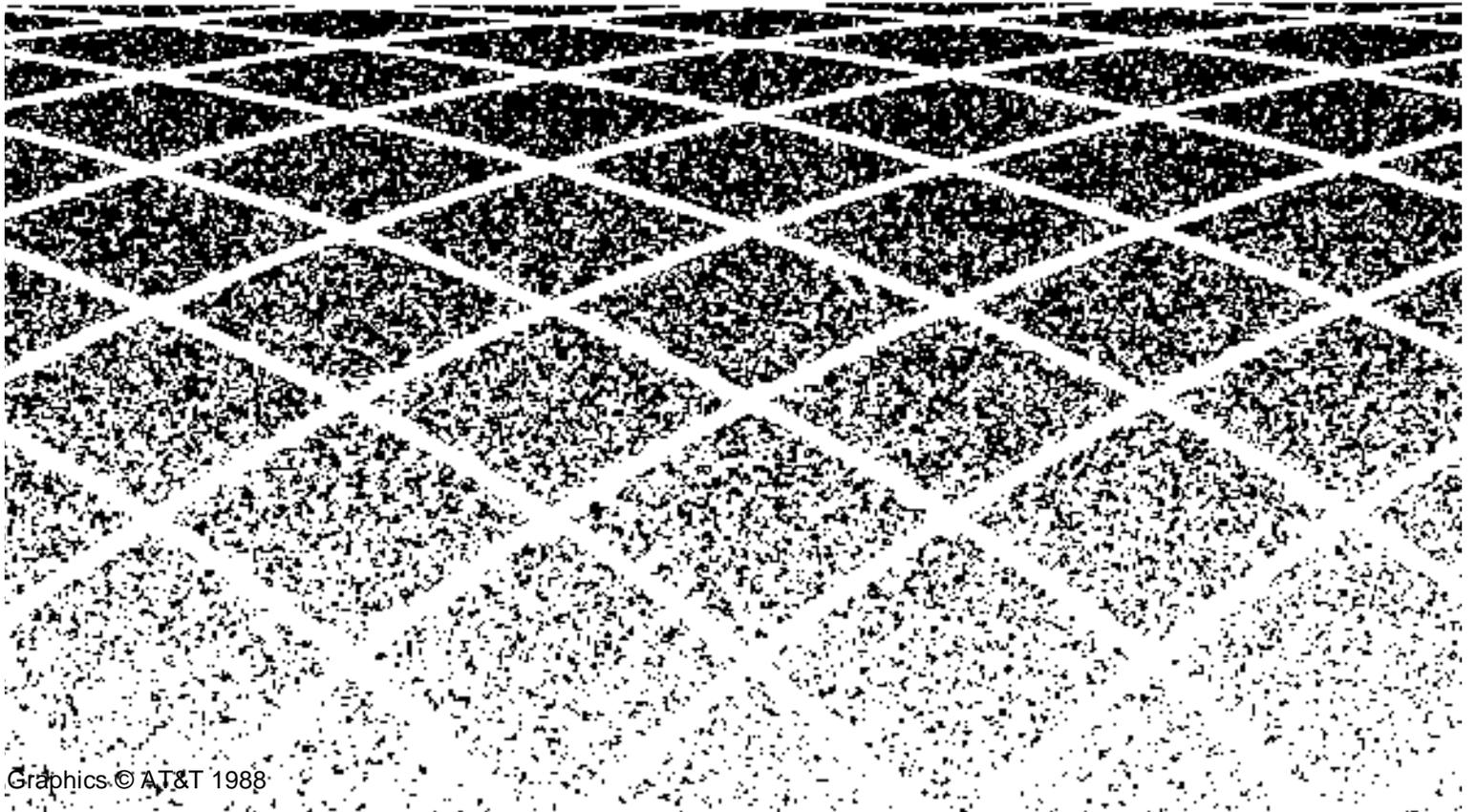




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Integration Package for AUDIX™ Voice Messaging System for DMS-100 Switch



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About This Document

This document provides reference, installation, and administration information for integrating an AUDIX™ Voice Messaging System with a Northern Telecom DMS-100 switch.

You can also use this document to install the AUDIX system with an SL-100 switch.

DMS-100 switch integration is not available on AUDIX-L systems.

Who Should Use This Document

This document is intended for

- Systems and technical consultants
- Account team
- Customers
- Technical Service Center (TSC)
- AT&T on-site service technicians
- System administrators

Prerequisite Skills And Knowledge

- If you are installing the AUDIX system, you should have a working knowledge of the AUDIX system hardware and software. Formal AUDIX system technician training is recommended.
- If you are administering the AUDIX system, you should be familiar with the AUDIX system administration, forms reference, and system description manuals. Training for AUDIX system administration is recommended.

Trademarks And Service Marks

This document uses the following trademarks:

- 1A ESS™ Switch is a trademark of AT&T
- AUDIX™ system is a trademark of AT&T
- DMS-100™ Switch is a trademark of Northern Telecom Limited
- ESS™ switch is a trademark of AT&T
- Silent Knight® Autodialer is a registered trademark of Silent Knight Security Systems
- SL-100® switch is a registered trademark of Northern Telecom Limited

Conventions Used In This Document

The following typographic conventions are used in this document:

- Terminal keys that you press are shown in curved-edge boxes. For example, an instruction to press the return, carriage return, or equivalent key is shown in this booklet as:

Press **RETURN**

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

At the `Login ID?` prompt, enter **snowfox** and press **RETURN**

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

Your file *filename* is formatted incorrectly.

