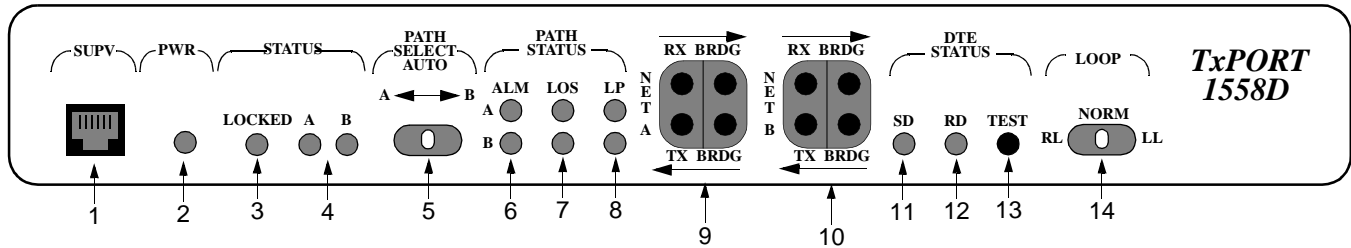
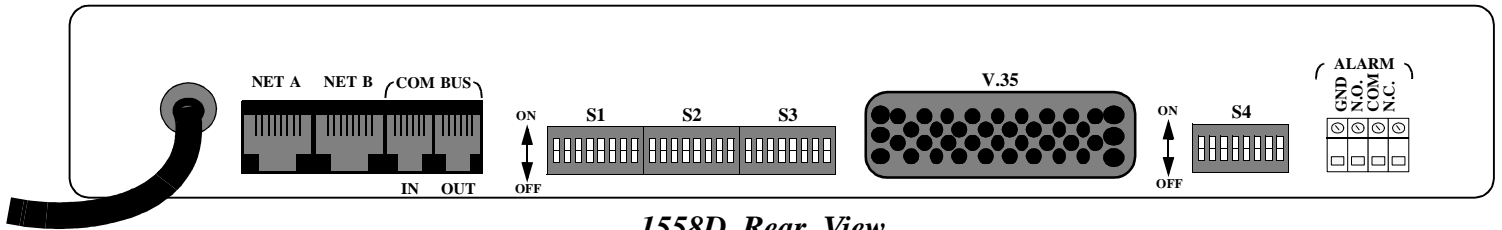


## 1558D Front View



## 1558D Controls and Indicators

Index	Indicator	Description
1	SUPV	The Supervisory port allows the user to connect to the 1558D via a PC running the supplied LAPS software.
2	Power	The power (green) LED will be ON when a nominal power source of 110 volts AC is present.
3	Locked	When the Locked amber LED is on, the 1558D has been manually or remotely (soft control) forced and locked to either the A or B path. Moving the Path Select switch back to the AUTO position or remotely sending an unlock command will turn off this LED and restores normal APS operation.
4	A / B	These green status LEDs indicate which of the two T1 receive paths (A or B) is presently actively carrying the service
5	Path Select Auto/A/B	The user can manually force and lock either the A or B path as the active path by moving this switch from the AUTO position to either the A or B position. The 1558D is now manually locked to this path and will not switch from it, even if the selected path fails
6	Alarm A/B	When on, these red LEDs indicate that one or more of the user definable alarm parameters (ES, CSES, LOS, and LOF) have been met or exceeded for Path A or Path B, respectively.
7	LOS	When on, these red LEDs indicate that no T1 pulses are being detected on the receive signal paths from the network for Path A or Path B, respectively.
8	Loop A/B	When on, these amber LED indicates that a loop (either manually or under soft control) has been activated for Path A or Path B, respectively.
9/10	Test Jacks	Bantam test access jacks and bridge/monitor jacks are provided to gain physical test access to the T1 path for NET A, NET B, and the T1 DTE transmit and receive signal paths (see 1558D Block Diagram).
11	Send Data	This green LED will indicate that data transitions are present on the Send Data (to the network) lead coming from the DTE equipment. The LED will be on for a mark condition and off for a space condition. The LED will vary in intensity depending upon the relative number of marks or spaces present at any given time.
12	Receive Data	This green LED will indicate that data transitions are present on the Receive Data lead coming from the active network path (A or B). The LED will be on for a mark condition and off for a space condition. The LED will vary in intensity depending upon the relative number of marks or spaces present at any given time.
13	Test	This LED (tri-colored amber, red, green) will indicate when the DSU portion of the 1558D has been placed in a test mode either via remote commands or activation of the front panel loop switch. The LED will be ON (amber) when the manual switch is placed in the local loop position or when a remote equipment or V.54 loop command has been received. Initially, the LED will be on (amber) when the manual loop switch is placed in the Remote Loop (V.54) position. After activation, the LED will turn from yellow to red if the unit does not detect a far end V.54 loop. If a loop is detected from the far end, the LED will change from amber to green (far unit in loop).
14	Loop Switch	This three position loop switch (Remote Loop, Normal, Local Loop) allows the user to initiate a LL (local loop) or a far end 1558D RL (remote V.54 loop). Moving the switch to the LL (local loop) position initiates a loop of both the A and B paths back to the 1558D unit (see 1558D Block Diagram). Placing the switch in the RL position initiates a V.54 inband loop command towards the far end unit (see 1558D Block Diagram). Moving the switch back to the Normal position removes the loop condition (either local or remote). The Remote loop/unloop process takes approximately 5 seconds to complete.



