

Connectivity

4

Overview

This chapter contains information that describes the hardware components and connections used to connect an Intuity AUDIX™ system and a System 25 switch. This chapter includes:

- Configuration descriptions that explain each of the components required to establish a link
- Wiring diagrams that show the hardware, physical connections, and cables used for connection



NOTE:

The numbers in the wiring diagrams do not show the order of connection. Follow the written instructions to make the connections.

Read the information in this chapter *before* you attempt to connect the components.

Purpose

The purpose of this chapter is to provide instructions to connect the Intuity AUDIX system, the System 25 switch, and other adjuncts.

System 25 Voice Port Requirements

The Intuity AUDIX system voice ports must be connected to specially administered tip/ring ports on a Tip/Ring card.

[Table 4-1](#) lists the System 25 circuit packs needed to support the INTUITY messaging system on System 25. (INTUITY is supported on System 25 R3V3 only.)

Table 4-1. Required System 25 Circuit Packs

Type	Number	Comments
Processor	ZTN142C	Required: Version 5.46.4 software
Service circuit	ZTN85 or ZTN131	Required: ZTN131 if using T1
Tone detector	TN748	Optional: See Table 4-2
Tip/Ring Ports	ZTN78 (some problems have been experienced with this port number), TN742, or TN746B	Required: Tip/Ring connectivity to the IVC6 board

Additional Tone Detectors may be required, depending on busy hour call volumes as shown in [Table 4-2](#).

Table 4-2. Tone Detector Estimator

Busy Hour Traffic (cph)	Number of TN748s Required
0-110	0
110-350	1
350+	2

Intuity AUDIX System Connections

Use the information and diagrams in this section to connect or verify the connections for the Intuity AUDIX system with a System 25 switch.

IVC6 Connections

There are two methods commonly used to connect IVC6 circuit-cards:

- Using an 885A adapter to connect to RJ11C connections
- Connecting to a type 104A connecting block

Connecting IVC6 Cards Using an 885A Adapter

To connect IVC6 cards using an 885A adapter, perform the following tasks:

1. Make sure that the line pairs were run individually (RJ11C).
2. Use a type 885A adapter to consolidate the six individual line pairs into three pairs in each of two cables. (See [Figure 4-1](#).)
3. There is an adhesive strip on the back of the 885A adapter. Remove the protective paper coating, and attach the 885A adapter in a convenient place.
4. Use the supplied six-conductor modular cables between the IVC6 card and the adapter.
5. Use the supplied two-conductor or four-conductor modular cables between the adapter and the RJ11C modular jacks.
6. Label the connections in the space provided on the 885A adapter.



NOTE:

The label on the 885A adapter refers to an IVP6. This should be interpreted as an IVC6.

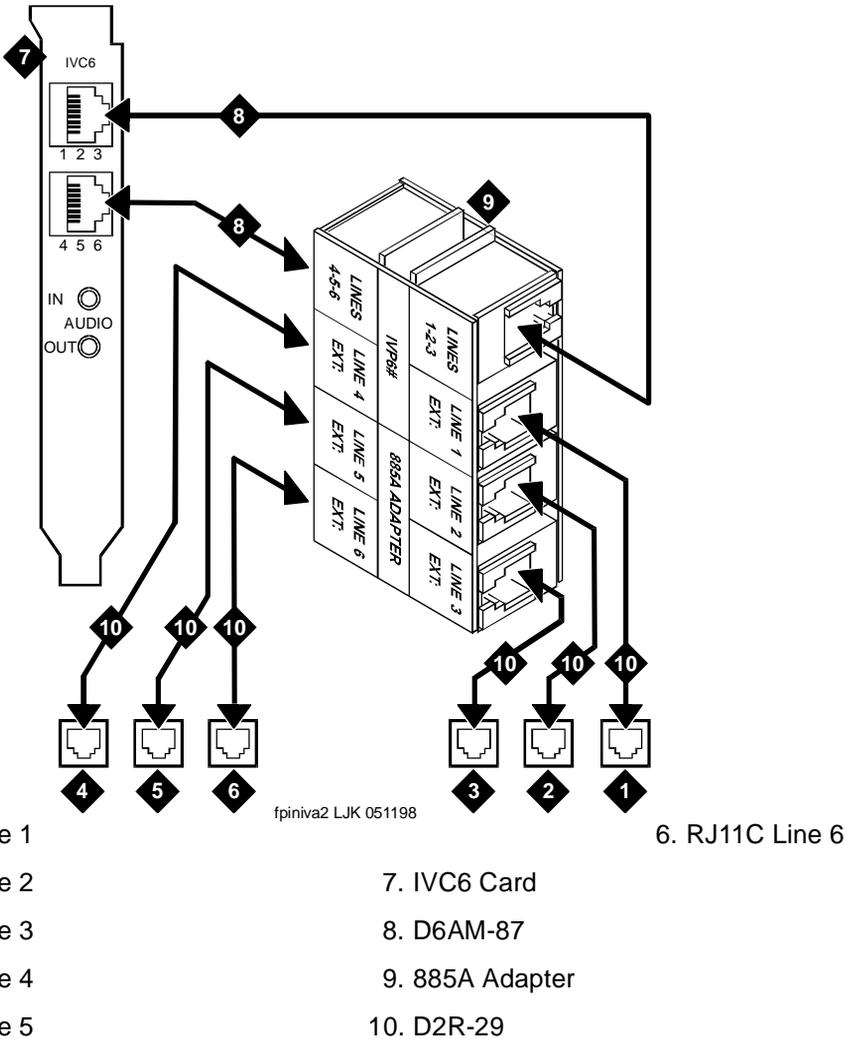


Figure 4-1. Connecting IVC6 Cards Using an 885A Adapter

Connecting IVC6 Cards Using a 104A Connecting Block

NOTE:

This is one of many ways to connect IVC6 cards to the System 25 switch using inside building wire. It is subject to the same distance limitations as stations. The key element is the connection of the Tip/Ring circuits to the correct pins on the connecting block jacks.

To connect IVC6 cards using type 104A connecting blocks, perform the following tasks:

1. Make sure that the line pairs were run together to type 104A connecting blocks or the equivalent (see [Figure 4-2](#)).
2. Use the supplied D6AM six-conductor modular cables between the IVC6 card and the type 104A connecting block.

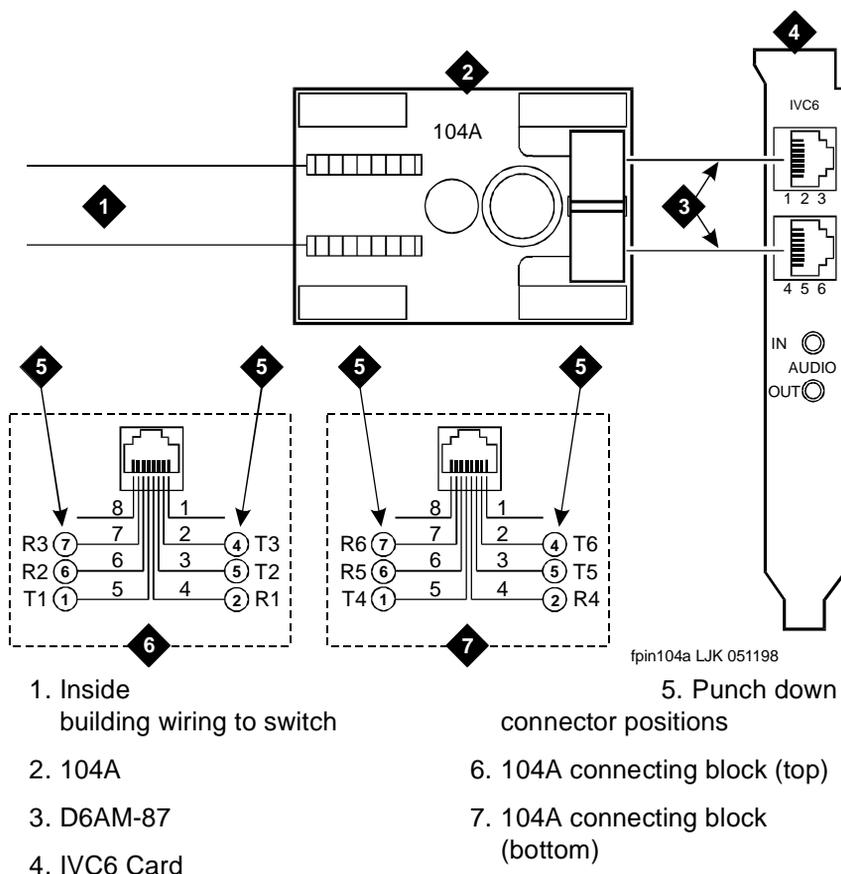


Figure 4-2. Connecting IVC6 Cards Using 104A Connecting Blocks

Connecting Serial (COM/tty) Ports

The Intuity AUDIX system communicates with various devices through serial (COM/tty) ports. COM ports are required for:

- A remote maintenance modem, installed on COM2/tty01

- An optional Call Accounting System (CAS)
- Any optional customer administration terminals

There are two built-in ports on the Intuity AUDIX system processors. If three or more devices are required, a multi-port serial card must be included in the configuration, as follows:

- CAS uses COM1/tty00.
- RMB uses serial port COM2/tty01.
- Add-on serial ports (ttyaa through ttyah) on a multi-port serial card are used for the third and subsequent devices.

The preferred order of connection of the devices is:

1. System 25 administration
2. Remote maintenance modem (must be co-located with the Intuity AUDIX system processor)
3. Optional – CAS
4. Optional – customer remote access terminals or modems

Connectivity Based on Distance Between Machines

If the System 25 switch is within 50 feet (15 meters) of the Intuity AUDIX system, and the System 25 switch and the Intuity AUDIX system share the same power outlet, a direct connection can be made between the System 25 administration and optional Station Message Detail Reporting (SMDR) ports, the switch box, the modem, and the Intuity AUDIX system ports. See below for procedures.

If the System 25 switch is farther than 50 feet (15 meters) from the Intuity AUDIX system, or the System 25 switch and the Intuity AUDIX system do not share the same power outlet, data cables from the System 25 switch administration and optional Station Message Detail Reporting (SMDR) ports to the Intuity AUDIX system ports have to be extended with Z3A2 ADU cable drivers. Two Z3A2 ADU interface units are required for each cable, one at each end. See below for procedures.