How This Document Is Organized

This document is organized as follows:

- Chapter 1, *Reference*, contains a basic description of an AUDIX system to DMS-100 switch configuration and a few key points to consider while coordinating the implementation of this system.
- Chapter 2, *Installation*, covers the procedures for the hardware installation and administering the AUDIX system for initial service and testing.
- An index is also included in this document.

Changes From Previous Document

This document is the combination of two previous documents:

- *AUDIX Integration Package for the DMS-100 Switch: Administration and Reference*
- *AUDIX Integration Package for the DMS-100 Switch: Installation and Maintenance*

Most of the maintenance and administration information was incorporated into the R1V5 and later AUDIX system manuals.

Related Resources

This document provides information about how an AUDIX system to DMS-100 switch configuration differs from an AT&T switch or PBX configuration. In *addition* to this document, you will need the following documentation:

- *AUDIX Administration* (585-305-501)
- *AUDIX Installation* (585-305-105)
- *AUDIX Maintenance for Tier 1* (585-305-106)
- *AUDIX Release 1 Version 6 Forms Reference* (585-305-204)
- *AUDIX System Description* (585-305-201)

⇒ NOTE:

These are the titles and order numbers at the time of this printing. Document titles and order numbers are subject to change. See the *Business Communications Systems Publications Catalog* (585-000-010) for a current list or call the AT&T Customer Information Center (CIC) at 1-800-432-6600.

How To Make Comments About This Document

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If your feedback form is missing, send your comments to:

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Westminster, Colorado 80234

This chapter contains the following general information for connecting a one- or two-cabinet AUDIX system to a Northern Telecom DMS-100 switch:

- Audix System Requirements
- DMS-100 SWITCH REQUIREMENTS
- Pre-Installation Considerations
- Ordering Summary
- Switch Feature Interactions
- User Interface Changes
- Administration Changes
- Maintenance Changes

Audix System Requirements

This section lists all the hardware and software requirements on the AUDIX system.

Hardware

- A TN547B Multiprotocol Switch Interface (MPSI) board
- A 202T modem for 1200 bps, RS-232C, asynchronous Simplified Message Service Interface (SMSI) links
- A Silent Knight Autodialer to report AUDIX system alarms to a remote location

- An analog line so service technicians can dial into the AUDIX system to troubleshoot the system remotely
- Up to 72 message services (72 SMSI links are available)

See the latest version of the AUDIX system Networking document for the additional equipment required for Networking.

Software

The AUDIX system requires the Integrations Package 2 software (R1V4.5 or later).

DMS-100 SWITCH REQUIREMENTS

This section lists the required hardware and software on the DMS-100 switch.

Hardware

- The DMS-100 switch ntx67fa terminal card
- A repeater between the the AUDIX system and the Central office (CO)— (for example, an 829 Channel Interface Unit, OMNI port, or other equivalent)
- A repeater may *not* be needed between the two 202T modems. You may use a straight back-to-back connection depending on the distance between the AUDIX system and the CO.
- An appropriate cable (such as a B25A) between the repeater and the 202T modem in the co
- A 202T modem in the CO

The wires between the 202T modem on the customer's premises and the repeater are usually punched down to a standard 110-type cross connect field that serves as the demarcation point. See Figure 1-1, AUDIX System Connection to a DMS-100 Switch.

Software

The DMS-100 switch requires the BCS24 through BCS28 and BCS32 or later software release in order to support the AUDIX system SMSI data link; Northern Telecom calls this link the Simplified Message Desk Interface (SMDI) link.