**1558D Rear View**

**1558D Wiring and Connector Information**

PIN	COM BUS IN RJ11 6-pin Modular Connector	COM BUS Out RJ11 6-pin Modular Connector
1	Not Used	Not Used
2	Signal Ground	Signal Ground
3	Data, output	Data, Output
4	Data, input	Not Used
5	Signal Ground	Signal Ground
6	Not Used	Not Used

Pin	NET A & B, RJ48 Modular Connectors
1	Data In, Tip
2	Data In, Ring
3	Not Used
4	Data Out, Tip
5	Data Out, Ring
6	Not Used
7	Not Used
8	Not Used

Function	CCITT	Name	Direction DTE....1558	1558D V.35 (34 pin, female)
Frame Ground	101	FG		A
Signal Ground	102	SG		B
Send Data	103 A/B	SD	→	P, S
Receive Data	104 A/B	RD	←	R, T
Request to Send	105 B	RTS	→	C
Clear to Send	106 B	CTS	←	D
Data Set Ready	107 B	DSR	→	E
Data Terminal Ready	108 B	DTR	→	H
Data Carrier Detect	109 B	DCD	←	F
Transmit Clock	114 A/B	TC	←	Y, AA
Receive Clock	115 A/B	RC	←	V, X
External Clock	113 A/B	EXT.TC	→	U, W
Test Mode	142	TM	←	K

Terminal	1558D Alarm Relay Terminal Descriptions
GND (Ground)	This terminal can be used to connect the 155D to a good earth ground
N.O. (normally open)	External alarm equipment requiring a normally open contact should be wired to this terminal and the common terminal
COM (Common)	Common lead for the 1558D alarm relay contact(s)
N.C. (normally closed)	External alarm equipment requiring a normally closed contact should be wired to this terminal and the common terminal

## 1558D Option Switch Configuration Information

### Option Switch S1, Pos. 1 - 8

Position	Description
1	<b>OFF</b> = Card Function, Slave ON= Card Function, Master
2,3	<b>OFF,OFF</b> = Boot from Switches OFF,ON = Boot from Manager ON,OFF = Boot from RAM ON,ON = Boot from ROM
4	<b>OFF</b> = ARM from ROM ON= ARM from RAM
5	<b>OFF</b> = Enable Frame Error Alarm ON = Disable Frame Error Alarm
6	<b>OFF</b> = LOS, Enabled ON= LOS, Disabled
7	<b>OFF</b> = NET/A, B8ZS ON = NET/A, AMI
8	<b>OFF</b> = NET/B, B8ZS ON = NET/B, AMI

