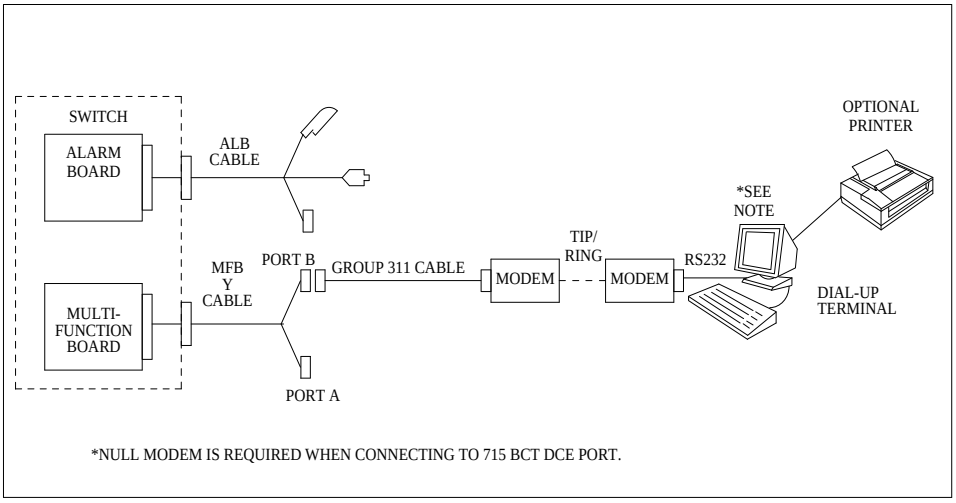


Figure 2-9. Connecting a Terminal to the MFB via a Modem

1. In the room where the switch and DEFINITY AUDIX system are located, place one modem between the DEFINITY AUDIX system and a telephone jack, close enough to each that the cables can easily reach. Also make sure the modem is within reach of a power outlet.
2. Connect the modem to Port B of the DEFINITY AUDIX system MFB.
    a. Attach one end of one of the Group 311 cables to the RS-232 connector labeled PORT B on the MFB Y-cable (the one connected to the fourth slot of the five DEFINITY AUDIX system slots). Attach the other end to the female 25-pin connector on the modem.
    b. Attach the connector on one end of a modular cord to the modem, and attach the other connector to a telephone outlet.

c. Plug the modem power cord into a wall outlet and power on the modem.

d. Set the modem options. Refer to Appendix C, *Option Settings*, for a complete list of option settings for all supported modems.

3. Connect a modem to the terminal.

a. If you are installing a new terminal, unpack it according to the instructions supplied with the terminal.

b. Place the terminal on a suitable table and connect the keyboard.

c. Attach one end of an RS-232 cable to a serial RS-232 port on the terminal (the DTE port on a 715 BCT), and attach the other end to the modem (if it is not already connected).

NOTE:
If you connect the modem to the DCE port on a 715 BCT, you must also connect a null modem cable between the modem and the 715 BCT.

d. Attach the connector on one end of a modular cord to the modem, and attach the other end to a telephone outlet.

e. Plug the modem power cord into a wall outlet.

f. Plug the terminal power cord into a wall outlet.

g. Power on the terminal and modem.

h. Set the options on the terminal and modem. Refer to Appendix C, *Option Settings*, for a complete list of option settings for all supported terminals and modems.

NOTE:
When installing a serial printer on all but a 610 or 615 BCT, set the options on the printer as described in the manual supplied with the printer, then set the corresponding options on the terminal to match. On the 610/615, set the terminal options first, then set the printer options.

i. At the terminal, enter **AT**.

If the modem is installed correctly, it responds with “OK” (written on the terminal screen).

j. Enter **ATDT** and the telephone number of the modem connected to the DEFINITY AUDIX system *ADMIN* port (listed on the *Terminals* worksheet).

If the terminal is installed correctly (and the DEFINITY AUDIX system is in either *ADX*, *OAM*, *OS* or *AINIT* state), the screen displays the login prompt.

If the terminal does not display the login prompt when the DEFINITY AUDIX system is in one of the above states, try pressing the RETURN key a few times. If the login prompt still does not appear, write down the state displayed on the LCD then see the troubleshooting procedures for terminal connections in *DEFINITY AUDIX System — Maintenance*, 585-300-110.

k. Log in to the DEFINITY AUDIX system (see Task 9 for login details).

   If you can log in successfully, the modem and terminal options are set correctly.

4. For CL mode, proceed to "Task 8: Install the Control-Link Cable". For DP mode, proceed to "Task 9: Install the Printer (Optional)".

Task 7C: Install a Terminal via ADUs

This task describes how to connect a terminal via ADUs to Port B (DP mode only) of the MFB. (This task can also be used for remote connection to Port A, in either DP or CL mode.)

Refer to Figure 2-10, *Connecting a Terminal to the MFB via ADUs*, when performing this task.

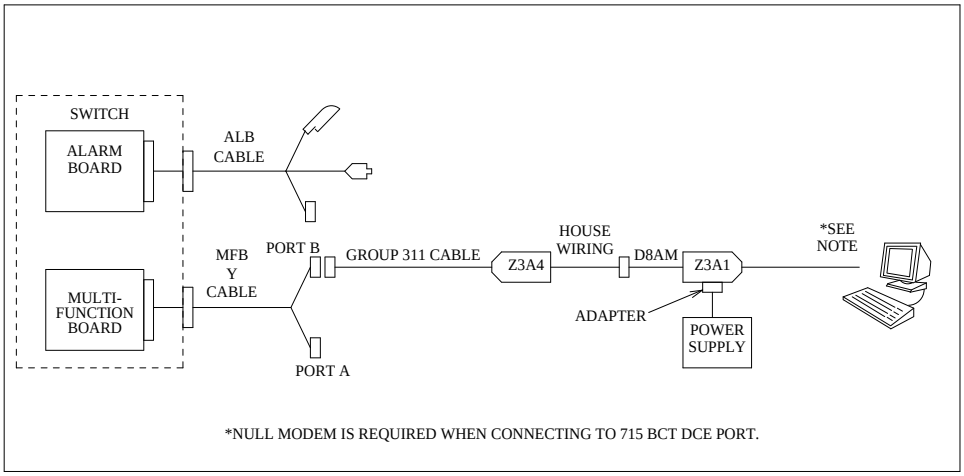


Figure 2-10. Connecting a Terminal to the MFB via ADUs

1. Connect the Z3A-4 ADU to the DEFINITY AUDIX system MFB.

a. In the room where the switch and DEFINITY AUDIX system are located, attach one end of a Group 311 cable to the RS-232 connector labeled PORT B on the MFB Y-cable (the one connected to the fourth slot of the five DEFINITY AUDIX system slots). Attach the other end to the Z3A-4 (female) ADU.

b. Plug the cable from the ADU into a telephone outlet.

2. In the terminal room, connect the Z3A-1 ADU to the terminal.

a. If you are installing a new terminal, unpack it according to the instructions supplied with the terminal.

b. Place the terminal on a suitable table and connect the keyboard.

c. Attach the Z3A-1 ADU (male) to a serial RS-232 port on the terminal (the DTE port on a 715 BCT).

NOTE:
If you connect the ADU to the DCE port on a 715 BCT, you must also connect a null modem cable between the ADU and the 715 BCT.

d. Plug one end of the D8AM crossover cord into the connector labeled *Wall Jack* on the ADU, and plug the other end of the D8AM cord into a telephone outlet.

e. Connect the 2012D ADU Power Supply to the ADU. (The power supply can be connected to either ADU.)

- Attach either the 400B2 or 248B adapter to the ADU.
- Plug the power supply into the adapter.
- Plug the power cord on the power supply into a wall outlet.

f. Power on the terminal.

g. Set the terminal options. Refer to Appendix C, *Option Settings*, for a complete list of option settings for all supported terminals.

NOTE:
When installing a serial printer on all but a 610 or 615 BCT, set the options on the printer as described in the manual supplied with the printer, then set the corresponding options on the terminal to match. On the 610/615, set the terminal options first, then set the printer options.

If the terminal is installed correctly (and the DEFINITY AUDIX system is in either *ADX*, *OAM*, *OS* or *AINIT* state), the screen displays the login prompt.

If the terminal does not display the login prompt when the DEFINITY AUDIX system is in one of the above states, try pressing the RETURN key a few times. If the login prompt still does not appear,

write down the state displayed on the LCD then see the troubleshooting procedures for terminal connections in *DEFINITY AUDIX System — Maintenance*, 585-300-110.

3. For CL mode, proceed to "Task 8: Install the Control-Link Cable". For DP mode, proceed to "Task 9: Install the Printer (Optional)".

Task 7D: Install a Terminal via 7400A Data Sets

This task describes how to connect a terminal via 7400A Data Sets to Port B (DP mode only) of the MFB. (This task can also be used for remote connection to Port A, in either DP or CL mode.)

Refer to Figure 2-11, *Connecting a Terminal to the MFB via 7400 Data Sets*, when performing this task.

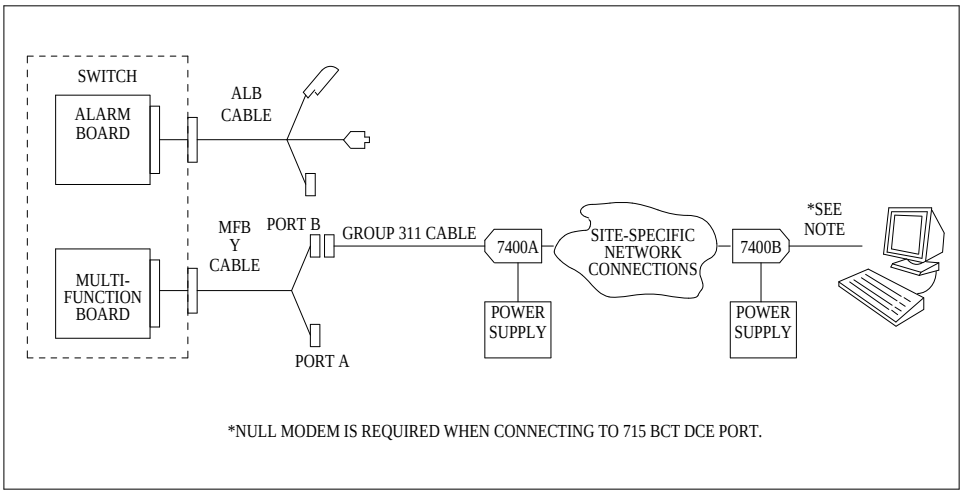


Figure 2-11. Connecting a Terminal to the MFB via 7400 Data Sets

NOTE:
You may use two 7400A data sets in this configuration. However, because the 7400B data set is easier to set up and use, it is the one described in this procedure on the terminal side. (The DEFINITY AUDIX system side of the configuration requires the 7400A.) If you are using two 7400A data sets, connect the second 7400A the same as the 7400B, but set the options as described under *Using the Front Panel* in *7400A Data Module User's Manual*, 555-020-706.

1. Make sure the EIA connector board (located under the top panel) is set to DCE (the factory default). If not, unplug the card and turn it around to the DCE setting (see the *7400A Data Module User's Manual*, 555-020-706 for details).
2. Connect the 7400A data set to the DEFINITY AUDIX system MFB.
    a. In the room where the switch and DEFINITY AUDIX system are located, attach one end of a Group 311 cable to the RS-232 connector labeled PORT B on the MFB Y-cable. Attach the other end to a 7400A data set.
    b. Plug one end of the modular cord (supplied with the data set) into the *LINE* connector on the 7400A data set and plug the other end into a telephone outlet.
    c. Connect the 4-pin connector on one of the 7400A power supplies to the *POWER* connector on the data set, and plug the power supply into a wall outlet.
    d. Set the options and interface baud rate on the 7400A data set. Refer to *Using the Front Panel* in the *7400A Data Module User's Manual*, 555-020-706 for details.
3. In the terminal room, connect the 7400B data set to the terminal.
    a. If you are installing a new terminal, unpack it according to the instructions supplied with the terminal.
    b. Place the terminal on a suitable table and connect the keyboard.
    c. Check the dip switches inside the front panel. If you are not connecting a telephone with this data set, set the first dip switch (1) to the ON position (it is shipped in the OFF position, as are all the others). If you are connecting a telephone, leave all dip switches OFF.
    d. Attach the 7400B data set to an RS-232 port on the terminal (the DTE port on a 715 BCT).

    NOTE:
    If you connect the data set to the DCE port on a 715 BCT, you must also connect a null modem cable between the data set and the 715 BCT.

    e. Plug one end of a D8W cable into the *LINE* connector on the 7400B data set and connect the other end into a telephone outlet.
    f. Connect the 7400B power supply to the data set, and plug the power supply into a wall outlet.
    g. Plug the terminal power cord into a wall outlet and power on the terminal.
    h. Set the terminal options. Refer to Appendix C, *Option Settings*, for a complete list of option settings for all supported terminals.

NOTE:
When installing a serial printer on all but a 610 or 615 BCT, set the options on the printer as described in the manual supplied with the printer, then set the corresponding options on the terminal to match. On the 610/615, set the terminal options first, then set the printer options.

i. At the terminal, enter **AT**.

If the 7400B data set is connected correctly, it responds with “OK” (on the terminal screen).

j. Enter **ATDT** and the phone number of the 7400A data set connected to the DEFINITY AUDIX system (refer to the *Terminals* worksheet for this number).

After a connect interval, if the terminal and 7400 data sets are installed correctly (and the DEFINITY AUDIX system is in either *ADX*, *OAM*, *OS* or *AINIT* state), the screen displays the login prompt.

If login prompt is not displayed when the DEFINITY AUDIX system is in one of the above states, try pressing the RETURN key a few times. If the login prompt still does not appear, write down the state displayed on the LCD then see the troubleshooting procedures for terminal connections in *DEFINITY AUDIX System — Maintenance*, 585-300-110.

4. For CL mode, proceed to Task 8, *Install the Control Link Cable*. For DP mode, proceed to "Task 9: Install the Printer (Optional)".

Task 8: Install the Control-Link Cable

This task is required only if the DEFINITY AUDIX system is to be run in the CL integration mode.

The control-link cable can be connected to the switch in one of the following six ways:

- Directly to the processor interface (PI) board
- Via an IDI to the processor interface (PI) board (TN765)
- Via an MPDM to the digital-line interface board (TN754)
- Via an IDI to the packet gateway board (TN577) of a G3r only
- Via DSUs to the packet gateway board (TN577) of a G3r only
- Via MPDMs to the packet gateway board (TN577) of a G3r only

Use Worksheet A-4 to determine which of the six cable-connection configurations to install. Then follow the steps in one of the following four subsections.

In the steps in the following subsections, the equipment described is cross-referenced to the circled numbers in the figures.

Connect to the PI without an IDI

WARNING:
Electric shock and/or fire may result from a cabinet-to-cabinet connection of the H600-406 control-link cable. Direct connection of the H600-406 control-link cable is to be used within a single cabinet only.

Refer to Figure 2-12, *Connecting the Control Link Cable to the PI without an IDI*, when performing this task.

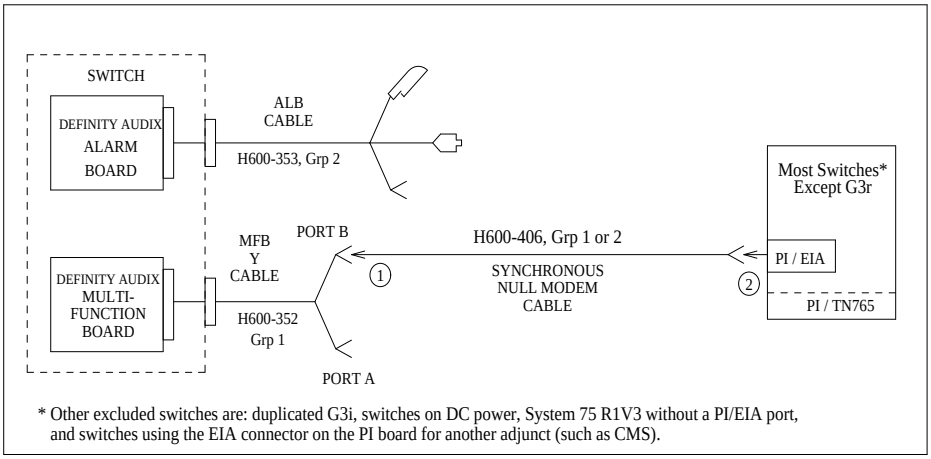


Figure 2-12. Connecting the Control Link Cable to the PI without an IDI

1. Attach the one end of the synchronous null modem cable to the RS-232C connector labeled PORT B on the MFB Y-cable (labeled 1). (The MFB Y-cable is connected to the fourth slot of the five DEFINITY AUDIX system slots.)
2. Attach the other end of the synchronous null modem cable to an EIA connector of the Processor Interface (PI) board on the switch (labeled 2).

3. Proceed to "Task 9: Install the Printer (Optional)".

Connect to the PI with an IDI

Refer to Figure 2-13, *Connecting the Control Link Cable to the PI with an IDI*, when performing this task.

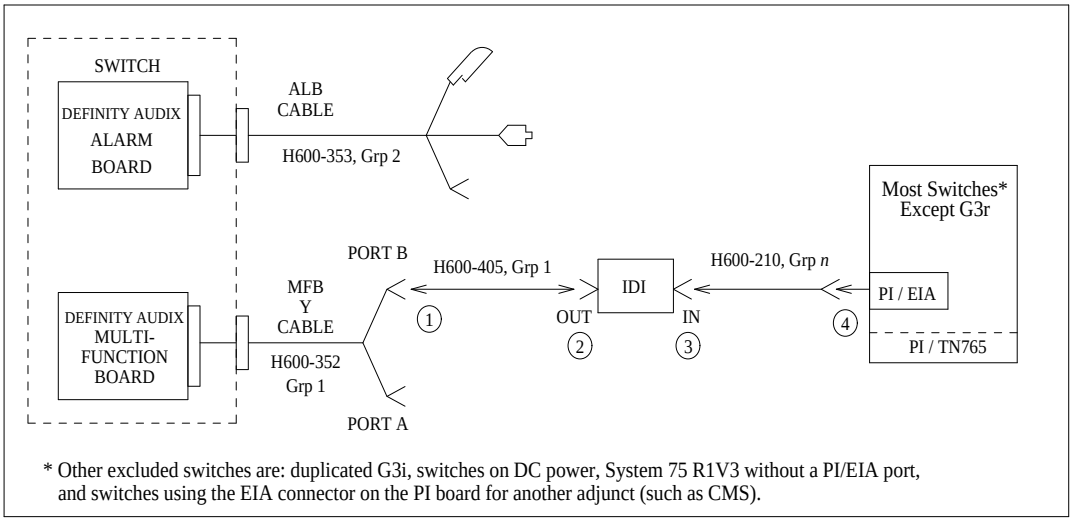


Figure 2-13. Connecting the Control Link Cable to the PI with an IDI

1. Attach one end of the H600-405 cable to the RS-232C connector labeled PORT B on the MFB Y-cable (labeled 1). (The MFB Y-cable is connected to the fourth slot of the five DEFINITY AUDIX system slots.)
2. Attach the other end of the H600-405 cable to the *out* RS-449 connector of the IDI (labeled 2).
3. Attach the RS-449 end of the H600-210 cable to the *in* RS-449 connector of the IDI (labeled 3).
4. Attach the RS-232C end of the H600-210 cable to an EIA connector on the Processor Interface (PI) (labeled 4).
5. Proceed to "Task 9: Install the Printer (Optional)".

Connect to the Digital Line Interface (TN754)

Refer to Figure 2-14, *Connecting the Control Link Cable to a Digital-Line Interface*, when performing this task.

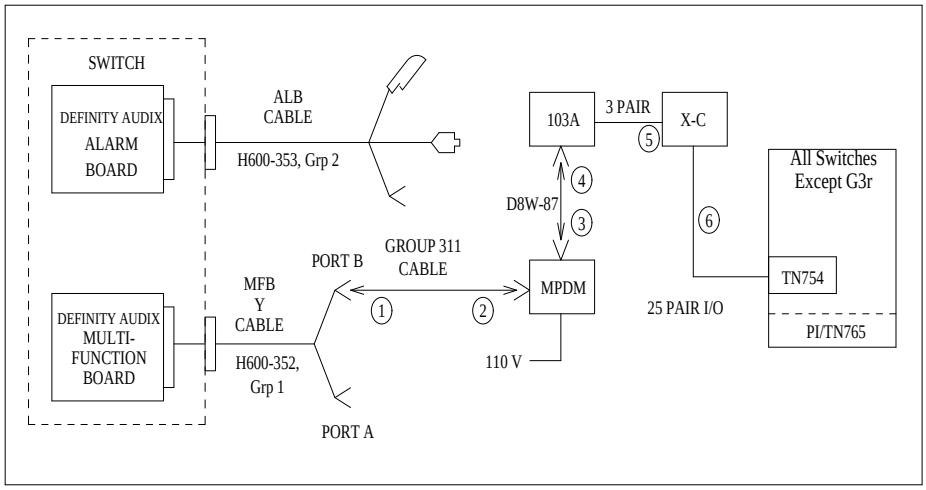


Figure 2-14. Connecting the Control Link Cable to a Digital-Line Interface

1. Attach one end of the (ED1E-434-11) Group 311 cable to the RS-232C connector labeled PORT B on the MFB Y-cable (labeled 1). (The MFB Y-cable is connected to the fourth slot of the five DEFINITY AUDIX system slots.)
2. Attach the other end of the Group 311 cable to the RS-232C connector of the MPDM (labeled 2).
3. Attach one end of the D8W-87 (4-pair) modular cord to the modular jack on the MPDM (labeled 3).
4. Attach the other end of the D8W-87 modular cord to the 103A adapter modular jack (labeled 4).
5. Attach a 3-pair cord from the 103A adapter to the cross-connect field (labeled 5).
6. Attach a 25-pair cable between the cross-connect field and the digital line interface board (TN754) on the switch (labeled 6).
7. Proceed to "Task 9: Install the Printer (Optional)".

Connect to the Packet Gateway Board (G3r only)

Refer to Figure 2-15, *Connecting the CL Cable to a Packet Gateway Board (G3r Only)*, when performing this task.

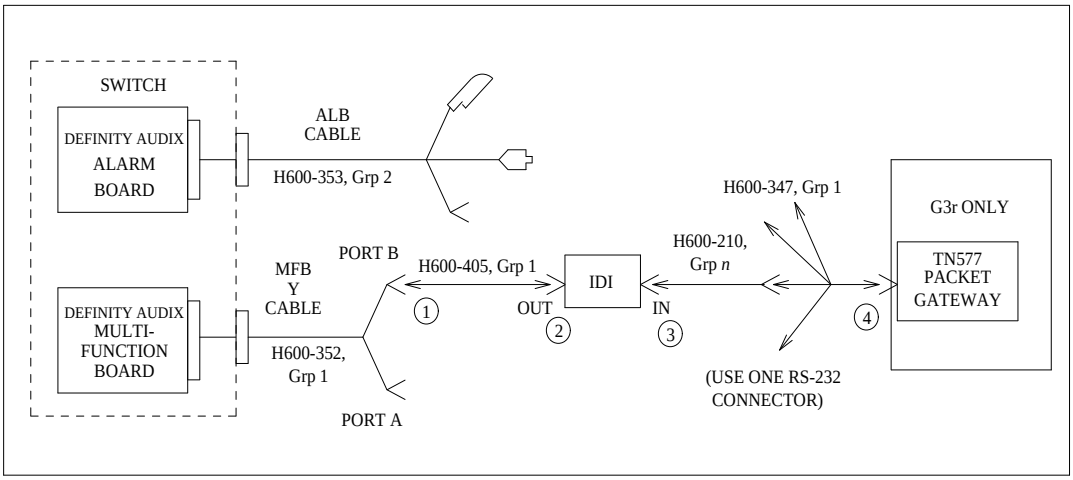


Figure 2-15. Connecting the CL Cable to a Packet Gateway Board (G3r Only)

1. Attach one end of the H600-405 cable to the RS-232C connector labeled PORT B on the MFB Y-cable (labeled 1). (The MFB Y-cable is connected to the fourth slot of the five DEFINITY AUDIX system slots.)
2. Attach the other end of the H600-405 cable to the *out* RS-449 connector of the IDI (labeled 2).
3. Attach the one of the four RS-232 connectors on the H600-347 cable to the *in* RS-449 connector of the IDI (labeled 3).
4. Attach the other end of the H600-347 cable to an RS-232C connector on the Packet Gateway board (TN577) on the G3r switch (labeled 4).
5. Proceed to "Task 9: Install the Printer (Optional)".

Connect to the TN577 via DSUs (G3r Only)

Refer to Figure 2-16, *Connecting the Control Link Cable to a TN577 via DSUs*, when performing this task.

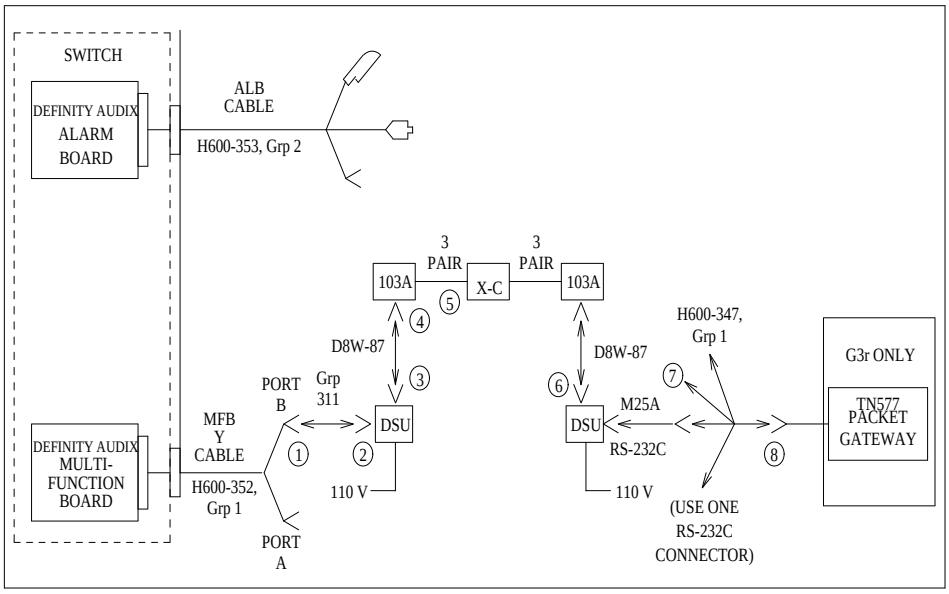


Figure 2-16. Connecting the Control Link Cable to a TN577 via DSUs

1. Attach one end of the Group 311 cable to the RS-232C connector labeled PORT B on the MFB Y-cable (labeled 1). (The MFB Y-cable is connected to the fourth slot of the five DEFINITY AUDIX system slots.)
2. Attach the other end of the Group 311 cable to the Group 110 cable of the DSU (labeled 2).
3. Attach one end of the D8W-87 (4-pair) modular cord to the modular jack on the DSU (labeled 3).
4. Attach the other end of the D8W-87 modular cord to the 103A adapter with a 3-pair cord (labeled 4).
5. Attach the 3-pair cord from the 103A adapter to the cross-connect field (labeled 5). (Remember to swap transmit and recieve pairs at the cross-connect field. See the DSU reference manual for more information on DSU connectivity.)
6. Connect the second 103A adaptor, D8W-87 modular cord, and DSU as before.

7. Connect the M25A cable to the modular jack on the DSU (labeled 6).
8. Connect the other end of the M25A cable to one of the four RS-232 connectors on the H600-347 (labeled 7).
9. Attach the other end of the H600-347 cable to an RS-232C connector on the Packet Gateway board (TN577) on the G3r switch (labeled 8).
10. Proceed to "Task 9: Install the Printer (Optional)".

Connect to the TN577 via MPDMs (G3r Only)

Refer to Figure 2-17, *Connecting the Control Link Cable to a TN577 via MPDMs*, when performing this task.

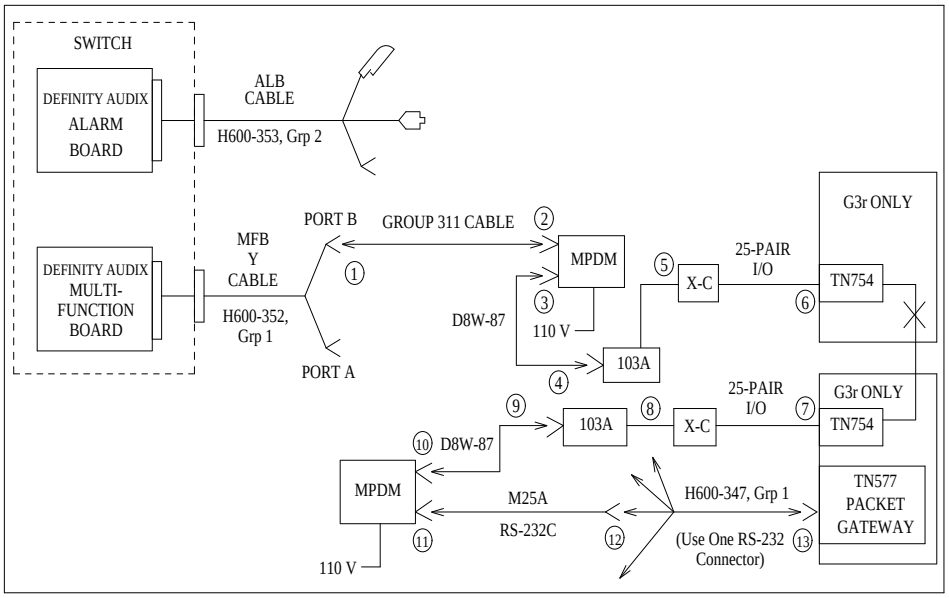


Figure 2-17. Connecting the Control Link Cable to a TN577 via MPDMs

1. Attach one end of the Group 311 cable to the RS-232C connector labeled PORT B on the MFB Y-cable (labeled 1). (The MFB Y-cable is connected to the fourth slot of the five DEFINITY AUDIX system slots.)
2. Attach the other end of the Group 311 cable to the RS-232C connector of the MPDM (labeled 2).
3. Attach one end of the D8W-87 (4-pair) modular cord to the modular jack on the MPDM (labeled 3).