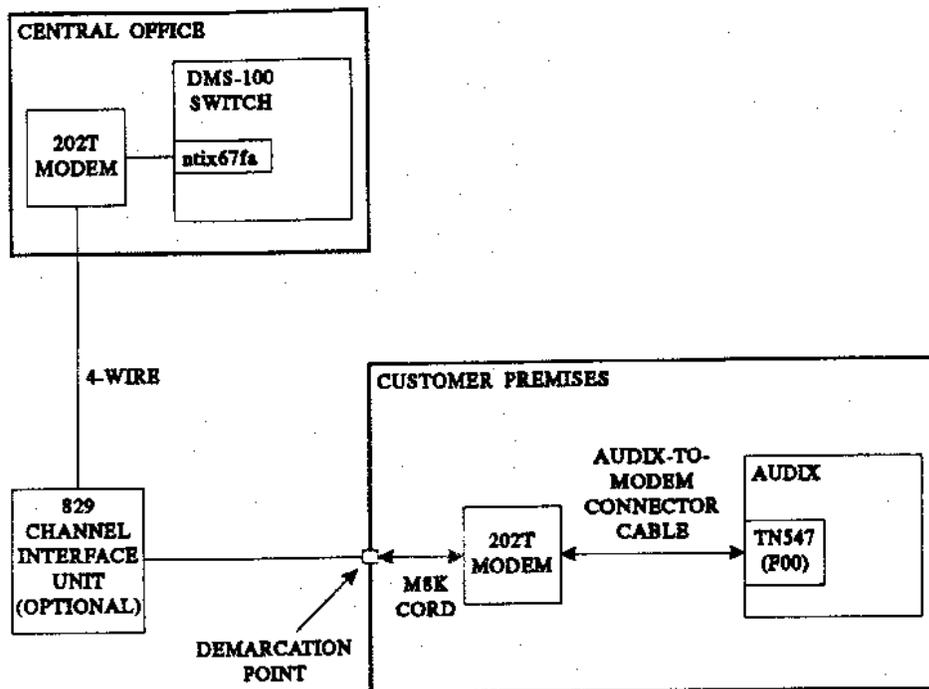
SMSI Feature Packages

The following software packages are required on the DMS-100 switch in order to support full operation of the SMSI (or SMDI) feature:

- NTX100: Meridian Digital Centrex—Basic (IBN)
- NTX101: Meridian Digital Centrex—Enhanced Business Services IBN)
- NTX119: Message Service
- NTX730: ASCII Driver
- NTX732: Simplified Message Desk Interface (SMDI).

⇒ NOTE:

NTX100 and NTX101 contain the Uniform Call Distribution (UCD) features required for basic message-desk operation. NTX119 allows the AUDIX system to request message-waiting updates. NTX730 and NTX732 enable the DMS-100 switch to send call-setup information to the AUDIX system.



USE ONE OF THE FOLLOWING AUDIX-TO-MODEM CONNECTOR CABLES:

- ED-1E434-11, GRP 110, RS449-TO-RS232C CABLE, 50-FOOT (15-m)
- ED-1E434-11, GRP 13, RS449-TO-RS232C CABLE, 36-INCH (91-cm)
- ED-1E434-11, GRP 13 PLUS M25A RS232C EXTENDER CABLE, 53-FOOT (16-m)

Figure 1-1. AUDIX System Connection to a DMS-100 Switch

POTS Users

In order for Plain old Telephone Service (POTS) customers to use the message desk, either NTX020 (Vertical Services I) or NTX806 (Enhanced Call Forwarding—POTS) packages must be available *in addition* to the packages listed previously.

Switch Translations

The following DMS-100 switch translations are translated on the switch prior to installation:

- The Uniform Call Distribution (UCD) group lines and Centrex lines (including UCD group extensions and subscriber extensions).
- Individual stations are translated for Busy Forward and No Answer Forward.
- The access code is translated to set the station for All Calls Forwarded. (This is an optional feature.)
- The data link baud rate is set to 1200.
- The parity is set to 0 (no parity).
- The individual UCD agents have the capability to originate calls (for transfer, outcalling, AMIS Analog Networking, and Message Delivery).
- There is queuing on the UCD group (at least three slots).
- There is automatic cutoff on disconnect. (Timing is normally 400 milliseconds.)
- The Call Request Retrieval feature is set up to work with the AUDIX system.

Pre-Installation Considerations

The pre-installation considerations including physical site preparation, maintenance arrangements, and acceptance test agreements are the same for the DMS-100 switch as they are for the 1A ESS Switch. See the latest version of the AUDIX system description manual.

Ordering Summary

Order an AUDIX system integrated with a DMS-100 switch like any other AUDIX system. Cables, components, and data devices such as the 202T modem are summarized in the latest version of the AUDIX system description manual. In addition, the following Price Element Codes (PECs) apply specifically to DMS-100 setups:

- PEC 1253-V47: Right-to-use Integrations Package 2 software on a one-cabinet AUDIX system.
- PEC 1253-V48: Right-to-use Integrations Package 2 software on a two-cabinet system.
- PEC 1253-E48: Right-to-use Integrations Package 2 software on a one- to two-cabinet upgrade.
- PEC 70364: TN547B MPSI required for a DMS-100 switch data link; use attribute ASV03 for a one- or two-cabinet AUDIX system. (order this *instead of* PEC 70363).
- PEC 70371: Program cartridge (Integrations Package 2) for a one-cabinet AUDIX system.
- PEC 70372: Program cartridge (Integrations Package 2) for a two-cabinet AUDIX system.

Switch Feature Interactions

The feature interactions between the AUDIX system and the DMS-100 switch are the same as the feature interactions between the AUDIX system and the 1A ESS Switch with the following exceptions

- *Announcement in Queue:* The DMS 100 switch can provide an announcement when the number of callers waiting to reach the AUDIX system crosses a certain threshold. Persons in queue will then hear a message alerting them about a delay reaching the AUDIX system, rather than hearing ringing with no answer.
- *Call forwarding:* on a DMS-100 switch, the originally called number is the number that is forwarded to the AUDIX system. For example, if an outside caller calls subscriber A, who has calls forwarded to extension B, which has calls forwarded to the AUDIX system, the AUDIX system will record a message for subscriber A. (A 1A ESS Switch records a message for the *last* extension in the chain—extension B in this example.)
- *Feature limitations:* The DMS-100 switch has the following feature limitations:
 - Up to 16 SMSI (or SMDI) links per DMS-100 switch
 - Up to 63 message desks per SMSI link (a message desk is equivalent to a Uniform Call Distribution (UCD) group)

