

Cable Specifications

This appendix provides the following pinout information:

- Console and Auxiliary Port Signals and Pinouts
- Ethernet Cable Assembly and Pinouts
- Synchronous Serial Cable Assemblies and Pinouts

Note All pins not listed in the tables in this appendix are not connected.

To order cables, see the section “Obtaining Service and Support” in the “Overview of the Router” chapter.

Console and Auxiliary Port Signals and Pinouts

Your router comes with a console and auxiliary cable kit, which contains the cable and adapters you need to connect a console terminal (an ASCII terminal or PC running terminal emulation software) or modem to your access server. The console and auxiliary cable kit includes the following items:

- RJ-45-to-RJ-45 roll-over cable. (See the next section, “Identifying a Roll-Over Cable,” for more information.)
- RJ-45-to-DB-9 female DTE adapter (labeled “TERMINAL”).
- RJ-45-to-DB-25 female DTE adapter (labeled “TERMINAL”).
- RJ-45-to-DB-25 male DCE adapter (labeled “MODEM”).

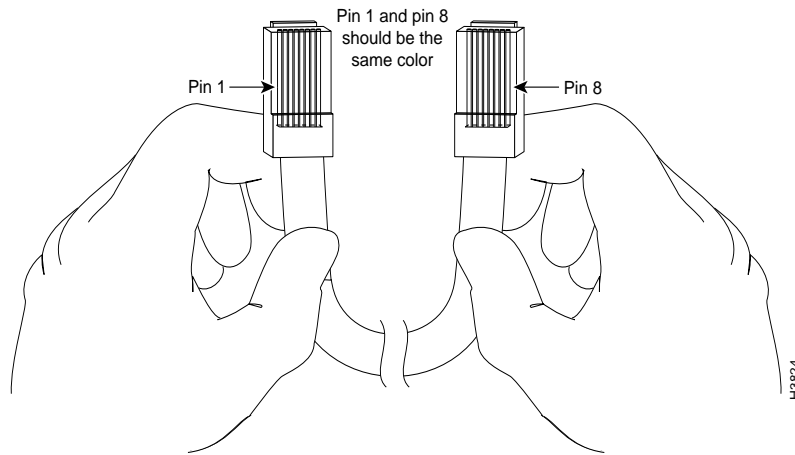
Console and Auxiliary Port Signals and Pinouts

For console connections, proceed to the section “Console Port Signals and Pinouts” later in this appendix; for modem connections, proceed to the section “Auxiliary Port Signals and Pinouts” later in this appendix.

Identifying a Roll-Over Cable

You can identify a roll-over cable by comparing the two modular ends of the cable. Holding the cables 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 wire connected to the pin on the outside of the right plug. (See Figure C-1.) If your cable came from Cisco Systems, 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).

Figure C-1 Identifying a Roll-Over Cable



Console Port Signals and Pinouts

Use the thin, flat, RJ-45-to-RJ-45 roll-over cable and RJ-45-to-DB-9 female DTE adapter (labeled “TERMINAL”) to connect the console port to a PC running terminal emulation software. Figure C-2 shows how to connect the console port to a PC. Table C-1 lists the pinouts for the asynchronous serial console port, the RJ-45-to-RJ-45 roll-over cable, and the RJ-45-to-DB-9 female DTE adapter (labeled “TERMINAL”).

Figure C-2 Connecting the Console Port to a PC

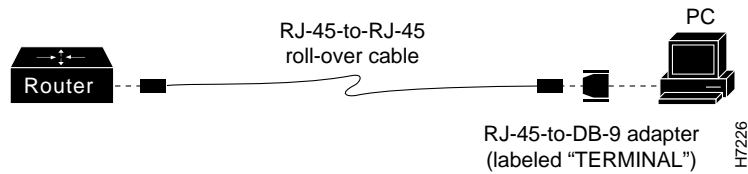


Table C-1 Console Port Signaling and Cabling Using a DB-9 Adapter

Console Port (DTE)	RJ-45-to-RJ-45 Roll-Over Cable		RJ-45-to-DB-9 Terminal Adapter	Console Device
Signal	RJ-45 Pin	RJ-45 Pin	DB-9 Pin	Signal
RTS	1 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	1	7	RTS

1. Pin 1 is connected internally to Pin 8.

Console and Auxiliary Port Signals and Pinouts

Use the thin, flat, RJ-45-to-RJ-45 roll-over cable and RJ-45-to-DB-25 female DTE adapter (labeled “TERMINAL”) to connect the console port to a terminal. Figure C-3 shows how to connect the console port to a terminal. Table C-2 lists the pinouts for the asynchronous serial console port, the RJ-45-to-RJ-45 roll-over cable, and the RJ-45-to-DB-25 female DTE adapter (labeled “TERMINAL”).

