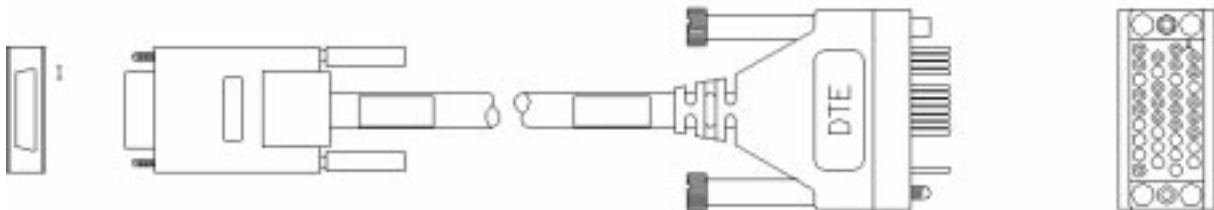


B Custom Cables

This appendix provides detailed information, including illustrations and pin diagrams, for the cables that can be used with OmniSwitch and Omni Switch/Router Submodules. These custom cables are available from Alcatel, but you can use the following information to manufacture them.

V.35 DTE Cable (For WSM-to-DCE Device Connection)



The following parts are recommended for the end of the cable connected to the WSM.


- AMP 750833-1 26 Pin HD50 Connector-male
- AMP 750850-6 26 Pin HD50 Backshell


Parts for the customer end of the cable can be of any industry-standard manufacturer. Use of a shielded-type connector is recommended.

Cable should be constructed with data-comm-quality cable that has an overall mylar foil shield and braided-shield, terminated to the appropriate pins and connector shell at each end of the cable. Twisted-pair 28GA cable is preferred, with any of the pairs used for non-paired signals.

The table on the right shows the pinouts for the connectors.

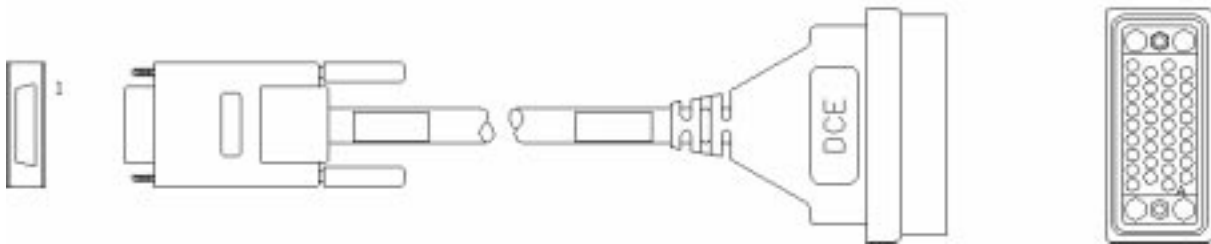
		XPN 12002300		
HD50-26		EMULATE DTE	V35-M	
CTP4	18			
CTP3	26			
SG	7		B	AB
SHIELD	1		A	SHIELD
TD-A	2		P	BA-A
TD-B	14		S	BA-B
RD-A	3		R	BB-A
RD-B	16		T	BB-B
TC-A	15		Y	DB-A
TC-B	12		AA	DB-B
RC-A	17		V	DD-A
RC-B	9		X	DD-B
XC-A	24		U	DA-A
XC-B	11		W	DA-B
RS-A	4		C	CA-A
RS-B	19			
CS-A	5		D	CB-A
CS-B	2 13			
DR-A	6		E	CC-A
DR-B	1 22			
CD-A	8		F	CF-A
CD-B	0 10			
TR-A	20		H	CD-A
TR-B	23			
RL	21		N	RL
TM	25		NN	TM

 Denotes twisted-pair

 150 ohm resistor

2,1,0 Denotes CTP2, CTP1, CTP0, respectively

V.35 DCE Cable (For WSM-to-DTE Device Connection)



The following parts are recommended for the end of the cable connected to the WSM.


- AMP 750833-1 26 Pin HD50 Connector-male
- AMP 750850-6 26 Pin HD50 Backshell


Parts for the customer end of the cable can be of any industry-standard manufacturer. Use of a shielded-type connector is recommended.

Cable should be constructed with data-comm-quality cable that has an overall mylar foil shield and braided-shield, terminated to the appropriate pins and connector shell at each end of the cable. Twisted-pair 28GA cable is preferred, with any of the pairs used for non-paired signals.

