Loop-O9340S
MULTI-SERVICES GIGABIT FOM
(Stand-Alone)
USER'S MANUAL

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Version 10 24 SEP 2010

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1 PRODUCT DESCRIPTION

1.1 Description

The Loop-O9340S Multi-Services Gigabit FOM is a flexible, cost-effective FOM (Stand Alone). With hot-pluggable platform, it allows service providers to offer combination of Gigabit Ethernet, or E1/T1 network over Gigabit Optical pipe.

To select protection level, users can choose dual pair fiber for the line (1+1) in point-to-point application and dual power supplies for power protection.

Loop-O9340S offers management through console port, Ethernet port, Telnet and SNMP agents. It supports local control and diagnostics using console port. The unit also supports local and remote monitoring and diagnostics. Contacts for office alarms are available.

1.2 Application

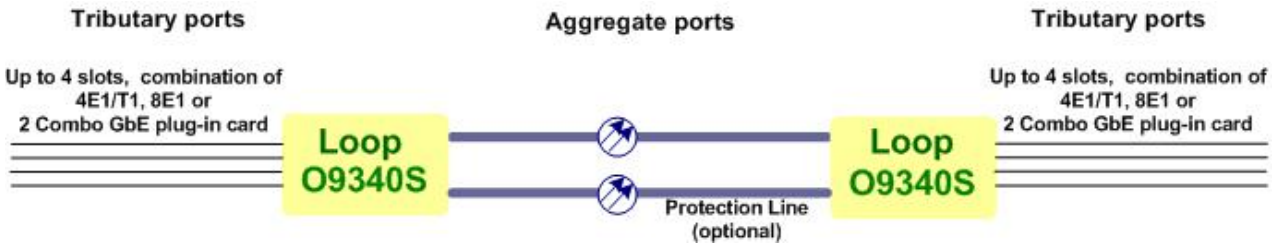


Figure 1-1 O9340S Point to Point Application

1.3 Specification

Optical SFP Module Characteristic for Gigabit Optical Interface/GbE Ethernet(GbE) Interface

SFP Optical Module	Direction	Data Rate	Wavelength(nm)	Connector	Distance
MTAFW	dual uni-directional fiber	1.25G	850	LC without DDM	550 m
MTAFD	dual uni-directional fiber	1.25G	850	LC with DDM	550 M
MTBTD	dual uni-directional fiber	1.25G	1310	LC with DDM	2 km
MTBTW	dual uni-directional fiber	1.25G	1310	LC without DDM	2 km
PTB1W	dual uni-directional fiber	1.25G	1310	LC without DDM	10 km
PTB2W	dual uni-directional fiber	1.25G	1310	LC without DDM	20 km
PTB4W	dual uni-directional fiber	1.25G	1310	LC without DDM	40 km
PTC5W	dual uni-directional fiber	1.25G	1550	LC without DDM	50 km
PTC6W	dual uni-directional fiber	1.25G	1550	LC without DDM	60 km
PTC8W	dual uni-directional fiber	1.25G	1550	LC without DDM	80 km
PTC9W	dual uni-directional fiber	1.25G	1550	LC without DDM	90 km
PTCVW	dual uni-directional fiber	1.25G	1550	LC without DDM	110 km
PTCXW	dual uni-directional fiber	1.25G	1550	LC without DDM	120 km
PTB1D	dual uni-directional fiber	1.25G	1310	LC with DDM	10 km
PTB3D	dual uni-directional fiber	1.25G	1310	LC with DDM	30 km
PTB4D	dual uni-directional fiber	1.25G	1310	LC with DDM	40 km
PTC5D	dual uni-directional fiber	1.25G	1550	LC with DDM	50 km
PTC6D	dual uni-directional fiber	1.25G	1550	LC with DDM	60 km
PTC8D	dual uni-directional fiber	1.25G	1550	LC with DDM	80 km
PTC9D	dual uni-directional fiber	1.25G	1550	LC with DDM	90 km
PTCVD	dual uni-directional fiber	1.25G	1550	LC with DDM	110 km
PTCXD	dual uni-directional fiber	1.25G	1550	LC with DDM	120 km
PKB1W	dual uni-directional fiber	622Mbps~ 1.25G	1310	LC with DDM	10 km

NOTE: For other special optical modules, please contact your nearest Loop sales representative.

SFP Optical Module	Direction	Data Rate	Wavelength(nm)	Connector	Distance
PTD1W	bi-directional fiber	1.25G	Tx1310/Rx1550 nm	LC without DDM	10 km
PTE1W	bi-directional fiber	1.25G	Tx1550/Rx1310 nm	LC without DDM	10 km
PTD2W	bi-directional fiber	1.25G	Tx1310/Rx1550 nm	LC without DDM	20 km
PTE2W	bi-directional fiber	1.25G	Tx1550/Rx1310 nm	LC without DDM	20 km
PTD4W	bi-directional fiber	1.25G	Tx1310/Rx1550 nm	LC without DDM	40 km
PTE4W	bi-directional fiber	1.25G	Tx1550/Rx1310 nm	LC without DDM	40 km
PTD6W	bi-directional fiber	1.25G	Tx1310/Rx1550 nm	LC without DDM	60 km
PTE6W	bi-directional fiber	1.25G	Tx1550/Rx1310 nm	LC without DDM	60 km
PTD1D	bi-directional fiber	1.25G	Tx1310/Rx1550 nm	LC with DDM	10 km
PTE1D	bi-directional fiber	1.25G	Tx1550/Rx1310 nm	LC with DDM	10 km
PTD2D	bi-directional fiber	1.25G	Tx1310/Rx1550 nm	LC with DDM	20 km
PTE2D	bi-directional fiber	1.25G	Tx1550/Rx1310 nm	LC with DDM	20 km
PTD4D	bi-directional fiber	1.25G	Tx1310/Rx1550 nm	LC with DDM	40 km
PTE4D	bi-directional fiber	1.25G	Tx1550/Rx1310 nm	LC with DDM	40 km
PTD6D	bi-directional fiber	1.25G	Tx1310/Rx1550 nm	LC with DDM	60 km
PTE6D	bi-directional fiber	1.25G	Tx1550/Rx1310 nm	LC with DDM	60 km
PTD8D	bi-directional fiber	1.25G	Tx1310/Rx1550 nm	LC with DDM	80 km
PTE8D	bi-directional fiber	1.25G	Tx1550/Rx1310 nm	LC with DDM	80 km

Aggregate – Gigabit Optical Interface

Number of Ports	2
Speed	1000M bps
Connector	SFP housing with LC

Tributary - E1 Interface

Line Rate	2.048M bps ± 50 ppm
Line Code	AMI/ HDB3
Framing	ITU G.704 framing monitoring only (framing transparency)
Output Signal	ITU G.703
Input Signal	ITU G.703
Connector	DB37 (DB37 to wire-wrap adapter and DB37 to RJ48 conversion cable are available) 1.0/2.3 RF connector (75 ohm impedance) with optional conversion cable(future option)
Jitter	ITU G.823
Surge Protection	IEC 61000-4-5 class 3

Tributary –T1 Interface

Line Rate	1.544M bps ± 32 ppm
Line Code	AMI / B8ZS(selectable)
Framing	D4 / ESF(selectable) framing monitoring only (framing transparency)
Output Signal	DS1 with 0, -7.5, -15 dB LBO
Input Signal	DS1 with 0 dB to -26 dB ALBO
Connector	DB37
Conversion Cable	DB37 to wire-wrap adapter, DB37 to 8 RJ45 female conversion cable, DB37 to 8 BNC conversion cable
Pulse Template	Per AT&T TR 62411
Surge Protection	IEC 61000-4-5 class 3

Tributary-Combo Gigabit Ethernet(GbE) Interface

Speed	10/100/1000M bps
Connector	RJ45 for twisted pair GbE, LC for optical GbE, auto detection
Surge Protection	IEC 61000-4-5 class 3

Ethernet Function

Basic Features	MDI/MDIX for 10/100/1000M BaseT auto-sensing Ethernet Leased Line Transmission with Hard-segmentation among Ethernet ports Support Packet length up to 2000 bytes Link Fault Propagation (LFP)
Packet Transparency	Packet transparency support for all types of packet types including IEEE 802.1q VLAN and 802.1ad (Q-in-Q) BPDU packet transparency Pause Frame transparency
QoS	Packet classification based on the 802.1p CoS 4 priority queues for packet classification Support Strictly Priority or WRR Scheduling of the 4 priority queues
Traffic Control	Ingress packet Rate limiting with granularity of 256kbps Pause frame issued when the traffic exceeding the limited rate before packet dropped following IEEE802.3X 256Kbytes of packet buffer per priority queue
Aggregate throughput	Up to 940 Mbps

SNMP Ethernet

Ethernet Functions	10/100BaseT, IEEE802.3 Auto-negotiation(10/100M) Auto MDI/MDIX Full or half duplex
Connector	RJ45

Alarm Relay

Alarm Relay	Fuse alarm and performance alarm

System Clock

Clock Source	Internal clock Aggregate line clock

Management

ACO	A button of alarm cut-off
RST	System Reset Button (Non-traffic affecting)
Console Port	Electrical: RS232, DCE Protocol: Menu driven VT-100 Connector: DB9S, female
Telnet	Access via SNMP Ethernet port
SNMP	SNMP v1, v2c; Up to 5 Trap IPs
Inband Management	Inband management in traffic bandwidth

Aggregate Diagnostics

Aggregate Loopbacks	Aggregate Local Loopback, Aggregate Remote Loopback
Bert	Off/PRBS $2^{\wedge 15}$-1

Tributary Diagnostics

E1/T1 Loopbacks	Local Loopback, Remote Loopback
E1/T1 Bert	Off/PRBS $2^{\wedge 15}$-1 (to aggregate)
GbE Loopbacks	Local Loopback, Remote Loopback
GbE Bert	Off/PRBS $2^{\wedge 15}$-1 (to aggregate)

Performance Monitor

Alarm History	Alarm Type (i.e. RAI, AIS, LOS, BPV, ES, UAS)
Alarm Queue	Maximum 500 alarm records which record the latest alarm type, location, and date & time
Alarm Threshold	BPV, ES, UAS

Aggregate Performance

Performance Store	Last 24 hours performance in 15-minute intervals and last 7 days in 24-hour intervals.
Performance Reports	Date & Time, Errored Second, Severe Errored Second count, Unavailable Second.

E1/T1 Performance

Performance Store	Last 24 hours performance in 15-minute intervals and last 7 days in 24-hour summary line, user
Performance Reports	Date & Time, Errored Second, Unavailable Second, Bursty Errored Second, Severe Errored Second count.

GbE Performance

Performance Store	Last 24 hours performance in 15-minute intervals and last 7 days in 24-hour intervals.
Performance Reports	Date & Time, Errored Second, Severe Errored Second count, Unavailable Second.

Power

AC Module	100 to 240 Vac
-48 Vdc Module	-36 to -75 Vdc
Power Consumption	Max. 20W

Physical and /Environmental

Dimensions	438 mm x 44 mm x 226 mm (WxHxD)
Temperature	0 -50°C (operation) or -20 -70°C (Industrial)
Humidity	0-95% RH(non condensing)
Mounting	Desk-top stackable, wall mount, rack mount

Certification

EMC	EN55022 Class A, EN55024, FCC Part 15 Class A
Safety	EN60950-1, IEC60950-1

Standards Compliance

ITU-T	G.703, G.704, G.823
IEC	61000-4-5 class 3
IEEE	802.3, 802.3u, 802.3z, 802.3X, 802.1q, 802.1ad

2 INSTALLATION

Chapter two provides introduction to all hardware units of Loop-O9340S and their detailed setup procedures. Both mechanical and electrical installations are included.

2.1 Site Preparation

Ensure that your installation site conforms to all environmental and structural regulations. A power supply must be available that conforms to the Loop-O9340S power requirements. It is recommended that a minimum bay access of 500mm be provided.

The following list indicates a site selection guideline. Follow this guideline to select a proper installation site.

- Location of the O9340 unit should be part of the central office equipment layout design. Considerations should be given to entrance cable routing.
- The installation site should provide proper room for adequate ventilation and cable routing. Reserve at least 0.5 m at the rear of the unit for human access, cables, and air flow.
- The site should provide a stable environment. The operating area should be clean and free from extremes of temperature, humidity, shock, and vibration.
- Relative humidity should stay between 0 and 95%.

2.2 Mechanical Installation

Wear a grounding wrist strap while installing the equipment. Familiarize yourself with the instructions in this manual before commencing any work.

2.2.1 Overview

When installing O9340S equipment into racks, follow these guidelines:

- Consider the effect of additional electronic equipment and its generated heat on the O9340 system equipment.
- Make sure the equipment rack is properly secured to the ground and, if required, to the ceiling.
- Ensure that the weight of the equipment does not make the rack unstable.
- When mounting equipment between two posts or rails, ensure that the minimum clearance between the sides is 485 mm (19 in.).
- Maintain a minimum clearance of 500 mm (19.7 in.) in front of the equipment and 500mm (19.7 in.) at the rear.

Note: For proper operation of the O9340S and the terminal server module in particular, the O9340S chassis must be grounded. Connect the chassis ground screw to a good earth connection with an AWG 16 wire at least.

2.2.2 Rack Mount Instruction

The O9340S is designed as a stand alone unit. It can be wall-mounted or rack-mounted.

The O9340S will fit in 485 mm (19-in.) equipment racks, and can be adapted for 600 mm ETSI (23.6-in.) racks. The racks must be accessible from the front and rear for equipment installation. You must allow at least 500 mm of space for this.

2.2.3 Chassis Grounding

The chassis is grounded when rack mounted. However, for stand alone units or extra grounding protection for rack mounted units, a dedicated chassis ground screw and lock washer is provided. The chassis ground screw is located on the right-hand side of the rear panel.

When attaching a ground wire to the chassis ground screw, please follow these instructions.

- Use copper grounding conductors of 18 AWG.
- Conductors should not be of dissimilar metals.
- The bare conductors should be coated with anti-oxidant before crimp connections are made.
- Un-plated connection surfaces, connectors, braided strap and bus bars must be bought to a bright finish and coated with anti-oxidant before connections are made.

Listed connectors and fastening hardware must be used.

Figure 2-1 Chassis Ground Location

2.3 O9340S Panel Views

We provide two types of shelves for O9340S:

- ANSI Shelf (front/rear access) with LCD panel (optional)
- ETSI Shelf (full front access)

Please see the following sections for detailed shelf description and panel views.

2.3.1 ANSI Shelf Overview

2.3.1.1 Front View of ANSI Shelf with LCD Panel Option

The front panel of ANSI shelf (from left to right) is system status LEDs indicators, LCD panel with keypads (optional), and power option.

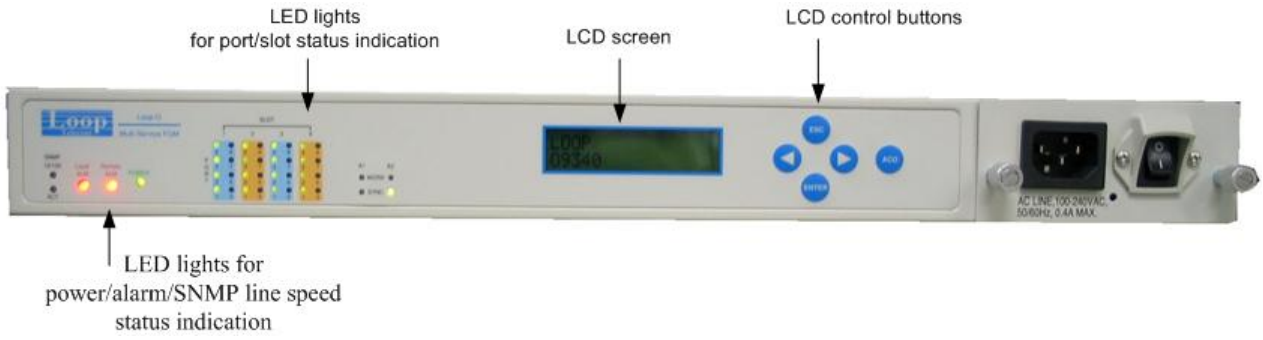


Figure 2-2 Front View of ANSI Shelf

2.3.1.2 Rear View of ANSI Shelf

The rear panel of ANSI shelf (from left to right) is power option, 4 slots for combination of tributary cards, and management ports.

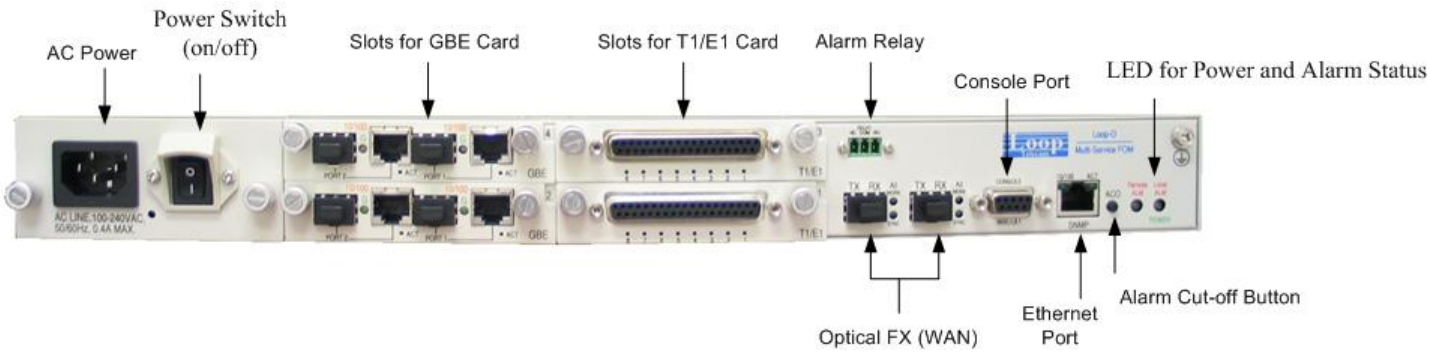


Figure 2-3 Rear View of ANSI Shelf

2.4 Electrical Installation

The power connection could be 90-240 Vac, 50—60Hz (3 pin AC jet), DC –48Vdc (-36 to –72Vdc) 3 pin terminal block or AC/DC co-existent. The power switch should be in the OFF position while you connect the power source.

Caution: Do not (under any circumstances) connect the O9340S unit to a power source that is inconsistent with the power rating labeled on the rear of the device. Do not (under any circumstances) remove the power module from the O9340S device while it is connected to live power source. Disconnect the module from the power source before removing it from the O9340S.