Figure C-3 Connecting the Console Port to a Terminal

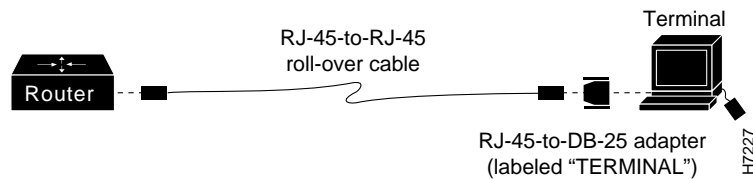


Table C-2 Console Port Signaling and Cabling Using a DB-25 Adapter

Console Port (DTE) ¹	RJ-45-to-RJ-45 Roll-Over Cable		RJ-45-to-DB-25 Terminal Adapter	Console Device
	RJ-45 Pin	RJ-45 Pin	DB-25 Pin	
RTS	1 ²	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	1	4	RTS

1. You can use the same cabling to connect a console to the auxiliary port.

2. Pin 1 is connected internally to Pin 8.

Auxiliary Port Signals and Pinouts

Use the thin, flat, RJ-45-to-RJ-45 roll-over cable and RJ-45-to-DB-25 male DCE adapter (labeled “MODEM”) to connect the auxiliary port to a modem. Figure C-4 shows how to connect the auxiliary port to a modem. Table C-3 lists the pinouts for the asynchronous serial auxiliary port, the RJ-45-to-RJ-45 roll-over cable, and the RJ-45-to-DB-25 male DCE adapter (labeled “MODEM”).

Figure C-4 Connecting the Auxiliary Port to a Modem

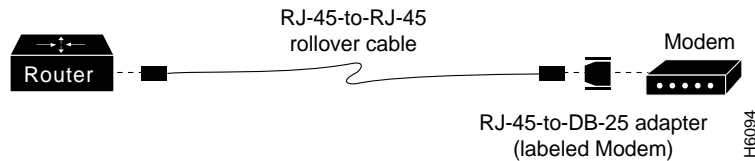


Table C-3 Auxiliary Port Signaling and Cabling Using a DB-25 Adapter

Auxiliary Port (DTE)	RJ-45-to-RJ-45 Roll-Over Cable		RJ-45-to-DB-25 Modem Adapter	Modem
Signal	RJ-45 Pin	RJ-45 Pin	DB-25 Pin	Signal
RTS	1 ¹	8	4	RTS
DTR	2	7	20	DTR
TxD	3	6	3	TxD
GND	4	5	7	GND
GND	5	4	7	GND
RxD	6	3	2	RxD
DSR	7	2	8	DCD
CTS	8 ¹	1	5	CTS

1. Pin 1 is connected internally to Pin 8.

Ethernet Cable Assembly and Pinouts

This section describes the pinouts for an Ethernet AUI cable.

Figure C-5 shows an Ethernet AUI cable assembly, and Table C-4 lists the cable pinouts.

Figure C-5 Ethernet AUI Cable Assembly

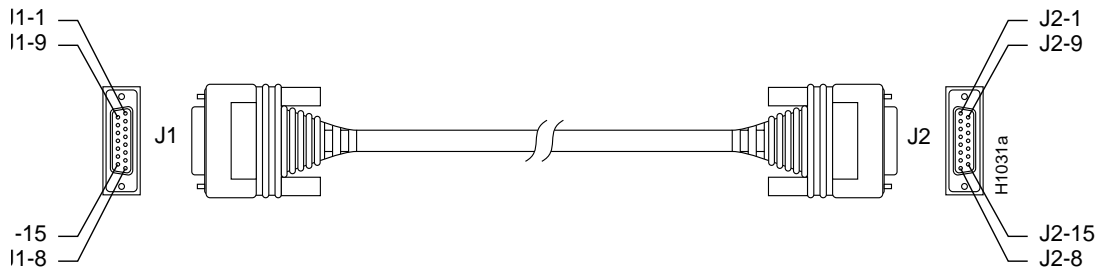


Table C-4 Ethernet AUI Cable Pinouts (DB-15)

Pin	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
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

Table C-4 Ethernet AUI Cable Pinouts (DB-15) (Continued)

Pin	Ethernet Circuit	Signal
14	VS	Voltage Shield (L25 and M25)
Shell	PG	Protective Ground

Token Ring Pinout

Table C-5 lists the pinout for the Token Ring interface port.

