

Lucent Technologies
Bell Labs Innovations



Identifying and Cabling Circuit Cards

Identifying and Cabling Circuit Cards

This section provides the basic information you need to connect cables to the faceplates of circuit cards that are installed in the system. Additional steps may be required for some cable connections.

The following table provides the circuit card capacity of each Lucent Intuity system.

Table: Circuit Card Capacity

Lucent Intuity System	Maximum Number of Circuit Cards
MAP/5P	7
MAP/40P	14
MAP/100P	20

Connecting a Tip/Ring Circuit Card

Tip/ring circuit cards use two 6-pin conductor modular cords. These cords provide three lines for telephone hook-up.

You can connect tip/ring circuit cards to telephone lines in several ways, depending on your system:

- Direct cable connection from the circuit card to the telephone line (for use with the MAP/5P and MAP/40P)
- Cable connection from the circuit card through a line splitter or adapter and then to the telephone line
- Cable connection using a tip/ring distribution panel to the telephone line (for use with the MAP/100P)

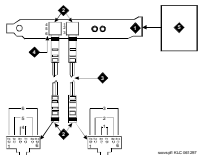
Direct Cable Connection

When you use a two-conductor modular cord to make a direct connection from either of the two tip/ring circuit card jacks to the telephone line, only line 1 or line 4 of the three telephone lines is connected.

Click the graphic for a larger view.

See [Pinouts for Tip/Ring Circuit Card](#) for more information.

Direct Line Connection from Tip/Ring Circuit Card



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Identifying and Cabling Circuit Cards

Cable Connection Using an Adapter

Adapters or line splitters enable you to use multiple channels in modular cords. There are two types of adapters:

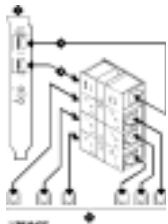
- 855A (for use with the MAP/5P and MAP/40P)
- 356B (for use with the MAP/40P and MAP/100P)

855A Adapter

If you use the 855A adapter to connect the tip/ring circuit card to the telephone line, you can use all three channels in the 6-pin-conductor modular cord.

Click the graphic for a larger view.

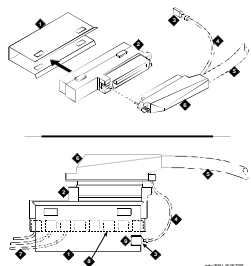
885A Adapter with a Tip/Ring Circuit Card



NOTE:

Record the circuit card slot number and telephone extension numbers on the 885A adapter.

356B Adapter



356B Adapter

If you use the 356B adapter to connect the tip/ring circuit card to the telephone line, you can use eight 6-pin-conductor modular cords. This adapter is connected to the back of the MAP/40P or the MAP/100P. Record the circuit card slot number and telephone extension numbers on the 356B adapter.

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Identifying and Cabling Circuit Cards

Cable Connection Using a Tip/Ring Distribution Panel

You can use a tip/ring distribution panel on the MAP/100P.

The distribution panel is located on the back of the unit. This panel provides a simplified wiring scheme for connecting to the local customer-premise equipment or building connecting block provided by the central office. This panel allows you to connect a maximum of 42 channels (up to seven tip/ring circuit cards).

NOTE:

The MAP/40P ships with a 356B adapter that connects the tip/ring circuit card to the telephone line.

Connecting a Tip/Ring Distribution Panel to a MAP/100P

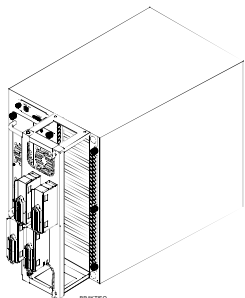
The MAP/100P system is shipped with a tip/ring distribution panel. This panel is located on the back of the chassis. This panel provides a simplified wiring scheme for connecting to the local customer-premise equipment or building connecting block provided by the central office. You can connect up to 48 channels using this panel.

To connect the tip/ring distribution panel:

1. Plug the 18-inch (46-centimeter), 6-pin modular cords from the tip/ring circuit cards into the 356B adapters. Each adapter can accommodate eight modular cords.
2. Using the connector provided, attach the 25-pair, high-density cable to the 356B adapter.

