

PRISM 3010-300 Dual DSX

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May 1999



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Trademarks

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FCC Requirements

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user is required to correct the interference at his own expense.



Shielded cables must be used to ensure compliance with the Class A FCC limits.



Caution: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment complies with Part 68 of the FCC rules. On the rear or bottom of this unit is a label that contains the FCC registration number and other information. If requested, provide this information to the telephone company. The following instructions are provided to ensure compliance with FCC Rules, Part 68.

- 1 All direct connections to network lines must be made using standard plugs and jacks.
- 2 The following information may be required by the local telephone company when applying for leased line facilities.

T1

Port ID	SOC	FIC	USOC Jack
1.544 Mbps (SF)	6.0 N	04DU9-BN	RJ-48C
1.544 Mbps (SF) (B8ZS)		04DU9-DN	
1.544 Mbps (ESF)		04DU9-IKN	
1.544 Mbps (ESF) (B8ZS)		04DU9-ISN	

- 3 If the unit appears to be malfunctioning, it should be disconnected from the telephone lines until it is learned whether the source of trouble is the equipment or the telephone line. If the equipment needs repair, it should not be reconnected until it is repaired.
- 4 The unit has been designed to prevent harm to the network. If the telephone company finds that the equipment is exceeding tolerable parameters, it can temporarily disconnect service. In this case, the telephone company provides advance notice, if possible.
- 5 Under FCC rules, no customer is authorized to repair this equipment. This restriction applies regardless of the warranty status.
- 6 If the telephone company alters its equipment in a manner that affect the use of this device, it must provide warning so that the customer can arrange uninterrupted service. The customer will be advised of the right to file a complaint with the FCC.

- 7 In the event of equipment malfunction, all repairs should be performed by our company or an authorized agent. It is the responsibility of users requiring service to report the need for service to our company or to one of our authorized agents.

Canadian Emissions Requirements

This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.



End users should use existing 48-VDC battery sources or a CSA-certified power supply.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques (de la class A) prescrites dans le Règlement sur le brouillage radioélectrique édicté par le ministère des Communications du Canada.

Warranty

Verilink's product warranty covers repair or replacement of all equipment under normal use for a five-year period from date of shipment. Replacement products may be new or reconditioned. Any replaced or repaired product or part has a ninety (90) day warranty or the remainder of the initial warranty period, whichever is longer. Our in-house Repair Center services on a standard 10-workday-turn-around basis.

Customer Service

Verilink offers the following services:

- System Engineers at regional sales offices for network design and planning assistance (800) 837-4546
- Technical Assistance Center for free 24×7 telephone support during installation, maintenance, and troubleshooting at (800) 285-2755 and support@verilink.com
- Return Materials Authorization (RMA) (800) 926-0085, ext. 2282
- Maintenance contracts and leasing plans (800) 837-4546, ext. 206
- Technical Training on network concepts and Verilink products at (800) 837-4546, ext. 346 and training@verilink.com
- Web site at www.verilink.com
- FAX-On-Demand at (800) 957-5465

Returning Products

A product must be assigned a Return Materials Authorization (RMA) number before it is sent to Verilink for repair. An RMA number is issued by Verilink Customer Service at (800) 926-0085, ext. 2282.

Safety Precautions

When handling this equipment, follow these basic safety precautions to reduce the risk of electric shock and injury:

- Follow all warnings and instructions marked on the product and in the manual.
- Unplug the hardware from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a slightly damp cloth for cleaning.
- Do not place this product on an unstable cart, stand, or table. It may fall, causing serious damage to the product.
- Slots in the unit are provided for ventilation to protect them from overheating. These openings must not be blocked or covered. Never place this product near a radiator or heat register.
- This product should be operated only from the type of power source indicated on the marking label and manual. If you are unsure of the type of power supply you are using, consult your dealer or local power company.
- Do not allow anything to rest on the power cord. Do not locate this product where the cord will interfere with the free movement of people.
- Do not overload wall outlets and extension cords, as this can result in fire or electric shock.
- Never push objects of any kind into the unit. They may touch dangerous voltage points or short out parts that could result in fire or electric shock. Never spill liquid of any kind on this equipment.
- Unplug the equipment from the wall outlet and refer servicing to qualified service personnel under the following conditions:
 - When the power supply cord or plug is damaged or frayed.
 - If liquid has been spilled into the product.
 - If the product has been exposed to rain or water.
 - If the product has been dropped or if the housing has been damaged.

Ordering Numbers



The Dual DSX requires the PRISM 3030 and 3060 to have software revision 2.5 or greater. Contact Verilink Inside Sales for software upgrade, if needed.

The following optional equipment may also be needed for the operation of the unit.

Part Number	Optional Equipment
9-1001-004-010	8-pin/RJ48 to 8-pin/RJ48 Interface Cable
9-1001-043-010	10 ft RJ48 to RJ48 Null Cable

Table of Contents

Copyright Notice	ii	Maintenance Screen	9
Trademarks	ii	Clear Tests	9
FCC Requirements	ii	Clear Alarms	9
Canadian Emissions Requirements	iii	Test Loops	9
Warranty	iii	T1 Loop	9
Customer Service	iii	T1 Unloop	9
Returning Products	iii	Far LLB	9
Safety Precautions	iv	Port Loop	9
Ordering Numbers	iv	Port Unloop	9
		Loopbacks	10
1 Installation		Normal Operation	10
Introduction	1	NET LLB	10
Safety Summary	1	FAR LLB	10
Unpacking and Inspection	1	NET PLB	10
Supplied Materials	1	FAR PLB	10
Option Card Installation	2	NET MLB	11
Unit Configuration	2	DTE MLB	11
Dual DSX Connection	2	DTE LLB	11
Network Disconnection	2	Port Loop	12
		DSX Port Loop	12
		BERT	12
		BERT	12
		Pattern	12
2 Operation		Configuration Screen	13
Introduction	3	Channel Allocation	14
Main Menu Display	3	Signalling Enabled	14
Dual DSX Configuration	3	Port #	14
Framing Type	4	Framing	14
Line Code	4	Line Code	14
DSX Level	4	DSX Level	14
Channel Assignment	4	Channel	14
IDLE	4	Setting	15
THRU	4	IDLE	15
Signalling Insertion	4	THRU	15
Alarm on LOS/OOF	4	Signalling	15
Diagnostics	4	Alarm on LOS/OOF	15
3 Terminal Operation			
Introduction	7		
Main Menu Screen	7		
Alarms Screen	8		
DTE Alarms	8		
(alarm status)	8		
Power Loss Seconds	8		
Reset Alarm Registers	8		

1

INSTALLATION

Introduction

This chapter contains information and instructions required to prepare the Verilink 3010-300 for use. Included are initial inspection procedures, installation instructions, configuration guidelines, and connection information.