Table C-5 Token Ring Port Pinout (DB-9)

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

1. 600 mA maximum.

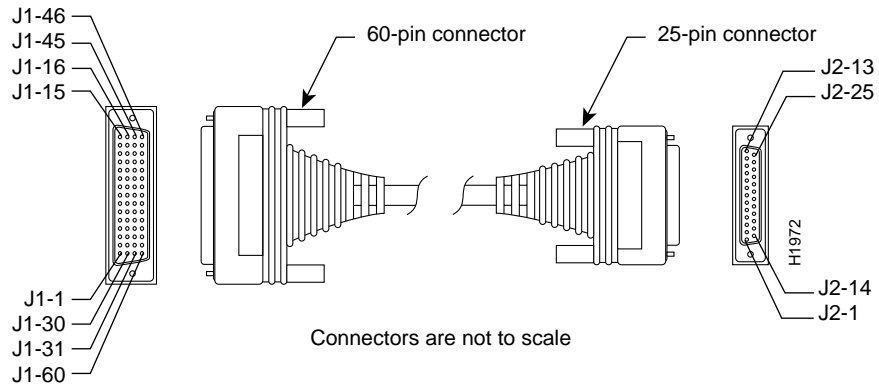
Synchronous Serial Cable Assemblies and Pinouts

The illustrations and tables in this section provide assembly drawings and pinouts for the EIA-530 DCE, EIA/TIA-232, EIA/TIA-449, V.35, and X.21 DTE and DCE cables, which are used with the synchronous serial WAN port (labeled “SERIAL”).

EIA-530

Figure C-6 shows the EIA-530 serial cable assembly, and Table C-6 lists the pinouts. Arrows indicate signal direction: —> indicates DTE to DCE, and <— indicates DCE to DTE.

Figure C-6 EIA-530 Serial Cable Assembly



Synchronous Serial Cable Assemblies and Pinouts

Table C-6 EIA-530 DTE Cable Pinouts (DB-60 to DB-25)

60 Pin	Signal	25 Pin	Signal	Direction	
				DTE	DCE ¹
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	-	-		
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_GND	J2-7	Circuit_GND	-	

Synchronous Serial Cable Assemblies and Pinouts

Table C-6 EIA-530 DTE Cable Pinouts (DB-60 to DB-25) (Continued)

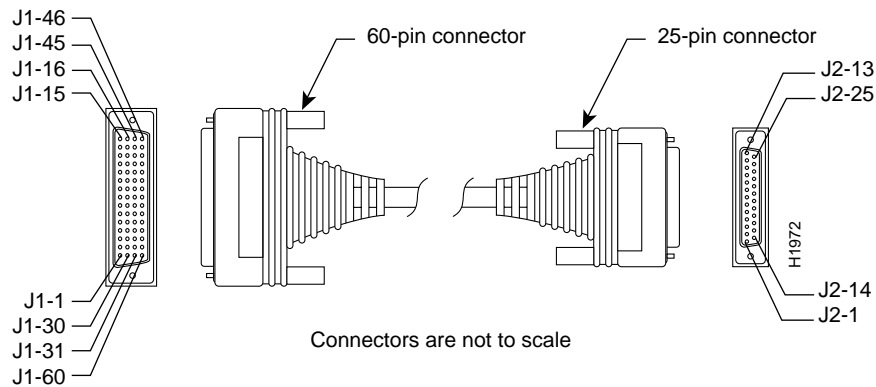
60 Pin	Signal	25 Pin	Signal	Direction	
				DTE	DCE ¹
J1-7	DTR/DSR+	J2-20	CD(A), DTR+	—>	
J1-8	DTR/DSR-	J2-23	CD(B), DTR-	—>	
J1-13	TxCE/TxC+	J2-24	DA(A), TxCE+	—>	
J1-14	TxCE/TxC-	J2-11	DA(B), TxCE-	—>	
J1-51	GND	—	—		Shorted
J1-52	MODE_DCE	—	—		

1. The EIA-530 interface operates in DTE mode only. A DCE cable is not available for the EIA-530 interface.

EIA/TIA-232

Figure C-7 shows the EIA/TIA-232 cable assembly. Table C-7 lists the DTE pinouts. Table C-8 lists the DCE pinouts. Arrows indicate signal direction: —> indicates DTE to DCE, and <— indicates DCE to DTE.