### Option Switch S2, Pos. 1 - 8

Position	Switch S2 Description
1	<b>OFF</b> = CSU Mode, Enabled ON = CSU Mode, Disabled
2	<b>OFF</b> = Path Revert, Disabled ON = Path Revert, Enabled
3,4	NET A LBO Value 0.0 db <b>OFF, OFF</b> 7.5 db OFF, ON 15.0 db ON, OFF 22.5 db ON, ON
5,6	NET A LBO Value 0.0 db <b>OFF, OFF</b> 7.5 db OFF, ON 15.0 db ON, OFF 22.5 db ON, ON
7,8	<b>OFF, OFF</b> = Network Clocking OFF, ON = Network Clocking ON, ON = Internal Clocking ON, OFF = External DTE Clocking

### Option Switch S3, Pos. 1 - 8

*APS Mgr. Unit Pos.	NET A/B Address	Pos 1	Pos 2	Pos 3	Pos 4	Pos 5 - 8
1.01	1/2	<b>OFF</b>	<b>OFF</b>	<b>OFF</b>	<b>OFF</b>	<b>OFF</b>
1.02	3/4	ON	ON	OFF	OFF	OFF
1.03	5/6	ON	OFF	ON	OFF	OFF
1.04	7/8	ON	ON	ON	OFF	OFF
1.05	9/10	ON	OFF	OFF	ON	OFF
1.06	11/12	ON	ON	OFF	ON	OFF

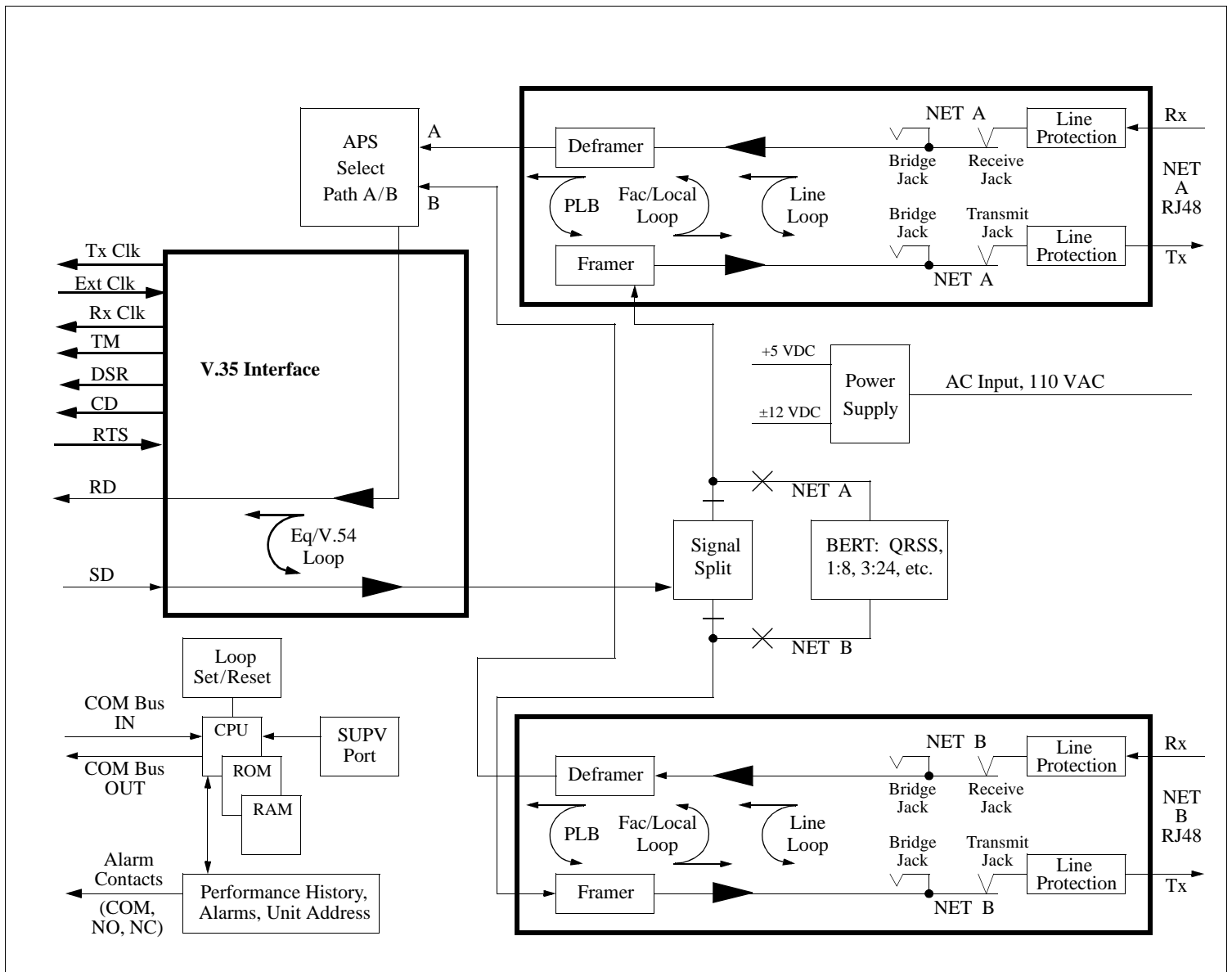
### Option Switch S4, Positions 1 - 6 (speed selection)