 **NOTE:**

The System 25 switch does not support out-of-building operation of the Intuity AUDIX system.

Optional customer access terminals may be co-located with the Intuity AUDIX system processor and directly connected (or remotely located and connected via ADUs or modems) to the next available serial port after COM2/tty01.

Connecting Serial (COM/tty) Ports Within 50 feet, Same Power Outlet

This method is used only when the System 25 switch, the switch box/modem, and the Intuity AUDIX system are within 50 feet (15 meters) and share the same power outlet. If the two systems are more than 50 feet (15 meters) apart, proceed to [“Connecting Serial \(COM/tty\) Ports More than 50 Feet, Different Power Outlet”](#).

The following parts are required:

- DB-9S to DB-25P adapter (MAP/40 and MAP/100 only)
- 355AF adapter
- D8W-87 modular cord
- WP90780 octopus cable
 - A/B parts kit, including:
 - A/B switch box
 - EIA DB-25 male-female cable
 - EIA DB-25 male-male cable
 - Male-male gender changer

If the System 25 switch includes CAS, the following parts are also required:

- 355AF adapter
- D8W-87 modular cord

To connect the System 25 Admin port and the Intuity AUDIX system COM2/tty01 port, perform the following tasks ([Figure 4-3](#) shows this procedure):

1. Connect plug 1 of the D8W-87 modular cord on the octopus cable (from the Admin [first] jack of the CPU module on the System 25 switch) to the 355AF adapter.
2. Connect the other end of the adapter to a 9-to-25 pin adapter which connects to Com 1 of the customer's Windows-based PC.
 - For Pentium PCs use AAS R4.1.5.5.
 - For 386 and 486 PCs use AAS R4.1.5.4.

Connecting the Lines

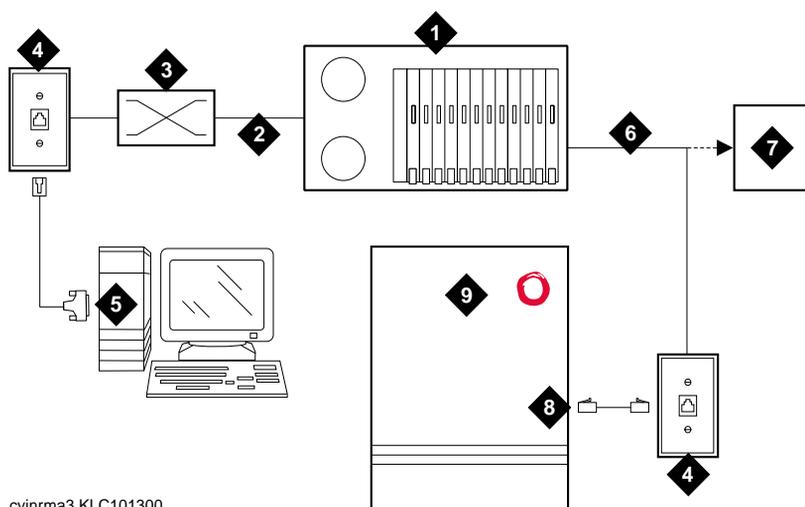
1. Do one of the following, depending on whether or not the System 25 switch is equipped with DID lines (see Worksheet [A: Coverage Options/Maintenance Access](#)).
 - If the system does *not* have DID lines, connect the other end of the modular cord to a RJ11C telephone jack wired to a loop start (LS) line from the CO.
 - If the system has DID lines, connect the other end of the modular cord to a System 25 Tip/Ring port that has an assigned DID number.



NOTE:

If building wire is used, it must be type 3 UTP or better. The distance limitation is the same as for a station.

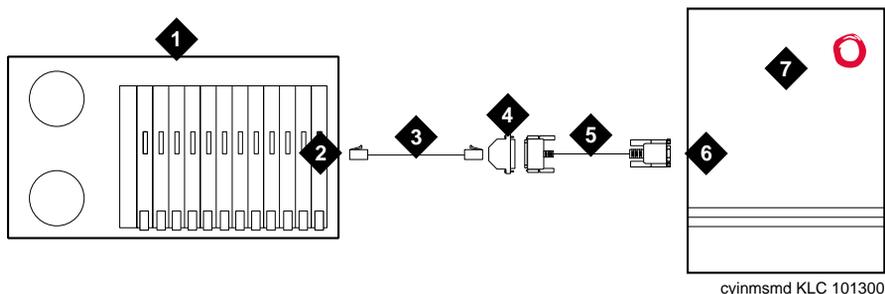
2. Connect the DID line or the POTS line to the line jack on the RMB (AYC54).
 3. Proceed to [Figure 4-3](#) below.
- If CAS is not included in the configuration, proceed to ["Networking"](#) below.