The Dual DSX requires the PRISM 3030 and 3060 to have software revision 2.5 or greater. Contact Verilink Inside Sales for software upgrade, if needed.

Safety Summary

This manual contains information and warnings which must be followed by the user to ensure safe operation and to retain the equipment in a safe condition.



WARNING: *This sign denotes a potential hazard to the operator. It calls attention to a procedure or practice which, if not correctly performed or adhered to, could result in injury or loss of life. Do not proceed beyond a WARNING sign until the indicated conditions are fully understood and met.*



CAUTION: *Option modules are susceptible to damage caused by static electricity. Use ESD (electrostatic device) precautionary measures, such as wearing static grounding straps and storing modules in the supplied antistatic bags.*

Unpacking and Inspection

This unit is carefully packaged to prevent damage in shipment. Upon receipt, inspect the shipping container for damage. If the shipping container or cushioning material is damaged, notify the carrier immediately and make a notation on the delivery receipt that the container was damaged (if possible, obtain the signature and name of the person making delivery). Retain the packaging material until the contents of the shipment have been checked for completeness and the instrument has been checked both mechanically and electrically.

If the contents of the shipment are incomplete or, if there is mechanical damage or defect, notify Verilink. If the shipping container is also damaged, or the cushioning material shows signs of stress, notify the carrier of the damage as well as Verilink. Keep the shipping materials for carrier's inspection. Verilink will arrange for repair or replacement without waiting for claim settlement.

Supplied Materials

For specific applications, the user may require additional cables and adapters for the installation and operation of the unit. The interface requirements of any application may be met by using the appropriate cable. Standard cables and Verilink ordering numbers are listed in Ordering Numbers on page iv. Contact Verilink for any needed assistance in cable selection.

Option Card Installation

The 3010-300 card fits into slots 2 or 3 of a 3030 or slots 2 through 6 of a 3060.



WARNING: To prevent electric shock or damage to the unit, turn the rear panel power switch OFF before removing or installing any option modules.

To add a module to an empty slot, power the unit off and remove the cover plate. Carefully slide the new card along the guides with the component side facing down. Push the board in until the faceplate rests against the rear panel. Ensure that it seats without displacing the flexcable connector. Then, insert the screws.

If resistance is encountered when inserting the card, remove the card and verify that there are no obstructions in the path. Also check for bent or damaged pins in the connectors on either the module or the chassis.

Unit Configuration

Configuration is performed using any of the following methods:

- The front panel LCD interface (refer to chapter Operation on page 3).
- A terminal connected to the SUPV or the NMS port (refer to chapter Terminal Operation on page 7).

The 3030 and 3060 provide non-volatile memory retention of unit configuration in the event of power failure. This feature allows the unit to automatically restore normal service following a power loss; however, when the unit is stored without power for an extended period, the battery may drain and some parameters may become corrupted.

Therefore, when the unit is first received for installation or if power has not been applied for an extended period, a factory default *maintenance reset* operation should be performed on the unit. Refer to the procedures detailed in section *Maintenance Reset* of chapter *Operation* of the 3030 or 3060 manual.

Dual DSX Connection

The Dual DSX card provides a DSX-level interface which allows extending the digital service to a variety of equipment types.



The Dual DSX interface connection is not designed to interface directly with a telco facility.

A typical PRISM 3030/3060 installation can include high-speed digital data, analog voice, and with the addition of the Dual DSX card, digital voice or data to a PABX or other DSX interface (A single DSX interface is available with the T1-DTE option.).

Table 1-1 Dual DSX Pinout

Pins	T1 DTE Interface
1, 2	R1/T1 (output to CPE)
3, 6	Not Used
4, 5	R/T (input from CPE)
7, 8	Chassis Ground

The Dual DSX line build out level should be set as shown in DSX Level on page 4. The Dual DSX physical interfaces are standard RJ-48C, 8-pin modular jacks with the pinout shown in Table 1-1.

Network Disconnection

When equipment is disconnected or power is lost to either DSX port, the 3030 and 3060 place all-ones code in associated channels.

2

OPERATION

Introduction

This chapter describes the screens and menus associated with the PRISM 3030 and 3060 front panel LCD interface for the Dual DSX card. Chapter Terminal Operation on page 7 discusses the screens and menus associated with the external terminal interface. In general, the options are the same for both interfaces.



Throughout this manual, all the factory default settings are shown underlined.

Main Menu Display

The Main Menu screen is the first level of access for all the functional menus available to the user. To activate any of these menus or submenus, use the methods described in section *Menu Components* in the *Operation* chapter of the PRISM 3030 and 3060 manuals. The Main Menu diagram is shown in Figure 2-1.

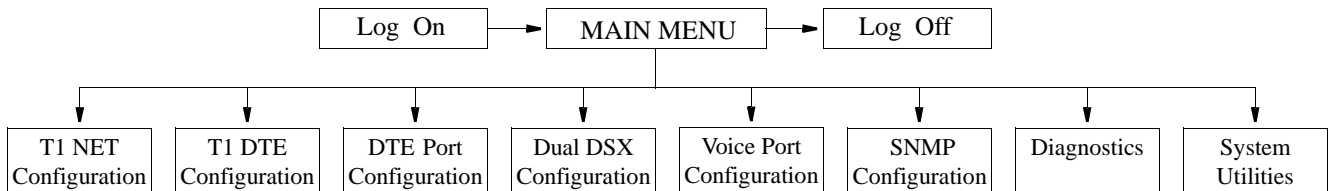


Figure 2-1 Main Menu Diagram

Dual DSX Configuration

The Dual DSX Configuration display (shown in Figure 2-2) allows configuration parameters to be set for the Dual DSX ports (if equipped). Figure 2-3 shows the menu for Dual DSX configuration.