The table on the right shows the pinouts for the connectors.

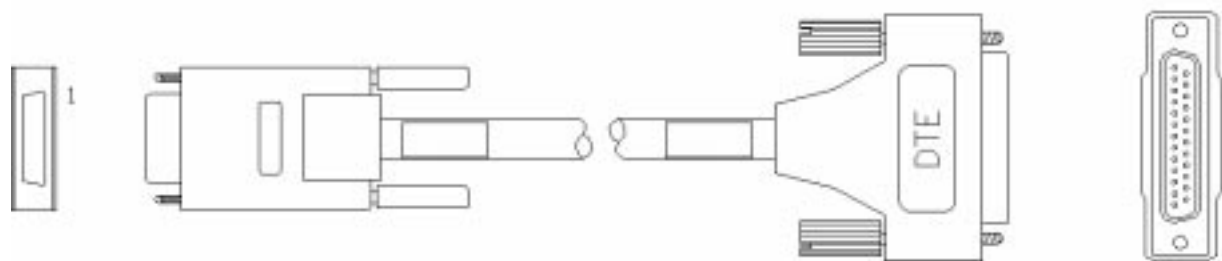
		XPN 12003100		
HD50-26		EMULATE DCE	V35-F	
CTP4	18	✗		
CTP3	26			
SG	7		B	AB
SHIELD	1		A	SHIELD
TD-A	2		R	BB-A
TD-B	14		T	BB-B
RD-A	3		P	BA-A
RD-B	16		S	BA-B
TC-A	15		Y	DB-A
TC-B	12		AA	DB-B
RC-A	17		U	DA-A
RC-B	9		W	DA-B
XC-A	24		V	DD-A
XC-B	11		X	DD-B
RS-A	4		F	CF-A
RS-B	19			
CS-A	5		D	CB-A
CS-B	2 13			
DR-A	6		H	CD-A
DR-B	1 22			
CD-A	8		C	CA-A
CD-B	0 10			
TR-A	20		E	CC-A
TR-B	23			
RL	21		NN	TM
TM	25		N	RL

 Denotes twisted-pair

 150 ohm resistor

2,1,0 Denotes CTP2, CTP1, CTP0, respectively

RS232 DTE Cable (For WSM-to-DCE Device Connection)





























The following parts are recommended for the end of the cable connected to the WSM.


- AMP 750833-1 26 Pin HD50 Connector-male
- AMP 750850-6 26 Pin HD50 Backshell

Parts for the customer end of the cable can be of any industry-standard manufacturer. Use of a shielded-type connector is recommended.

Cable should be constructed with data-comm-quality cable that has an overall mylar foil shield and braided-shield, terminated to the appropriate pins and connector shell at each end of the cable. Twisted-pair 28GA cable is preferred, with any of the pairs used for non-paired signals.

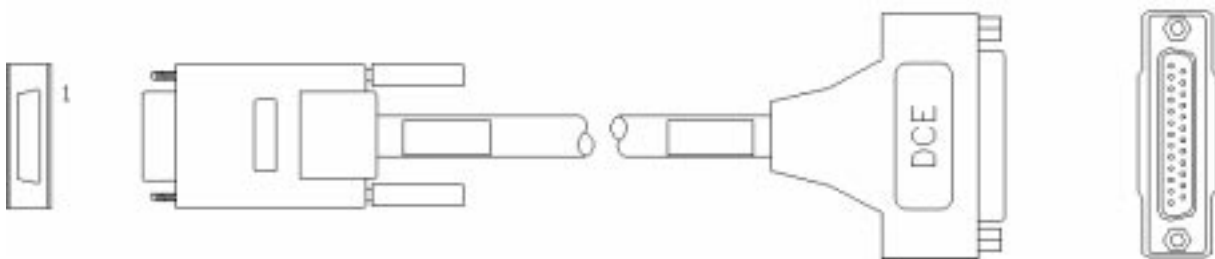
The table on the right shows the pinouts for the connectors.