2.4.1 DC plug-in Module

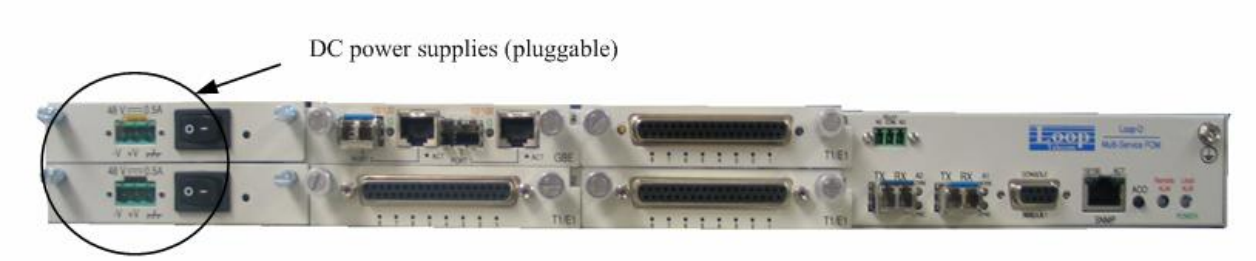


Figure 2-4 View of DC module

2.4.2 AC plug-in Module

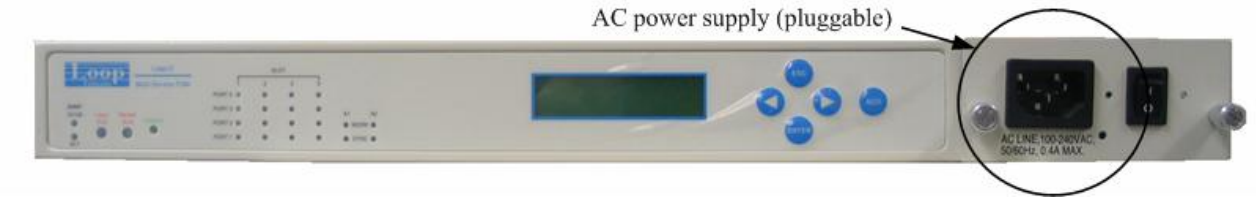


Figure 2-5 View of AC module

2.4.3 Pin Assignment for Power Connector

Pin Number	Signal	Description
1	-V	-DC 24 or 48 Volts
2	+V	+DC Return
3	⏚	Chassis Ground

Table 2-1 Power Connector

3 INTERFACE

This section provides different types of physical interfaces in O9340S.

- Aggregate Ports: 2 Gigabit Optical Interfaces with SFP housing
- Tributary Ports: 4 hot-swappable slots with choice of 4 E1/T1, 8 E1 and 2 Combo GbE plug-in cards.
- LCD panel and Keypads:
- Console Port: 1 RS232, DB9
- SNMP Port: RJ45
- Alarm Relay Port

3.1 Aggregate Ports

The two aggregate ports are Gigabit Optical Interface with SFP housing and support the following functions:

- Protection
  - Aggregate Line (1+1) protection
- Switch
  - Switching time will be within 50ms
  - Switching mode: manual switch, automatic switch

3.1.1 Connector

The connector of Gigabit Optical Interface is SFP housing with LC

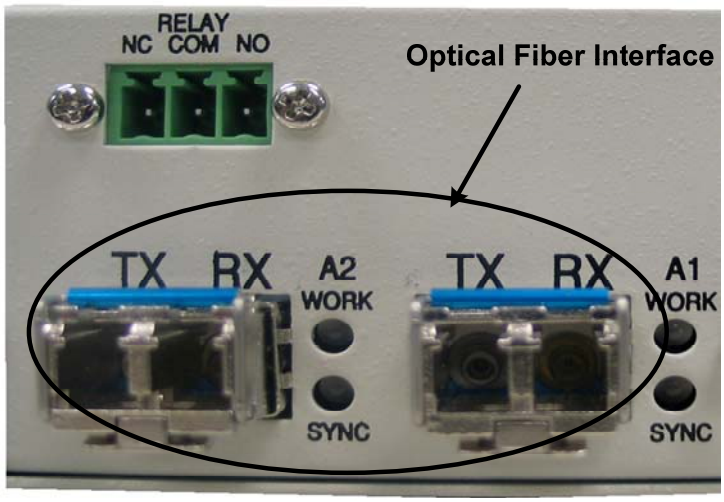


Figure 3-1 Gigabit Optical Interface

3.2 Tributary Ports

Available plug-in cards for the O9340S are as follow:
- 4 E1/T1 plug-in card
- 8 E1 plug-in card
- GbE plug-in card

Each unit can set up to 16 channels of 4E1/T1 ports or 32 channels of 8E1 ports.

3.2.1 4 port E1/T1 and 8 port E1 Plug-in Card

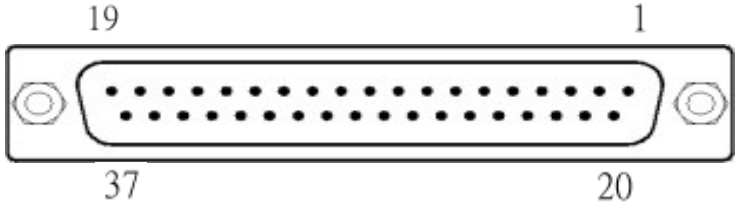
The front panel of 4 port E1/T1 and 8 port E1 is the same.

Figure 3-2 4E1/T1 and 8 E1Plug-in Card

The functions of the E1/T1 cards are as follow:
- E1/T1 per card is software configurable
- Up to 16 channels of 4E1/T1 ports or 32 channels of 8E1 ports per system

3.2.1.1 DB37 Connector

E1/T1 Card contains a DB37 connector. The pin assignment is as follows:



		Port 1	Port 2	Port 3	Port 4
RX	Tip	15	13	11	9
	Ring	34	32	30	28
	Earth	22	3	20	1
TX	Tip	16	14	12	10
	Ring	35	33	31	29
	Earth	4	23	2	21

Table 3-1 4E1/T1: DB37 Pin Assignments

		Port 1	Port 2	Port 3	Port 4	Port 5	Port 6	Port 7	Port 8
RX	Tip	15	13	11	9	7	5	3	1
	Ring	34	32	30	28	26	24	22	20
TX	Tip	16	14	12	10	8	6	4	2
	Ring	35	33	31	29	27	25	23	31

Table 3-2 8E1: DB37 Pin Assignments

3.2.1.2 Adapter: DB37 to Wrie-Wrap

- **For 4E1/T1 port:**

Figure 3-3 DB37 to Wire-Wrap Adapter for 4E1/T1 Port

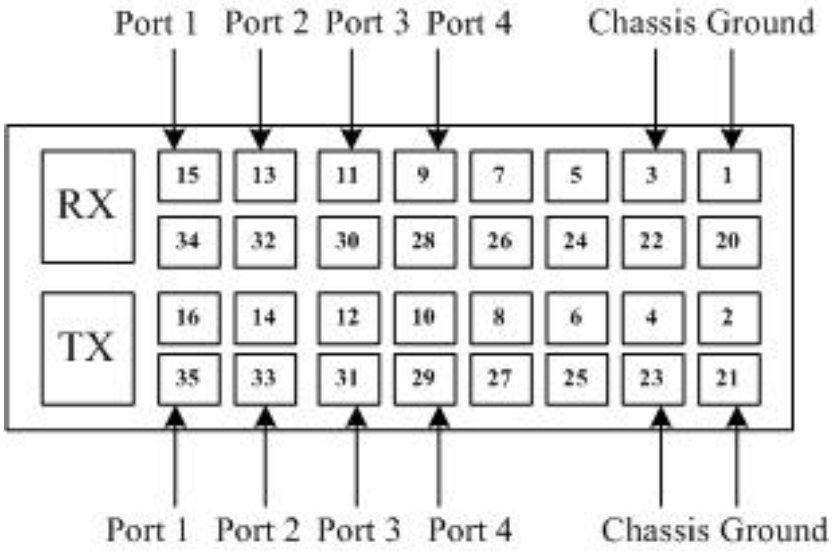


Figure 3-4 Pin Assignment for 4E1/T1 DB37 to Wire-Wrap Adapter

- **For 8E1 Port:**

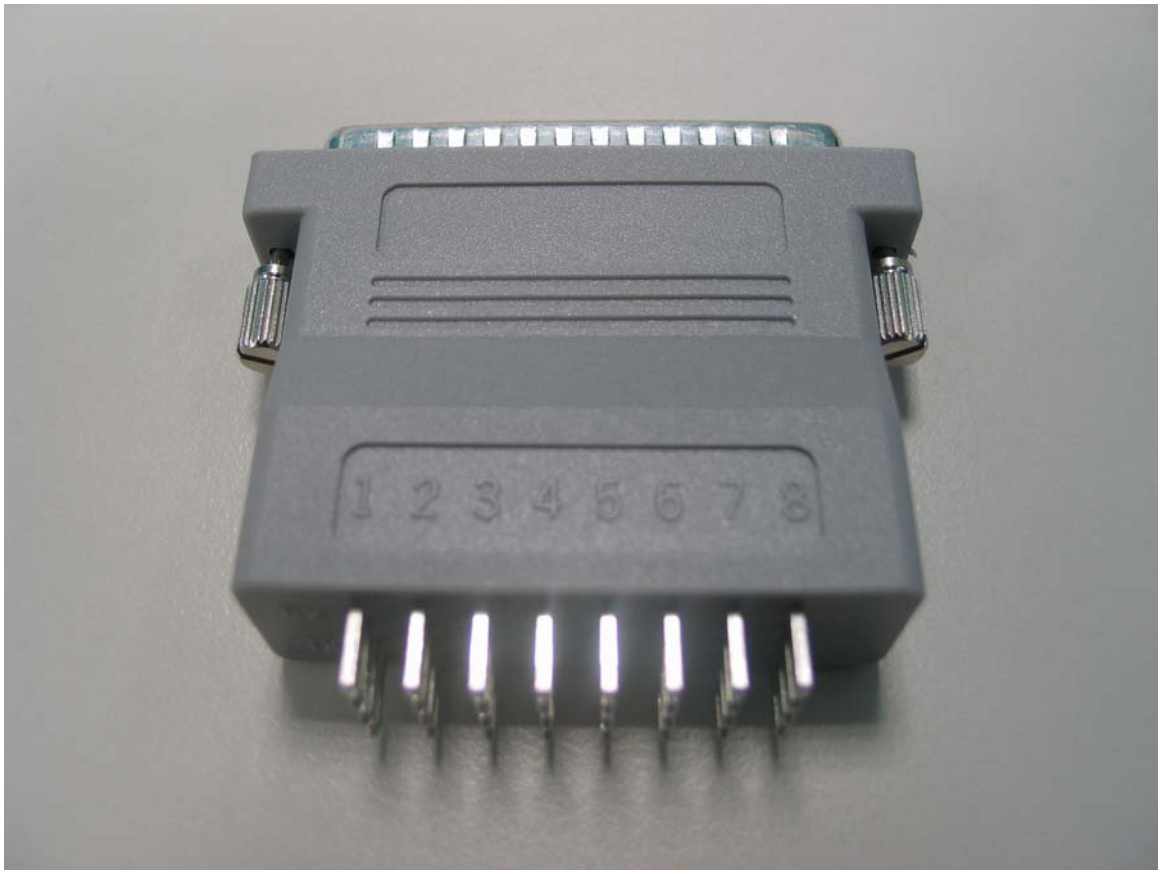


Figure 3-5 DB37 to Wire-Wrap Adapter for 8E1 Port

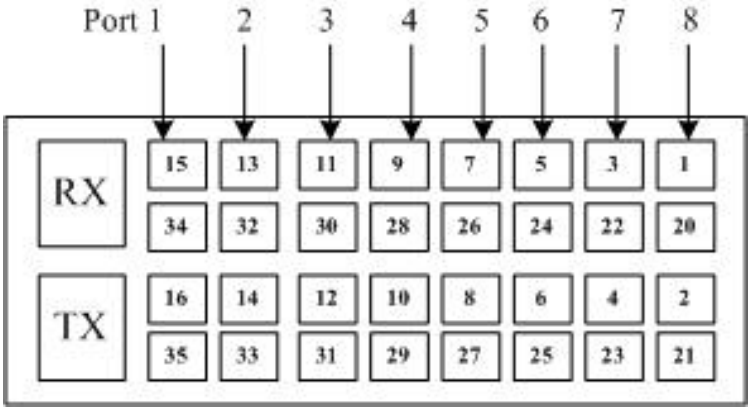


Figure 3-6 Pin Assignment for 8E1 DB37 to Wire-Wrap Adapter

3.2.1.3 Conversion Cable: DB37 to RJ45

Figure 3-7 DB37 to RJ45 Conversion Cable

RJ45 Port / RJ45 Pin		Port 1	Port 2	Port 3	Port 4	Port 5	Port 6	Port 7	Port 8
RX	**Pin_1**	DB37_15	DB37_13	DB37_11	DB37_9	DB37_7	DB37_5	DB37_3	DB37_1
	Pin_2	DB37_34	DB37_32	DB37_30	DB37_28	DB37_26	DB37_24	DB37_22	DB37_20
	Pin_3	X	X	X	X	X	X	X	X
TX	**Pin_4**	DB37_16	DB37_14	DB37_12	DB37_10	DB37_8	DB37_6	DB37_4	DB37_2
	Pin_5	DB37_35	DB37_33	DB37_31	DB37_29	DB37_27	DB37_25	DB37_23	DB37_21
	Pin_6	X	X	X	X	X	X	X	X
	Pin_7	X	X	X	X	X	X	X	X
	Pin_8	X	X	X	X	X	X	X	X

Table 3-3 DB37 to RJ45 Pin Assignment

3.2.1.4 Conversion Cable: DB37 to 8 BNC

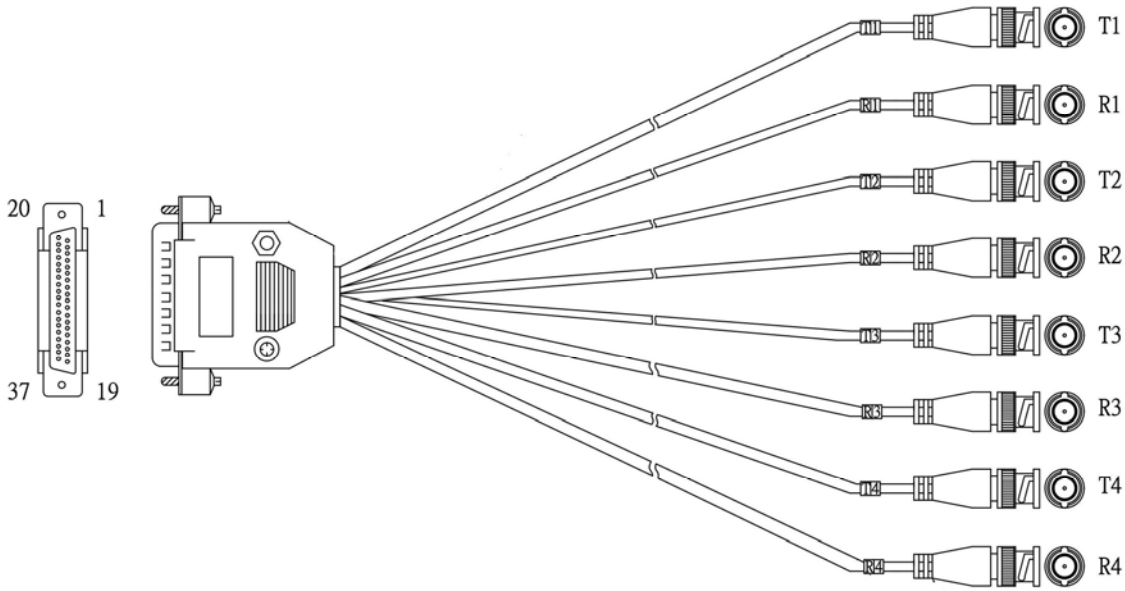


Figure 3-8 DB37 to 8 BNC Conversion Cable

DB37 Connector Pin Number	BNC Connector	4E1 Port Number
35	T1	Port 1
16		
34	R1	
15		
33	T2	Port 2
14		
32	R2	
13		
31	T3	Port 3
12		
30	R3	
11		
29	T4	Port 4
10		
28	R4	
9		

Table 3-4 DB37 to 8BNC Conversion Pin Assignments

3.2.2 GbE plug-in card

The GbE plug-in card contains two pairs of combo GbE ports (2 RJ45 and 2 SFP housing). The functions of the GbE card are as follow:

- Packet Transparency: BPDU packet transparency; IEEE 802.1q VLAN, 802.1ad (Q-in-Q)
- QoS: 4 priority queues for packet classification; 256K bytes of packet buffer per priority queue, IEEE 802.1p CoS
- Traffic Rate Control: Rate limited with 256K bps; IEEE 802.3X

Pin Number	Signal	Description
1	TPTX_A+	TP Driver Output 1
2	TPTX_A-	
3	TPRX_B+	TP Receive Input 1
6	TPRX_B-	
4	TPTX_A+	TP Driver Output 2
5	TPTX_C-	
7	TPRX_D+	TP Driver Output 2
8	TPRX_D-	

Table 3-5 GbE Card Pin Assignment

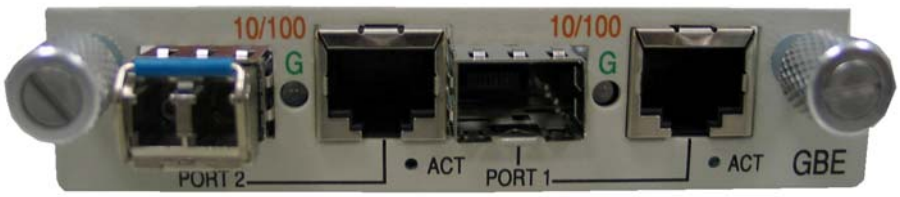


Figure 3-9 GbE plug-in card

3.3 Management Ports

Connector	Description
Console	The console port DB9 DCE
SNMP	The 10/100BaseT SNMP port RJ-45 (4 pins)
CLK IO	2 pairs of external timing source input and output
ALM O/P	The external alarm Outputs (4 Outputs)
ALM I/P	The external Alarm Inputs (4 Inputs)

3.3.1 Alarm

Pin Number	Signal	Description
1	NC	Normal Close
2	COM	Common
3	NO	Normal Open

Table 3-6 Alarm Relay Table

3.3.2 Console

The console port allows the user either to use a local or remote VT-100 terminal via modem for system configuration, diagnostics, polling status reports, etc. The default configuration is listed below:

Item	Fixed Setting
Baud	9600
Data Length	8
Stop Bit	1
Parity	NONE

Table 3-7 Console Port Settings

3.3.2.1 Connector

The RS232 interface for O9340S is provided via a DB9 connector, with the following pin-out:

Pin Number	Signal	Description
1	Data Carrier Detect	Output from O9340
2	Receive Data	Output from O9340
3	Transmit Data	Input to O9340
4	Unassigned	
5	Signal Ground	
6	Data Set Ready	Output from O9340
7	Unassigned	
8	Clear to send	Output from O9340
9	Unassigned	

Table 3-8 DB9 Console Port Pin Assignment

3.3.3 SNMP

The SNMP port is an Ethernet interface. The pin assignment is listed as below:

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

Table 3-9 Ethernet Port

3.4 LED

LED Location	LED Name	LED Color	Function
	Power	Off	System power OFF
		Green	System power ON
		Red	Local FOM major alarm
	Local ALM (Local alarm)	Green	No alarm
		Red	Local FOM major alarm
	Remote ALM (Remote alarm)	Off	No alarm on Remote FOM
		Red	Remote FOM major alarm
SNMP Port	Act (activity)	Flashing Green	SNMP port transmitting packets
		Green	SNMP port
	SNMP 10/100	Off	SNMP rate: 10Mbps
		Green	SNMP rate: 100Mbps
Aggregate Port	Work (A1), Work (A2)	Off	standby port
		Flashing Green	working port with ongoing FOM loopback or sending test pattern
		Green	working port without ongoing FOM loopback
	SYNC(A1), SYNC(A2)	Off	Aggregate port disable
		Green	frame sync
		Red	loss of signal (LOS)
4 E1/T1 Port	Front panel LED : Port 1 ~ Port 4 (slot 1) Port 1 ~ Port 4 (slot 2) Port 1 ~ Port 4 (slot 3) Port 1 ~ Port 4 (slot 4) E1/T1 card LED：1~4	Off	E1/T1 port disable
		Green	E1/T1 port frame sync
		Flashing Green	E1/T1 port loopback or sending test pattern
		Flashing Red	Receive AIS alarm
		Red	E1/T1 port loss of signal (LOS)
8 E1 Port	Front panel LED : Port 1 ~ Port 8 (slot 1) Port 1 ~ Port 8 (slot 2) Port 1 ~ Port 8 (slot 3) Port 1 ~ Port 8 (slot 4) E1 card LED：1~8	Off	E1 port disable
		Green	E1 port frame sync
		Flashing Green	E1 port loopback
		Flashing Red	Remove AIS alarm
		Red	E1 port loss of signal (LOS)
Combo GbE Port	Port 1, Port 2 (slot 1) Port 1, Port 2 (slot 2) Port 1, Port 2 (slot 3) Port 1, Port 2 (slot 4)	Off	Ethernet port disable
		Green	Ethernet port link up
		Flashing Green	Ethernet port loopback or sending test pattern
		Red	Ethernet port link down
	Act (activity) (port 1, port 2)	Flashing Green	Combo GbE port sending packet
		Green	Combo GbE stop sending packet
	G (port 1, port 2)	Off	Link down or disable
		Green	SFP port sync or 1000M (RJ)
		Yellow	RJ(100M) port sync
		Flashing Green	Ethernet port with ongoing FOM loopback or sending test pattern

Table 3-10 LED Indication

3.5 Interface Block Diagram

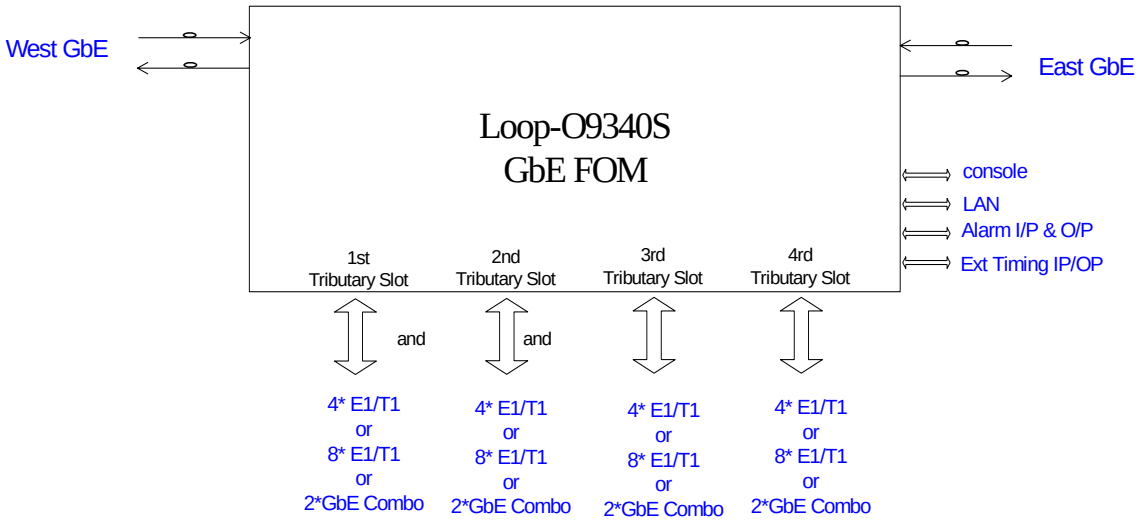


Figure 3-10 O9340S system interfaces

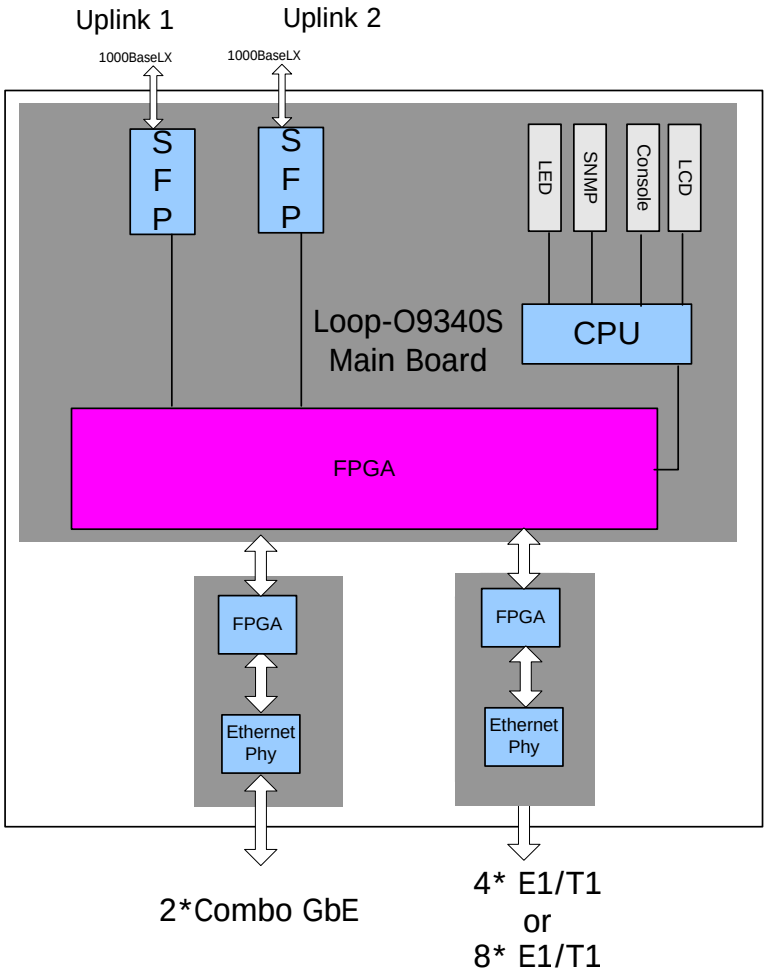


Figure 3-11 O9340S Interface Block Diagram

4 SYSTEM OPERATION

4.1 Quick Start

Loop-O9340S provides comprehensive and enhanced configuration and test capability through the console port. A VT-100 type terminal or a modem can be connected to the console port on the front of O9340S. By using single-character commands and arrow keys, Loop-O9340S can be configured and tested. Single-character commands are not case sensitive.

4.1.1 Power On

After following the installation instructions in Chapter 2, connect the unit with a console connector, then, power it up. It will go through a self-test procedure.

4.2 Self Test

At system power up, a complete self-test routine will run to check all I/O ports, read/write memory, and data paths to validate system integrity. If no error is found, the VT100 screen will automatically bring you to the login page. If the login page fails to appear, power down the unit and check all connections and cables before powering it up again.

4.3 Using the LCD panel

The front panel LCD utilizes a 2-line by 16-character display and four keys labeled ESC, ENTER, left arrow '<', and right arrow '>', as shown in Figure 4-1. The ENTER key is to enable a selection, while the left and right arrow keys move the cursor to the left and right respectively. The ESC key returns to the next higher level of selection or to the main menu without performing any operation. When the menu selected has no further sub-menus, the current item selected is indicated by “*”.

Figure 4-1 LCD Panel View

Note: Use left or right key to select the desired main menu branch and press ENTER to confirm your setting.

