

Cable Specifications

This appendix provides the following pinout information:

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Console and Auxiliary Port Signals and Pinouts

The console port is configured as data communications equipment (DCE), and the auxiliary port is configured as data terminal equipment (DTE). The console and auxiliary ports both use RJ-45 connectors. RJ-45-to-DB-25 adapters are available for connection to modems and other external communications equipment. Both ports are configured as asynchronous serial ports.

Following are the pinouts for the console port (see Table C-1), the auxiliary port (see Table C-2), and the adapter (see Table C-16 and Table C-17).

Table C-1 Console Port Pinouts (RJ-45)

Console Port (DTE)		
Pin ¹	Signal	Input/Output
1	–	–
2	DTR	Output
3	TxD	Output
4	GND	–
5	GND	–
6	RxD	Input
7	DSR	Input
8	–	–

1. Any pin not referenced is not connected.

Table C-2 Auxiliary Port Pinouts (RJ-45)

Auxiliary Port (DTE)		
Pin ¹	Signal	Input/Output
1	RTS	Output
2	DTR	Output
3	TXD	Output

Auxiliary Port (DTE)		
Pin ¹	Signal	Input/Output
4	GND	–
5	GND	–
6	RXD	Input
7	DSR	Input
8	CTS	Input

1. Any pin not referenced is not connected.

Serial Cable Assemblies and Pinouts

The following illustrations and tables provide assembly drawings and pinouts for the EIA-530 DCE, and EIA/TIA-232, EIA/TIA-449, V.35, and X.21 DTE and DCE cables.

EIA-530

Figure C-1 shows the EIA-530 serial cable assembly, and Table C-3 lists the pinouts. Arrows indicate signal direction: —> indicates DTE to DCE, and <— indicates DCE to DTE.

Serial Cable Assemblies and Pinouts

Figure C-1 EIA-530 Serial Cable Assembly

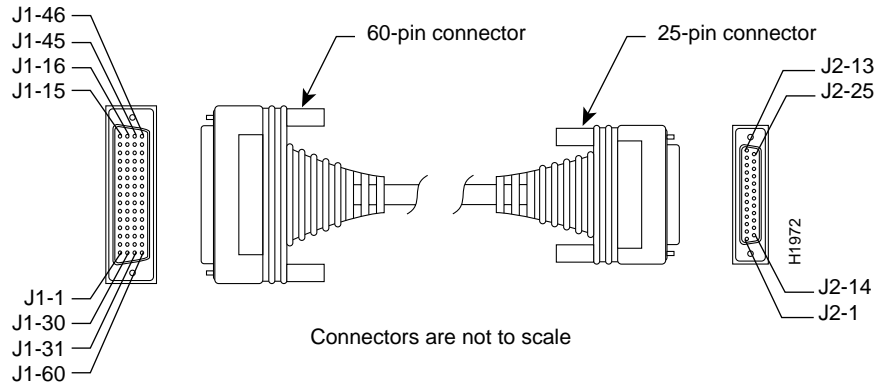


Table C-3 EIA-530 DTE Cable Pinout (DB-60 to DB-25)

60 Pin ¹	Signal	25 Pin	Signal	Direction	
				DTE	DCE ²
J1-11	TxD/RxD+	J2-2	BA(A), TxD+	—>	
J1-12	TxD/RxD-	J2-14	BA(B), TxD-	—>	
J1-28	RxD/TxD+	J2-3	BB(A), RxD+	<—	
J1-27	RxD/TxD-	J2-16	BB(B), RxD-	<—	
J1-9	RTS/CTS+	J2-4	CA(A), RTS+	—>	
J1-10	RTS/CTS-	J2-19	CA(B), RTS-	—>	
J1-1	CTS/RTS+	J2-5	CB(A), CTS+	<—	
J1-2	CTS/RTS-	J2-13	CB(B), CTS-	<—	
J1-3	DSR/DTR+	J2-6	CC(A), DSR+	<—	
J1-4	DSR/DTR-	J2-22	CC(B), DSR-	<—	
J1-46	Shield_GND	J2-1	Shield		Shorted
J1-47	MODE_2	—	—		
J1-48	GND	—	—		Shorted
J1-49	MODE_1	—	—		

