



A Quick Reference Guide to Loop Connectors, Cables and Pin Definition Tables

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A Reference Guide to Loop Connectors and Cables

1 OVERVIEW

Following is a comprehensive reference guide to the connectors and cables used with Loop products. Section 2 contains pictures of connectors commonly used by Loop. Section 3 details which connectors are used in specific Loop Units. Section 4 details pin definition tables and Section 5 deals with cables.

Note: This guide is for quick reference only. **If in doubt** about something, **always refer to the appropriate user manual.**

2 CONNECTOR IDENTIFICATION

Figures 2-1 to 2-12, below, depict common Loop connectors.

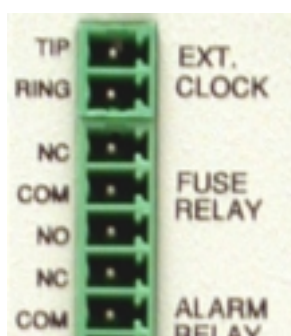


Figure 2-1 Relay Connectors

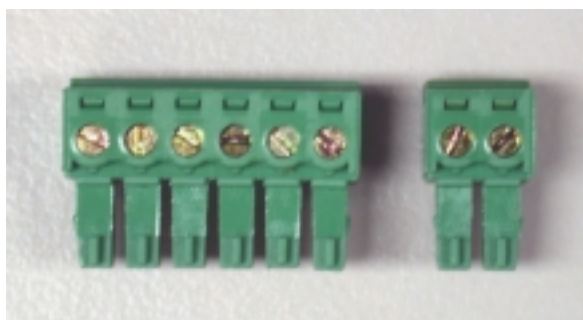


Figure 2-2 2 Pin and 6 Pin Alarm Relay Connectors

(Note: 3 Pin Alarm Relay Connector is not illustrated)



Figure 2-3 BNC Connector

Loop Connectors

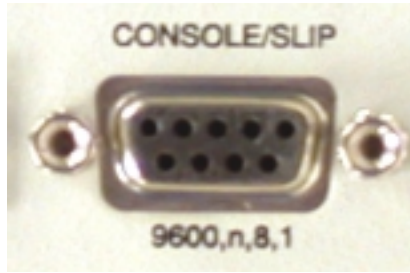


Figure 2- 4 DB9 Connector



Figure 2- 5 DB15

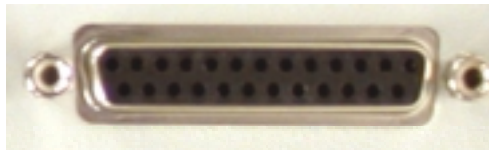


Figure 2- 6 DB25 Connector

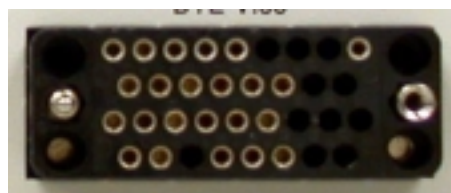


Figure 2- 7 M34 Connector



Figure 2- 8 RJ11 Connectors

Loop Connectors

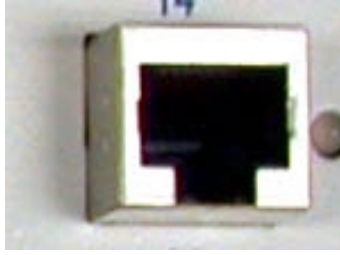


Figure 2- 9 RJ45 , RJ48 & RJ 48C

- Note:**
1. These three connectors appear identical but have different pin definitions.
 2. Loop Telecom does not use RJ48X connectors in its products, but they are compatible with RJ48C connectors.

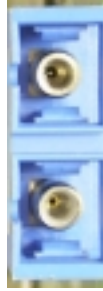


Figure 2- 10 FC/PC Connector



Figure 2- 11 SC/PC Connector



Figure 2- 12 SCSI-68 Connector

3 CONNECTORS USED WITH SPECIFIC LOOP UNITS

3.1 Loop-AM Series Connectors

Table 3- 1 AM Series Connectors

Loop AM Series Connectors												
Loop Unit	Power	Console Port	Slip Port	Alarm Relay	Ethernet Port	U Port	E1	T1	E1/T1	DTE	E&M	HDSL
AM 3410	AC:cord or 48Vdc:w ired	DB9	DB9 or RS232	2 or 4 pin	RJ45	RJ48C	BNC RJ45	RJ48C		DTE	RJ45	RJ45
AM 3420	48Vdc -wired	DB9	DB9 or RS232	2 or 4 pin	RJ48C	RJ48C	BNC RJ48C	RJ48C	DB9	DB25	-	RJ45
AM 3440	48Vdc -wired	DB9	DB9	2 or 4 pin	RJ48	RJ45	BNC RJ45	RJ48C		DB25*	RJ45	RJ45

*AM3440 DTE - for V.35 an optional conversion cable (DB25 to M34) is available from Loop.