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1. ZTN142C, System 25 switch
2. Port 1 BAS
3. Cross-connect field
4. Wall jack
5. Windows Based PC, with AAS version 4.1
5.4
6. With DID to Tip/Ring port
7. Without DID to public network LS line
8. Remote Maintenance Board (RMB)
9. Intuity AUDIX system

Figure 4-3. Connecting Admin Ports to the Intuity AUDIX System



1. System 25 switch
2. SMDR port
3. Four pair cable
4. 355AF modular adapter
5. 9 to 25 pin adapter
6. Com port 1
7. Intuity AUDIX system

Figure 4-4. Connecting SMDR Ports Within 50 Feet, and Same Power Outlet (Multi-Port Serial Circuit Card)

Connecting Serial (COM/tty) Ports More than 50 Feet, Different Power Outlet

This method is used only when the System 25 switch and the Intuity AUDIX system are more than 50 feet (15 meters) apart or do not share the same power outlet.

NOTE:

The System 25 switch does not support out-of-building operation of the Intuity AUDIX system.

The following parts are required:

- DB-9S to DB-25P adapter (MAP/40 and MAP/100 only)
- 355AF adapter
- Three D8W-87 modular cords
- A/B parts kit, including:
 - A/B switch box
 - EIA DB-25 male-female cable
 - EIA DB-25 male-male cable
 - Male-male gender changer
- M7-U87 crossover cable

- Two Z3A2 ADUs
- Two M8AJ-87 cables
- D8AM-87 modular crossover cable
- Two 248B AD6AP-87 modular cords
- Two 400B2 adapters
- Two 2012D power transformers
- WP90780 octopus cable
- Remote Maintenance Board (RMB) internal modem

 **NOTE:**

The combination of a Z3A2 ADU and a M8AJ-87 cable is equivalent to a Z3A4 ADU. You must order both pieces by ordering the Z3A4.

Additionally, inside wire must be 4-pair, suitable for data; type 3 UTP data cable or better.

Connecting the Lines

1. Do one of the following, depending on whether or not the System 25 switch is equipped with DID lines (see [Worksheet A](#)).
 - If the system does *not* have DID lines, connect the other end of the modular cord to a RJ11C telephone jack wired to a loop start (LS) line from the CO.
 - If the system has DID lines, connect the other end of the modular cord to a System 25 Tip/Ring port that has an assigned DID number.

 **NOTE:**

If building wire is used, it must be type 3 UTP or better. The distance limitation is the same as for a station.

2. Proceed to [“Connecting CAS via SMDR Ports More Than 50 Feet, Different Power Outlet”](#) below.

If CAS is not included in the configuration, proceed to [“Networking”](#) below.

Connecting CAS via SMDR Ports More Than 50 Feet, Different Power Outlet

 **NOTE:**

If your configuration does not include CAS, proceed to [“Networking”](#) below.

This method is used only when the System 25 switch and the Intuity AUDIX system are more than 50 feet (15 meters) apart or do not share the same power outlet.

⇒ NOTE:

The System 25 switch does not support out-of-building operation of the Intuity AUDIX system.

The following parts are required for connection to the SMDR ports more than 50 feet (15 meters) apart:

- 355AF adapter
- Three D8W-87 modular cords
- M7-U87 crossover cable
- Two Z3A2 ADUs
- Two M8AJ-87 cables
- D8AM-87 modular crossover cable
- Two 400B2 adapters
- Two D6AP-87 modular cords
- Two 248B adapters
- Two 2012D power transformers

⇒ NOTE:

The combination of a Z3A2 ADU and a M8AJ-87 cable is equivalent to a Z3A4 ADU. You must order both pieces by ordering the Z3A4.

Additionally, inside wire must be 4-pair, suitable for data; type 3 UTP data cable or better.

To connect CAS via serial port 1 (COM1/tty00), perform the following tasks ([Figure 4-3](#), [Figure 4-4](#), and [Figure 4-5](#) show this procedure):

1. Connect plug 2 of the D8W-87 modular cord of the octopus cable (from the SMDR [second] jack of the CPU module on the System 25 switch) to the 355AF adapter.
2. Connect the 355AF adapter to one end of an M7-U87 crossover cable.
3. Connect the other end of the M7-U87 crossover cable to the matching end of a M8AJ-87 cable.
4. Connect the other end of the M8AJ-87 cable to the matching connector on a Z3A2 ADU.
5. Connect one end of a D8W-87 modular cord to the modular jack labelled as WALL on the Z3A2 ADU.
6. Connect the other end of the D8W-87 modular cord to the modular jack end of a D8AM-87 crossover cord.
7. Connect the modular plug end of the D8AM-87 crossover cord to the matching modular jack on a 400B2 adapter.

8. Plug the 400B2 adapter into the wall jack leading to the Intuity AUDIX system.
9. Connect one end of a D6AP-87 modular cord to the 400B2 adapter.
10. Mount a 248B adapter to a 2012D power transformer.
11. Connect the other end of the D6AP-87 modular cord to the 248B adapter.
12. Plug the 2012D power transformer into an AC power outlet.