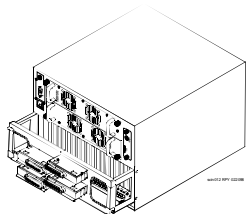
Click the graphic for a larger view.

MAP/100P Tip/Ring Distribution Panel – Deskside Configuration



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Identifying and Cabling Circuit Cards

**MAP/100P Tip/Ring
Distribution Panel –
Rack-Mounted
Configuration**

3. Snap the 356B adapters into the adapter bracket. Ensure that the modular cords are inside the adapter bracket.

NOTE:

The 356B adapters can be removed by spreading the bracket sides apart.

**CAUTION:**

In a deskside configuration, the 25-pair, high-density cables dress down from the adapter brackets. In a rack-mounted configuration, the cables dress across each other to either side of the MAP/100P. In the rack-mounted configuration, the cables must be tied back and up to the rear of the cabinet to reduce connector stress.

4. Connect the grounding wire and strap to the top of the adapter bracket.
5. Secure the 25-pin cable connector to the 356B adapter using the cable ties provided with the adapter kit.

Different cable lengths are available. See [Ordering Cables](#) to find out which cables are available for the MAP/100P.

See [Pinouts for Tip/Ring Circuit Cards](#) if you need wiring and pinout connections for the tip/ring distribution hardware.



Procedure completed.

Connecting Asynchronous Devices

There are two ways to connect the system to a terminal, modem, or other DTE or DCE devices through an asynchronous link:

- Using asynchronous port COM1. COM1 is located on the CPU circuit card for MAP/40P and MAP/100P systems, and on the rear of the MAP/5P system.
- Using the additional asynchronous ports on the optional serial interface circuit card.

NOTE:

All Lucent Intuity systems provide two asynchronous ports, COM1 and COM2. However, COM2 is reserved for Lucent remote maintenance and is not available to use for asynchronous connections.

Using COM1

A 9-pin D subminiature male connector is provided on the back of the system for COM1. This connector connects internally to the CPU. See [Pinouts for Asynchronous Connections](#) if you need pinout information for the COM1 connector.

NOTE:

Networking uses the ACCX circuit card, not COM1. For more information on the ACCX circuit card, see [Connecting the ACCX Circuit Card](#).



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Identifying and Cabling Circuit Cards

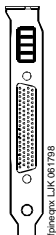
Using the Super Serial Circuit Card

The optional serial interface circuit card provides eight additional asynchronous ports for connecting to modems, terminals, or switch integration devices.

Each serial interface circuit card is shipped with an octopus cable that connects to the circuit card faceplate and branches out into eight modular jacks. These jacks connect to two types of 25-pin D subminiature adapters.

Click the graphic for a larger view.

Super Serial Circuit Card Faceplate



Use the following adapters to connect peripheral devices to your system:

- A terminal/printer adapter for connection to terminals, printers, or other DTE devices
- A modem adapter for connection to modems or other DCE devices

NOTE:

These are special adapters that are customized for use with the serial interface circuit card.

Follow the instructions provided with the devices you are installing for connection and setup.

See *Intuity Messaging Solutions Getting Connected*, 585-313-703, to determine how to connect the Lucent Intuity system to switches or to other peripherals.

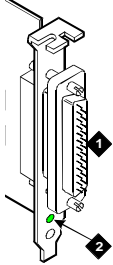


Procedure completed.

Connecting the DCUI Circuit Card

Click the graphic for a larger view.


DCIU Circuit Card Faceplate with Gender Changer Connector



The DCIU circuit card connects the Lucent Intuity system to some Lucent switches. One DCIU circuit card can be installed in the system.

See *Intuity Messaging Solutions Getting Connected*, 585-313-703, to determine how to connect the Lucent Intuity system to switches or to other peripherals.

See [System 75 Switch](#) for information on administering a System 75 DCIU switch.

 Procedure completed.

Connecting the Digital Station Interface Circuit Card

Click the graphic for a larger view.