60 Pin ¹	Signal	25 Pin	Signal	Direction	
				DTE	DCE ²
J1-5	DCD/DCD+	J2-8	CF(A), DCD+	<—	
J1-6	DCD/DCD–	J2-10	CF(B), DCD–	<—	
J1-24	TxC/RxC+	J2-15	DB(A), TxC+	<—	
J1-23	TxC/RxC–	J2-12	DB(B), TxC–	<—	
J1-26	RxC/TxCE+	J2-17	DD(A), RxC+	<—	
J1-25	RxC/TxCE–	J2-9	DD(B), RxC–	<—	
J1-44	LL/DCD	J2-18	LL	—>	
J1-45	Circuit_GN D	J2-7	Circuit_GND	–	
J1-7	DTR/DSR+	J2-20	CD(A), DTR+	—>	
J1-8	DTR/DSR–	J2-23	CD(B), DTR–	—>	
J1-13	TxCE/TxC+	J2-24	DA(A),	—>	
J1-14	TxCE/TxC–	J2-11	TxCE+ DA(B), TxCE–	—>	

1. Any pin not referenced is not connected.

2. The EIA-530 interface cannot be operated in DCE mode. A DCE cable is not available for the EIA-530 interface.

EIA/TIA-232

Figure C-2 shows the EIA/TIA-232 cable assembly; Table C-4 lists the DTE pinout; and Table C-5 lists the DCE pinout. Arrows indicate signal direction: —> indicates DTE to DCE, and <— indicates DCE to DTE.

Serial Cable Assemblies and Pinouts

Figure C-2 EIA/TIA-232 Cable Assembly

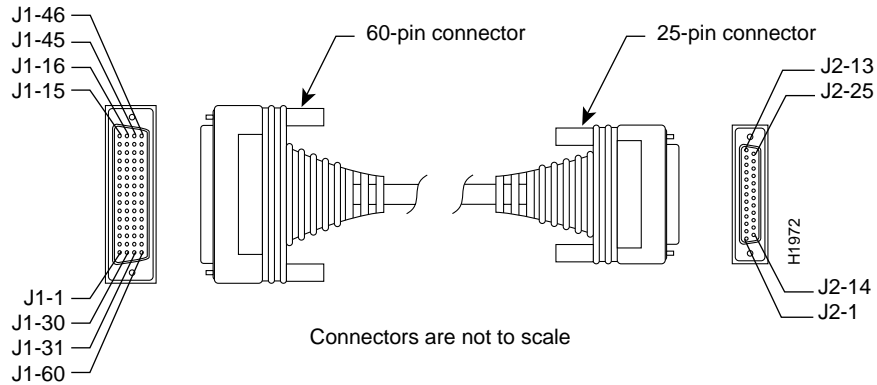


Table C-4 EIA/TIA-232 DTE Cable Pinout (DB-60 to DB-25)

60 Pin ¹	Signal	Description	Direction	25 Pin	Signal
J1-50	MODE_0	Shorting group	—	—	—
J1-51	GND				
J1-52	MODE_DCE				
J1-46	Shield GND	Single	—	J2-1	Shield GND
J1-41	TxD/RxD	Twisted pair no. 5	—>	J2-2	TxD
Shield	—		—	Shield	—
J1-36	RxD/TxD	Twisted pair no. 9	<—	J2-3	RxD
Shield	—		—	Shield	—
J1-42	RTS/CTS	Twisted pair no. 4	—>	J2-4	RTS
Shield	—		—	Shield	—
J1-35	CTS/RTS	Twisted pair no. 10	<—	J2-5	CTS
Shield	—		—	Shield	—
J1-34	DSR/DTR	Twisted pair no. 11	<—	J2-6	DSR
Shield	—		—	Shield	—
J1-45	Circuit GND	Twisted pair no. 1	—	J2-7	Circuit GND
Shield	—		—	Shield	—

Serial Cable Assemblies and Pinouts

60 Pin ¹	Signal	Description	Direction	25 Pin	Signal
J1-33 Shield	DCD/LL –	Twisted pair no. 12	<— –	J2-8 Shield	DCD –
J1-37 Shield	TxC/NIL –	Twisted pair no. 8	<— –	J2-15 Shield	TxC –
J1-38 Shield	RxC/TxCE –	Twisted pair no. 7	<— –	J2-17 Shield	RxC –
J1-44 Shield	LL/DCD –	Twisted pair no. 2	—> –	J2-18 Shield	LTST –
J1-43 Shield	DTR/DSR –	Twisted pair no. 3	—> –	J2-20 Shield	DTR –
J1-39 Shield	TxCE/TxC –	Twisted pair no. 6	—> –	J2-24 Shield	TxCE –

1. Any pin not referenced is not connected.

Table C-5 EIA/TIA-232 DCE Cable Pinout (DB-60 to DB-25)