4. Attach the other end of the D8W-87 modular cord to the 103A adapter with a 3-pair cord (labeled 4).
5. Attach a 3-pair cord from the 103A adapter to the cross-connect field (labeled 5).
6. Attach a 25-pair cable between the cross-connect field and the digital line interface board (TN754) on the switch (labeled 6).
7. Attach a 25-pair cable between the cross-connect field and a second digital line interface board (TN754) on the switch (labeled 7).
8. Attach a 3-pair cord from the cross-connect field to the 103A adapter (labeled 8).
9. Attach one end of the D8W-87 modular cord to the 103A adapter (labeled 9).
10. Attach the other end of the D8W-87 (4-pair) modular cord to the modular jack on the MPDM (labeled 10).
11. Attach one end of the Group 110 cable to the RS-232C connector of the MPDM (labeled 11).
12. Attach the other end of the Group 110 cable to one of the four RS-232 connectors on the H600-347 (labeled 12).
13. Attach the other end of the H600-347 cable to an RS-232C connector on the Packet Gateway board (TN577) on the G3r switch (labeled 13).
14. Proceed to Task 9, *Install the Printer*.

Task 9: Install the Printer (Optional)

This task is required only if the customer requested a printer on a DEFINITY AUDIX system terminal.

This task describes how to install an AT&T 470 or 570 series printer. For other printers follow the instructions supplied with the printer, making sure you set the options required for the DEFINITY AUDIX system as described in this task.

1. Set up the printer.
    a. Unpack and set up the printer according to the instructions supplied with the printer.
    b. Be sure that the printer has paper, the ribbon is properly installed, and the cover is closed.
2. Connect the printer to the terminal.
    a. Connect one end of the printer cable to either the serial or parallel port on the terminal (depending on which type terminal and printer you are installing). Secure the connector with the captive screws.

NOTE:
If you are connecting a serial printer to the DTE connector on a 715 BCT, you must connect a null modem between the printer and the terminal.

b. Connect the other end to the matching port (serial or parallel) on the printer.

3. Set the options on the printer. Refer to Appendix C, *Option Settings*, for a complete list of option settings for all supported printers.

NOTE:
When installing a serial printer on all but a 610 or 615 BCT, set the options on the printer as described in the manual supplied with the printer, then set the corresponding options on the terminal to match. On the 610/615, set the terminal options, then set the printer options.

4. Proceed to Task 10, *Finalize and Test the Hardware*.

Task 10: Finalize and Test the Hardware

This task is required for all installation scenarios.

1. Verify that the DEFINITY AUDIX system is in the *ADX* (AUDIX) state.

   Standing to the right of the DEFINITY AUDIX assembly, reading from bottom to top, the LCD should display ADX.

2. Log in to the DEFINITY AUDIX system at the terminal (both terminals if you have installed more than one) to verify that the terminals and modems (if applicable) are connected and set up correctly*.

   a. At the login prompt, type **craft** and press RETURN. (If the login prompt is not displayed, press RETURN once or twice.)

   NOTE:
   To send the information to the DEFINITY AUDIX system, the RETURN key (located on the right side of your keyboard) must be pressed after you type a command or a response to a prompt. On some keyboards, this key is labeled ENTER instead of RETURN. If yourkeyboard has *both* a RETURN key and an ENTER key (as on the 513 and 615 keyboards), use the RETURN key.

   The system responds with the Password prompt.

   b. Enter **crftpw**.

   The system responds with the Enter terminal type prompt.

   c. Enter one of the following:

- **513** for a 513 BCT or 715 BCT*; enter **513** also for a 610/615 BCT or a PC with a 513 emulation package. (Since **513** is the default, you can just press RETURN to select it).
- **4410** for a 4410 or 5410 terminal; enter **4410** also for a 610/615 BCT or a PC with a 4410 emulation package.
- **4425** for a 4425 or 5425 terminal
- **5420** for a 5420 or 4415 terminal
- **g3-ma** for a G3-MA terminal

If the terminals and modems (if applicable) are connected properly and the options are set correctly, the system responds with the AUDIX command line.

3. Verify that the DEFINITY AUDIX system hardware and software components are installed properly. (If you have installed more than one terminal, you can use either one for the remainder of this task.) At the DEFINITY AUDIX system command line, enter **list configuration**. The system responds with the LIST CONFIGURATION screen. The following screen shows sample locations, board codes and vintages.

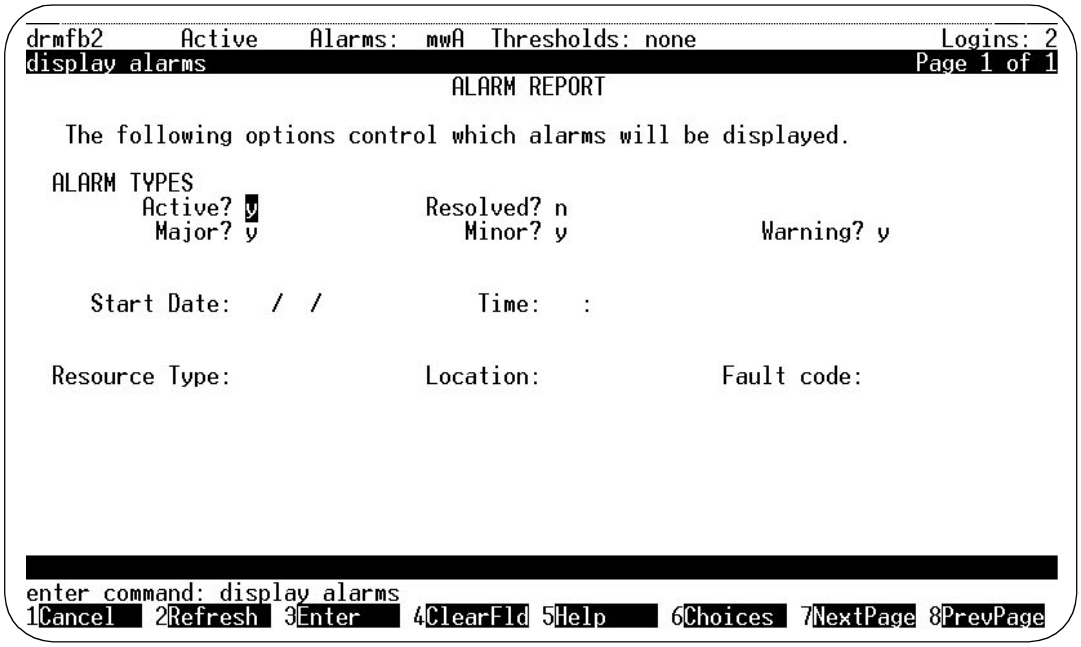
```
drmfb2      Active    Alarms:  mwA  Thresholds: none                Logins: 4
list configuration
                              LIST CONFIGURATION

 Software Vintage : Release 3.1, Issue 1

                    Location   Type     Board Code     Vintage

                    01A01    ALARM_BD    TN2170         1
                             ABP_FW                     4
                    01A02    MFB_BD      FAC fac        1
                             FAC_FW                     2
                             386_FW                     5
                    01A0200  DISK
                    01A0201  TAPE

enter command:
1Cancel  2Refresh  3Enter  4ClearFld  5Help  6Choices  7NextPage  8PrevPage
```

NOTE:
The location field will initially display “1a01” for component types ALARM_BD, MFB_BD, DISK, and TAPE since they have not yet been administered. Ignore this field.

4. Check the alarm status.

a. With the cursor on the DEFINITY AUDIX system command line, enter **display alarms**.

The system displays the DISPLAY ALARMS screen.



b. Check the ALARM TYPES fields for any active alarms (indicated by a "y" next to the alarm type). Press ENTER (F3) to display the alarms.

You should see a voice ports major alarm and possibly port warnings because the ports are not administered yet. These are the only alarms that you should expect.

c. Ignore the voice port alarms; however, resolve all other active alarms. See *DEFINITY AUDIX System — Maintenance*, 585-300-110 for the procedures for identifying and resolving the alarms.

5. Place the labels supplied with the DEFINITY AUDIX system hardware as follows:

a. Place the label containing the DEFINITY AUDIX system shutdown warning next to the cabinet Power switch.

b. Place the label with fan/filter cleaning information on the inside of the switch cabinet door.

6. Give the program tape and one of the blank cartridge tapes to the DEFINITY AUDIX system administrator, or put them in a safe place (away from electromagnetic parts). Keep the other blank tape, you will install it in the drive later ("Task 14: Perform Initial DEFINITY AUDIX Administration").
7. With the cursor on the command line, enter **logoff** to log off the terminal.
8. Proceed to the tasks in 3, *Initial System Administration*.

Initial System Administration

3

This chapter describes the tasks required to initially administer the DEFINITY AUDIX System.

Initial System Administration Tasks

The initial system administration tasks for the DEFINITY AUDIX system are:

"Task 11: Perform Initial Switch Administration" — This section is a place holder for the switch administration tasks, see *Switch Administration for the DEFINITY AUDIX System*, 585-300-509 for the actual task descriptions

"Task 12: Activate Customer Options"

"Task 13: Activate DEFINITY AUDIX Server Hardware (IMM) Options"

"Task 14: Perform Initial DEFINITY AUDIX Administration"

"Task 15: Activate Parameters and Basic Features"

"Task 16: Add Tape"

"Task 17: Alarm Origination Administration/test and Status Tape"

"Task 18: Check the Status of the Switch Names Audit"

Worksheets Needed

Before beginning these tasks, make sure you have the following worksheets.

NOTE:
The Project Manager or Software Specialist (SS) should have provided you with these worksheets from *Planning for the DEFINITY AUDIX System*, 585-300-904.

- C-1, *Activate Customer Options*
- C-2, *Activate DEFINITY AUDIX Server Hardware (IMM) Options*
- C-3, *Assign DEFINITY AUDIX Machine ID*
- C-5, *Set System Parameter Limits*
- C-6, *Assign the Time Zone*
- C-7, *Activate Parameters and Basic Features*
- C-8, *Add Subscribers*
- C-9, *Set Up Alarm Origination*

CL Mode Only

The following five worksheets are needed only if the DEFINITY AUDIX System will be running in the CL integration mode:

- B-5, *Administer Voice Ports as Stations*
- B-6, *Assign the Hunt Group*
- B-7, *Assign the Data Link*
- B-8, *Assign the Call Coverage Path for Subscribers*
- C-4, *Assign Switch Link Translations*

DP Mode Only

The following four worksheets are needed only if the DEFINITY AUDIX System will be running in the DP integration mode:

- B-1, *Administer Voice Ports as Stations*
- B-2, *Assign the Hunt Group*
- B-3, *Assign the Call Coverage Path for Voice Ports*
- B-4, *Assign the Call Coverage Path for Subscribers*

Windowing on the 715 Terminal

If you are using the 715 BCT terminal, you should be aware of its windowing capabilities. You can use the 715 terminal to log on to both the switch and the DEFINITY AUDIX system to perform administration tasks and easily toggle back and forth between the two sessions.

The windowing functions are controlled by the four function keys, F1, F2, F3, and F8 as described in Table 3-1, *Function Keys Used for Windowing on the 715 BCT*.

Table 3-1. Function Keys Used for Windowing on the 715 BCT

Key	Operation
Ctrl+F3	Enables the windowing function keys and displays their labels
F1	Turns off the windowing function keys
F2	Toggles between the DEFINITY AUDIX system window and the switch window
F3	Toggles between split-screen and full-screen modes
Ctrl+F8	When in the DEFINITY AUDIX system window, this key enables the DEFINITY AUDIX function keys and displays their labels.Ctrl+F3 enables the windowing keys again and displays their labels.

Task 11: Perform Initial Switch Administration

This task is required for all installation scenarios.

Before beginning the initial administration tasks on the DEFINITY AUDIX system, you must perform administration tasks on the switch to prepare the switch for the DEFINITY AUDIX system.

Because this task may differ depending on the switch in which you are installing the DEFINITY AUDIX System, the details are described in *Switch Administration for the DEFINITY AUDIX System*, 585-300-509.

Task 12: Activate Customer Options

This task is required for all installation scenarios to check if customer options have been activated and set to their limits. Use Worksheet C-1, *Activate Customer Options*, when completing this screen.

Activating customer options is normally done before the system is shipped. Complete the first section of this task, *Display Customer Options*, to see if the settings on the SYSTEM PARAMETERS CUSTOMER-OPTIONS screen are as specified on Worksheet C-1.

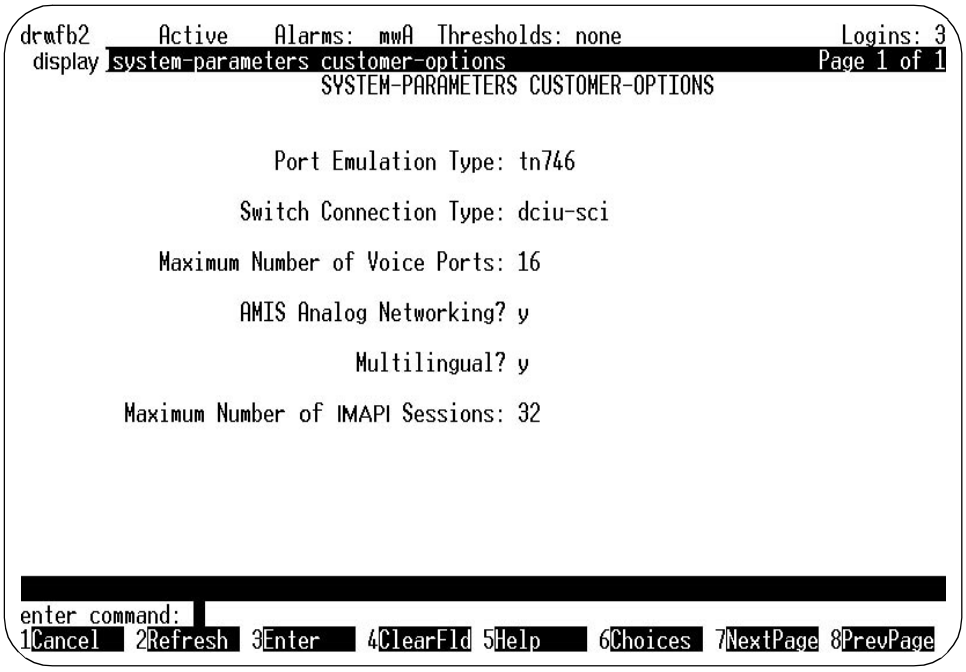
If the settings are correct, proceed to *"Task 13: Activate DEFINITY AUDIX Server Hardware (IMM) Options".*

If the settings are not correct, complete the next section of this task, *Change Customer Options*.

Display Customer Options

1. At the login prompt, enter **craft**. The system displays the Password prompt.
2. Enter **crftpw**. The system displays the Enter terminal type prompt.
3. Enter one of the following:
   - **513** for a 513 BCT or 715 BCT; enter **513** also for a 610/615 BCT or a PC with a 513 emulation package. (Since **513** is the default, you can just press RETURN to select it).
   - **4410** for a 4410 or 5410 terminal; enter **4410** also for a 610/615 BCT or a PC with a 4410 emulation package.
   - **4425** for a 4425 or 5425 terminal
   - **5420** for a 5420 or 4415 terminal
   - **g3-ma** for a G3-MA
4. Enter **display system-parameters customer options**.

The system displays the SYSTEM-PARAMETERS CUSTOMER-OPTIONS screen.



NOTE:
The DEFINITY AUDIX Status line will display an M (and possibly other alarms) in the alarms field reflecting the voice ports alarm that you saw on the ALARM REPORT screen in "Task 10: Finalize and Test the Hardware". These alarms should resolve themselves when you administer the voice ports (in "Task 14D: Administer Voice Ports") and can be ignored at this time.

If the value of the following fields,

```
Port Emulation Type
Maximum Number of Voice Ports
AMIS Analog Networking?
Multilingual?
Maximum Number of IMAPI Options
```

on the SYSTEM-PARAMETERS CUSTOMER-OPTIONS screen are as specified on Worksheet C-1, press CANCEL (F1) to cancel and proceed to "Task 13: Activate DEFINITY AUDIX Server Hardware (IMM) Options".

If the value in any of these fields needs to be changed, proceed to the next section of this task to change the customer options.

Change Customer Options

Complete the following steps only if the customer options need to be changed or activated.

1. Logoff the DEFINITY AUDIX System.
2. At the terminal login prompt, enter **init**. The system displays the Password prompt.
3. Enter the password for the *init* login*. The system displays the Enter terminal type prompt.
4. Enter one of the valid terminal types as listed in the previous section, *Display Customer Options*.

   The system automatically displays the SYSTEM-PARAMETERS CUSTOMER OPTIONS screen as shown in the previous section. (In this case, the screen is in the *change* mode.)
5. Move the cursor to the Port Emulation Type field and enter **tn754** for the digital port (DP) mode, or **tn746** for the control link (CL) mode.

   After you have entered a value in the Port Emulation Type field, either **embedded** for DP mode or **dciu-sci** for CL mode appears in the (display-only) Switch Connection Type field.
6. Move the cursor to the Maximum Number of Voice Ports field and, using the information on the customer's order, type the number of ports that the customer has purchased (2, 4, 6, or 8 for DP mode, or 2, 4, 6, 8, 10, 12, 14, or 16 for CL mode).
7. If the customer did not order AMIS Analog Networking, skip to Step 8. Otherwise, move the cursor to the AMIS Analog Networking? field and type **y**.
8. Move the cursor to the Multilingual? field. This indicates whether or not multilingual announcement sets can be administered on a per subscriber or class-of-service basis. The default value is **n**. Type **y** to enable the Multilingual feature.
9. Move the cursor to the Maximum Number of IMAPI Sessions: field and, using the information on the customer's order, type **32**, the allowable number of sessions.
10. Press the ENTER (F3) function key to save your changes or press CANCEL (F1) to cancel. Press ENTER (F3) again to confirm.

    The system automatically logs off. If the Port Emulation Type was changed, a system restart is automatically initiated. Wait for `OLDTRACELOG=/var/spool/audix/oldtrace` to display on the screen, then press RETURN to clear the screen and display the login prompt.

* If this password is not available to you, contact the TSO.

11. Proceed to Task 13, *Activate DEFINITY AUDIX Server Hardware (IMAPI) options*.

Task 13: Activate DEFINITY AUDIX Server Hardware (IMM) Options

This task is required only if a TN2170 was installed and Intuity Message Manager was purchased. Otherwise, proceed to "Task 14: Perform Initial DEFINITY AUDIX Administration". The SYSTEM PARAMETERS IMAPI-OPTIONS screen cannot be accessed if Intuity Message Manager was not purchased.

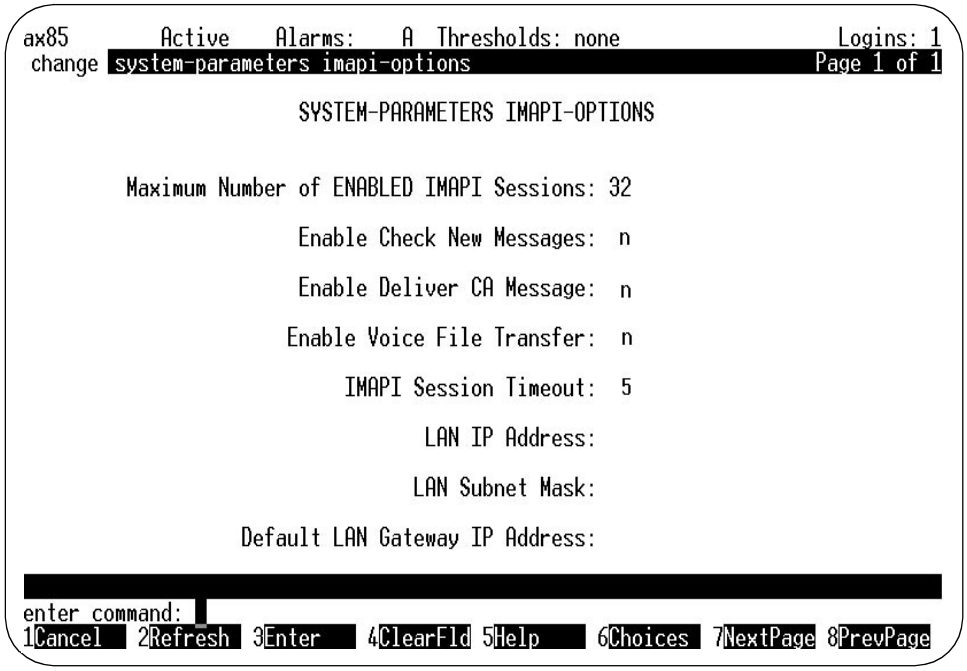
Check that the settings on the SYSTEM PARAMETERS IMAPI-OPTIONS screen are as specified on Worksheet C-2. Also check that the `IMAPI Access` and `IMAPI Voice File` on the SUBSCRIBER and COS (class of service) screens are activated. Refer to Worksheet C-8.

NOTE:
Prior to activating and installing the LAN options that will allow IMM to work, inform the LAN administrator to add the AUDIX host name to the network domain name server. This will allow name addressing to the AUDIX system. Also, a 104A Connecting Block must be connected to the LAN prior to setting up this feature (see "Task 6: Connect the Alarm Board Cable").

Task 13A: Set System Parameters for IMM

1. With the cursor on the DEFINITY AUDIX command line, enter **change system-parameters IMAPI-options**.

The system displays the SYSTEM-PARAMETERS IMAPI-OPTIONS screen.



2. Move the cursor to the Maximum Number of ENABLED IMAPI Sessions field. This should be **32**.
3. Move the cursor to the `Enable Check New Messages` field. Set to **y**. This allows clients to check for new messages without the overhead of logging in. If left at **n,** automatic new message notification from Intuity Message Manager is disabled.
4. Move the cursor to the `Enable Deliver_ca_Message` field. Leave at **n**. Entering **y** enables the public class-of-service function allowing messages to be delivered over the IMAPI interface. This feature is not used in IMM Release 1.0.
5. Move the cursor to the `Enable Voice File Transfer` field. Enter **y** to enable the use of the personal folder in Intuity Message Manager and also voice file transfer for all subscribers who have `IMAPI Voice File Transfer enabled`.
6. Move the cursor to the `LAN Session Timeout` field. This is the amount of time that a session can be inactive before the user is logged out of the mailbox. Intervals can be set in five-minute increments from 5 to 60 minutes. Leave at 5. After being logged out, the user still has an active TCP/IP connection to the AUDIX server.
7. Move the cursor to the `LAN IP Address` field. This is the number assigned to the AUDIX server by the LAN administrator. The site-specific address is expressed as *nnn.nnn.nnn.nnn*, each *nnn* representing a decimal integer between 1 and 126, or 128 and 254..

8. Move the cursor to the `IMAPI Subnet Mask` field. Part of this number matches the network IP address, while the remaining part contains the host interface address. (Usually, *255.255.255.0* will work.)
9. Move the cursor to the `Default LAN Gateway IP Address` field. This is the LAN server address to which all unknown addresses will be sent for resolution. It too is supplied by the LAN administrator and has the same form as the LAN IP Address.
10. Press the ENTER (F3) function key to save the changes.
11. When the IP, Subnet mask, and Gateway IP address fields are set, a call must be made to the underlying TCP/IP software to assign these numbers to the interface. (Changes in these values will not take effect until after the AUDIX system has been rebooted. Rebooting is done during "Task 14: Perform Initial DEFINITY AUDIX Administration".)

Task 13B: Check Access for IMM

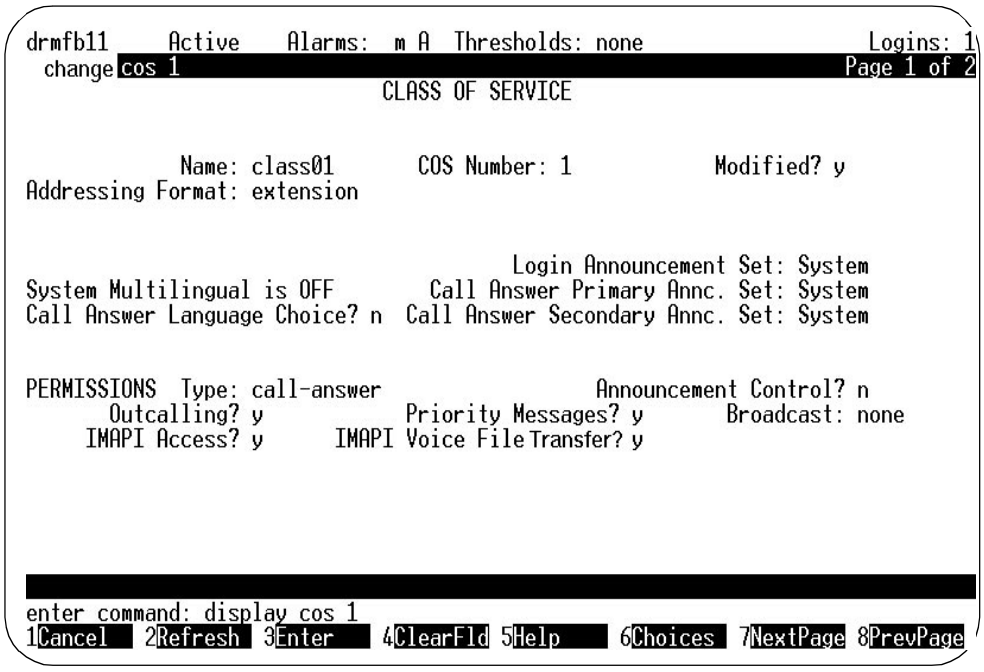
You need to give the IMM user permission to use it. You may:

— Change each subscriber's profile which results in a custom cos, or

— Change the cos for people who are to have IMM permission. In this case, perform the following steps:

1. With the cursor on the DEFINITY AUDIX command line, enter **change cos** and the class of service the group of subscribers who will use IMM will be assigned to.

The system displays the CHANGE COS screen.



2. Ensure that the `IMAPI access?` field for IMM and the `IMAPI Voice File Transfer?` field for a personal folder are set to **y**.
3. With the cursor on the DEFINITY AUDIX command line, enter **change subscriber** and the extension of a subscriber who will have Intuity Message Manager on their PC. Press NEXTPAGE (F7) to display the second page.

The system displays the CHANGE SUBSCRIBER screen.

```
ax85       Active    Alarms:    A  Thresholds: none                  Logins: 1
change  subscriber 84884                                            Page 2 of 2
                    SUBSCRIBER CLASS OF SERVICE PARAMETERS
Addressing Format: extension
                                        Login Announcement Set: System
System Multilingual is ON         Call Answer Primary Annc. Set: System
Call Answer Language Choice? n  Call Answer Secondary Annc. Set: System

PERMISSIONS  Type: call-answer                 Announcement Control? n
       Outcalling? y              Priority Messages? y     Broadcast: none
     IMAPI Access? y      IMAPI Voice File Transfer? y

INCOMING MAILBOX          Order: fifo               Category Order: nuo
  Retention Times (days),   New: 30       Old: 20         Unopened: 30
OUTGOING MAILBOX          Order: fifo               Category Order: nufda
Retention Times(days), File Cab: 60       Delivered/Nondeliverable: 5

Voice Mail Message (seconds),  Maximum Length: 480  Minimum Needed: 32
Call Answer Message (seconds), Maximum Length: 480  Minimum Needed: 8
        End of Message Warning Time (seconds):
          Maximum Mailing Lists: 25     Total Entries in all Lists: 250
Mailbox Size (seconds), Maximum: 2400            Minimum Guarantee: 0

enter command: display subscriber 84884
1Cancel  2Refresh  3Enter  4ClearFld 5Help  6Choices  7NextPage 8PrevPage
```

4. Ensure that the `IMAPI access?` field for IMM and the `IMAPI Voice File Transfer?` field for a personal folder are set to **y**.
5. Proceed to Task 14.

Task 14: Perform Initial DEFINITY AUDIX Administration

This task is required for all installation scenarios.

There are 13 parts to this task.

a. Set the DEFINITY AUDIX clock

b. Assign the DEFINITY AUDIX machine ID

c. Run the Switch Translations audit

d. Administer the voice ports

e. Set Switch-Link Parameters — CL mode only

f. Synchronize the DEFINITY AUDIX system and switch clocks

g. Set system parameters limits (optional)

h. Run the Switch Translations audit again

i. Assign the time zone

j. Reboot the system

k. Run the switch-names audit (DP mode only)

l. Check alarm status

m. Check hardware status

Task 14A: Set the DEFINITY AUDIX Clock

1. At the login prompt, enter **craft**.

   The system displays the Password prompt.

2. Enter **crftpw**.

   The system displays the Enter terminal type prompt.

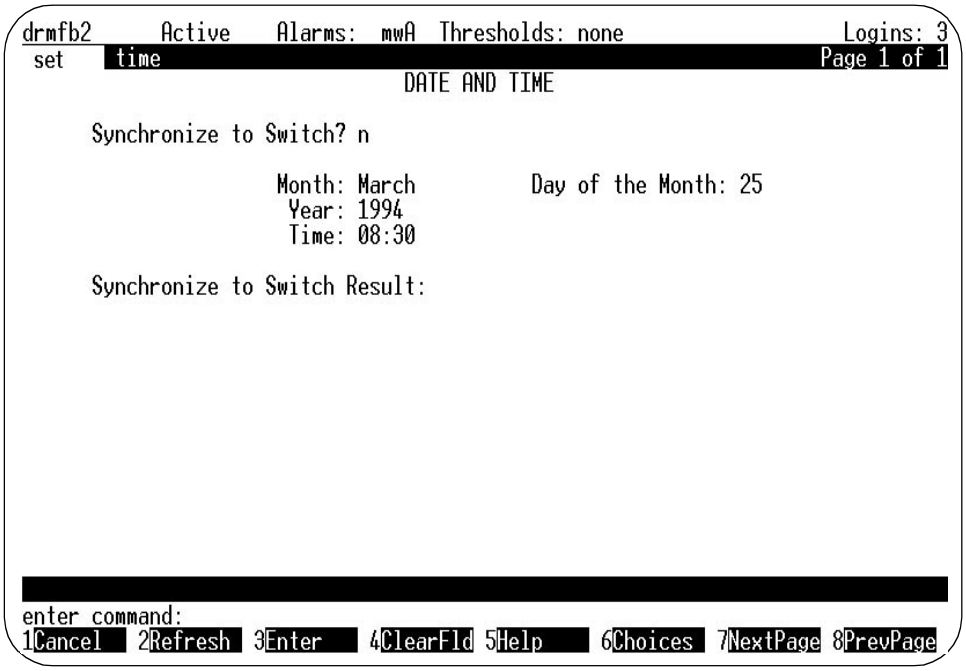
3. Enter one of the following:

   - **513** for a 513 BCT or 715 BCT; enter **513** also for a 610/615 BCT or a PC with a 513 emulation package. (Since **513** is the default, you can just press RETURN to select it).
   - **4410** for a 4410 or 5410 terminal; enter **4410** also for a 610/615 BCT or a PC with a 4410 emulation package.
   - **4425** for a 4425 or 5425 terminal
   - **5420** for a 5420 or 4415 terminal
   - **g3-ma** for a G3-MA

   The system displays the DEFINITY AUDIX command line.

