APPENDIX A

Technical Specifications

This appendix describes the technical specifications and connector pinouts of the switch.

Technical Specifications

Table A-1 provides the technical specifications of both switches.

Table A-1 Technical Specifications

Specification	EtherSwitch 1220	EtherSwitch 1420
Operating temperature	32–104˚F (0–40˚C)	32–104˚F (0–40˚C)
Operating humidity	10–90% (noncondensing)	10–90% (noncondensing)
Operating altitude	Up to 10,000 ft (3050 m)	Up to 10,000 ft (3050 m)
Power consumption	65W	110W
AC input voltage	100–240V, 50–60 Hz	100–240V, 50–60 Hz
DC input voltage	5V@8A 12V@1A	5V@14A 12V@1A
Dimensions		
Weight	10.5 lb (4.78 kg)	13 lb (5.90 kg)
Width	17.5 in. (44.45 cm)	17.5 in. (44.45 cm)
Depth	15.3 in. (38.86 cm)	12.4 in. (31.50 cm)
Height	1.73 in. (4.39 cm)	3.34 in. (8.76 cm)

Connector Pinouts

This section describes the following connectors used by the switch:

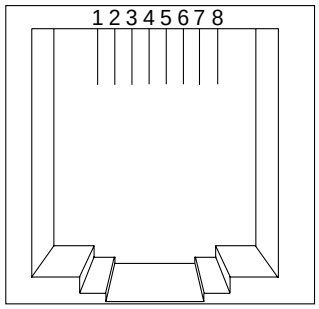
- 10BaseT RJ-45
- 10Base-5 AUI
- Serial RS-232

10BaseT Connector Pinout

Ports 1 through 25 use standard RJ-45 connectors and 10BaseT pinouts with internal crossover, as indicated by an X. These 10BaseT ports have their transmit (TD) and receive (RD) signals internally crossed, for attachment of an adapter using a straight-through cable. Figure A-1 shows the connector pinout and the pin arrangement.

Figure A-1 10BaseT Pinout and Connector

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



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100BaseTX

100BaseTX ports use an RJ-45 connector and pinout equivalent to the one shown in Figure A-1.

AUI Connector Pinout

The AUI connector is a 15-pin female receptacle, as shown in Figure A-2; the pinout is shown in Table A-2.

Figure A-2 AUI Connector

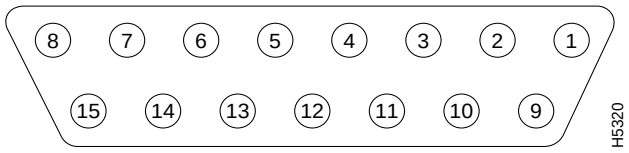


Table A-2 AUI Connector Pinout

Pin	Label	Description
1	GND	Ground
2	CI+	Positive AUI differential collision-data input
3	TX+	Positive AUI differential transmit-data input
4	GND	Ground
5	RX+	Positive AUI differential receive-data output
6	GND	Ground
7	NC	
8	GND	Ground
9	CI-	Negative AUI differential collision data
10	TX-	Negative AUI differential transmit-data input
11	GND	Ground
12	RX-	Negative AUI differential receive-data output
13	+12V	12V supply for external MAU
14	GND	Ground
15	NC	

Serial Connector Pinout

The serial connector is a male 9-pin D-Sub connector, as shown in Figure A-3. The pinout is shown in Table A-3.

Figure A-3 Serial Connector

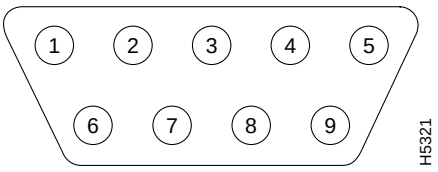


Table A-3 Serial Connector Pinout

Pin	Label
1	DCD
2	RD
3	TD
4	DTR
5	GND
6	DSR
7	RTS
8	CTS
9	RI

The shell is connected to the chassis ground. Use a standard modem cable to connect to a modem. Use a null-modem cable to connect to a terminal.

Either piece of equipment can come with either 9- or 25-pin connectors, as shown in Figure A-4 and Figure A-5.

