APPENDIX D

Hub Specifications and Cable Wiring

This appendix contains the following sections:

- Hub Specifications
- Cable Wiring Specifications

Hub Specifications

Table D-1 lists the system specifications for the Cisco Micro Hubs.

Table D-1 System Specifications

Description	Specification
Ports	**Connector Type**
— Network device connectors (8)	— RJ-45 MDI-X shielded (Port 5 provides MDI-X or MDI options)
— Interconnect (2) (Micro 1502 and Micro Hub 1503 only)	— RJ-45 backplane bus
— Console port (1) (Micro Hub 1503 only)	— RJ-45
Access method	CSMA/CD, 10 Mbps
Media supported	• 100-ohm unshielded twisted-pair (UTP) • 100-ohm shielded twisted-pair (STP)

Description	Specification
Indicator panel	LEDs: • PWR—Indicates whether power is being supplied to hub • OK—Indicates whether self-test is successful • 1–8—Indicates port status: link, activity, partition, and disable • COL—Indicates network collisions • MGMT —(Micro Hub 1503 only) Indicates that hub is receiving SNMP data
Configuration options	• Direct connection to the CONSOLE port • Network connection via Telnet service • Network connection via optional SNMP management software
Processor	80C31 (Micro Hub 1502) 386EX (Micro Hub 1503)
Dimensions (H x W x D)	3.1 x 11.2 x 8.7 in. (7.85 x 28.4 x 22.1 cm) Height includes the stacking curves on top of the hub
Weight	1.3 lb (0.6 kg)
Power (external)	13.5 VDC (+/- 5%), 2A
Nonoperating temperature	-40 to 149°F (-20° to 65°C)
Operating temperature	32 to 104°F (0° to 40°C)
Operating humidity	10 to 85%, noncondensing
Standards conformance	IEEE 802.3 10BaseT
Hub Stack	
— Expansion	— Up to five units
— Expansion interface	— Proprietary RJ-45
— Configuration	— Automatic hub-ID and bus termination (for stack)

Cable Wiring Specifications

This section describes the cables and cable wiring that is supported by the Cisco Micro Hubs.

Ethernet Cable Specifications

You must supply the Ethernet cable for connecting workstations or other 10BaseT devices, such as compatible hubs or switches, to the Cisco Micro Hub.

The Ethernet cable should meet the following specifications:

- Straight-through Ethernet
- 100-ohm Category 3, 4, or 5
- Can be shielded or unshielded
- No longer than 328 feet (100 meters)

If you are connecting another 10BaseT hub or switch, you can also run straight-through 10BaseT cabling from a a port labeled 1X through 8X on this hub to an MDI port on the other device.

However, if you are connecting a Cisco Micro Hub workstation port (labeled 1X through 8X) to another hub's MDI-X port, you must use an Ethernet rollover cable. You can identify a rollover cable by comparing the modular ends of the cable. Holding the cable in your hand, side-by-side, with the tab at the back, the wire connected to the pin on the outside of the left connector (pin 1) is the same color as the pin on the outside of the right connector (pin 8). On Cisco cables, pin 1 is white on one connector, and pin 8 is white on the other connector.

Cable Wiring

This section contains wiring specifications for cables used with the Cisco Micro Hub, including the following:

- 10BaseT port
- Straight-through 10BaseT cable (RJ-45 to RJ-45)
- Console cable and adapters

Table D-2 10BaseT Port Wiring

8 Pin[1]	Description
1	TX+
2	TX-
3	RX+
6	RX-

1. Pins 4, 5, 7, and 8 are not used.

Table D-3 describes the wiring for a straight-through 10BaseT cable, which is used to connect the hub to any devices that use a standard Ethernet LAN interface (for example, to a PC or server).

Table D-3 Straight-Through 10BaseT Cable (RJ-45 to RJ-45)

RJ-45 Pin	Signal	Direction	RJ-45 Pin
1	TX+	—>	1
2	TX-	—>	2
3	RX+	<—	3
4	–	–	4
5	–	–	5
6	RX-	<—	6
7	–	–	7
8	–	–	8

A console cable kit is provided with your hub to connect a console (an ASCII terminal or PC running terminal emulation software) to the hub's CONSOLE port.

The console cable kit contains:

- RJ-45-to-RJ-45 console cable (light blue)
- RJ-45-to-DB-25 adapter (light gray)
- RJ-45-to-DB-9 adapter (light gray)

Table D-4 describes the wiring for the CONSOLE port, the console cable, and both adapters.

Table D-4 Console Cable and Adapter Pinouts

	CONSOLE Port (DTE)	RJ-45-to-RJ-45 Console Cable			
Signal	**RJ-45 Pin**	**RJ-45 Pin**	**DB-9 Pin**	**DB-25 Pin**	**Signal**
–	1	8	7	4	–
DTR	2	7	4	20	DSR
TxD	3	6	3	2	RxD
GND	4	5	5	7	GND
GND	5	4	5	7	GND
RxD	6	3	2	3	TxD
DSR	7	2	6	6	DTR
–	8	1	8	5	–