



APPENDIX 1

Cable Pinouts

This appendix describes pinout information for 10/100/1000BaseT ports, console and the RJ-45 to DB-9 ports, and the Management 10/100/1000 Ethernet port, and includes the following sections:

- [10/100/1000BaseT Connectors, page 1-1](#)
- [Console Port \(RJ-45\), page 1-2](#)
- [RJ-45 to DB-9, page 1-4](#)
- [MGMT 10/100/1000 Ethernet Port, page 1-4](#)
- [Gigabit and Fibre Channel Ports, page 1-5](#)

10/100/1000BaseT Connectors

The adaptive security appliance supports 10/100/1000BaseT ports. You must use at least a Category 5 cable for 100/1000baseT operations, but a Category 3 cable can be used for 10BaseT operations.

The 10/100/1000BaseT ports use standard RJ-45 connectors and supports MDI and MDI-X connectors. Ethernet ports normally use MDI connectors and Ethernet ports on a hub normally use an MDI-X connector.

Use an Ethernet straight-through cable to connect an MDI to an MDI-X port. Use a cross-over cable to connect an MDI to an MDI port, or an MDI-X to an MDI-X port.

[Figure 1-1](#) shows the 10BaseT and the 100BaseTX connector (RJ-45).

Figure 1-1 10/100 Port Pinouts

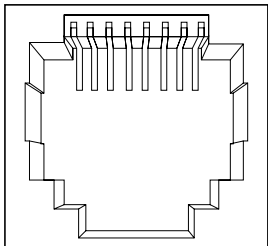
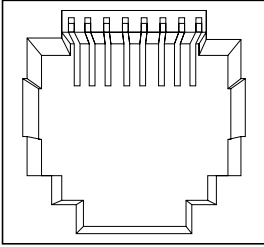
Pin	Label	1 2 3 4 5 6 7 8
1	RD+	
2	RD-	
3	TD+	
4	NC	
5	NC	
6	TD-	
7	NC	
8	NC	

Figure 1-2 shows the 10BaseT, 100BaseTX, and 1000BASE-T connector (RJ-45).

Figure 1-2 10/100/1000 Port Pinouts

Pin	Label	1 2 3 4 5 6 7 8
1	TP0+	
2	TP0-	
3	TP1+	
4	TP2+	
5	TP2-	
6	TP1-	
7	TP3+	
8	TP3-	

Console Port (RJ-45)

Cisco products use the following types of RJ-45 cables:

- Straight-through
- Crossover

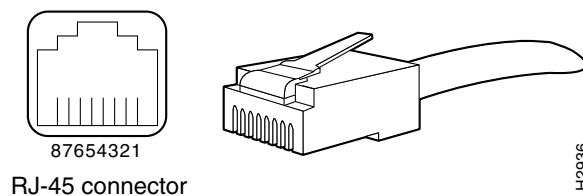


Note

Cisco does not provide these cables; they are widely available from other sources.

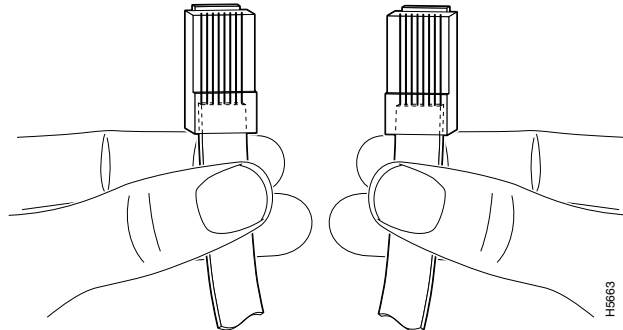
Figure 1-3 shows the RJ 45 cable.

Figure 1-3 RJ-45 Cable



To identify the RJ-45 cable type, hold the two ends of the cable next to each other so that you can see the colored wires inside the ends, as shown in [Figure 1-4](#).

Figure 1-4 *RJ-45 Cable Identification*



Examine the sequence of colored wires to determine the type of RJ-45 cable, as follows:

- Straight-through—The colored wires are in the same sequence at both ends of the cable.
- Crossover—The first (far left) colored wire at one end of the cable is the third colored wire at the other end of the cable.

[Table 1-1](#) lists the rolled (console) cable pinouts for RJ-45.

Table 1-1 *RJ-45 Rolled (Console) Cable Pinouts*

Signal	Pin	Pin	Pin
-	1	8	-
-	2	7	-
-	3	6	-
-	4	5	-
-	5	4	-
-	6	3	-
-	7	2	-
-	8	1	-

RJ-45 to DB-9

Table 1-2 lists the cable pinouts for RJ-45 to DB-9 or DB-25.

Table 1-2 Cable Pinouts for RJ-45 to DB-9 or DB-25

Signal	RJ-45 Pin	DB-9 Pin
RTS	8	8
DTR	7	6
TxD	6	2
GND	5	5
GND	4	5
RxD	3	3
DSR	2	4
CTS	1	7

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.

Table 1-3 lists the cable pinouts for 10/100/1000BASE-T Management Port Cable Pinouts (MDI).

Table 1-3 10/100/1000BASE-T Management Port Cable Pinouts (MDI)

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

Gigabit and Fibre Channel Ports

Table 1-4 lists the types of SFP modules and connectors used in the adaptive security appliance.

Table 1-4 *Types of SFP Modules and Connectors*

Port	Compliance	Connector	Fiber Type
Gigabit Ethernet	1000BASE-SX	SW	MMF
	1000BASE-LX	LW	SMF

Table 1-5 lists the SFP port cabling specifications for the SFP modules and connectors used in the adaptive security appliance.

Table 1-5 *SFP Port Cabling Specifications*

Cisco Product Number	Wavelength (nanometer)	Core Size (micron)	Baud Rate	Cable Distance
GLC-SX-MM=	850	62.5	1.0625	300 m
		50.0	1.0625	500 m
GLC-LH-SM=	1300	9.0	1.0625	10 km