XPN 12002400			
HD50-26	EMULATED DTE	DB25-M	
CTP4 18			
CTP3 26			
SG 7		7	AB
SHIELD 1		1	SHIELD
TD-A 2		2	BA-A
TD-B 14			
RD-A 3		3	BB-A
RD-B 16			
TC-A 15		15	DB-A
TC-B 12			
RC-A 17		17	DD-A
RC-B 9			
XT-A 24		24	DA-A
XC-B 11			
RS-A 4		4	CA-A
RS-B 19			
CS-A 5		5	CB-A
CS-B 2 13			
DR-A 6		6	CC-A
DR-B 1 22			
CD-A 8		8	CF-A
CD-B 0 10			
TR-A 20		20	CD-A
TR-B 23			
RL 21		21	RL
TM 25		25	TM

 Denotes twisted-pair

2, 1, 0 Denotes CTP2, CTP1, CTP0, respectively

RS232 DCE Cable (For WSM-to-DTE Device Connection)



The following parts are recommended for the end of the cable connected to the WSM.


- AMP 750833-1 26 Pin HD50 Connector-male
- AMP 750850-6 26 Pin HD50 Backshell

Parts for the customer end of the cable can be of any industry-standard manufacturer. Use of a shielded-type connector is recommended.

Cable should be constructed with data-comm-quality cable that has an overall mylar foil shield and braided-shield, terminated to the appropriate pins and connector shell at each end of the cable. Twisted-pair 28GA cable is preferred, with any of the pairs used for non-paired signals.

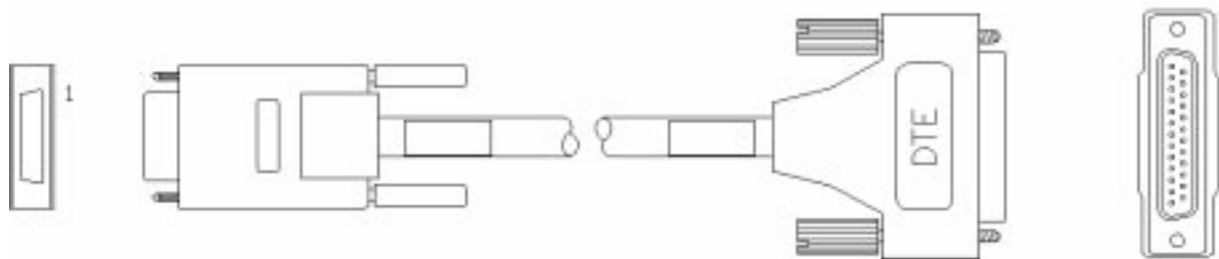
The table on the right shows the pinouts for the connectors.

XPN 12005200			
HD50-26	EMULATED DCE	DB25-F	
CTP4 18	✗		
CTP3 26			
SG 7		7 AB	
SHIELD 1		1 SHIELD	
TD-A 2		3 BB-A	
TD-B 14			
RD-A 3		2 BA-A	
RD-B 16			
TC-A 15		15 DB-A	
TC-B 12			
RC-A 17		24 DA-A	
RC-B 9			
XT-A 24		17 DD-A	
XC-B 11			
RS-A 4		8 CF-A	
RS-B 19			
CS-A 5		5 CB-A	
CS-B 2 13			
DR-A 6		20 CD-A	
DR-B 1 22			
CD-A 8		4 CA-A	
CD-B 0 10			
TR-A 20		6 CC-A	
TR-B 23			
RL 21		25 TM	
TM 25		21 RL	

 Denotes twisted-pair

2, 1, 0 Denotes CTP2, CTP1, CTP0, respectively

RS530 DTE Cable (For WSM-to-DCE Device Connection)



The following parts are recommended for the end of the cable connected to the WSM.

- AMP 750833-1 26 Pin HD50 Connector-male
- AMP 750850-6 26 Pin HD50 Backshell

Parts for the customer end of the cable can be of any industry-standard manufacturer. Use of a shielded-type connector is recommended.

Cable should be constructed with data-comm-quality cable that has an overall mylar foil shield and braided-shield, terminated to the appropriate pins and connector shell at each end of the cable. Twisted-pair 28GA cable is preferred, with any of the pairs used for non-paired signals.

The table on the right shows the pinouts for the connectors.