3.2 Loop-C Series Connectors

Table 3- 2 C Series Connectors

Loop C Series Connectors										
Loop Unit	Power	Console Port	Slip Port	Alarm Relay	Ethernet Port	DTE				
						V.35	E1A530	X.21	RS232 RS232S	RS449
C 5500	24/48 Vdc: wired	*RS232	RS232 or DB25	3 pin	???	M34, DB25	DB25	DB15	DB25	DB37

*Console port - Can be connected via RS232 interface. One RJ11 to DB9 or DB25 conversion cable is required for proper connection. See C5500 user's manual for pinout definitions.

3.3 Loop-D Series connectors

Table 3- 3 D Series Connectors

Loop D Series Connectors						
Loop Unit	Power	Console Port	Alarm Relay	Ethernet Port	21 E1	Backplane Panel
D 7163	48Vdc 3 pin	DB9	3 pin	RJ45	SCSI- 68	BNC or RJ

3.4 Loop-E Series Connectors

Table 3- 4 Loop E Series Connectors

Loop E Series Connectors										
Loop Unit	Power	Console Port	Ethernet Port	E1 Line	Router	DTE				
						V.35	E1A530	X.21	RS232	RS449
E1500 IS	AC 100-249v 3 pin block	DB9	RJ45	RJ48 or BNC	RJ45	M34, DB25	DB25	DB15	DB25	DB37
E1500 2S	AC 90-250v 3 pin block	DB9S	RJ45	RJ48 or BNC	RJ45	M34, DB25	DB25	DB15	DB25	DB25

3.5 Loop H Series Connectors

3.5.1 Loop H 3300

Table 3- 5 Loop H 3300 Connectors

Loop H 3300 Connectors													
Loop Unit	Power	Con. Port	Ether. Port	Alm. Relay	Slip Port	E1 Line	T1 Line	Loop H plug-ins	Router	x.DSL	DTE		
											V.35	E1A530	X.21
H3300 Rack Card DTE	48vdc 3 pin	Front RJ11 Rear DB25 RJ45	RJ45	3 pin	DB25	BNC or RJ48C	RJ48C	RS485	-		DB25, M34	DB25	DB15
H3300 Stand Alone DTE/ Router	AC 100-240v 3 pin or 48vdc	Front DB9S	RJ45	-	-	RJ48C	RJ48C	-	RJ45	RJ48C	DB25, M34	-	-
H3300 Rack Card E1	48vdc 3 pin	Front RJ11 Rear DB25 RJ45	RJ45	3 pin	DB25	BNC or RJ48C	RJ48C	-	-	-	-	-	-
H3300 Stand alone E1	AC 100-240v 3 pin or 48vdc	Front DB9S	RJ45	-	-	BNC or RJ48C	RJ48C	-	-	RJ48C	DB25, M34	-	-

3.5.2 Loop H 3900

Table 3- 6 Loop H 3900 Connectors

Loop H 3900 Connectors													
Loop Unit	Power	Console Port	Ethernet Port	Alm. Relay	Slip Port	E1 Line	T1 Line	Router	x.DSL	DTE			
										V.35	E1A530	X.21	RS449
H 3900 Rack Card DTE	48vdc 3 pin	Front RJ11 Rear DB25 RJ45	RJ45	3 pin	DB25	RJ48	-	-	-	DB25, M34	DB25	DB15	DB37
H 3900 Stand Alone DTE	AC 100-240v 3 pin or 48vdc	Front DB9S	RJ45	3 pin	-	RJ48	RJ48	RJ45	RJ48C	DB25, M34	DB25	DB15	DB37
H 3900 Rack Card E1/T1	48vdc 3 pin	Front RJ11 Rear DB25 RJ45	RJ45	3 pin	DB25	BNC Or RJ48C	RJ48C	-	-	DB25, M34	DB25	DB15	DB37
H 3900 Stand Alone E1/T1	AC 100-240v 3 pin or 48vdc	Front DB9S	RJ45	3 pin	-	BNC or RJ48C	RJ48C	-	-	DB25, M34	DB25	DB15	DB37