- Up to 1,024 agent lines per UCD group and 4,096 agents per DMS-100 switch
- *Message Desk Interactions:* Some specified DMS-100 message desk cases include:
 - The source of an attendant console-extended call to a message desk is considered to be the calling party presented to the message desk.
 - If a trunk or attendant console originates a call, the calling Directory Number (DN) presented to the message desk is a blank DN (no extension number).
 - In a station-controlled conference, the calling station given to the message desk is a blank DN.
- *Night Service:* The DMS-100 switch can route calls to a night service number if all the ports in the AUDIX system UCD group are deactivated (for example, by shutting down the system or by manually busying out all the voice ports at the switch). However, any calls in queue when the voice ports are deactivated will remain in queue; they are not redirected to the night service number.

User Interface Changes

As on other AUDIX system integrations, AUDIX system subscribers can directly call the AUDIX system to retrieve messages in their AUDIX system mailboxes. However, Northern Telecom users also have a Call Request Retrieval access code feature for retrieving messages. Some Call Request Retrieval interactions include:

- *Call Request Activate (CRA):* The CRA feature is similar to Leave Word Calling (LWC) on an AT&T PBX. When a switch user with Call Forwarding active requests CRA through a feature button or access code, the switch places a "please call" message in the Call Request Retrieve (CRR) queue (see bullet item below). The message might be from the AUDIX system (if the AUDIX system has new messages) or from another switch user (if another user places the CRA call).
- *Call Request Retrieve (CRR):* When an entry is placed in the CRR queue, the subscriber's Message Waiting Indicator (MWI) is activated. To retrieve the message, the user dials an access code and the switch places a call to the first entry in the queue—either the AUDIX system or another switch user, depending on the origination of the entry. (Multiple AUDIX system messages create only one "please call" request for the AUDIX system in the queue.) When the last CRR queue entry is accessed, the subscriber's MWI is turned off.

 **NOTE:**

If a user has no entries in the queue and dials a CRR access code, the switch returns a fast-busy signal.

- *Call Request Delete All (CRDA)*: A user can dial an access code to erase all entries in the Call Request Retrieval queue and turn the MWI off. In this case, a subscriber's MWI will turn off as requested, even if the AUDIX system has new messages for that subscriber. A new CRA message or a MWI update from the AUDIX system will turn the MWI back on.

Administration Changes

The DMS-100 switch interfaces with the AUDIX system exactly as does the 1A ESS Switch, which also uses the SMSI data link. The only exception is how the data link between the AUDIX system and the switch is administered. See Chapter 2, "Installation", section, *Administer The Audix System*.



CAUTION:

It is extremely important that the data link administration is done correctly to prevent future problems.

See the latest version of the AUDIX system forms reference manual (`system : translation : switch connection form—SMSI`) for more information

Maintenance Changes

An AUDIX system connection to a DMS-100 switch is maintained in the same way as an AUDD(system connection to a 1A ESS Switch with the following differences:

- *End-to-End Data Link Confirmation Test*: Each time the AUDIX system sends an invalid MWI message to check the data link (about every 30 seconds), the DMS-100 switch logs an entry in the error log. After the DMS-100 switch connection to the AUDIX system is stable, switch personnel may do the following:
 1. Remove the end-to-end data link number (leave it blank on the `system translation : switch connection form`) to prevent the switch from logging additional errors.
 2. Restart the AUDIX system or run the `maintenance : datalink : test form` (run option 1). (Always perform this step whenever the DN confirmation number is changed or removed.)



NOTE:

The AUDIX system can no longer check for a working data link when the DN is removed.

- *Restarts*: The AUDIX system voice ports and data link automatically come back into service following a warm or cold restart on the switch; however, switch personnel must bring the AUDIX system back into full service

following a reload restart. The AUDIX system automatically sends message-waiting update messages to re-synchronize the AUDIX system and the switch following a service interruption.

- Test Calls: The DMS-100 switch allows individual extensions (DNs) to be assigned to the voice ports. This allows service technicians to call any port directly using the `maintenance : system : test call` form as they do for the AUDIX system connections to an AT&T PBX.

Installation

2

Use this section to install an AUDIX system with a DMS-100 switch. You will need to use this section in *addition* to the latest version of the AUDIX system installation manual.

The following table outlines the installation procedures. Use this table to know when to use the AUDIX system installation manual and when to use this document (DMS-100).

Task	Procedure	Use Procedures In Manual
1	Inventory	installation and DMS-100
2	Install AUDIX system cabinet	installation
3	DMS-100 Switch Preparations	DMS-100
4	AUDIX System Preparations	DMS-100
5	Cable the Voice Ports	DMS-100
6	Cable the Data Link	DMS-100
7	Cable the Alarm Link	installation
8	Install Terminals, Printers, and Modems	installation
9	Initialize the AUDIX System	installation
10	Administer AUDIX System	installation and DMS-100
11	Test the DMS-100 Switch	DMS-100
12	Test the AUDIX System	installation
13	Final Procedures	installation

DMS-100 To AUDIX System Inventory

Perform the following inventory in *addition* to the inventory listed in the installation manual.