Pos 1	Pos 2	Pos 3	Pos 4	Pos 5	Pos 6 OFF (64Kb)	Pos 6 ON (56Kb)	DSO
<b>OFF</b>	<b>OFF</b>	<b>OFF</b>	<b>OFF</b>	<b>OFF</b>	<b>1536</b>	1344	<b>24</b>
OFF	OFF	OFF	ON	OFF	1472	1288	23
ON	OFF	OFF	ON	OFF	1408	1232	22
OFF	ON	OFF	ON	OFF	1344	1176	21
ON	ON	OFF	ON	OFF	1280	1120	20
OFF	OFF	ON	ON	OFF	1216	1064	19
ON	OFF	ON	ON	OFF	1152	1008	18
OFF	ON	ON	ON	OFF	1088	952	17
ON	ON	ON	ON	OFF	1024	896	16
OFF	OFF	OFF	OFF	ON	960	840	15
ON	OFF	OFF	OFF	ON	896	784	14
OFF	ON	OFF	OFF	ON	832	728	13
ON	ON	OFF	OFF	ON	768	672	12
OFF	OFF	ON	OFF	ON	704	616	11
ON	OFF	ON	OFF	ON	640	560	10
OFF	ON	ON	OFF	ON	576	504	9
ON	ON	ON	OFF	ON	512	448	8
OFF	OFF	OFF	ON	ON	448	392	7
ON	OFF	OFF	ON	ON	384	336	6
OFF	ON	OFF	ON	ON	320	280	5
ON	ON	OFF	ON	ON	256	224	4
OFF	OFF	ON	ON	ON	192	168	3
ON	OFF	ON	ON	ON	128	112	2
ON	ON	ON	ON	ON	64	56	1

### Option Switch S4, Pos. 7 - 10

Position	Switch S4 Description
7	<b>OFF</b> = Contiguous DSOs ON = Alternate DSOs
8	<b>OFF</b> = Control Lines (CTS, DSR,CD) are set on ON = Control Lines follow (DSR follows T1 sync, CTS follows RTS, and CD follows T1 density status)
9	<b>OFF</b> = Data Invert Disabled ON = Data Invert Enabled
10	Spare, Not Used

## 1558D Block Diagram



### *TxPORT Customer Service*

TxPORT  
127 Jetplex Circle  
Madison, Alabama 35758

888-4TxPORT / 800-926-0085 / 205-772-3770

Customer Service Returns: 800-926-0085, ext. 2227

### *Product Technical Support*

*Normal Hours - 8 a.m. to 5 p.m. Central, Monday - Friday*

Telephone: 888-4TxPORT / 800-285-2755 / 205-772-3770

Emergency - Nights / Weekends / Holidays:

Telephone: 800-285-2755

E-Mail: support@txport.com