60 Pin ¹	Signal	Description	Direction	25 Pin	Signal
J1-50 J1-51	MODE_0 GND	Shorting group	–	–	–
J1-46	Shield GND	Single	–	J2-1	Shield GND
J1-36 Shield	RxD/TxD –	Twisted pair no. 9	<— –	J2-2 Shield	TxD –
J1-41 Shield	TxD/RxD –	Twisted pair no. 5	—> –	J2-3 Shield	RxD –
J1-35 Shield	CTS/RTS –	Twisted pair no. 10	<— –	J2-4 Shield	RTS –
J1-42 Shield	RTS/CTS –	Twisted pair no. 4	—> –	J2-5 Shield	CTS –
J1-43 Shield	DTR/DSR –	Twisted pair no. 3	—> –	J2-6 Shield	DSR –

Serial Cable Assemblies and Pinouts

60 Pin ¹	Signal	Description	Direction	25 Pin	Signal
J1-45 Shield	Circuit GND –	Twisted pair no. 1	– –	J2-7 Shield	Circuit GND
J1-44 Shield	LL/DCD –	Twisted pair no. 2	—> –	J2-8 Shield	DCD –
J1-39 Shield	TxCE/TxC –	Twisted pair no. 7	—> –	J2-15 Shield	TxC –
J1-40 Shield	NIL/RxC –	Twisted pair no. 6	—> –	J2-17 Shield	RxC –
J1-33 Shield	DCD/LL –	Twisted pair no. 12	<— –	J2-18 Shield	LTST –
J1-34 Shield	DSR/DTR –	Twisted pair no. 11	<— –	J2-20 Shield	DTR –
J1-38 Shield	RxC/TxCE –	Twisted pair no. 8	<— –	J2-24 Shield	TxCE –

1. Any pin not referenced is not connected.

EIA/TIA-449

Figure C-3 shows the EIA/TIA-449 cable assembly; Table C-6 lists the DTE pinout; Table C-7 lists the DCE pinout. Arrows indicate signal direction: —> indicates DTE to DCE, and <— indicates DCE to DTE.

Figure C-3 EIA/TIA-449 Cable Assembly

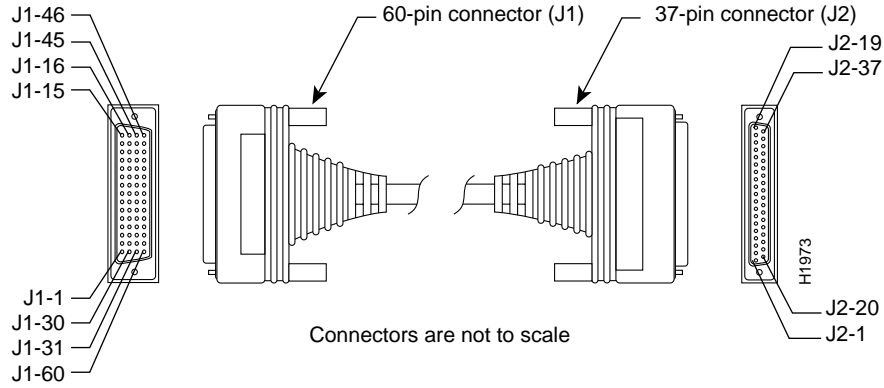


Table C-6 EIA/TIA-449 DTE Cable Pinout (DB-60 to DB-37)

60 Pin ¹	Signal	Description	Direction	37 Pin	Signal
J1-49 J1-48	MODE_1 GND	Shorting group	—	—	—
J1-51 J1-52	GND MODE_DCE	Shorting group	—	—	—
J1-46	Shield_GND	Single	—	J2-1	Shield GND
J1-11 J1-12	TxD/RxD+ TxD/RxD-	Twisted pair no. 6	—> —>	J2-4 J2-22	SD+ SD-
J1-24 J1-23	TxC/RxC+ TxC/RxC-	Twisted pair no. 9	<— <—	J2-5 J2-23	ST+ ST-
J1-28 J1-27	RxD/TxD+ RxD/TxD-	Twisted pair no. 11	<— <—	J2-6 J2-24	RD+ RD-
J1-9 J1-10	RTS/CTS+ RTS/CTS-	Twisted pair no. 5	—> —>	J2-7 J2-25	RS+ RS-
J1-26 J1-25	RxC/TxCE+ RxC/TxCE-	Twisted pair no. 10	<— <—	J2-8 J2-26	RT+ RT-

