

Connectors and Cables

This appendix provides BMM connector pinouts and instructions for identifying and connecting cables and adapters to ports.

10BaseT and 100BaseTX Connectors

The 10BaseT and 100BaseTX ports use standard RJ-45 connectors for Category 5 UTP cabling (see Figure B-1). The 10BaseT and 100BaseTX ports have their transmit (TD) and receive (RD) pairs internally crossed. Figure B-2 shows the connector pinout, and Figure B-3 shows the straight-through and crossover cable schematics.

Figure B-1 RJ-45 10BaseT and 100BaseTX Port Connector

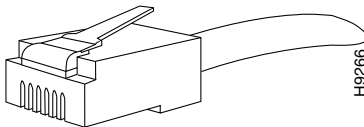


Figure B-2 10BaseT and 100BaseT Pinout and Connector

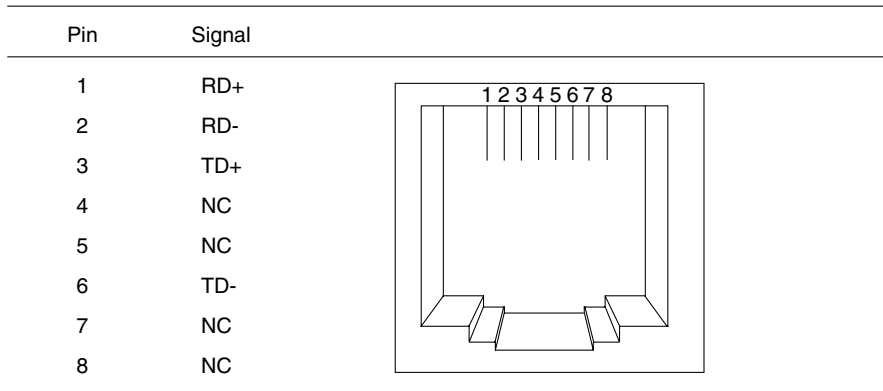
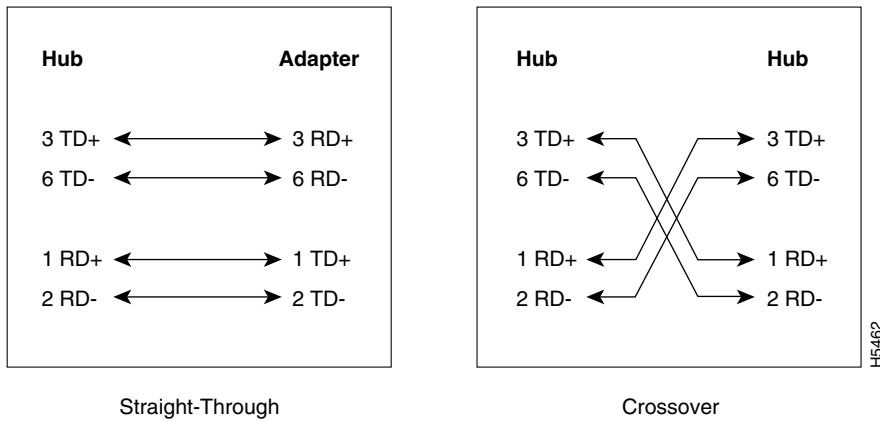


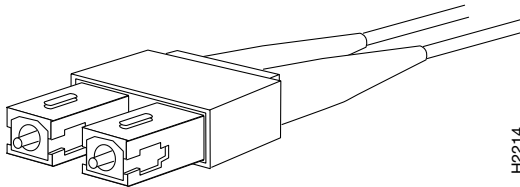
Figure B-3 Straight-Through and Crossover Cable Schematics



100BaseFX Connector

The 100BaseFX port connector (see Figure B-4) is a multimode fiber-optic SC (square connector).