- A TN547B Multiprotocol Switch Interface (MPSI) installed in slot 15 of the AUDIX system base cabinet.
- AUDIX system Integrations Package 2 software (RIV45 or later):
 - Two disk cartridges for an AUDIX system with a 20 MB disk drive.
 - One disk cartridge for an AUDIX system with a 50 MB disk drive.
- 66MI-50 connecting blocks for the AUDIX system cables.

DMS-100 Switch Preparations

Verify that the DMS-100 switch is translated and ready for the AUDIX system installation by contacting your supervisor the Systems Implementation Manager (SIM) or Account Team.

CO Requirements

The customer and the local operating company are responsible for translating the DMS-100 switch at the Central office (CO) to accept the AUDIX system. The local operating company must translate the DMS-100 switch *before* you begin the installation. See the *Reference* chapter for a list of CO requirements.

Information For The Technician

Make sure you have the following assignments before continuing with this installation. The following information is supplied by the customer.

- All Multi-Line Hunt Group (MLHG) numbers or Message Desk Center (MDC) numbers
- MLHG used for voice mail and Call Answer
- MLHG or individual line used for Automated Attendant (optional)
- Individual lines for outcalling (optional)
- Extensions.

⇒ NOTE:

You will need to know what extensions and hunt group members are assigned to each physical location of the voice ports. There is *not* always a logical correlation.

Audix System Preparations

This section outlines the AUDIX system equipment required to install the AUDIX system with a DMS-100 switch

Make sure there is a TN547B circuit pack installed in slot 15 of the AUDIX system base cabinet. This is the data port required by the data link to the DMS-100 switch.

The AUDIX system side of the data link consists of:

- 202T Private Line modem with RS-232C to RS-449 cable
- ED-1E434-11 Group 13 cable (fixed length, 36-inch, RS-232C to RS-449)
or
ED-1E434-11 Group 110 cable (fixed length, 50-foot, RS-232C to RS-449)
or
ED-1E434-11 Group 13 cable (fixed length, 36-inch, RS-232C to RS-449)
and M25 A cable (orderable from 5 to 50 feet RS-232C to RS-232C extender).
- M8K modular cord.

A device such as the Silent Knight Autodialer is required to report AUDIX system alarms to a remote location. The remote location must have a Silent Knight Autodialer receiver.

Cabling The Audix System To The Demarcation Point

The following procedures are for an AUDIX system installed on the customer premises.

Install the lines from the DMS-100 switch to the 66MI-50 connecting block (the demarcation point). This includes:

- One analog line for each of the following:
 - The AUDIX system voice port
 - The AUDIX system alarm circuit
 - The remote maintenance locations (optional)
- One full duplex channel on the ntix67fa terminal card installed up to the demarcation point for the data link.

Cabling the Voice Ports

The voice port cabling for the DMS-100 Switch connection is identical to the 1A ESS Switch procedures except you will need to use a 66MI-50 connecting block as a demarcation point for the voice ports.

The voice links between the AUDIX system and the DMS-100 switch are used to connect callers from a compatible switch port to an AUDIX system voice port. Internal or external callers are directed through the DMS-100 switch to a call-distribution group or hunt group of analog ports associated with the AUDIX system. These ports then connect the callers to the appropriate extension on the AUDIX system voice ports.

The DMS-100 switch can be set up with one or both of the following.

- A MLHG for Voice Mail Call Answer and Automated Attendant
- One or more individual lines for AUDIX system outcalling.

Figure 2, AUDIX System Voice Port Cabling and the following steps show how to connect an AUDIX system to a DMS-100 switch that requires Voice Mail Call Answer Automated Attendant and outcalling. If the AUDIX system you are installing does *not* require a separate hunt group for Automated Attendant and separate lines for outcalling connect all voice ports to one MLHG. This is the default.

⇒ NOTE:

If individual lines are set up for outcalling connect these ports last using the highest numbered AUDIX system ports. As shown in the example ports 29 through 32 are used. In a 16-port system with two Outcalling ports, use ports 15 and 16.

Step 1: Connect the white/blue pair (voice port 1) inside D00 to terminal 1 of the Call Answer/Voice Mail MLHG.

Step 2: Connect the white/brown pair (voice port 2) inside D00 to terminal 2 of the Call Answer/Voice Mail MLHG.

Step 3: Use figure 2 *AUDIX system Voice Port Cabling* and repeat this procedure until voice ports 1 through 8 are connected to the Call Answer/Voice Mail MLHG.

Step 4: Connect the same wire colors for D01 voice ports 9 through 16 to the Call Answer/Voice Mail MLHG.

Step 5: Connect D06 voice ports 17 through 20 to the Call Answer/Voice Mail MLHG.

Step 6: Connect voice ports 21 through 24 to the Automated Attendant MLHG.

Step 7: Connect D07 voice ports 25 through 28 to the Automated Attendant MLHG.

Step 8: Connect D07 voice ports 29 through 32 to four individual lines.