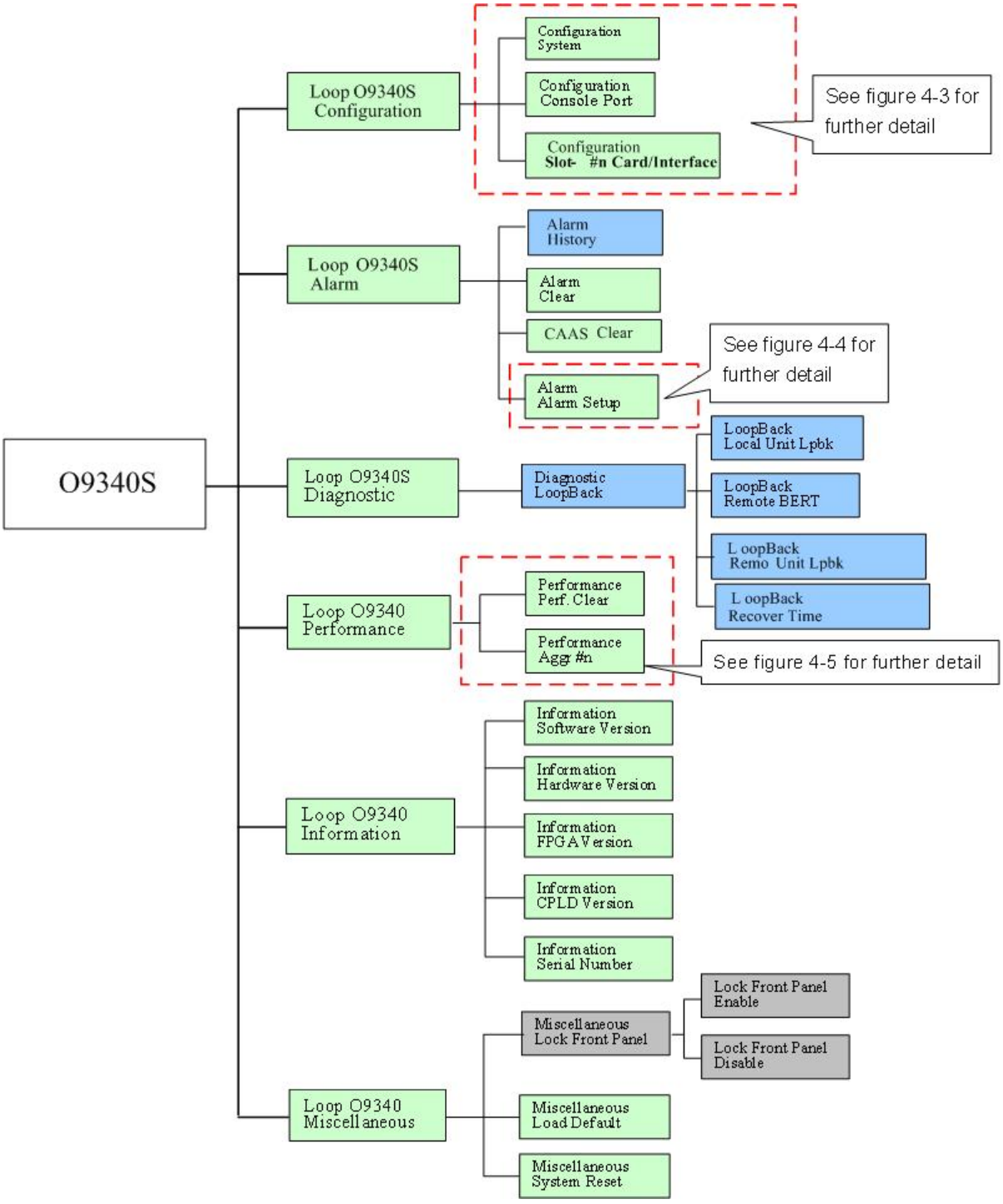


Figure 4-2 LCD Menu Tree: Main Menu

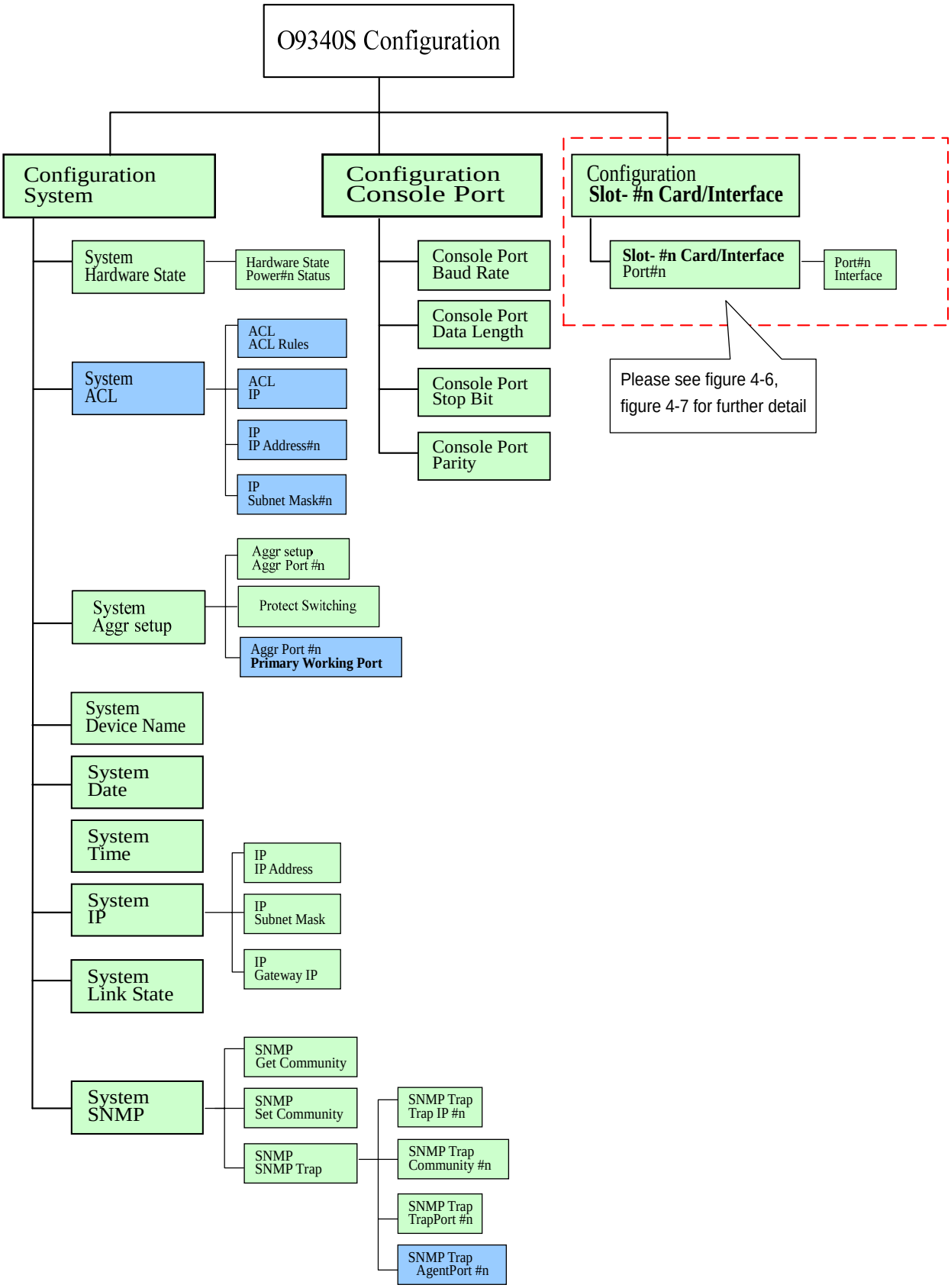


Figure 4-3 LCD Main Menu Tree: Configuration

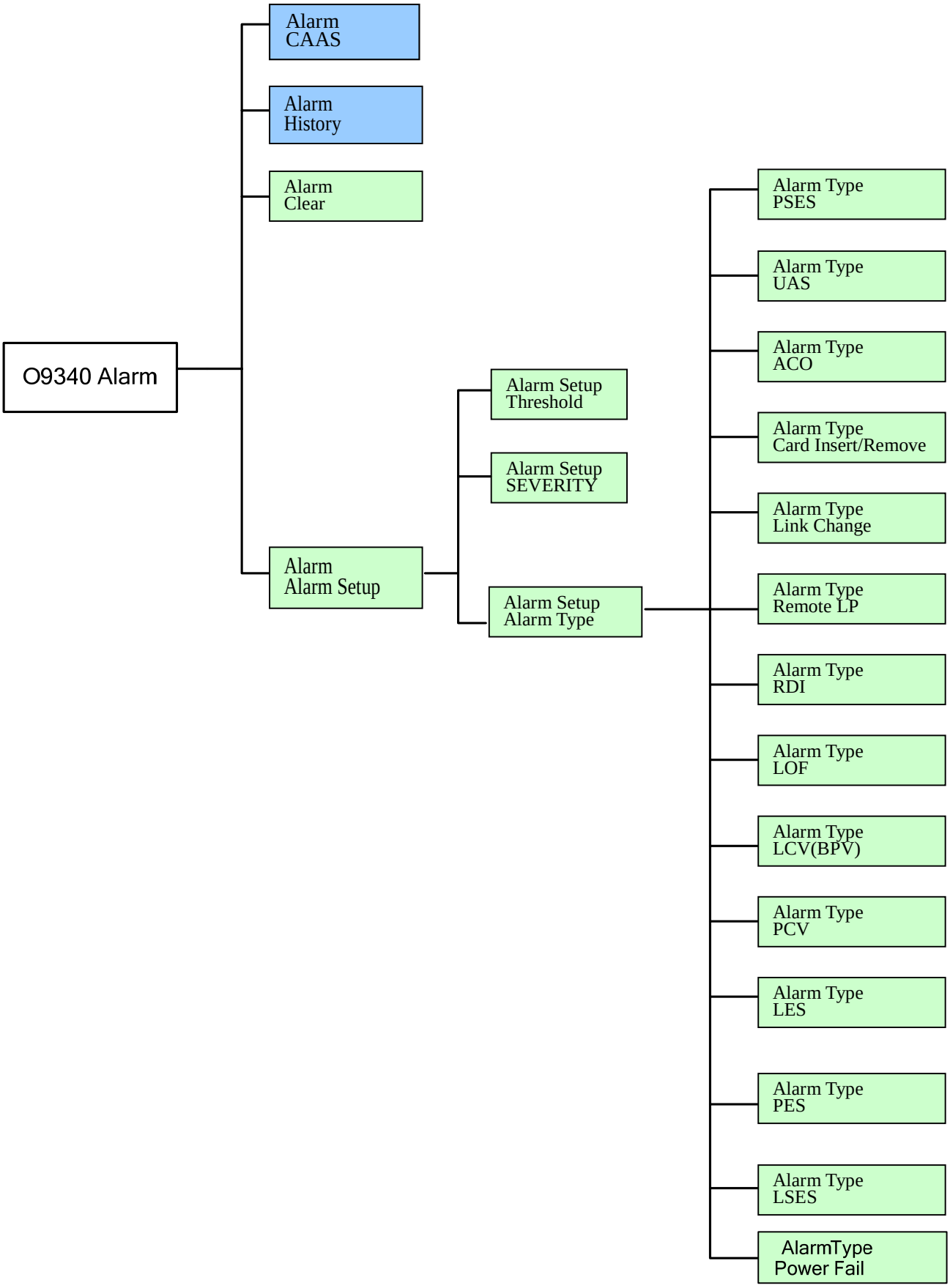


Figure 4-4 LCD Main Menu : Alarm

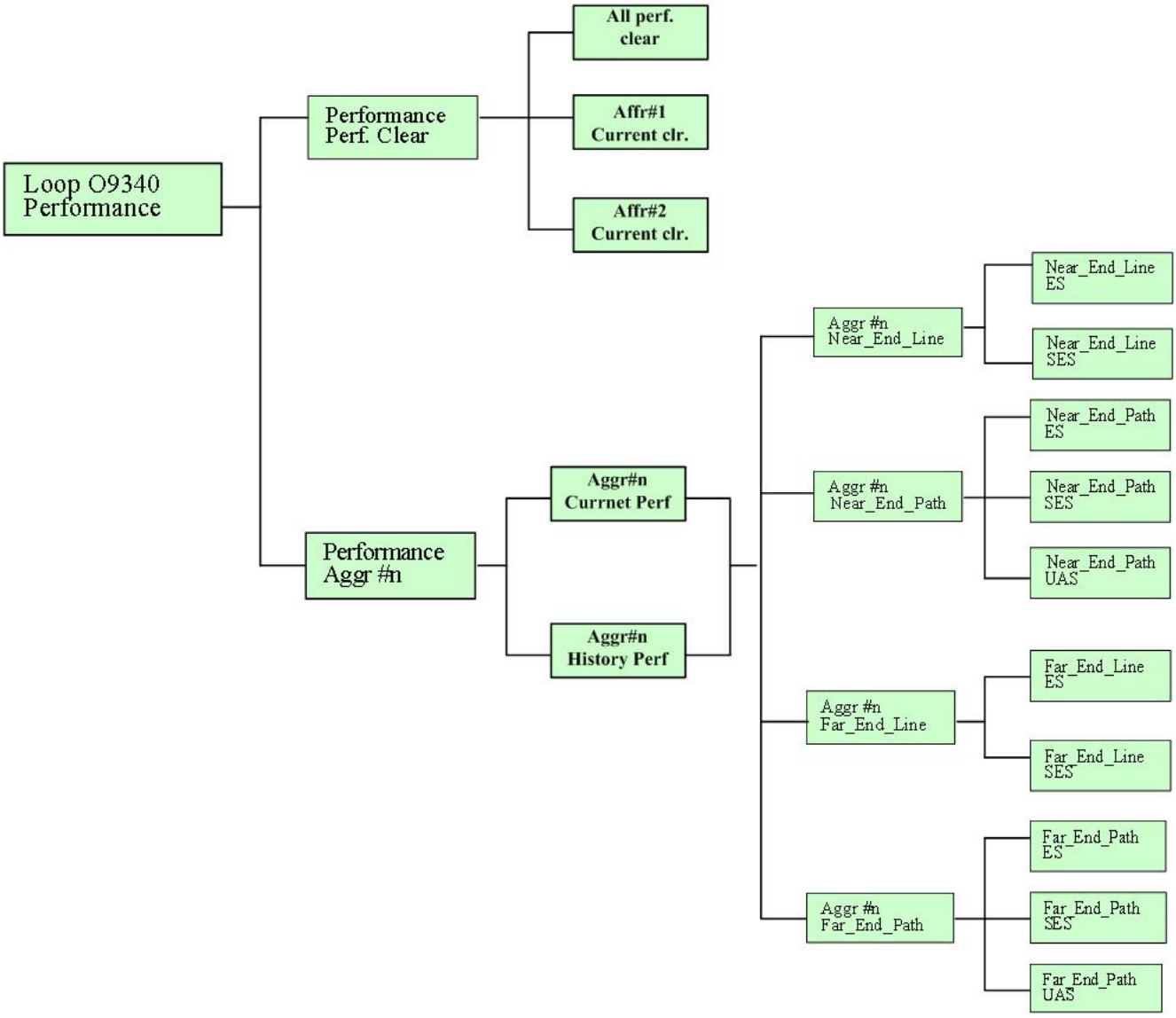


Figure 4-5 LCD Main Menu: Performance

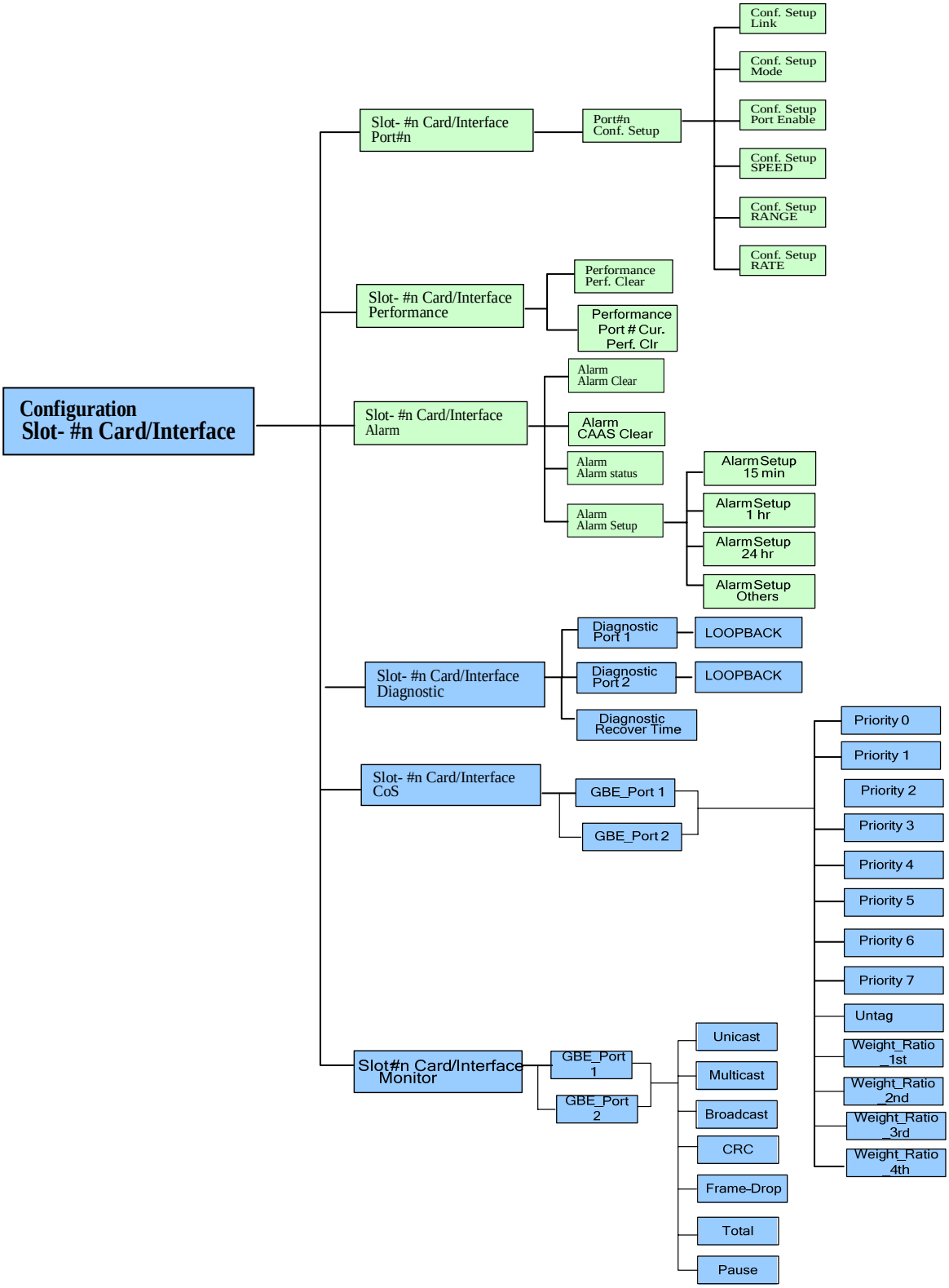


Figure 4-6 LCD Menu Tree: Plug-in Cards

4.4 Using a VT-100 terminal

4.4.1 Console Port

Loop-O9340S provides comprehensive and enhanced configuration and test capability through the console port. A VT-100 type terminal or a modem can be connected to the console port on the front of O9340S. Using single-character commands and arrow keys, O9340S can be configured and tested. The single-character commands are not case sensitive. On each screen, the available commands and the configurable fields are highlighted.

When a VT-100 terminal is connected to the console port of O9340S, a main menu is displayed on the VT-100 monitor. The main menu consists of four groups of commands, DISPLAY, LOG, SETUP, and MISC. The functions of the commands in the VT-100 Controller Menu Tree are as below:

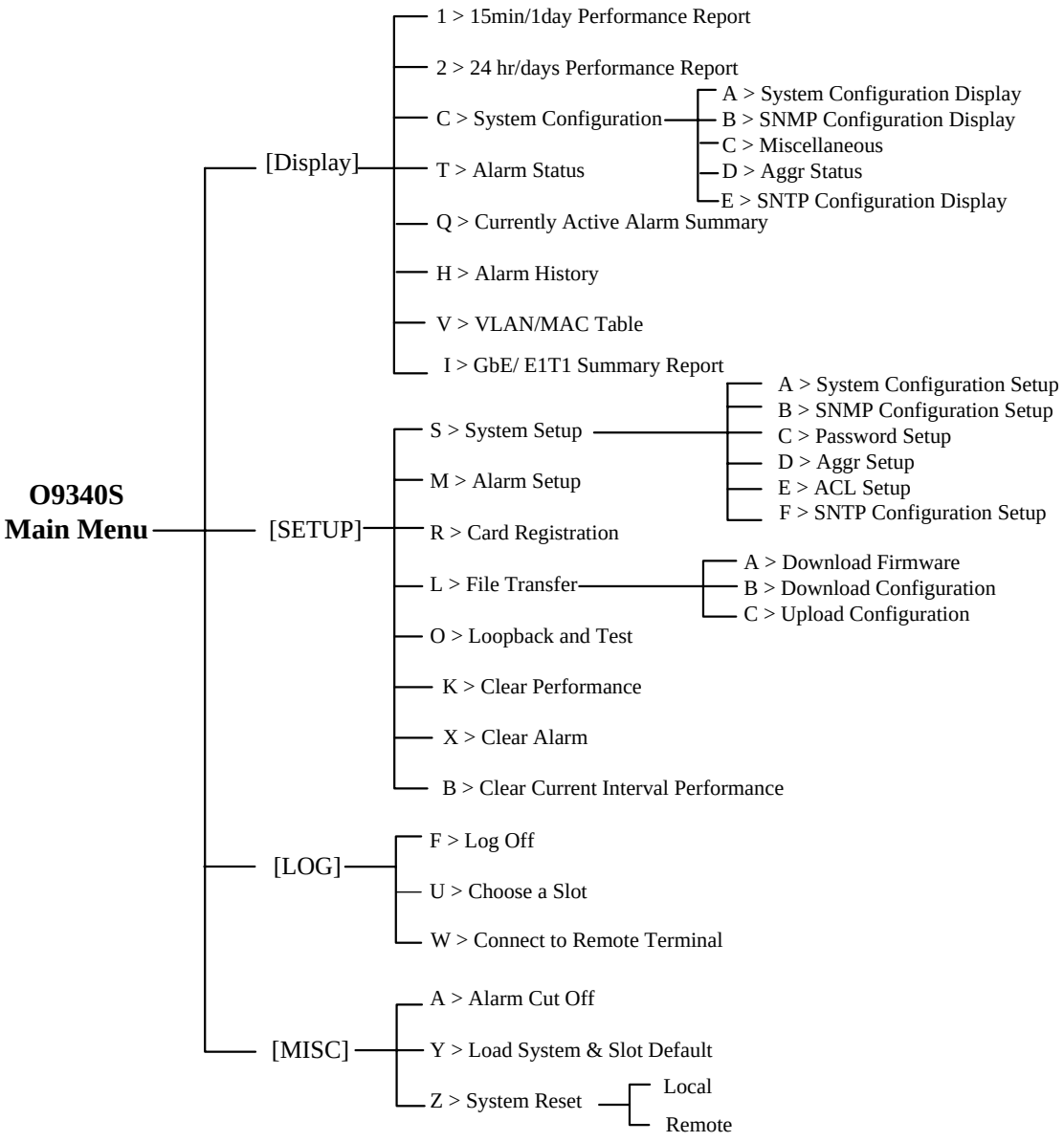


Figure 4-7 Menu Tree (Main Menu)

Display	Allow operator or administrator to view (but not to change) system configuration.
Setup	Allow administrator (only) to view existing configurations and set up new ones.
Log	Allow an operator or administrator to activate the following commands **Log Off:** log off from the VT100 main menu **Choose a Slot:** choose a tributary slot(i.e. a card plugged into a Tributary slot) and log in the system **Connect to Remote Terminal:** Enter remote system and operate the remote site by using VT100 menu
MISC	Allow administrator (only) to activate the following commands: **Alarm Cut Off:** cancel all the current alarms **Load System & Slot Default:** return the system or the plug-in card to its default configuration **System Reset:** shut down and restart the system

Table 4-1 Command Group Functions

4.4.2 Logon to the Main Menu

When the self-test procedure is complete, you will have to enter your account name to log in (ADMIN or OPERATOR). Key-in one of these accounts in upper case (capital) letters. Then, use the arrow key to move the cursor down to the row for password. Key-in the default password or your own password (all in capital letters only). Then, press the **Enter** key. The Main Menu will then appear on the screen.

```
O9340-S                    === Login  ===          01:28:09 08/01/2008
ARROW KEYS: CURSOR MOVE
Serial Number   : 774910240          Device Name : O9340
Hardware/FPGA Version: Ver.A/11       Connect Port: Local
Firmware Version: V1.01.02 02/25/2009   Start Time  : 00:00:01 08/01/2008


               Account: __________________
               Password:__________________




<< Please Input password and then Press ENTER key to continue >>
```

4.4.3 Logon, Logoff and Return to Default

The Main Menu screen will appear after you login. To Log off, simply press the **F** button. To return the system to its default settings, press **Y** for Return to Default Configuration.

```
O9340-S                          === Main Menu ===            16:17:20 03/24/2009

Serial Number   : 000038                 Device Name : O9340
Hardware/FPGA Version: Ver.C/23          Connect Port: Local
Firmware Version: V1.01.04 03/22/2009    Start Time  : 00:00:01 08/01/2008

[DISPLAY]                                 [SETUP]
1 -> 15min/24hr Performance Report        S -> System Setup
2 -> 24hr/days Performance Report          M -> Alarm Setup
C -> System Configuration                 R -> Card Registration
T -> Alarm Status                         L -> File Transfer
Q -> Currently Active Alarm Summary       O -> Loopback and Test
H -> Alarm History                        K -> Clear Performance
V -> VLAN/MAC Table                       X -> Clear Alarm
I -> GBE/E1T1 Summary Report              B -> Clear Current Interval Performance


[LOG]                                     [MISC]
F -> Log Off                             A -> Alarm Cut Off
U -> Choose a Slot                       Y -> Load System & Slot Default
W -> Connect to Remote Terminal          Z -> System Reset



>>SPACE bar to refresh or enter a command ===>
```

Note that if you log in as operator, you are only allowed to see the DISPLY and LOG section on the main menu:

```
O9340-S                      === Main Menu ===               00:13:31 08/01/2008

Serial Number   : 000000                  Device Name : O9340
Hardware/FPGA Version: Ver.A/11           Connect Port: Local
Firmware Version: V1.01.02 02/25/2009     Start Time  : 00:00:10 08/01/2008

[DISPLAY]
1 -> 15min/24hr Performance Report
2 -> 24hr/days Performance Report
C -> System Configuration
T -> Alarm Status
Q -> Currently Active Alarm Summary
H -> Alarm History
V -> VLAN/MAC Table
I -> GbE/E1T1 Summary Report

[LOG]
F -> Log Off
U -> Choose a Slot
W -> Connect to Remote Terminal



>>SPACE bar to refresh or enter a command ===>
```

5 SYSTEM STATUS

5.1 Performance Report

5.1.1 15min/24hr Performance Report

- **Command Path** Main Menu > (1) 15min/24hr Performance Report
- **Function** User can select the Performance Port and Performance Type. The Performance Port included Aggr#1 and Aggr#2. The Performance Type included Near_End_Line, Near_End_Path , Far_End_Line and Far_End_Path.

  There are two types for performance display: Current and History. "History" shows the performance values from system start-up to current stage. "Current" shows the performance values from the last time the user cleans up the performance record to the current stage. Users are allowed to clean up the current performance values but not the history values. To clean up the current values, press K (Clear Performance) on the main menu.
- **Screen for 15min/24hr Performance Report**

Choose the performance port and type you need and press **Enter**. Then, select the display type.

```
O9340-S           === 15min/1day Performance Report ==    00:57:47 08/01/2008
ARROW KEYS: CURSOR MOVE, TAB: ROLL OPTIONS

Performance Port : Aggr#1
Performance Type : Near_End_Line

Display Type :    History

<< Press ESC key to abort, ENTER key to show Perf. Report >>
```

The screen will display the performance data. A sample screen is shown below:

Sample screen for Near_End_Path：

```
O9340-S           === 15min/1day Performance Report ==    01:06:04 08/01/2008
Aggr#1   Near_End_Path      History
-- Valid Seconds in Current 15-Min Interval : 364 seconds
                            (ES)  (SES)  (UAS)
  Current 15-Min Interval   :    0     0   364
  1st Nearest 15-Min Interval:     0      0    900
  2nd Nearest 15-Min Interval:     0      0    900
  3rd Nearest 15-Min Interval:     0      0    900
  4th Nearest 15-Min Interval:     0      0    900

-- Valid 15-Min Intervals in Current 24-Hour Interval:
                           (ES)   (SES)  (UAS)
  Current 24-Hour Interval   :    0      0   3600
  07/31/2008               : -----   -----   -----
  07/30/2008               : -----   -----   -----
  07/29/2008               : -----   -----   -----
  07/28/2008               : -----   -----   -----
  07/27/2008               : -----   -----   -----
  07/26/2008               : -----   -----   -----
  07/25/2008               : -----   -----   -----



<< ESC key to return to previous menu, SPACE bar to refresh >>
```

sample screen for Near_End_Line：

```
O9340-S             === 15min/1day Performance Report ==      01:06:04 08/01/2008
Aggr#1   Near_End_Line  History
-- Valid Seconds in Current 15-Min Interval : 364 seconds
                              (LES)  (LSES)
   Current 15-Min Interval    :    0     0
   1st Nearest 15-Min Interval:     0      0
   2nd Nearest 15-Min Interval:     0      0
   3rd Nearest 15-Min Interval:     0      0
   4th Nearest 15-Min Interval:     0      0

-- Valid 15-Min Intervals in Current 24-Hour Interval:
                             (LES)   (LSES)
   Current 24-Hour Interval :    0      0
   07/31/2008               : -----   -----
   07/30/2008               : -----   -----
   07/29/2008               : -----   -----
   07/28/2008               : -----   -----
   07/27/2008               : -----   -----
   07/26/2008               : -----   -----
   07/25/2008               : -----   -----



<< ESC key to return to previous menu, SPACE bar to refresh >>
```

5.1.2 24hr/days Performance Report

- **Command Path** Main Menu > (2) 24hr/days Performance Report
- **Function** User can select the Performance Port, Performance Type and Performance Regs. The Performance Port included Aggr#1 and Aggr#2. The Performance Type included Near_End_Line, Near_End_Path, Far_End_Line and Far_End_Path. The Performance Regs included ES ,SES and UAS.

