



PRISM 3000 Configuration Guide

Customer Location: _____
 Circuit ID: _____
 Date: ____/____/____

DS0 Channel Assign: CONTIGUOUS ALTERNATING
 Port Transmit Clock: INTERNAL EXTERNAL OVERSAMPLED
 Invert Data: NO YES
 CTS Control: INTERNAL FORCE TRUE FORCE FALSE
 DSR Control: INTERNAL FORCE TRUE FORCE FALSE
 DCD Control: INTERNAL FORCE TRUE FORCE FALSE
 V.54 Loop: ENABLE DISABLE
 RS232 Port Rate: NONE SYNCHRONOUS 1200 2400
 (optional) 4800 9600 14400 19200 28800
 38400 48000 56000 64000

T1 NET CONFIGURATION

Framing Type: ESF D4
 Line Coding: AMI B8ZS
 Line Build Out: 0dB -7.5dB -15dB -22.5dB
 Timing: INTERNAL NETWORK T1DTE STATION
 PORT 1 PORT 2 PORT 3 PORT 4
 Station Input Timing: 1.544MHz Nx56K Nx64K
 (Timing must be set to 'Station' in 'Timing menu')
 Station Timing: _____ Enter a number from 1 to 24 to select the
 'N' multiplier for the 'Station Input Timing' menu.
 Zero Suppression: ENABLE DISABLE
 PRM Enable: ENABLE DISABLE
 Alarm Thresholds: ALARM RESET:____ ES:____ SES:____
 (enter # of seconds) LOSS:____ OOFFS:____ UAS:____
 RAS:____ AISS:____ BPVS:____

DTE PORT 4

Port Rate Multiplier: Nx64K Nx56K DISABLE
 Port Rate: _____ Enter a number from 0 to 24 to select the
 'N' multiplier for the 'Port Rate Multiplier' menu.
 Starting Channel #: _____ Enter a number from 1 to 24.
 DS0 Channel Assign: CONTIGUOUS ALTERNATING
 Port Transmit Clock: INTERNAL EXTERNAL OVERSAMPLED
 Invert Data: NO YES
 CTS Control: INTERNAL FORCE TRUE FORCE FALSE
 DSR Control: INTERNAL FORCE TRUE FORCE FALSE
 DCD Control: INTERNAL FORCE TRUE FORCE FALSE
 V.54 Loop: ENABLE DISABLE

T1 DTE CONFIGURATION (Optional)

Framing Type: ESF D4
 Line Coding: AMI B8ZS
 DSX Level (feet): 0-110 111-220 221-330 331-440
 441-550 551-660 >660
 Channel Assignment: IDLE THRU REM COM PORT 1
 PORT 2 PORT 3 PORT 4

SNMP CONFIGURATION (Optional)

Unit I.P. Address: _____ . _____ . _____
 Router I.P. Address: _____ . _____ . _____
 Trap I.P. Address: _____ . _____ . _____
 Read Community: _____
 Write Community: _____
 System Contact: _____
 System Name: _____
 System Location: _____

DTE PORT 1

Port Rate Multiplier: Nx64K Nx56K DISABLE
 Port Rate: _____ Enter a number from 0 to 24 to select the
 'N' multiplier for the 'Port Rate Multiplier' menu.
 Starting Channel #: _____ Enter a number from 1 to 24.
 DS0 Channel Assign: CONTIGUOUS ALTERNATING
 Port Transmit Clock: INTERNAL EXTERNAL OVERSAMPLED
 Invert Data: NO YES
 CTS Control: INTERNAL FORCE TRUE FORCE FALSE
 DSR Control: INTERNAL FORCE TRUE FORCE FALSE
 DCD Control: INTERNAL FORCE TRUE FORCE FALSE
 V.54 Loop: ENABLE DISABLE
 RS232 Port Rate: NONE SYNCHRONOUS 1200 2400
 (optional) 4800 9600 14400 19200 28800
 38400 48000 56000 64000

DIAGNOSTICS

T1 Network Loop: NONE LOOP FAR UNLOOP FAR PLB
 LLB NET MLB DTE MLB
 T1 DTE Loop: NONE LLB
 Port ____ Loop: NONE NEAR SEND LOOP SEND UNLOOP
 BERT Function:
 BERT Port: NONE NETWORK T1 DTE PORT 1
 PORT 2 PORT 3 PORT 4
 BERT Channel: ALL IDLE CHANNEL ____ (from 1 to 24)
 BERT Pattern: 1 in 8 3 in 24 ALT CLEAR QRSS 63
 511 2047 2¹⁵-1 2²⁰-1 2²³-1
 BERT Direction: TOWARD NETWORK TOWARD DTE

DTE PORT 2

Port Rate Multiplier: Nx64K Nx56K DISABLE
 Port Rate: _____ Enter a number from 0 to 24 to select the
 'N' multiplier for the 'Port Rate Multiplier' menu.
 Starting Channel #: _____ Enter a number from 1 to 24.
 DS0 Channel Assign: CONTIGUOUS ALTERNATING
 Port Transmit Clock: INTERNAL EXTERNAL OVERSAMPLED
 Invert Data: NO YES
 CTS Control: INTERNAL FORCE TRUE FORCE FALSE
 DSR Control: INTERNAL FORCE TRUE FORCE FALSE
 DCD Control: INTERNAL FORCE TRUE FORCE FALSE
 V.54 Loop: ENABLE DISABLE