Serial Cable Assemblies and Pinouts

60 Pin ¹	Signal	Description	Direction	37 Pin	Signal
J1-1	CTS/RTS+	Twisted pair no. 1	<—	J2-9	CS+
J1-2	CTS/RTS-		<—	J2-27	CS-
J1-44	LL/DCD	Twisted pair no. 12	—>	J2-10	LL
J1-45	Circuit_GND		-	J2-37	SC
J1-3	DSR/DTR+	Twisted pair no. 2	<—	J2-11	DM+
J1-4	DSR/DTR-		<—	J2-29	DM-
J1-7	DTR/DSR+	Twisted pair no. 4	—>	J2-12	TR+
J1-8	DTR/DSR-		—>	J2-30	TR-
J1-5	DCD/DCD+	Twisted pair no. 3	<—	J2-13	RR+
J1-6	DCD/DCD-		<—	J2-31	RR-
J1-13	TxCE/TxC+	Twisted pair no. 7	—>	J2-17	TT+
J1-14	TxCE/TxC-		—>	J2-35	TT-
J1-15	Circuit_GND	Twisted pair no. 9	-	J2-19	SG
J1-16	Circuit_GND		-	J2-20	RC

1. Any pin not referenced is not connected.

Table C-7 EIA/TIA-449 DCE Cable Pinout (DB-60 to DB-37)

60 Pin ¹	Signal	Description	Direction	37 Pin	Signal
J1-49	MODE_1	Shorting group	-	-	-
J1-48	GND				
J1-46	Shield_GND	Single	-	J2-1	Shield GND
J1-28	RxD/TxD+	Twisted pair no. 11	<—	J2-4	SD+
J1-27	RxD/TxD-		<—	J2-22	SD-
J1-13	TxCE/TxC+	Twisted pair no. 7	—>	J2-5	ST+
J1-14	TxCE/TxC-		—>	J2-23	ST-
J1-11	TxD/RxD+	Twisted pair no. 6	—>	J2-6	RD+
J1-12	TxD/RxD-		—>	J2-24	RD-
J1-1	CTS/RTS+	Twisted pair no. 1	<—	J2-7	RS+
J1-2	CTS/RTS-		<—	J2-25	RS-

Serial Cable Assemblies and Pinouts

60 Pin ¹	Signal	Description	Direction	37 Pin	Signal
J1-24	TxC/RxC+	Twisted pair no. 9	—>	J2-8	RT+
J1-23	TxC/RxC-		—>	J2-26	RT-
J1-9	RTS/CTS+	Twisted pair no. 5	—>	J2-9	CS+
J1-10	RTS/CTS-		—>	J2-27	CS-
J1-29	NIL/LL	Twisted pair no. 12	—>	J2-10	LL
J1-30	Circuit_GND		-	J2-37	SC
J1-7	DTR/DSR+	Twisted pair no. 4	—>	J2-11	DM+
J1-8	DTR/DSR-		—>	J2-29	DM-
J1-3	DSR/DTR+	Twisted pair no. 2	<—	J2-12	TR+
J1-4	DSR/DTR-		<—	J2-30	TR-
J1-5	DCD/DCD+	Twisted pair no. 3	—>	J2-13	RR+
J1-6	DCD/DCD-		—>	J2-31	RR-
J1-26	RxC/TxCE+	Twisted pair no. 10	<—	J2-17	TT+
J1-25	RxC/TxCE-		<—	J2-35	TT-
J1-15	Circuit_GND	Twisted pair no. 8	-	J2-19	SG
J1-16	Circuit_GND		-	J2-20	RC

1. Any pin not referenced is not connected.

V.35

Figure C-4 shows the V.35 cable assembly; Table C-8 lists the DTE pinout; Table C-9 lists the DCE pinout. Arrows indicate signal direction: —> indicates DTE to DCE, and <— indicates DCE to DTE.

Figure C-4 V.35 Cable Assembly

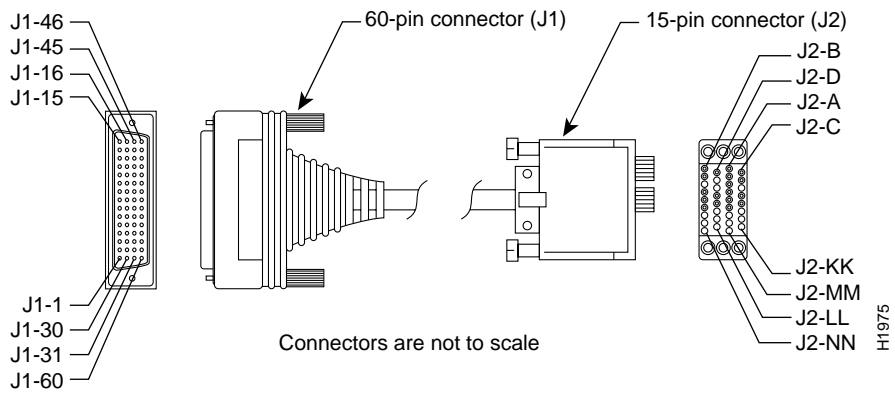


Table C-8 V.35 DTE Cable Pinout (DB-60 to 34-Pin)