Go to the Intuity AUDIX system and continue the connection:

1. Connect the small end of the DB-9S to DB-25P adapter to serial port 1 on the MAP/5 or COM1/tty00 on the MAP/40 or MAP/100.
2. Connect the large end of the DB-9S to DB-25P adapter to one end of the M8AJ-87 cable.
3. Connect the other end of the M8AJ-87 cable to the Z3A2 ADU.
4. Connect one end of a D8W-87 modular cord to the modular jack labelled as WALL on a Z3A2 ADU.
5. Connect the other end of the D8W-87 modular cord to a 400B2 adapter.
6. Plug the 400B2 adapter into the wall jack from the System 25 site.
7. Connect one end of a D6AP-87 cord to the 400B2 adapter.
8. Mount a 248B adapter on a 2012D power transformer.
9. Connect the other end of the D6AP-87 cord to the 248B adapter.
10. Plug the 2012D power transformer into an AC outlet.
11. Proceed to ["Networking"](#) below.

Networking

for low-speed Digital Networking, the following parts are required:

- ACCX card (includes cable and breakout box)
- Modem (Paradyne COMSPHERE 3820 or compatible, including modular cord and power supply)
- DB-25 male-male cable

To connect the Intuity AUDIX low speed networking, perform the following tasks ([Figure 4-5](#) shows this procedure):

1. Connect one end of the ACCX cable to the connector on the ACCX card.
2. Connect the other end of the ACCX cable to the matching connector on the breakout box.
3. Connect one end of the DB-25 male-male cable to the connector marked RS-232-CH1 (2, 3, or 4) on the breakout box.

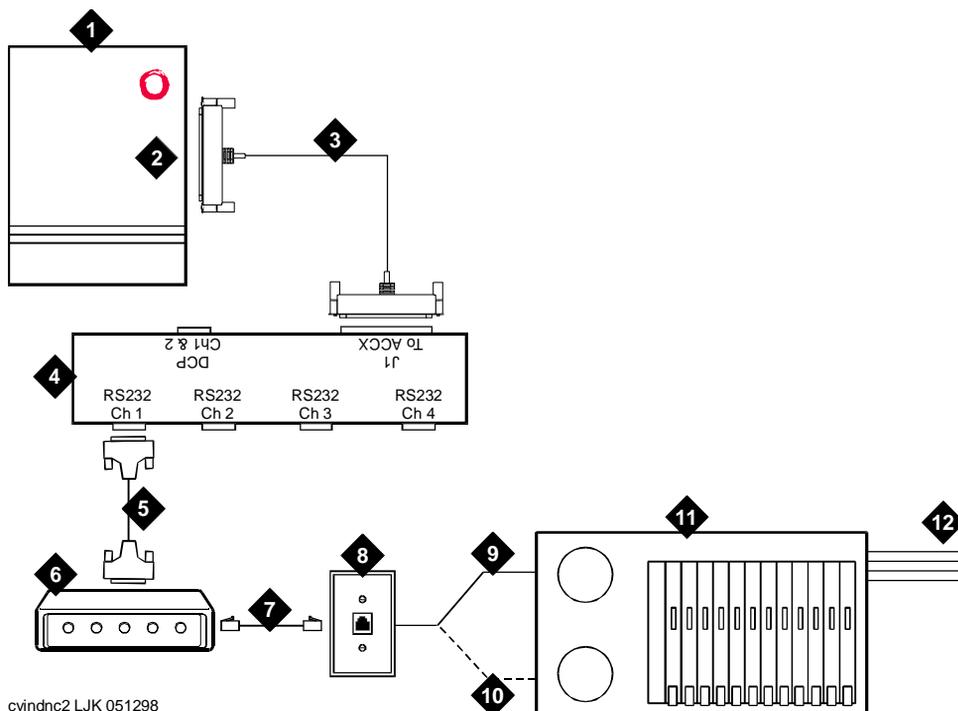
4. Connect the other end of the DB-25 male-male cable to the matching connector on the modem.
5. Connect one end of the modular cord to the jack labeled as DIAL on the modem.
6. Do one of the following, depending on whether or not the System 25 switch is equipped with DID lines:
 - If the system does **not** have DID lines, connect the other end of the modular cord to a RJ11C telephone jack wired to a loop start (LS) line from the CO.
 - If the system has DID lines, connect the other end of the modular cord to a System 25 Tip/Ring port that has an assigned DID number.



NOTE:

If building wire is used, it must be type 3 UTP or better. The distance limitation is the same as for a station.

7. Connect the power supply connector to the modem.
8. Plug in the power supply.
9. Turn on power for the modem.
10. Repeat step 3 through step 9 for each networking channel.
11. If you have the optional Multi-User Feature Package and Remote Access, proceed to ["Remote Access"](#) below.



- | | |
|----------------------------|---|
| 1. Intuity AUDIX system | 7. Modular cord |
| 2. ACCX circuit card | 8. Wall jack |
| 3. 78-pin cable | 9. With DID, to Tip/Ring port |
| 4. Networking breakout box | 10. Without DID, to public network L/S Line |
| 5. DB-25 male-male cable | 11. System 25 switch |
| 6. Modem | 12. DID lines to public network |

Figure 4-5. Digital Networking Connections

Remote Access

Local access to the Intuity AUDIX system is provided by the keyboard and monitor of the Intuity AUDIX system. The Multi-User Feature Package and Remote Access is an *optional* application for the Intuity AUDIX system. It is sometimes convenient to have terminals located on the system administrator's desk or at other locations. Remote administration allows system administrators to perform duties from their desks. This saves time when the Intuity AUDIX system is not close by.