Digital Station Interface Circuit Card Faceplate



fpirvds LJK 080697

The digital station interface circuit card connects the Lucent Intuity system to Lucent switches. You can install one digital station interface circuit card per system.

A 3-foot (1-meter) octopus cable is provided with the digital station interface circuit card. Use the cable to connect from the customer station jacks.

NOTE:

If customers use ROLM or Northern Telecom equipment, their station jacks are RJ-11, not RJ-45. You must use in-line adapters to convert the RJ-11 to RJ-45 to connect to their equipment.

See *Intuity Messaging Solutions Getting Connected*, 585-313-703, for more information on how to make cable connections from the digital station interface circuit card.

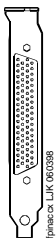


Procedure completed.

Connecting the ACCX Circuit Card

Click the graphic for a larger view.

ACCX Circuit Card Faceplate



The Lucent Intuity system supports up to eight networking channels through digital and analog remote connections from the ACCX circuit card using DCP and RS-232 links, respectively.

The following table shows the maximum number of ACCX circuit cards supported per system.

Table: ACCX Circuit Cards Per System

Lucent Intuity System	Number of ACCX Circuit Cards Supported
MAP/5P	1
MAP/40P	2
MAP/100P	3

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Identifying and Cabling Circuit Cards

Each ACCX circuit card terminates four data channels in one of the following combinations:

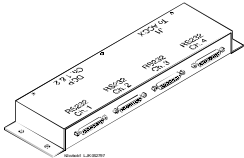
- Two DCP lines, each providing two I-channels. Depending on the version of the switch to which you are connecting, you may only be able to use one of the two I-channels of each DCP circuit:
 - System 75 R1V3, DEFINITY G1 R1V4, and DEFINITY G3i, G3s, or G3vs Version 1 support the use of one I-channel only.
 - System 85, DEFINITY G2, and DEFINITY G3i, G3s, and G3vs Version 2 support the use of both of the I-channels.

NOTE:

For DEFINITY G3i, G3s, and G3vs, this option must be installed and administered on the switch before you perform Lucent Intuity system administration.

Click the graphic for a larger view.

RS-232 Connections on a Breakout Box



- Four RS-232 ports
- One DCP line (two I-channels) and two RS-232 ports

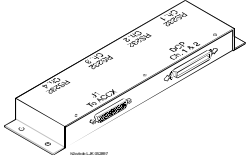
A breakout box and a cable are provided with each ACCX circuit card. Use the cable to connect from the circuit card to the breakout box. The [RS-232 line](#) then connects through a modem to the customer connecting block. The [DCP line](#) connects directly to the block.



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Identifying and Cabling Circuit Cards


DCP Connections on a Breakout Box



Attach the breakout box to the wall. The cable length allows placement up to 10 feet (3 meters) away from the system.

See [Pinouts for Connections from the ACCX Circuit Card](#) for pinout and signal information for RS-232 and DCP connections.

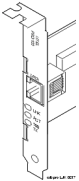
See *Intuity Messaging Solutions Getting Connected*, 585-313-703, for more information on how to make cable connections from the ACCX circuit card.

 Procedure completed.

Connecting the LAN Circuit Card

Click the graphic for a larger view.

LAN Circuit Card Faceplate



The LAN circuit card provides the connection to the customer's LAN.

The type of cable you use to connect the LAN circuit card to the customer's LAN depends on the connection already in use for the LAN.

This cable connection can be one of three types:

- Thin Ethernet (BNC)
- Thick Ethernet (AUI)
- 8-pin modular connector (Tbase or twisted pair)



CAUTION:

Do *not* cable the LAN circuit card before you power up. Doing so can disturb the customer's existing LAN. See [Administering and Testing TCP/IP LAN Connectivity](#) for information on when and how to cable the LAN circuit card.



Procedure completed.

Connecting the SSP Circuit Card

Click the graphic for a larger view.

SSP Circuit Card Faceplate




The speech and signal processor (SSP) circuit card (AYC43) provides speech support for various speech technologies. See [SSP Circuit Card Faceplate](#) for a figure of the SSP circuit card.

The SSP circuit card must be used with at least one tip/ring circuit card. One SSP circuit card can be installed in MAP/40P and MAP/100P systems.