3.6 Loop IP Series Connectors

Table 3- 7 Loop IP Series Connectors

Loop IP Series Connectors				
Loop Unit	Power	Ethernet Port	Alarm Relay	High Speed Internet
IP 6100 IP 6110	24-60vdc 3 pin	RJ45	3 pin	BNC (75 ohm)

3.7 Loop T Series Connectors

Table 3- 8 Loop T Series Connectors

Loop Unit	Power	Con. Port	Ether. Port	Alm. Relay	T1 Line	D&I	Router	DTE				
								V.35	RS232	RS449	E1A530	X.21
T2200	AC 100-240v 3 pin or 48vdc	DB9	-	6 pin	Male DB15	Female DB15	-	DB25*	DB25*	DB25*	DB25*	DB25*
T2500 Rack Card	48vdc 3 pin	Front RJ11	-	-	RJ48	-	-	DB25, M34	DB25	DB37	DB25	DB15
T2500 Stand Alone	AC 100-240v 3pin	Front RJ11	-	-	RJ48	-	RJ45	DB25	DB25	DB37	DB25	DB9S

DB25* - conversion cable required. (T2200 only)

3.8 Loop U Series Connectors

Table 3- 9 Loop U Series Connectors

Loop U Series Connectors											
Loop Unit	Power	Console Port	Ether. Port	Alm. Relay	Slip Port	Router	DTE				
							V.35	E1A530	X.21	RS232	RS449
U 3500 Rack Card	24-48vdc 3 pin	Front RJ11*	-	3 pin	DB25	-	DB25** M34**	DB25**	DB15**	DB25**	DB37* *
U 3500 Stand Alone	AC 100-240v 3 pin	Front RJ11	-	-	-	RJ45	DB25 M34	DB25	DB15	B25	DB37

* One RJ11 to DB9 or DB25 conversion cable is required for proper connection.

** Modular adapter required

3.9 Loop V Series Connectors

3.9.1 Loop-V 3100

Table 3- 10 Loop-V 3100 Connectors

Loop-V 3100 Connectors						
Loop Unit	Power	Con. Port	Ether. Port	Alm. Relay	OC3/STM1	HDE1
V3100	AC: cord Or 48Vdc: - 3 pin Dual Vdc:- wired	DB9	RJ45	-	FC/PC	SCSI -68

3.9.2 Loop-V 4100

Table 3- 11 Loop-V 4100 Connectors

Loop-V 4100 Connectors								
Loop Unit	Power	Con. Port	Ether. Port	OC3/STM1	HDE1	HDT1	DS3	E3
V4100	AC 90-240v Or 48Vdc: - 3 pin Single or dual module	DB9	RJ45	SC,/PC or FC/PC, BNC	SCSI 68	SCSI 68	BNC	BNC

3.9.3 Loop-V 4200 Series

Table 3- 12 Loop-V 4200 Series Connectors

Loop Unit	Loop-V 4200 Series Connectors			
	Power	Con. Port	Ether. Port	Alm. Relay
V4200-9	AC 90-240v or 24vdc or 48vdc	DB9	RJ45	3 pin
V4200-28	AC 95-240v or 48vdc	DB9	RJ45	3 pin

3.9.4 Loop-V 4200 Series Card Modules

Table 3- 13 V 4200 Series Card Module Connectors

Card Module	Connectors			
ATM/FR	E1: RJ45, BNC		T1: RJ45	
DS3	E1 : BNC		T1: BNC	
DTE	V.35: DB25	E1A530 DB25	RS232 DB25	X.21 DB15
E1/T1	E1: BNC or DB15P and RJ48C		T1: DB15S, RJ48C	
OC3/STM1	OPTICAL: FC/PC			
Router	E1: Rj45		T1: RJ45	
Subnet	Ethernet: RJ45			
Terminal Server	E1: D-SUB-44			
QFXS	E1: RJ11			
QFXO	E1: RJ11			

4 PIN DEFINITION TABLES FOR CONNECTORS

4.1 Alarm Relay Pin Definitions

4.1.1 Three Pin Alarm Relay Connector

Table 4- 1 3 Pin Alarm Relay Connector Pin Definitions

Pin Number	Signal	Description
1	NO	Alarm Relay - Normally Open
2	COM	Alarm Relay - Common
3	NC	Alarm Relay - Normally Close