4. Enter **set time**.

The system displays the DATE AND TIME screen.



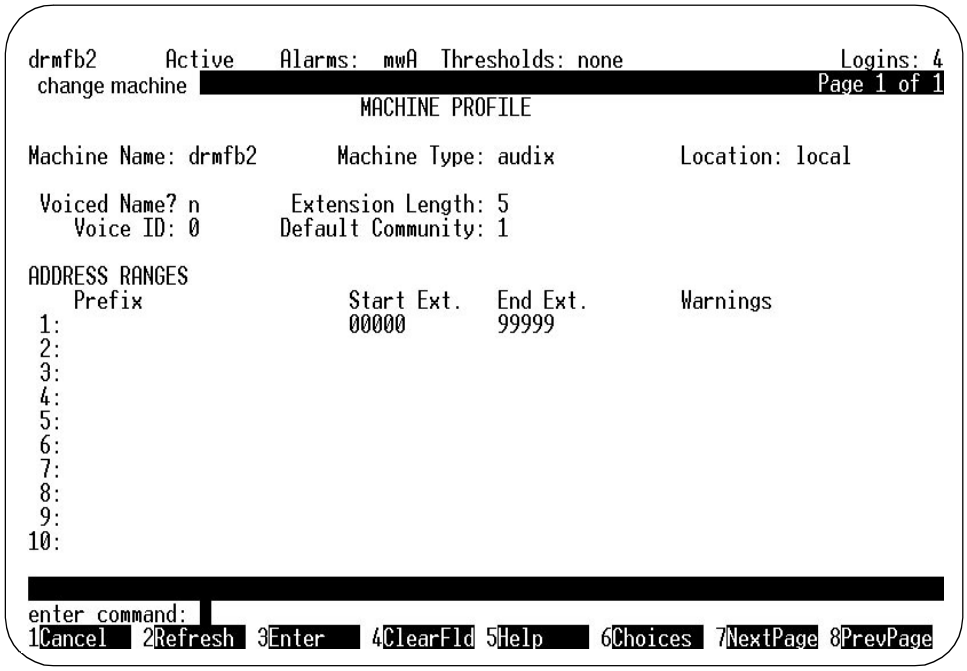
5. Move the cursor to the month field and type the name (not the number) of the current month.
6. Move the cursor to the Day of the Month field and type the two digits of the current day of the month (not the day of the week). For example, type **11** if the current date is April 11.
7. Move the cursor to the Year field and type the full four digits of the current year.
8. Move the cursor to the Time field and type the current time in an *hh:mm* format (*hh* specifies the hour and *mm* specifies the minutes).
9. Press the ENTER (F3) function key to save the changes.
10. Proceed to Subtask 14B.

Task 14B: Assign the DEFINITY AUDIX Machine ID

Use information from Worksheet C-3: *Assign the DEFINITY AUDIX Machine ID*, when completing this task.

1. With the cursor on the DEFINITY AUDIX command line, enter **change machine**.

The system displays the MACHINE PROFILE screen.



2. Move the cursor to the Machine Name field and type the new name to be assigned to this DEFINITY AUDIX system. The machine name must be from 1 to 8 characters in length.
3. Verify that the Machine Type field displays `audix`. If not, move the cursor to that field and type **audix**.
4. Move the cursor to the Extension Length field and type the number of digits that the extensions on this DEFINITY AUDIX system will have.
5. Move the cursor to the ADDRESS RANGES fields, and fill in the starting and ending switch extensions that will have coverage on this DEFINITY AUDIX system.
6. For the remaining fields, change only the fields whose values on the worksheet are different from the default.
7. Press the ENTER (F3) function key to save the changes.
8. Proceed to Subtask 14C.

Task 14C: Run the Switch Translations Audit

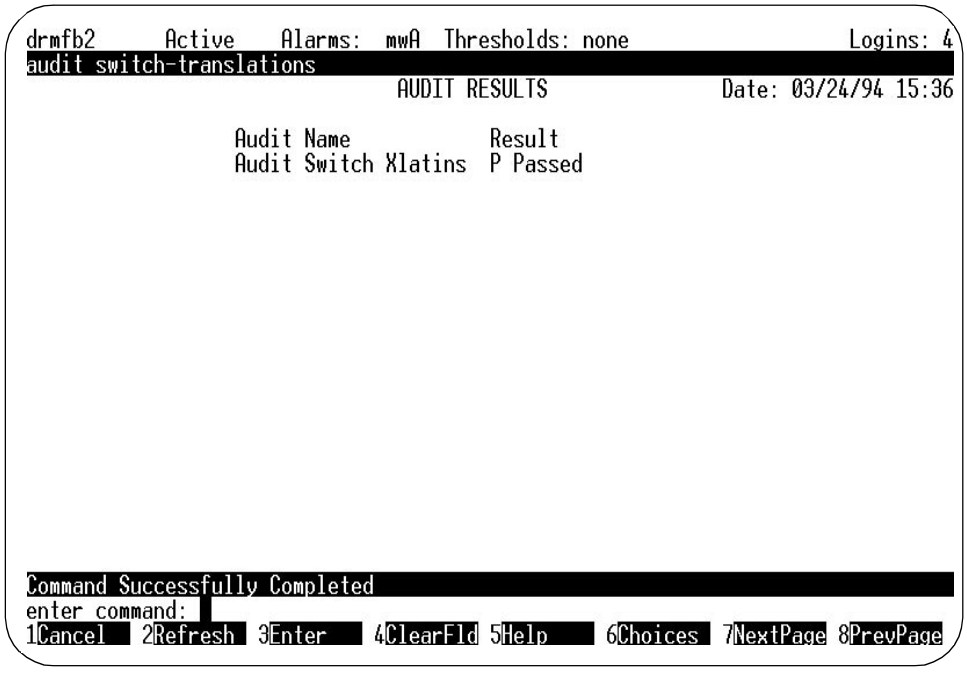
This task is required for all installation scenarios.

The switch translations audit internally synchronizes all software processes to make them aware of the changes you have made. Run the audit at this time to update all processes with the machine profile and clock changes.

This audit takes only about 1-2 seconds.

1. With the cursor on the DEFINITY AUDIX command line, enter **audit switch-translations**.

   The system displays the AUDIT RESULTS screen.



2. Press the ENTER (F3) function key to begin the audit.
3. When the audit is complete (in a few seconds) proceed to Subtask 14D. If the audit does not complete successfully, see *DEFINITY AUDIX System — Maintenance*, 585-300-110.

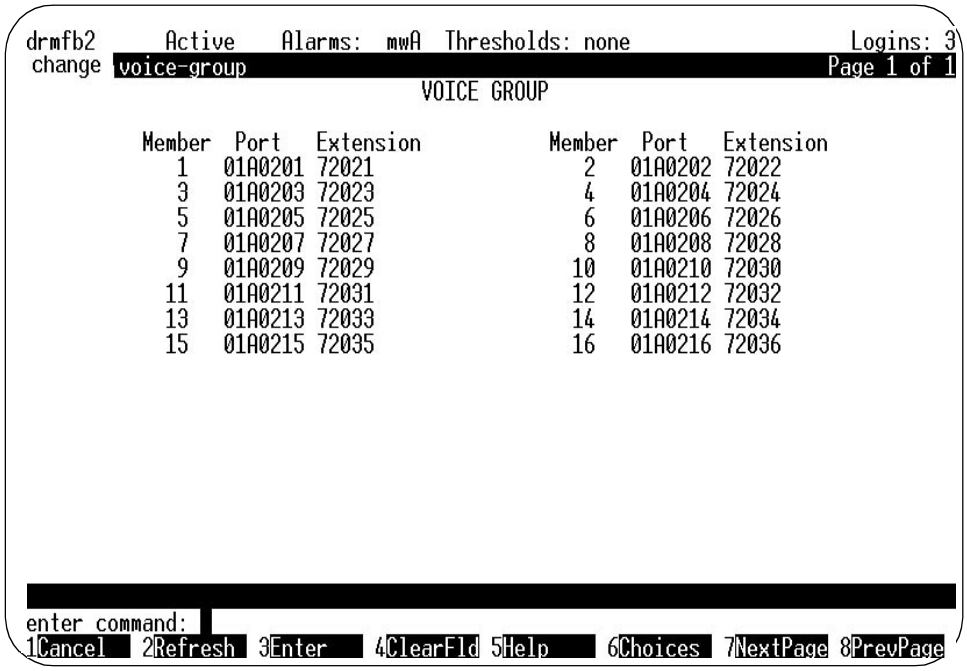
Task 14D: Administer Voice Ports

This task is required for all configurations.

The voice ports and extensions that you administer in this task must match the ports and extensions that you administered on the switch. See Worksheet B-1 (for DP mode) or B-5 (for CL mode), *Administer Voice Ports as Stations*, for the correct values.

1. With the cursor on the DEFINITY AUDIX command line, enter **change voice-group**.

The system displays the VOICE GROUP screen.



2. With the cursor at the Port field, type the 6-digit location identifier of the first port. For example, if the DEFINITY AUDIX system multifunction board (MFB) is in module 2, carrier B, slot 07, the first port location is 2B0701 (the last two digits are the port number).
3. Move the cursor to the Extension field and type the extension number of the first port.
4. Repeat Steps 2 and 3 for as many ports as the customer has purchased. Following the example in Step 2, the second port location is 2B0702, the third is 2B0703, the fourth is 2B0704, etc.
5. Press the ENTER (F3) function key to save the changes.
6. Proceed to Subtask 14E.

Task 14E: Set Switch-Link Parameters

This task is required only if the DEFINITY AUDIX system will be running in the CL mode. Check Worksheet C-1: *Activate Customer Options*, to see if the system is to run in the CL mode (the Port Emulation Type will be **TN746**). If not, skip to "Task 14F: Synchronize DEFINITY AUDIX System and Switch Clocks".

If the system will be running in CL mode, perform the following steps.

1. With the cursor on the DEFINITY AUDIX command line, enter **change switch-link**.

   The system displays the SWITCH-LINK DCIU-SCI screen.

```
drmfb2      Active    Alarms:  mwA  Thresholds: none                Logins: 4
 change switch-link                                                 Page 1 of 1
                          SWITCH LINK DCIU-SCI

       AUDIX Port                                    AUDIX Port
Switch  Logical   Switch  Data          Switch  Logical   Switch  Data
Number  Channel   Port    Link          Number  Channel   Port    Link
   1       1      59      1               2
   3                                      4
   5                                      6
   7                                      8
   9                                     10
  11                                     12
  13                                     14
  15                                     16
  17                                     18
  19                                     20

      Host Switch: 1
            AUDIX: 1

enter command:
1Cancel  2Refresh  3Enter  4ClearFld  5Help  6Choices  7NextPage  8PrevPage
```

2. Enter values for the Host Switch and AUDIX fields from Worksheet C-3. The number entered in the Host Switch field must match the *Local PBX ID** administered on the switch.

   NOTE:
   If the Logical Channel, Switch Port, or Data Link fields display values for any of the 20 switch numbers (rows) on this screen, these fields must be cleared (using the CLEARFIELD [F4] function key) before proceeding to the next step.

3. Move the cursor to the Switch Number row corresponding to the host switch number that you entered in step 2, and enter values for the Logical Channel field, the Switch Port field, and the Data Link field from Worksheet B-7a (or B-7b for G3r switches).

The Logical Channel, Switch Port, and AUDIX numbers must be the same as the corresponding numbers administered on the switch. These fields have different names on the switch screens. The field names on the switch screens corresponding to the DEFINITY AUDIX SWITCH LINK screen field names are shown in the following table:

Table 3-2. Field-Name Correspondence — DEFINITY AUDIX System vs. Switch

DEFINITY AUDIX Switch-link Dciu-sci Screen	Processor Channel Screen		Remote
	System 75, G1, G3i,s,vs	G3r	System 85/G2
AUDIX Port Logical Channel	Interface Channel, or Remote Processor Channel	Interface Channel, or Remote port	Remote port
Switch Port	Processor Channel	Local Port	Local Port
AUDIX	Machine ID	Machine ID	Machine ID

4. If the DEFINITY AUDIX System is operating in a DCS environment, repeat step 3 for each remote switch-node in the DCS network. Refer to Worksheets B-9 through B-15.

NOTE:
DCS-related switch administration must be done in conjunction with this task for each switch in the the DCS network.

5. Once you have entered values for these fields, press the ENTER (F3) function key to save the changes.
6. Proceed to Subtask 14F.

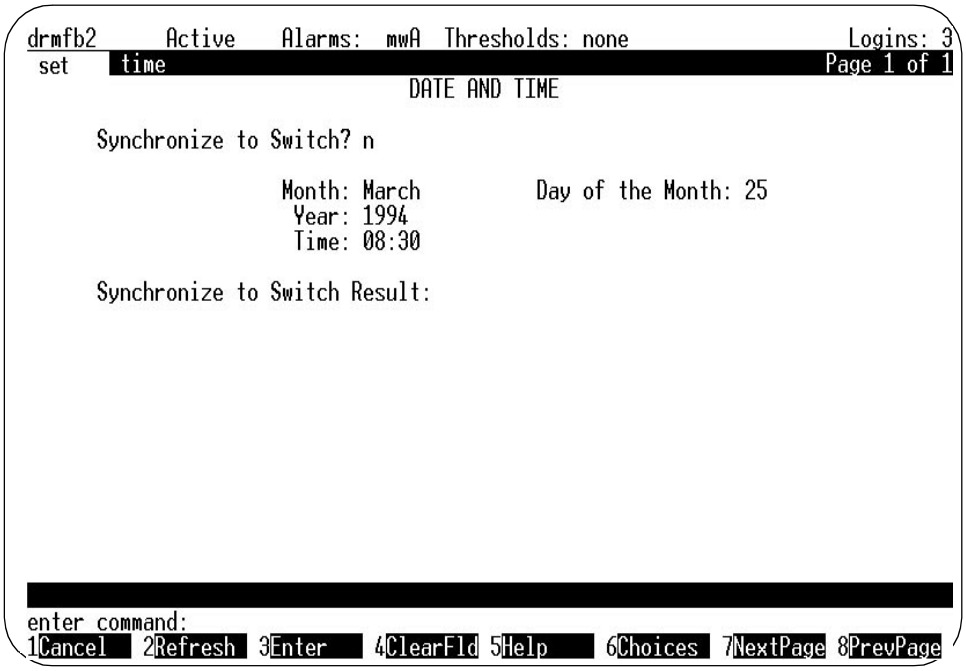
Task 14F: Synchronize DEFINITY AUDIX System and Switch Clocks

This task is required for all installation scenarios.

NOTE:
The switch clock may not be set at this time. If it is not, set the switch clock before performing this task. (See the appropriate switch document for the procedure to set the switch clock.)

1. With the cursor on the DEFINITY AUDIX command line, enter **set time**.

The system displays the DATE AND TIME screen.



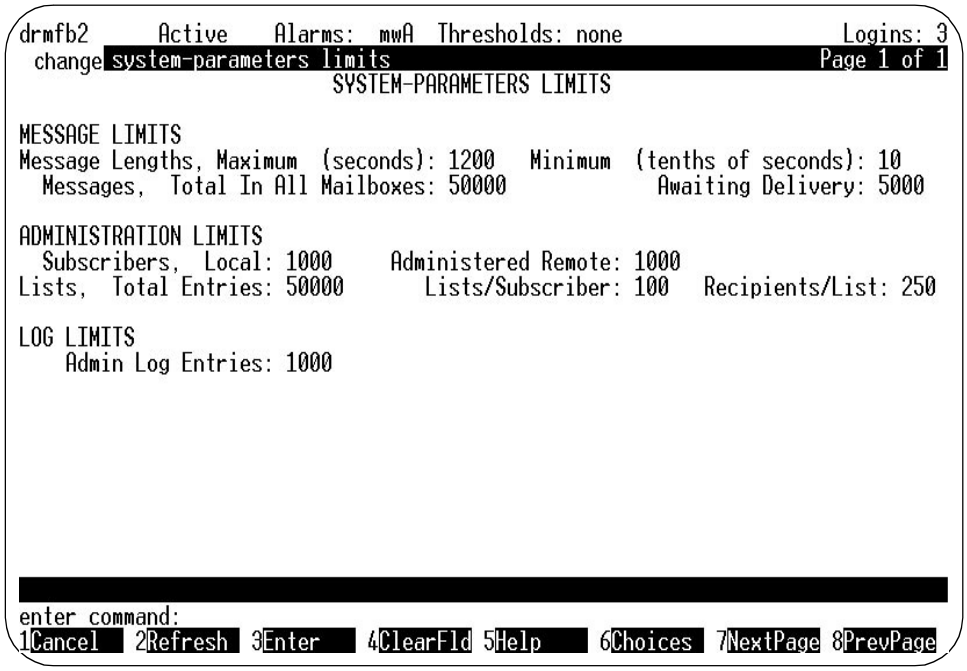
2. With the cursor at the Synchronize to Switch field, type **y**.
3. Press the ENTER (F3) function key to save the changes.
4. Proceed to Subtask 14G.

Task 14G: Set System Parameters Limits

This task is required only if the customer wants to use subscriber limits that are different from the defaults. Check Worksheet C-4, *Set System Parameters Limits*, to see if you need to change the system parameters limits. If not, skip to Task 14H. If changes are indicated on the worksheet, perform the following steps.

1. With the cursor on the DEFINITY AUDIX command line, enter **change system-parameters limits**.

The system displays the SYSTEM-PARAMETERS LIMITS screen.



2. Move the cursor to each of the fields that is to be changed (according to Worksheet C-4) and type the new system parameters limits.
3. Once you have changed all the fields, press the ENTER (F3) function key to save the changes.
4. Proceed to Subtask 14H.

Task 14H: Run the Switch Translations Audit a Second Time

This task is required for all installation scenarios.

You must run the Switch Translations audit a second time to update the DEFINITY AUDIX system processes again with the new information you have administered.

1. With the cursor on the DEFINITY AUDIX command line, enter **audit switch-translations**.

The system displays the AUDIT RESULTS screen.

2. Press the ENTER (F3) function key to begin the audit.
3. When the audit is complete (in a few seconds) proceed to Subtask 14I. If the audit does not complete successfully, see *DEFINITY AUDIX System — Maintenance*, 585-300-110.

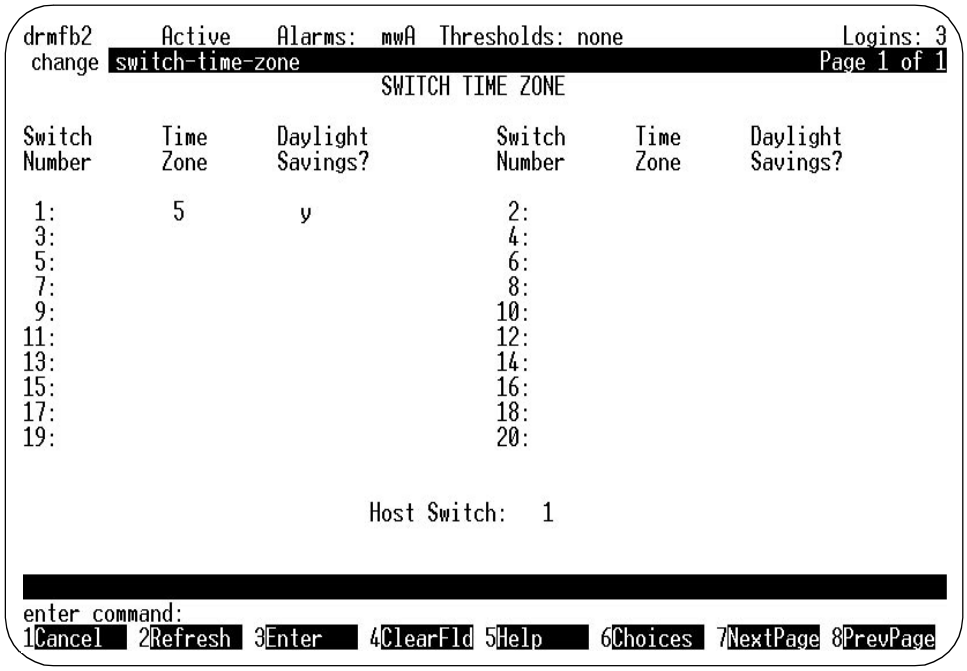
Task 14I: Assign the Time Zone

This task is required for all installation scenarios.

Use the information on Worksheet C-5: *Assign the Time Zone* to perform this task.

1. With the cursor on the DEFINITY AUDIX command line, enter **change switch-time-zone**.

The system responds with the SWITCH TIME ZONE screen.



2. With the cursor at the Time Zone field for switch number 1, type the number corresponding to the time zone in which this switch is installed. Time zone numbers (for Standard Time) are: **4** = Atlantic, **5** = Eastern, **6** = Central, **7** = Mountain, **8** = Pacific, **9** = Alaska, and **10** = Hawaii.
3. Move the cursor to the Daylight Savings field and type a **y** (yes) if this system is at a location that uses daylight savings time; otherwise, type an **n** (no).
4. Press the ENTER (F3) function key to save the changes.

NOTE:
The system will not put these changes into effect until you have rebooted the system (Task 14J).

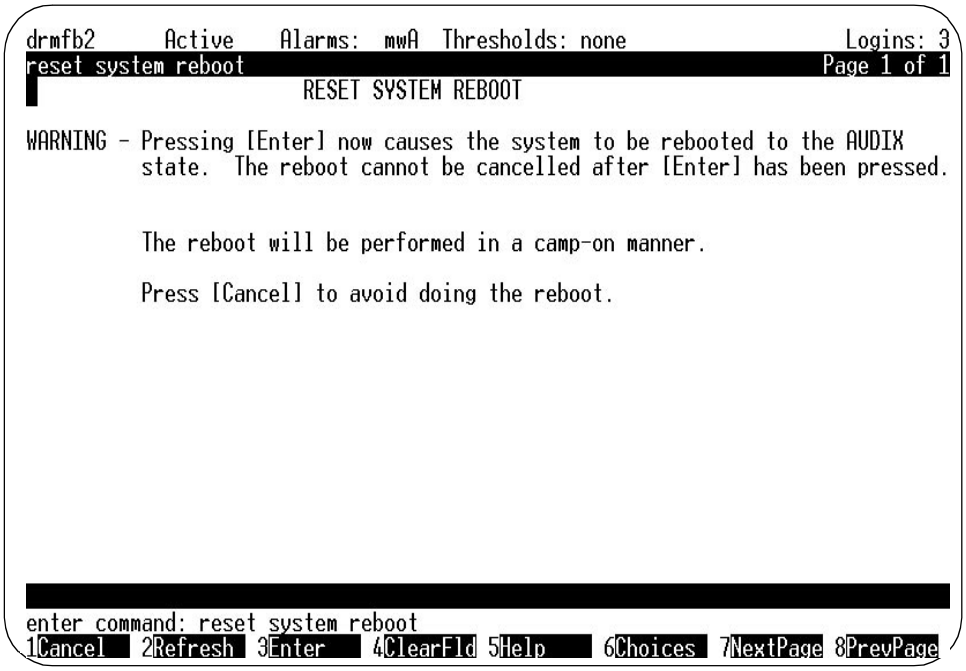
5. Proceed to Subtask 14J.

Task 14J: Reboot the DEFINITY AUDIX System

This task is required for all installation scenarios.

1. With the cursor on the DEFINITY AUDIX command line, enter **reset system reboot**.

The system displays the RESET SYSTEM REBOOT screen.



2. Press the ENTER (F3) function key to begin the reboot.

   During the DEFINITY AUDIX system reboot, the LCD displays the various system states and the terminal screen displays a series of messages about the reboot, including a login prompt. Do not log in yet.

3. Wait approximately 10 minutes for the DEFINITY AUDIX system to come up to the AUDIX state (the screen will display `OLDTRACELOG=/var/spool/audix/oldtrace`), then login as **craft** (see Task 14A for the login procedure).

   If the system has completed the reboot, the Status line on the screen displays audix; otherwise, the Status line displays Initializing to AUDIX. (You cannot continue until the Status line changes to audix.)

4. Once the reboot completes successfully, proceed to Subtask 14K. Otherwise, note the state indicated on the LCD, then see the corresponding troubleshooting procedures in *DEFINITY AUDIX System — Maintenance*, 595-300-110 before continuing.

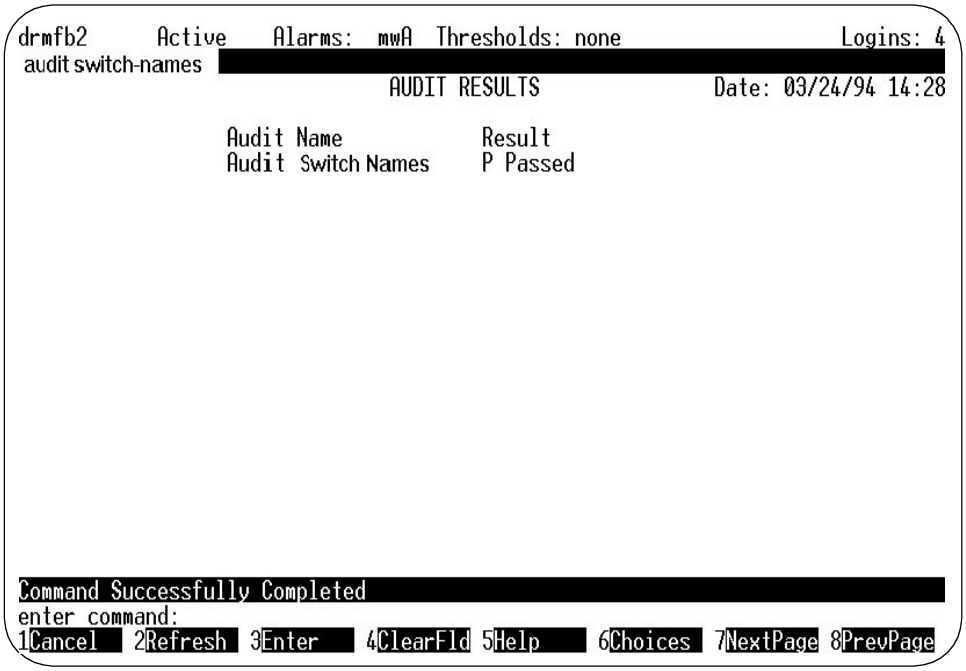
Subtask 14K: Run the Switch Names Audit

This task is required only if the system is running in DP mode. Otherwise, skip to "Task 14L: Check Alarm Status".

The Switch Names audit uploads the names-to-extensions database from the switch. The Switch Names audit could take from 5 minutes to an hour, depending on the size of the database.

1. With the cursor on the DEFINITY AUDIX command line, enter **audit switch-names**.

   The system displays the SWITCH NAMES AUDIT screen.



2. Press the ENTER (F3) function key to begin the audit.
3. Press the ENTER (F3) function key again to have the audit run in the background.

   NOTE:
   Because of the possible long duration of this task, complete the remaining administration tasks (Tasks 14L, 14M, 15, and 16) and then check the status of this audit as described in "Task 18: Check the Status of the Switch Names Audit".

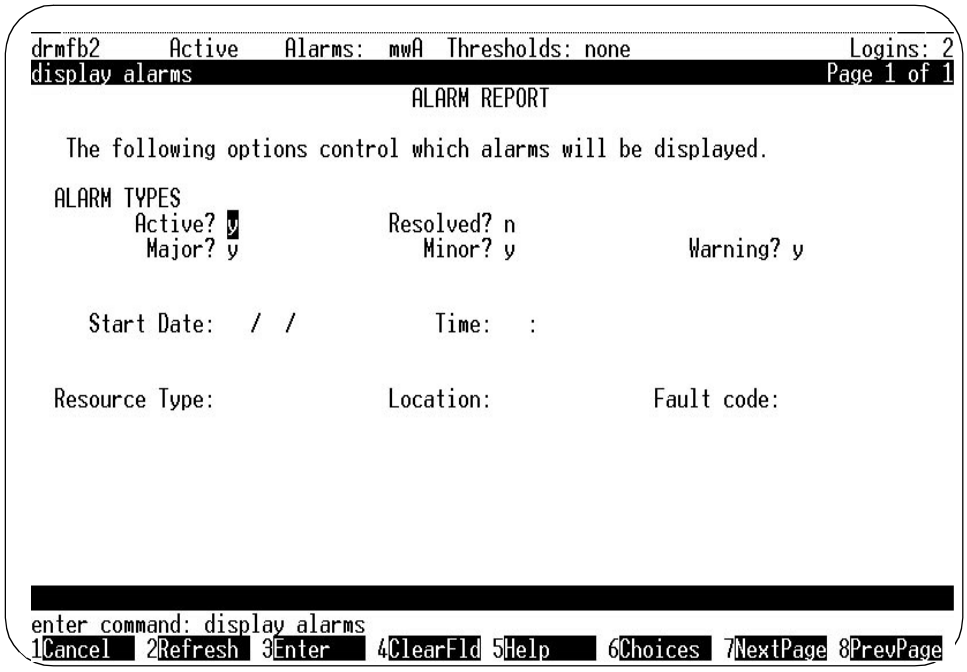
4. Proceed to Subtask 14L.

