

Wiring Specifications

This appendix lists the pinouts and wiring specifications for the EIA/TIA-232 admin. port, CDDI UTP, 10BaseT, SUM port, and the optical bypass switch.

Admin. Port Pinout

Table A-1 and Table A-2 list the pinouts for the EIA/TIA-232 admin. port.

Table A-1 EIA/TIA-232 (Console) DTE Pinouts

At the Switch				At the Console (DTE)	
Signal	Definition	RJ-45 Pin	Direction	DB-25 Pin	Signal
CTS	Clear To Send	1 <—	Output	4	RTS
DSR	Data Set Ready	2 <—	Output	20	DTR
RXD	Receive Data	3 <—	Output	2	TX
GND	Ground	4	—	7	GND
GND	Ground	5	—	—	—
TXD	Transmit Data	6 —>	Input	3	RXD
DTR	Data Terminal Ready	7 —>	Input	6	DSR
RTS	Request To Send	8 —>	Input	5	CTS

CDDI UTP Pinout

Table A-2 EIA/TIA-232 (Modem) DCE Pinouts

At the Switch				At the Modem (DCE)	
Signal	Definition	RJ-45 Pin	Direction	DB-25 Pin	Signal
CTS	Clear To Send	1 <—	Output	5	CTS
DSR	Data Set Ready	2 <—	Output	8	DCD
RXD	Receive Data	3 <—	Output	3	RX
GND	Ground	4	—	7	GND
GND	Ground	5	—	—	GND
TXD	Transmit Data	6 —>	Input	2	TX
DTR	Data Terminal Ready	7 —>	Input	20	DTR
RTS	Request To Send	8 —>	Input	4	RTS

CDDI UTP Pinout

Following are pinouts and cabling requirements for CDDI UTP wiring. Table A-3 lists the pinout used for the CDDI/MLT-3 A/B port card transmit and receive pairs.

Table A-3 CDDI/MLT-3 Pinout

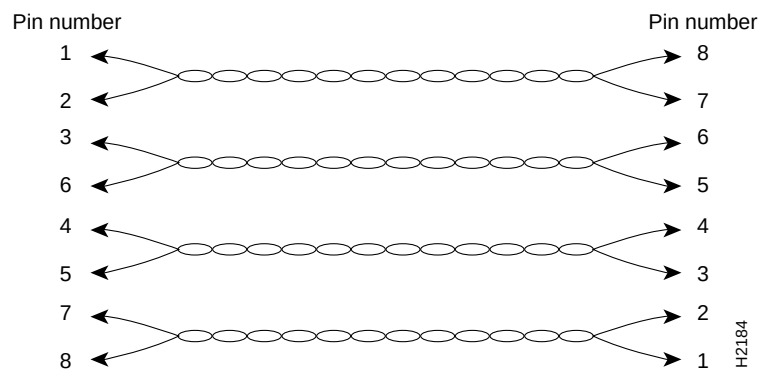
Pin	Signal	Pin	Signal
1	TX+	5	—
2	TX—	6	—
3	—	7	RX+
4	—	8	RX—

You must use modular, cross-connect cables in the following configurations:

- From a workstation CDDI port to a CDDI-FDDI translator
- From a CDDI A port to a CDDI B port
- From a CDDI A or B port to a CDDI M port

Each of the four pairs of wires that make up the twisted-pair cross-connect cable must be individually twisted. For example, the wire pair connecting pins 1 and 2 at one end of the cable must connect to pins 8 and 7 at the other end. (See Figure A-1.)

Figure A-1 CDDI UTP Wiring Configuration—Cross-Connect Cables



Note The EIA/TIA-568-B wiring scheme is recommended. Connect all four pairs of inside wiring cables to the wall outlet and patch panels.

The cabling from A ports to B ports must be cross-connect, twisted-pair. Each of the four pairs of wires that make up the twisted-pair cable must be individually twisted. Table A-4 lists the EIA/TIA-568-B RJ-45 wiring scheme.