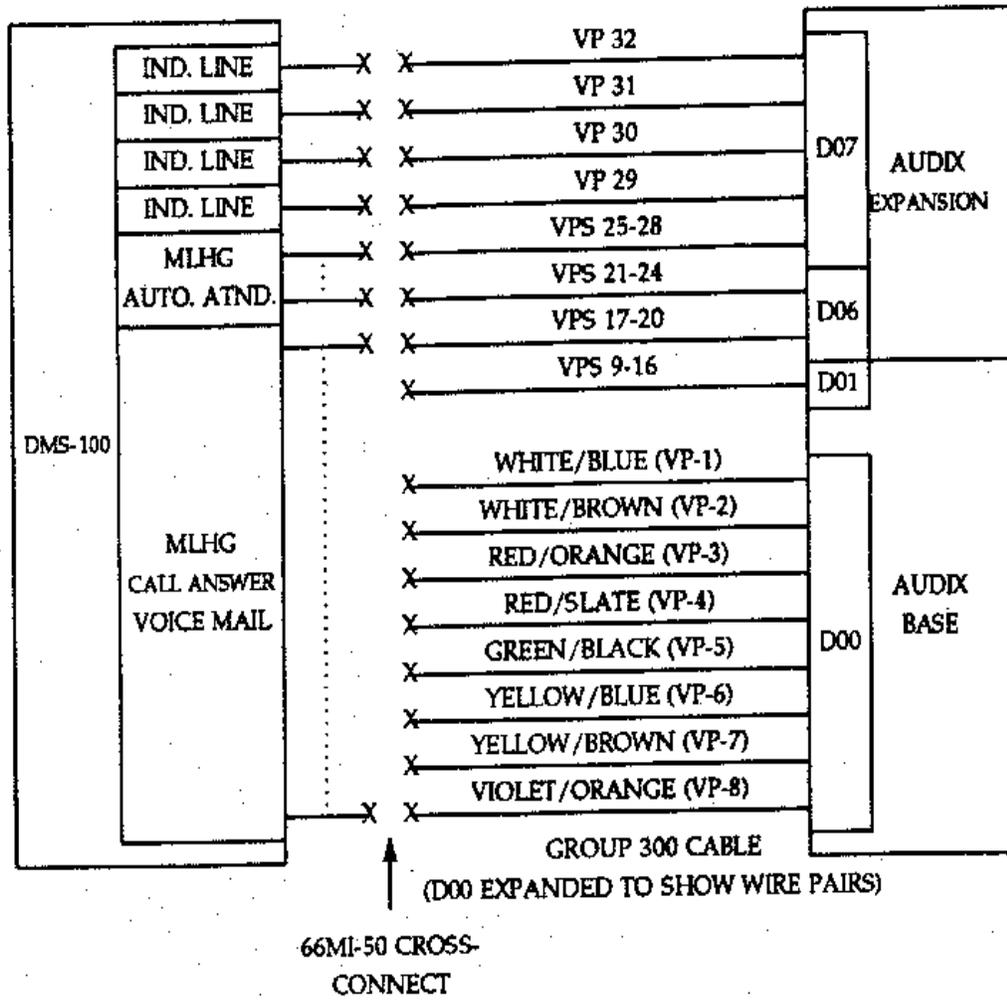


Figure 2-1. AUDIX System Voice Port Cabling

Cabling the Data Link

The data link is the connection from the AUDIX system cabinet (F00) to the switch that enables non-voice messages or data to pass between the AUDIX system and the switch.

Step 1: Option settings inside the 202T modem must be changed. options set at the factory will not work with the AUDIX system. See figure 3, *202T Modem Dip Switch Locations*, for dip switch locations. The dashed lines in figure 3 indicate a board that must be removed to get to switches S2 and S3. Remove the board and set the switch options according to Table 2-1, Option Setting for the 202T Modem. In the table an "X" means the rocker should be down on the side the numbers are on.

After setting all switch options return the board to its proper position and connect the modem to the data link.