⇒ NOTE:

Only one subscriber can be logged into the Intuity AUDIX system at a time unless the Multi-User Feature Package is installed. With the Multi-User Feature, the Intuity AUDIX system can accommodate up to four simultaneous logins.

Because the Multi-User Feature Package allows multiple login sessions, it is possible to delegate Intuity AUDIX system administration duties to several people. This not only divides up the work needed to maintain an Intuity AUDIX system, but also gives subscribers and callers several points of contact should a problem occur.

Dedicated Line Access

Dedicated line access can be used when a specific terminal will always be connected to the line, that is, when dial-up access is not required. Dedicated line access is always to the first available port on the multi-port serial card. Connections for dedicated line access can be made in the following ways:

- If the terminal is within 50 feet (15 meters) of the Intuity AUDIX system, it can be connected directly to the multi-port serial card using either of the methods shown in [Figure 4-6](#).
- If the terminal is more than 50 feet (15 meters) from the Intuity AUDIX system, it can be connected to the multi-port serial card using ADUs as line extenders.

In all other cases, remote access connections (using dial-up modems) should be used.

Connecting Dedicated Lines Within 50 Feet (15 meters)

These methods are used only when the Intuity AUDIX system and the terminal are within 50 feet (15 meters) of each other.

The following parts are required:

- Multi-port serial card (if not already installed)
- Six-position, six-conductor straight-through modular cord (supplied with the multi-port serial card)
- DCE 4/6-to-DB-25P adapter

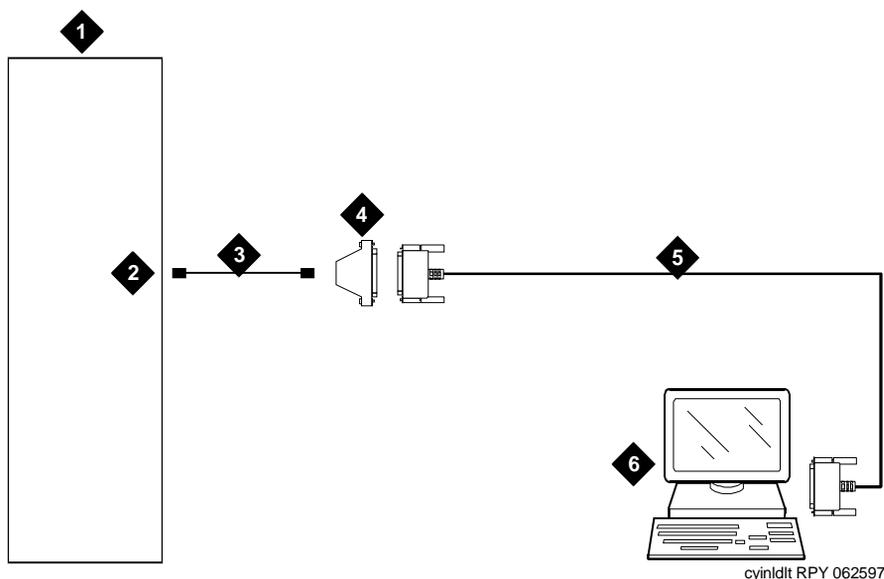
⇒ NOTE:

This adapter has slanted sides as shown in [Figure 4-4](#).

- DB-25 male-female cable

To connect the local terminal, perform the following tasks ([Figure 4-6](#) shows this procedure):

1. Connect one end of the six-position, six-conductor modular cord to the first available port on the multi-port serial card.
2. Plug the other end of the modular cord to the DTE 4/6-to-DB-25P adapter.
3. Connect the matching end of the DB-25 M-F cable to the DTE 4/6-to-DB-25P adapter.
4. Connect the other end of the DB-25 M-F cable to the Avaya 715 terminal.



- | | |
|---|------------------------------|
| 1. Intuity AUDIX System | 4. DTE 4/6 to DB-25P Adapter |
| 2. Multi-Port Serial Card
(First Available Port) | 5. DB-25 M-F Cable |
| 3. 6P6C Modular Cord | 6. Avaya 715 Terminal |

Figure 4-6. Local Dedicated Line Terminal Connections

Connecting Dedicated Lines Beyond 50 Feet (15 meters)

This method is used only when the Intuity AUDIX system and the terminal are more than 50 feet (15 meters) apart.

If the terminal is in a building other than the building where the Intuity AUDIX system is located, an ADU and an additional protector must be installed in each

building. The ADUs and protectors provide both the Intuity AUDIX system and the terminal protection against exposure to lightning, inadvertent contact with power lines, and power currents induced by nearby power lines. See the installation notes packed with the ADU for more information.

The following parts are required:

- Multi-port serial card (if needed and not already installed)
- Six-position, six-conductor straight-through modular cord supplied with multi-port serial card (for connection to the multi-port serial card only)
- DTE 4/6-to-DB-25P adapter supplied with multi-port serial card (for connection to the multi-port serial card only)

 **NOTE:**

This adapter has slanted sides as shown in [Figure 4-4](#).