60 Pin ¹	Signal	Description	Direction	34 Pin	Signal
J1-49	MODE_1	Shorting group	—	—	—
J1-48	GND				
J1-50	MODE_0	Shorting group	—	—	—
J1-51	GND				
J1-52	MODE_DCE				
J1-53	TxC/NIL	Shorting group	—	—	—
J1-54	RxC_TxCE				
J1-55	RxD/TxD				
J1-56	GND				
J1-46	Shield_GND	Single	—	J2-A	Frame GND

Serial Cable Assemblies and Pinouts

60 Pin ¹	Signal	Description	Direction	34 Pin	Signal
J1-45 Shield	Circuit_GND -	Twisted pair no. 12	- -	J2-B Shield	Circuit GND -
J1-42 Shield	RTS/CTS -	Twisted pair no. 9	—> -	J2-C Shield	RTS -
J1-35 Shield	CTS/RTS -	Twisted pair no. 8	<— -	J2-D Shield	CTS -
J1-34 Shield	DSR/DTR -	Twisted pair no. 7	<— -	J2-E Shield	DSR -
J1-33 Shield	DCD/LL -	Twisted pair no. 6	<— -	J2-F Shield	RLSD -
J1-43 Shield	DTR/DSR -	Twisted pair no. 10	—> -	J2-H Shield	DTR -
J1-44 Shield	LL/DCD -	Twisted pair no. 11	—> -	J2-K Shield	LT -
J1-18 J1-17	TxD/RxD+ TxD/RxD-	Twisted pair no. 1	—> —>	J2-P J2-S	SD+ SD-
J1-28 J1-27	RxD/TxD+ RxD/TxD-	Twisted pair no. 5	<— <—	J2-R J2-T	RD+ RD-
J1-20 J1-19	TxCE/TxC+ TxCE/TxC-	Twisted pair no. 2	—> —>	J2-U J2-W	SCTE+ SCTE-
J1-26 J1-25	RxC/TxCE+ RxC/TxCE-	Twisted pair no. 4	<— <—	J2-V J2-X	SCR+ SCR-
J1-24 J1-23	TxC/RxC+ TxC/RxC-	Twisted pair no. 3	<— <—	J2-Y J2-AA	SCT+ SCT-

1. Any pin not referenced is not connected.

Serial Cable Assemblies and Pinouts

Table C-9 V.35 DCE Cable Pinout (DB-60 to 34-Pin)

60 Pin ¹	Signal	Description	Direction	34 Pin	Signal
J1-49 J1-48	MODE_1 GND	Shorting group	–	–	–
J1-50 J1-51	MODE_0 GND	Shorting group	–	–	–
J1-53 J1-54 J1-55 J1-56	TxC/NIL RxC_TxCE RxD/TxD GND	Shorting group	–	–	–
J1-46	Shield_GND	Single	–	J2-A	Frame GND
J1-45 Shield	Circuit_GND –	Twisted pair no. 12	– –	J2-B Shield	Circuit GND –
J1-35 Shield	CTS/RTS –	Twisted pair no. 8	<– –	J2-C Shield	RTS –
J1-42 Shield	RTS/CTS –	Twisted pair no. 9	–> –	J2-D Shield	CTS –
J1-43 Shield	DTR/DSR –	Twisted pair no. 10	–> –	J2-E Shield	DSR –
J1-44 Shield	LL/DCD –	Twisted pair no. 11	–> –	J2-F Shield	RLSD –
J1-34 Shield	DSR/DTR –	Twisted pair no. 7	<– –	J2-H Shield	DTR –
J1-33 Shield	DCD/LL –	Twisted pair no. 6	<– –	J2-K Shield	LT –
J1-28 J1-27	RxD/TxD+ RxD/TxD–	Twisted pair no. 5	<– <–	J2-P J2-S	SD+ SD–
J1-18 J1-17	TxD/RxD+ TxD/RxD–	Twisted pair no. 1	–> –>	J2-R J2-T	RD+ RD–
J1-26 J1-25	RxC/TxCE+ RxC/TxCE–	Twisted pair no. 4	<– <–	J2-U J2-W	SCTE+ SCTE–
J1-22 J1-21	NIL/RxC+ NIL/RxC–	Twisted pair no. 3	–> –>	J2-V J2-X	SCR+ SCR–

60 Pin ¹	Signal	Description	Direction	34 Pin	Signal
J1-20	TxCE/TxC+	Twisted pair no. 2	—>	J2-Y	SCT+
J1-19	TxCE/TxC-		—>	J2-AA	SCT-

1. Any pin not referenced is not connected.

X.21

Figure C-5 shows the X.21 cable assembly; Table C-10 lists the DTE pinout; Table C-11 lists the DCE pinout. Arrows indicate signal direction: —> indicates DTE to DCE, and <— indicates DCE to DTE.