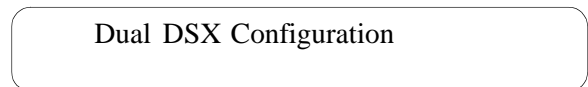


Figure 2-2 Dual DSX Configuration Screen

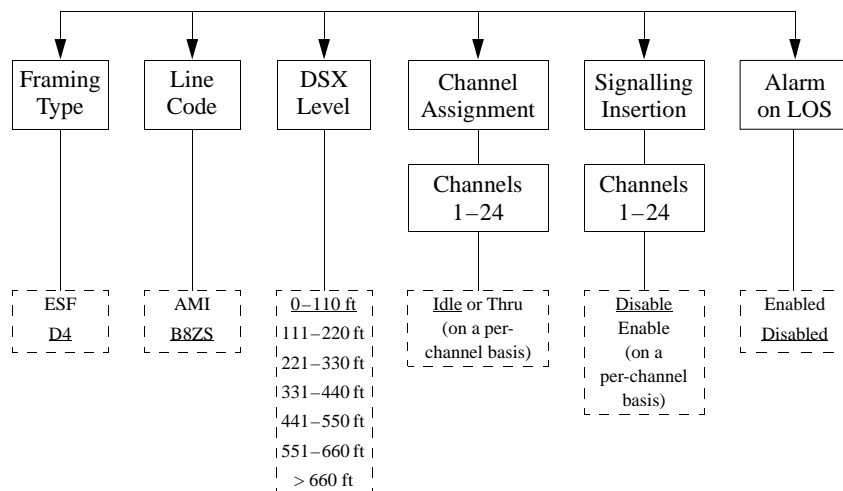


Figure 2-3 Dual DSX Configuration Screen and Diagram

Framing Type Selects the type of framing for the DSX port. The 3030 and 3060 permits framing conversion from the DTE to the Network and from the Network to the DTE (D4 to ESF and ESF to D4). Newer ESF spans can support older D4 equipment. Using ESF framing allows the user and the telco access to the increased serviceability and information available through the FDL protocols. The choices are D4 and ESF.

Line Code Selects the type of line coding for the DTE side of the unit. The choices are AMI and B8ZS.

DSX Level Specifies the DTE DSX1 interface output pre-emphasis. The choices are 0–110 ft, 111–220 ft, 221–330 ft, 331–440 ft, 441–550 ft, 551–660 ft, and >660 ft.

Channel Assignment These can be set IDLE or THRU (Only channels currently mapped to that port or available are shown.). Channels assigned to other ports can only be changed from that port’s configuration menu. Choices for the unassigned channels are IDLE and THRU. The default is all channels IDLE.

IDLE

This selection does not allocate a channel to that port. Sets the specified channel to transmit idle code on the DSX port and ignore received data.

THRU

Sets the specified channel to pass data from the DSX port to the network and vice versa.

Signalling Insertion Shows a list of channels mapped to the port. Selections are Enable or Disable on a per DS0 signalling insertion.

Alarm on LOS/OOF The unit generates and clears alarms for OOF and LOS only as long as these conditions exist.

Diagnostics

The Diagnostics screen (Figure 2-4) allows performing test and maintenance functions on the T1 network, the T1 DTE

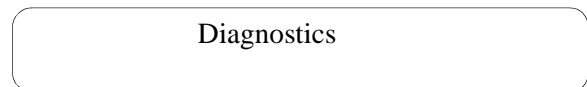


Figure 2-4 Diagnostics Screen

port, and the high-speed ports, including the Dual DSX port card. The network interface of the unit recognizes in-band and FDL out-of-band loopback requests. The Dual DSX also recognizes local testing and remote network management loopback test configurations as shown in Figure 2-5. The unit supports many ways to test the service to and from the unit.

For the Dual DSX card, the supported loop (see Figure 2-6) is for the local interface only. The NEAR selection invokes a loopback at the interface that loops the receive data back towards the customer's equipment. The unit also supports several other loops for other interfaces. Ports in alarm are shown on the DTE Alarms list. BERTs can be performed on the Dual DSX port.