Figure B-4 100BaseFX SC Connector



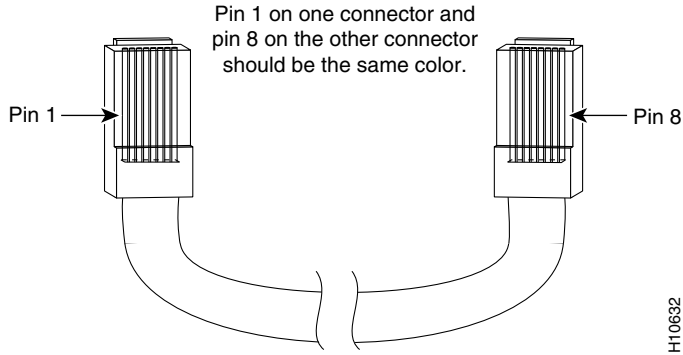
Console Cables and Adapters

The RJ-45-to-RJ-45 rollover cable and adapters supplied with the BMM are used to connect the BMM console port to a console terminal or modem. The following sections describe cables and adapters for the console port.

Identifying a Rollover Cable

You can identify a rollover cable by comparing the two modular ends of the cable. Hold the cables side-by-side, with the tab at the back. The wire connected to the pin on the outside of the left plug should be the same color as the wire connected to the pin on the outside of the right plug. (See Figure B-5.) If your cable came from Cisco Systems, pin 1 is white on one connector, and pin 8 is white on the other (a rollover cable reverses pins 1 and 8, 2 and 7, 3 and 6, and 4 and 5).

Figure B-5 Identifying a Rollover Cable



Connector and Adapter Pinouts

Table B-1, Table B-2, and Table B-3 list the pinouts for the console port, the RJ-45-to-RJ-45 rollover cable, and the following adapters:

- RJ-45-to-DB-9 female DTE adapter (labeled “TERMINAL”)
- RJ-45-to-DB-25 female DTE adapter (labeled “TERMINAL”)
- RJ-45-to-DB-25 male DCE adapter (labeled “MODEM”)

Table B-1 Console-to-PC Signaling Using a DB-9 Adapter

Console Port (DTE)	RJ-45-to-RJ-45 Rollover Cable		RJ-45-to-DB-9 Terminal Adapter	Console Device
	RJ-45 Pin	RJ-45 Pin	DB-9 Pin	
RTS	1 ¹	8	8	CTS
DTR	2	7	6	DSR
TxD	3	6	2	RxD
GND	4	5	5	GND
GND	5	4	5	GND
RxD	6	3	3	TxD
DSR	7	2	4	DTR
CTS	8 ¹	1	7	RTS

1. Pin 1 is connected internally to Pin 8.

Table B-2 Console-to-Terminal Signaling Using a DB-25 Adapter

Console Port (DTE)	RJ-45-to-RJ-45 Rollover Cable		RJ-45-to-DB-25 Terminal Adapter	Console Device
	RJ-45 Pin	RJ-45 Pin	DB-25 Pin	
RTS	1 ¹	8	5	CTS
DTR	2	7	6	DSR
TxD	3	6	3	RxD
GND	4	5	7	GND
GND	5	4	7	GND
RxD	6	3	2	TxD
DSR	7	2	20	DTR
CTS	8 ¹	1	4	RTS

1. Pin 1 is connected internally to Pin 8.

Table B-3 Console-to-Modem Signaling Using a DB-25 Adapter

Console Port (DTE)	RJ-45-to-RJ-45 Rollover Cable		RJ-45-to-DB-25 Modem Adapter	Modem Signal
	RJ-45 Pin	RJ-45 Pin	DB-25 Pin	
RTS	1 ¹	8	4	RTS
DTR	2	7	20	DTR
TxD	3	6	3	TxD
GND	4	5	7	GND
GND	5	4	7	GND
RxD	6	3	2	RxD
DSR	7	2	8	DCD
CTS	8 ¹	1	5	CTS

1. Pin 1 is connected internally to Pin 8.