Figure C-5 X.21 Cable Assembly

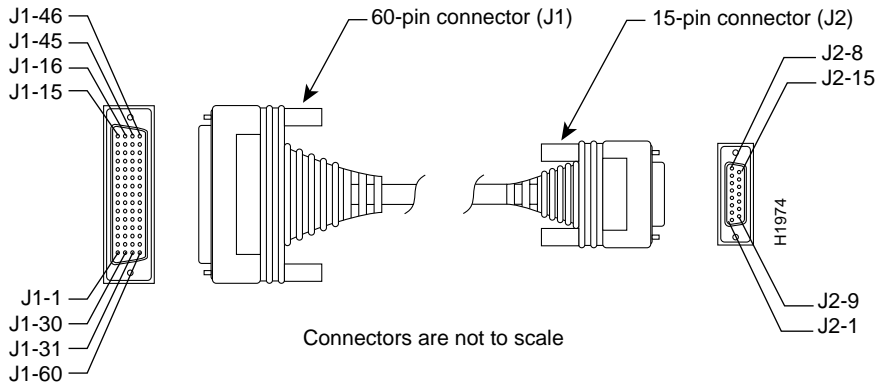


Table C-10 X.21 DTE Cable Pinout (DB-60 to DB-15)

60 Pin ¹	Signal	Description	Direction	15 Pin	Signal
J1-48	GND	Shorting group	—	—	—
J1-47	MODE_2				
J1-51	GND	Shorting group	—	—	—
J1-52	MODE_DCE				

Serial Cable Assemblies and Pinouts

60 Pin ¹	Signal	Description	Direction	15 Pin	Signal
J1-46	Shield_GND	Single	–	J2-1	Shield GND
J1-11	TxD/RxD+	Twisted pair no. 3	—>	J2-2	Transmit+
J1-12	TxD/RxD–		—>	J2-9	Transmit–
J1-9	RTS/CTS+	Twisted pair no. 2	—>	J2-3	Control+
J1-10	RTS/CTS–		—>	J2-10	Control–
J1-28	RxD/TxD+	Twisted pair no. 6	<–	J2-4	Receive+
J1-27	RxD/TxD–		<–	J2-11	Receive–
J1-1	CTS/RTS+	Twisted pair no. 1	<–	J2-5	Indication+
J1-2	CTS/RTS–		<–	J2-12	Indication–
J1-26	RxC/TxCE+	Twisted pair no. 5	<–	J2-6	Timing+
J1-25	RxC/TxCE–		<–	J2-13	Timing–
J1-15	Control_GND	Twisted pair no. 4	–	J2-8	Control GND
Shield	–		–	Shield	–

1. Any pin not referenced is not connected.

Table C-11 X.21 DCE Cable Pinout (DB-60 to DB-15)

60 Pin ¹	Signal	Description	Direction	15 Pin	Signal
J1-48	GND	Shorting group	–	–	–
J1-47	MODE_2		–	–	–
J1-46	Shield_GND	Single	–	J2-1	Shield GND
J1-28	RxD/TxD+	Twisted pair no. 6	<–	J2-2	Transmit+
J1-27	RxD/TxD–		<–	J2-9	Transmit–
J1-1	CTS/RTS+	Twisted pair no. 1	<–	J2-3	Control+
J1-2	CTS/RTS–		<–	J2-10	Control–
J1-11	TxD/RxD+	Twisted pair no. 3	—>	J2-4	Receive+
J1-12	TxD/RxD–		—>	J2-11	Receive–
J1-9	RTS/CTS+	Twisted pair no. 2	—>	J2-5	Indication+
J1-10	RTS/CTS–		—>	J2-12	Indication–
J1-24	TxC/RxC+	Twisted pair no. 4	—>	J2-6	Timing+
J1-23	TxC/RxC–		—>	J2-13	Timing–

60 Pin ¹	Signal	Description	Direction	15 Pin	Signal
J1-15	Control_GND	Twisted pair no. 5	–	J2-8	Control GND
Shield	–	–	–	Shield	–

1. Any pin not referenced is not connected.

Ethernet Cable Assembly and Pinout

Figure C-6 shows an Ethernet (AUI) cable assembly, and Table C-12 lists an AUI cable pinout.