Task 14L: Check Alarm Status

This task is required for all installation scenarios.

1. With the cursor on the DEFINITY AUDIX command line, enter **display alarms**.

   The system displays the ALARM REPORT screen.



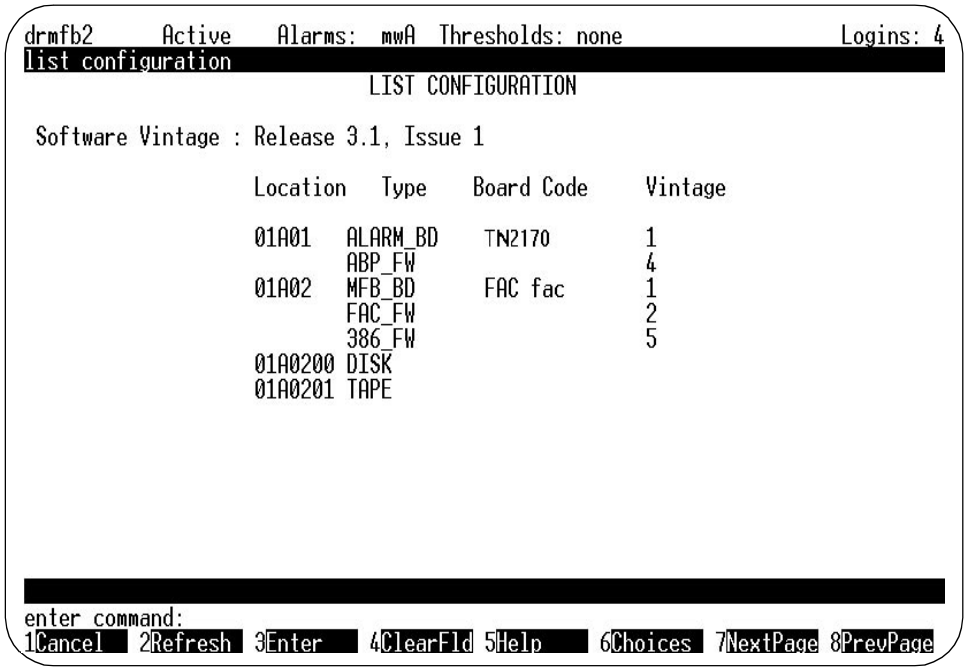
2. Check the ALARM TYPES fields for any active alarms — make sure that a "y" (the default) appears in each of the alarm type fields and press ENTER (F3) to display the active alarms.
3. If there are no active alarms (the screen will be blank), skip to Step 4. Otherwise, resolve all active alarms. See *DEFINITY AUDIX System—Maintenance*, 585-300-110 for the procedures for identifying and resolving the alarms.
4. Proceed to Subtask 14M.

Task 14M: Check Hardware Status

This task is required for all installation scenarios.

1. With the cursor on the DEFINITY AUDIX command line, enter **list configuration**.

The system displays the LIST CONFIGURATION screen.



2. Make sure the screen displays the following components (indicating that the system correctly recognizes all the components).
   - ALARM_BD
   - ABP_FW
   - MFB_BD
   - FAC_FW
   - 386_FW
   - DISK
   - TAPE
3. If all the components are listed and shown in the proper location, skip to Step 4. Otherwise, see *DEFINITY AUDIX System — Maintenance*, 585-300-110 for troubleshooting procedures.
4. With the cursor on the DEFINITY AUDIX command line, enter **status voice-group**.

The system displays the VOICE GROUP STATUS screen.

```
drmfb2      Active    Alarms:  mwA  Thresholds: none                  Logins: 3
status voice-group
                              VOICE GROUP STATUS

                                          Port      Processor
        Resource   Member  Ext            Location  Location  State   Reason
        VOICE_PT     1     72021          01A0201    01A02     ISI
        VOICE_PT     2     72022          01A0202    01A02     ISI
        VOICE_PT     3     72023          01A0203    01A02     ISI
        VOICE_PT     4     72024          01A0204    01A02     ISI
        VOICE_PT     5     72025          01A0205    01A02     ISI
        VOICE_PT     6     72026          01A0206    01A02     ISI
        VOICE_PT     7     72027          01A0207    01A02     ISI
        VOICE_PT     8     72028          01A0208    01A02     ISI
        VOICE_PT     9     72029          01A0209    01A02     ISI
        VOICE_PT     10    72030          01A0210    01A02     ISI
        VOICE_PT     11    72031          01A0211    01A02     ISI
        VOICE_PT     12    72032          01A0212    01A02     ISI
        VOICE_PT     13    72033          01A0213    01A02     ISI
        VOICE_PT     14    72034          01A0214    01A02     ISI
        VOICE_PT     15    72035          01A0215    01A02     ISI
        VOICE_PT     16    72036          01A0216    01A02     ISI

enter command:
1Cancel  2Refresh  3Enter  4ClearFld  5Help  6Choices  7NextPage  8PrevPage
```

5. Make sure all the ports that are supposed to be active are shown on the screen with the correct location and extension and that the State field shows ISI (In-Service Idle).
6. If any of the port information is incorrect, see *DEFINITY AUDIX System — Maintenance*, 585-300-110 for complete troubleshooting procedures.

Step 7 is required only if the DEFINITY AUDIX system will be running in the CL mode. If not, skip to step 8.

7. Enter **status switch-link** to check the status of the switch link set up in Task 14E. The screen should show the state field as **ISB** and the DCIU Switches number 1 field should be **I***. If either of these values is different, see *DEFINITY AUDIX System — Maintenance*, 585-300-110 for complete troubleshooting procedures.
8. Proceed to Task 15, *Activate Parameters and Basic Features*.

Task 15: Activate Parameters and Basic Features

This task is required if the customer has indicated specific features to be activated. Check Worksheet C-6: *Activate Parameters and Basic Features* to see if any features are to be activated. If no features are to be activated, skip to "Task 16: Add Tape". Otherwise, perform the following steps.

1. With the cursor on the DEFINITY AUDIX command line, enter **change system-parameters features**.

   The system displays the SYSTEM-PARAMETERS FEATURES screen.

```
drmfb2      Active    Alarms:  mwA  Thresholds: none                 Logins: 3
change system-parameters features                                  Page 1 of 3
                        SYSTEM-PARAMETERS FEATURES

LOG-IN PARAMETERS
        Login Retries: 3              Consecutive Invalid Attempts: 18
 System Guest Password:                    Minimum Password Length: 0

PASSWORD AGING LIMITS (DAYS)
   Password Expiration Interval: 0   (0 for no password aging)
     Minimum Age Before Changes: 0
             Expiration Warning: 0   (0 for no warning)

INPUT TIME LIMITS (SECONDS)
       Normal: 60     Full Mailbox Timeout: 5     Wait (*W): 180
       Between Digits at Auto-attendent or Standalone Menu: 3  (3-12)

DISCONNECT OPTIONS
       Quick Silence Disconnect? n         Silence Limit? 30 (5-30 seconds)
          Tone Based Disconnect? n


enter command: display system-parameters features
1Cancel  2Refresh  3Enter  4ClearFld 5Help  6Choices  7NextPage 8PrevPage
```

2. Move the cursor to any of the fields to be changed on the first page and, using the information on Worksheet C-6, *Activate Parameters and Basic Features*, type the values specified.

3. Press the NEXTPAGE (F7) function key to display page two of this screen.

```
drmfb2      Active    Alarms:  mwA  Thresholds: none                Logins: 3
 change system-parameters features                                 Page 2 of 3
                        SYSTEM-PARAMETERS FEATURES

MISCELLANEOUS PARAMETERS
         Broadcast Mailbox Extension:
            System Prime Time, Start: 08:00      End: 17:00
               Weekly Backup Enabled? y
              Increment(1/s), Rewind: s      Advance: s

FEATURE ACTIVATION
                    Traffic Collection? y
              Name Record by Subscriber? y
           Multiple Personal Greetings? y
                End of Message Warning? y      Warning Time (seconds): 15
             Priority on Call Answer? n

CALL TRANSFER OUT OF AUDIX
 Transfer Type: none                          Transfer Restriction: subscribers
 Covering Extension:


enter command: display system-parameters features
1Cancel  2Refresh  3Enter  4ClearFld 5Help  6Choices  7NextPage 8PrevPage
```

4. Move the cursor to any of the features to be activated on page 2 and enter the appropriate data as specified on the worksheet.

5. Press the NEXTPAGE (F7) function key to display page three of this screen.

```
drmfb2      Active    Alarms:  mwA  Thresholds: none                Logins: 3
 change system-parameters features                                 Page 3 of 3
                        SYSTEM-PARAMETERS FEATURES

ANNOUNCEMENT SETS
             System: us-eng                    Administrative:

RESCHEDULING INCREMENTS FOR UNSUCCESSFUL MESSAGE DELIVERY
 Incr 1: 0  days  0  hrs 5  mins      Incr 2: 0  days 0  hrs 15 mins
 Incr 3: 0  days  0  hrs 30 mins      Incr 4: 0  days 1  hrs 0  mins
 Incr 5: 0  days  2  hrs 0  mins      Incr 6: 0  days 6  hrs 0  mins
 Incr 7: 1  days  0  hrs 0  mins      Incr 8: 2  days 0  hrs 0  mins
 Incr 9: 7  days  0  hrs 0  mins      Incr10: 14 days 0  hrs 0  mins









enter command: display system-parameters features
1Cancel  2Refresh  3Enter  4ClearFld 5Help  6Choices  7NextPage 8PrevPage
```

6. Move the cursor to any of the fields and add announcement sets or change rescheduling increments as needed.
7. When you have completed all the changes, press the ENTER (F3) function key to save the changes.

   If no covering extension is administered, the system displays the following message:

   ```
   Covering Extension not defined, press Enter to confirm.
   ```

8. Press the ENTER (F3) function key again.
9. If any of the features that you just activated required special administration (as specified on the *Activate Parameters and Basic Features* worksheet) see the appropriate tasks in *DEFINITY AUDIX System — Administration*, 585-300-507 for details.
10. Proceed to Task 16, *Add Tape*.

Task 16: Add Tape

This task is required for all installation scenarios.

You should have received two blank tapes as part of the DEFINITY AUDIX system order. In Task 10, you were to give one of these tapes to the system administrator or put it in a safe place. You should still have the second blank tape (to be used for nightly backups) which you will install in this task.

1. Take the blank tape out of the box.
2. The tape must be writeable. To make the tape writeable, move the *write protect* marker forward (in the direction of the arrow on the tape label).
3. Rotate the lever on the tape drive to the open (facing down) position (if it is not already open).
4. Referring to Figure 3-1., hold the cartridge with the tape side down and the arrow pointing toward the drive (away from you), then insert the cartridge into the drive.

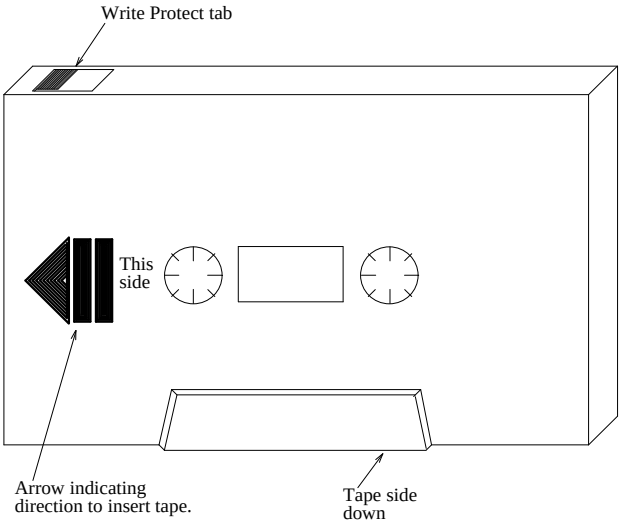


Figure 3-1. Tape Cartridge

5. Rotate the tape lever to the closed (1/4-turn left) position.
6. At the terminal, enter **add tape**.

   The system displays the TAPE screen.

```
drmfb2      Active    Alarms:  mwA  Thresholds: none                Logins: 3
 add   tape                                                        Page 1 of 1
                                   TAPE

Tape Drive Location: 01A0201

          Volume Type:

          Volume Name:

      Software Release:

          Machine Name:

          Creation Date:

            Status of most recent "add tape" operation:



Status Command Complete
enter command:
1Cancel  2Refresh  3Enter  4ClearFld 5Help  6Choices  7NextPage 8PrevPage
```

7. With the cursor on the Volume Name field, type **backup1**.
8. Press the ENTER (F3) function key.

   The Message line displays the following message.

   ```
   This operation erases all existing tape data. Press
   "ENTER" to confirm.
   ```

9. Press the ENTER (F3) function key to begin the add tape function.

   It takes approximately 3 minutes to re-tension the tape if the cartridge is blank. If you are adding a tape that already has data on it, this could take up to 30 minutes.

10. Proceed to the next task. You will verify the status of the add tape function in a later step.

Task 17: Alarm Origination Administration/test and Status Tape

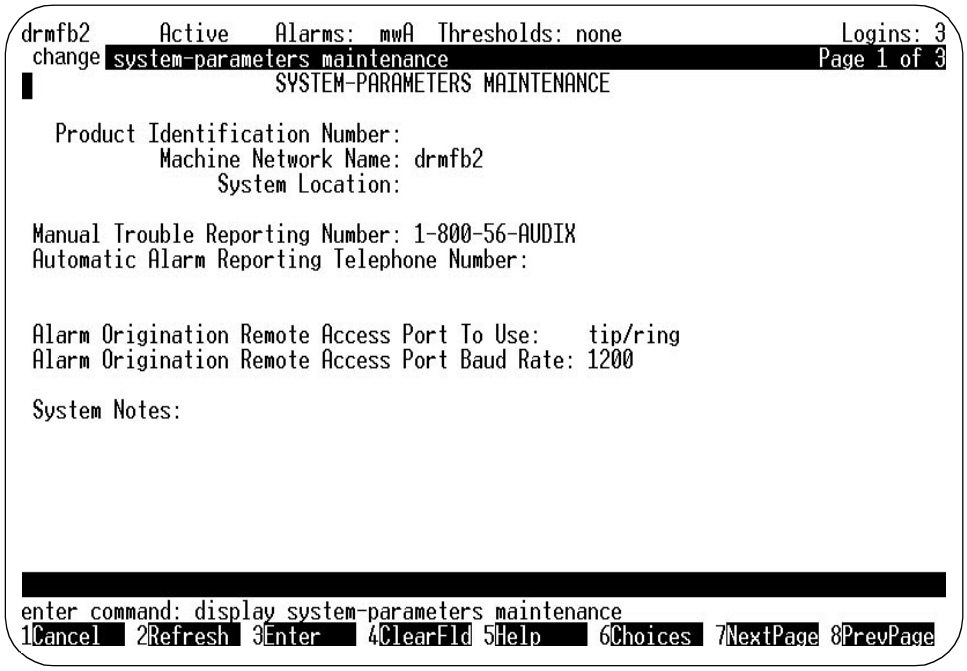
Worksheet C-8, *Set Up Alarm Origination*, indicates whether alarm origination is to be activated through *AUDIX only*, through the *switch only*, or through *both*. If alarm origination is to be set up through the switch only, rather than through AUDIX only or through both, skip to step 9 of this task.

You will perform this task jointly with people at the INADS center.

The steps listed below present a typical execution of this task but you may vary the steps for this site depending on the approach you agree upon with the INADS people.

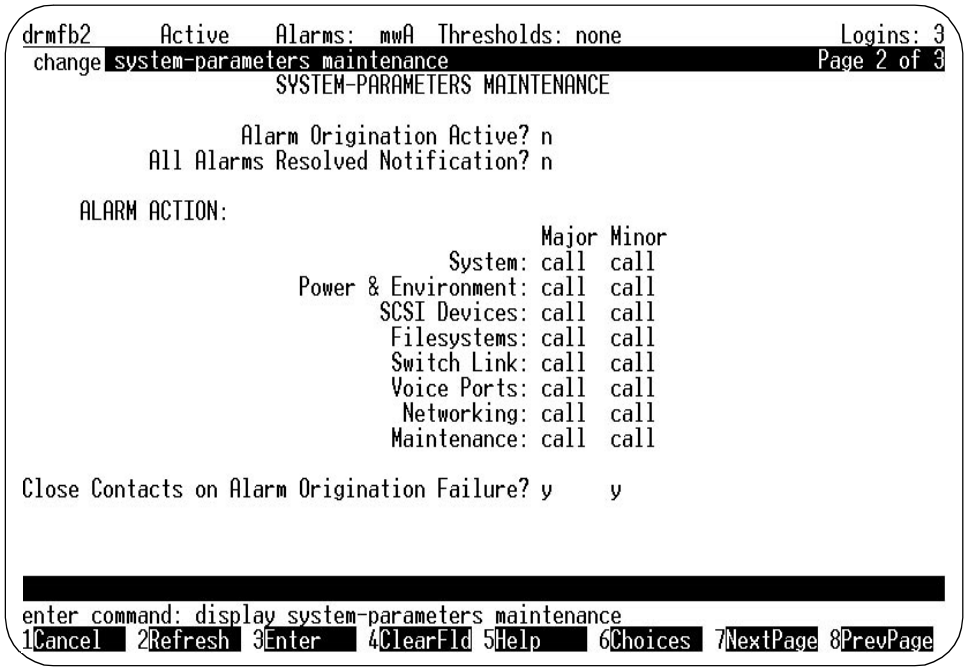
1. Call INADS and request administration and test of alarm origination for this DEFINITY AUDIX system.
2. If you have not already done so, log in to the DEFINITY AUDIX system terminal as **craft**. (Refer to Task 14A for the login procedure.)
3. Enter **change system-parameters maintenance**.

The system displays the SYSTEM-PARAMETERS MAINTENANCE screen.



4. With information given to you by the Project Manager and with the help of the INADS people, fill in all fields on the screen.
5. Verify that the following fields are filled in:
   - Product Identification Number
   - AT&T Services Identifier
   - System Location
   - Automatic Alarm Reporting Telephone Number
   - Alarm Origination Remote Access Port to Use
   - Baud Rate

6. Press NEXTPAGE (F7) to display the second page of SYSTEM-PARAMETERS MAINTENANCE screen.



If Worksheet C-8 indicates that alarm origination is to be activated through the **switch only**, enter **n** in the Alarm Origination Active? field. If either **audix only**, or **both**, is indicated on Worksheet C-8, enter **y** in the Alarm Origination Active? field.

7. Ask the INADS personnel to login and display the SYSTEM-PARAMETERS MAINTENANCE screen. The following steps should be completed by INADS personnel

   a. INADS checks that the login is successful.

   b. INADS checks that the Product Identification Number on the SYSTEM-PARAMETERS MAINTENANCE screen is correct.

   c. INADS enters the **test alarm-origination** command, terminates login, and hangs up.

   d. INADS checks the appropriate trouble ticket. The trouble ticket should show **INADS,n,MINOR** in the description field to indicate that a minor off-board alarm was reported to INADS. There may be additional text in the description field if other resolved alarms were reported.

   e. INADS makes a second call and login to the DEFINITY AUDIX system and checks the error log to verify that there are no problems.

   f. INADS terminates login and hangs up.

8. If all the fields are properly filled in, press the CANCEL (F1) function key to exit the screen.

   This completes the alarm origination and test.

9. Verify the status of the add-tape function performed in the previous task by entering **status tape**.

   The system displays the STATUS TAPE screen.

```
drmfb2      Active    Alarms:  mwA  Thresholds: none                Logins: 3
status tape                                                        Page 1 of 1
                          STATUS TAPE

Tape Drive Location: 01A0201
             Status: Out-of-Service--F

DRIVE:
           Equipped? y
             Vendor: TEAC
              Model: MT-2ST/N50
           Revision: RV F

CARTRIDGE:
           Equipped? n
       Administered? n
      Write Enabled?
   Capacity(Mbytes):



Status Command Complete
enter command:
1Cancel  2Refresh  3Enter  4ClearFld 5Help  6Choices  7NextPage 8PrevPage
```

10. The Status field should display In service, idle. If not, see *DEFINITY AUDIX System — Maintenance*, 585-300-110.

If the system is running in DP mode, proceed to Task 18, *Check the Status of the Switch Names Audit*. Otherwise, skip to 4, *Confidence Checks*.

Task 18: Check the Status of the Switch Names Audit

This task is required if the system is running in DP mode. Otherwise, skip to 4, *Confidence Checks*.

The purpose of this task is to check the status of the switch names audit operation initiated in "Subtask 14K: Run the Switch Names Audit".

1. With the cursor on the DEFINITY AUDIX command line, enter **status audit**.

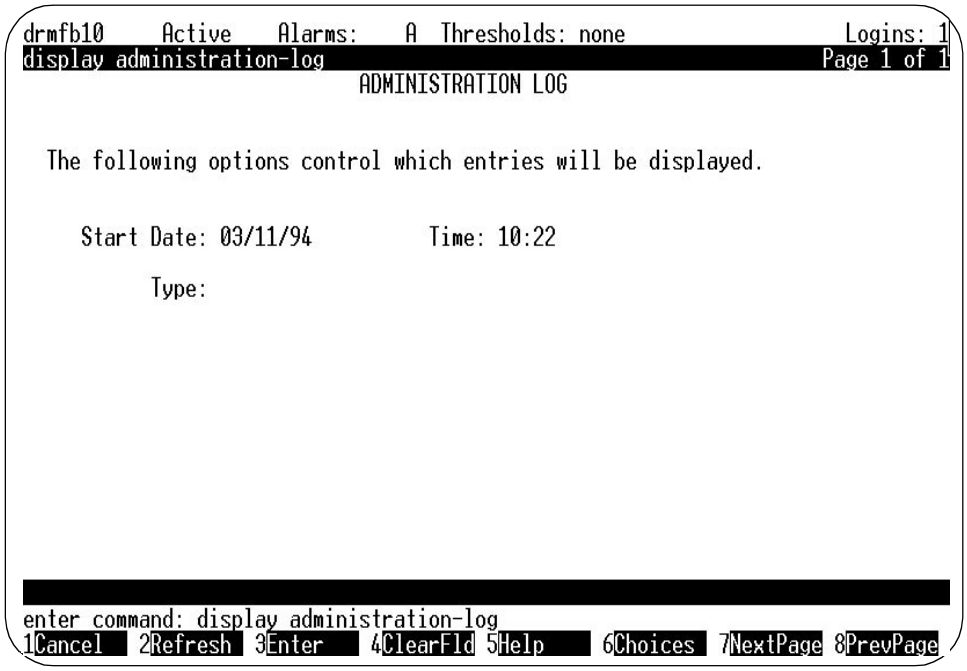
   The system responds with the AUDIT RESULTS screen showing the result of the most recently run audit.

2. Check the Result field for the Switch Names audit. If it displays Passed, proceed to Step 3. If it displays Running, wait a few minutes and repeat Step 1. Repeat Steps 1 and 2 until the audit screen displays Passed, then proceed with Step 3.

   If the audit does not complete successfully, see *DEFINITY AUDIX System — Maintenance*, 585-300-110.

3. Once the audit passes, enter **display administration-log** at the DEFINITY AUDIX command line.

The system responds with the ADMINISTRATION LOG screen.



4. Leave the Start Date, Time, and Type fields on page 1 blank to display all log entries. Press ENTER (F3) to display the administration-log entries on page 2 of the screen.
5. Check the log for entries that indicate the Switch Names audit found one or more non-unique subscriber names.

   If the Switch Names audit finds a non-unique subscriber name the DEFINITY AUDIX system will answer in *stand-alone* mode for that subscriber (requiring the caller to reenter the subscriber's extension). In addition, each time the Switch Names audit runs (at least nightly), it will write an entry in the Administration log for each non-unique subscriber name, which can quickly fill up the log file.

   If the Switch Names audit finds 50 or more non-unique subscriber names, the entire switch names database is discarded and the DEFINITY AUDIX system will answer in stand-alone mode for *all* subscribers. This condition is indicated by an entry in the Administration log.

   For a description of the restrictions on subscriber names, see the section *Restrictions On Switch Translations* in Chapter 3 of *Switch Administration for the DEFINITY AUDIX System*, 585-300-509.
6. Inform the switch system administrator of any entries in the administration log and ask the administrator to change all non-unique subscriber names in the switch names database to unique names.

NOTE:
To find non-unique names using G3-MA screen, connect to the switch and use the "data-management" option from the main menu. Create a template by using the *add data-template <name>*. Retrieve the data and sort it using the name as the key. Use the print out to locate duplicate names.

7. After the system administrator has changed the non-unique subscriber names in the switch names database, repeat the switch names audit ("Subtask 14K: Run the Switch Names Audit") and steps 1-5 of Task 18.

   When you run the **display administration-log** screen, the default values for Start Date and Time on page 1 are the date and time the screen was last run. Leave these defaults to display only the new log entries.

   If more non-unique subscriber names are found, again ask the switch system administrator to change all non-unique subscriber names in the switch names database. Repeat "Subtask 14K: Run the Switch Names Audit" and Task 18 until no non-unique names are found.

8. Once the Switch Names audit has run without creating entries for non-unique subscriber names in the administration log, proceed to the tasks in 4, *Confidence Checks*.

Confidence Checks

4

This chapter describes tests to ensure that the DEFINITY AUDIX system is functioning properly after installation. Joint confidence checks to ensure that the Local Area Network (LAN) is operational should be run with a customer LAN system administrator.

Confidence Check Tasks

The confidence-check tasks include:

"Task 19: Perform Dial Tone Test"

"Task 20: Run Test Switch-Link Long"

"Task 21: Add Two Test Subscribers"

"Task 22: Test the Call Answer and Voice Mail Features"

"Task 23: Run Test Tape Long"

"Task 24: Test Local Area Network"

"Task 25: Test Intuity Message Manager Connection to AUDIX"

"Task 26: Clear Administration, Error, and Alarm Logs"

Worksheets Needed

Before beginning these tasks, make sure you have the *Administering Voice Ports as Stations* Worksheet — B-1 for DP mode or B-5 for CL mode — from *Planning for the DEFINITY AUDIX System*, 585-300-904. The Project Manager or Software Specialist (SS) should have provided you with this worksheet.

Task 19: Perform Dial Tone Test

Do *either* Task 19A *or* Task 19B:
If the system is running in DP mode, do Task 19A.
If the system is running in CL mode, skip to "TASK 19B: Dial Tone Test for CL Mode".

TASK 19A: Dial Tone Test for DP Mode

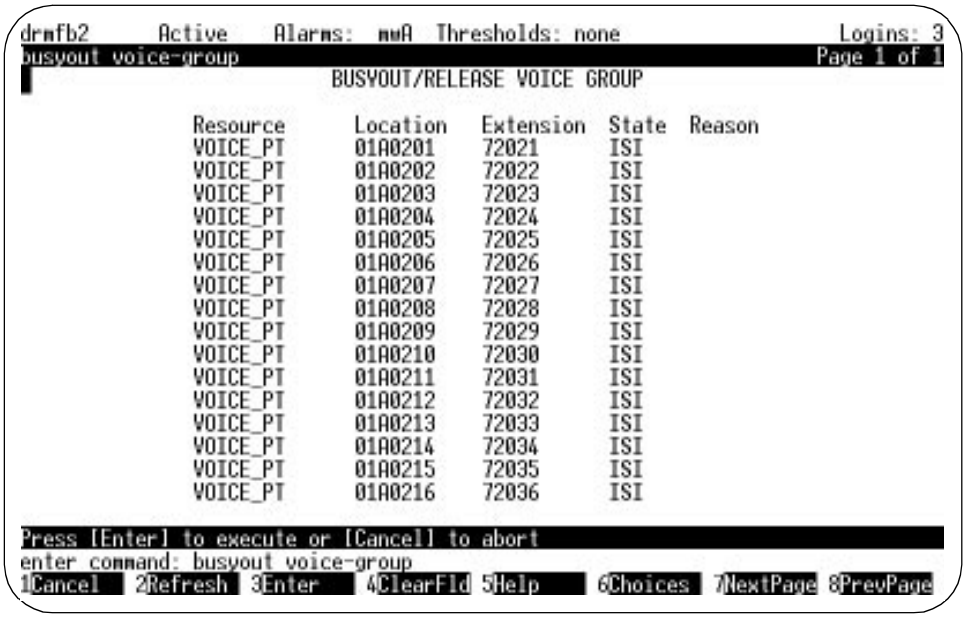
Use the information on Worksheet B-1, *Administering the Voice Ports as Stations (DP Mode)*.

1. If you have not already done so, log in to the switch administration terminal.
2. In switch administration, with the cursor on the command line, enter **display feature-access-codes**.

   The system displays the FEATURE ACCESS CODES screen.
3. Look for the Priority Calling Access Code field.

   This is a multi-page screen, therefore you may need to look at more than one page to find this field.
4. When you find the field, write down the priority calling access code value.
5. Press the CANCEL (F1) function key to exit the screen.
6. Logoff of the switch administration terminal.
7. Return to the DEFINITY AUDIX system terminal.
8. From the command line, enter **busyout voice-group**.

The system responds with the BUSYOUT/RELEASE VOICE GROUP screen.



9. Press the ENTER (F3) function key to busy out the voice groups and exit the screen.
10. From any telephone, dial the priority calling access code that you wrote down in Step 4.
11. When you hear the second dial tone, enter the extension of the first DEFINITY AUDIX port listed on Worksheet B-1, *Administering Voice Ports as Stations (DP Mode)*.

    If the DEFINITY AUDIX system answers, proceed to Step 12. Otherwise, refer to the troubleshooting procedures in *DEFINITY AUDIX System—Maintenance*, 585-300-110.
12. Repeat Steps 10 and 11 for the remaining extensions on the worksheet.
13. When all DEFINITY AUDIX ports have answered, return to the DEFINITY AUDIX system terminal and enter **release voice-group**.

    The system responds with the RELEASE VOICE-GROUP screen.
14. Press the ENTER (F3) function key to release the voice group and exit the screen.
15. Proceed to "Task 20: Run Test Switch-Link Long".

TASK 19B: Dial Tone Test for CL Mode

Use the information on Worksheet B-5, *Administering the Voice Ports as Stations (CL Mode)*.

1. From any telephone, dial the extension of the first DEFINITY AUDIX port listed on Worksheet B-5, *Administering Voice Ports as Stations (CL Mode)*. (These extensions are also listed on the STATUS VOICE-GROUP screen.)