- Two D8W-87 modular cords
- M7-U87 crossover cable
- Two Z3A2 ADUs
- Two M8AJ-87 cable
- D8AM-87 modular crossover cable
- Two 400B2 adapters
- Two D6AP-87 modular cords
- Two 248B adapters
- Two 2012D power transformers

 **NOTE:**

The combination of a Z3A2 ADU and a M8AJ-87 cable is equivalent to a Z3A4 ADU. You must order both pieces by ordering the Z3A4.

Inside wire must be 4-pair, suitable for data; type 3 UTP data cable or better.

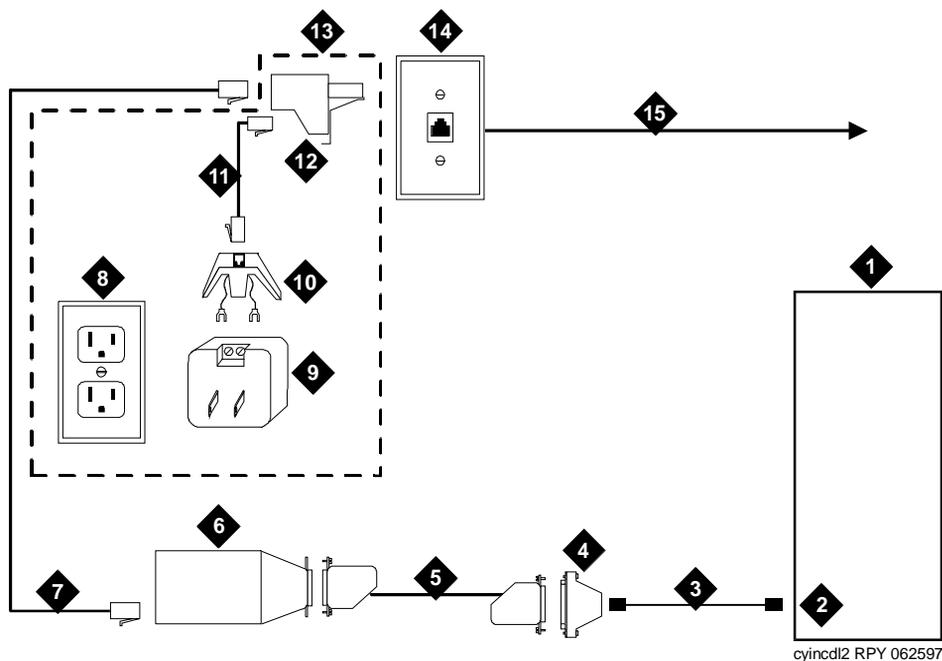
Local powering of the Z3A2 ADU is optional.

To connect the terminal and the Intuity AUDIX system, perform the following tasks ([Figure 4-7](#) shows this procedure):

1. Connect one end of the M7U-87 crossover cable to the terminal.
2. Connect the other end of the M7U-87 cable to the matching end of a M8AJ-87 cable.
3. Connect the other end of the M8AJ-87 cable to the matching connector on a Z3A2 ADU.
4. Connect one end of a D8W-87 modular cord to the modular jack labeled as WALL on the Z3A2 ADU.

5. Connect the other end of the D8W-87 modular cord to the modular jack end of a D8AM-87 crossover cord.
6. Connect the modular plug end of the D8AM-87 crossover cord to the matching modular jack on a 400B2 adapter.
7. Plug the 400B2 adapter into the wall jack leading to the Intuity AUDIX system site.
8. Connect one end of a D6AP-87 modular cord to the 400B2 adapter.
9. Mount a 248B adapter to a 2012D power transformer.
10. Connect the other end of the D6AP-87 modular cord to the 248B adapter.
11. Plug the 2012D power transformer into an AC power outlet.

Go to the Intuity AUDIX system to continue the connection ([Figure 4-8](#) shows this procedure).



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- | | |
|--|--------------------------------------|
| 1. Intuity AUDIX system | 9. 2012D power transformer |
| 2. Multi-port serial card (first available port) | 10. 248B adapter |
| 3. 6P6C modular cord | 11. D6AP-87 |
| 4. DTE 4/6 to DB-25P adapter | 12. 400B2 adapter |
| 5. M8AJ-87 cable | 13. optional power |
| 6. Z3A2-ADU | 14. Wall jack |
| 7. D8W-87 modular cord | 15. Building wiring to terminal site |
| 8. AC power outlet | |

Figure 4-8. Connecting Dedicated Line Terminal More Than 50 Feet (15 Meters): Intuity AUDIX End

16. Connect one end of the six-position, six-conductor modular cord to the first available port on the multi-port serial card.
17. Connect the other end of the modular cord to the DTE 4/6-to-DB-25P adapter.
18. Connect the matching end of an M8AJ-87 cable to the DTE 4/6-to-DB-25P adapter.

19. Connect the other end of the M8AJ-87 cable to the Z3A2 ADU.
20. Connect one end of a D8W-87 modular cord to the modular jack labeled as WALL on the Z3A2 ADU.
21. Connect the other end of the D8W-87 modular cord to a 400B2 adapter.
22. Plug the 400B2 adapter into the wall jack from the Communications System site.
23. Connect one end of a D6AP-87 cord to the 400B2 adapter.
24. Mount a 248B adapter on the 2012D power transformer.
25. Connect the other end of the D6AP-87 cord to the 248B adapter.
26. Plug the 2012D power transformer into an AC outlet.