NOTE:

No external cabling is required for the SSP circuit card.

 Procedure completed.

Connecting Other Devices for Switch Connections

You may use the following devices to connect the Lucent Intuity system to switches or other peripherals:

- Z3A asynchronous data unit (ADU)
- Isolating data interface (IDI) ground isolation device
- Modular processor data module (MPDM)
- Switch integration device (SID) for the following switches:
 - Mitel
 - Rolm
 - Northern Telecom Meridian
 - NEAX
- 3A translator

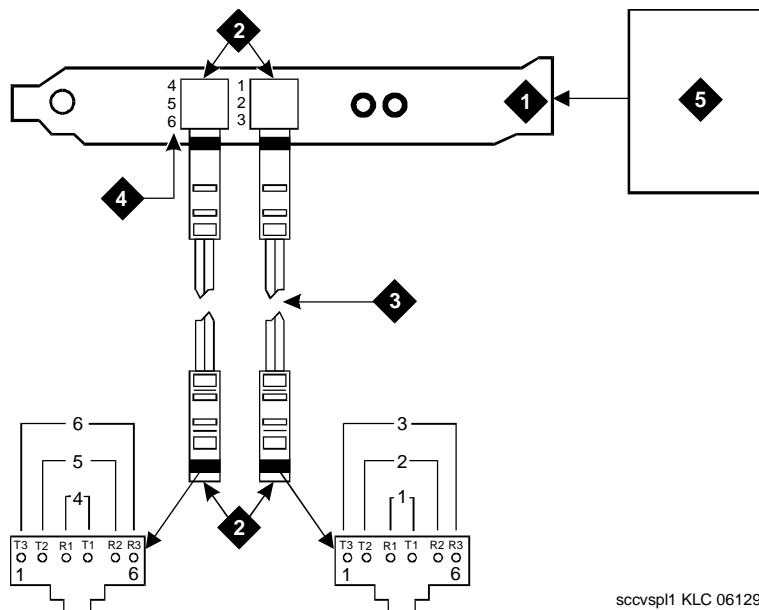
Follow the instructions provided with these devices for connection and setup. See *Intuity Messaging Solutions Getting Connected*, 585-313-703, to determine how to cable these devices between the Lucent Intuity system and the switches or other peripherals.



Procedure completed.

Direct Line Connection from a Tip/Ring Circuit Card

Figure: Direct Line Connection from a Tip/Ring Circuit Card



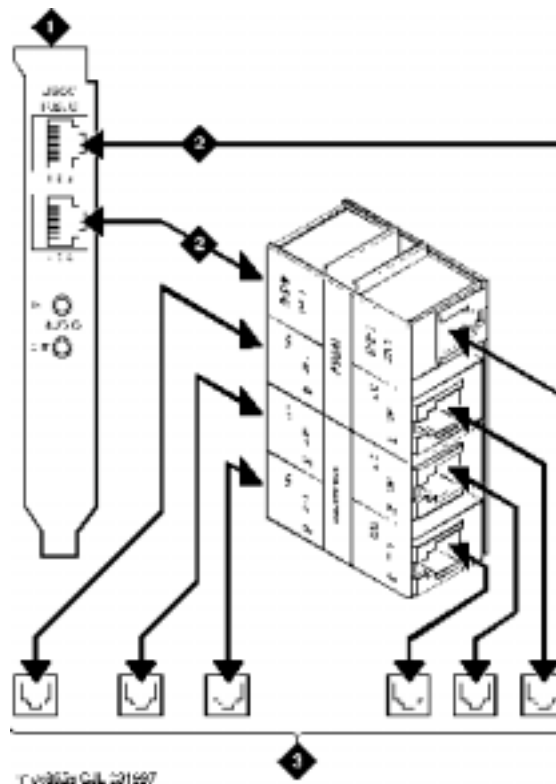
sccvsp11 KLC 061297

- 1 Circuit card faceplate
- 2 RJ25C
- 3 25-ft (7.5 m) modular cord (comcode number 103823195)
- 4 Channel number
- 5 Lucent Intuity system