4.1.2 Six Pin Alarm Relay Connector

Table 4- 2 6 Pin Alarm Relay Connector Pin Definitions

Pin Number	Signal	Description
1	NC	Fuse Relay - Normally Close
2	C	Fuse Relay - Common
3	NO	Fuse Relay - Normally Open
4	NC	Alarm Relay -Normally Close
5	C	Alarm Relay -Common
6	NO	Alarm Relay -Normally Open

4.2 Console Port Pin Definitions

4.2.1 DB9 Console Port

Table 4- 3 DB9 Console Port Pin Definitions

Pin Number	Signal	Source
1	Data Carrier Detect	To DTE
2	Receive Data	To DTE
3	Transmit Data	From DTE*
4	Unassigned	
5	Signal Ground	
6	Data Set Ready**	To DTE
7	Unassigned	
8	Clear to send**	To DTE
9	Unassigned	

*DCE on Loop-V 4100

**Unassigned on Loop-V 4100

4.2.2 RJ 11 Console Port

Table 4- 4 RJ 11 Console Port Pin Definitions

Pin Number	Signal	Source	Source on Some Units (eg. C 5500)
1	Unassigned		
2	Data Carrier Detect	DCE	PC or MODEM
3	Transmit Data	DTE	Loop-C. or Loop-U, etc.
4	Receive Data	DCE	PC or MODEM
5	Signal Ground		
6	Data Terminal Ready	DTE	Loop-C. or Loop-U, etc.

4.2.3 Console Port Conversion Cable - RJ 11 to DB9 (Female)

Table 4- 5 RJ11 to DB9 (Female) Console Port Conversion Cable Pin Definitions

RJ11 Connector Pin Number	DB9S Connector Pin Number
1	-
2	-
3	2
4	3
5	5
6	-

NOTE: The following pins on the DB9S should be paired (connected) together: pins 1 to 4, and pins 7 to 8.

4.2.4 Console Port Conversion Cable- RJ 11 to DB25 (Male)

Table 4- 6 RJ11 to DB25P (Male) Console Port Conversion Cable Pin Definitions

RJ11 Connector Pin Number	DB25P Connector Pin Number
1	-
2	8
3	2
4	3
5	7
6	20

Note: Pin 4 (RTS) and Pin 5 (CTS) of DB25 are connected.

4.3 DTE Port Pin Definitions

The DTE port is configured as a DCE device. There are 6 different DTE boards: V.35/M34, V.35/DB25, EIA530/DB25, X.21/DB15, RS232/DB25, and RS449/DB37.

Pin Definition Tables

4.3.1 EIA530/DB25 DTE Port

Table 4- 7 EIA530/DB25 DTE Port Pin Definitions

Pin Number	Signal	Source
1	Cable Shield	
2	Transmit Data	DTE
3	Receive Data	DCE
4	Request To Send	DTE
5	Clear To Send	DCE
6	Data Set Ready	DCE
7	Signal Ground	
8	Data Carrier Detect	DCE
9	Receive Clock Return	DCE
10	Data Carrier Detect Return	DCE
11	External Clock Return	DTE
12	Transmit Clock Return	DCE
13	Clear To Send Return	DCE
14	Transmit Data Return	DTE
15	Transmit Clock	DCE
16	Receive Data Return	DCE
17	Receive Clock	DCE
18	Local Loopback	DTE
19	Request To Send Return	DTE
20	Data Terminal Ready	DTE
21	Remote Loopback	DTE
22	Data Set Ready Return	DCE
23	Data Terminal Ready Return	DTE
24	External Clock	DTE
25	Test Mode	DCE

4.3.2 RS232/DB25 DTE Port

Table 4- 8 RS232/DB25 DTE Port Pin Definitions

Pin Number	Signal	Source
1	Cable Shield	
2	Transmit Data	DTE
3	Receive Data	DCE
4	Request To Send	DTE
5	Clear To Send	DCE
6	Data Set Ready	DCE
7	Signal Ground	
8	Data Carrier Detect	DCE
9	Unassigned	
10	Unassigned	
11	Unassigned	
12	Unassigned	
13	Unassigned	
14	Unassigned	
15	Transmit Clock	DCE
16	Unassigned	
17	Receive Clock	DCE
18	Local Loopback	DTE
19	Unassigned	
20	Data Terminal Ready	DTE
21	Remote Loopback	DTE
22	Unassigned	
23	Unassigned	
24	External Clock	DTE
25	Test Mode	DCE