Remote Access (Dial) Connections

Connect to Serial Port 2 (COM2/tty01) if it is available. If Serial Port 2 (COM2/tty01) is not available, connect to the first available port on the multi-port serial card.

The following parts are required:

- Multi-port serial card (if already installed)
- Six-position, six-conductor straight-through modular cord supplied with multi-port serial card (for connection to the multi-port serial card only)
- DTE 4/6-to-DB-25P adapter supplied with multi-port serial card (for connection to the multi-port serial card only)

NOTE:

This adapter has slanted sides as shown in [Figure 4-9](#).

- DB-9S to DB-25P adapter (for connection to Serial Port 2 on a MAP/5 or COM2 on a MAP/40 or MAP/100 only)
- RS-232 male-female cable (for connection to Serial Port 2 on a MAP/5 or to COM2 on a MAP/40 or MAP/100 only)
- Modem (Paradyne COMSPHERE 3820 or compatible model; includes modular cord and power supply)

To connect the Intuity AUDIX remote maintenance modem, perform the following tasks ([Figure 4-9](#) shows this procedure):

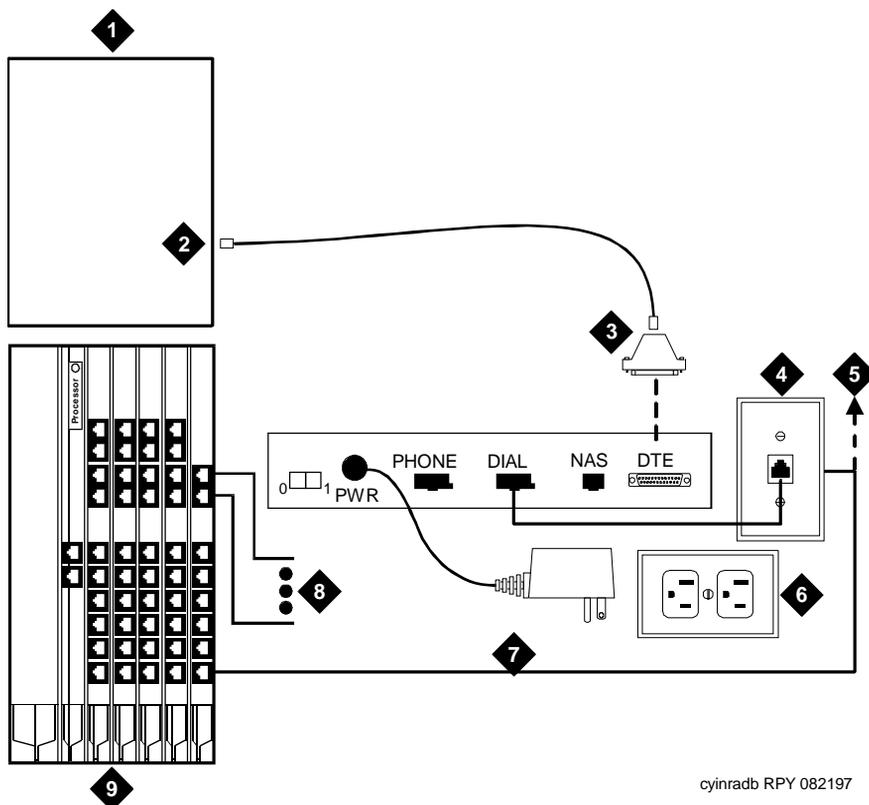
1. Do one of the following to connect to the Intuity AUDIX system:
 - If connecting to Serial Port 2 (COM2/tty01), connect the small end of the DB-9P to DB-25S adapter to Serial Port 2 on the MAP/5 or COM1/tty00 on the MAP/40 or MAP/100. Then connect one end of the DB-25 male-female cable to the large end of the DB-9P to DB-25S adapter.
 - If connecting to the first available port on the multi-port serial card, connect one end of the six-position, six-conductor modular cord to the port. Then connect the other end of the modular cord to the DTE 4/6-to-DB-25P adapter.
2. Connect the other end of the DB-25 male-female cable or the DTE 4/6-to-DB-25P adapter to the matching connector on the modem.
3. Connect one end of the modular cord supplied with the modem to the jack labeled DIAL on the modem.
4. Do one of the following, depending on whether or not the System 25 switch is equipped with DID lines (see Worksheet [A: Coverage Options/Maintenance Access](#))
 - If the system does **not** have DID lines, connect the other end of the modular cord to an RJ11C telephone jack wired to a loop start (LS) line from the CO.
 - If the system has DID lines, connect the other end of the modular cord to a System 25 Tip/Ring port that has an assigned DID number.



NOTE:

If building wire is used, it must be type 3 UTP or better. The distance limitation is the same as for a station.

5. Connect the power supply connector to the modem.
6. Plug in the power supply.
7. Turn on power for the modem.



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1. Intuity AUDIX system
2. Multi-port serial card (first available port)
3. DTE 4/6 to DB-25P adapter
4. Wall jack
5. Without DID, to public network L/S line
6. AC power outlet
7. With DID, to Tip/Ring port
8. DID lines to public network
9. System 25 switch

Figure 4-9. Remote Access Dial Connections