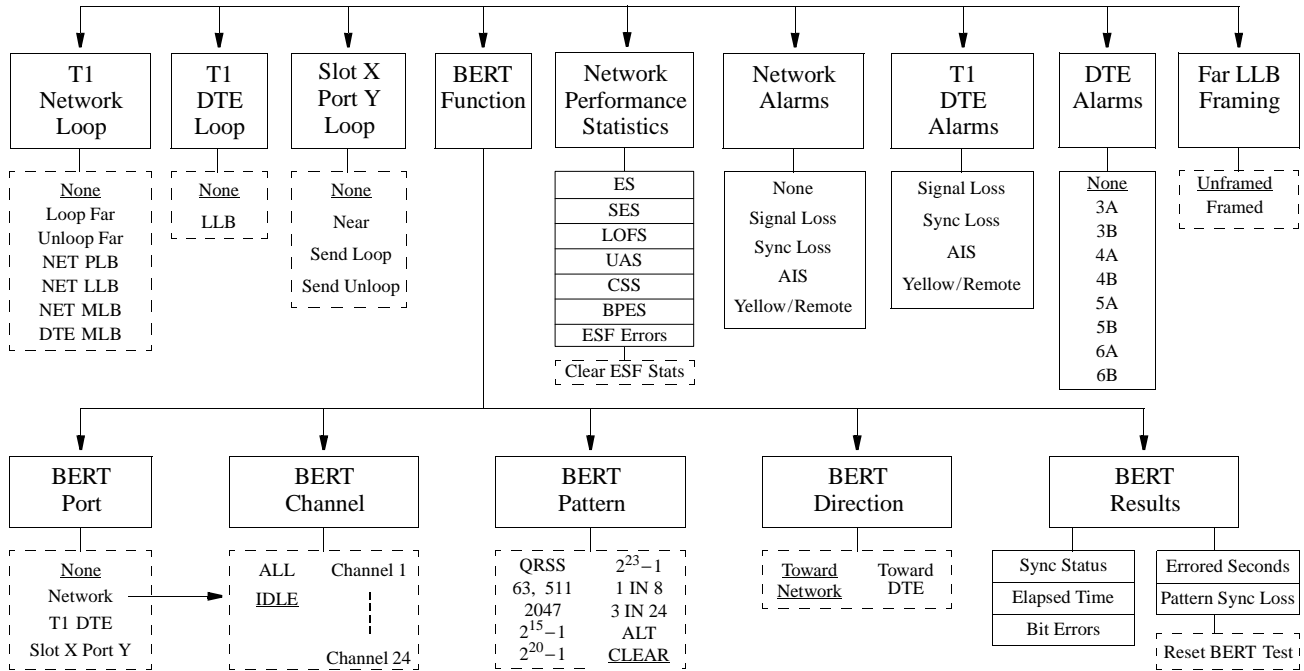


Figure 2-5 Diagnostics Menu Diagram

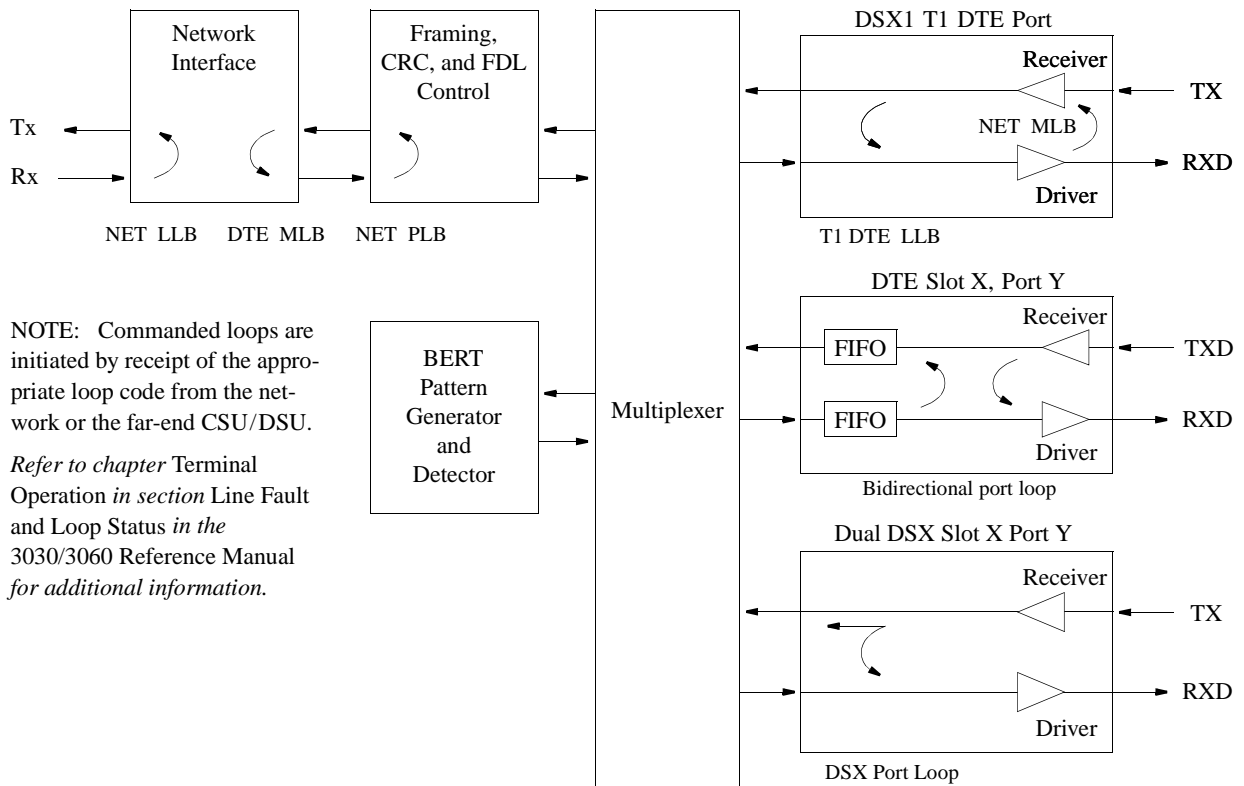


Figure 2-6 Diagnostics Loop Functions

3

TERMINAL OPERATION

Introduction

This chapter describes the screens and menus applicable to the Dual DSX card that are associated with the PRISM 3030 and 3060 terminal interface, an application program embedded inside those units. The *Operations* chapter discussed the screens and menus associated with the front panel interface. Although the options are essentially the same for both interfaces, the terminal interface is able to show more parameters on each screen.

Main Menu Screen

The Main Menu screen (Figure 3-1) lists the functional user accessible menus. To activate any menu, highlight the desired selection and press Enter. This menu and any subsequent menu can be exited by pressing the Escape key. If the Main Menu is exited, the terminal interface program terminates. This is a valid way to end a user session. If any other menu is exited, the previous screen is returned.



If no key is pressed for 10 minutes, the terminal interface logs off automatically. To manually log off, press the Escape key from the Main Menu.

```
3030 DSU x.xx/x.xx          PRISM 3030          Date: MM/DD/YY
3030 DSU x.xx/x.xx          (Unit Address: 23)    Time: HH:MM:SS

----- MAIN -----

Alarms
Performance
Maintenance
Configuration
Utilities

----- Messages -----
```

Figure 3-1 Main Menu Screen

The menu structure (Figure 4-2) shows all the screens accessible from the Main Menu.