Figure C-6 Ethernet (AUI) Cable Assembly

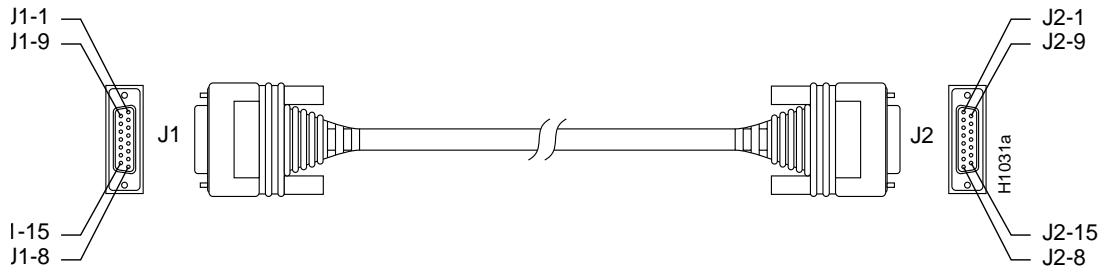


Table C-12 Ethernet (AUI) Cable Pinout (DB-15)

Pin ¹	Ethernet Circuit	Signal
3	DO-A	Data Out Circuit A
10	DO-B	Data Out Circuit B
11	DO-S	Data Out Circuit Shield
5	DI-A	Data In Circuit A
12	DI-B	Data In Circuit B
4	DI-S	Data In Circuit Shield

Token Ring Pinout

Pin ¹	Ethernet Circuit	Signal
2	CI-A	Control In Circuit A
9	CI-B	Control In Circuit B
1	CI-S	Control In Circuit Shield
6	VC	Voltage Common
13	VP	Voltage Plus
14	VS	Voltage Shield (L25 and M25)
Shell	PG	Protective Ground

1. Any pin not referenced is not connected.

Token Ring Pinout

Table C-13 lists the pinout for the Token Ring interface port.

Table C-13 **Token Ring Port Pinout (DB-9)**

9 Pin ¹	Signal
1	Receive
3	+5V ²
5	Transmit
6	Receive
9	Transmit

1. Pins 2, 4, 7, and 8 are ground.
2. 600 mA maximum.

Asynchronous Serial Ports

Figure C-7 shows the RJ-45 breakout cable with pinouts for the 68-pin SCSI port and the RJ-45 serial port. Table C-14 contains the pinout for the RJ-45 end, and Table C-15 contains the pinout for the 68-pin SCSI type connector.

Figure C-7 Asynchronous Serial Interface Breakout Cable Assembly

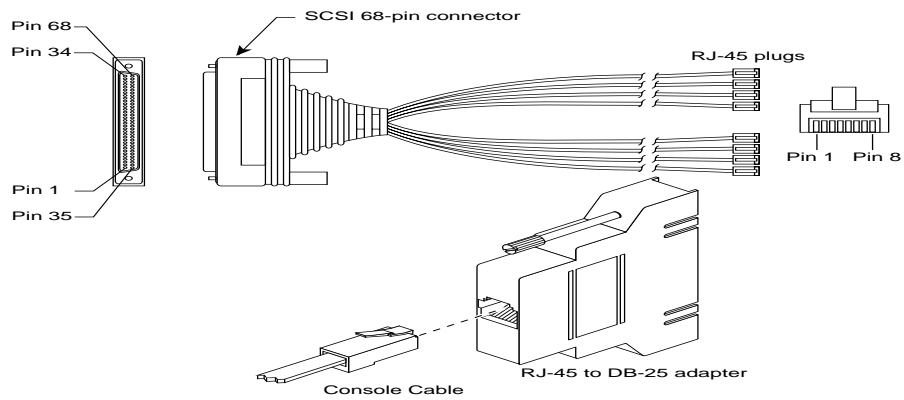


Table C-14 Asynchronous Breakout Cable Pinout (8-Pin RJ-45)

8-Pin RJ-45	Signal	Direction
1	CTS	←
2	DSR/DCD	←
3	RXD	←
4	RXD/GND	—
5	TXD/GND	—
6	TXD	→
7	DTR	→
8	RTS	→

Asynchronous Serial Ports

Note The Asynchronous breakout cable is equivalent to a console or auxiliary port with a roll-over RJ-45 cable attached. See Table C-17 for asynchronous device connection options.

Table C-15 Asynchronous-Line Cable Pinout (68-Pin SCSI)

RJ-45 Plug	Pin	Signal	68-Pin SCSI (J1)
1	1	CTS	39
	2	DSR	5
	3	RXD	38
	4	RXD GND	4
	5	TXD GND	37
	6	TXD	3
	7	DTR	36
	8	RTS	2
2	1	CTS	43
	2	DSR	9
	3	RXD	42
	4	RXD GND	8
	5	TXD GND	41
	6	TXD	7
	7	DTR	40
	8	RTS	6