		XPN 12002500	
		HD50-26	DB25-M
CTP4	18		7 AB
CTP3	26		1 SHIELD
SG	7		2 BA-A
SHIELD	1		14 BA-B
TD-A	2		3 BB-A
TD-B	14		16 BB-B
RD-A	3		15 DE-A
RD-B	16		12 DE-B
TC-A	15		17 DD-A
TC-B	12		9 DD-B
RC-A	17		24 DA-A
RC-B	9		11 DA-B
XC-A	24		4 CA-A
XC-B	11		19 CA-B
RS-A	4		5 CB-A
RS-B	19		13 CB-B
CS-A	5		6 CC-A
CS-B	2 13		22 CC-B
DR-A	6		8 CF-A
DR-B	1 22		10 CF-B
CD-A	8		20 CD-A
CD-B	0 10		23 CD-B
TR-A	20		21 RL
TR-B	23		25 TM
RL	21		
TM	25		

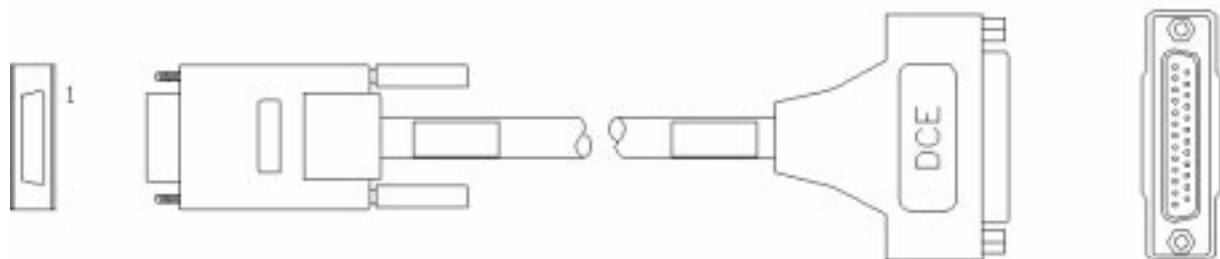
Denotes twisted pair

100 ohm resistor

150 ohm resistor

2,1,0 Denotes CTP2, CTP1, CTP0, respectively

RS530 DCE Cable (For WSM-to-DTE Device Connection)



The following parts are recommended for the end of the cable connected to the WSM.

- AMP 750833-1 26 Pin HD50 Connector-male
- AMP 750850-6 26 Pin HD50 Backshell

Parts for the customer end of the cable can be of any industry-standard manufacturer. Use of a shielded-type connector is recommended.

Cable should be constructed with data-comm-quality cable that has an overall mylar foil shield and braided-shield, terminated to the appropriate pins and connector shell at each end of the cable. Twisted-pair 28GA cable is preferred, with any of the pairs used for non-paired signals.

The table on the right shows the pinouts for the connectors.

HD50-26		XPN 12005300 EMULATE DCE	DB25-F
CTP4	18		
CTP3	26		
SG	7		7 AB
SHIELD	1		1 SHIELD
TD-A	2		3 BB-A
TD-B	14		16 BB-B
RD-A	3		2 BA-A
RD-B	16		14 BA-B
TC-A	15		15 DB-A
TC-B	12		12 DB-B
RC-A	17		24 DA-A
RC-B	9		11 DA-B
XC-A	24		17 DD-A
XC-B	11		9 DD-B
RS-A	4		8 CF-A
RS-B	19		10 CF-B
CS-A	5		5 CB-A
CS-B	2 13		13 CB-B
DR-A	6		20 CD-A
DR-B	1 22		23 CD-B
CD-A	8		4 CA-A
CD-B	0 10		19 CA-B
TR-A	20		6 CC-A
TR-B	23		22 CC-B
LL	21		25 TM
TM	25		21 RL

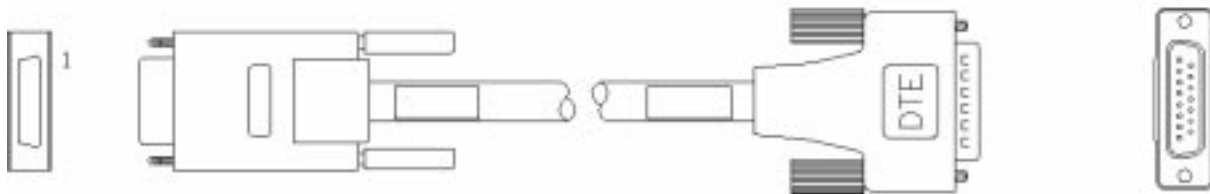
Denotes twisted pair

100 ohm resistor

150 ohm resistor

2,1,0 Denotes CTP2, CTP1, CTP0, respectively

X.21 DTE Cable (For WSM-to-DCE Device Connection)



The following parts are recommended for the end of the cable connected to the WSM.