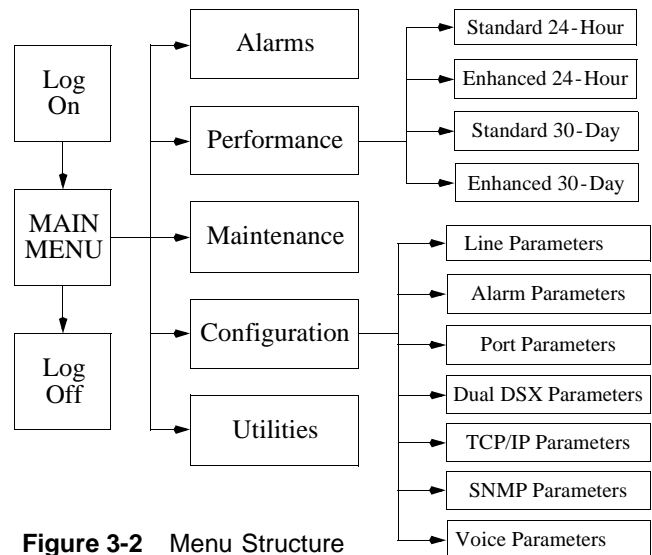


Figure 3-2 Menu Structure

Alarms Screen

The Alarms screen (Figure 3-3) is used to view the current alarm status of the network and the DTE lines. The fields are described as follows.

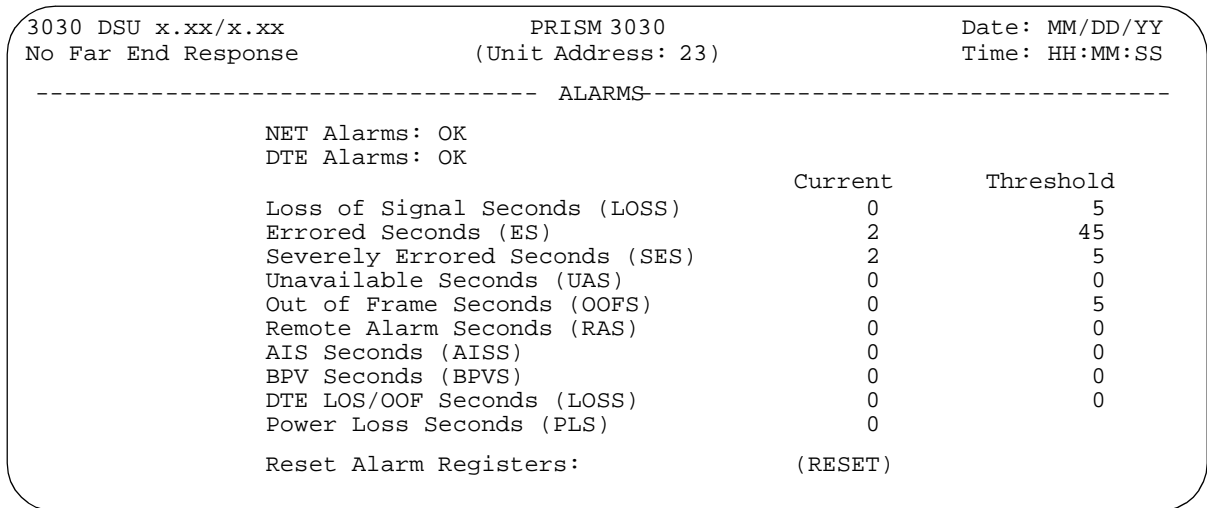


Figure 3-3 Alarms Screen

DTE Alarms This status line displays the selected elements current DTE signal alarm state. The Alarm State for the Dual DSX port is shown on the DTE Alarms Status Line as XY, where X is the slot and Y is the port, for example, 3A. DTE Alarm can be enabled or disabled in the Dual DSX Configuration Screen (Figure 3-13 on page 13) at the Alarm on LOS/OOF parameter.

(alarm status) The main body of the Alarms screen shows the current count for parameters used to trigger an alarm.

The Current column shows the total of the preceding 15 one-minute intervals. At the end of each one-minute interval, the oldest minute of the 15-minute interval is discarded.

The Threshold column shows the values set in the Alarm screen. Any parameter that has a current value equal to or greater than its non-zero threshold generates an alarm. Any parameter with a threshold value of 0 is disabled from generating alarms.



The DTE LOS/OOF seconds field does not apply to the Dual DSX card.



The parameters shown on the Alarms Screen are updated at five-second intervals.

Power Loss Seconds Displays the number of seconds that the element has been without power since this value was last cleared.

Reset Alarm Registers Pressing Enter on (RESET) clears all Current alarm parameters, but does not change 24-hour or 30-day performance registers.

Maintenance Screen

The Maintenance screen (Figure 3-4) allows performing test and maintenance functions on the T1 circuit. BERT is performed by using on-board test facilities. No other test equipment is needed. Actions initiated by each field are detailed in the following paragraphs.

```

3030 DSU x.xx/x.xx                PRISM 3030                Date: MM/DD/YY
No Far End Response              (Unit Address: 23)          Time: HH:MM:SS
----- ELEMENT MAINTENANCE -----
                                     BERT:                [3A NET]
(CLEAR TESTS)                    Pattern:                [QRSS]
(CLEAR ALARMS)                   Test Length:           [15 min]
T1 Loop: [NET PLB]                Pattern Sync: NO TEST
T1 Unloop: [NET PLB]             Elapsed Time:          01:15:00
Far LLB: [Unframed]              Bit Errors:             5
Port Loop: [3B NEAR ]            Errored Seconds:       3
Port Unloop: [3B NEAR ]          % EFS:                 97.5
                                     (START TEST)
NET Status: OK                   (RESET ERRORS)
DTE Status: OOF
Near Loops: NET PLB/3A NEAR/-----/-----
Far Loops:

```

Figure 3-4 Maintenance Screen

- Clear Tests** Pressing Enter clears all tests and any line loops that have been initiated.
- Clear Alarms** Pressing Enter causes all near-end alarms to be cleared.
- Test Loops** Loop status changes can be made only when the BERT function is not in the active mode. The type of loop is chosen by toggling the spacebar and is executed by pressing Enter.
- T1 Loop** Used to select the test loops to initiate. The normal operating mode and available loopback options are detailed in Loopbacks beginning on page 10.
- T1 Unloop** Pressing Enter takes down the specified loop.
- Far LLB** This field selects if the in-band Line Loop Code is either Framed or Unframed. The default is Unframed.
- Port Loop** Used to loop a high-speed DTE or a Dual DSX port at the near end (see Port Loop on page 12. Far-end loops activate using V.54 loop codes. To enable the V.54 function, refer to chapter *Terminal Operation*, section *Fault and Loop Status* of the 3030 or 3060 reference manual.
- Port Unloop** Pressing Enter takes down the specified loop from the selected port.