RJ-45 Plug	Pin	Signal	68-Pin SCSI (J1)
3	1	CTS	47
	2	DSR	13
	3	RXD	46
	4	RXD GND	12
	5	TXD GND	45
	6	TXD	11
	7	DTR	44
	8	RTS	10
4	1	CTS	51
	2	DSR	17
	3	RXD	50
	4	RXD GND	16
	5	TXD GND	49
	6	TXD	15
	7	DTR	48
	8	RTS	14
5	1	CTS	55
	2	DSR	21
	3	RXD	54
	4	RXD GND	20
	5	TXD GND	53
	6	TXD	19
	7	DTR	52
	8	RTS	18

Asynchronous Serial Ports

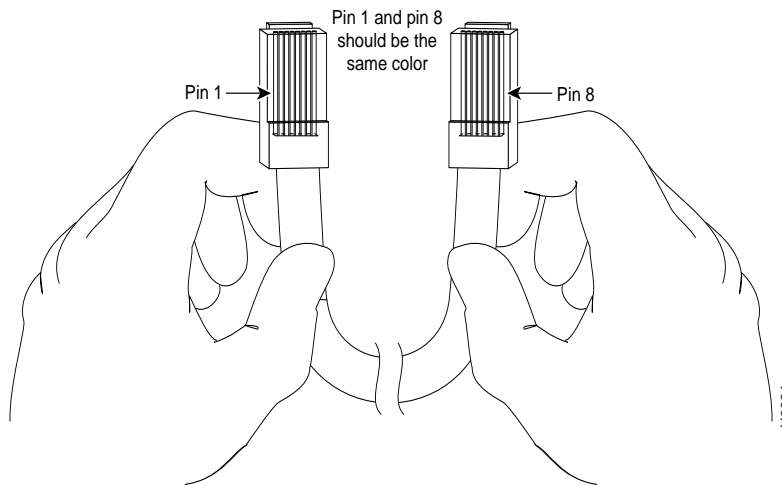
RJ-45 Plug	Pin	Signal	68-Pin SCSI (J1)
6	1	CTS	59
	2	DSR	25
	3	RXD	58
	4	RXD GND	24
	5	TXD GND	57
	6	TXD	23
	7	DTR	56
	8	RTS	22
7	1	CTS	53
	2	DSR	29
	3	RXD	62
	4	RXD GND	28
	5	TXD GND	61
	6	TXD	27
	7	DTR	60
	8	RTS	26
8	1	CTS	67
	2	DSR	33
	3	RXD	66
	4	RXD GND	32
	5	TXD GND	65
	6	TXD	31
	7	DTR	64
	8	RTS	30

RJ-45 Adapter Pinouts

Refer to Table C-16 for a list of the pins used on the RJ-45-to-DB-25 adapters, used with an RJ-45 cable, to connect terminals and modems to the Cisco 2500 series access server. The cable you use may be a roll-over cable or a straight cable.

A roll-over cable can be detected by comparing the two modular ends of the cable. Holding the cables in your hand, 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 pin on the outside of the right plug. If your cable was purchased from Cisco, pin 1 will be white on one connector, and pin 8 will be white on the other (a roll-over cable reverses pins 1 and 8, 2 and 7, 3 and 6, and 4 and 5). (See Figure C-8.)

Figure C-8 Identifying a Roll-Over Cable



The Cisco 2500 series access server ships with a rolled cable. Connection to a terminal or a modem will require an RJ-45-to-DB-25 adapter, and possibly a DB-25-to-DB9 adapter. Refer to Table C-17 for the cable and adapter configurations that can be used to connect terminals and modems to the Cisco 2500 series access server.

RJ-45 Adapter Pinouts

Table C-16 Pinouts for the RJ-45-to-DB-25 Adapters

Adapter	DTE M/F Pins ¹	DCE M/F Pins	MMOD Pins ²
RJ-45 Pins	DB-25 Pins		
1	4	5	5
2	20	6	8
3	2	3	3
4	7	7	7
5	7	7	7
6	3	2	2
7	6	20	20
8	5	4	4

1. The female data terminal equipment (FDTE) adapter that is available from Cisco is labeled "Terminal."

2. The MMOD adapter that is available from Cisco is labeled "Modem."

Table C-17 Asynchronous Device Cabling Options

Access Server Port	RJ-45 Cable Type	DB-25 Adapter	End Device
Console or auxiliary	Rolled	FDTE ¹	Terminal
Console or auxiliary	Straight	FDCE	Terminal
Auxiliary or console	Rolled	MMOD ²	Modem ³

1. The FDTE RJ-45-to-DB-25 adapter is labeled "Terminal."

2. The MMOD RJ-45-to-DB-25 adapter is labeled "Modem."

3. The asynchronous breakout cable (see Table C-14 and Table C-15) is functionally equivalent to a roll-over cable.