- **Screen for 24hr/days Performance Report**

Choose the performance port and type you need and press **Enter**.

```
O9340-S             === 24hr/days Performance Report ===     01:02:21 08/01/2008
ARROW KEYS: CURSOR MOVE, TAB: ROLL OPTIONS

Performance Port : Aggr#1
Performance Type : Far_End_Line
Performance Regs : ES

Display Type :    History

<< Press ESC key to abort, ENTER key to show Perf. Report >>
```

The screen will display the performance data. A sample screen is shown below:

Sample screen for Near_End_Path：

```
O9340-S              === 24hr/days Performance Report ===      01:07:44 08/01/2008
Aggr#1   Near_End_Path     History
-- Valid Seconds in Current 15-Min Interval : 464 seconds
-- Valid 15-Min Intervals in Current 24-Hour Interval: 4
                           (PES)  (PSES)  (UAS)
  Current 15-Min Interval :    0     0    465
  Current 24-Hour Interval:    0     0   3600

-- ES , Last 96 15-Min Interval :

  00-07 >    0    0    0    0 ----- ----- ----- -----
  08-15 > ----- ----- ----- ----- ----- ----- ----- -----
  16-23 > ----- ----- ----- ----- ----- ----- ----- -----
  24-31 > ----- ----- ----- ----- ----- ----- ----- -----
  32-39 > ----- ----- ----- ----- ----- ----- ----- -----
  40-47 > ----- ----- ----- ----- ----- ----- ----- -----
  48-55 > ----- ----- ----- ----- ----- ----- ----- -----
  56-63 > ----- ----- ----- ----- ----- ----- ----- -----
  64-71 > ----- ----- ----- ----- ----- ----- ----- -----
  72-79 > ----- ----- ----- ----- ----- ----- ----- -----
  80-87 > ----- ----- ----- ----- ----- ----- ----- -----
  88-95 > ----- ----- ----- ----- ----- ----- ----- -----

<< ESC key to return to previous menu, SPACE bar to refresh >>
```

Sample screen for Near_End_Line：

```
O9340-S           === 24hr/days Performance Report ===       01:07:44 08/01/2008
Aggr#1   Near_End_Line   History
-- Valid Seconds in Current 15-Min Interval : 464 seconds
-- Valid 15-Min Intervals in Current 24-Hour Interval: 4
                            (LES)  (LSES)
  Current 15-Min Interval :    0     0
  Current 24-Hour Interval:    0     0

-- ES , Last 96 15-Min Interval :

  00-07 >    0    0    0    0 ----- ----- ----- -----
  08-15 > ----- ----- ----- ----- ----- ----- ----- -----
  16-23 > ----- ----- ----- ----- ----- ----- ----- -----
  24-31 > ----- ----- ----- ----- ----- ----- ----- -----
  32-39 > ----- ----- ----- ----- ----- ----- ----- -----
  40-47 > ----- ----- ----- ----- ----- ----- ----- -----
  48-55 > ----- ----- ----- ----- ----- ----- ----- -----
  56-63 > ----- ----- ----- ----- ----- ----- ----- -----
  64-71 > ----- ----- ----- ----- ----- ----- ----- -----
  72-79 > ----- ----- ----- ----- ----- ----- ----- -----
  80-87 > ----- ----- ----- ----- ----- ----- ----- -----
  88-95 > ----- ----- ----- ----- ----- ----- ----- -----

<< ESC key to return to previous menu, SPACE bar to refresh >>
```

5.2 System Configuration

5.2.1 System Configuration Display

- **Command Path** Main Menu > (C) System Configuration > (A) System Configuration Display
- **Function** System Configuration allows user to view IP address, Subnet Mask, Gateway IP, Baud Rate, Data Length, Stop Bit, Parity and Link State.

- **Screen for System Configuration**

```
O9340-S              === System Configuration Display===     01:34:15 08/01/2008


[System]
IP Address:     000.000.000.000
Subnet Mask:    255.255.255.000
Gateway IP:     000.000.000.000

[Console port]
Baud Rate:      9600
Data Length:    8-Bit
Stop Bit:       1-Bit
Parity:         None

[LAN Speed]
Link State: Down



<< ESC key to return to previous menu, SPACE bar to refresh >>
```

5.2.2 SNMP Configuration Display

- **Command Path** Main Menu > (C) System Configuration > (B) SNMP Configuration Display
- **Function** User can check the current status for Get Community, Set Community, Trap IPs, Trap Ports, Device Name, Agent Port, System Location and System Contact.

- **Screen for SNMP Configuration**

```
O9340-S            === SNMP Configuration Display ===   00:42:28 08/01/2008


Get Community: *****
Set Community: *****

Trap IP 1:   10.30.16.67   Community 1: rinpoche       TrapPort 1:   162
Trap IP 2:   10.30.16.67   Community 2: rinpoche       TrapPort 2:   162
Trap IP 3:   10.30.16.67   Community 3: rinpoche       TrapPort 3:   162
Trap IP 4:   10.30.16.67   Community 4: rinpoche       TrapPort 4:   162
Trap IP 5:   10.30.16.67   Community 5: rinpoche       TrapPort 5:   162
Device Name: O9340                                      AgentPort :   161

System Location:


System Contact:



<< ESC key to return to previous menu, SPACE bar to refresh >>
```

5.2.3 Miscellaneous

- **Command Path** Main Menu > (C) System Configuration > (C) Miscellaneous
- **Function** User can check for the Power Status, PCB Version, Controller FPGA Version, CPLD1 Version and CPLD2 Version.

- **Screen for Miscellaneous**

```
O9340-S                      ===  Miscellaneous   ===          01:53:18 08/01/2008



[Hardware State Probe]
Power1 is not Exist.
Power2 is not Exist.
Power3 is not Exist.

PCB Version: Ver.A
Controller FPGA Version: Ver.144
CPLD1 Version    : Ver. 5
CPLD2 Version    : Ver.172




<< ESC key to return to previous menu, SPACE bar to refresh >>
```

5.2.4 Aggregate Status

- **Command Path** Main Menu > (C) System Configuration > (D) Aggr Status
- **Function** User can check the current status for Working Port, Aggregate Ports, Link Fault Propagation, Protection Switching and Primary Working Port.

- **Screen for Aggregate Status**

```
O9340-S                      === Aggr Status ===              02:19:25 08/01/2008


Working Port is Port1
  Identify: Unknow    Connector: Unknow
  Rate: 0 Mbps    Link Length: 0 km   Wavelength: 0 nm

Port2 link down

Aggr Port1:  Enable
Aggr Port2:  Enable


[Global]
Protection Switching  : Auto
Primary Working Port  : Port#1







<< ESC key to return to previous menu, SPACE bar to refresh >>
```

5.2.5 SNTP Configuration Display

- **Command Path** Main Menu > (C) System Configuration > (E) SNTP Configuration Display
- **Function** User can check the SNTP servers, SNTP timezone, SNTP update and SNTP enable.

- **Screen for SNTP Configuration Display**

```
O9340-S              === SNTP Configuration Display ===      02:07:22 08/01/2008


SNTP server 1  : 10.144.123.235
SNTP server 2  : 000.000.000.000
SNTP server 3  : 000.000.000.000
SNTP server 4  : 000.000.000.000

SNTP timezone  : +8
SNTP update(hr): 1
SNTP enable    : Enable



<< ESC key to return to previous menu, SPACE bar to refresh >>
```

5.3 Alarm Status

- **Command Path** Main Menu > (T) Alarm Status
- **Function** User can check the alarm types of the controller or each plug-in card.

System Type	Alarm Type
Controller: SYSTEM	ACO,CARD INSERT/REMOVE,LINK CHANGE,LPR
Controller: AGGR	LINK CHANGE,RDI,LOS,LCV(BPV),PCV,LCV(BPV),PCV,LES,PES,LSES,PSES,UAS
E1/T1 Card	RECEIVE AIS,AIS,LOSS,LOF,LCV(BPV),PCV,LES,PES,LSES,PSES,UAS,RAI
GBE Card	LINK CHANGE,LCV(BPV),PCV,LES,PES,LSES,PSES,UAS

- **Screen for Alarm Status**

Select the port you need and press **Enter**:

```
O9340-S                      === Alarm Status ===            00:35:27 08/01/2008

Select Port >> *Aggr1  Aggr2  System

<< ESC key to return to previous menu, SPACE bar to refresh >>
```

Below is the sample screen for Aggr 1 alarm status:

```
 O9340-S                   === Alarm Status ===        00:44:23 08/01/2008


 Aggr#1

 [----- TYPE -----]   [ALARM]  [COUNT]
 Link Change           Alarm    1
 RDI                    OK      0
 LOS                    OK      0
 LCV(BPV)               OK      0
 PCV                    OK      0
 LES                    OK      0
 PES                    OK      0
 LSES                   OK      0
 PSES                   OK      0
 UAS                Disable      0


<< ESC key to return to previous menu, SPACE bar to refresh >>
```

The sample screen for Aggr 2 alarm status:

```
O9340-S                      === Alarm Status ===          00:40:41 08/01/2008

Aggr#2

[----- TYPE -----]   [ALARM]  [COUNT]
Link Change           Disable    0
RDI                  Disable    0
LOS                  Disable    0
LCV(BPV)             Disable    0
PCV                  Disable    0
LES                  Disable    0
PES                  Disable    0
LSES                 Disable    0
PSES                 Disable    0
UAS                  Disable    0


<< ESC key to return to previous menu, SPACE bar to refresh >>
```

The sample screen for system alarm status:

```
O9340-S                      === Alarm Status ===          00:41:15 08/01/2008


System

[----- TYPE -----]   [ALARM]  [COUNT]
ACO                  Disable    0
Card Insert/Remove   Disable    0
Link Change          Disable    0
LPR                  Disable    0









<< ESC key to return to previous menu, SPACE bar to refresh >>
```

5.4 Currently Active Alarm Summary

- **Command Path** Main Menu > (E) Currently Active Alarm Summary
- **Function** User can check for the currently active alarm.
  Note: the 4-port E1/T1 card and the 8-port E1 share the same naming “T1E1”on currently active alarm summary screen. Please check the slot number shown on the screen with the card location on the device to find out which card is sending out the alarm.

- **Screen for Currently Active Alarm Summary**

```
O9340-S            === Currently  Active Alarm Summary ===   00:35:00 08/01/2008


  1  Slot2 Remote  Port4 LOS
  2  Slot2 Remote  Port3 LOS
  3  Slot2 Remote  Port2 LOS
  4  Remote      Opt1 RDI
  5  Controller  Opt1 LOS
  6  Slot2 T1E1  Port1 Receive AIS
  7  Slot2 T1E1  Port1 LOF
  8  Slot2 T1E1  Port4 LOS
  9  Slot2 T1E1  Port3 LOS
 10  Slot2 T1E1  Port2 LOS
 11  Slot2 T1E1  Port3 LOF
 12  Slot2 T1E1  Port2 LOF
 13  Slot1 GBE   Port1 Link Change


<< ESC key to return to previous menu, SPACE bar to refresh >>
```

5.5 Alarm History

- **Command Path** Main Menu > (H) Alarm History
- **Function** User can check for the alarm history of the controller and plug-in cards. This includes Local and Remote site alarms (LOS, LOF, AIS, RAI, Link State, RDI, LPR) and 15 mins, 1hr, 24hr performance alarm.

  Note: the 4-port E1/T1 card and the 8-port E1 share the same naming "T1E1"on currently active alarm history screen. Please check the slot number shown on the screen with the card location on the device to find out which card is sending out the alarm.

- **Screen for Alarm History**

Sample screen for Controller/Plug-in Card Alarm History ：

```
O9340-S                    === Alarm History ===          00:26:21 08/01/2008


 1  Slot2 T1E1  Port4 AIS          Critical           00:26:16 08/01/2008
 2  Slot2 T1E1  Port3 AIS          Critical           00:26:16 08/01/2008
 3  Slot2 T1E1  Port2 AIS          Critical           00:26:16 08/01/2008
 4  Slot2 T1E1  Port1 AIS          Critical           00:26:16 08/01/2008
 5  Controller  Opt2  LOS          Critical          00:26:16 08/01/2008
 6  Controller  Opt1  LOS          Critical          00:26:16 08/01/2008
 7  Controller        LPR          Critical           00:26:13 08/01/2008
 8  Slot2 T1E1  Port1 LOF          Critical      Clear 00:25:53 08/01/2008
 9  Slot2 T1E1  Port1 LOF          Critical           00:25:51 08/01/2008
10  Slot2 T1E1  Port1 LOF          Critical      Clear 00:25:31 08/01/2008
11  Slot2 T1E1  Port1 LOF          Critical           00:25:28 08/01/2008
12  Slot2 T1E1  Port1 LOF          Critical      Clear 00:25:13 08/01/2008
13  Slot2 T1E1  Port1 RAI          Critical       Clear 00:25:12 08/01/2008
14  Slot2 T1E1  Port1 LOF          Critical           00:25:10 08/01/2008
15  Remote      Opt1  LOS          Critical      Clear 00:25:06 08/01/2008
16  Controller  Opt1 RDI          Critical      Clear 00:25:06 08/01/2008
17  Remote      Opt1 LOS          Critical           00:25:01 08/01/2008
18  Controller  Opt1 RDI          Critical           00:25:01 08/01/2008
19  Remote      Opt1 RDI          Critical      Clear 00:24:58 08/01/2008


<< ESC key to return to previous menu, SPACE bar to refresh >>
```

Sample screen for performance report alarm history：

```
O9340-S                    === Alarm History ===          02:09:38 08/01/2008

 1  Slot2 T1E1  Port4 PSES       Major              02:00:00 08/01/2008
 2  Slot2 T1E1  Port4 UAS        Major               02:00:00 08/01/2008
 3  Slot2 T1E1  Port3 PSES       Major               02:00:00 08/01/2008
 4  Slot2 T1E1  Port3 UAS        Major               02:00:00 08/01/2008
 5  Slot2 T1E1  Port2 PSES       Major               02:00:00 08/01/2008
 6  Slot2 T1E1  Port2 UAS        Major               02:00:00 08/01/2008
 7  Slot2 T1E1  Port1 PSES       Major               02:00:00 08/01/2008
 8  Slot2 T1E1  Port1 UAS        Major               02:00:00 08/01/2008
 9  Slot2 T1E1  Port4 UAS        Major               01:45:00 08/01/2008
10  Slot2 T1E1  Port3 UAS        Major               01:45:00 08/01/2008
11  Slot2 T1E1  Port2 UAS        Major               01:45:00 08/01/2008
12  Slot2 T1E1  Port1 UAS        Major               01:45:00 08/01/2008
13  Slot2 T1E1  Port4 UAS        Major               01:30:00 08/01/2008
14  Slot2 T1E1  Port3 UAS        Major               01:30:00 08/01/2008
15  Slot2 T1E1  Port2 UAS        Major               01:30:00 08/01/2008
16  Slot2 T1E1  Port1 UAS        Major               01:30:00 08/01/2008
17  Slot2 T1E1  Port4 UAS        Major               01:15:00 08/01/2008
18  Slot2 T1E1  Port3 UAS        Major               01:15:00 08/01/2008
19  Slot2 T1E1  Port2 UAS        Major               01:15:00 08/01/2008
20  Slot2 T1E1  Port1 UAS        Major               01:15:00 08/01/2008


<< ESC key to return to previous menu, SPACE bar to refresh >>
```

5.6 VLAN/MAC Table

- **Command Path** Main Menu > (V) VLAN/MAC Table
- **Function** User can check the information of Slot, Port, VID, Priority and Physical Address.
- **Screen for VLAN/MAC Table**

```
 O9340-S                 === VLAN/MAC Table ===        03:33:50 08/02/2008


 No      Slot    Port      VID    Priority   Physical Address
   1       3       2      3095       0      00:06:00:00:00:01
   2       3       2      3094       0      00:06:00:00:00:02
   3       3       2      3093       0      00:06:00:00:00:03
   4       3       2      3092       0      00:06:00:00:00:04
   5       3       2      3091       0      00:06:00:00:00:05
   6       3       2      3090       0      00:06:00:00:00:06
   7       3       2      3089       0      00:06:00:00:00:07
   8       3       2      3088       0      00:06:00:00:00:08
   9       3       2      3087       0      00:06:00:00:00:09
  10       3       2      3086       0      00:06:00:00:00:0a
  11       3       2      3085       0      00:06:00:00:00:0b
  12       3       2      3084       0      00:06:00:00:00:0c
  13       3       2      3083       0      00:06:00:00:00:0d
  14       3       2      3082       0      00:06:00:00:00:0e
  15       3       2      3081       0      00:06:00:00:00:0f
  16       3       2      3080       0      00:06:00:00:00:10
  17       3       2      3079       0      00:06:00:00:00:11
  18       3       2      3078       0      00:06:00:00:00:12


 << ESC key to return to previous menu, SPACE bar to refresh >>
```

5.7 Summary Report

- **Command Path** Main Menu > (I) Summary Report
- **Function** Check the current status of each existing cards
- **Screen for Summary Report: E1/T1 Card**

```
O9340-S                  === E1T1 Summary Report ===       11:03:02 09/16/2009

<LOCAL>                          <REMOTE>
S# P# TP SS FF LC LB ALM  SEV    S# P# TP SS FF LC LB ALM  SEV
 1  1 E1 IS CC  H RL LOS   Maj    1  1 E1 IS CC  H OF LOS   Maj
 1  2 E1 IS CC  H RL LOS   Maj    1  2 E1 IS CC  H OF LOS   Maj
 1  3 E1 IS CC  H RL LOS   Maj    1  3 E1 IS CC  H OF LOS   Maj
 1  4 E1 IS CC  H RL LOS   Maj    1  4 E1 IS CC  H OF LOS   Maj
 1  5 E1 IS UF  H OF LOS   Maj
 1  6 E1 IS UF  H OF LOS   Maj
 1  7 E1 IS UF  H OF LOS   Maj
 1  8 E1 IS UF  H OF LOS   Maj
 2  1 T1 IS ES  B OF  OK   Maj    2  1 T1 IS ES  B OF  OK    Maj
 2  2 T1 IS ES  B OF  OK   Maj    2  2 T1 IS ES  B OF  OK    Maj
 2  3 T1 IS ES  B OF  OK   Maj    2  3 T1 IS ES  B OF  OK    Maj
 2  4 T1 IS ES  B OF  OK   Maj    2  4 T1 IS ES  B OF  OK    Maj
 4  1 E1 IS CR  H OF  OK   Maj    4  1 E1 IS CR  H OF  OK    Maj
 4  2 E1 IS CR  H OF LOF   Maj    4  2 E1 IS CR  H OF LOS   Maj
 4  3 E1 IS CR  H OF LOF   Maj    4  3 E1 IS CR  H OF LOS   Maj
 4  4 E1 IS CR  H OF LOF   Maj    4  4 E1 IS CR  H OF LOS   Maj


<< ESC key to previous menu, SPACE key to next page >>
```

- **Screen for Summary Report: Ethernet Card**

```
O9340-S                  === GbE Summary Report ===      02:13:58 08/01/2008

<LOCAL>                         <REMOTE>
S# P# MODE SS LS/ALM LB SEV     S# P# MODE SS LS/ALM LB SEV
 1  1   EA IS DN    OF   Inf
 1  2   EA IS DN    OF   Inf

<< Press ESC key to return to previous menu >>
```

6 SYSTEM SETUP

6.1 System Setup

6.1.1 System Configuration Setup

- **Command Path** Main Menu > (S) System Setup > (A) System Configuration Setup
- **Function** System Configuration Setup allows you to change the IP and console port configuration.
- **How to Setup** Here, you can key in the IP Address, Subnet Mask and Gateway IP for your device. Also remember to change the time and date.
  You can also modify the console port settings according to the table below.