10BaseT Pinout

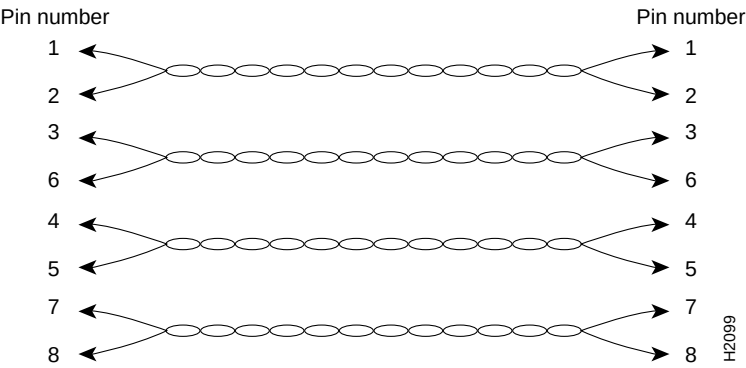
Table A-4 **EIA/TIA-568-B RJ-45 Wiring Scheme**

Pin	Pair	Color
1	2	White/orange
2	2	Orange
3	3	White/green
4	1	Blue
5	1	White/blue
6	3	Green
7	4	White/brown
8	4	Brown

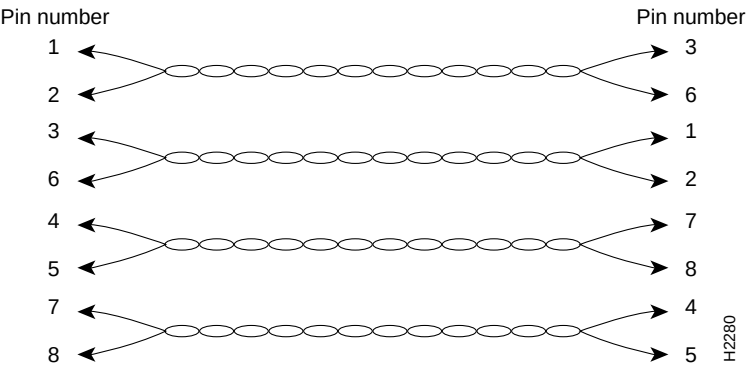
10BaseT Pinout

The 10BaseT cabling from the workstation to the switch must be straight-through, twisted-pair. Each of the four pairs of wires that make up the twisted-pair cable must be individually twisted. Figure A-2 shows straight-through cables and Figure A-3 shows cross-connect cables.

**Figure A-2 10BaseT Twisted-Pair Wiring Configuration—
Straight-Through Cables**



**Figure A-3 10BaseT Twisted-Pair Wiring Configuration—
Cross-Connect Cables**



SUM Port Pinout

Table A-5 lists the pinout for Ethernet 10BaseT LAN port cabling.

Table A-5 LAN Port Ethernet 10BaseT Pinout

Pin	Signal	Pin	Signal
1	RX+	5	–
2	RX–	6	TX–
3	TX+	7	–
4	–	8	–

SUM Port Pinout

Table A-6 lists the pinout for the optional Ethernet 10BaseT SUM port.

Table A-6 SUM Port Ethernet 10BaseT Pinout

Pin	Signal	Pin	Signal
1	TX+	5	–
2	TX–	6	RX–
3	RX+	7	–
4	–	8	–

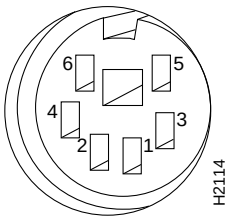
Optical Bypass Switch Pinout

Table A-7 lists the pinout for the optical bypass connector, and Figure A-4 shows the connector. The connector is a female Deutsche Industrie Norm (DIN) type.

Table A-7 Optical Bypass Switch Connector Pinout

Pin	Function
1	V+
2	V+
3	Switch
4	Switch
5	GND
6	Bypass present

Figure A-4 Optical Bypass Connector



Optical Bypass Switch Pinout