4.3.3 RS449/DB37 DTE

Table 4- 9 RS449/DB37 DTE Port Pin Definitions

Pin Number	Signal	Source
1	Cable Shield	
2	Unassigned	
3	Unassigned	
4	Transmit Data	DTE
5	Transmit Clock	DCE
6	Receive Data	DCE
7	Request To Send	DTE
8	Receive Clock	DCE
9	Clear To Send	DCE
10	Local Loopback	DTE
11	Data Set Ready	DCE
12	Data Terminal Ready	DTE
13	Data Carrier Detect	DCE
14	Remote Loopback	DTE
15	Unassigned	
16	Unassigned	
17	External Clock	DTE
18	Test Mode	DCE
19	Signal Ground	
20	Unassigned	
21	Unassigned	
22	Transmit Data Return	DTE
23	Transmit Clock Return	DCE
24	Receive Data Return	DCE
25	Request To Send Return	DTE
26	Receive Clock Return	DCE
27	Clear To Send Return	DCE
28	Unassigned	
29	Data Set Ready Return	DCE
30	Data Terminal Ready Return	DTE
31	Data Carrier Detect Return	DCE
32	Unassigned	
33	Unassigned	
34	Unassigned	
35	External Clock Return	DTE
36	Unassigned	
37	Unassigned	

4.3.4 V.35/DB25 DTE Port

Table 4- 10 V.35/DB25 DTE Port Pin Definitions

Pin Number	Signal	Source
1	Cable Shield	
2	Transmit Data	DTE
3	Receive Data	DCE
4	Request To Send	DTE
5	Clear To Send	DCE
6	Data Set Ready	DCE
7	Signal Ground	
8	Data Carrier Detect	DCE
9	Receive Clock Return	DCE
10	Unassigned	
11	External Clock Return	DTE
12	Transmit Clock Return	DCE
13	Unassigned	
14	Transmit Data Return	DTE
15	Transmit Clock	DCE
16	Receive Data Return	DCE
17	Receive Clock	DCE
18	Unassigned	*
19	Unassigned	
20	Data Terminal Ready	DTE
21	Unassigned	**
22	Unassigned	
23	Unassigned	
24	External Clock	DTE
25	Unassigned	***

*Local Loopback DTE on some Loop models

**Remote Loopback DTE on some Loop models

***Test Mode DCE on some Loop models

Pin Definition Tables

4.3.5 V.35/M34 DTE Port Pin Definitions

Table 4- 11 V.35/M34 DTE Port Pin Definitions

<i>Pin Number</i>	<i>Signal</i>	<i>Source</i>
A	Cable Shield	
B	Signal Ground	
C	Request To Send	DTE
D	Clear To Send	DCE
E	Data Set Ready	DCE
F	Data Carrier Detect	DCE
H	Data Terminal Ready	DTE
J	Unassigned	
K	Unassigned	
L	Unassigned	*
M	Unassigned	
N	Unassigned	**
P	Transmit Data	DTE
R	Receive Data	DCE
S	Transmit Data Return	DTE
T	Receive Data Return	DCE
U	External Clock	DTE
V	Receive Clock	DCE
W	External Clock Return	DTE
X	Receive Clock Return	DCE
Y	Transmit Clock	DCE
Z	Unassigned	
AA	Transmit Clock Return	DCE
BB	Unassigned	
CC	Unassigned	
DD	Unassigned	
EE	Unassigned	
FF	Unassigned	
HH	Unassigned	
JJ	Unassigned	
KK	Unassigned	
LL	Unassigned	
MM	Unassigned	
NN	Unassigned	***

*Local Loopback DTE on some Loop models.

**Remote Loopback DTE on some Loop models

***Test Mode DCE on some Loop models

4.3.6 X.21/DB15 DTE Port

Table 4- 12 X.21/DB15 DTE Port Pin Definitions

Pin Number	Signal	Source
1	Cable Shield	
2	Transmit Data	DTE
3	Control	DTE
4	Receive Data	DCE
5	Indication	DCE
6	Signal Timing	DCE
7	External Clock	DTE
8	Signal Ground	
9	Transmit Data Return	DTE
10	Control Return	DTE
11	Receive Data Return	DCE
12	Indication Return	DCE
13	Signal Timing Return	DCE
14	External Clock Return	DTE
15	Unassigned	

4.4 Ethernet Port

4.4.1 Ethernet Port

Table 4- 13 Ethernet Port Pin Definitions

Pin Number	Signal	Description
1	TPTX+	TP Driver Output
2	TPTX-	
3	TPRX+	TP Receive Input
6	TPRX-	

Note: On some Loop units, Pin #7 and Pin #8 are connected to Chassis Ground.