   The DEFINITY AUDIX system should answer in stand-alone mode (the system will prompt you to enter the extension number again). If the DEFINITY AUDIX system answers, proceed to Step 2. Otherwise, refer to the troubleshooting procedures in *DEFINITY AUDIX System—Maintenance*, 585-300-110.

2. Repeat Step 1 for each of the remaining extensions on the worksheet.
3. Proceed as follows:

If the switch is running in the **CL** integration mode, proceed to Task 20.
If the switch is running in the **DP** integration mode, proceed to "Task 21: Add Two Test Subscribers".

Task 20: Run Test Switch-Link Long

This task is required only if the DEFINITY AUDIX system is running in the CL integration mode.

1. Run **busyout voice-group**.
2. With the cursor on the DEFINITY AUDIX command line, enter **test switch link long**.

The system responds with the SWITCH-LINK TEST RESULTS screen.

3. Press the ENTER (F3) function key to begin the test.

   The test takes from 2 to 5 minutes to complete.

4. When the test completes successfully, proceed to "Task 24: Test Local Area Network", *Test LAN*. If the test does not complete, refer to *DEFINITY AUDIX System—Maintenance*, 585-300-110.

5. If running in a DCS network, the test results for each switch node will appear on the SWITCH-LINK TEST RESULTS screen. Verify that each node test is completed successfully.

6. Run **release voice-group**.

7. Proceed to Task 21.

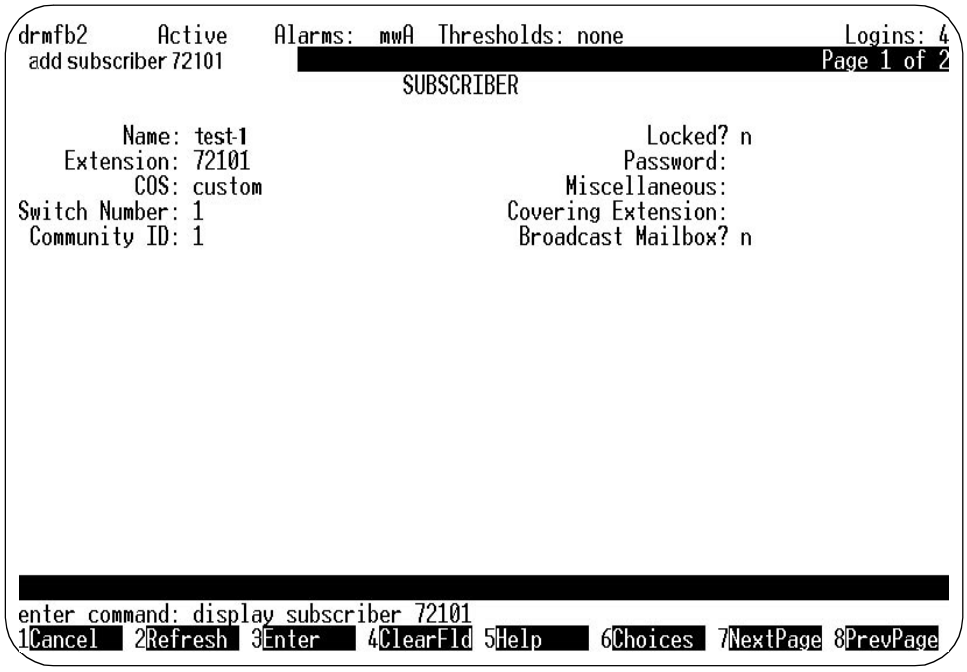
Task 21: Add Two Test Subscribers

This task is required for all installation scenarios.

1. If you have not already done so, log into the DEFINITY AUDIX local terminal as **craft**. (See "Task 14A: Set the DEFINITY AUDIX Clock" for the login procedure.)

2. Enter **add subscriber**.

The system responds with the SUBSCRIBER screen.



NOTE:
The two test subscriber extensions used in this task must be administered on the switch. The second test extension must have the coverage path for the AUDIX set. You can administer subscribers on the switch using the ADD STATION screen.

3. With the cursor at the Name field, type the name of the first test subscriber (for example, **test-1** or **subscriber-1**).
4. Move the cursor to the Extension field and type the extension of the first test subscriber that you are using for the test. (These are the only fields that you need to fill in. The system will use defaults for the remaining fields.)
5. Press the ENTER (F3) function key to add the test subscriber.
6. Repeat Steps 2 through 5 for the second test subscriber.

7. If running in a DCS environment, repeat Steps 2 through 5 for one test subscriber on each switch in the DCS network.

> **NOTE:**
> Make sure that each DCS remote subscriber is assigned the correct switch number. The switch number for DCS remote subscribers is *not* the same as the host switch number. The Switch Number field on the SUBSCRIBER screen must match the switch number for the subscriber's switch on the SWITCH LINK DCIU-SCI screen (see "Task 14E: Set Switch-Link Parameters").

8. Proceed to Task 22.

Task 22: Test the Call Answer and Voice Mail Features

This task is required for all installation scenarios.

1. Create a test Call Answer message.
   a. From one of the test phones, call the extension of the second test phone.
   b. Let the phone ring until the DEFINITY AUDIX system answers.
   c. After the system greeting and the tone, leave a test message (for example, "This is a test Call Answer message."
   d. Hang up.
2. Retrieve the Call Answer message.
   a. Walk over to the phone that you just called and check the MWI — either a lamp on the phone or a stutter dial tone. (The MWI signal may take up to 1 minute to appear.) If it is on, proceed to the next step. Otherwise, refer to the troubleshooting procedures in *DEFINITY AUDIX System—Maintenance*, 585-300-110.
   b. From this phone (the one with the MWI on), call the DEFINITY AUDIX extension.
   c. After the DEFINITY AUDIX system answers and prompts you for your extension, press [#] (the pound sign).
   d. When the DEFINITY AUDIX system prompts you for your password, press [#] (the pound sign). There is no password assigned to this extension.
   e. If the Name Record by Subscriber (NRS) feature is on, the DEFINITY AUDIX System will prompt you to record a name. Record a test name such as "test name."
   f. Press [2] then press [0] to listen to the message you recorded from the first test extension.

g. After listening to the message, press * D to delete the message.

3. Create a test Voice Mail message.

   a. From the DEFINITY AUDIX session you are currently in, press 1.

   b. After the tone, speak a test message (for example "This is a test Voice Mail message.")

   c. When you have finished speaking the message, press # to approve the message.

   d. When prompted for a destination extension, enter the extension of the first test phone and press # to end the addressing.

   e. Press # again to deliver now.

   f. Hang up.

4. Retrieve the test Voice Mail message.

   a. Walk back over to the first test phone and check the MWI. It may take a minute or two for the MWI to turn on. When it is on, proceed to the next step. Otherwise, refer to the troubleshooting procedures in *DEFINITY AUDIX System—Maintenance*, 585-300-110.

   b. Call the DEFINITY AUDIX extension to retrieve the message.

   c. Press # when prompted for your extension and when prompted for your password. (There is no password assigned to this extension.)

   d. Press 2 then press 0 to listen to the message you recorded from the second test extension.

   e. After listening to the message, press * D to delete the message.

   f. Hang up and enter **status test** to check the results of the test tape operation run previously.

DCS Subscribers

If running in a DCS environment, complete the following steps to test the Call Answer, Voice Mail, and Leave Word Calling features for each remote test subscriber added in "Task 21: Add Two Test Subscribers".

1. Create a test Call Answer message.

   a. From one of the test phones, call the extension of the remote subscriber.

   b. Let the phone ring until the DEFINITY AUDIX system answers.

   c. After the system greeting and the tone, leave a test message (for example, "This is a test Call Answer message.")

   d. Hang up.

2. Retrieve the Call Answer message.

a. If you are in contact with someone at the remote site, ask them to check the MWI — either a lamp on the phone or a stutter dial tone — on the remote subscriber's phone. (The MWI signal may take up to 1 minute to appear.) If it is on, proceed to the next step. Otherwise, refer to the troubleshooting procedures in *DEFINITY AUDIX System—Maintenance*, 585-300-110.

b. Call the remote DEFINITY AUDIX extension. (If the remote switch is a System 85 or G2, this will be the same number as for the local DEFINITY AUDIX System; for all other remote switch types, the DEFINITY AUDIX extension for the remote switch will be different from the extension for the local DEFINITY AUDIX System.)

c. When the DEFINITY AUDIX system answers and prompts you for your extension, enter the remote subscriber's extension and press #.

d. When prompted for your password, press # again.

e. If the Name Record by Subscriber (NRS) feature is on, the DEFINITY AUDIX System will prompt you to record a name. Record a test name such as "test name."

f. Press 2 then press 0 to listen to the message you recorded from the first test extension.

g. After listening to the message, press * D to delete the message.

3. Create a test Voice Mail message.

a. Call the local (host) DEFINITY AUDIX extension. Press # when prompted for your extension and when prompted for your password.

b. Press 1 to create a voice mail message. After the tone, speak a test message (for example "This is a test Voice Mail message.")

c. When you have finished speaking the message, press # to approve the message.

d. When prompted for a destination extension, enter the extension of the remote test subscriber and press # to end the addressing.

e. Press # again to deliver now.

f. Hang up.

4. Retrieve the test Voice Mail message.

a. If you are in contact with someone at the remote site, ask them to check the MWI — either a lamp on the phone or a stutter dial tone — on the remote test subscriber's phone. (The MWI signal may take up to one minute to appear.) If it is on, proceed to the next step. Otherwise, refer to the troubleshooting procedures in *DEFINITY AUDIX System—Maintenance*, 585-300-110.

b. Call the remote DEFINITY AUDIX extension to retrieve the message. (If the remote switch is a System 85 or G2, this will be the same number as for the local DEFINITY AUDIX System; for all other remote switch types, the DEFINITY AUDIX extension for the remote switch will be different from the extension for the local DEFINITY AUDIX System.)

c. After the DEFINITY AUDIX system answers and prompts you for your extension, enter the remote test subscriber's extension and press #.

d. When prompted for your password, press the # again.

e. Press 2 then press 0 to listen to the message you recorded.

f. After listening to the message, press * D to delete the message.

g. Hang up.

5. Send a Leave Word Calling (LWC) message to and from the remote test subscriber. If possible, have someone check the MWI at the remote site.
6. Repeat Steps 1 through 5 for each DCS remote test subscriber.
7. Proceed to Task 23.

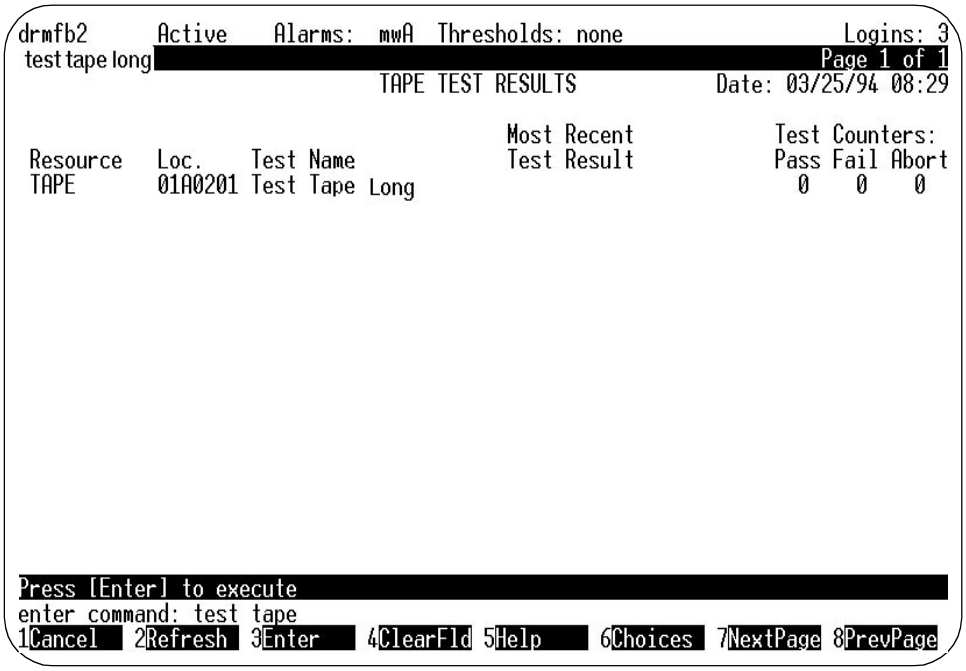
Task 23: Run Test Tape Long

This task is required for all installation scenarios.

At this point, the backup tape cartridge added in Task 16 should still be in the tape drive.

1. Check the status of the tape drive and cartridge — with the cursor on the DEFINITY AUDIX command line, enter **status tape**. The system displays the STATUS TAPE screen. The Status field should display `In service idle`. If the Status field displays any other value, see the STATUS TAPE screen description in *DEFINITY AUDIX System—R3.1 Screens Reference*, 585-300-211 for an explanation of the values of the Status field or see *DEFINITY AUDIX System—Maintenance*, 585-300-110 for information on tape problems.
2. With the cursor on the DEFINITY AUDIX command line, enter **test tape long**.

The system responds with the TAPE TEST RESULTS screen.



3. Press the ENTER (F3) function key to begin the test. The test takes from 3 to 5 minutes to complete. If it does not complete successfully, refer to *DEFINITY AUDIX System—Maintenance,* 585-300-110. If it does pass, proceed to Task 24 if:

   - AUDIX server hardware options have been purchased ("Task 13: Activate DEFINITY AUDIX Server Hardware (IMM) Options")
   - The DEFINITY AUDIX system has been upgraded with a TN2170 Alarm Board and a three-way splitter cable (See Upgrade Instructions, Appendix A, and "Task 6: Connect the Alarm Board Cable", respectively)
   - IMAPI system parameters have been activated ("Task 13: Activate DEFINITY AUDIX Server Hardware (IMM) Options").

   Otherwise, go to 'Task 26: Clear Administration, Error, and Alarm Logs".

Task 24: Test Local Area Network

If possible, tasks 24 and 25 are done jointly with the customer's LAN system administrator.

Prior to activating and installing the LAN options that will allow IMM to work, the LAN administrator must do one of the following:

— Add the AUDIX host name to the network domain name server.

— Create a host file on each PC, typically under the *\net\tcp\hosts* directory.

— Neither of the above if you are using the numeric IP address.

When this is done, proceed with the following steps.

1. With the cursor on the DEFINITY AUDIX command line, enter **test lan.** The system responds with the following screen..

```
ax85        Active    Alarms:    A  Thresholds: none                Logins: 1
test lan                                                          Page 1 of 1
                              TEST LAN RESULTS          Date: 05/24/94 14:00

                                        Most Recent          Test Counters:
 Resource   Loc.    Test Name           Test Result          Pass Fail Abort
 LANINTF    03C08   Get hardware ID                            0    0    0
 LANINTF    03C08   External loop around                       0    0    0
 AIS        03C08   Test Process                               0    0    0

Press [Enter] to execute
enter command: test lan
1Cancel  2Refresh  3Enter  4ClearFld 5Help  6Choices  7NextPage 8PrevPage
```

2. Press the ENTER (F3) function key to begin the test. The test takes up to 2½ minutes to run.

3. If any of the individual tests fail or abort, refer to *DEFINITY AUDIX System—Maintenance*, 585-300-110. If there are problems with the network itself, the LAN system manager will have to resolve these problems before proceeding with this test.

4. To test if a connection can be made to a Intuity Message Manager user or other LAN node, enter **test lan dest** and the IP numerical address (in the form *nnn.nnn.nnn.nnn*) on the screen. Press the ENTER (F3) function key.

If the connection is made, a UNIX ping will be returned. The test takes approximately 15 seconds. If the test fails, refer to *DEFINITY AUDIX System—Maintenance*, 585-300-110.

5. After the tests pass, proceed to Task 25.

Task 25: Test Intuity Message Manager Connection to AUDIX

This task is performed to ensure that Intuity Message Manager connects to the DEFINITY AUDIX server over the LAN and is operational. Verify these results jointly with the LAN administrator.

1. Have several customers use Intuity Message Manager. They should be able to log into their mailbox, play a new message, and reply to sender. (For more detail, see the *Intuity Message Manager User Guide,* 585-310-725).
2. If any connection or login fails, discuss the LAN connection with the LAN administrator. This person is responsible for all aspects of the LAN and will ensure that it is problem-free. Refer to the troubleshooting tips in the *Intuity Message Manager User Guide*, 585-320-725, and to the *README.TXT* on the Intuity Message Manager diskette.

If a LAN administator is not present for joint acceptance tests, you will consider the installation and testing complete at this point.

3. Proceed with Task 26.

Task 26: Clear Administration, Error, and Alarm Logs

This task must be completed from the AUDIX Upgrade Control Center (AUCC) at the TSC. Call the TSC and let them know you have completed all the installation and acceptance tests for this DEFINITY AUDIX system. Ask them to clear the administration, error, and alarm logs.

This is the end of your (the installation technician) installation responsibilities for this DEFINITY AUDIX system. The tasks in 5 and 6 are to be completed by the system administrator, the AT&T Software Specialist (SS), and the AT&T Project Manager.

Initial Subscriber Administration

5

This chapter describes the tasks to administer the initial subscribers.

Initial Subscriber Administration Tasks

This chapter contains three tasks.

"Task 27: Add the Initial Subscribers"

"Task 27: Add the Initial Subscribers"

"Task 29: Complete Initial Administration"

Task 27 is to be completed by the DEFINITY AUDIX system administrator or, if the task is included as part of the signed contract, by the AT&T Software Specialist (SS).

Task 28 is to be completed by the DEFINITY AUDIX system administrator (or SS) and the TSC.

Task 29 is a reminder to the person — either the system administrator or the SS — administering the initial subscribers to perform the initial administration tasks described in *DEFINITY AUDIX System—Administration*, 585-300-507.

Worksheets Needed

Before beginning these tasks, make sure you have worksheet C-8, *Add Subscribers*, from *Planning for the DEFINITY AUDIX System*, 585-300-904. The Project Manager or Software Specialist (SS) should have provided you with this worksheet.

Task 27: Add the Initial Subscribers

This task is required for all installation scenarios.

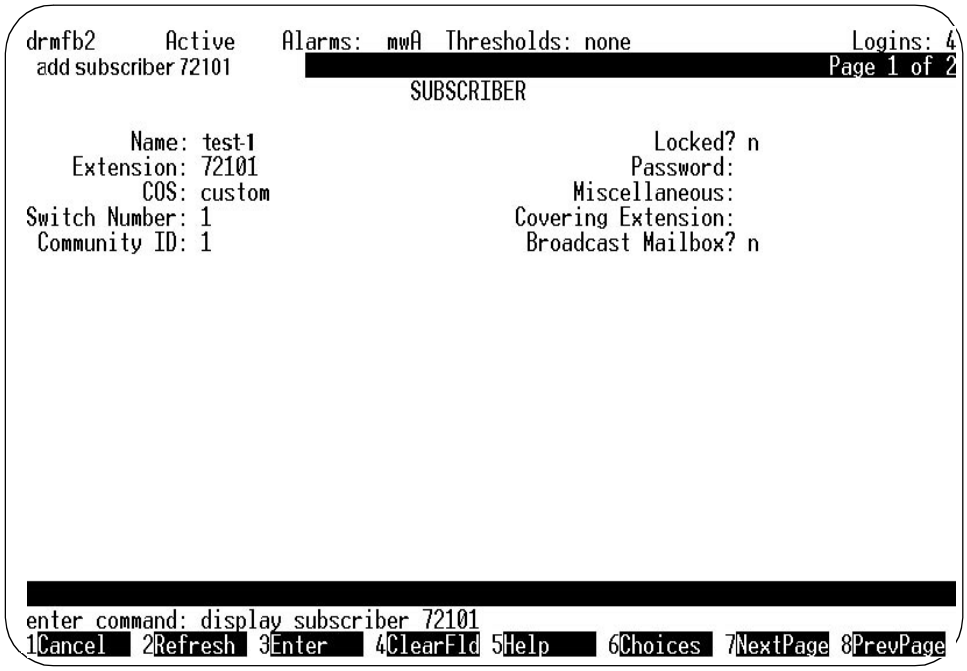
This task describes the basic procedure for adding subscribers via the SUBSCRIBER screen. The basic procedure includes entering only subscribers' names and extensions (using default values for all other parameters). Check Worksheet C-8: *Add Subscribers* to see if any subscribers are to have special administration (other than their name and extension). If so, refer to Chapter 3, *Ongoing Administration*, in *DEFINITY AUDIX System—Administration*, 585-300-507 for adding and administering the subscribers. Otherwise, continue with the following procedure.

NOTE:
You may also add subscribers via the AUDIX Administration and Data Acquisition Package (ADAP) **addsub** command. This is described in *AUDIX Administration and Data Acquisition Package,* 585-300-502. However, before adding subscribers via ADAP, make sure the DEFINITY AUDIX system administrator has installed and administered the ADAP system.

The procedure for adding subscribers via the DEFINITY AUDIX SUBSCRIBER screen is as follows.

1. With the cursor on the DEFINITY AUDIX command line, enter **add subscriber**.

The system responds with the SUBSCRIBER screen.



2. With the cursor at the Name field, type the name of the first subscriber listed on Worksheet C-8.
3. Move the cursor to the Extension field and type the extension of the first subscriber.
4. Press the ENTER (F3) function key to add the subscriber.
5. Repeat steps 1 through 4 for each subscriber listed on the *Adding Subscribers* worksheet.
6. If running in a DCS environment, repeat steps 1 through 4 for each initial remote subscriber.

NOTE:
Make sure that each DCS remote subscriber is assigned the correct switch number. The switch number for DCS remote subscribers is *not* the same as the host switch number. The Switch Number field on the SUBSCRIBER screen must match the switch number for the subscriber's switch on the SWITCH LINK DCIU-SCI screen (see "Task 14E: Set Switch-Link Parameters").

7. Proceed to Task 28.

Task 28: Switch Names Audit

This task is required only if the DEFINITY AUDIX System will be running in the DP integration mode.

1. Execute the **audit switch-names** command as described in "Subtask 14K: Run the Switch Names Audit" in Chapter 3.
2. Execute the **status audit** and the **display administration-log** commands as described in "Task 18: Check the Status of the Switch Names Audit" in Chapter 3.
3. Resolve any administration-log entries.

Task 29: Complete Initial Administration

This task is required for all installation scenarios.

The DEFINITY AUDIX system administrator should complete the following steps.

- Read Chapter 2 and Chapter 3 of *DEFINITY AUDIX System—Administration*, 585-300-507.
- Complete the initial administration tasks in those chapters:
  - Recording automated attendant greetings
  - Recording customized announcements
  - Changing system passwords
  - Installing and administering the AUDIX Administration and Data Acquisition Package (ADAP)
- Inform your subscribers what to expect with their DEFINITY AUDIX system service
- Copy and distribute any letters and user documents that your subscribers need.

This is the end of all installation and initial administration tasks. The tasks in Chapter 6 must be completed by the Project Manager.

Customer Acceptance

6

This chapter lists the tasks that the Project Manager must perform with the customer to hand the DEFINITY AUDIX system over to the customer. Most of these tasks are part of the Streamlined Implementation process. Therefore, they are not described in this document but are listed here as a final check to make sure they are completed.

These tasks include:

Task 30: Cutting the system into service (changing the call coverage path for subscribers to the DEFINITY AUDIX system hunt group). This task may depend on the switch in which the DEFINITY AUDIX system is installed. Therefore, the details are described in *Switch Administration for the DEFINITY AUDIX System*, 585-300-509.

Task 31: Performing a walk-through with the customer, which includes:

a. Showing the customer the SYSTEM-PARAMETERS CUSTOMER-OPTIONS screen to verify that the purchased ports and features are activated (log in to the administration terminal as **cust** to display this screen).

b. Verifying that the second blank cartridge tape is present (the first is installed in the tape drive for system backups).

c. Verifying that all DEFINITY AUDIX system documentation is present, and then instructing the customer how to use the documentation set (which documents are used when).

d. Providing customer with a list of phone numbers and post-cut escalation points.

Task 32: Showing the customer the TEST ALARM-ORIGINATION SHORT screen to verify that the Customer Database is updated.

Task 33: Conducting Project Review.

Software Upgrade Instructions

A

This appendix describes the considerations and procedures to upgrade a DEFINITY AUDIX 1.0, 2.0, or 3.0 system to Release 3.1.

Upgrade Kit

The installation kit taken to the upgrade site contains the following components:

- R3.1 generic software tape
- Tape or tapes with purchased language sets
- Two blank tapes, necessary to save customer data during the upgrade. These tapes will not be left at the upgrade site.
- TN2170 (if Intuity Message Manager (IMM) is purchased)
- Ethernet Alarm Board cable (if TN2170 is shipped)
- 104A connecting block for LAN connection (if TN2170 is shipped)
- D8W modular wall cord for LAN connection (if TN2170 is shipped)
- Anti-static mat and other ESD protection tools (if TN2170 is shipped)
- Return box for TN2169 and Y-cable (if TN2170 is shipped)

Prior to the Upgrade

Before you upgrade a DEFINITY AUDIX system to R3.1, the following issues must be considered and actions performed:

- The TN566B Multifunction Board is required with all 3.1 systems.
- The TN2170 Alarm Board is only shipped if the IMM feature is purchased. If not, 3.1 will run with the existing TN2169.
- If you are upgrading 1.0 or 2.0 systems, you must replace any non-AT&T disks larger than six hours with a new AT&T hard disk of the same or greater size. If this is not done, the upgrade will not run.
- If IMM is purchased, the demarcation point between the DEFINITY AUDIX system and the Local Area Network (LAN) must be determined. The customer will provide a 10BaseT LAN connection on the wall field at that point. The connection must not be farther than 25 feet from the back of the switch where DEFINITY AUDIX resides. It is AT&T's responsibility to install a 104A connecting block at that point and use it to make the connection between the LAN and DEFINITY AUDIX (see step 1 in the "After the Upgrade" section later in this appendix).

Software Upgrade Instructions

Perform the following steps to upgrade your DEFINITY AUDIX System to release 3.1. If the upgrade is from a 2.0 or a 3.0 release, follow the notes in the upgrade script as shown.

The *approximate* time to complete each step is shown in brackets. Times could vary considerably depending on the size of the system and the call traffic volume.) It should take from one to four hours to complete all the steps.

WARNING:
The contents of the error log, the event log, and the resolved alarm log will be deleted by the upgrade. Existing customized announcement sets will be preserved during the upgrade.

1. Inform subscribers with a broadcast message that the DEFINITY AUDIX System will be shut down for three to six hours during this upgrade procedure.
2. [1 min]
   Make sure that your administration terminal is connected to Port A. Log in to the DEFINITY AUDIX System on the administration terminal as **craft**.

3. [30 sec]
   Enter CHANGE MACHINE. Ensure that the `machine name` on the screen contains eight characters or less. Otherwise, the upgrade will not run.

4. [20 sec]
   Disable any alarms by using the DISABLE ALARM ORIGINATION screen. If this is not done, the TSC will see alarms while the upgrade is being done.

5. [5 min]
   Shut down the system in a camp-on manner using the RESET SYSTEM SHUTDOWN screen. The system will respond with information similar to the following:

```
System name: audix
login:

INIT: New run level: 0

The system is coming down. Please wait.
System services are now being stopped.
System data saved during shutdown.
The system is down.
Transferring to Firmware.
~
SHUTDOWN Pending, Code = F022
Software Maintenance Shutdown
SHUTDOWN Completed
```

6. [3 min]
   While waiting for the shutdown to complete, remove the backup tape and clean the tape heads with the supplied cleaning kit. Perform these steps as described in the following box. The kit includes a cleaning tape cartridge, cleaning sticks, and cleaning solution.

   a. Remove the working tape and insert the cleaning tape cartridge into the drive, pushing it with your finger all the way into the streamer. *Do not* lock it into place by turning the front lever clockwise.

   b. Dip the pad of the cleaning stick into the cleaning solution and insert into the guide hole at the bottom of the tape. Ensure that the blue side of the pad touches the head (it will face the LED of the streamer).

   c. Gently pressing the pad against the head, run the stick back and forth through the guide hole 10 times.

   d. Turn the stick so the white side of the pad touches the head. Run the stick back and forth 5 to 10 times.

   e. Using the dry white pad of another cleaning stick, perform the same operation 5 to 10 times.

   f. Remove the cleaning tape and allow the head to dry for a minute.

7. [10 min]
   (This step is performed if the TN2169 must be replaced with the TN2170. Otherwise, go to Step 8.) When the terminal displays **`SHUTDOWN Completed`**, remove the DEFINITY AUDIX system from the carrier. Referring to Figure A-1, *Top View of DEFINITY AUDIX System*, and to Figure A-2, *Side View of DEFINITY AUDIX System*, complete the lettered substeps below.

