APPENDIX C

Cable and Port Specifications

This appendix provides **cable** and port specifications, and includes the following sections:

Cables and Adapters Provided

The Cisco MDS 9500 Series accessory kit includes the following items:

- RJ-45 rollover cable
- DB-9F/RJ-45F PC—RJ-45 to DB-9 female DTE adapter (labeled “Terminal”)
- RJ-45/DSUB F/F adapter—RJ-45 to DB-25 female DTE adapter (labeled “Terminal”)
- RJ-45/DSUB R/P adapter—RJ-45 to DB-25 male DCE adapter (labeled “Modem”)

Note Additional cables and adapters can be ordered from your customer service representative.

Note If you purchased Cisco support through a Cisco reseller, contact the reseller directly. If you purchased support directly from Cisco Systems, contact Cisco Technical Support at this URL: http://www.cisco.com/warp/public/687/Directory/DirTAC.shtm

Console Port

The console port is an asynchronous RS-232 serial port with an RJ-45 connector. You can use the RJ-45 rollover cable and the RJ-45/DSUB F/F adapter or the DB-9F/RJ-45F PC terminal adapter to connect the console port to a computer running terminal emulation software.

Console Port Pinouts

Table C-1 lists the pinouts for the console port on the Cisco MDS 9500 Series.

Table C-1 Console Port Pinouts

Pin	Signal
1[1]	RTS
2	DTR
3	TxD
4	GND
5	GND
6	RxD
7	DSR
8	CTS

1. Pin 1 is connected internally to pin 8.

Connecting the Console Port to a Computer Using the DB-25 Adapter

You can use the RJ-45 rollover cable and RJ-45/DSUB F/F adapter (labeled “Terminal”) to connect the console port to a computer running terminal emulation software. Table C-2 lists the pinouts for the console port, the RJ-45 rollover cable, and the RJ-45/DSUB F/F adapter.

Table C-2 Port Mode Signaling and Pinouts with the DB-25 Adapter

Console Port	RJ-45 Rollover Cable		RJ4-5/DSUB F/F Terminal Adapter	Console Device
Signal	RJ-45 Pin	RJ-45 Pin	DB-25 Pin	Signal
RTS	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	4	RTS

Connecting the Console Port to a Computer Using the DB-9 Adapter

You can use the RJ-45 rollover cable and DB-9F/RJ-45F PC terminal (labeled "Terminal") to connect the console port to a computer running terminal emulation software. Table C-3 lists the pinouts for the console port, the RJ-45 rollover cable, and the DB-9F/RJ-45F PC terminal.

Table C-3 Port Mode Signaling and Pinouts with the DB-9 Adapter

Console Port	RJ-45 Rollover Cable		DB9F/RJ45F PC Terminal	Console Device
Signal	**RJ-45 Pin**	**RJ-45 Pin**	**DB-9 Pin**	**Signal**
RTS	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	7	RTS

COM1 Port

The COM1 port is a serial port with a DB-9 connector. The COM1 port can be connected to a modem using the cable and adapters provided in the accessory kit.

COM1 Port Pinouts

Table C-4 lists the pinouts for the COM1 port on the Cisco MDS 9500 Series.

Note Additional cables and adapters can be ordered from your customer service representative.

Table C-4 COM1 Port Pinouts

Pin	Signal
1	DCD
2	RxD
3	TxD
4	DTR
5	GND
6	DSR
7	RTS
8	CTS
9	RI

Connecting the COM1 Port to a Modem

You can use the DB-9F/RJ-45F PC terminal (labeled “Terminal”) to connect to the COM1 port, and the RJ-45/DSUB R/P adapter (labeled “Modem”) to connect to the modem. You can use the RJ-45 rollover cable to connect these adapters.

Table C-5 lists the pinouts for the COM1 port, the DB-9F/RJ-45F PC terminal, RJ-45 rollover cable, and the RJ-45/DSUB R/P adapter.