- AMP 750833-1 26 Pin HD50 Connector-male
- AMP 750850-6 26 Pin HD50 Backshell


Parts for the customer end of the cable can be of any industry-standard manufacturer. Use of a shielded-type connector is recommended.


Cable should be constructed with data-comm-quality cable that has an overall mylar foil shield and braided-shield, terminated to the appropriate pins and connector shell at each end of the cable. Twisted-pair 28GA cable is preferred, with any of the pairs used for non-paired signals.

The table on the right shows the pinouts for the connectors.

HD50-26		XPN 12002600 EMULATE DTE		DB15-M	
CTP4	18	X			
CTP3	26				
SG	7			8	SIG GND
SHIELD	1			1	SHIELD
TD-A	2			2	T-A
TD-B	14			9	T-B
RD-A	3			4	R-A
RD-B	16			11	R-B
TC-A	15			6	S-A
TC-B	12			13	S-B
RC-A	17				
RC-B	9				
XC-A	24			7	B-A
XC-B	11			14	B-B
RS-A	4			3	C-A
RS-B	19			10	C-B
CS-A	5				
CS-B	2 13				
DR-A	6				
DR-B	1 22				
CD-A	8			5	I-A
CD-B	0 10			12	I-B
TR-A	20				
TR-B	23				
RL	21				
TM	25				

 Denotes twisted-pair

 100 ohm resistor

 150 ohm resistor

2,1,0 Denotes CTP2, CTP1, CTP0, respectively

X.21 DCE Cable (For WSM-to-DTE Device Connection)



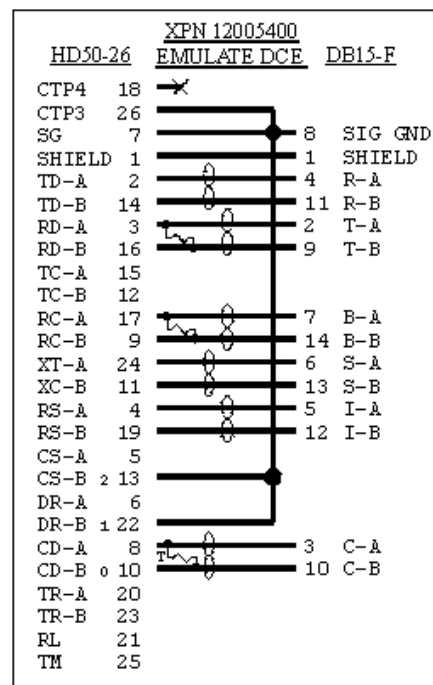
The following parts are recommended for the end of the cable connected to the WSM.

- AMP 750833-1 26 Pin HD50 Connector-male
- AMP 750850-6 26 Pin HD50 Backshell

Parts for the customer end of the cable can be of any industry-standard manufacturer. Use of a shielded-type connector is recommended.

Cable should be constructed with data-comm-quality cable that has an overall mylar foil shield and braided-shield, terminated to the appropriate pins and connector shell at each end of the cable. Twisted-pair 28GA cable is preferred, with any of the pairs used for non-paired signals.

The table on the right shows the pinouts for the connectors.



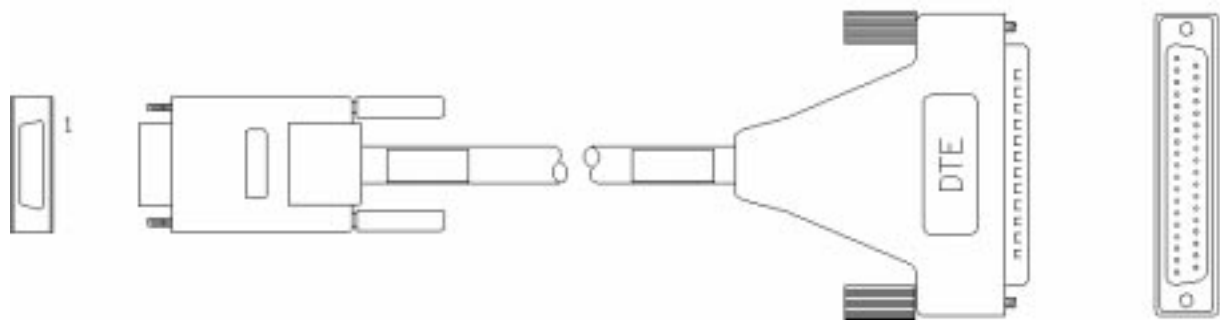
Denotes twisted-pair

100 ohm resistor

150 ohm resistor

2,1,0 Denotes CTP2, CTP1, CTP0, respectively

RS449 DTE Cable (For WSM-to-DCE Device Connection)



The following parts are recommended for the end of the cable connected to the WSM.