885A Adapter with a Tip/Ring Circuit Card

Figure: 885A Adapter with a Tip/Ring Circuit Card

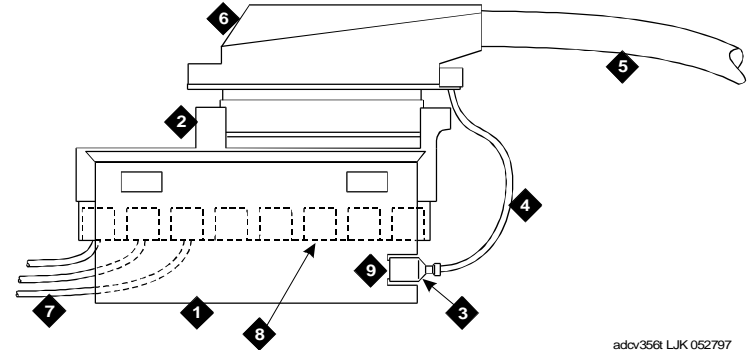
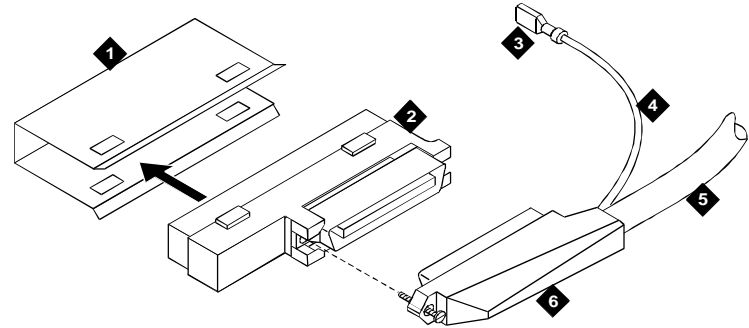
- 1 Tip/ring circuit card faceplate
- 2 Interconnects RJ25C between the tip/ring circuit card and the 885A adapter
- 3 Connect to RJ11 on customer-premise equipment



How to Use the 356B Adapter with a Tip/Ring Circuit Card

Figure: How to Use the 356B Adapter with a Tip/Ring Circuit Card

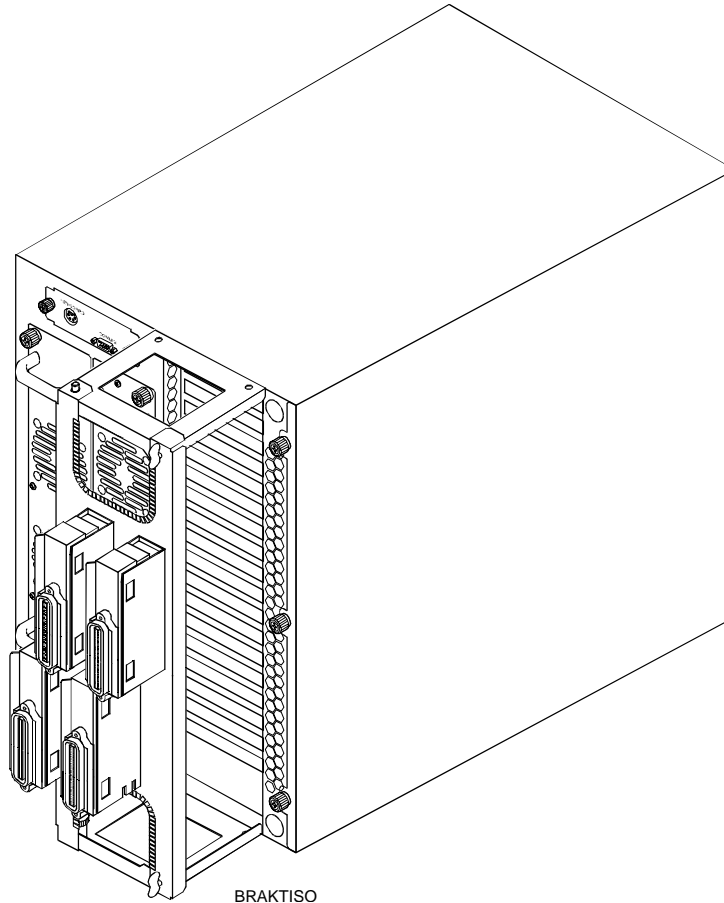
- 1 Adapter bracket
- 2 356B adapter
- 3 Grounding plug
- 4 Grounding wire
- 5 25-pin cable
- 6 Connector
- 7 Tip/ring cords
- 8 Modular jacks (8)
- 9 Grounding tab