	Field	Setting Options	Default
[System]	IP address	Setup by user Valid value:0~255	000.000.000.000
	Subnet Mask		255.255.255.000
	Gateway IP		000.000.000.000
	Time Date	hr (0-23):min.(0-59):sec.(0-59) month (1-12):day(1-31):year(4 digits)	00:00:00 01/01/2008
[Console Port]	Baud Rate	2400, 4800, 9600, 19200, 38400, 57600, 115200 bps	9600 bps
	Data Length	8-Bit, 7-Bit	8-Bit
	Stop Bit	1-Bit, 2-Bit	1-Bit
	Parity	None, Odd, Even	None

- **Screen for System Setup**

```
O9340S-S                    === System Setup  ===          00:18:46 08/01/2008

[System]

IP Address:   000.000.000.000
Subnet Mask:  255.255.255.000
Gateway IP:   000.000.000.000   DateTime: 01:18:19 08/01/2008

[Console Port]
Baud Rate:    9600
Data Length: 8-Bit
Stop Bit:     1-Bit
Parity:      None

[LAN Speed]
Link State: Down

<< Press ESC key to return to previous menu >>
```

6.1.2 SNMP Configuration Setup

- **Command Path** Main Menu > (S) System Setup > (B) System Configuration Setup
- **Function** SNMP Configuration Setup allows users to manage the units on a network in a quick and simple way.
- **How to Setup** Here you can categorize the units into 5 communities, and each community contains 5 spaces for device IP address. For detailed information please see the table below:

Field	Setting Options	Default
Get Community	Setup by User	anims
Set Community		
Trap IP #1 ~ # 5	000.000.000.000~255.255.255.255	10.30.16.67
Community #1 ~ # 5	Setup by User	rinpoche
Trap Port #1~#5	1~65535	162
Agent Port	1~65535	161
Device Name	Setup by User	O9340S
System Location	Setup by User	Set up by service provider
System Contact	Setup by User	Set up by service provider

- **Screen for SNMP Configuration Setup**

```
O9340S-SA            === SNMP Configuration Setup ===       00:27:33 08/01/2008
ARROW KEYS: CURSOR MOVE, BACKSPACE to edit, ESC to abort


Get Community: anims
Set Community: anims


Trap IP 1: 10.30.16.67   Community 1: rinpoche       TrapPort 1: 162
Trap IP 2: 10.30.16.67   Community 2: rinpoche       TrapPort 2: 162
Trap IP 3: 10.30.16.67   Community 3: rinpoche       TrapPort 3: 162
Trap IP 4: 10.30.16.67   Community 4: rinpoche       TrapPort 4: 162
Trap IP 5: 10.30.16.67   Community 5: rinpoche       TrapPort 5: 162
Device Name:O9340S                                      AgentProt:  161


System Location:


System Contact:


<< Press ESC key to return to previous menu >>
```

6.1.3 Password Setup

- **Command Path** Main Menu > (S) System Setup > (C) Password Setup
- **Function** Password Setup allows you to change current user's password.
- **How to Setup** O9340S supports two user accounts: Administrator and Operator. Check the difference between Administrator and Operator from the table below:

	Account	Default Password	Authority
Administrator	ADMIN	LOOP	• Enable to view and modify all configurations on the main menu: [DISPLAY], [SETUP], [MISC] and [LOG]. • Enable to change password for both Administrator and Operator.
Operator	OPERATOR	LOOP	• Only enable to operate sections [DISPLAY] and [LOG] on the main menu • Unable to change any configuration • Unable to change one's own password. • **New passwords for Operator should be changed and given by the Administrator.**

Table 6-1 Password Setup

Note1: Please key in the account name and the password **in capital letters ONLY.** Maximum password size is 10 characters. Minimum password size is 1 character. Both alphabetic and/or numeric characters are allowed.
Note2: Up to 5 people are enabled to login as Administrator simultaneously.

- **Password Setup Procedures (For Administrators ONLY)**

Please follow the steps listed below to change your password.

1. After pressing **C** from System Setup Menu, you will see a screen for Password Setup as below:

```
O9340S                    === Password Setup ===          03:20:16 01/01/2008
ARROW KEYS: CURSOR MOVE, TAB: ROLL OPTIONS




Account :
Enable Password : Yes
Change Password : No









<< Press ESC key to return to previous menu >>
```

2. Key in your account name. The default account name is ADMIN.
3. Move the cursor to "Change Password". Use Tab key to select **Yes.**
4. Press the **Enter** key**,** a new page will shown as below:

```
O9340S                    === Password Setup ===          14:45:04 01/01/2008
ARROW KEYS: CURSOR MOVE, BACKSPACE to edit, ESC to abort


      Account: ADMIN
      Enable Password : YES
      Change Password : YES
        Old  Password : _________


 >> Please input old password, then press ENTER.
```

5. Key in the default password or your old password and press the **Enter** key.

```
O9340S                 === Password Setup ===             14:45:04 01/01/2008
ARROW KEYS: CURSOR MOVE, BACKSPACE to edit, ESC to abort


      Enable Password : YES
      Change Password : YES
        Old  Password : XXXX______
        New  Password : _________


 >> Please input new password, then press ENTER.
```

6. Key in your new password and press the **Enter** key.

```
O9340S                 === Password Setup ===             14:45:04 01/01/2008
ARROW KEYS: CURSOR MOVE, BACKSPACE to edit, ESC to abort


      Enable Password : YES
      Change Password : YES
        Old  Password :  XXXX______
        New  Password :  XXX_______
      Confirm Password: XXX_______


 >> Please input new password again to confirm, then press ENTER.
```

7. Confirm your password by keying it in again. Press the **Enter** key.

```
O9340S                  === Password Setup ===           14:45:04 01/01/2008
ARROW KEYS: CURSOR MOVE, BACKSPACE to edit, ESC to abort


      Enable Password : YES
      Change Password : YES
        Old  Password : XXXX______
        New  Password : XXX_______
      Confirm Password:  XXX_______



>> Save new password (Y/N)?
```

8. A prompt will ask if you want to save the new password. Press **Y** for yes.

Note: Write your password down and keep it in a safe place in case you forget it. Press the **Esc** key twice to return to the Main Menu.

6.1.4 Aggregate Port Setup

- **Command Path** Main Menu > (S) System Setup > (D) Aggr Setup
- **Function** User can set up the status of two optical ports on the main unit.
- **How to Setup** You can either enable only one port or both ports. The parameters under [Global] category apply to both port 1 and port 2. You can also switch the protection status from auto to manual.

Protection Switching: could be set as auto or manual.

Below is the guideline for Aggregate port (1+1) protection switching function:

a. When fast Ethernet link is stable (under normal condition), Aggregate port 1 is the working port and Aggregate port 2 is the standby port.

b. The device is able to protect the aggregate optical signal against failures. Once Aggregate port 1 lost its connection (lost or signal / lost of frame), the system will automatically switch the work to Aggregate port 2.

c. When the system switch the working port up to 6 times within 10 minutes, the auto switching function will be locked and the last normally operating aggregate port will be the working port. The system will return to auto switching function once the connection of aggregate port1 and aggregate port 2 operates normally up to 20 minutes.

For detailed configuration please see the table below:

Field	Setting Options	Default
Aggr Port 1	Enable, Disable	Enable
Aggr Port 2	Enable, Disable	Enable
Protection Switching	Auto, Manual (5.1) (5.2)	Auto
Primary Working Port	Port #1, Port #2	Port #1

- **Screen for Aggregate Setup**

```
O9340-S                    === Aggr Setup ===          02:50:36 08/01/2008
ARROW KEYS: CURSOR MOVE, BACKSPACE to edit, ESC to abort

Aggr Port1:  Enable
Aggr Port2:  Enable

[Global]
Protection Switching  : Auto
Primary Working Port  : Port#1

<< Press ESC key to return to previous menu >>
```

6.1.5 ACL Rule

- **Command Path** Main Menu > (S) System Setup > (E) ACL Rule
- **Function** ACL (Access Control List) Rule allows you to set up a list of 5 IP addresses which are permitted to access the system
- **How to Setup** Set the ACL Rules to Enable. Then, key in the IP addresses and Subnet mask addresses. For detailed configuration please see the table below:

Field	Setting Options	Default
ACL Rules	Enable, Disable	Disable
IP Address #1~#5	Setup by User	000.000.000.000
Subnet Mask #1~#5		

- **Screen for Access Control List**

```
O9340S-SA                        === ACL Rule ===          01:02:36 08/01/2008
ARROW KEYS: CURSOR MOVE, BACKSPACE to edit, ESC to abort

ACL RULES:   Disable

[ Permit IP List ]

IP Address1:     000.000.000.000
Subnet Mask1:    000.000.000.000

IP Address2:     000.000.000.000
Subnet Mask2:    000.000.000.000

IP Address3:     000.000.000.000
Subnet Mask3:    000.000.000.000

IP Address4:     000.000.000.000
Subnet Mask4:    000.000.000.000

IP Address5:     000.000.000.000
Subnet Mask5:    000.000.000.000


<< Press ESC key to return to previous menu >>
```

6.1.6 SNTP Configuration Setup

- **Command Path** Main Menu > (S) System Setup > (F) SNTP Configuration Setup
- **Function** Set up SNTP server IP and timezone
- **Configuration**

Field	Setting Options	Default
SNTP server #1	000.000.000.000 ~255.255.255.255	10.144.123.235
SNTP server #2	000.000.000.000 ~255.255.255.255	000.000.000.000
SNTP server #3	000.000.000.000 ~255.255.255.255	000.000.000.000
SNTP server #4	000.000.000.000 ~255.255.255.255	000.000.000.000
SNTP Timezone	-12 to +12	+8
SNTP update(hr)	0 to 255	1
SNTP Enable	Enable, Disable	Enable

- **Screen for SNTP Configuration Setup**

```
O9340-S              === SNTP Configuration Setup ===        00:26:18 08/01/2008
ARROW KEYS: CURSOR MOVE, Please Input: nnn.nnn.nnn.nnn, BACKSPACE to edit

SNTP server 1  : 10.144.123.235
SNTP server 2  : 000.000.000.000
SNTP server 3  : 000.000.000.000
SNTP server 4  : 000.000.000.000

SNTP timezone  : +8
SNTP update(hr): 1
SNTP enable    : Enable









<< Press ESC key to return to Main Menu or enter a command >>
```

6.2 Alarm Setup

- **Command Path** Main Menu > (M) Alarm Setup
- **Function** System Alarm Setup is used to enable or disable different alarm types. User also allowed to setup alarm threshold for optical interface. The function of each alarm type is listed below:

Alarm Type	Function
ACO	Alarm Cut Off
Card Insert/Remove	Indicates a card has just been plugged in or removed
LPR	Loss of Power. An alarm that occurs when the device is about to lose power (when the power is lower than 90-240Vac or -36 to -72Vdc)
RDI	Remote Defect Indication. It indicates the failure occurred at the far end of the ATM network.
LOS	Loss of Signal.
LCV (BPV)	Line Code Violations. An error event of a Bipolar Violation (BPV) occurred on the DS1/T1 interface
PCV	Path Coding Violation. An error event in the DS1/T1 interface
LES	Line Errored Second. The number of one-second intervals in which a Line Code Violation occurred.
PES	Percentage Error Second. A second with 2048 or more PCVs in E1, or 1544 or more PCVs in T1 interface.
LSES	Line Severely Errored Seconds.
PSES	Percentage Error Second. A second with 805 or more PCVs in E1, or 320 or more PCVs in T1 interface.
UAS	Unavailable seconds. The number of one-second intervals in which the controller was down.
Power Fail	Indicates that a power source is not connected or does not function properly

- **How to Setup** First, select an alarm forwarding type: 15 minute, 1 hour or 1 day. Then, press **Enter**.

```
O9340-S                  === Alarm Setup ===         00:18:56 08/01/2008
ARROW KEYS: CURSOR MOVE, TAB: ROLL OPTIONS

Select type: 15Min

<< Press ESC key to return to previous menu >>
```

An alarm setup screen will appear. Below is the sample screen for 15 minutes alarm setup:

```
O9340-S                 === 15M Alarm Setup ===        00:08:28 08/01/2008
ARROW KEYS: CURSOR MOVE, TAB: ROLL OPTIONS

Alarm Relay: Disable

[-- TYPE --]        [THRESHOLD]    [ALARM]   [SEVERITY]
ACO                                Enable     Informative
Card Insert/Remove                 Enable     Informative
Link Change                         Enable    Informative
LPR                                 Enable     Informative
RDI                                 Enable     Informative
LOS                                 Enable     Major
LCV(BPV)             0             Enable    Informative
PCV                 0              Enable    Informative
LES                 100             Enable    Minor
PES                 100             Enable    Minor
LSES                 10             Enable    Major
PSES                 10             Enable    Major
UAS                 0              Enable    Informative
Power Fail                          Enable    Critical



<< Press ESC key to return to previous menu >>
```

For alarm configuration, please see the table below.

Field	Setting Options	Default
Alarm Relay	Enable, Disable	Disable
Threshold	0~65535	LCV(BPV): 0 PCV: 0 LES: 100 PES: 100 LSES: 10 PSES: 10 UAS : 0
Alarm	Enable, Disable	Disable
Severity	Critical, Major, Minor, Warning, Informative	ACO: informative Card Insert/Remove: informative Link Change: informative LPR: informative RDI: informative LOS: Major LCV(BPV): informative PCV: informative LES: Minor PES: Minor LSES: Major PSES: Major UAS: informative Power Fail: Critical

6.3 Card Registration

➢ **Command Path** Main Menu > (R) Card Registration

• **Function** The system will automatically detect and register a new plug-in card. Here you can see the overview of all plug-in cards and their located slots.

• **How to Setup** You can see the current status of each card. This includes the plug in cards in each slot, the card's software version and whether the card is registered or not. To register and un-register plug-in cards manually, follow the instructions below:

Use the command option to register or un-register the plug-in card:

```
O9340-S               === Card Registration ===       02:46:15 08/01/2008
ARROW KEYS: CURSOR MOVE, TAB: ROLL OPTIONS
Slot    Current Card/Interface    FPGA Version    Registered Card
====    ======================  ==================  ======================
Slot- 1   E1/T1                    5                   E1/T1
Slot- 2   Gbe                     33                   Gbe
Slot- 3                           1
Slot- 4                           1


Command:  Card Registration

<< Press ESC key to return to previous menu >>
```

The system will then ask you to choose the slot where the card locates. Then, press enter. The registration is therefore completed.

```
Command:  Card Registration
SLOT     SLOT-01:
```

6.4 File Transfer

6.4.1 Download Firmware

- **Command Path** Main Menu > (L) File Transfer > (A) Download Firmware
- **Function** Download Mainboard Firmware allows you to select a particular firmware and a transfer protocol type to do the download.
- **How to Setup** Type in the T firmware file name

Field	Setting Options	Default
TFTP Server IP	Setup by User	000.000.000.000
Firmware File Name	Setup by User	Blank
File Type	local firmware remote firmware	local firmware

- **Screen for Download Firmware:**

```
O9340-S                 === Download Firmware ===            00:13:44 08/01/2008
ARROW KEYS: CURSOR MOVE, Please Input: nnn.nnn.nnn.nnn, BACKSPACE to edit

Current Bank 1 Version:  V1.01.01 10/28/2008
Current Bank 2 Version:  V1.01.01 10/28/2008
Active Bank         :  1

TFTP Server IP      :  000.000.000.000
Firmware File Name  :
File Type           :  Local Firmware




<< Press ESC key to abort, ENTER key to continue >>
```

6.4.2 Download Configuration

- **Command Path** Main Menu > (L) File Transfer > (B) Download Configuration
- **Function** Download Configuration allows you to download information to the system.
- **How to Setup** To download information, type in a configuration file's name and its TFTP server IP. Then, press the **Enter** key. A question "Really want to download?" will appear on the screen. Press **Y** to confirm the download, and **N** to cancel and return to the previous menu.

Field	Setting Options	Default
Download Slot	Controller Slot 1, Slot 2, Slot 3, Slot 4, system	Controller
TFTP Server IP	Setup by User	000.000.000.000
Firmware File Name	Setup by User	Blank

- **Screen for Download Configuration:**

```
O9340-S              === Download Configuration ===    02:49:12 08/01/2008
ARROW KEYS: CURSOR MOVE, Please Input: nnn.nnn.nnn.nnn, BACKSPACE to edit




Download Slot        :  Controller
TFTP Server IP       :  000.000.000.000
Config File Name     :
File Type            :  Local Config


Really want to Download ?(Y/N)



<< Press ESC key to abort, ENTER key to continue >>
```

6.4.3 Upload Configuration

- **Command Path** Main Menu > (L) File Transfer > (C) Upload Configuration
- **Function** Upload Configuration allows you to upload information to the system.
- **How to Setup** To upload information, type in a configuration file's name and its TFTP server IP. Then, press the **Enter** key. A question "Really want to upload?" will appear on the screen. Press **Y** to confirm the download, and **N** to cancel and return to the previous menu.