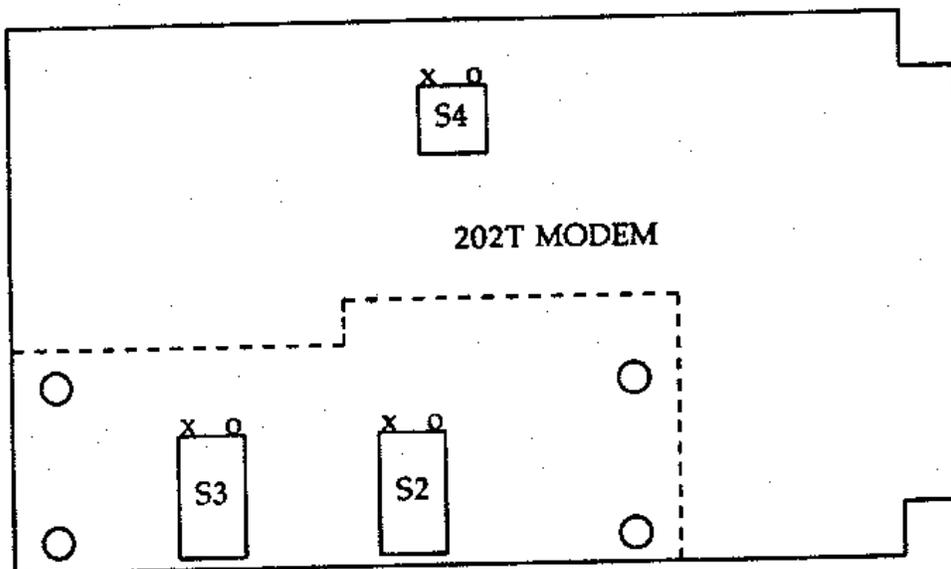


Figure 2-2. 202T Modem Dip Switch Locations

Table 2-1. Option Setting for the 202T Modem

Switch S2				
Segment	Position	Feature	Option	Description
1	X	4-Wire Operation	ZK*	—
2	X	Soft Turnoff and Squelch Intervals	Z	O (soft turnoff) O (squelch)
3	X	Fast Carrier Detection	N	Out (Normal Mode)
4	O	Clear-to-Send Interval	M*	8 ms
5	O	—	—	—
6	O	Soft Turnoff and Squelch Intervals	Z	O (soft turnoff) O (squelch)
7	X	Soft Turnoff and Squelch Intervals	Z	O (soft turnoff) O (squelch)
8	O	Soft Turnoff and Squelch Intervals	Z	O (soft turnoff) O (squelch)
9	X	—	—	—
0	O	Clear-to-Send Interval	M*	8 ms

(continued)

* Factory furnished

X = Rocker down on the side adjacent to the numbers (closed).

O = Rocker up on the side adjacent to the numbers (open).

Table 2-1. Option Setting for the 202T Modem (continued)

Switch S3				
Segment	Position	Feature	Option	Description
1	O	4-Wire Operation	ZK*	—
2	O	Compromise Delay Equalization	ZU*	Maximum
3	O	Channel Condition	ZY*	Basic
4	O	4-Wire Operation	ZK*	—
5	O	Compromise Amplitude Equalization	ZW*	Maximum
6	X	4-Wire Operation	ZK*	—
7	X	4-Wire Operation	ZK*	—
8	X	4-Wire Operation	ZK*	—
9	X	4-Wire Operation	ZK*	—
0	X	4-Wire Operation	ZK*	—

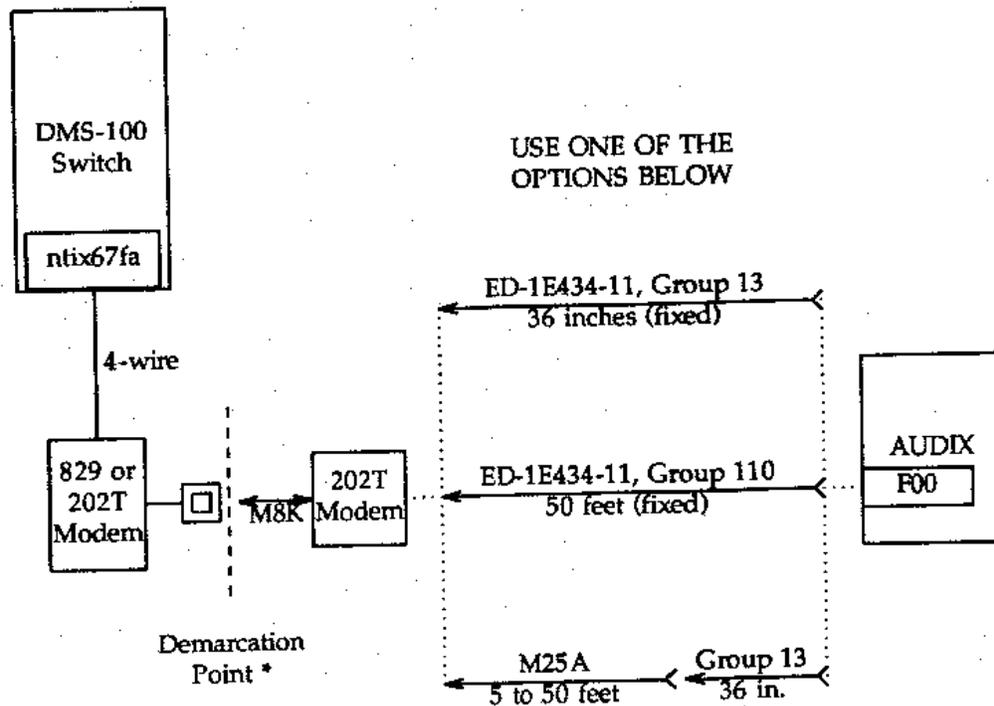
Switch S4				
Segment	Position	Feature	Option	Description
1	X	Continuous Carrier	ZN	In
2	O	Carrier Detector Reset	ZM*	Out
3	X	State of CC (Data Set Ready) During Analog Loopback	YB	On

* Factory furnished.

X = Rocker down on the side adjacent to the numbers (closed).

O = Rocker up on the side adjacent to the numbers (open).

Step 2: Figure 4 AUDIX System Data Link to a DMS-100 Switch, shows how to cable the AUDIX system data link to the demarcation point. Connect the M8K modular cord from the 202T modem into the phone jack that leads to the 829.