4.4.2 RJ-45 for 10/100M

Table 4- 14 RJ-45 for 10/100M Pin Definitions

Pin Number	Signal	Signal Direction
1	Transmit Data +	Output
2	Transmit Data -	Output
3	Receive Data +	Input
4	No Connection	
5	No Connection	
6	Receive Data -	Input
7	No Connection	
8	No Connection	

4.5 Line Connectors

4.5.1 D&I Male Miniature DA 15 Pin Connector (T2200 CSU/DSU only)

Table 4- 15 D&I Male Miniature DA 15 Pin Connector Pin Definitions

Pin Number	Signal	Signal Direction
1	Transmit Tip	To DS1 Network
2	Transmit Ground	
3	Receive Tip	From DS1 Network
4	Receive Ground	
5	Unassigned	
6	Unassigned	
7	Unassigned	
8	Unassigned	
9	Transmit Ring	To DS1 Network
10	Unassigned	
11	Receive Ring	From DS1 Network
12	Unassigned	
13	Unassigned	
14	Unassigned	
15	Unassigned	

4.5.2 DTU RJ 48 Line Connector (Loop-U 3500S)

Table 4- 16 DTU RJ 48 Line Connector (Loop-U3500) Pin Definitions

Pin Number	Signal
1	Unassigned
2	Unassigned
3	Unassigned
4	Tip
5	Ring
6	Unassigned
7	Unassigned
8	Unassigned

4.5.3 E1 BNC/RJ45

Table 4- 17 E1 BNC/ RJ 45 Pin Definitions

Pin Number	Signal
1	R TIP
2	R RING
4	T TIP
5	T RING
7	Chassis Ground/ Unassigned
8	Chassis Ground/ Unassigned

4.5.4 E1 RJ48 Connector

Table 4- 18 E1 RJ48 Line Connector Pin Definitions

Pin Number	Signal	Signal Direction
1	Receive Ring	From E1 Network
2	Receive Tip	From E1 Network
3	Unassigned	
4	Transmit Ring	To E1 Network
5	Transmit Tip	To E1 Network
6	Unassigned	
7	Chassis Ground*	
8	Chassis Ground*	

*Shield Ground in some cases. Check your user manual if in doubt.

4.5.5 E1/T1 (DB9)

Table 4- 19 E1/T1 (DB9) Pin Definitions

Pin Number	Signal
1	T TIP
2	R TIP
4	T RING
5	Chassis Ground/Unassigned
6	T RING
7	R RING

4.5.6 E&M

Table 4- 20 E&M interface RJ45 Pin Definitions (Note: AM 3440 only)

Pin Number	Signal	Signal Description
8	SG	
7	E	
6	TIP1	
5	TIP	
4	RING	
3	RING1	
2	M	
1	SB	

4.5.7 HDSL

Table 4- 21 Line HDSL Connector Pin Definitions

Pin Number	Signal	Signal Description
1	Unassigned	
2	Unassigned	
3	Unassigned	
4	Loop 1 Tip	Tip
5	Loop1 Ring	Ring
6	Unassigned	
7	Chassis Ground/ Unassigned	
8	Chassis Ground/ Unassigned	

4.5.8 Network (V 4300)

Table 4- 22 Network (RJ 45) Line Connector Pin Definitions

Pin Number	Signal	Signal Direction
1	Receive Tip	Input to 4300
2	Receive Ring	Input to 4300
4	Transmit Tip	Output from 4300
5	Transmit Ring	Output from 4300
7	Chassis GND	
8	Chassis GND	

4.5.9 OCU/DP Connector

Table 4- 23 OCU/DP RJ 45 Line Connector

Pin Number	Signal	Signal Direction
1	Transmit Tip	Output from 4200
2	Transmit Ring	Output from 4200
7	Receive Tip	Input to 4200
8	Receive Ring	Input to 4200