Field	Setting Options	Default
Upload Slot	Controller Slot 1, Slot 2, Slot 3, Slot 4, system	Controller
TFTP Server IP	Setup by User	000.000.000.000
Firmware File Name	Setup by User	Blank
File Type	Local Config Remote Config	Local Config

- **Screen for Upload Configuration**

```
O9340-S               === Upload Configuration ===          00:03:29 08/01/2008
ARROW KEYS: CURSOR MOVE, Please Input: nnn.nnn.nnn.nnn, BACKSPACE to edit




Upload Slot          :  Controller
TFTP Server IP       :  000.000.000.000
Config File Name     :
File Type            :  Local Config


Really want to Upload ?(Y/N)


<< Press ESC key to abort, ENTER key to continue >>
```

6.5 Loopback and Test

- **Command Path** Main Menu > (O) Loopback AND Test
- **Function** BERT (Bit Error Rate Tester) is the device that determines the Bit Error Rate (BER) on a given communications channel.
- **How to Setup** Below is the configuration chart for Loopback and Test:

Field	Setting Options	Default
Local Unit Loopback	ON, OFF	OFF
Remote Unit Loopback	ON, OFF	OFF
BERT	ON, OFF	OFF
Recovery Timer (sec)	0~36000	60

- **Screen for Loopback and Test**

Select **ON** for **BERT** and press **ESC**. A prompt asking “Change Configuration?” will appear. Press **Y**, and the status of BERT will show on the screen.

```
O9340-S              === LoopBack and Test ===    01:08:13 08/01/2008
ARROW KEYS: CURSOR MOVE, BACKSPACE to edit, ESC to abort

Local  Unit Loopback: OFF              BERT: OFF
Remote Unit Loopback: OFF
Recover Timer (sec):  0 (0 = forever)



<< Press ESC key to return to previous menu >>
<< Press ESC key to return to Main Menu or enter a command >>
```

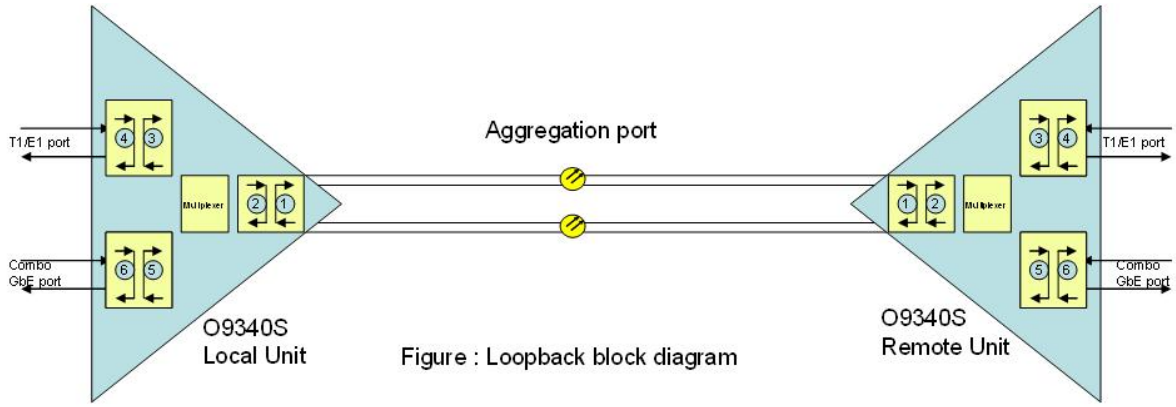


Figure : Loopback block diagram

① Aggregation port : Remote Loopback
② Aggregation port : Local Loopback
③ T1/E1 port : Remote Loopback
④ T1/E1 port : Local Loopback
⑤ Combo GbE port : Remote Loopback
⑥ Combo GbE port : Local Loopback

Figure 6-1 Loopback Application Diagram

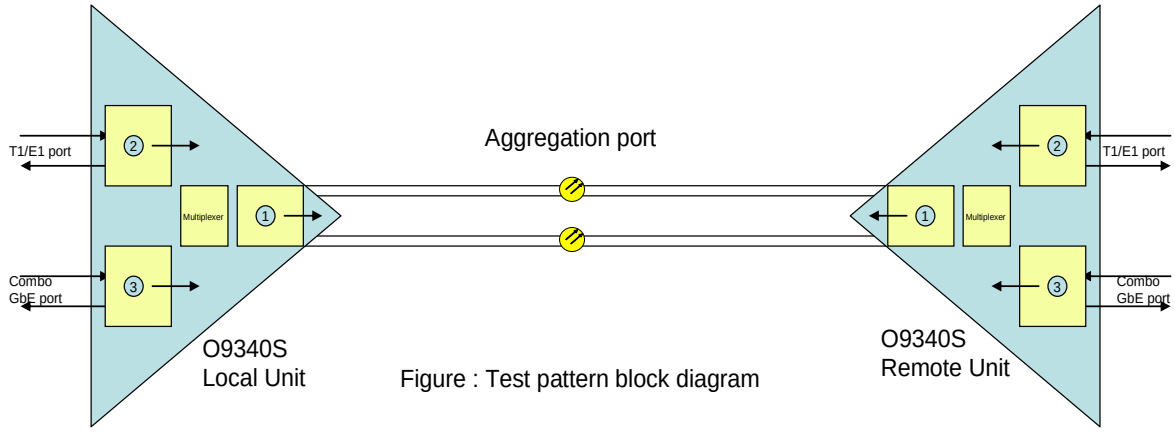


Figure : Test pattern block diagram

① Aggregation port : Send test pattern to remote unit

② T1/E1 port : Send test pattern to remote unit

③ Combo GbE port : Send test pattern to remote unit

Figure 6-2 Sending Test Pattern Application Diagram

6.6 Alarm Cut Off

- **Command Path** Main Menu > (A) Alarm Cut Off
- **Function** Alarm Cut Off allows you to cut off alarm.

- **Screen for Alarm Cut Off**

Select **(A) Alarm Cut Off** from the main menu. A prompt will ask “Cut off alarm- are you sure (Y/N)?” Press **Y** to confirm.

```
O9340-S                    === Main Menu ===          16:17:20 03/24/2009

Serial Number   : 000038                  Device Name : O9340
Hardware/FPGA Version: Ver.C/23           Connect Port: Local
Firmware Version: V1.01.04 03/22/2009     Start Time  : 00:00:01 08/01/2008

[DISPLAY]                                  [SETUP]
1 -> 15min/24hr Performance Report         S -> System Setup
2 -> 24hr/days Performance Report          M -> Alarm Setup
C -> System Configuration                  R -> Card Registration
T -> Alarm Status                          L -> File Transfer
Q -> Currently Active Alarm Summary        O -> Loopback and Test
H -> Alarm History                         K -> Clear Performance
V -> VLAN/MAC Table                        X -> Clear Alarm
I -> GbE/E1T1 Summary Report               B -> Clear Current Interval Performance

[LOG]                                     [MISC]
F -> Log Off                              A -> Alarm Cut Off
U -> Choose a Slot                        Y -> Load System & Slot Default
W -> Connect to Remote Terminal           Z -> System Reset
D -> Debug Mode, Field Support

>> Cut off alarm - are you sure (Y/N)?
```

6.7 Clear Performance

- **Command Path** Main Menu > (K) Clear Performance
- **Function** After you clear the performance report, all the current data in (1)15min/24hr Performance Report and (2) 24hr/days performance report will disappear

- **Screen for Clear Performance**

Select **(K) Clear Performance** from the main menu. A prompt will ask “Clear Performance- are you sure (Y/N)?” Press **Y** to confirm.

```
O9340-S                        === Main Menu ===              16:17:20 03/24/2009

Serial Number   : 000038                 Device Name : O9340
Hardware/FPGA Version: Ver.C/23          Connect Port: Local
Firmware Version: V1.01.04 03/22/2009    Start Time  : 00:00:01 08/01/2008

[DISPLAY]                                 [SETUP]
1 -> 15min/24hr Performance Report        S -> System Setup
2 -> 24hr/days Performance Report         M -> Alarm Setup
C -> System Configuration                 R -> Card Registration
T -> Alarm Status                         L -> File Transfer
Q -> Currently Active Alarm Summary       O -> Loopback and Test
H -> Alarm History                        K -> Clear Performance
V -> VLAN/MAC Table                       X -> Clear Alarm
I -> GbE/E1T1 Summary Report              B -> Clear Current Interval Performance

[LOG]                                     [MISC]
F -> Log Off                             A -> Alarm Cut Off
U -> Choose a Slot                        Y -> Load System & Slot Default
W -> Connect to Remote Terminal          Z -> System Reset
D -> Debug Mode, Field Support


>> Clear Performance - are you sure (Y/N)?
```

6.8 Clear Alarm

- **Command Path** Main Menu > (X) Clear Alarm
- **Function** Clear Alarm History allows you to clear alarm history or CAAS table.

- **Screen for Clear Alarm**

Choose **(X) Clear Alarm** from the main menu. Use arrow keys to choose between **History** or **CAAS table**. Press **Y**, and the one you selected will be cleared.

```
O9340-S                     === Main Menu ===          16:17:20 03/24/2009

Serial Number   : 000038                 Device Name : O9340
Hardware/FPGA Version: Ver.C/23          Connect Port: Local
Firmware Version: V1.01.04 03/22/2009    Start Time  : 00:00:01 08/01/2008

[DISPLAY]                                 [SETUP]
1 -> 15min/24hr Performance Report        S -> System Setup
2 -> 24hr/days Performance Report         M -> System Alarm Setup
C -> System Configuration                 R -> Card Registration
T -> Alarm Status                         L -> File Transfer
Q -> Currently-Active Alarm Summary       O -> Aggr Loopback & Test
H -> Alarm History                        K -> Clear Performance
V -> VLAN/MAC Table                       X -> Clear Alarm
I -> GbE/E1T1 Summary Report              B -> Clear Current Interval Performance

[LOG]                                     [MISC]
F -> Log Off                             A -> Alarm Cut Off
U -> Choose a Slot                        Y -> Load System & Slot Default
W -> Connect to Remote Terminal          Z -> System Reset
D -> Debug Mode, Field Support


>> *History   CAAS table
```

6.9 Load System & Slot Default

- **Command Path** Main Menu > (Y) Load System & Slot Default
- **Function** Load Default Config allows you to load configuration to default setting.

- **Screen for Load Default Config**

Choose **(Y) Load System & Slot Default** from the main menu.

```
O9340-S                    === Main Menu ===          16:17:20 03/24/2009

Serial Number   : 000038                 Device Name : O9340
Hardware/FPGA Version: Ver.C/23          Connect Port: Local
Firmware Version: V1.01.04 03/22/2009    Start Time  : 00:00:01 08/01/2008

[DISPLAY]                                 [SETUP]
1 -> 15min/24hr Performance Report        S -> System Setup
2 -> 24hr/days Performance Report         M -> Alarm Setup
C -> System Configuration                 R -> Card Registration
T -> Alarm Status                         L -> File Transfer
Q -> Currently Active Alarm Summary       O -> Loopback and Test
H -> Alarm History                        K -> Clear Performance
V -> VLAN/MAC Table                       X -> Clear Alarm
I -> GbE/E1T1 Summary Report              B -> Clear Current Interval Performance

[LOG]                                    [MISC]
F -> Log Off                             A -> Alarm Cut Off
U -> Choose a Slot                       Y -> Load System & Slot Default
W -> Connect to Remote Terminal          Z -> System Reset
D -> Debug Mode, Field Support

>> Use TAB key to select slot, and ENTER key to load default: ALL SLOTs
```

If you wish to load default configuration to a specific slot, press the TAB key. Then, select the slot you need. Then, press Enter. The system will ask “are you sure?” Press Y to confirm.

```
>> Load Default of SLOT #1 - are you sure ? [Y/N]
```

If you wish to return all systems to the default rate, press the TAB key and select ALL SLOS. Then, press Enter. The system will ask “are you sure?” Press Y to confirm.

```
>> Load Default of ALL SLOTs - are you sure ? [Y/N]
```

6.10 System Reset

- **Command Path** Main Menu > (Z) System Reset
- **Function** System Reset allows you to reset the system. You can select Local system or Remote system to reset.

- **Screen for System Reset**

Choose **(Z) System Reset** from the main menu. Move the cursor to the site you would like to select (**Local** or **Remote**) and press **Enter** to confirm your selection.

```
O9340-S                    === Main Menu ===          16:17:20 03/24/2009

Serial Number   : 000038                  Device Name : O9340
Hardware/FPGA Version: Ver.C/23           Connect Port: Local
Firmware Version: V1.01.04 03/22/2009     Start Time  : 00:00:01 08/01/2008

[DISPLAY]                                   [SETUP]
1 -> 15min/24hr Performance Report          S -> System Setup
2 -> 24hr/days Performance Report           M -> Alarm Setup
C -> System Configuration                   R -> Card Registration
T -> Alarm Status                           L -> File Transfer
Q -> Currently Active Alarm Summary         O -> Loopback and Test
H -> Alarm History                          K -> Clear Performance
V -> VLAN/MAC Table                         X -> Clear Alarm
I -> GbE/E1T1 Summary Report                B -> Clear Current Interval Performance

[LOG]                                      [MISC]
F -> Log Off                               A -> Alarm Cut Off
U -> Choose a Slot                         Y -> Load System & Slot Default
W -> Connect to Remote Terminal            Z -> System Reset
D -> Debug Mode, Field Support


>>   *Local  Remote
```

If you select Local, you can choose between Warm Restart and Cold Restart:

```
O9340-S                    === Main Menu ===          16:17:20 03/24/2009

Serial Number   : 000038                  Device Name : O9340
Hardware/FPGA Version: Ver.C/23           Connect Port: Local
Firmware Version: V1.01.04 03/22/2009     Start Time  : 00:00:01 08/01/2008

[DISPLAY]                                 [SETUP]
1 -> 15min/24hr Performance Report         S -> System Setup
2 -> 24hr/days Performance Report          M -> Alarm Setup
C -> System Configuration                  R -> Card Registration
T -> Alarm Status                          O -> LoopBack and Test
Q -> Currently Active Alarm Summary        K -> Clear Performance
H -> Alarm History                         X -> Clear Alarm
V -> VLAN/MAC Table                        B -> Clear Current Interval Performance
I -> GBE / E1T1 Summary Report

[LOG]                                     [MISC]
E -> Return to Main Menu                   Y -> Load System & Slot Default
U -> Choose a Slot                         Z -> System Reset
W -> Connect to Remote Terminal

>>   *Warm Restart  Cold Restart
```

Press **Enter** again，the system will start to reset.

```
>>   *Local  Remote

Loop O9340
Memory data bus testing: Pass
Memory address bus testing: Pass
Memory chip testing...
```

Once the reset procedure is done, the screen will return to the login page. You will have to log in again.

```
O9340-S                          === Login ===          02:07:23 08/01/2008

Serial Number   : 774910240              Device Name : O9340
Hardware/FPGA Version: Ver.A/11          Connect Port: Local
Firmware Version: V1.01.02 02/25/2009    Start Time  : 00:00:01 08/01/2008


               Account:   _____________________
               Password:




<< Please Input password and then Press ENTER key to continue >>
```

6.11 Clear Current Interval Performance

- **Command Path** Main Menu > (B) Clear Current Interval Performance
- **Function** Clear the performance data for the last 15 minutes

- **Screen for System Reset**

Choose **(B) Clear Current Interval Performance** from the main menu. The system will ask for the port you wish to clear the performance data. Choose the port you need and press Enter.

```
O9340-S                    === Main Menu ===          16:17:20 03/24/2009

Serial Number   : 000038                  Device Name : O9340
Hardware/FPGA Version: Ver.C/23           Connect Port: Local
Firmware Version: V1.01.04 03/22/2009     Start Time  : 00:00:01 08/01/2008

[DISPLAY]                                  [SETUP]
1 -> 15min/24hr Performance Report         S -> System Setup
2 -> 24hr/days Performance Report          M -> Alarm Setup
C -> System Configuration                  R -> Card Registration
T -> Alarm Status                          L -> File Transfer
Q -> Currently Active Alarm Summary        O -> Loopback and Test
H -> Alarm History                         K -> Clear Performance
V -> VLAN/MAC Table                        X -> Clear Alarm
I -> GbE/E1T1 Summary Report               B -> Clear Current Interval Performance

[LOG]                                      [MISC]
F -> Log Off                               A -> Alarm Cut Off
U -> Choose a Slot                         Y -> Load System & Slot Default
W -> Connect to Remote Terminal            Z -> System Reset
D -> Debug Mode, Field Support


>> Use TAB key to select port, and ENTER key to clear performance: Aggr#1
```

Then, press Y to confirm with your setting. The current interval performance data will be cleared.

```
>> clear performance of Aggr #1 - are you sure ? [Y/N]
```

6.12 Connect to Remote Terminal

- **Command Path** Main Menu > (W) Connect to Remote Terminal
- **Function** Connect to Remote Terminal allows you to connect to remote console for management

- **Screen for Connect to Remote Terminal**

Choose **(W) System Reset** from the main menu. You will see a login page as below. Key-in your account name and password to log in the remote console. To return to local console, press CTRL+Z.

```
REMOTE CONSOLE

O9340-S                          === Login  ===              04:29:08 08/01/2008
ARROW KEYS: CURSOR MOVE
Serial Number   : 000214              Device Name : O9340
Hardware/FPGA Version: Ver.C/23        Connect Port: Remote(ctrl+Z to Return)
Firmware Version: V1.01.04 03/22/2009   Start Time  : 00:00:01 08/01/2008


               Account: _____________________
               Password:_____________________









                                                          Press CTRL+Z to escape
<< Please Input password and then Press ENTER key to continue >>
```

7 CHOOSE A SLOT

7.1 4 port E1/T1 Card & 8 port E1 Card

Press U from Main Unit, use Tab key to select one slot and press Enter. Slot Menu will show as below. Below is the 4 -port E1/T1 slot menu. You can see the plug-in card name “E1/T1” on the upper left of the screen:

```
Slot 1  E1/T1              === Slot Menu ===           04:25:14 08/01/2008


[DISPLAY]                                [SETUP]
1 -> 15min/24hr Performance Report        S -> Card Setup
2 -> 24hr/days Performance Report         L -> LoopBack and Test
I -> Slot Summary Report                  M -> Alarm Setup
T -> Slot Alarm Status                    X -> Clear Alarm
H -> Slot Alarm History                   K -> Clear Performance
Q -> Slot CAAS                            B -> Clear Current Interval Performance


[LOG]                                    [MISC]
                                         Y -> Load Default Config
U -> Choose a Slot
E -> Return to Main Menu


>>SPACE bar to refresh or enter a command ===>
```

8-port E1 slot menu is the same with 4-port E1/T1 menu. The only difference is the naming on the upper left of the screen. It shows “E1” instead of “E1/T1” :

```
Slot  2  E1                  === Slot Menu ===           04:25:14 08/01/2008


[DISPLAY]                                [SETUP]
1 -> 15min/24hr Performance Report        S -> Card Setup
2 -> 24hr/days Performance Report         L -> LoopBack and Test
I -> Slot Summary Report                  M -> Alarm Setup
T -> Slot Alarm Status                    X -> Clear Alarm
H -> Slot Alarm History                   K -> Clear Performance
Q -> Slot CAAS                            B -> Clear Current Interval Performance


[LOG]                                    [MISC]
                                         Y -> Load Default Config
U -> Choose a Slot
E -> Return to Main Menu


>>SPACE bar to refresh or enter a command ===>
```

7.1.1 15min/24hr Performance Report

- **Command Path** Slot Menu > (1) 15min/24hr Performance Report
- **Function** User can select the Performance Port and Performance Type. The Performance Type included Near_End_Line，Near_End_Path and Far_End_Line, and Far_End_Path.

  There are two types for performance display: Current and History. “History” shows the performance values from system start-up to the current stage. “Current” shows the performance values from the last time the user cleans up the performance record to the current stage. Users are allowed to clean up the current performance values but not the history values. To clean up the current values, press K (Clear Performance) on the Slot Menu.
- **Screen for 15min/24hr Performance Report**

```
Slot  1  E1/T1          === 15min/1day Performance Report ===  00:03:29 08/01/2008
ARROW KEYS: CURSOR MOVE, TAB: ROLL OPTIONS

Performance Port : Port#1
Performance Type : Near_End_Line

Display Type :    History

<< Press ESC key to abort, ENTER key to show Perf. Report >>
```

7.1.2 24hr/days Performance Report

- **Command Path** Slot Menu > (2) 24hr/days Performance Report
- **Function** User can select the Performance Port, Performance Type and Performance Regs. The Performance Type included Near_End_Line, Near_End_Path, Far_End_Line and Far_End_Path. The Performance Regs include PSES, PVC, UAS, PES, LES, LSE and LCV.