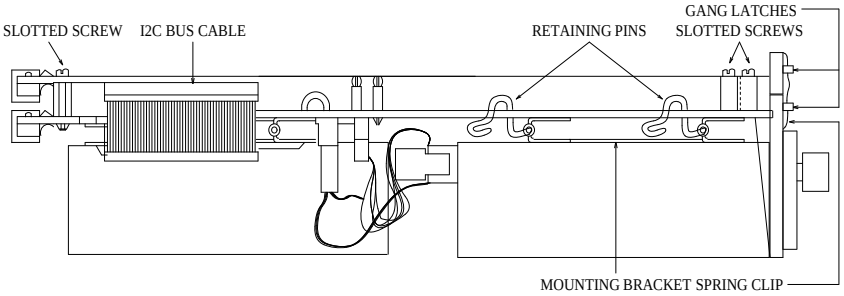


Figure A-1. Top View of DEFINITY AUDIX System

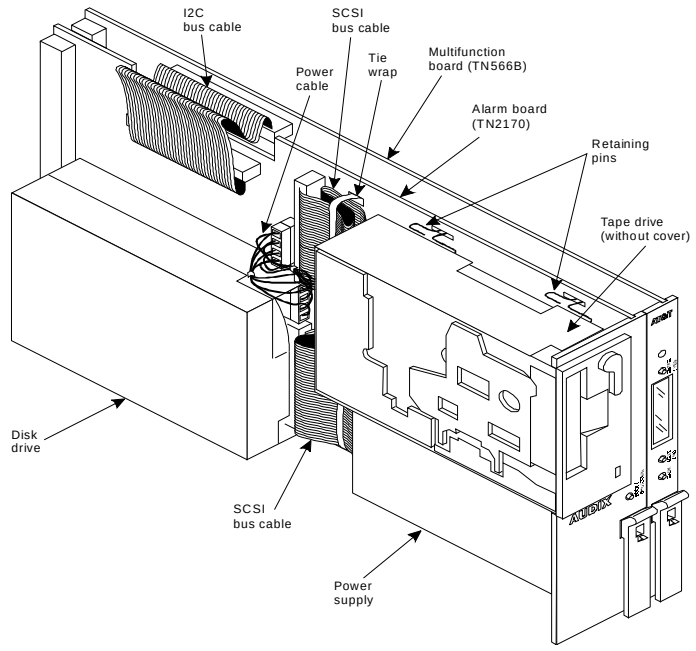


Figure A-2. Side View of DEFINITY AUDIX System

WARNING:
Static electricity can be destructive to system parts. Use an anti-static wrist strap whenever removing or installing a DEFINITY AUDIX system. Also use an anti-static mat when taking the system apart to replace the MFB. These are provided with the upgrade kit.

a. Unsnap the two *gang latches* at the bottom front of the MFB and Alarm Board, and swing downward. Squeeze the boards together and slip off the *spring clip*.

b. Carefully slide the DEFINITY AUDIX system from the switch carrier. Handle with care: the system weighs 6.2 pounds.

c. Disconnect the *Interboard bus cable* from the top edge of both boards using the pull tab.

d. Remove the three socket-headed *slotted screws* that hold the MFB to the alarm board.

e. Separate the two boards.

f. Cut loose and remove the tie wrap that holds the power cable and the tape drive SCSI bus cable against the alarm board.

g. Cut loose and remove the tie wrap that holds the disk drive SCSI bus cable against the alarm board.

h. Disconnect the power and SCSI bus cables from the alarm board.

i. Unlock the four retaining pins from the slots along the edge of the alarm board that hold the tape and disk drives in place. Slide out the pins; this releases the drives from the board.

j. Replace the TN2169 alarm board with the TN2170 Ethernet alarm board.

k. Position the disk drive on the new alarm board, and slide the two retaining pins into the drive mounting bracket. Lock the pins into the slots along the edge of the alarm board.

l. Repeat the above step with the tape drive, inserting and locking the two retaining pins.

m. Connect the SCSI bus and power cables to the TN2170.

n. Pull a new tie wrap through the two slots in the TN2170 opposite the disk drive's SCSI cable and fasten the cable snugly against the board.

o. Do the same for the tape drive's SCSI and power cables.

p. Attach the MFB to the Ethernet alarm board with the three socket-headed slotted screws. Note the play between the MFB and the alarm board when they are together. This allows the system to be easily seated into the switch carrier.

q. Connect the Interboard bus cable to the top edges of both boards.

r. Replace the alarm board Y-cable with the Ethernet alarm board cable. Reconnect the amphenol connector to the remote alarm.

s. Connect the RJ45 connector to the supplied D8W modular wall cord. Attach the other end of this cord to the 104A connecting block that was earlier installed at the demarcation point.

t. Insert the DEFINITY AUDIX system into the switch.

8. [1 min. See note below before performing this step.]
Invoke command mode by pressing CONTROL-C *twice*. The system responds with information on the screen similar to the following.

```
MFB 386FW Version: AU00S01EA
Local Console: Output ON, Input ON
Remote Maintenance Console: INACTIVE
command menu:?
```

NOTE:
Steps 9 and 10 must be done within the minute of invoking command mode in Step 8. Otherwise, the system will boot automatically and you will have to shut down and start over with the upgrade.

9. Press ? ENTER to list available commands. A menu similar to the following is displayed:

```
command menu: ?
1 = Display Init History
2 = Display Status
3 = Read/Write Functions
4 = Additional Tests
5 = Auto Boot
6 = Preempt Auto Boot
7 = Manual Boot
8 = Board Commands
q = Quit and Auto Boot
command menu:
```

10. Enter 6 to *preempt an automatic boot*.

11. Insert the new-release generic tape.

12. [1 min]
Press ? ENTER. From the command menu, enter **7** to select the *Manual Boot* option. The system will respond with information on the screen similar to the following:

```
command menu: 7

Auto Boot Preempted
Enter 1 for Disk, 2 for Tape (Default = Disk):
```

13. Enter 2 for *boot from tape*. The system will respond with information on the screen similar to the following:

```
Enter 1 for Disk, 2 for Tape (Default = Disk): 2
```

```
Enter Tape Device (0-6) (Default = 1):
```

14. Enter 1 for *device number for the tape*. The system will respond with information on the screen similar to the following:

```
Enter Tape Device (0-6) (Default = 1): 1
Board Diagnostics PASSED
Transferring To Software

      Copyright (c) 1992 AT&T
      All Rights Reserved
0: Exit
1: Initialize Disk
2: Modify Partition Map
3: Copy Generic Partitions
4: Additional Commands
Enter option:
```

Confirm that the board diagnostics passed.

WARNING:
*In the next step, **be careful to not press 1** (the Initialize Disk option), which would destroy all existing customer data.*

15. [10 min]
    When the menu appears, enter 3 to select *Copy Generic Partitions* to disk. The system will respond with information on the screen similar to the following:

```
            Enter option: 3
 Enter SCSI ID of Disk (default 0):
```

16. Enter **0** (zero, the default) for the SCSI ID. Wait for copying to complete (several rows of dots and messages will appear as the copying progresses).

    After the generic partitions are copied, the system automatically reboots. The system will scroll with information similar to the following:

```
Enter SCSI ID of Disk (default 0): 0
Copy generic data from tape to disk
```

    The following line will appear for upgrades if the hard disk drive is larger than 6 hours:

```
Changing <var.s5> partition size from 29296 to 17576


     Copy Generic Partitions PASSED

     Automatic reboot
```

```
Loader or Utility Abort
Board Diagnostics PASSED
Transferring To Software

Booting the Operating System... OS loaded. Transferring control...

total real memory = 8388608
total available memory = 7135232

AT&T UNIX System V/386 Release 4.0 Version 2.1

Copyright (c) 1984, 1986, 1987, 1988, 1989, 1990, 1991 AT&T
Copyright (c) 1987, 1988 Microsoft Corp.
All Rights Reserved

DEFINITY(R) AUDIX(R) System
Copyright (c) 1991,1992,1993 AT&T
All Rights Reserved.

The system is coming up. Please wait.
WARNING: Firmware verification/reprogramming in progress.
Do not interrupt until completed.
Firmware verification/reprogramming completed successfully.
MFB state set to 35
Welcome to DEFINITY(R) AUDIX(R) System Release 3.1, Issue 1
Installation and Recovery – Copyright (c) 1992,1993 AT&T

In the following steps,you may be prompted for selections from menus
to supply further information. Type either the menu number or name,
and a carriage return.

Do you wish to
     1) shutdown
     2) install
     3) upgrade
     4) recover

?
```

WARNING:
In the next step, ***be careful to NOT press 2*** *(the Install option); this will destroy all existing customer data.*

17. [2 min]
    When the menu appears, enter 3 to select the *upgrade* option. Previously saved system data is restored at this point after which the system prompts for a backup tape.

```
? 3
Recovering system information.
Could NOT recover network information.
Could NOT recover machine name information.
Please insert the first backup tape. Press <enter> when ready:
Checking announcement files for modification in the background.
```

18. [Time varies depending on amount of customer data in system]
    When the prompt for a backup tape is displayed, insert the first of your two scratch backup tapes. When the yellow tape LED goes out, press RETURN. Note that you should *not* insert your automated backup tapes or the generic tape at this point as the utility will overwrite all existing data on the tape.

    The screen shows the progress of the backups as they are done for you. If you are asked to insert the second scratch backup tape, insert it and press RETURN.

```
Write the volume label
*** START Fri Jul 23 08:50:07 EDT 1993 ***
*** END Fri Jul 23 08:50:33 EDT 1993 ***
Save nightly
*** START OF BACKUP Fri Jul 23 08:50:39 EDT 1993 ***
.........................................
*** END OF BACKUP Fri Jul 23 08:54:20 EDT 1993 ***
Save weekly
*** START OF BACKUP Fri Jul 23 08:54:25 EDT 1993 ***
................................
*** END OF BACKUP Fri Jul 23 08:58:25 EDT 1993 ***
Checking for customized announcements.....................completed.
Checking for announcement file times in "us-eng".
Customizations found for "us-eng".(see /var/spool/audix/us-eng.cust)
Checking for announcement file times in "us-eng-t".
No customizations found for "us-eng-t".
```

    If you are upgrading from a 1.0 or 2.0 release, the US English announcement set names will appear as **standard** or **terse**. Table 2 in Appendix B lists names for all versions of each available language set.

```
*** START OF BACKUP Fri Jul 23 09:17:21 EDT 1993 ***
*** END OF BACKUP Fri Jul 23 09:26:22 EDT 1993 ***
Save voice
*** START OF BACKUP Fri Jul 23 09:17:21 EDT 1993 ***
.............................................
.............................................
.............................................
.............................................
.............................................
.............................................
.............................................
.............................................
Please insert the next tape
.............................................
.............................................
.............................................
.............. .............
*** END OF BACKUP Fri Jul 23 09:26:22 EDT 1993 ***

Backups have completed successfully.
Upgrading customer data.
Previous customer data release: Release 2.0, Issue 1.

Standard customer data will now be checked on the disk. Please wait.
```

    This check will take up to 30 minutes.

If the upgrade is from a 1.0 or 2.0 release,

```
restore weekly from tape
.....................
.....................
.....................
restore voice from tape
 .....................
.....................
.....................
```

are done here. If the upgrade is from a 3.0 release, restores are not done.

```
Upgrading subscriber profile database ... completed.
Upgrading message header database .. completed.
Upgrading message header database ... completed.
Saving customized announcements
Saving customized announcements from us-eng in us-eng.cust
No customized announcements
Standard announcements will now be replaced.
The generic announcements tape must be inserted
Please insert the announcements tape. Press <enter> when ready:

Reading announcements ............................... completed.
Upgrade from the program tape is complete.
Proceeding with initialization.
```

If the upgrade is being done in a different timezone than the one set on the upgrade tape, the following actions must take place. Otherwise, skip to the script where noted.

```
Reboot to pick up correct timezone.
Change to state 2 has been completed.
DEFINITY(R) AUDIX (R) System
     - initializing from boot Tue Nov 10 12:53:14 EST 199-
Install completed successfully, rebooting

INIT: New run level: 6
rc6: The system is coming down. Please wait.
System services are now being stopped.
System data saved during shutdown.

The system is down.
The system is being rebooted.
Automatic Boot Procedure
~
MFB 386FW Version: AU00S03EC
Local Console: Output ON, Input OFF
Remote Maintenance Console: INACTIVE
Board diagnostics PASSED
Transferring to Software


Booting the Operating System... OS loaded. Transferring control...

total real memory = 8388608
total available memory = 7135232

AT&T UNIX System V/386 Release 4.0 Version 2.1
```

```
Copyright (c) 1984, 1986, 1987, 1988, 1989, 1990, 1991 AT&T
Copyright (c) 1987, 1988 Microsoft Corp.
All Rights Reserved

DEFINITY(R) AUDIX(R) System
Copyright (c) 1991,1992,1993 AT&T
All Rights Reserved.

The system is coming up. Please wait.

WARNING: Firmware verification/reprogramming in progress.
Do not interrupt until completed.
Firmware verification/reprogramming completed successfully.
```

If the timezone did not change, the upgrade sequence continues here.

```
Change to state 2 has been completed.
DEFINITY (R) AUDIX(R) System
    - initializing from boot Tue Nov 10 10:57:34 MST 1992
No install errors found
DEFINITY (R) AUDIX(R) System
    - initializing to AUDIX state Tue Nov 10 10:57:

System name: audix

login: DEFINITY(R) AUDIX(R) System
Phase 1 file check PASSED
Phase 2 file check PASSED
Phase 3 file check PASSED
Phase 4 file check PASSED
Phase 5 file check PASSED
login:
DOTRACE=yes
TRACELOG=/var/spool/audix/tracelog
TRACECMD=-s 60 -o /var/spool/audix/tracelog.a -o /var/spool/audix
        /tracelog.b
TRACEOUTPUT=/dev/null
Save output to Trace process
OLDTRACELOG=/var/spool/audix/oldtrace
```

19. [1 min]
    After the `OLDTRACELOG=/var/spool/audix/oldtrace` message appears on the screen, press RETURN to clear the screen and get the login prompt.

20. Log in to the DEFINITY AUDIX System as **craft**. Wait for `Active` to appear on the status line before continuing to the next step.

21. [less than 1 min]
    Run TEST TAPE CLEAN to reset the tape cleaning-interval counter.

22. [5 min]
    Call the DEFINITY AUDIX System and log in as a subscriber. Verify that the DEFINITY AUDIX System is in service and working properly; create, send, and retrieve a message.

23. [1 min]
    Remove the language set tape. Insert a customer backup tape to be used for the automated saves.

24. [10 min]
    Run ADD TAPE to equip the tape. Enter a new volume name in the Volume Name field. (The new volume name must be different from the name already in this field, if any.) Press [RETURN] to invoke the add-tape operation. Ignore any warnings about releases not matching. Check the status of the ADD TAPE operation using the STATUS TAPE screen. When the ADD TAPE operation is complete, the STATUS TAPE screen will show `In service, idle`.
25. Run DISPLAY TAPE to verify that the backup tape *Software Release* is now `Release 3.1`.
26. If the administration alarm, A, appears on the status line, clear the alarm as follows.
    Run DISPLAY ADMINISTRATION-LOG and press [ENTER] (F3).
    The administration alarm should now be gone from the status line. If the command prompt fails to appear, press [CANCEL].
27. [4 min]
    Run SAVE NIGHTLY.

    When the administration alarm, A, appears on the status line, run DISPLAY ADMINISTRATION-LOG. If the SAVE NIGHTLY operation was successfully completed, `save manual_nightly passed` will be displayed.
28. [5 min]
    Run SAVE WEEKLY.

    When the administration alarm, A, appears on the status line, run DISPLAY ADMINISTRATION-LOG. If the SAVE WEEKLY operation was successfully completed, `save manual_weekly passed` will be displayed.
29. [1 min]
    Check the Alarm Status. If there are alarms, run DISPLAY ALARMS and take the appropriate action to remove the alarms. (You may need to consult *DEFINITY AUDIX System Maintenance*, 585-300-110 for information on removing alarms.)
30. Enable alarms by entering ENABLE ALARM-ORIGINATION.
31. Enter **logoff** to log off the system (if you do not have to install IMM).
32. Return the TN2169 and alarm board Y-cable to the factory. A return box is provided with the upgrade kit.

This completes the procedure for the R3.1 software upgrade.

After the Upgrade

If IMM is part of the 3.1 upgrade, or language sets must be added, continue through the following sections.

Installing, Administering, and Testing IMM

Perform the following steps to install, administer, and test IMM. The LAN administrator should be present.

1. A 10BaseT twisted pair LAN cable with a male RJ-45 connector must be present at the wall field before IMM can be installed. The connector can be no farther than 25 feet from the back of the switch where DEFINITY AUDIX resides. Confirm with the LAN administrator prior to the software upgrade that a connection is available.
2. Remove the top of the104A connecting block that was included in the upgrade kit. Inside, eight wires must be hard-connected across the two mounting blocks , as shown in Figure A-3, *104A Mounting Block*. The ends of each wire are stripped of insulation. A punch-down tool is used to press the ends of these eight wires into the mounting blocks. Four protector caps snap over the top of the mounting blocks.

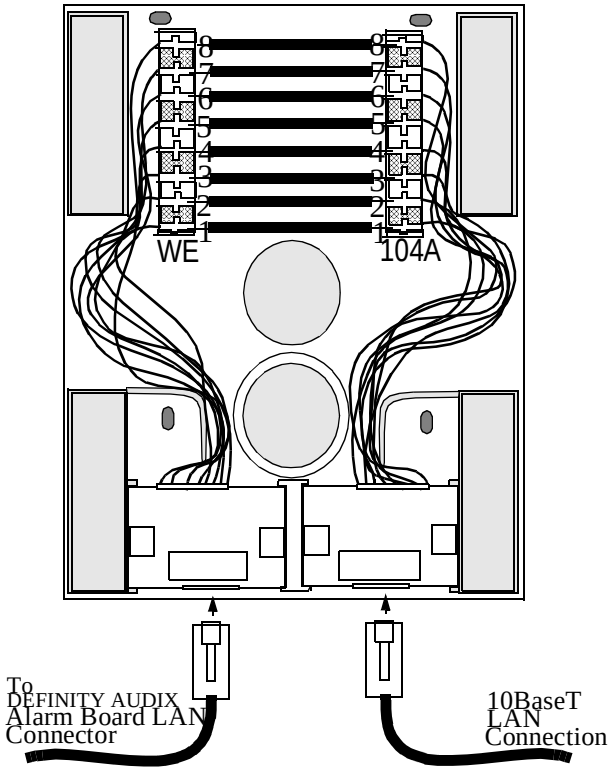


Figure A-3. 104A Mounting Block

3. Mount the 104A connecting block on the wall within reach of the 10BaseT twisted pair LAN cable.
4. Connect the RJ45 10BaseT LAN connector into one of the connections at the bottom of the 104A connecting block.
5. Connect one end of the D8W modular wall cord supplied with the upgrade kit into the other connection at the bottom of the 104A connecting block.
6. Connect the other end of the D8W modular wall cord into the Alarm Board RJ45 connector.
7. Prior to activating and installing the LAN options that will allow IMM to work, the LAN administrator must do one of the following:
   - — Add the AUDIX host name to the network domain name server.
   - — Create a host file on each PC, typically under the *\net\tcp\hosts* directory.
   - — Neither of the above if you will use a numeric IP address.
8. With the cursor on the DEFINITY AUDIX command line, enter **display system-parameters customer options**.

   The system displays the SYSTEM-PARAMETERS CUSTOMER-OPTIONS screen.

```
drwfb2      Active    Alarms:  mwA  Thresholds: none                Logins: 3
 display system-parameters customer-options                        Page 1 of 1
                      SYSTEM-PARAMETERS CUSTOMER-OPTIONS


                    Port Emulation Type: tn746

                 Switch Connection Type: dciu-sci

             Maximum Number of Voice Ports: 16

                   AMIS Analog Networking? n

                            Multilingual? n

          Maximum Number of IMAPI Sessions:  0




enter command:
1Cancel  2Refresh  3Enter  4ClearFld 5Help  6Choices  7NextPage 8PrevPage
```

9. If the `Maximum Number of IMAPI Sessions:` field does not say **32**, contact the TSO. They will have to enter **32** using the *init* login.
10. When the `Maximum Number of IMAPI Sessions:` is **32**, enter **change system-parameters IMAPI-options**.

The system displays the SYSTEM-PARAMETERS IMAPI-OPTIONS screen.

```
ax85       Active    Alarms:    A  Thresholds: none                Logins: 1
change system-parameters imapi-options                          Page 1 of 1

                      SYSTEM-PARAMETERS IMAPI-OPTIONS

        Maximum Number of ENABLED IMAPI Sessions: 32

                      Enable Check New Messages:  n

                      Enable Deliver CA Message:  n

                    Enable Voice File Transfer:  n

                         IMAPI Session Timeout:  5

                                LAN IP Address:

                               LAN Subnet Mask:

                  Default LAN Gateway IP Address:

enter command:
1Cancel  2Refresh  3Enter  4ClearFld 5Help  6Choices  7NextPage 8PrevPage
```

11. Move the cursor to the Maximum Number of ENABLED IMAPI Sessions field. This should be **32**.
12. Move the cursor to the `Enable Check New Messages` field. Set to **y**. This allows clients to check for new messages without the overhead of logging in. If left at **n,** automatic new message notification from IMM is disabled.
13. Move the cursor to the `Enable Deliver_ca_Message` field. Leave at **n**. Entering **y** enables the public class-of-service function allowing messages to be delivered over the LAN interface. This feature is not used in IMM Release 1.0.
14. Move the cursor to the `Enable Voice File Transfer` field. Enter **y** to enable the use of the personal folder in IMM and also voice file transfer for all subscribers who have `IMAPI Voice File Transfer enabled`.
15. Move the cursor to the `LAN Session Timeout` field. This is the amount of time that a session can be inactive before the user is logged out of the mailbox. Intervals may be set in five-minute increments from 5 to 60 minutes. Leave at **5**. After being logged out, the user still has an active TCP/IP connection to the AUDIX server.
16. Move the cursor to the `LAN IP Address` field. This is the number assigned to the AUDIX server by the LAN administrator. The site-specific address is expressed as *nnn.nnn.nnn.nnn*, each *nnn* representing a decimal integer between 1 and 126, or 128 and 254.

17. Move the cursor to the `IMAPI Subnet Mask` field. Part of this number matches the network IP address, while the remaining part contains the host interface address. (Frequently, it is *255.255.255.0*.)

18. Move the cursor to the `Default LAN Gateway IP Address` field. This is the LAN server address to which all unknown addresses will be sent for resolution. It too is supplied by the LAN administrator and has the same form as the LAN IP address.

19. Press the ENTER (F3) function key to save the changes. (Changes in the IP address, subnet mask, and gateway IP address fields only take effect after the AUDIX system has been rebooted. Rebooting is done later.)

20. You must give the user permission to use IMM. You may:

    — Change each subscriber's profile which results in a custom class of service (cos), or

    — Change the cos for people who are to have IMM permission. In this case, enter **change cos** and the class of service of the specific group of subscribers who will use IMM.

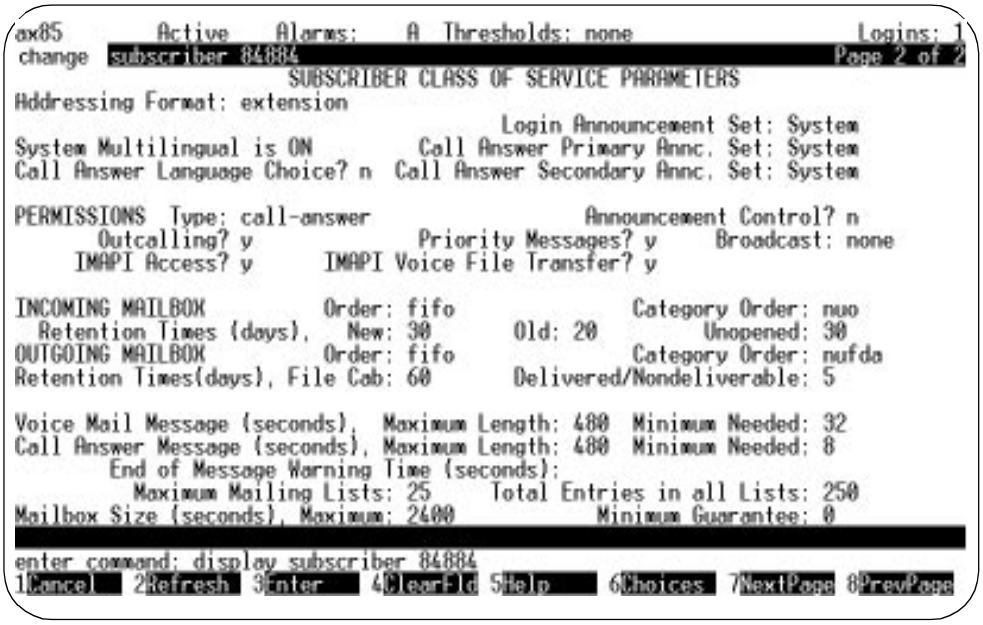
    The system displays the CHANGE COS screen.

```
drmfb11     Active    Alarms:  m A  Thresholds: none                Logins: 1
 change cos 1                                                      Page 1 of 2
                          CLASS OF SERVICE


            Name: class01       COS Number: 1           Modified? y
Addressing Format: extension


                                      Login Announcement Set: System
System Multilingual is OFF         Call Answer Primary Annc. Set: System
Call Answer Language Choice? n   Call Answer Secondary Annc. Set: System


PERMISSIONS  Type: call-answer                 Announcement Control? n
       Outcalling? y           Priority Messages? y       Broadcast: none
     IMAPI Access? y      IMAPI Voice File Transfer? y




enter command: display cos 1
1Cancel  2Refresh  3Enter  4ClearFld  5Help  6Choices  7NextPage  8PrevPage
```

21. Ensure that the `IMAPI access?` field for IMM and the `IMAPI Voice File Transfer?` field for a personal folder are set to **y**.

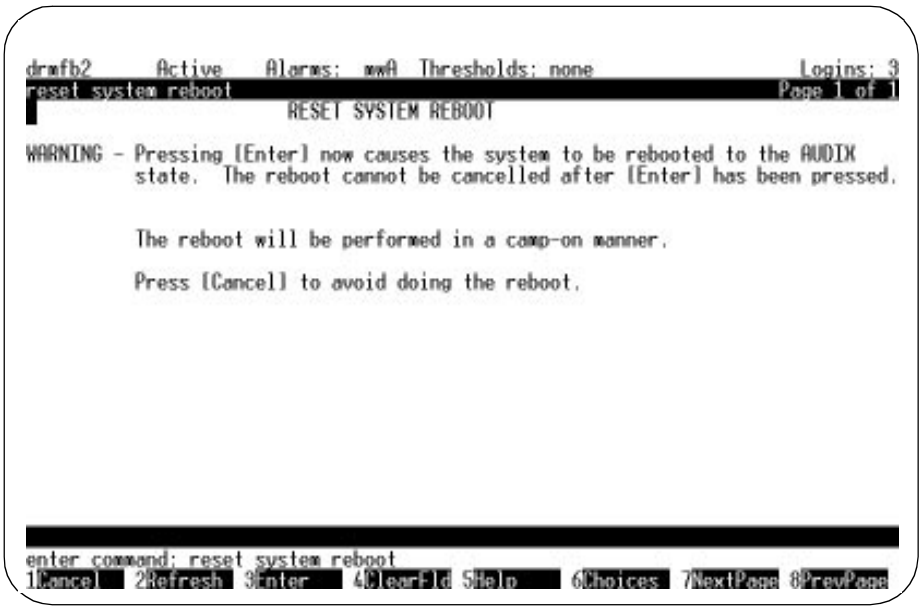
22. With the cursor on the DEFINITY AUDIX command line, enter **change subscriber** and the extension of a subscriber who will have IMM on their PC. Press NEXTPAGE (F7) to display the second page.

The system displays the CHANGE SUBSCRIBER screen.

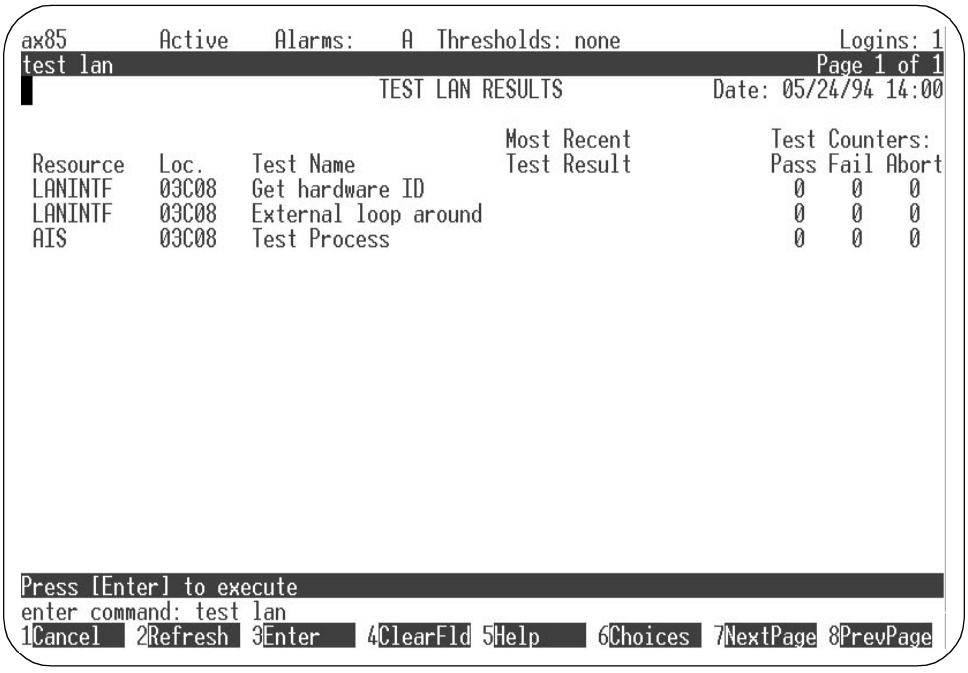


23. Ensure that the `IMAPI access?` field for IMM and the `IMAPI Voice File Transfer?` field for a personal folder are set to **y**.
24. With the cursor on the DEFINITY AUDIX command line, enter **reset system reboot**.

    The system displays the RESET SYSTEM REBOOT screen.



25. Press the ENTER (F3) function key to begin the reboot. Wait approximately 10 minutes for the DEFINITY AUDIX system to come up to the AUDIX state (the screen will display `OLDTRACELOG=/var/spool/audix/oldtrace`).
26. Log in as **craft**.
27. With the cursor on the DEFINITY AUDIX command line, enter **test lan.** The system responds with the following screen:



28. Press the ENTER (F3) function key to begin the test. The test takes up to 2½ minutes to run.
29. If any of the individual tests fail or abort, refer to *DEFINITY AUDIX System—Maintenance*, 585-300-110. If there are problems with the network itself, the LAN system manager will have to resolve these problems before proceeding with this test.
30. To test if a connection can be made to an IMM user or other LAN node, enter **test lan dest** and the IP numerical address (in the form *nnn.nnn.nnn.nnn*) on the screen. Press the ENTER (F3) function key. If the connection is made, a UNIX ping will be returned. The test takes approximately 15 seconds. If the test fails, refer to *DEFINITY AUDIX System—Maintenance*, 585-300-110.
31. Have several customers use Intuity Message Manager. They should be able to log into their mailbox, play a new message, and reply to sender. (For more detail, see the *Intuity Message Manager User Guide,* 585-310-725).