4.5.10 T1 Female Miniature DA 15 Pin Connector (T2200 CSU/DSU only)

Table 4- 24 T1 Female Miniature DA 15 Pin Connector Pin Definitions

Pin Number	Signal	Signal Direction
1	Transmit Tip	From D&I Equipment
2	Transmit Ground	
3	Receive Tip	To D&I Equipment
4	Receive Ground	
5	Unassigned	
6	Unassigned	
7	Unassigned	
8	Unassigned	
9	Transmit Ring	From D&I Equipment
10	Unassigned	
11	Receive Ring	To D&I Equipment
12	Unassigned	
13	Unassigned	
14	Unassigned	
15	Unassigned	

4.5.11 T1 RJ48 Line Connector

Table 4- 25 T1 RJ48 Line Connector Pin Definitions

Pin Number	Signal	Signal Direction
1	Receive Ring	From T1 Network*
2	Receive Tip	From T1 Network*
3	Unassigned	
4	Transmit Ring	To T1 Network*
5	Transmit Tip	To T1 Network*
6	Unassigned	
7	Chassis Ground*	
8	Chassis Ground*	

*DS3 on some Loop models (eg. T2500)

4.5.12 Voice Card (RJ 11) Connectors

Table 4- 26 Pin Assignment for QFXS/ QFXO RJ 11 Pin Definitions

Voice Channel		RJ11	Pin
1	Ring	Voice channel 1	Pin 3
	Tip		Pin 4
2	Ring	Voice channel 2	Pin 3
	Tip		Pin 4
3	Ring	Voice channel 3	Pin 3
	Tip		Pin 4
4	Ring	Voice channel 4	Pin 3
	Tip		Pin 4

4.5.11 Wire Wrap Line Connectors (some rack cards only)

Table 4- 27 Wire Wrap Line Connector

Pin Number	Signal	Signal Direction
1	Transmit Tip	To DS1 Network
2	Transmit Ring	To DS1 Network
3	Receive Tip	From DS1 Network
4	Receive Ring	From DS1 Network
5	Shield Ground	

4.5.12 xDSL Connector

Table 4- 28 Line xDSL Connector Pin Definitions

Pin Number	Signal	Signal Direction
1	Loop2 Tip*	To/ From xDSL Network
2	Loop2 Ring*	To/ From xDSL Network
3	Unassigned	
4	Loop1 Tip	To/ From xDSL Network
5	Loop1 Ring	To/ From xDSL Network
6	Unassigned	
7	Chassis Ground	
8	Chassis Ground	

*Unassigned on some Loop products. Always check your User Manual..

4.6 SCSI Connectors

Please refer to your Loop User Manual to view SCSI pin definition tables for a specific Loop product.

4.7 SLIP Port

4.7.1 DB9 SLIP Port

Table 4- 29 DB9 SLIP Port Pin Definitions

Pin Number	Signal	Source
1	Data Carrier Detect	From DCE
2	Receive Data	From DCE
3	Transmit Data	To DTE
4	Data Terminal Ready	To DTE
5	Signal Ground	

4.7.2 DB25 SLIP Port (C 5500)

Table 4- 30 DB25 SLIP Port (C 5500) Pin Definitions

Pin Number	Signal	Source
1	Chassis Ground	
2	Transmit Data	DTE
3	Receive Data	DCE
7	Signal Ground	
8	Data Carrier Detect	DCE
20	Data Terminal Ready	DTE

Note: Pin 4 (RTS) and Pin 5 (CTS) of DB25 are connected

4.8 U-Port U-Interface RJ45 Terminals

Table 4- 31 U- PORT U-Interface RJ-45 Terminal Pin Definitions

Pin Number	Signal
4	TIP
5	RING

5 LOOP SPECIAL CABLES

5.1 Console Port Conversion Cables (RJ11 to DB9 or DB25)

On the Loop-C 5500, the Console Port can be connected via the RS232 interface. One RJ11 to DB9 or DB25 conversion cable is required for proper connection. See the Loop-C 5500 user's manual.