Loopbacks The following loopbacks can be invoked from the Maintenance screen.

Normal Operation

This diagram depicts the unit's normal operating mode.

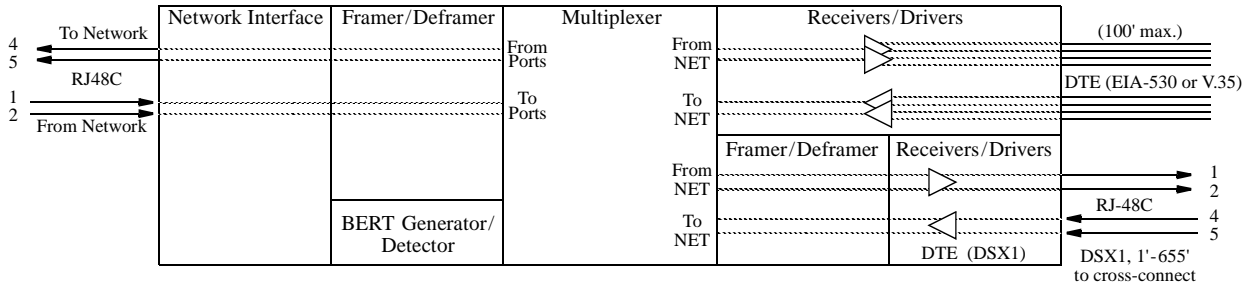


Figure 3-5 Normal Operation

NET LLB

The network line loopback command loops data received from the network back toward the network. Received data is passed through to the DTE ports.

FAR LLB

The far line loopback command sends loop codes to the far-end unit to force it into a network line loopback mode.

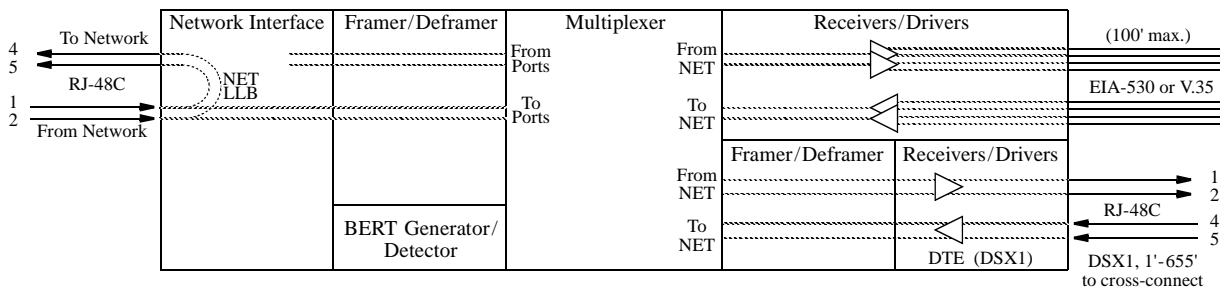


Figure 3-6 Network LLB

NET PLB

The network payload loopback command loops the network data back toward the network. Framing, CRC, and FDL are regenerated. Framed all ones are passed to the DTE ports.

FAR PLB

The far payload loopback command sends loop codes to the far-end unit to force it into a network payload loopback mode.

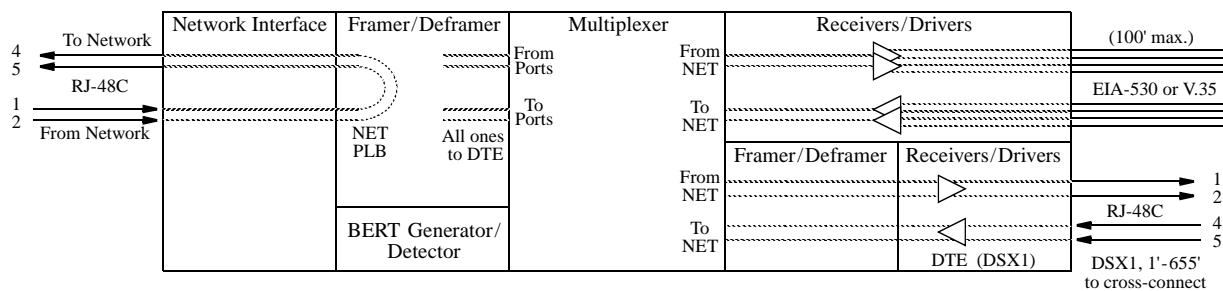


Figure 3-7 Network PLB

NET MLB

The network maintenance loopback command loops data at the T1 DTE port back toward the network (passes network data to the DTE and return data to the network). MLB affects only network channels assigned to the T1 DTE.