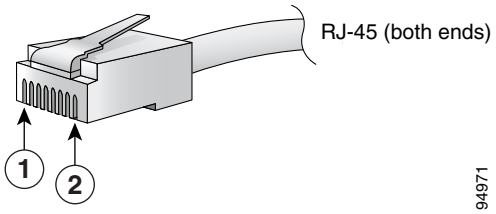
Table C-5 Port Mode Signaling and Pinouts for Modem with DB-25 Connection

COM1 Port	DB-9F/RJ45F PC terminal	RJ-45 Rollover Cable		RJ-45/DSUB R/P Adapter	Modem
Signal	DB-9 Pin	RJ-45 Pin	RJ-45 Pin	DB-25 Pin	Signal
CTS	8	8	1	5	CTS
DSR	6	7	2	8	DCD
RxD	2	6	3	3	RxD
GND	5	5	4	7	GND
GND	5	4	5	7	GND
TxD	3	3	6	2	TxD
DTR	4	2	7	20	DTR
RTS	7	1	8	4	RTS

MGMT 10/100/1000 Ethernet Port

The MGMT 10/100/1000 Ethernet port is an Ethernet port with an RJ-45 connector. You can use a modular, RJ-45, straight-through UTP cable to connect the management port to an external hub, switch, or router (see Figure C-1).

Figure C-1 RJ-45 Interface Cable Connector



1	Pin 1	2	Pin 8

Table C-6 lists the connector pinouts and signal names for a 10/100/1000BASE-T management port (MDI) cable.

Note The RJ-45 interface only uses pins 1, 2, 3, and 6.

Table C-6 10/100/1000BASE-T Management Port Cable Pinout (MDI)

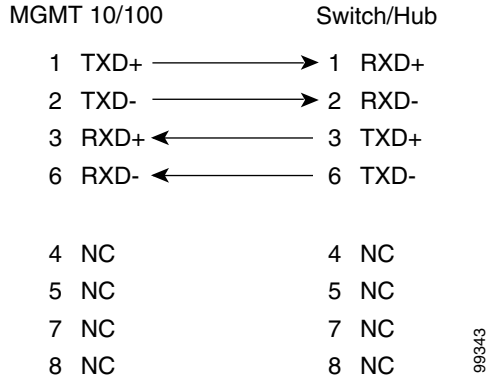
Pin	Signal
1	TD+
2	TD-

Table C-6 10/100/1000BASE-T Management Port Cable Pinout (MDI) (continued)

Pin	Signal
3	RD+
6	RD–
4	Not used
5	Not used
7	Not used
8	Not used

Figure C-2 shows a schematic of the 10/100/1000BASE-T cable required to connect the management port to a switch or hub (not provided with the switch).

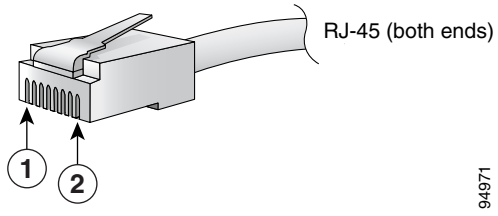
Figure C-2 Twisted-Pair 10/100/1000BASE-T Cable Schematic



MGMT 10/100 Ethernet Port

The MGMT 10/100 Ethernet port is an Ethernet port with an RJ-45 connector. You can use a modular, RJ-45, straight-through UTP cable to connect the management port to an external hub, switch, or router (see Figure C-3).

Figure C-3 RJ-45 Interface Cable Connector



1	Pin 1	**2**	Pin 8

Table C-7 lists the connector pinouts and signal names for a 10/100BASE-T management port (MDI) cable.

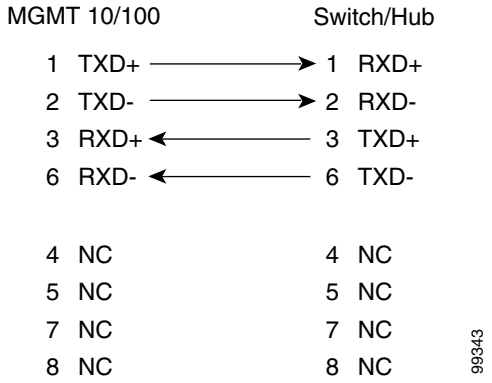
Table C-7 10/100BASE-T Management Port Cable Pinout (MDI)

Pin	Signal
1	TD+
2	TD-
3	RD+
6	RD–
4	Not used
5	Not used
7	Not used
8	Not used

Note The RJ-45 interface only uses pins 1, 2, 3, and 6.

Figure C-4 shows a schematic of the 10/100BASE-T cable required to connect the management port to a switch or hub (not provided with the switch).