* If the customer provides both 202T modems, the demarcation point will be between the Group 13, Group 110, or M25A cable and the 202T modem.

Figure 2-3. AUDIX System Data Link to a DMS-100 Switch

Cabling the Alarm Link

The AUDIX system reports alarms locally using LEDs mounted on the equipment and by keeping an alarm log (displayable on the maintenance terminal). If desired these alarms can also be reported to a remote location. A major alarm circuit and a minor alarm circuit appear at D03. For steps to install a Silent Knight Autodialer see the latest version of the AUDIX system installation manual.

Administer The Audix System

Follow the procedures in the latest version of the AUDIX system installation manual to administer the AUDIX system to prepare it for service. There is a section in the manual to assign the switch connection. Use the following procedures for the DMS 100 switch.

Step 1: Go to the `system : translation : switch connection` form by typing `sy tr s` in the path line and press **(RETURN)**.

Step 2: Tab to the `connection type` field and enter `smsi`.

Step 3: Press **(F1)** (CHANGE or RUN). A new set of fields will be displayed. See figure 5, *The system: translation: switch connection Form*.

Step 4: Set `host type` to `dms-100`

Step 5: Verify that the `data -speed` field is set to `1200`

Northern Telecom does *not* recommend 2400 or 4800 baud rates.

Step 6: Verify that `channel terminal type` is set to `c`

Typing anything but `c` will *not* be accepted by the machine.

Step 7: The `call answer timeout` and `timeout treatment (m/n/t)` fields are normally set by the System Administrator. If you require more information on these fields see the latest version of the AUDIX system forms reference manual.

Step 8: Replace the seven 0s in the `end to end datalink number` field with seven blanks. (Press the space bar seven times.) This will prevent the switch from logging errors.

Step 9: Set the timing value in the `voice port disconnect timing (milliseconds)` field to `300`

If you need to adjust the timing after testing make sure the timing value is a value *lower* than the switch (which is normally set to 400). The default is set to 400 milliseconds.

 **NOTE:**

The timing range is typically between 250-350.

Step 10: Set `host switch` to `1`

Step 11: Set `AUDIX` to the AUDIX machine number.

Step 12: In the address ranges: field specify from 1 to 8 address ranges. The address ranges shown in figure 5 *The system: translation: switch connection Form (SMSI)* are examples only. A 3- to 10-digit first extension is followed by a 3- to 10-digit last extension and a 7- or 10-digit public network number. The following guidelines apply:

- The number of digits must be consistent with the number of digits specified on the `system : translation : machine : audixtamis/call delivery` form for the local machine.
- Values must be numeric.
- Ranges cannot overlap.
- The ending extension number must be greater than or equal to the beginning extension number.
- You may enter from one to eight ranges. A minimum of one range is required.
- The address default range is 0-0: 9-9 (as determined by the number of digits field). For example if five digits as specified for the machine the default address range first and last extension numbers are 00000 to 99999.

Step 13: Tab to the public network number and enter the office codes specified by the customer followed by the first digits in the range. See Figure 2-4, *The system : translation : switch connection Form (SMSI)*, for an example.

Step 14: Press **F1** (CHANGE or RUN).

Step 15 Press **CONTROL** and **Z** simultaneously to exit the form.

```

AUDIX STATUS: alarms: M , logins:1, thresholds:none
PATH: system : translation : switch connection
connection type (dc1u-scl/smsi/bri-apl/standalone): smsi
(PRESS CHANGE TO MODIFY CONNECTION TYPE, NEW FIELDS WILL BE DISPLAYED)
  (THE FOLLOWING FIELDS APPLY ONLY TO A SMSI CONNECTION TYPE)
host type (laess/5ess/dms100/sl100): dms100
data speed (1200- 9600) : 1200 channel terminal type (c/t) : t
call answer timeout (seconds): 5
timeout treatment (m/n/t) : n extension: _____
end to end datalink number: 5551212
voice port disconnect timing (milliseconds) : 300
host switch: 1 AUDIX: 1
address ranges (first / last extension public network number)
1: _____ / _____ 2770000
2: _____ / _____ 9541000
3: _____ / _____ 3330000
4: _____ / _____
5: _____ / _____
6: _____ / _____
7: _____ / _____
8: _____ / _____
Error and confirmation messages appear here.
    
```

Figure 2-4. The system : translation : switch connection Form (SMSI)

Audix System To Switch Tests

Perform the following tests to verify that the AUDIX system-to-switch connection is functioning correctly.

- Check dial tone from the switch port on the cross-connect field.
- Check continuity to the AUDIX system backplane.
- Make sure a yellow LED on the AUDIX system VPT circuit pack lights while the line is ringing.
- Check for frogged lines (for example Port 0 wired or translated to Port 1.)

Feature and Voice Port Tests

Use the latest version of the installation manual to test the AUDIX system features. Use this section to test the voice ports.

1. Dial the 4- or 5-digit extension number associated with the first port. You should receive the Stand-alone greeting.

2. Dial each extension number until you've tested all the ports.

⇒ NOTE:

You may get a bad translation message on the administrative log after making these test calls. Check the `system : translation : voice port` and `system : translation : switch connection` forms to verify that all the data on both forms match.

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