Figure C-7 EIA/TIA-232 Cable Assembly



Synchronous Serial Cable Assemblies and Pinouts

Table C-7 EIA/TIA-232 DTE Cable Pinouts (DB-60 to DB-25)

60 Pin	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	–
J1-33	DCD/LL	Twisted pair no. 12	<—	J2-8	DCD
Shield	–		–	Shield	–
J1-37	TxC/NIL	Twisted pair no. 8	<—	J2-15	TxC
Shield	–		–	Shield	–

Synchronous Serial Cable Assemblies and Pinouts

Table C-7 EIA/TIA-232 DTE Cable Pinouts (DB-60 to DB-25) (Continued)

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

Table C-8 EIA/TIA-232 DCE Cable Pinouts (DB-60 to DB-25)

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

Synchronous Serial Cable Assemblies and Pinouts

Table C-8 EIA/TIA-232 DCE Cable Pinouts (DB-60 to DB-25) (Continued)

60 Pin	Signal	Description	Direction	25 Pin	Signal
J1-43	DTR/DSR	Twisted pair no. 3	—>	J2-6	DSR
Shield	–		–	Shield	–
J1-45	Circuit GND	Twisted pair no. 1	–	J2-7	Circuit GND
Shield	–		–	Shield	
J1-44	LL/DCD	Twisted pair no. 2	—>	J2-8	DCD
Shield	–		–	Shield	–
J1-39	TxCE/TxC	Twisted pair no. 7	—>	J2-15	TxC
Shield	–		–	Shield	–
J1-40	NI/RxC	Twisted pair no. 6	—>	J2-17	RxC
Shield	–		–	Shield	–
J1-33	DCD/LL	Twisted pair no. 12	<—	J2-18	LTST
Shield	–		–	Shield	–
J1-34	DSR/DTR	Twisted pair no. 11	<—	J2-20	DTR
Shield	–		–	Shield	–
J1-38	RxC/TxCE	Twisted pair no. 8	<—	J2-24	TxCE
Shield	–		–	Shield	–

EIA/TIA-449

Figure C-8 shows the EIA/TIA-449 cable assembly. Table C-9 lists the DTE pinouts. Table C-10 lists the DCE pinouts. Arrows indicate signal direction: —> indicates DTE to DCE, and <— indicates DCE to DTE.

Figure C-8 EIA/TIA-449 Cable Assembly

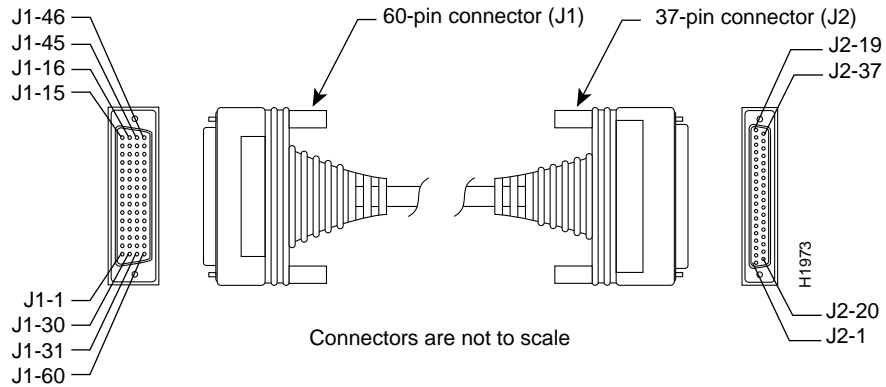


Table C-9 EIA/TIA-449 DTE Cable Pinouts (DB-60 to DB-37)

60 Pin	Signal	Description	Direction	37 Pin	Signal
J1-49	MODE_1	Shorting group	—	—	—
J1-48	GND				
J1-51	GND	Shorting group	—	—	—
J1-52	MODE_DCE				
J1-46	Shield_GND	Single	—	J2-1	Shield GND
J1-11	TxD/RxD+	Twisted pair no. 6	—>	J2-4	SD+
J1-12	TxD/RxD-		—>	J2-22	SD-
J1-24	TxC/RxC+	Twisted pair no. 9	<—	J2-5	ST+
J1-23	TxC/RxC-		<—	J2-23	ST-

Synchronous Serial Cable Assemblies and Pinouts

Table C-9 EIA/TIA-449 DTE Cable Pinouts (DB-60 to DB-37) (Continued)