Figure 5- 1 RJ11 to DB9 Conversion Cable



Figure 5- 2 RJ11 to DB25 Conversion Cable

5.2 D 7163/V4100 Cable



Figure 5- 3 Loop-D 7163/V4100 Cable

5.3 RS449 Conversion Cable (DB37 to DB 25)

This conversion cable is used to connect an external RS449 module to various Loop devices.
OK

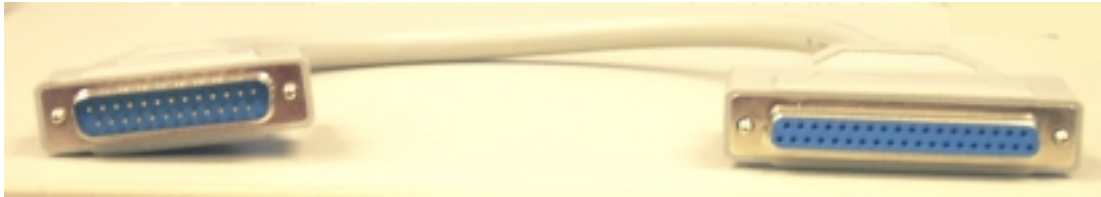


Figure 5- 4DB37 to DB 25 Conversion Cable

5.4 SCSI-68 Cables

The Loop D-7163 uses special SCSI-68 cables. There are six identical cables used to connect the 21E1 ports to the backplane. Both ends of the **30 cm**.cable are fitted with an SCSI-68 connector. Pin 1 at one end of the cable is thus directly connected to pin 1 at the other end and pin 2 is directly connected to pin 2, etc.



Figure 5- 5 SCSI-68 Cables

5.5 TELCO 50 to SCSI-68 Conversion Cables

When connecting the Loop-V 3100 to a Verity 3100S echo canceller, a special cable with six TELCO 50 connectors on one end and six SCSI-68 connectors on the other end is used. Refer to the Loop-V3100 user manual for more information.
OK



Figure 5- 6 TELCO 50 to SCSI-68 Cables

5.3 V.35 Conversion Cable (DB25 to M34)



Figure 5- 7 DB25 to M34 Conversion Cable

6 PIN DEFINITIONS FOR SELECTED CABLES

6.1 E1A530 DB25 to DB25 Cable

Table 6- 1 E1A530 DB24 to DB25 Cable

Male		E1A530 DB25 CABLE			Male	
Pin Number		Signal	Source	Signal	Pin Number	
1		Cable Shield		Cable Shield	1	
2		TXD+	DTE	RXD+	3	
3		RXD+	DCE	TXD+	2	
4		RTS+	DTE	CTS+	5	
5		CTS+	DCE	RTS+	4	
6		DSR+	DCE	DTR+	20	
7		Signal Ground		Signal Ground	7	
8		DCD+	DCE			
9		RXCLK-	DCE	EXTCLK-	11	
10		DCD-	DCE			
11		EXTCLK-	DTE	RXCLK-	9	
12		TXCLK-	DCE			
13		CTS-	DCE	RTS-	19	
14		TXD-	DTE	RXD-	16	
15		TXCLK+	DCE			
16		RXD-	DCE	TXD-	14	
17		RXCLK+	DCE	EXTCLK+	24	
18		LL	DTE			
19		RTS-	DTE	CTS-	13	
20		DTR+	DTE	DSR+	6	
21		RL	DTE			
22		DSR-	DCE	DTR-	23	
23		DTR-	DTE	DSR-	22	
24		EXTCLK+	DTE	RXCLK+	17	
25		TM	DCE			

6.2 V.35 Crossover Cable – DB25 to M34

Table 6- 2 V.35 CrossoverCable - DB25 to M34

Male		V.35 Crossover Cable DB25 to M34			Male	
Pin Number		Signal	Source	Signal	Pin Number	
M34	DB25				M34	DB25
A	1	Cable Shield		Cable Shield	A	1
P	2	TXD+	DTE	RXD+	R	3
R	3	RXD+	DCE	TXD+	P	2
B	7	Signal Ground		Signal Ground	B	7
X	9	RXCLK-	DCE	EXTCLK-	W	11
F		DCD	DCE			
W	11	EXTCLK-	DTE	RXCLK-	X	9
AA		TXCLK-	DCE			
D	5	CTS	DCE	RTS	C	4
S	14	TXD-	DTE	RXD-	T	16
Y		TXCLK+	DCE			
T	16	RXD-	DCE	TXD-	S	14
V	17	RXCLK+	DCE	EXTCLK+	U	24
L		LL	DTE			
C	4	RTS	DTE	CTS	D	5
H	20	DTR	DTE	DSR	E	6
N		RL	DTE			
E	6	DSR	DCE	DTR	H	20
U	24	EXTCLK+	DTE	RXCLK+	V	17
NN		TM	DCE			