- AMP 750833-1 26 Pin HD50 Connector-male
- AMP 750850-6 26 Pin HD50 Backshell

Parts for the customer end of the cable can be of any industry-standard manufacturer. Use of a shielded-type connector is recommended.

Cable should be constructed with data-comm-quality cable that has an overall mylar foil shield and braided-shield, terminated to the appropriate pins and connector shell at each end of the cable. Twisted-pair 28GA cable is preferred, with any of the pairs used for non-paired signals.

The table on the right shows the pinouts for the connectors.

HD50-26		XPN 12002700 EMULATE DTE		DB37-M	
CTP4	18		19	AB	
CTP3	26			SD-A	
SG	7		4	SD-B	
SHIELD	1		22	RD-A	
TD-A	2		6	RD-B	
TD-B	14		24	ST-A	
RD-A	3		5	ST-B	
RD-B	16		23	RT-A	
TC-A	15		8	RT-B	
TC-B	12		26	TT-A	
RC-A	17		17	TT-B	
RC-B	9		35	RS-A	
XT-A	24		7	RS-B	
XC-B	11		25	CS-A	
RS-A	4		9	CS-B	
RS-B	19		27	DM-A	
CS-A	5		11	DM-B	
CS-B	2 13		29	RR-A	
DR-A	6		13	RR-B	
DR-B	1 22		31	TR-A	
CD-A	8		12	TR-B	
CD-B	0 10		30	RL	
TR-A	20		14	TM	
TR-B	23		18		
RL	21				
TM	25				

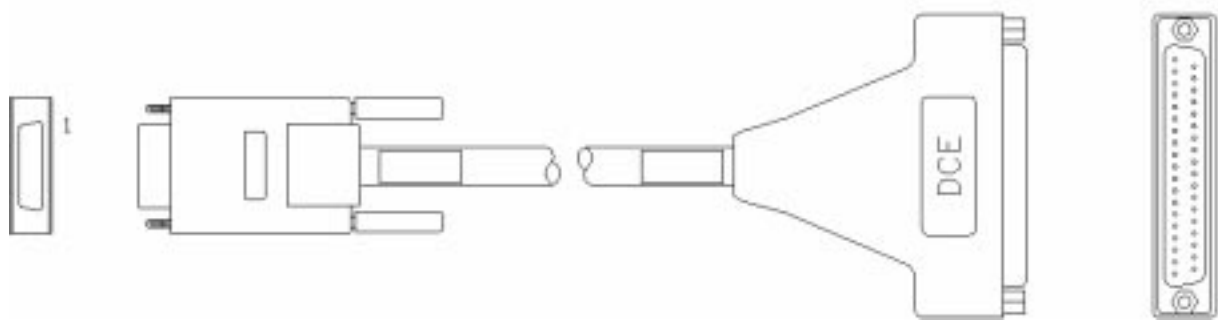
Denotes twisted pair

100 ohm resistor

150 ohm resistor

2,1,0 Denotes CTP2, CTP1, CTP0, respectively

RS-449 DCE Cable Assembly (For WSM-to-DTE Device 75Ω Connection)



The following parts are recommended for the end of the cable connected to the WSM.


- AMP 750833-1 26-Pin HD50 Connector-male
- AMP 750850-6 26-Pin HD50 Backshell


Parts for the customer end of the cable can be of any industry-standard manufacturer. Use of a shielded-type connector is recommended.


Cable should be constructed with data-comm-quality cable that has an overall mylar foil shield and braided-shield, terminated to the appropriate pins and connector shell at each end of the cable. Twisted-pair 28GA cable is preferred, with any of the pairs used for non-paired signals.

The table on the right shows the pinouts for the connectors.