SYSTEM UTILITIES

Edit Password: _____ (up to 10 characters)
 NMS Address: _____ (select a number from 1 to 250)
 NMS Bit Rate: 19200 9600 4800 2400 1200
 Supv Bit Rate: 19200 9600 4800 2400 1200
 Boot Mode: LOCAL NMS
 Alarm Cut Off: DISABLE ENABLE
 Remote Link: FDL NONE CHANNEL ____ (from 1 - 24)
 Call on Alarm:
 Primary #: _____ (up to ____ characters)
 Secondary #: _____ (up to ____ characters)
 Element ID: _____ (up to 29 characters)
 Alarm Notification: OFF DIRECT DIAL DIAL NMS

DTE PORT 3

Port Rate Multiplier: Nx64K Nx56K DISABLE
 Port Rate: _____ Enter a number from 0 to 24 to select the
 'N' multiplier for the 'Port Rate Multiplier' menu.
 Starting Channel #: _____ Enter a number from 1 to 24.

Network BERT Testing

The following front panel test procedures are recommended in order to activate the BERT generator and perform end-to-end or local testing.

1) From the 'Main Menu', select 'T1 NET Configuration', then select the 'Timing' source. 'Network' is the most common selection. This allows the unit to derive timing from the T1 line.

2) From the 'Main Menu', select 'Diagnostics', then 'BERT Function', then 'BERT Port'. The choices are:

Network - Tests all channels mapped to the network.

T1 DTE - Tests all channels associated with the T1 DTE port.

Port 1, 2, 3, or 4 - Selecting any of these ports tests all channels associated with that port.

The amber 'Test' indicator should now be on.

3) Select the 'BERT Channel' option. This menu item is available only when 'BERT Port' is set to 'Network'. This allows selection of a specific DS0 channel (1 to 24) to be tested. Only unassigned (idle) channels will appear as selections. If 'ALL' is selected, the entire T1 bandwidth will be tested. If 'IDLE' is selected, all unassigned channels are tested. Excluded are ports which are assigned as 'Alternate' channels.

4) Select 'BERT Pattern' to specify which pattern will be transmitted toward the port being tested. '3 in 24' is recommended for all end-to-end stress testing (for AMI/B8ZS signals, '1 in 8' is recommended).

5) Select 'BERT Direction'. The choices are 'Toward Network' and 'Toward DTE'. If the 'BERT Port' menu is set to 'Network', the BERT direction is automatically forced toward the network and this option does not appear.

6) Select 'BERT Results'. If the local unit has a modular loopback plug installed or if the remote unit is configured identically to the local unit, 'Sync Status' should indicate 'IN SYNC'. When running a local BERT test, the timing source must be set to 'Internal', provided no other timing source is used. When running end-to-end tests using a far and local unit, only one timing source can be used. The following are display only fields showing test results.

Sync Status: This field displays the current state of pattern sync during a test. 'NO SYNC' indicates that no test is in progress.

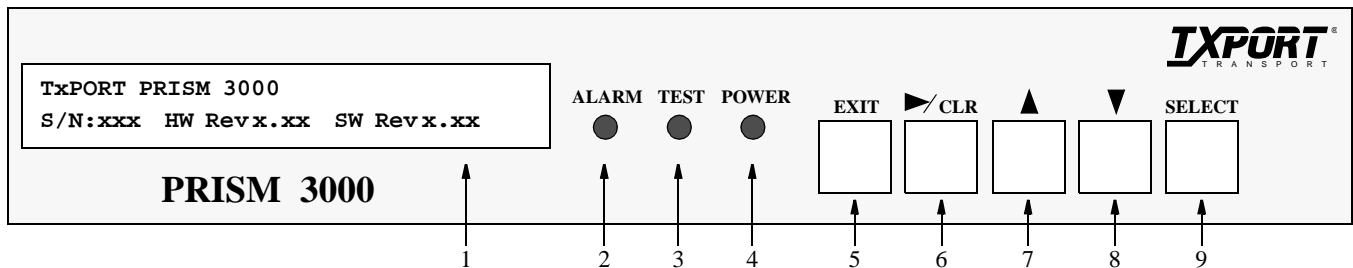
Elapsed Time: This field displays the elapsed time since a timed test began. A value is displayed only when a test is running.

Bit Errors: This field displays the total number of bit errors detected since the test began or since error statistics were last cleared.

Errored Seconds: This field displays the number of errored seconds that have been detected since the test began or since error statistics were last cleared.

Pattern Sync Loss: This field displays the number of times during the test period that the BERT pattern detector lost sync.

Reset BERT Test: If this option is selected, both BERT error counts and elapsed time values are cleared to zero.



Index	Control/Indicator	Function
1	LCD Display	This 2-line, 40-character window provides access to unit configuration, diagnostics, and utilities.
2	ALARM (red)	This LED lights continuously when the unit is in an active alarm condition.
3	TEST (yellow)	This LED lights continuously when line or DTE loops are set or if the BERT function is operating.
4	POWER (green)	This LED lights continuously when power is applied to the unit.
5	EXIT	Pressing this button returns the user to the previous menu.
6	▶/ CLR	Pressing the 'Clear' button moves the cursor one character to the right or clears the error counts. Pressing this button on power up resets all parameters to the factory defaults.
7	▲	Pressing this button allows the user to scroll up through the elements/parameters.
8	▼	Pressing this button allows the user to scroll down through the elements/parameters.
9	SELECT	Pressing this button accesses a submenu or sets a parameter to the displayed value.