Figure A-4 Modem Cable Schematic with 9- and 25-Pin Devices

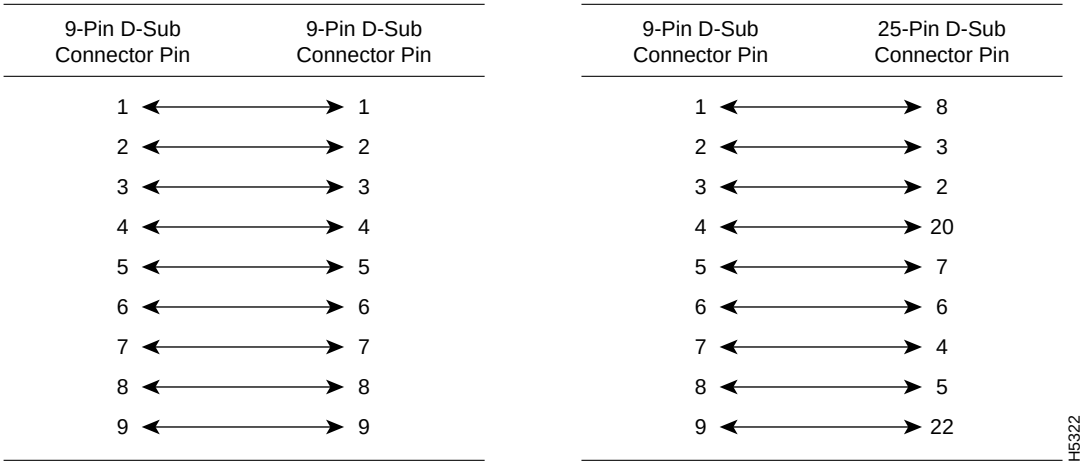
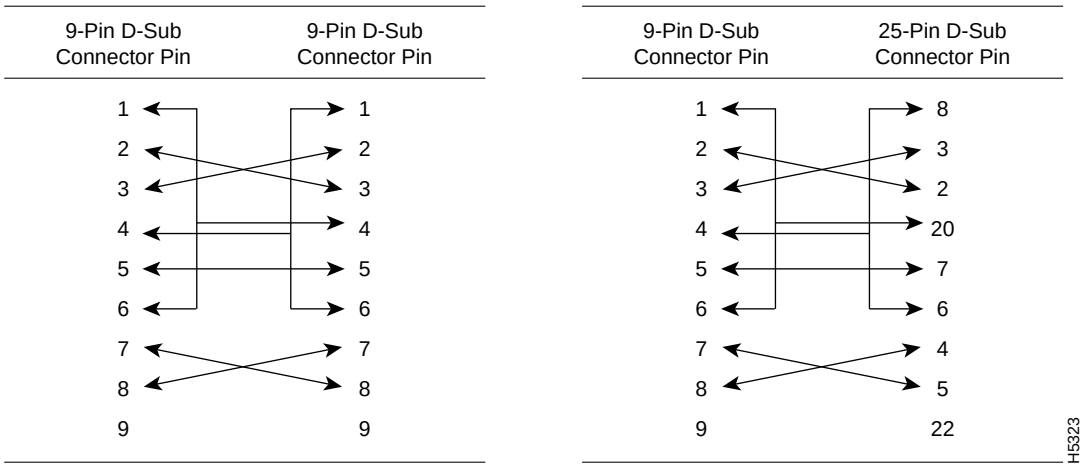


Figure A-5 Null-Modem Cable Schematic with 9- and 25-Pin Devices



Straight-Through and Crossover Cable Pinouts

The schematics of crossover and straight-through cables are shown in Figure A-6 and Figure A-7, respectively.

Figure A-6 Crossover Cable Schematic

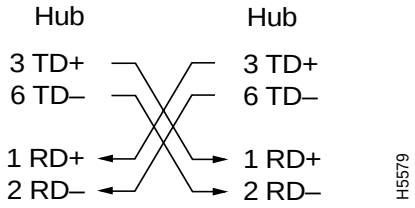


Figure A-7 Straight-Through Cable Schematic