adv356t LJK 052797

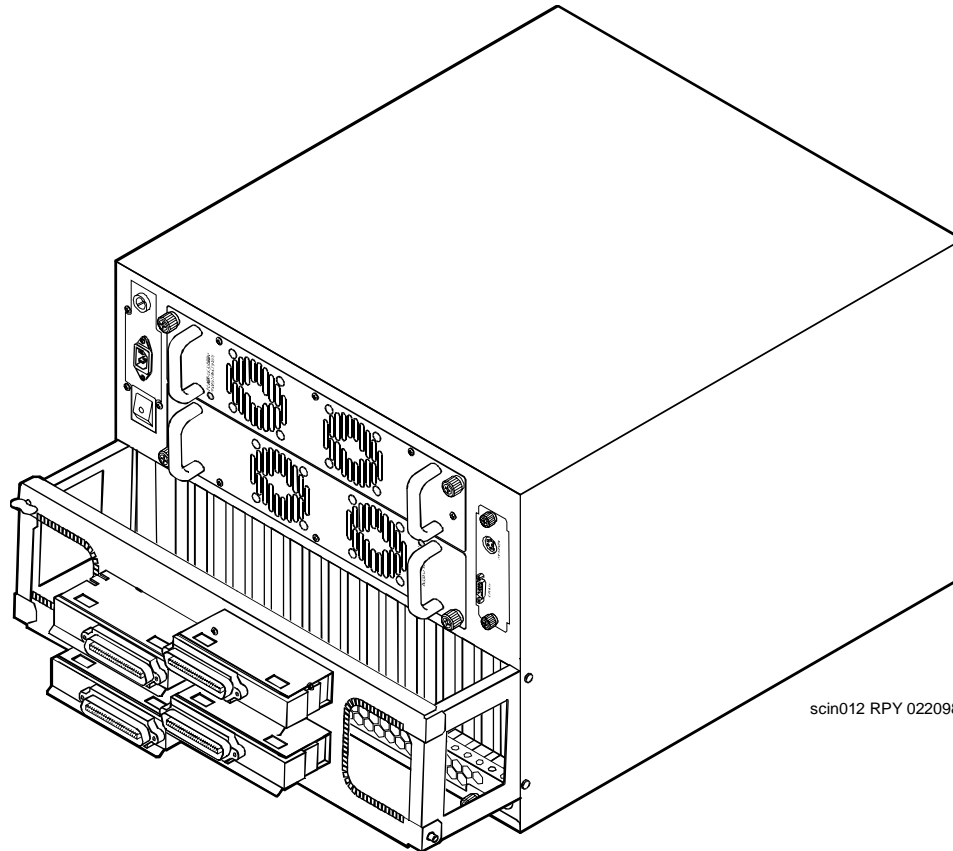
MAP/100P Tip/Ring Distribution Panel – Deskside Configuration