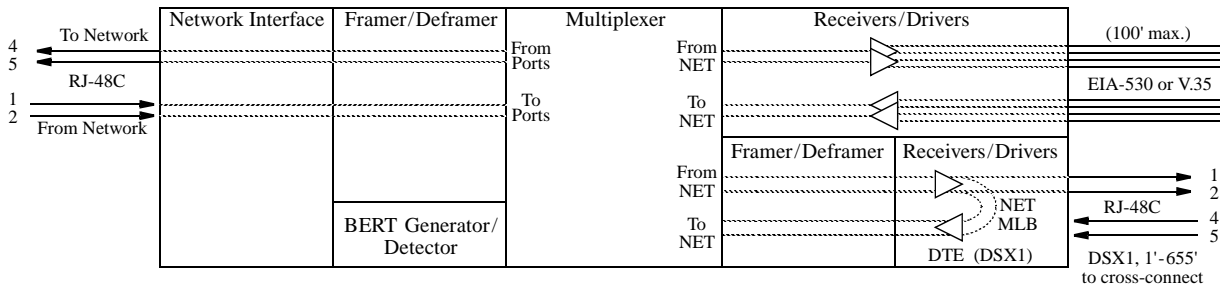


Figure 3-8 Network MLB

DTE MLB

The T1 DTE maintenance loopback command loops all network data back toward the DTE ports at the network interface. Data is passed through to the network. It is advisable to set T1-NET Timing to INTERNAL rather than NETWORK when this loop is enabled.

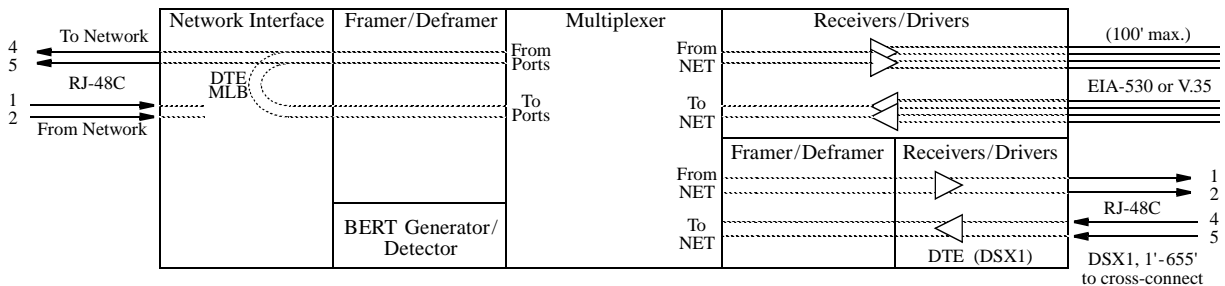


Figure 3-9 DTE MLB

DTE LLB

The T1 DTE line loopback command loops data received at the T1 DTE interface back toward the T1 DTE (all DS0s are returned to the T1 DTE port). The T1 DTE data is also passed to the network.

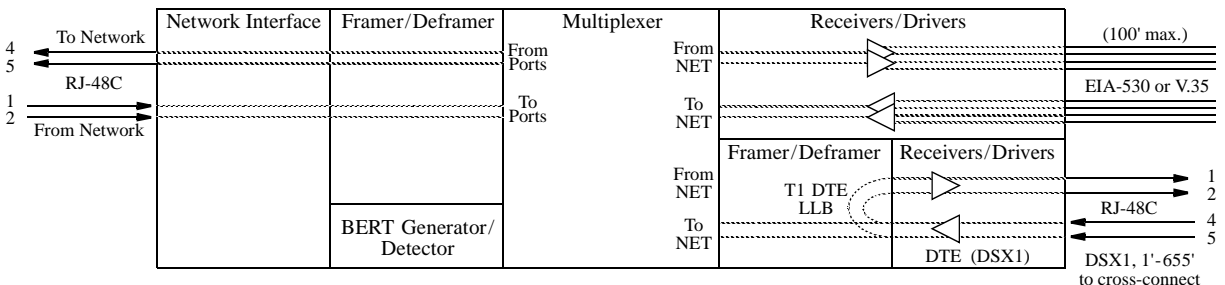


Figure 3-10 DTE LLB

Port Loop

Used to loop a high-speed DTE at the near or far end. High-speed port loops are bidirectional.

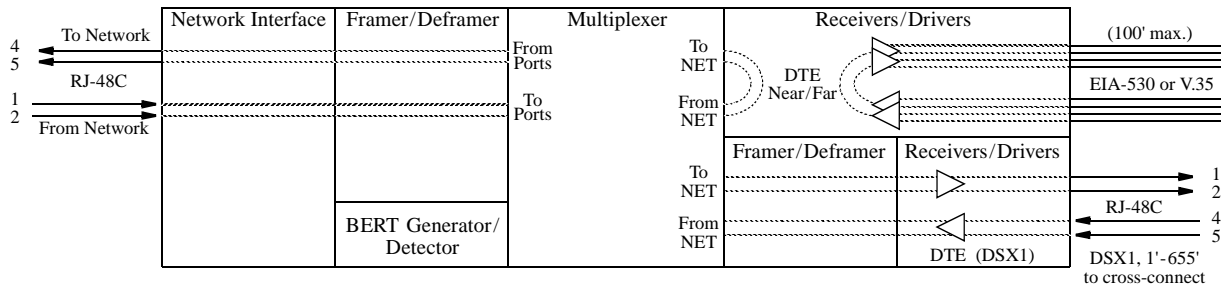


Figure 3-11 Port Loop

DSX Port Loop

Used to loop the data from the customer equipment back to the customer. The data from the network is terminated and the data from the customer is passed through to the network.

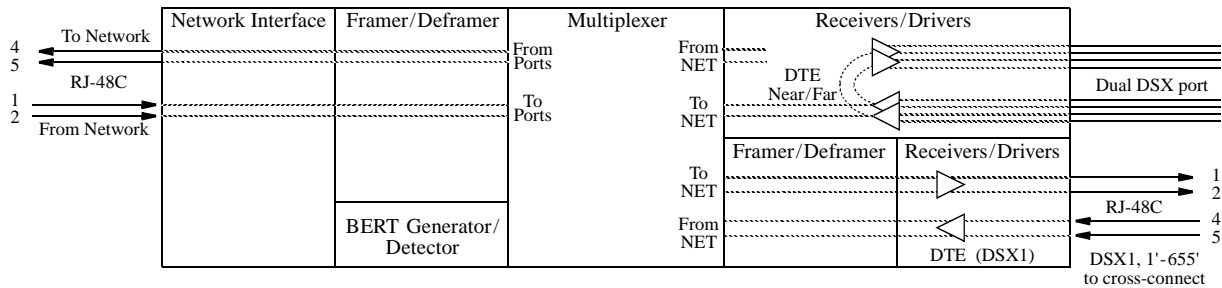


Figure 3-12 DSX Port Loop

BERT BERT

Specifies the direction the BERT signal is sent. If the direction is changed from the front panel, the new choice is not updated on the terminal interface until this screen is exited and then reentered. The choices are: IDLE, T1 NET, T1 DTE, Channels 1–24, plus XY NET and XY DTE, where X = 2 or 3 in the PRISM 3030 or 2 through 6 in the PRISM 3060 and Y = A or B.