Figure C-4 Twisted-Pair 10/100BASE-T Cable Schematic



Supported Power Cords and Plugs

Each power supply has a separate power cord. Standard power cords or jumper power cords are available for connection to a power distribution unit having IEC 60320 C19 outlet receptacles. The jumper power cords, for use in cabinets, are available as an optional alternative to the standard power cords.

Power Cords

The standard power cords have an IEC C19 connector on the end that plugs into the switch. The optional jumper power cords have an IEC C19 connector on the end that plugs into the switch, and an IEC C20 connector on the end that plugs into an IEC C19 outlet receptacle.

Note Only the regular power cords or jumper power cords provided with the switch are supported.

Table C-8 lists the power cords for the Cisco MDS 9200, 9100, and 9020 series of switches and provides their lengths in feet and meters.

Table C-8 Power Cords for the MDS 9200, 9100, and 9020 Series of Switches

	Length	
Description	**Feet**	**Meters**
Power Cord, 125 VAC 13 A NEMA 5-15 Plug, North America	8.2	2.5
Power Cord, 250 VAC 10 A 3112 Plug, Australia	8.2	2.5
Power Cord, 250 VAC 10 A CEE 7/7 Plug, EU	8.2	2.5
Power Cord, 250 VAC 10 A CEI 23-16/VII Plug, Italy	8.2	2.5
Power Cord, 250 VAC 10 A BS1363 Plug (13 A fuse), UK	8.2	2.5
Power Cord, 250 VAC 10 A IRAM 2073 Plug, Argentina	8.2	2.5
Power Cord, 250 VAC 10 A MP232 Plug, Switzerland	8.2	2.5
Power Cord, 250 VAC 10 A SABS 164/1 Plug, South Africa	6	1.83
Power Cord, 250 VAC 10 A SI32 Plug, Israel	14.76	4.5
Power Cord, 250 VAC 15 A CNS10917-2 Plug, Taiwan	13.94	4.25
Cabinet Jumper Power Cord, 250 VAC 13 A, C14-C15 Connectors	4	1.22

Supported Plugs for 845-W AC and 300-W AC Power Supplies

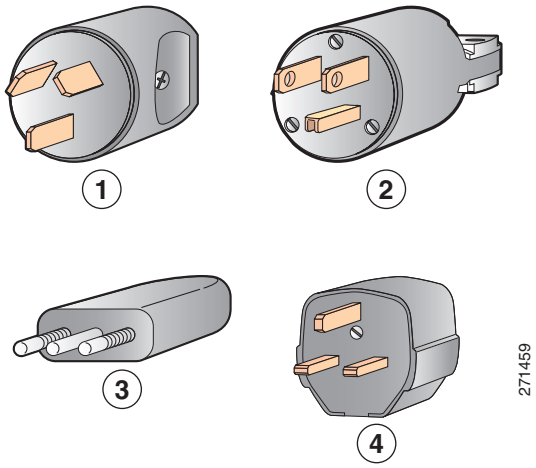
Each power supply has a separate power cord. Standard power cords or jumper power cords are available for connection to a power distribution unit having IEC 60320 C15 outlet receptacles. The jumper power cords, for use in cabinets, are available as an optional alternative to the standard power cords.

Power Cords

The standard power cords have an IEC C15 connector on the end that plugs into the switch. The optional jumper power cords have an IEC C15 connector on the end that plugs into the switch, and an IEC C14 connector on the end that plugs into an IEC C13 outlet receptacle.

Figure C-5 shows the supported plugs for the Cisco MDS 9200 Series power supplies.

Figure C-5 845-W Power Supply Plugs



1	Argentina, IRAM 2073 plug (10 A)	3	Italy 1/3G plug, CEI 23-16 (10 A)
2	North America NEMA 5-15P plug (15 A)	4	United Kingdom BS89/13, BS 1363/A (13 A; replaceable fuse)

Jumper Power Cord

Figure C-6 shows the C14 and C15 connectors on the optional jumper power cord for the Cisco MDS 9200 Series switch. The C15 connector connects into the C14 inlet on the Cisco MDS 9200 Series power supply, while the C14 connector connects into the C13 receptacle of a power distribution unit for a cabinet.

Figure C-6 Connectors on Jumper Power Cord for Cisco MDS 9200 Series