XPN 12005500		
HD50-26	EMULATE DCE	DB37-F
CTP4 18		
CTP3 26		
SG 7		19 AB
SHIELD 1		1 SHIELD
TD-A 2		6 RD-A
TD-B 14		24 RD-B
RD-A 3		4 SD-A
RD-B 16		22 SD-B
TC-A 15		5 ST-A
TC-B 12		23 ST-B
RC-A 17		17 TT-A
RC-B 9		35 TT-B
XT-A 24		8 RT-A
XC-B 11		26 RT-B
RS-A 4		13 RR-A
RS-B 19		31 RR-B
CS-A 5		9 CS-A
CS-B 2 13		27 CS-B
DR-A 6		12 TR-A
DR-B 1 22		30 TR-B
CD-A 8		7 RS-A
CD-B 0 10		25 RS-B
TR-A 20		11 DM-A
TR-B 23		29 DM-B
RL 21		18 TM
TM 25		14 RL

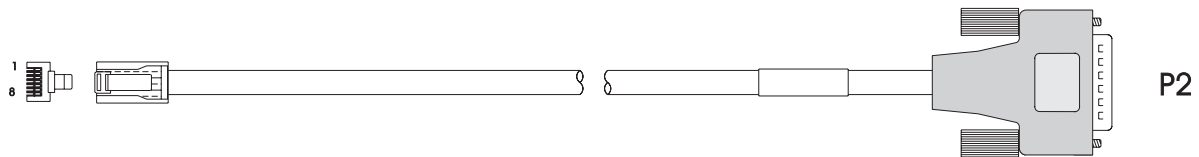
 Denotes twisted pair

 100 ohm resistor

 150 ohm resistor

2,1,0 Denotes CTP2, CTP1, CTP0, respectively

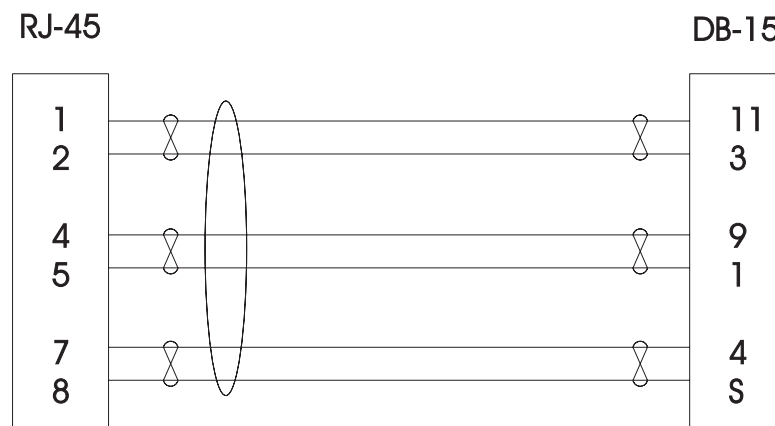
RJ-45 to DB15F Cable Assembly (For T1/E1 Port 120Ω Connections)



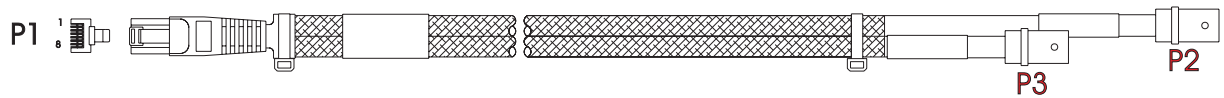
The following parts are recommended for the ends of the cable:

- For the switch side of the cable assembly (P1): 8-conductor RJ-45 round connector (MTP-88U or equivalent)
- Parts for the customer end of the cable (P2) can be of any industry-standard manufacturer. Use of a shielded-type DB-15 female connector is recommended.

Cable should be constructed with datacomm-quality cable that has an overall mylar foil shield and braided-shield, terminated to the appropriate pins and connector shell at each end of the cable. Twisted-pair 28GA cable is preferred, with any of the pairs used for non-paired signals.



RJ-45 to BNC Cable Assembly (For E1 75Ω Port Connections)



The following parts are recommended for manufacturing the cable:

- For the switch side of the cable assembly (P1): 8-conductor RJ-45 round connector (MTP-88U or equivalent)
- For the cable: RG-187A coaxial cable (Belden 83267 or equivalent)
- For the customer end of the cable assembly (P2 and P3): Coaxial BNC connector, 75Ω (Amp 413760-8, or equivalent).

The figure below shows the pinouts for the cable assembly.