All testing must be stopped before channels can be reallocated to an active port.

Pattern

Specifies the pattern transmitted during a test. Modifying this field does not cause the pattern to be transmitted (see Start Test below). The choices are QRSS, 63, 511, 2047, 2¹⁵, 2²⁰, 2²³, 1:8, 3:24, ALT, and CLEAR. The CLEAR pattern passes the received data through the unit (alarm detection and reporting is disabled while the test is active).

Test Length. Defines the run-time of test pattern generation and error accumulation. The choices are Continuous, 15 min, 30 min, 60 min, and 24 Hour.

Start Test. Pressing Enter with the cursor on the (START TEST) option starts the selected test pattern. TEST IN PROGRESS appears once the test has started. To end the test, press Enter on STOP TEST.

Reset Errors. Pressing Enter with the cursor clears the test error results.

The following fields are for display only. They reflect the selected test parameters and the results of these tests only.

Pattern Sync. Displays the current state of pattern sync during a test. If no test is in progress, NO TEST is displayed. If a test is active, but the receiver is not in pattern sync, NO SYNC is displayed. If the receiver is in pattern sync, IN SYNC is displayed.

Elapsed Time. Displays the time elapsed since a timed test began or, if completed, the total test time.

Bit Errors. Displays the total number of bit errors detected since the test began or since error statistics were cleared (up to 999,999).

Errored Seconds. Displays the number of asynchronous errored seconds that have been detected since the test began or since error statistics were last cleared. This parameter includes bit error seconds and sync loss seconds.

% EFS. This ratio is derived from the number of error-free seconds divided by the number of seconds accumulated in Elapsed Time.

Configuration Screen

The Dual DSX Configuration screen (Figure 4-6) allows viewing and setting configuration parameters for the Dual DSX unit.

```

3030 DSU x.xx/x.xx                PRISM 3030                Date: MM/DD/YY
3030 DSU x.xx/x.xx                (Unit Address: 23)         Time: HH:MM:SS

----- DUAL DSX CONFIGURATION-----

          222222  2+2+2+  333333  11111+
Channel Allocation:  AAAAAA  BXBXB  ABCDEF  *****R
Signalling Enabled:  -----  -----  -----  -----


          Port #:          [ 4A  ]

          Framing:         [ D4    ]
          Line Code:       [ AMI   ]
          DSX Level:      [ 0-110 FEET  ]
          Channel:        [ 1    ]
          Setting:        [ IDLE ]
          Signalling:     [ DISABLE ]
          Alarm on LOS/OOF: [ DISABLE ]

-----Messages-----

```

Figure 3-13 Dual DSX Configuration Screen

 To send a new configuration to the unit, press Enter on one of the fields or exit the screen. The underlined values are the factory default parameters stored in ROM.

This screen has the following fields, most of which have user-selectable options. To send the new line configuration to the unit, either press Enter on one of the fields, change the Element selection, or exit the screen.

Channel Allocation Indicates the network channel assignments with Channel 1 on the left and Channel 24 on the right.

The top line identifies the slot number and the bottom line identifies the port number. A plus (+) sign in the slot position indicates either a remote communication link or the fill channels used for the alternate channel assignment mode. When channels are assigned to a port in the ALTERNATE mode (Refer to chapter *Terminal Operation*, section *Fault and Loop Status* of the 3030 or 3060 reference manual), each data channel is followed by an idle channel not assignable for other ports and marked with an x in the port position.

The T1 DTE port is identified with an asterisk (*) in the port position. The Remote Comm Link is identified with an R in the port position. Refer to the following example.

```
Channel      222222 2+2+2+ 333333 11111+
Allocation:  AAAAAA BXBXBX ABCDEF *****R
```

Slot 2, Port A is assigned to network channels 1–6 (contiguous).

Slot 2, Port B is assigned to network channels 7–12 (alternating).

Slot 3, Port A is assigned to network channel 13 (voice).

Slot 3, Port B is assigned to network channel 14 (voice).

Slot 3, Port C is assigned to network channel 15 (voice).

Slot 3, Port D is assigned to network channel 16 (voice).

Slot 3, Port E is assigned to network channel 17 (voice).

Slot 3, Port F is assigned to network channel 18 (voice).

Network channels 19–23 are mapped through to the T1 DTE.

Network channel 24 is assigned to the remote communication link.

Signalling Enabled Used to show which channel has robbed-bit signalling enabled.

Port # Used to select the configuration of the slot (2 or 3 for the 3030 and 2 through 6 for the 3060) and the port (A or B).

The following parameters are for the displayed slot and port.

Framing Selects the type of framing for the network side of the element. The choices are ESF and D4.

Line Code Sets the network side line coding. The choices are AMI and B8ZS.

DSX Level Specifies the DTE line build out signal level. the choices are 0–110 ft, 111–220 ft, 221–330 ft, 331–440 ft, 441–550 ft, 551–660 ft, and >660 ft

Channel Selects channels to be assigned to the DSX port, from 1 through 24.

Setting IDLE

Sets the specified channel to transmit idle code on the DSX port and ignore received data.

THRU

Sets the specified channel to pass data from the DSX port to the network and vice versa.

Signalling Enables or disables robbed-bit signalling insertion for the selected channel.

Alarm on LOS/OOF The unit generates and clears alarms for OOF and LOS only as long as these conditions exist. The unit defaults to Disable.