32. If any connection or login fails, discuss the LAN connection with the LAN administrator. This person is responsible for all aspects of the LAN and will ensure that it is problem-free. Follow the troubleshooting guidelines in the *Intuity Message Manager User's Guide*, 585-310-725.

Language Sets

If additional language sets are to be added after the upgrade, the multilingual feature must be turned on (see "Task 12: Activate Customer Options" in Chapter 3). Prior to an upgrade, the customer must also be informed what is new in announcements and fragments in the R3.1 upgrade. These changes may impact customized announcements and fragments. Refer to Appendix B for a list of new announcements and fragments, and for instructions on how to add additional language sets.

Announcement Set Considerations and Installation

B

This appendix describes customized announcement and fragment considerations, and the installation of additional language sets.

Customized Announcement and Fragment Considerations

DEFINITY AUDIX R3.1 standard and abbreviated announcements are installed during an upgrade. Any announcements or fragments added or changed by the customer in a prior release will be saved in a new announcement set. This set retains the same directory name with an additional ***.cust** suffix. All other announcement and fragments on the system are removed by the upgrade procedure.

NOTE:
TThe name of the directory where the customized announcements will be stored is limited to 14 characters. Should the current name be more than 10 letters, the **.cust** appendix will be cut short.

If a customer has customized an announcement set, they must either rerecord the customized fragments or follow the guidelines which follow. They should have a list of all the fragments and announcements they have added, changed, or deleted.

Customer Modified Announcements

Normally, announcements are not added or deleted but are often modified by the customer. If additions or deletions were made, Tier 3 engineers should be contacted. For modified announcements, the customer should consider the viability of using them in the upgrade. The following questions must be considered:

- Did the standard announcement change from R1.0/R2.0/R3.0 to R3.1?
- Does the modified version invoke fragments that have changed in R3.1?

These questions can be answered by examining the contents of the modified announcement and all fragments called by that announcement. Also compare it to the table of changed announcements and fragments listed below. If the customer decides the modified announcement will work in a meaningful way, it can then be copied to the announcement set being used.

Customer Modified and Added Fragments

Does it make sense to use a customized fragment with the new announcement sets? It is possible the official fragment has changed and the customer's version may not make sense each time and place the official fragment is used. Match it to the list of changed or added fragments in the table below. If it can no longer be used effectively, the customer should delete it from the ***.cust** directory.

If the customer desires to reuse the fragment, they must assign it to an unused number in the 4000-4999 range reserved for customer use. It can then be copied to the desired announcement set.

Announcement and Fragment Changes

The following table lists new and modified announcement and fragment numbers introduced in DEFINITY AUDIX 3.1 to existing announcement sets. To review what these fragments and announcements actually say, refer to the *DEFINITY AUDIX System Announcement Customization* manuals for each language.

Table B-1. New and Modified Announcements and Fragments

New Announcements	Modified Announcements	New Fragments
All language sets: 1144-1166	*All language sets:* 192, 570, 620, 622, 183, 184, 185, 718, 719, 964, 965, 269-272, 355-358, 489-492, 663-666, 676-679, 808-811	*British:* 1110-1151 *French-Canadian:* 1196-1237 *Latin-Spanish:* 1161-1202 *US English:* 1437-1471

Announcement Set Identifiers

The following table lists the names assigned to various announcement sets available to DEFINITY AUDIX users. Note that names of the verbose (standard) sets can be no longer than eight characters in length.

The names in the first column appear on the actual cassette tape labels and are used on the DEFINITY AUDIX screens for *add announcements*, *list announcements*, and so forth. See the procedure below for installing additional language sets.

The numbers in the second column are the touch-tone equivalents for the R3.1 announcement set names. These codes are used only by the system administrator. Note that the hyphens in the numbers are ignored.

The recorded words in the third column are the language's self-identifying announcement used by the Multilingual feature. These are stored in *Announcement #1143*.

The recorded words in the fourth column are announcement set identifiers used when system administrators edit announcement sets. For all announcement sets, these names are played in *Announcement #855*.

R3.1 and (Old/ R3.0) Annc Set Names	R3.1 Touch Tone ID	R3.1 Multilingual Self-ID Announcement	R3.1 and (Old/R3.0) Administration Self-ID Announcement
us-eng (standard)	87364	"English"	"Standard US English" ("Standard American")
us-eng-t (terse)	873648	"English"	"Terse US English" ("Terse American")
us-123 (123stand)	87123	"English"	"123 Standard US English" ("123 Standard American")
british (british)	2748474	"English"	"British-English" ("British-English")
lat-span (lat-span)	5287726	"Espaz nol"	"Espaz nol" ("Latin-Spanish")
french-c (french-c)	3736242	"Francais"	"Canadien Francais" ("Canadien Francais")
us-tdd	87833	"TDD ENGLISH"	(text)
dutch (New for 3.1)	38824	"Nederlanos"	"Nederlanos"
german (New for 3.1)	437626	Deutsch	Deutsch
portug (New for 3.1)	767884	Portugûes	Portugûes

Installing Additional Language Sets

Perform the following procedure to add new language sets to a DEFINITY AUDIX system. Each language set is provided on its own tape.

1. Inform subscribers through a broadcast message that the DEFINITY AUDIX system will be taken off the line for possibly a half hour.
2. Log in to the DEFINITY AUDIX System on the administration terminal as **craft**.
3. Bring the system to the Operations, Administration, and Maintenance (OA&M) state by typing **reset system oa&m** and pressing RETURN. Use the *camp-on* option to allow any callers to complete their messages.
4. Remove the backup tape and insert the new language tape.
5. Type **add tape** and press RETURN. The add operation takes approximately 15 seconds and is done in the background. When the operation is complete, the STATUS TAPE screen will show `In service, idle`.

6. Restore the new language set onto the disk by typing **restore backups** and pressing RETURN. To confirm this operation, press RETURN again.
7. Type **remove tape** and press RETURN. Remove the new language tape and insert the original backup tape.
8. If more than one language set is being added to the system, repeat steps 4 through 7 with each new language tape.
9. Bring the system back to the AUDIX state by typing **reset system restart** and pressing RETURN.

This is the end of this procedure.

Option Settings

C

This appendix contains a list of option settings for supported terminals and modems. However, this appendix does not provide procedures for setting the options. Refer to the appropriate manual supplied with the terminal and modem for these procedures.

Terminal Option Settings

This section lists the option settings for the following administration/maintenance terminals:

- PC using G3MA software
- 715 BCT
- 513 BCT
- 610 BCT with 513 emulation
- 615 BCT with 513 emulation
- 4410/5410
- 4425/5425
- 4415/5420

PC/G3MA User Option Settings

Table C-1. PC with G3MA User Option Settings

Option	Setting
Color	**default** (original screen colors) **customized** (redefined colors) **lcd** (for laptop/notebook screens) **monochrome** (without color)
Mouse speed	**slow**, **medium**, **fast**
Beep tone	**yes**, **no**
Flashing line?	**yes**, **no**
Operating system	**DOS, UNIX**

715 BCT Option Settings

Table C-2. 715 BCT User Preference Option Settings

Option	Setting
Lines	24
Columns	80
Reverse video	no
Screen saver	30 minutes
Scrolling	jump
Scroll speed	
Labels	on
Key click	off
Warning bell	on
Font size	large
Parallel port	enabled

Assumes a direct connect or a 9600 baud modem.

Table C-3. 715 BCT Communication Option Settings

Option	Main Setting (Switch)	Aux Setting (Audix)
Port mapping	**port 1**	**port 2**
Port service	**host**	**printer**
Speed	**4800**	**9600***
Stop bits	**1**	**1**
Data bits	**7**	**7**
Send parity	**space**	**space**
Check parity	**no**	**no**
Local Echo		**off**
Encoding		**off**
Generate flow	**XON/XOFF**	**XON/XOFF**
Receive flow	**XON/XOFF**	**XON/XOFF**†
XOFF at	**240**	**240**
Transmit limit		**no**
Answerback on connect		**no**
Clear communication port	**main**	**aux**

* Assumes a direct connect or a 9600 baud modem.
† This option may be set to *none*.

Only the options shown in bold type are critical to terminal operation.

Table C-4. 715 BCT General Option Settings

Option	Window 1 (Switch)	Window 2 (Audix)
Emulation	**BCS**	**BCS**
Terminal ID	**BCS***	**BCS**
Newline on LF	**no**	**no**
Transmit controls	**7 bits**	**7 bits**
Backspace mode	**normal**	**normal**
User features	**unlocked**	**unlocked**
Conceal answerback	**no**	**no**

* This option may be set to *track*

Only the settings shown in bold type are critical to terminal operation.

Table C-5. 715 BCT Display Option Settings

Option	Window 1 (Switch)	Window2 (Audix)
Monitor mode	**off**	**off**
Cursor type	**block**	**block**
Cursor blink	**on**	**on**
Display cursor	**yes**	**yes**
Status line position	**bottom**	**bottom**
Status line type	**host**	**host**
Character mode	**multnatl**	**multnatl**
International font	**ISO Latn**	**ISO Latn**
Autowrap	**on**	**on**

Only the settings shown in bold type are critical to terminal operation.

Table C-6. 715 BCT Keyboard Option Settings

Option	Window 1 (Switch)	Window 2 (Audix)
Caps/Shift lock key	**caps lck**	**caps lck**
RET	**CR**	**CR**
Enter key	**ent***	
Autorepeat	**yes**	**yes**
Margin bell	**yes**	**yes**
Compose key	**enabled**	**enabled**
Break key	**enabled**	**enabled**
Keyboard language	**US**	**US**
Numeric pad	**numeric**	**numeric**
Cursor keys	**normal**	**normal**
Swap delete	**yes**	**yes**
Control key swapping	**none**	**none**
Legends		
User defined keys		
Backspace key	**BS**	**BS**

* This option may be set to ESC S B

Only the settings shown in bold type are critical to terminal operation.

When installing a serial printer, set the options on the printer as described in the manual supplied with the printer then set the corresponding terminal options to match.

When installing a 473/474 parallel printer, set the printer options below.

Table C-7. 715 BCT Printer Option Settings

Option	Window 1 (Switch)	Window 2 (Audix)
Select print region	**page**	**page**
Print mode	**normal**	**normal**
Print terminator	**none**	**none**
Printer type/driver	**BCS**	**BCS**
Printer alarm	**no**	**no**
Printer to host	**no**	**no**

513 BCT Option Settings

Table C-8. 513 BCT Terminal Option Settings

Option	Setting
Speed	**9600**
Duplex	**full**
Send parity	**space**
Check parity	**no**
Memory access	scroll
Clock	**async**
Return key	**CR**
Newline on LF	no
Autowrap	on
Cursor	steady
Key click	off
Margin bell	off
Transmission	**char**
Columns	80
Send from	cursor
Send edit seq	**yes**
Send graphics	**no**
Enter key	**Esc-S-B**
Block terminator	
Answerback	

Only the settings shown in bold type are critical to terminal operation.

For the 513 BCT Auxiliary Printer, set the options on the printer as described in the manual supplied with the printer, then set the corresponding options on the terminal to match.

610 BCT with a 513 Emulation Package Option Settings

Table C-9. 610 BCT with 513 Emulation Package Option Settings

Option	Setting
I/O card	idle
Speed	**9600**
Send parity	**space**
Check parity	no
Local echo	off
Monitor mode	off
Autowrap	**on**
Newline on LF	**no**
Return key	CR
Enter key	**Esc-S-B**
Cartridge	**used**
Columns	80
Scrolling	jump
Reverse video	no
Volume	4
Key click	off
Cursor type	block
Cursor blink	no
Labels	on

Only the settings shown in bold are critical to terminal operation.

615 BCT with a 513 Emulation Package Option Settings

Table C-10. 615 BCT with 513 Emulation Package Option Settings

Option	Setting
I/O card	idle
Speed	**9600**
Send parity	**space**
Check parity	no
Local echo	off
Encoding off	
Generates flow	on
Receive flow	off
Pass flow	yes
Monitor mode	off
Autowrap	**on**
Newline on LF	**no**
Return key	CR
Enter key	**Esc-S-B**
Cartridge	**used**
Columns	80
Scrolling	no
Reverse video	no
Volume	4
Key click	off
Scrolling	jump
Scroll speed	med
Cursor type	blck
Cursor blink	no
Labels	on

Only the settings shown in bold are critical to terminal operation.

4410 and 5410 Terminal Option Settings

Table C-11. 4410/5410 Option Settings

Option	Setting
Speed	**9600**
Parity	**space**
Duplex	**full**
Screen	80
Return key	**CR**
Rec'vd LF	index
Labels	on
Monitor mode	off
Key click	off
Autowrap	on
Cursor	block
Built-in modem	**no**

Only the settings shown in bold type are critical to terminal operation.

4425 and 5425 Terminal Option Settings

Table C-12. 4425/5425 Terminal Option Settings

Option	Setting
Speed	**9600**
Duplex	**full**
Send parity	**space**
Check parity	**no**
132 Columns	off
Memory access	scroll
Clock	**async**
Wait for DSR	no
Return key	**CR**
Newline on LF	no
Autowrap	on
Cursor	steady
Key click	off
Margin bell	off
Dialer	no
Answer on connect	no
Transmission	**char**
Line send	keyed
Block send	unprot
Send from	cursor
Edit keys	**send**
Send attributes	**no**
Autoanswer	no
VT 52	no
Enter key	**Esc-S-B**
Field separator	
Block terminator	
Answerback	

Only the settings shown in bold type are critical to terminal operation.

For auxiliary printer option settings on the 4425/5425, set the options on the printer as described in the manual supplied with the printer, then set the corresponding options on the terminal to match.

4415 and 5420 Terminals

Table C-13. 4415/5420 Terminal Option Settings

Option	Setting
Speed	**9600**
Duplex	**full**
Send parity	**space**
Check parity	**no**
132 columns	**off**
Memory access	**scroll**
Clock	**async**
Return key	**CR**
Newline on LF	**no**
Autowrap	**on**
Cursor	**steady**
Keyclick	**off**
Margin bell	**off**
Keyboard model	**5420**
Transmission	**char**
Line send	**keyed**
Block send	**unprot**
Send front	**cursor**
Send edit seq	**yes**
Send graphics	**no**

For auxiliary printer options, set the options on the printer as described in the manual supplied with the printer, then set the corresponding options on the terminal to match.

Modem Option Settings

AT&T 2400 Modem Option Settings

The AT&T 2400 Modem is shipped from the factory with default option settings. Some of the default settings may not be appropriate when this modem is used with the DEFINITY AUDIX System. You should set the options at your terminal as described below.

You should set the options listed in the table in the following section, *Software Settings*. To do this, the modem must be in the *command* mode, which is determined by the position of a jumper switch located inside the front endcap of the modem. The jumper switch has two settings: command (*smart*) mode, and noncommand (*dumb*) mode. The jumper switch set to command mode when the modem is shipped from the factory, but it must be set to noncommand mode for use with the DEFINITY AUDIX System.

If the jumper switch is already set to the noncommand mode, you must move it to the command mode before setting the options at the terminal. The *Jumper Setting* section below describes how to access and change the jumper plug setting.

Software Settings

To set the options, the modem must be connected to a terminal (for example, the 715 BCT) with the terminal speed set at 2400 bps.

All the factory default option settings, except transmission speed, should be appropriate for the DEFINITY AUDIX System. With the jumper switch set to command mode (factory default), enter the following option commands at the terminal.

Option Command	Meaning
at&z0	Set factory defaults from user profile 0
ats37=6	Connect at either 1200 or 2400 bps (automatically selected)
at&w1	Save settings in user profile 1
at&y1	Invoke settings in user profile 1 on power up

Jumper Setting

A jumper switch is located inside the front endcap of the modem. The jumper must be set to the command mode when setting the options listed in the previous section. After setting the options, the jumper must be set to the noncommand mode for normal operation with the DEFINITY AUDIX System.

To access the jumper switch, the front endcap of the modem must be removed. First turn off the modem and disconnect it from the power source, the telephone line, and the computer.

⚠ CAUTION:
Before removing the modem's endcap, always unplug the telephone line and turn off power to the modem. If a telephone is plugged into the PHONE jack on the modem's rear panel, remove it. Do not operate the modem without the endcaps or housing in place. Doing so may expose electrically live parts and create a safety hazard.

To remove the front endcap, first insert a screwdriver under the front-endcap tab located on the side of the modem. Twist the screwdriver slightly to loosen the tab and then remove the endcap.

Figure C-1, *Modem Front View*, shows the jumper pins and the jumper plug in a front view of the modem with the endcap removed.

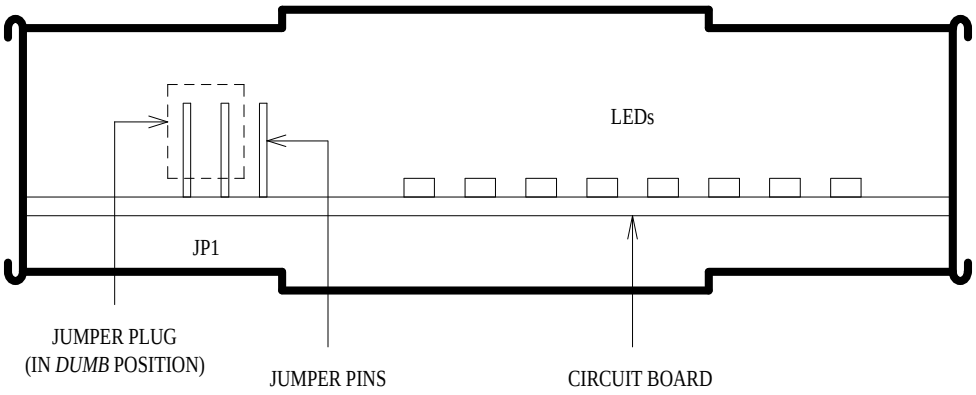


Figure C-1. Modem Front View

There are three jumper pins (labeled *JP1*) on the left side of the circuit board. When the jumper plug connects the *left* and middle pins (as shown in the figure), the modem is in the noncommand (*dumb*) mode. When the jumper plug connects the *right* and middle pins, the modem is in the command mode (the factory setting). To change the jumper setting, lift the plug up until it clears the pins (the plug may have to be tilted outward to clear the top of the housing); then slide the plug down on the middle pin and the other end pin. Replace the

endcap, reconnect the telephone wire and computer cable, and plug in the power cord.

For more details on setting options for the AT&T 2400 modem, see the booklet that is packaged with the modem.

Paradyne COMSPHERE 3820 Modem Option Settings

Change the following options from their defaults. Only the options that require changing are listed — leave the defaults for all others.

- Change Async DTE Rate to 9600 (default = 19200)
- Change DTR Action To Stndrd_RS232 (default = ignore)

Paradyne COMSPHERE 3830 Modem Option Settings

Connect the modem to a terminal (for example, the 715 BCT) with the terminal speed set at 2400 bps. Enter **AT** to get the OK prompt; then enter the following string to set the modem to noncommand (dumb) mode:

AT&D2Q1&W0

No other option settings are necessary.

DM424 Modem Option Settings

Change the following options from their defaults. Only the options that require changing are listed — leave the defaults for all others.

- On the DEFINITY AUDIX system PORT A* modem, set the modem to the Answer Only Mode of Operation (refer to the manual supplied with the DM424 modem for details)
- Also, set switch 2 to the ON position (modem does not recognize AT commands; dumb mode)
- After setting switch 2, turn the modem off then back on.

DM224 Modem Option Settings

To set the options, the modem must be connected to a terminal (for example, the 715 BCT) with the terminal speed set at 2400 bps.

Change the following options from their defaults. Only the options that require changing are listed — leave the defaults for all others.

- Set AT&C1 — DCD follows real carrier (it is not asserted all the time)

- Set AT&D2 — Modem hangs up and returns to command state after DTR changes from active to inactive (autoanswer is disabled as long as DTR is not active)
- Set S0=1 — Answer after one ring (the default, 0, specifies don't answer)
- Set ATV1 — Results from the modem are ASCII strings Save these changes to both profiles via at&w0 and at&w1.

212AR Modem Option Settings

Set the switches on the 212AR modem as follows:

Option Switch	Rocker Number 1-N (O=Open, C=Closed	
S1	COC	
S2	CCOOOCCOO	
S3	CCCCOOCO	Option Straps
S4	OO	

Also, make sure you press the HS button on the front of the 212AR modem.

NOTE:
This modem can be used only at 1200 baud. Make sure you set the terminal option accordingly.

2212D Modem Option Settings

Set the switches on the 2212D modem as follows:

Option Switch	Rocker Number 1-N (O=Open, C=Closed)
S1	OOOCCCCC
S2	OOOO

Also, make sure you press the HS button on the front of the 2212D modem.

NOTE:
This modem can be used only at 1200 baud. Make sure you set the terminal option accordingly.

MPDM Data Module Option Settings

This data module can be connected to PORT A for CL mode, or to either PORT A or PORT B for DP mode. The option settings depend on the whether the DEFINITY AUDIX system is running in the DP or CL mode.

DP Mode

Set the following MPDM options to the **ON** switch position if running in DP mode:

- 1200 (baud rate)
- 9600 (baud rate)
- FDX
- ASYN
- EXT
- DISC
- AANS
- EV (Parity)
- Set all other options to **OFF**

CL Mode

Set the following MPDM options to the **ON** switch position if running in CL mode:

- 9600 (baud rate)
- SYN
- INT
- AANS
- Set all other options to **OFF**

7400A Data Module Settings

In the *set interface* option menu, set the ANS ONLY? option to **YES**. Then select the following options:

Option	Setting
BAUD RATE	1200 and 9600
ANS	AUTO
BRK DISK	LONG
CI	OFF

CH	OFF
CTS	ON
DCD	NORMAL
DSR	ON
DTR	50 Msec
DTR	FOLLOW
LL	OFF
REMLOOP	GRANT
RI	ON
RL	OFF
SIGLS DISC	OFF
TM	OFF
DONE	YES

See *7400A Data Module User's Manual*, 555-020-706 for instructions on how set options on the 7400A data module.

7400B Data Module Settings

Set the two dip switches located under the top panel of the 7400B data module as follows:

- SW1-1:
  - Set to ON if a telephone is *not* attached to the 7400B
  - Set to OFF if a telephone *is* attached to the 7400B
- SW1-5: 0set to ON

See *7400B Plus Data Module User's Guide*, 555-020-710 for instructions on how set options on the 7400B data module.

Changing Switch-Integration Mode

D

This appendix lists the installation tasks to change the DEFINITY AUDIX system from the digital-port (DP) switch-integration mode to the control-link (CL) switch-integration mode and to change from the CL to the DP mode.

To complete these tasks, you will need *Switch Administration for the DEFINITY AUDIX System*, 585-300-509 in addition to this (installation) manual. You may also need worksheets from Appendix B of *Planning for the DEFINITY AUDIX System*, 585-300-904.

Change from DP to CL Mode.

Table D-1. Tasks to Change from DP to CL Mode

Task	Reference	Done
Update to R3.1	If the DEFINITY AUDIX system has not been upgraded to the latest release, follow the steps listed in Appendix C, *Upgrades, Announcements, Language Sets*.	
Hardware Installation	Follow the instructions in "Task 8: Install the Control-Link Cable" of Chapter 2, *Hardware Installation*, to install the control-link cable.	
Notify INADS	Before starting the procedure to change mode, notify INADS that you are executing the procedure to change from the CL to the DP integration mode and that this procedure may cause switch and/or DEFINITY AUDIX System alarms.	
DEFINITY AUDIX System Administration	1. Log in as **craft**. Enter **display system-parameters features**, move to page 2 of the screen, and record the values displayed in the following fields: Transfer Type _____ Covering Extension _____ Transfer Restrictions _____ These values will be used in a later step. 2. Complete "Task 12: Activate Customer Options". 3. At the end of Task 12, the system will be restarted. When the restart has finished, log in as **craft** and complete "Task 14E: Set Switch-Link Parameters".	
	4. For all subscribers serviced by the DEFINITY AUDIX System, the Switch Number on the SUBSCRIBER screen must match the Switch Number administered on the switch. This will always be the case for System 75 switches. For G1 and G3 switches, you can determine whether these numbers match by taking the following steps: 4a. Check the Switch Number field on the SUBSCRIBER screen using the **change subscriber *extension*** command. 4b. Check the switch number administered on the switch: — For G1 switches, the switch number is in the Node Number field on the SYSTEM-PARAMETERS FEATURES screen. — For G3 switches, the switch number is in the Local PBX ID field on the DIALPLAN screen. If the switch number on the switch does not match the switch number in the Switch Number field on any subscriber's SUBSCRIBER screen, change the value in this field to match the switch number administered on the switch. 5. If necessary, use the CHANGE VOICE-GROUP screen to add or delete voice ports to match the number of ports that will be administered on the switch. 6. If the value of the Transfer Type field in step 1 was **basic**, use **change system-parameters features** to change this field **to enhanced**. Enter the values recorded in step 1 for Covering Extension and Transfer Restriction.	

Table D-1. Tasks to Change from DP to CL Mode — *Continued*

Task	Reference	Done
Switch Administration	Complete the tasks listed in Appendix A, *Changing from DP Mode to CL Mode*, in *Switch Administration for the DEFINITY AUDIX System,* 585-300-509.This appendix refers to detailed task descriptions in the body of the switch administration book. The detailed task descriptions are somewhat different for each type of switch. Be sure to locate the correct task descriptions for the type of switch you are working with.	
Acceptance Tests	Complete the following tasks in Chapter 4, *Confidence Checks*. 1. "Task 19: Perform Dial Tone Test" 2. "Task 20: Run Test Switch-Link Long" (if there are no subscribers already administered) 3. "Task 21: Add Two Test Subscribers" 4. "Task 23: Run Test Tape Long" 5. "Task 26: Clear Administration, Error, and Alarm Logs"	

Change from CL to DP Mode

This section lists the installation tasks to change the DEFINITY AUDIX system from the control-link (CL) switch-integration mode to the digital-port (DP) switch-integration mode.

Table D-2. Tasks to Change from CL to DP Mode

Task	Reference	Done
Notify INADS	Before starting the procedure,notify INADS that you are executing the procedure to change from the CL to the DP integration mode and that this procedure may cause spurious switch and/or DEFINITY AUDIX System alarms in the next hour.	

Table D-2. Tasks to Change from CL to DP Mode — *Continued*

Task	Reference	Done
DEFINITY AUDIX System Administration	Complete the following steps: 1. Log in to the DEFINITY AUDIX System as **craft**. 2. Remove any extra voice ports (i.e., any ports above 8) using the CHANGE VOICE-GROUP screen. 3. Enter **display system-parameters features**, move to page 2 of the screen, and record the values displayed in the following fields: Transfer Type _____ Covering Extension _____ Transfer Restrictions _____ These values will be used in a later step. 4. Log off 5. Do "Task 12: Activate Customer Options" 6. If the value of the Transfer Type field in step 1 was **enhanced**, use **change system-parameters features** to change this field **to basic**. Enter the values recorded in step 1 for Covering Extension and Transfer Restriction.	
Switch Administration	Complete the tasks listed in Appendix B, *Changing from CL Mode to DP Mode*, in *Switch Administration for the DEFINITY AUDIX System,* 585-300-509. This appendix refers to detailed task descriptions in the body of the switch administration book. The detailed task descriptions are somewhat different for each type of switch. Be sure to locate the correct task descriptions for the type of switch you are working with.	
Hardware	Remove the control link cable from the DEFINITY AUDIX System and the switch. Refer to "Task 8: Install the Control-Link Cable" of Chapter 2, *Hardware Installation*, for information on the control link cable connections.	
Acceptance Tests	Complete the following tasks in Chapter 4, *Confidence Checks.* 1. "Task 19: Perform Dial Tone Test" 2. "Task 20: Run Test Switch-Link Long" (if there are no subscribers already administered) 3. "Task 21: Add Two Test Subscribers" 4. "Task 26: Clear Administration, Error, and Alarm Logs" If the voice group does not come into service, busyout the voice group and then release it (use the BUSYOUT VOICE-GROUP and the RELEASE VOICE-GROUP screens).	

Ordering Information

E

This appendix contains a list of Price Element Codes (PECs) and comcodes for primary and optional components comprising the DEFINITY AUDIX system.

Complete System

Table E-1. Identifiers for Complete System

Description	PECs and Attributes
DEFINITY AUDIX Package (See individual items in Table E-2)	PECs: 7021-D06, D15, or D40 (New Switch Installation) 7021-A06, A15, or A40 (Existing Switch Installation) 7021-U06, U15, or U40 (Upgrade) 7021-S06 or S15 (TIBI-G3s) 7021-T06, T15, or T40 (TIBI) Attributes: ALB01—Standard Alarm Board (TN2169) ALB02—Optional Alarm Board (TN2170) for Message Manager Interface
G3s Advantage Bundles	PECs: 6308-B8A, B8B, or B8C 6308-C8A, C8B, or C8C 6308-E8A, E8B, or E8C 6038-F8A, F8B, or F8C
G3s Premier Bundles	6038-G8A, G8B, or G8C 6038-H8A, H8B, or H8C Attributes (for either G3s Advantage or Premier Bundles): ALB01—TN2169 without Optical Isolator (for AC-powered switch) ALB02—TN2170 without Optical Isolator (for AC-powered switch) ALB03—TN2169 with Optical Isolator (for DC-powered switch) ALB04—TN2170 with Optical Isolator (for DC-powered switch)

Primary Equipment

NOTE:
Only the multifunction board, alarm board, disk and tape drives listed in the following table are stocked regionally; cables and miscellaneous parts must be ordered directly from the factory.