60 Pin	Signal	Description	Direction	37 Pin	Signal
J1-28	RxD/TxD+	Twisted pair no. 11	<—	J2-6	RD+
J1-27	RxD/TxD-		<—	J2-24	RD-
J1-9	RTS/CTS+	Twisted pair no. 5	—>	J2-7	RS+
J1-10	RTS/CTS-		—>	J2-25	RS-
J1-26	RxC/TxCE+	Twisted pair no. 10	<—	J2-8	RT+
J1-25	RxC/TxCE-		<—	J2-26	RT-
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

Table C-10 EIA/TIA-449 DCE Cable Pinouts (DB-60 to DB-37)

60 Pin	Signal	Description	Direction	37 Pin	Signal
J1-49	MODE_1	Shorting group	-	-	-
J1-48	GND				

Synchronous Serial Cable Assemblies and Pinouts

Table C-10 EIA/TIA-449 DCE Cable Pinouts (DB-60 to DB-37) (Continued)

60 Pin	Signal	Description	Direction	37 Pin	Signal
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-
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

V.35

Figure C-9 shows the V.35 cable assembly. Table C-11 lists the DTE pinouts. Table C-12 lists the DCE pinouts. Arrows indicate signal direction: —> indicates DTE to DCE, and <— indicates DCE to DTE.

Figure C-9 V.35 Cable Assembly

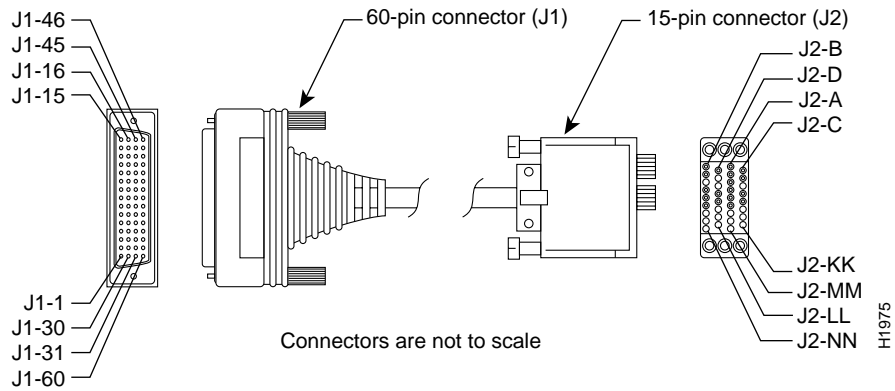


Table C-11 V.35 DTE Cable Pinouts (DB-60 to 34-Pin)

60 Pin	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				

Synchronous Serial Cable Assemblies and Pinouts

Table C-11 V.35 DTE Cable Pinouts (DB-60 to 34-Pin) (Continued)

60 Pin	Signal	Description	Direction	34 Pin	Signal
J1-46	Shield_GND	Single	–	J2-A	Frame GND
J1-45	Circuit_GND	Twisted pair no. 12	–	J2-B	Circuit GND
Shield	–		–	Shield	–
J1-42	RTS/CTS	Twisted pair no. 9	—>	J2-C	RTS
Shield	–		–	Shield	–
J1-35	CTS/RTS	Twisted pair no. 8	<—	J2-D	CTS
Shield	–		–	Shield	–
J1-34	DSR/DTR	Twisted pair no. 7	<—	J2-E	DSR
Shield	–		–	Shield	–
J1-33	DCD/LL	Twisted pair no. 6	<—	J2-F	RLSD
Shield	–		–	Shield	–
J1-43	DTR/DSR	Twisted pair no. 10	—>	J2-H	DTR
Shield	–		–	Shield	–
J1-44	LL/DCD	Twisted pair no. 11	—>	J2-K	LT
Shield	–		–	Shield	–
J1-18	TxD/RxD+	Twisted pair no. 1	—>	J2-P	SD+
J1-17	TxD/RxD–		—>	J2-S	SD–
J1-28	RxD/TxD+	Twisted pair no. 5	<—	J2-R	RD+
J1-27	RxD/TxD–		<—	J2-T	RD–
J1-20	TxCE/TxC+	Twisted pair no. 2	—>	J2-U	SCTE+
J1-19	TxCE/TxC–		—>	J2-W	SCTE–
J1-26	RxC/TxCE+	Twisted pair no. 4	<—	J2-V	SCR+
J1-25	RxC/TxCE–		<—	J2-X	SCR–
J1-24	TxC/RxC+	Twisted pair no. 3	<—	J2-Y	SCT+
J1-23	TxC/RxC–		<—	J2-AA	SCT–