**Figure:
MAP/100P
Tip/Ring
Distribution
Panel –
Deskside
Configuration**



MAP/100P Tip/Ring Distribution Panel – Rack-Mounted Configuration

**Figure:
MAP/100P
Tip/Ring
Distribution
Panel –
Rack-Mounted
Configuration**



**Figure: Super
Serial Interface
Circuit Card
Faceplate**

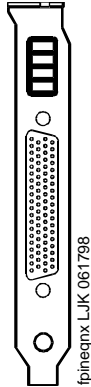
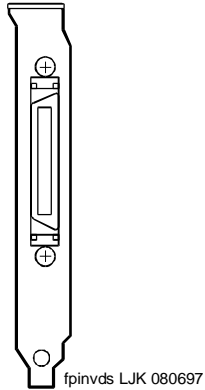
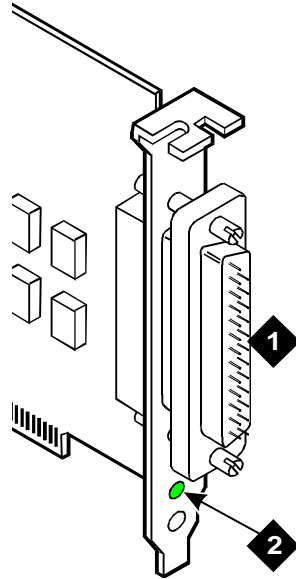


Figure: Digital Station Interface Circuit Card Faceplate

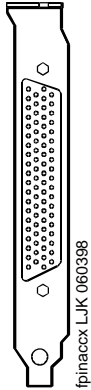


**Figure: DCIU
Circuit Card
Faceplate**



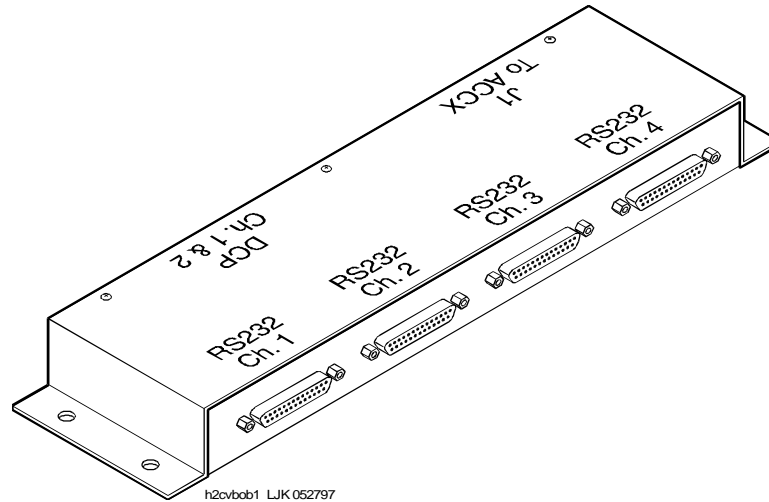
- 1 Genderchanger connector
- 2 LED (green)

**Figure: ACCX
Circuit Card
Faceplate**

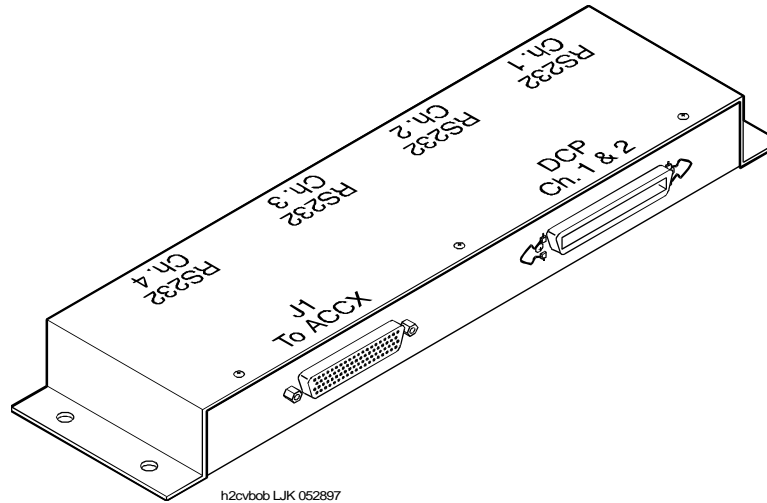


RS-232 Connections on a Breakout Box

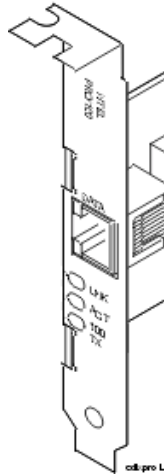
**Figure: RS-232
Connections on
a Breakout Box**



**Figure: DCP
Connections on
a Breakout Box**



**Figure: LAN
Circuit Card**



**Figure: SSP
Circuit Card
Faceplate**