Table E-2. Identifiers for Primary Hardware and Software

Description	PEC	Comcode, ED/H/J Drawing	Qty	Notes
TN566B MFB		107 083 651 ED1E54670 G-14	1	Included in basic package listed in Table E-1, or can be ordered separately.
TN2169 ALB		106 433 063 ED1E54670 G11	1	Choice of alarm board included in basic package listed in Table E-1, or can be ordered separately.
TN2170 ALB		106 433 071 ED1E54670 G(TBD)	1	
6-Hour Disk Drive		406 621 607 ED1E54670 G-3	1	One disk drive included in basic package listed in Table E-1, or can be ordered separately.
15-Hour Disk Drive		407 033 653 ED1E54670 G-4	1	
40-Hour Disk Drive		406 740 613 ED1E54670 G-5	1	
Tape Drive		406 680 884 ED1E54670 G-1	1	Included in basic package listed in Table E-1, or can be ordered separately.
Tape Drive Shield		846 906 089	1	
SCSI Bus Cable		601 463 318 H 600-344, G1	2	
Interboard Bus Cable		601 463 326 H 600-345, G1	1	
Power Cable		601 463 300 H 600-343, G1	1	
Drive Mounting		846 777 407	2	
Retaining Pins (2 per drive)		846 777 324	4	
MFB Two-Way Splitter Cable		601 458 110 H 600-352, G1	1	
ALB (TN2169) Two-Way Splitter Cable		601 458 128 H 600-353, G1	1	Cable matched to proper ALB. Included in basic package listed in Table E-1, or can be ordered separately.
ALB (TN2170) Three-Way Splitter Cable	2720-06X	601 463 334	1	

Table E-2. Identifiers for Primary Hardware and Software — *Continued*

Description	PEC	Comcode, ED/H/J Drawing	Qty	Notes
104A Connecting Block		103 116 943	1	Included in basic package listed in Table E-1, or can be ordered separately.
D8W Modular Wall Cord	2725-07S	103 786 828	1	
T2-380 Tape Cleaning Kit		406 680 868		
M-F Null Modem Cables		H600-258 G-1	2	
Assembly Kit, Includes:		846 873 693	1	Items included in basic package listed in Table E-1, or can be ordered separately.
Plastic standoffs		901 005 058	3	
Screws, machine slotted hex—SEMS .138-32x5/16		406 546 176	3	
Screws, machine slotted hex—SEMS .138-32x3/16		406 580 837	4	
Screws, pan head slotted—3C6 MSPZ (metric)		406 602 045	4	
Cable ties		401 077 862	2	
Retainer, spring tandem		846 751 766	1	
Blank Backup Tape	70422 (New) 70422A (Existing)	406 680 843 J58889VA1 L-1	2	Included in basic package listed in Table E-1, or can be ordered separately.
Upgrade to 200 MB disk	70427A	ED1E54670 G-4		
Upgrade to 400 MB disk	70428A	ED1E54670 G-5		
AMIS Analog Networking	1253-DAA	107 094 617	1	
Right To Use (RTU) for two additional voice ports on a *NEW* switch	1253-DVP	011 111 111	2	Two ports are included with basic package. Extra ports ordered separately.
RTU for Two Additional Voice Ports on an *EXISTING* Switch	1253-DVPA	011 111 111	2	

Table E-2. Identifiers for Primary Hardware and Software — *Continued*

Description	PEC	Comcode, ED/H/J Drawing	Qty	Notes
RTU DEFINITY AUDIX System R3.1 Software	1253-A31		1	For existing DEFINITY or System 75 R1V3 switches (without accompanying upgrade to a DEFINITY G3 switch).
RTU DEFINITY AUDIX System R3.1 Software	1253-D31		1	For new switch, new refurbished switch, or with upgrade to a DEFINITY G3 switch.
RTU Upgrade to R3.1 from R1.0, R2.0 or R3.0	1253-Z31		1	If Control Link Integration is required, 1253-CLI must also be specified as well as any additional ports (1253-AVP).
Upgrade kit for new R3.1 systems. Includes program tape, installation, and documentation. (Same PEC is used to order kit for upgrade from R3.0. Note that language attributes are different.)	70482		1	Paired with either 1253-A31/D31 for a new system, or with 1253-Z31. Includes one primary language, picked from the following by attribute: LAN01—Standard American English LAN02—American English 123 LAN03—British English LAN04—Latin Spanish LAN05—Canadian French LAN06—TDD LAN09—German LAN10—Portuguese LAN11—Dutch
Upgrade kit for upgrades to R3.1 from R3.0. Includes program tape, installation, and documentation.	70482		1	Paired with either 1253-A31/D31 for a new system, or with 1253-Z31. Includes one primary language, picked from the following by attribute: LAN01—British English LAN03—Canadian French LAN04—German LAN07—Dutch LAN09—Portuguese LAN10—Latin Spanish LAN16—Standard American English LAN17—TDD LAN18—American English 123

Table E-2. Identifiers for Primary Hardware and Software — *Continued*

Description	PEC	Comcode, ED/H/J Drawing	Qty	Notes
Upgrade to R3.1 from R1.0 or R2.0. Kit includes program tape, replacement MFB (TN566 to TN566B), installation, and documentation.	70483		1	Paired with 1253-Z31. Includes one primary language, picked from the following by attribute: LAN01—British English LAN03—Canadian French LAN04—German LAN07—Dutch LAN09—Portuguese LAN10—Latin Spanish LAN16—Standard American English LAN17—TDD LAN18—American English 123
R3.1 Customer Documentation Set	70740		1	Includes ADAP documentation and disks (replaces PEC 70731).
RTU for Multilingual option	1253-MLF		1	Allows up to nine languages. Language RTUs and tape cartridges must be ordered separately.
RTU American English 123	1253-DNU	107 145 013	1	New systems.
	1253-DNUA		1	After market addition.
	1253-NUU		1	Upgrades already having this language.
American English 123 cartridge tape	70416		1	Paired with one of the above RTUs..
RTU Standard American English	1253-DAE		1	New systems.
	1253-DAEA		1	After-market additions.
	1253-AEU		1	Upgrades already having this language.
Standard American English cartridge tape	70485		1	Paired with one of the above RTUs.
RTU British English	1253-DBE	107 015 869	1	New systems.
	1253-DBEA		1	After-market additions.
	1253-BEU		1	Upgrades already having this language.
British English cartridge tape	70414		1	Paired with one of the above RTUs.
RTU Canadian French	1253-DCF	107 015 877	1	New systems.
	1253-DCFA		1	After-market additions.
	1253-UCF		1	Upgrades already having this language.

Table E-2. Identifiers for Primary Hardware and Software — *Continued*

Description	PEC	Comcode, ED/H/J Drawing	Qty	Notes
Canadian French cartridge tape	70412		1	Paired with one of the above RTUs.
RTU Latin Spanish	1253-DLS	107 015 885	1	New systems.
	1253-DLSA		1	After-market additions.
	1253-LSU		1	Upgrades already having this language.
Latin Spanish cartridge tape	70488		1	Paired with 1253-DLS for new systems, or with 1253-LSU for upgrades already having this language.
RTU TDD	1253-DTD	107 145 013	1	New systems.
	1253-DTDA		1	After-market additions.
	1253-TDU		1	Upgrades already having this language.
TDD cartridge tape	70490		1	Paired with 1253-DTD for new systems, or with 1253-TDU for upgrades already having this language. Not applicable for R2.0 or R1.0.
RTU German	1253-DGE		1	New systems.
	1253-DGEA		1	After-market additions.
	1253-GEU		1	Upgrades already having this language.
German cartridge tape	70491		1	Paired with 1253-DGE for new systems or with 1253-GEU for upgrades already having this language. Not applicable for R3.1, R3.0, R2.0, or R1.0.
RTU Dutch	1253-DDU		1	New systems.
	1253-DDUA		1	After-market additions.
	1253-UDU		1	Upgrades already having this language
Dutch cartridge tape	70492		1	Paired with 1253-DDU for new systems or with 1253-UDU for upgrades already having this language. Not applicable for R3.1, R3.0, R2.0, or R1.0.

Table E-2. Identifiers for Primary Hardware and Software — *Continued*

Description	PEC	Comcode, ED/H/J Drawing	Qty	Notes
RTU Portuguese	1253-DPO		1	New systems.
	1253-DPOA		1	After-market additions.
	1253-DPOA		1	Upgrades already having this language.
Portuguese cartridge tape	70484		1	Paired with 1253-DDU for new systems or with 1253-UDU for upgrades already having this language. Not applicable for R3.1, R3.0, R2.0, or R1.0.
Opto-isolator attribute ISO 01		106 005 242	2	M-F RS-232 116A (DC-powered switch only)
Control Link direct-connect cable*	70441	H600-406 G1	1	Factory installed, 1.75 ft
		H600-406 G2	1	Upgrade, 7 ft
M-M RS-232 Group 311 cables:		601 087 075	2	5 ft (Attribute: LNG05)
		601 087 083	2	10 ft (Attribute: LNG50)
		601 087 091	2	20 ft (Attribute: LNG25D)
		601 087 109	2	30 ft (Attribute: LNG27)
		601 087 117	2	40 ft (Attribute: LNG28)
		601 001 365	2	50 ft (Attribute: LNG11)

* Alternative control-link connections requiring different cables are possible. See Chapter 2, "Task 8: Install the Control-Link Cable" for alternative specifications.

Peripheral Equipment

All peripherals are optional to the order. However, the customer must provide at least one terminal for DEFINITY AUDIX system administration/maintenance. See the *Installing the Terminal(s)* worksheet for terminal information.

Table E-3. Identifiers for Peripheral Equipment

Description	PEC	Comcode, H/ED Drawing	Qty	Notes
715 BCT	6950-ET6	ED3P00170	opt	Amber
	6950-ET7		opt	White
G3-MA	1268-200		opt	New switch, new DEFINITY AUDIX system
	1268-1AX		opt	Existing switch, new DEFINITY AUDIX system
AT&T 2400 modem (Courier)		407 044 965	1	Optional for remote admin.
3820 Comsphere 9600 modem	2270-SA2	106 597 776	1	Optional for remote admin.
3830 Comsphere 9600 modem (301)		106 904 303	1	Optional for remote admin.
DM224 2400 modem	2224-CEO		1	Optional for remote admin.
212AR 1200 modem (1A-2A)		103 624 003	1	Optional for remote admin.
2212D 1200 modem			1	Optional for remote admin.
7400A data set	2171-ADM	105 558 050	1	Optional for remote admin. (paired with 7400B)
7400B data set	2172-101		2	Optional for remote admin. (paired with 7400A)
Power supply for 7400s	21625		2	Required with 7400 data sets
Model 2830 Telecommunications Device for the Deaf (TDD)	3780-004	406 613 265	1	Must have buffer if Automatic Attendant menus are used.
Z3A-1 male ADU	2169-001		1	Optional for remote admin. (paired with Z3A-4)
Z3A-4 female ADU	2169-004		1	Optional for remote admin. (paired with Z3A-1)
Power supply for ADUs	21691		1	One per ADU pair (includes one 400B2 or 248B adapter)
D8AM crossover cord		104 154 430	1	Req. for ADU connection

Table E-3. Identifiers for Peripheral Equipment — *Continued*

Description	PEC	Comcode, H/ED Drawing	Qty	Notes
Parallel printer and cable	6951-417 6950-EB1			Optional printer Printer cable
Isolating Data Interface (IDI)	65399		1	May be required for a CL connection to a processor interface or packet gateway board
Z700-D Modular Processor Data Module (MPDM)	2161-PDM	103 954 541	1-2	Required for a CL connection to the digital-line interface board or packet gateway board
Data Service Unit (DSU) (many models)			2	May be required for a CL connection to the packet gateway board
M-F RS232C – RS449 Cable		H600-210	1	Required for IDI connection
M-M RS232C – RS449 Cable		H600-405	1	Required for IDI connection
M-M RS232C Cable		H600-347	1	Required for CL connection to packet gateway
M-F RS232 M25A Cables:		846 823 649	1	5 ft Required for some
		846 823 656	1	9 ft DSU or MPDM
		846 823 664	1	25 ft CL connections
		846 823 680	1	50 ft

Intuity Message Manager

Table E-4. Identifiers for Intuity Message Manager

Description	PEC	Comcode	Notes
RTU IMM interface activation via the *init* screen	1253-IVM		Includes capacities of 32 sessions and up to 500 clients.
IMM Upgrade Kit	70493		Includes TN2170, 3-way splitter cable to make the LAN connection, and the upgrade software for IMM.
IMM Desktop Applications (Disks and Documentation) (One package has 5 complete sets)	7028-001		1 to 5 sets (5 to 25 users)
	7028-002		6 to 10 sets (26 to 50 users)
	7028-003		11 to 15 sets (51 to 75 users)
	7028-004		16 to 20 sets (76 to 100 users)
	7028-005		21+ sets (101+ users)
IMM Site License (Includes license, 2 sets of application disks and 2 sets of tutorial disks)	7028-101		1 to 25 users
	7028-102		26 to 50 users
	7028-103		51 to 75 users
	7028-104		76 to 100 users
	7028-105		101 to 200 users
	7028-106		201 to 300 users
	7028-107		301 to 400 users
	7028-108		401 to 500 users
Additional Documentation	7028-201		One package of 5 user's guides
	7028-202		Camera-ready master of IMM document for local reproduction

Abbreviations

A

ABP
Alarm Board Processor

AC
Alternating Current

ACD
Automatic Call Distribution

ACM
Assistant Contract Manager

ADAP
Administration and Data Acquisition Package

ADC
Analog-to-Digital Converter

ADM
Administration Manager

ADU
Asynchronous Data Unit (ZA)

ADX
AUDIX State

AE
Account Executive

AFIO
Asynchronous File Input/Output

AIM
AUDIX Initialization Manager

AKSRV
AUDIX Kernel Server

ALB
Alarm Board (TN2170)

AMIS
Audio Messaging Interchange Specification

ANET
AUDIX Network

AOM
Alarm Origination Manager

API
Application Program Interface

ASC
Audio Session Control

ATTOMS
AT&T Order Management System

AUCC
AUDIX Upgrade Control Center

AUDIX
Audio Information Exchange

AWG
American Wire Gauge

B

BMPM
Board Mounted Power Module

BTU
British Thermal Unit

C

CALC
Call Answer Language Choice

CL
Control Link

CLT
Control Link Trace Manager

CO
Central Office

CPU
Central Processing Unit

D

DAC
Dial Access Code

DC
Direct Current

DCIU
Data Communications Interface Unit

DCP
Digital Communications Protocol

DCS
Distributed Communications System

DD
Disconnect Detect

DDD
Direct Distance Dialing

DID
Direct Inward Dialing

DIO
DSP Input/Output Controller

DLG
Dual Language Greetings

DM
Database Manager

DMA
Direct Memory Access

DOSS
Delivery Operations Support System

DP
Digital Port

DPC
DSP Parallel Interface Controller

DRAM
Dynamic Random Access Memory

DS
Design Specialist

DS1
Digital Service 1

DSI
Digital Service Interface

DSIC
Dedicated Switch Installation Crew

DSP
Digital Signal Processor

DTE
Data Terminal Equipment

DTMF
Dual Tone Multifrequency

DUSCC
Dual Synchronous Channel Chip

E

EDT
Equipped Device Table

EIA
Electronic Industries Association

EMI
Electro-magnetic Interference

EPROM
Electrically Programmable Read Only Memory

ER
Error Manager

ES
Enhanced Services

ESS
Electronic Switching System

F

FAC
Faceplate and Alarm Controller

FC
Forms Control

FIFO
First-In First-Out

FP
Feature Processor

FPROM
Flash Erasable Programmable Read Only Memory

FSA
File System Administrator

FSO
Field Service Organization

FW
Flashware

G

GBCS
Global Business Communications Systems

GBCSDC
Global Business Communications Systems Design Center

I

ICITT
International Consultive Committee for Telephony and Telegraphy

I^2C
Inter-Integrated Circuit

IDI
Isolating Data Interface

IL
Installation Location

IMM
Intuity Message Manager

INADS
Initialization and Administration System

I/O
Input/Output

ISB
In Service Busy

ISI
In Service Idle

ISP
In Service Pending

ISDN
Integrated Services Digital Network

K

Kbyte
Kilobyte (1024 bytes)

kHz
kilohertz

L

LAN
Local Area Network

LAT
Local Administration Terminal

LCD
Liquid Crystal Display

LEC
Local Exchange Carrier

LED
Light-Emitting Diode

LWC
Leave Word Calling

M

Mbyte
Megabyte (~= one million bytes)

MCM
Maintenance Control Manager

MD
Management Devices

MFAT
Multifunction Analog Telephone

MFB
Multifunction Board (TN566B)

MHz
Megahertz

MOJ
Material on Job

MP
Maintenance Procedure

MPDM
Modular Processor Data Module

MPM
Maintenance Procedure Manager

ms
Millisecond

MSB
Mass Storage Bracket

MSC
Message Service Center

MTBF
Mean Time Between Failures

MWI
Message-Waiting Indication

N

NACS
New AUDIX Call Simulator

NDC
National Design Center

NMI
Non-maskable Interrupt

NVRAM
Non-volatile Random Access Memory

O

OA&M
Operations, Administration, and Maintenance

OOS-D
Out of Service-Due to insufficient translations

OOS-F
Out of Service-Fault

OOS-R
Out of Service-Resource

OOS-T
Out of Service-Testing

OS
Operating System

P

PBX
Private Branch Exchange

PC
Power Converter or Personal Computer

PDM
Processor Data Module

PEC
Price Element Code

PM
Project Manager

PPE
Packet Processing Element

PROC
Procedure

PROM
Programmable Read Only Memory

Q

QSD
Quick Silence Disconnect

R

RAM
Random Access Memory

RMT
Remote Maintenance Terminal

ROM
Read Only Memory

RTU
Right to Use

S

SAKI
Sanity and Control Interface

SA
Software Associate

SAS
Subscriber-Specific Announcement Sets

SAT
System Administration Terminal

SCI
Switch Communications Interface

SCSI
Small Computer Systems Interface (AUDIX)

SD
Switch Dispatcher, System Data

SDI
SCSI Driver Interface

SIM
System Implementation Manager

SS
Software Specialist, System Status

STRC
Sales Technical Response Center

STU
Standalone Tape Utilities

T

TBD
Tone Based Disconnect

TCP/IP
Transmission Control Protocol/Internet Protocol

TD
Target Driver

TDD
Telecommunications Device for the Deaf

TDM
Time Division Multiplex

TEG
Trunk Equipment Group

TMC
Technical Marketing Center

TSO
AT&T's Technical Services Organization

U

UEQ
Unequipped

UL
Underwriters Laboratories

UPS
Uninterruptible Power Supply

USART
Universal Synchronous/Asynchronous Receiver-Transmitter

V

VB
Voice Buffer

VD
Voice Data

VM
Voice Messages

VSC
Voice Session Control

W

WGS
Work Group System

Glossary

Numeric

10BaseT
A network baseband medium using twisted wire pairs, operating at 10 Mbits per second.

A

Activity Menu
The list of main options voiced to subscribers when they access the DEFINITY AUDIX system.

Administration
The process of setting up a system (such as a switch or a voice mail system) so that it will function as desired. Options and defaults are normally set up (translated) by the system administrator or remote services personnel.

Alarm Board (ALB)
The hardware platform (TN2169) which works with the Multifunction board to provide monitoring for system power and environmental status, -48 VDC to +12 VDC power conversion for the system's disk and tape drives, and remote terminal access. The TN2170 also provides SCSI-to-Ethernet connectivity to support IMAPI.

Alarms
Hardware, software, or environmental problems that may affect system operation. These faults are classified as *major*, *minor*, or *warning*. They are recorded into an alarm log which can be accessed either locally or remotely on a terminal connected to the system.

Angel
A processor activity that exchanges TDM bus control messages and performs functions associated with call setup and port maintenance.

Announcement Fragment
A numbered piece of spoken voice mail information that makes up a system message or prompt.

Asynchronous Transmission
A form of serial communications where each transmitted character is bracketed with a start bit and one or two stop bits.

Asynchronous Data Unit (ADU)
A small device that can extend data transmission far beyond recommended Electronic Industries Association (EIA) limits over building wiring. System terminals may use a Z3A1 or Z3A4 ADU.

Audio Messaging Interchange Specification (AMIS)
An analog networking feature that allows subscribers of different voice mail systems to send voice mail messages to one another.

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.

Audio Information Exchange (AUDIX)
A complete voice-mail messaging system accessed and operated by touch-tone telephones and integrated with a switch.

AUDIX Administration and Data Acquisition Package (ADAP)
A software package which allows the DEFINITY AUDIX administrator to transfer system subscriber, maintenance, or traffic data over the administration port to a personal computer (PC) or Work Group System (WGS).

Automated Attendant
A DEFINITY AUDIX feature that allows a customer to set up a main number with a menu of options that routes callers to an appropriate department at the touch of a button.

B

Backup
A duplicate copy of a filesystem saved on a removable tape. The backup filesystem may be copied back (restored) if the active version is damaged (corrupted) or lost.

Balun
On the DEFINITY AUDIX LAN connection, the adapter needed to connect the twisted-pair breakout cable to the coaxial building wire distribution system.

Baud Rate
Transmission signaling speed.

Boot (or Reboot)
The operation to start a computer system by loading programs from disk to main memory (part of system initialization).

Boot Filesystem
The filesystem from which the system loads its initial programs.

Broadcast Messaging
A feature that enables the system administrator and other designated users to send a voice mail message to all subscribers automatically.

Buffer
Memory used to compensate for time differences in transmission by temporarily storing data.

Business Communications Terminal (BCT)
The recommended terminal for system maintenance or administration.

Busyout Service
When a technician or administrator blocks service to keep customers from using faulty equipment until it can be repaired or tested. For instance, when ports (or a link) are busied out, subscribers who try to access their mailboxes hear a *fast busy* reorder tone. People who would normally reach DEFINITY AUDIX through Call Answering are not forwarded; they hear ringing and no answer at the number they called.

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 Answer Language Choice
Call answer multilingual option where a user can alternate between a primary language set and a secondary language. The two languages are administered on a per subscriber basis. If CALC is enabled, the subscriber may not use the standard DEFINITY AUDIX Multiple Personal Greetings feature.

Camp-On
A system shutdown option that waits for ports to become idle before blocking service to them. This allows subscribers to finish calls in progress.

Central Office (CO)
A main telephone office where private customer lines are terminated and connected to the public network through common carriers.

Central Processing Unit (CPU)
The Multifunction board's main 80386SX processor that controls system data transfer, input/output (I/O), and logical instructions.

Class of Service (COS)
The standard set of features given to subscribers when they are first administered (set up with a Voice Mailbox).

Command Mode
A system state where flashware is in control and software is shut down. In this state, a technician has access to menu options to see flashware status and initialization history, run through flashware diagnostics, and to start or continue system initialization.

Configuration
The particular composition and hardware selected for a system, including internal options and peripheral equipment.

Control Link (CL)
The switch-link integration, or interface, between the DEFINITY AUDIX system and the switch that enables the transmission of control messages from the DEFINITY AUDIX system to the switch. The control messages carry information such as calling-party identification and message-waiting indicator status and control.

Control-Link Mode
The type of switch-link integration for which the DEFINITY AUDIX System R3.0 is connected to the switch via analog-line card emulation and a digital connection.

D

Default
A value that is automatically supplied if no other value is specified.

Digital-Port (DP) Mode
The type of switch-link integration for which the DEFINITY AUDIX System R3.0 is connected to the switch via digital line card emulation.

Digital Signal Processor (DSP)
Programmed RAM chips on the Multifunction board that provide signaling, power-level control, speech coding, and data processing.

Disconnect Signaling Detection
Signaling from the CO to the PBX which indicates that the far end caller has hung up.

Dual Language Greetings
When the Call Answer Language Choice is in effect, the subscriber can record personalized greetings for each of the languages listed as the primary and secondary announcement sets. The subscriber instructs the caller to enter *1 to switch to the alternate language.

E

Errors
Problems detected by the system during automatic self-tests and recorded in an error log. Errors can produce an alarm (fault) if they exceed a threshold.

Events
Occurrences such as inline errors, maintenance procedure failures, alarms, errors, or transitions into or out of the *AUDIX* or *OA&M* states which are recorded in an events log.

F

Faceplate and Alarm Controller (FAC)
The circuitry on the Multifunction board which monitors activity of the DEFINITY AUDIX system.

Field
An area on a form, menu, or report where information can be typed or displayed.

Filesystems
A collection of related files (programs or data) stored on disk which are required to initialize a DEFINITY AUDIX system and provide full service.

Flashware
Code that is stored in electrically reprogrammable memory on the DEFINITY AUDIX system. This programming is retained over power outages but can be reprogrammed automatically on board during initialization.

Forms
Terminal screens of information that allow data to be displayed or changed.

G

Generic Tape
A copy of the standard software and Standalone Tape Utilities that is shipped with a new system.

Graceful Shutdown
Taking the DEFINITY AUDIX system offline (to the maintenance shutdown state) using \s8RESET SYSTEM SHUTDOWN\s0 in a camp-on manner.

Guest Password
A feature that allows people who are not subscribers to leave messages on the system by dialing a subscriber's extension and entering a system-wide guest password.

H

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.

Hunt Group
A group of analog ports on a switch usually administered to search for available ports in a circular pattern.

I

Initialization
The process of bringing a system to a predetermined operational state. The start-up procedure tests hardware and flashware; loads the boot filesystem programs, locates, mounts, and opens other required filesystems; and starts normal service.

Initialization and Administration System (INADS)
A maintenance system used by remote technicians to track alarms.

Interboard Bus
The inter-integrated circuit (I^2C) bus that provides connectivity between the Alarm board and the Multifunction board.

Intuity Message Manager
A PC-based feature for retrieval and display of message headers, addressing to lists, managing personal greetings, and for creating, forwarding, and replying to Voice Mail messages.

L

Leave Word Calling
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.

Light Emitting Diode (LED)
A red-light indicator on the system Faceplate panel that shows the status of operations and possible fault conditions. An unlit LED indicates a healthy system. When flashing, the LED indicates a software problem. When it is steadily lit, a hardware problem exists.

Liquid Crystal Display (LCD)
The 10-character alphanumeric display on the DEFINITY AUDIX faceplate panel that automatically shows status of the system including alarms.

Local Area Network (LAN)
The System 75 packet bus.

Local Maintenance Terminal (LMT)
A display terminal located near the DEFINITY AUDIX system and the switch. It is temporarily attached to the Multifunction board via a Y-cable during an on-site service visit.

Login
A unique code used to gain approved access to a subscriber's Voice Mailbox or to a display terminal.

M

Mailbox
A portion of disk memory given to each subscriber for creating and storing outgoing and incoming messages.

Message-Waiting Lamp
An LED on a telephone that alerts subscribers to new messages.

Modem
A modulator/demodulator used for transmitting analog signals across phone lines.

Multifunction Board (MFB)
The hardware platform (TN566B) which holds the central processing unit, controllers, memory devices, and signal processors that make a DEFINITY AUDIX system operational.

Multilingual System
A DEFINITY AUDIX system containing primary and secondary language announcement sets. A large (40 hour) system can hold up to nine different language sets. The Telecommunications Device for the Deaf (TDD)-based announcement set is treated as a multilingual option.

N

Native Mode
The ability of the switch to recognize the DEFINITY AUDIX multifunction board (MFB) as a TN566B (AUDIX) circuit pack. With native mode support, the switch reserves five slots for the DEFINITY AUDIX assembly, and the switch is able to correctly identify the DEFINITY AUDIX board in alarms sent to the services organization.

Nonnative Mode
Without native mode, the MFB slot is provisioned as a TN754 (for the DP integration mode) or as a TN746B (for the CL integration mode), the five slots occupied by the DEFINITY AUDIX assembly are not reserved, and MFB alarms are reported as alarms for a TN754 or TN746B.

Nonvolatile Random Access Memory (NVRAM)
A battery-backed RAM on the Multifunction board that retains data through loss of power.

Null Modem
An RS232-C cable interface which allows a direct connection between two devices when a modem is not required. Null modems provide no timing signals, but are used with asynchronous devices that derive their timing from start/stop bits.

O

Operating System (OS)
The set of programs that runs the hardware and interprets software commands.

Operations, Administration, and Maintenance (OA&M)
A state of system operation where core processes of the Multifunction board are accessed, including system initialization, resource configuration, forms interface, entry into the maintenance subsystem, and filesystem access. Also entered when customer data must be restored.

Outcalling
A feature that allows the system to dial subscribers' numbers or go to pagers to inform them they have new messages.

P

Port
A connection or link between two devices, allowing information to travel through it to a desired location. For example, a switch port connects to a DEFINITY AUDIX port to allow a subscriber on a voice terminal to leave a message.

R

Reboot
A system *reboot* is done to clear major system problems (such as corrupt program memory). It also runs automatically whenever the system is powered up.

Remote Field Update
A set of software changes on a given release that is transmitted from a central location to customer equipment. Changes are generally restricted to serious *bug* fixes and are limited in volume.

Reply Loop Escape
Allows the subscriber the option to return to responding to a message after trying to reply to a non-subscriber message.

Restart
During maintenance, a system *restart* brings the system software back into full service, usually after an administrative shutdown. This is often done to try to clear software problems.

S

Sanity and Control Interface (SAKI)
An integrated circuit that receives and transmits TDM bus control messages and monitors the sanity of the angel processor.

Shutdown States
States of system operation where either a technician can shut down the system for maintenance, or where a critical error condition brings down the system. In either case, filesystems are closed and the system can be powered down and removed from the carrier.

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.

Standalone Tape Utility
A software utility with options that include disk drive initialization, copying files from a generic tape onto the customer's disk, and map partition modification.

Subscriber Specific Announcement Set
When the Multilingual feature is enabled, each subscriber form has three fields specifying the announcement set with which the subscriber will interact with the system once they log in, and the two announcement sets with which callers to the subscriber's mailbox can interact with the system.

T

Transmission Control Protocol/Internet Protocol
A set of protocol standards which allows a process on one machine to send data to a process on another machine. Communication may be full or half duplex. TCP/IP includes support for multiple operating systems and machine architectures.

Technical Service Organization
The *Tier 3* services group who remotely maintains and diagnoses a DEFINITY AUDIX system using a set of forms generated on a computer terminal.

Telecommunications Device for the Deaf (TDD)
A feature providing Call Answering and Personal Greeting capabilities to the hearing-disabled. The announcement set responds to Baudot tones which are input from a special keypad.

Time Division Multiplex (TDM) Bus
The interface between the DEFINITY AUDIX system and the switch that carries digitally-encoded voice waveforms and circuit-switched data.

U

Update
A limited incremental change on an existing release involving software only.

Upgrade
The replacement of one release with a new release. This may involve software, flashware, hardware, and/or data.

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