Synchronous Serial Cable Assemblies and Pinouts

Table C-12 V.35 DCE Cable Pinouts (DB-60 to 34-Pin)

60 Pin	Signal	Description	Direction	34 Pin	Signal
J1-49	MODE_1	Shorting group	-	-	-
J1-48	GND				
J1-50	MODE_0	Shorting group	-	-	-
J1-51	GND				
J1-53	TxC/NIL	Shorting group	-	-	-
J1-54	RxC_TxCE				
J1-55	RxD/TxD				
J1-56	GND				
J1-46	Shield_GND	Single	-	J2-A	Frame GND
J1-45	Circuit_GND	Twisted pair no. 12	-	J2-B	Circuit GND
Shield	-		-	Shield	-
J1-35	CTS/RTS	Twisted pair no. 8	<—	J2-C	RTS
Shield	-		-	Shield	-
J1-42	RTS/CTS	Twisted pair no. 9	—>	J2-D	CTS
Shield	-		-	Shield	-
J1-43	DTR/DSR	Twisted pair no. 10	—>	J2-E	DSR
Shield	-		-	Shield	-
J1-44	LL/DCD	Twisted pair no. 11	—>	J2-F	RLSD
Shield	-		-	Shield	-
J1-34	DSR/DTR	Twisted pair no. 7	<—	J2-H	DTR
Shield	-		-	Shield	-
J1-33	DCD/LL	Twisted pair no. 6	<—	J2-K	LT
Shield	-		-	Shield	-
J1-28	RxD/TxD+	Twisted pair no. 5	<—	J2-P	SD+
J1-27	RxD/TxD-				J2-S

Synchronous Serial Cable Assemblies and Pinouts

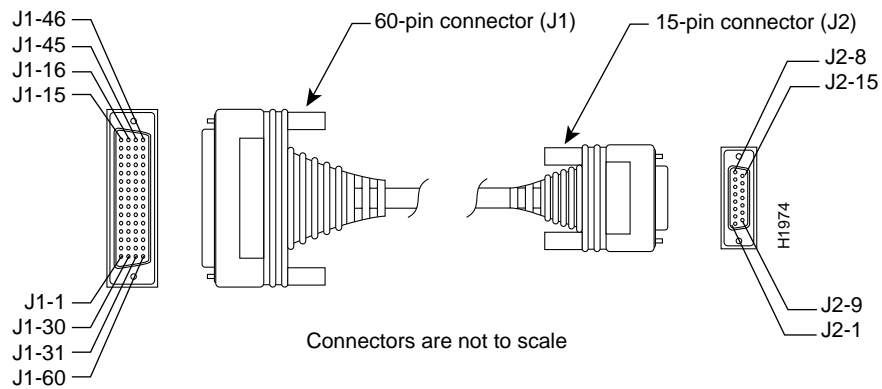
Table C-12 V.35 DCE Cable Pinouts (DB-60 to 34-Pin) (Continued)

60 Pin	Signal	Description	Direction	34 Pin	Signal
J1-18	TxD/RxD+	Twisted pair no. 1	—>	J2-R	RD+
J1-17	TxD/RxD-		—>	J2-T	RD-
J1-26	RxC/TxCE+	Twisted pair no. 4	<—	J2-U	SCTE+
J1-25	RxC/TxCE-		<—	J2-W	SCTE-
J1-22	NIL/RxC+	Twisted pair no. 3	—>	J2-V	SCR+
J1-21	NIL/RxC-		—>	J2-X	SCR-
J1-20	TxCE/TxC+	Twisted pair no. 2	—>	J2-Y	SCT+
J1-19	TxCE/TxC-		—>	J2-AA	SCT-

X.21

Figure C-10 shows the X.21 cable assembly. Table C-13 lists the DTE pinouts. Table C-14 lists the DCE pinouts. Arrows indicate signal direction: —> indicates DTE to DCE, and <— indicates DCE to DTE.

Figure C-10 X.21 Cable Assembly



Synchronous Serial Cable Assemblies and Pinouts

Table C-13 X.21 DTE Cable Pinouts (DB-60 to DB-15)

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

Synchronous Serial Cable Assemblies and Pinouts

Table C-14 X.21 DCE Cable Pinouts (DB-60 to DB-15)

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