  There are two types for performance display: Current and History. “History” shows the performance values from system start-up to the current stage. “Current” shows the performance values from the last time the user cleans up the performance record to the current stage. Users are allowed to clean up the current performance values but not the history values. To clean up the current values, press K (Clear Performance) on the Slot Menu.
- **Screen for 24hr/days Performance Report**

```
Slot  1  E1/T1          === 24hr/days Performance Report ===  00:06:09 08/01/2008
ARROW KEYS: CURSOR MOVE, TAB: ROLL OPTIONS

Performance Port : Port#1
Performance Type : Far_End_Line
Performance Regs : LES

Display Type :    History

<< Press ESC key to abort, ENTER key to show Perf. Report >>
```

7.1.3 Slot Summary Report

- **Command Path** Slot Menu > (I) Slot Summary Report
- **Function** User can check for Slot Summary Report here.
- **Screen for Alarm Status:**

```
E1T1                    === Slot Summary Report ===         00:12:40 08/01/2008


 E1               FRAME     CODE  RxAIS TxAIS  INTF      Loopback Type
Port1   Enable     UNFRAME   HDB3    NO    NO   120 Ohm     OFF
Port2   Enable     UNFRAME   HDB3    NO    NO   120 Ohm     OFF
Port3   Enable     UNFRAME   HDB3    NO    NO   120 Ohm     OFF
Port4   Enable     UNFRAME   HDB3    NO    NO   120 Ohm     OFF



<< ESC key to return to previous menu, SPACE bar to refresh >>
```

7.1.4 Slot Alarm Status

- **Command Path** Slot Menu > (T) Slot Alarm Status
- **Function** User can check for the Slot Alarm Status.
- **How to Set Up**

First, select Port 1 to Port 4 for Alarm Status for 4E1/T1 card, or Port1 to Port8 for 8E1 card.

```
Slot  1  E1/T1            === Slot Alarm Report ===       00:16:26 08/01/2008
ARROW KEYS: CURSOR MOVE, TAB: ROLL OPTIONS

  E1T1 PORT: PORT1

<< Press ESC key to return to previous menu >>
```

```
Slot 2   E1            === Slot Alarm Report ===       00:16:26 08/01/2008
ARROW KEYS: CURSOR MOVE, TAB: ROLL OPTIONS

  E1T1 PORT: PORT1

<< Press ESC key to return to previous menu >>
```

You will see the alarm report of the port you choose:

```
Slot 3 E1T1             === Slot Alarm Status ===       00:10:24 08/01/2008
ARROW KEYS: CURSOR MOVE, TAB: ROLL OPTIONS

  Port1
  [----- TYPE -----]   [ALARM]  [COUNT]
  Receive AIS             OK     0
  Tx AIS                 ALM     1
  LOS                    ALM     1
  LOF                     OK     0
  LCV(BPV)                OK     0
  PCV                     OK     0
  LES                     OK     0
  PES                     OK     0
  LSES                    OK     0
  PSES                    OK     0
  UAS                     OK     0
  RAI                     OK     0



<< ESC key to return to previous menu, SPACE bar to refresh >>
<< Press ESC key to return to previous menu >>
```

7.1.5 Slot Alarm History

- **Command Path** Slot Menu > (H) Slot Alarm History
- **Function** User can check for the Slot Alarm History.
  Note: the 4-port E1/T1 card and the 8-port E1 share the same naming "T1E1"on slot alarm summary screen. Please check the slot number shown on the screen with the card location on the device to find out which card is sending out the alarm.

- **Screen for Slot Alarm History**

```
Slot 1  E1/T1           === Slot Alarm History ===      00:22:26 08/01/2008


  1  Slot2 T1E1  Port4 UAS       Major               00:15:00 08/01/2008
  2  Slot2 T1E1  Port3 UAS       Major               00:15:00 08/01/2008
  3  Slot2 T1E1  Port2 UAS       Major               00:15:00 08/01/2008
  4  Slot2 T1E1  Port1 UAS       Major               00:15:00 08/01/2008
  5  Slot2 T1E1  Port4 LOS       Major              00:00:16 08/01/2008
  6  Slot2 T1E1  Port3 LOS       Major               00:00:16 08/01/2008
  7  Slot2 T1E1  Port2 LOS       Major              00:00:16 08/01/2008
  8  Slot2 T1E1  Port1 LOS       Major               00:00:16 08/01/2008









<< SPACE bar to refresh or ESC key return to main menu >>
```

7.1.6 Slot CAAS

- **Command Path** Slot Menu > (Q) Slot CAAS
- **Function** User can check for E1T1 card's Current Active Alarm Summary here.
  Note: the 4-port E1/T1 card and the 8-port E1 share the same naming "T1E1"on currently active alarm summary screen. Please check the slot number shown on the screen with the card location on the device to find out which card is sending out the alarm.

- **Screen for Slot CAAS**

```
Slot 1  E1/T1       === Currently  Active Alarm Summary ===   00:24:15 08/01/2008


  1  Slot2 T1E1  Port4 UAS
  2  Slot2 T1E1  Port3 UAS
  3  Slot2 T1E1  Port2 UAS
  4  Slot2 T1E1  Port1 UAS
  5  Slot2 T1E1  Port4 LOS
  6  Slot2 T1E1  Port3 LOS
  7  Slot2 T1E1  Port2 LOS
  8  Slot2 T1E1  Port1 LOS



<< ESC key to previous menu, SPACE key to another page >>
```

7.1.7 Card Setup

- **Command Path** Slot Menu > (S) Card Setup
- **Function** Users can Enable/Disable port, Frame, Code and INTF here. Press **Y** to save configuration.

Note:

1. The selection of 75ohm/120ohm is only available for E1 cards with EXAR chip (hardware version A). E1 cards with IDT chip (hardware version D) only support 120 ohm power resistance.
2. Users can only select one power resistance type (ohm) for all the ports on an E1 card. Selection of mixed power resistance type on one card (i.e. 75 ohm for port 1 and port2, 120 ohm for port 3 and port 4) is not available.

- **E1 Card Setup**

Field	Setting Options	Default
E1 Port	Enable, Disable	Enable
Frame	FAS,CRC,UNFRAME, FAS+CAS, CRC+CAS	CRC
Code	HDB3, AMI	HDB3
INTF	120ohn, 75 ohm	120 ohm

- **Sample Screen for 4 port E1 Card Setup**

For 4 E1 card, select the interface (E1) and press ENTER.

```
Slot 1  E1/T1                 === Card Setup ===            00:34:05 08/01/2008
ARROW KEYS: CURSOR MOVE, TAB: ROLL OPTIONS

Interface: E1

<< Press ESC key to return to previous menu >>
```

You will see the card setup screen for 4E1card as below:

```
Slot 1  E1/T1               ===  Card Setup ===           00:03:45 08/01/2008
ARROW KEYS: CURSOR MOVE, TAB: ROLL OPTIONS

 E1              FRAME    CODE  RxAIS TxAIS   INTF    Loopback Type
Port1   Enable      FAS     HDB3    NO    NO    120 Ohm     OFF
Port2   Enable      FAS     HDB3    NO    NO    120 Ohm     OFF
Port3   Enable      FAS     HDB3    NO    NO    120 Ohm     OFF
Port4   Enable      FAS     HDB3    NO    NO    120 Ohm     OFF


>> Change configuration (Y/N)? (Note:to save,please use V-command)
```

- **Sample Screen for 8 port E1 Card Setup**

Use “S’’ command from the main menu to access the 8 E1 card setup directly:

```
Slot 2 E1                   ===  Card Setup ===          11:00:39 09/16/2009
ARROW KEYS: CURSOR MOVE, TAB: ROLL OPTIONS

 E1              FRAME     CODE  RxAIS TxAIS  INTF      Loopback Type
Port1   Enable      CRC+CAS   HDB3    NO   YES   75  Ohm     REMOTE
Port2   Enable      CRC+CAS   HDB3    NO   YES   75  Ohm     REMOTE
Port3   Enable      CRC+CAS   HDB3    NO   YES   75  Ohm     REMOTE
Port4   Enable      CRC+CAS   HDB3    NO   YES   75  Ohm     REMOTE
Port5   Enable      UNFRAME   HDB3    NO    NO   75  Ohm     OFF
Port6   Enable      UNFRAME   HDB3    NO    NO   75  Ohm     OFF
Port7   Enable      UNFRAME   HDB3    NO    NO   75  Ohm     OFF
Port8   Enable      UNFRAME   HDB3    NO    NO   75  Ohm     OFF


<< Press ESC key to return to previous menu >>
```

- **T1 Card Setup**

Field	Setting Options	Default
T1 Port	Enable, Disable	Enable
Frame	SF, ESF, UNFRAME	UNFRAME
Code	B8ZS, AMI	B8ZS
EQU	0 Ft, 0-133 Ft, 133-266 Ft, 266-399 Ft, 399-533 Ft, 533-665 Ft	0 Ft

- **Sample Screen for T1 Card Setup**

For T1 card, select the interface (T1) and press ENTER.

```
Slot 1  E1/T1                 === Card Setup ===              00:34:05 08/01/2008
ARROW KEYS: CURSOR MOVE, TAB: ROLL OPTIONS

Interface: T1

<< Press ESC key to return to previous menu >>
```

You will see the card setup screen for 4T1 card as below:

```
Slot 1  E1/T1                 === Card Setup ===            00:03:45 08/01/2008
ARROW KEYS: CURSOR MOVE, TAB: ROLL OPTIONS

  T1              FRAME    CODE   EQU          Loopback Type
Port1   Enable      SF       B8ZS   0      Ft      OFF
Port2   Enable      SF       B8ZS   0      Ft      OFF
Port3   Enable      SF       B8ZS   0      Ft      OFF
Port4   Enable      SF       B8ZS   0      Ft      OFF



>> Change configuration (Y/N)? (Note:to save,please use V-command)
```

7.1.8 Loopback and Test

- **Command Path** Slot Menu > (L) Loopback and Test
- **Function** User can setup local Bert for local unit or remote unit for each port. Press **Y** to save configuration.

Field	Setting Options	Default
Local Unit	Off, Local, Remote	Off
Remote Unit	Off, Local, Remote	Off
Local Bert	Off, On	Off
Recover Timer (sec)	0~36000	60

- **Sample Screen for E1T1 Loopback and Test**

Below is the screen for 4-port E1/T1 Loopback and Test at its default rate:

```
Slot 2 E1T1              === LoopBack and Test ===    01:08:13 08/01/2008
ARROW KEYS: CURSOR MOVE, BACKSPACE to edit, ESC to abort

Port 1:   Local Unit   OFF   Remote Unit   OFF   Local Bert   OFF
Port 2:   Local Unit   OFF   Remote Unit   OFF   Local Bert   OFF
Port 3:   Local Unit   OFF   Remote Unit   OFF   Local Bert   OFF
Port 4:   Local Unit   OFF   Remote Unit   OFF   Local Bert   OFF
Recover Timer (sec):  0 (0 = forever)




<< Press ESC key to return to previous menu >>
```

To activate Loopback and test, turn on the port you need and set **Local Bert** to **ON**. Press ESC after set up, and press **Y** to confirm your settings.

```
Slot 1  E1/T1                === LoopBack and Test ===         01:32:08 08/01/2008
ARROW KEYS: CURSOR MOVE, TAB: ROLL OPTIONS


 Port 1:  Local Unit    OFF    Remote Unit    OFF     Local Bert ON
 Port 2:  Local Unit    LOCAL   Remote Unit    LOCAL    Local Bert ON
 Port 3:  Local Unit    OFF    Remote Unit    OFF     Local Bert ON
 Port 4:  Local Unit    OFF    Remote Unit    OFF     Local Bert ON
 Recover Timer: 0 (0 = forever)


>> Change configuration (Y/N)?
```

Once you activate Local Bert, the current data for Bert transmission will show on the screen. The type for loopback test is 2^15-1.

```
Slot 1  E1/T1                === LoopBack and Test ===         04:26:41 08/01/2008
ARROW KEYS: CURSOR MOVE, TAB: ROLL OPTIONS


 Port 1:  Local Unit    OFF    Remote Unit    REMOTE   Local Bert ON
 Port 2:  Local Unit    OFF    Remote Unit    REMOTE   Local Bert ON
 Port 3:  Local Unit    OFF    Remote Unit    REMOTE   Local Bert ON
 Port 4:  Local Unit    OFF    Remote Unit    REMOTE   Local Bert ON
 Recover Timer: 0 (0 = forever)


          TYPE    STATUS  BIT_ERR     ES  EPSED_SECs  UNSYNC_SECs  BER(10Sec)
Port1 BERT: 2^15-1    SYNC       0     0         11           0         0
Port2 BERT: 2^15-1    SYNC       0     0          1           0         0
Port3 BERT: 2^15-1    SYNC       0     0          1           0         0
Port4 BERT: 2^15-1    SYNC       0     0          0           0         0



*** left arrow key -- clear static
*** ESC key -- escape
>> Change configuration (Y/N)? Y
```

For 8-port E1 card Loopback and test set up, follow the same procedure as 4-port E1/T1.

```
Slot 2  E1                   === LoopBack and Test ===         00:34:49 08/01/2008
ARROW KEYS: CURSOR MOVE, TAB: ROLL OPTIONS


 Port 1:  Local Unit    OFF    Remote Unit    :OFF    Local Bert OFF
 Port 2:  Local Unit    OFF    Remote Unit    :OFF    Local Bert OFF
 Port 3:  Local Unit    OFF    Remote Unit    :OFF    Local Bert OFF
 Port 4:  Local Unit    OFF    Remote Unit    :OFF    Local Bert OFF
 Port 5:  Local Unit    OFF    Remote Unit    :OFF    Local Bert OFF
 Port 6:  Local Unit    OFF    Remote Unit    :OFF    Local Bert OFF
 Port 7:  Local Unit    OFF    Remote Unit    :OFF    Local Bert OFF
 Port 8:  Local Unit    OFF    Remote Unit    :OFF    Local Bert OFF
 Recover Timer: 0 (0 = forever)

<< Press ESC key to return to previous menu >>
```

7.1.9 Alarm Setup

- **Command Path** Slot Menu > (M) Alarm Setup
- **Function** User can select Port #1 to Port #4 to setup local Bert for local unit or remote unit.

Field	Setting Options	Default
ThresHold Type	15 min, 1 hr, 24 hr	15 min

```
Slot 1  E1/T1              === E1T1 Alarm Setup ===          00:55:35 08/01/2008
ARROW KEYS: CURSOR MOVE, TAB: ROLL OPTIONS


   ThresHold Type: 15 min



<< Press ESC key to return to previous menu >>
```

Alarm Type	THRESHOLD		ALARM		SEVERITY	
	Setting Options	Default	Setting Options	Default	Setting Options	Default
Receive AIS	N/A	N/A	Enable/Disable	Enable	Critical, Major, Minor, Warning, Informative	Minor
Tx AIS	N/A	N/A		Enable		Minor
LOS	N/A	N/A		Enable		Major
LOF	N/A	N/A		Enable		Major
LCV(BPV)	0~65535	0		Enable		Info
PCV	0~65535	0		Enable		Info
LES	0~65535	100		Enable		Minor
PES	0~65535	100		Enable		Minor
LSES	0~65535	10		Enable		Major
PSES	0~65535	10		Enable		Major
UAS	0~65535	0		Enable		Info
RAI	N/A	N/A		Enable		Info

- **Screen for E1T1 Alarm Setup**

```
Slot 3 E1T1                === Alarm Setup ===          00:12:02 08/01/2008
ARROW KEYS: CURSOR MOVE, TAB: ROLL OPTIONS


  [-- TYPE --]     [15-Min THRES]  [ALARM]  [SEVERITY]
Receive AIS                       Enable    Minor
Tx AIS                            Enable    Minor
LOS                               Enable    Major
LOF                               Enable    Major
LCV(BPV)              0           Enable    Informative
PCV                   0           Enable    Informative
LES                   100         Enable    Minor
PES                   100         Enable    Minor
LSES                  10          Enable    Major
PSES                  10          Enable    Major
UAS                   0           Enable    Informative
RAI                               Enable    Informative

<< Press ESC key to return to previous menu >>
```

7.1.10 Clear Alarm

- **Command Path** Slot Menu > (X) Clear Alarm
- **Function** User can clear alarm history and CAAS table.

- **Screen for Clear Alarm**

```
Slot 1  E1/T1                === Slot Menu ===              01:06:12 08/01/2008


[DISPLAY]                           [SETUP]
1 -> 15min/24hr Performance Report     S -> Card Setup
2 -> 24hr/days Performance Report      L -> LoopBack and Test
I -> Slot Summary Report               M -> Alarm Setup
T -> Slot Alarm Status                 X -> Clear Alarm
H -> Slot Alarm History                K -> Clear Performance
Q -> Slot CAAS                          B -> Clear Current Interval Performance


[LOG]                               [MISC]
                                        Y -> Load Default Config
U -> Choose a Slot
E -> Return to Main Menu


>> *History   CAAS table
```

7.1.11 Clear Performance

- **Command Path** Slot Menu > (K) Clear Performance
- **Function** User can clear performance here. Press **Y** to confirm or press **N** to abort.

- **Screen for Clear Performance**

```
Slot 1  E1/T1                === Slot Menu ===          01:06:12 08/01/2008



[DISPLAY]                           [SETUP]
1 -> 15min/24hr Performance Report     S -> Card Setup
2 -> 24hr/days Performance Report      L -> LoopBack and Test
I -> Slot Summary Report               M -> Alarm Setup
T -> Slot Alarm Status                 X -> Clear Alarm
H -> Slot Alarm History                K -> Clear Performance
Q -> Slot CAAS                          B -> Clear Current Interval Performance



[LOG]                               [MISC]
                                        Y -> Load Default Config
U -> Choose a Slot
E -> Return to Main Menu


>> Clear Performance - are you sure (Y/N)?
```

7.1.12 Clear Current Interval Performance

- **Command Path** Slot Menu > (B) Clear Current Interval Performance
- **Function** User can clear the most recent performance data here. First select the port you need to clear the performance data and press Enter, then, press **Y** to confirm or press **N** to abort.

- **Screen for Clear Performance**

```
Slot 1  E1/T1                 === Slot Menu ===          14:31:18 03/26/2009



[DISPLAY]                                [SETUP]
1 -> 15min/24hr Performance Report        S -> Card Setup
2 -> 24hr/days Performance Report         L -> LoopBack and Test
I -> Slot Summary Report                  M -> Alarm Setup
T -> Slot Alarm Status                    X -> Clear Alarm
H -> Slot Alarm History                   K -> Clear Performance
Q -> Slot CAAS                            B -> Clear Current Interval Performance


[LOG]                                    [MISC]
                                         Y -> Load Default Config
U -> Choose a Slot
E -> Return to Main Menu


>> Use TAB key to select port, and ENTER key to clear performance: Port#1
```

7.1.13 Load Default Config

- **Command Path** Slot Menu > (Y) Load Default Config
- **Function** User can load default config here. Press Y to confirm or press N to abort.

- **Screen for Load Default Config**

```
Slot 1  E1/T1                 === Slot Menu ===          01:06:12 08/01/2008


[DISPLAY]                              [SETUP]
1 -> 15min/24hr Performance Report      S -> Card Setup
2 -> 24hr/days Performance Report       L -> LoopBack and Test
I -> Slot Summary Report                M -> Alarm Setup
T -> Slot Alarm Status                  X -> Clear Alarm
H -> Slot Alarm History                 K -> Clear Performance
Q -> Slot CAAS                          B -> Clear Current Interval Performance


[LOG]                                 [MISC]
                                        Y -> Load Default Config
U -> Choose a Slot
E -> Return to Main Menu


>> Return to default - are you sure ? [Y/N]
```

7.2 Combo Gigabit Ethernet (GbE) Card

Press **U** from Main Unit, use Tab key to select one unit and press **Enter**.

```
O9340-S                    === Main Menu ===          16:17:20 03/24/2009

Serial Number   : 000038                  Device Name : O9340
Hardware/FPGA Version: Ver.C/23           Connect Port: Local
Firmware Version: V1.01.04 03/22/2009     Start Time  : 00:00:01 08/01/2008

[DISPLAY]                                   [SETUP]
1 -> 15min/24hr Performance Report          S -> System Setup
2 -> 24hr/days Performance Report           M -> System Alarm Setup
C -> System Configuration                   R -> Card Registration
T -> Alarm Status                           L -> File Transfer
Q -> Currently Active Alarm Summary         O -> Loopback and Test
H -> Alarm History                          K -> Clear Performance
V -> VLAN/MAC Table                         X -> Clear Alarm
I -> GbE/E1T1 Summary Report                B -> Clear Current Interval Performance

[LOG]                                       [MISC]
F -> Log Off                                A -> Alarm Cut Off
U -> Choose a Slot                          Y -> Load System & Slot Default
W -> Connect to Remote Terminal             Z -> System Reset
D -> Debug Mode, Field Support


==>> Press Tab key to select the slot:  1
```

Slot Menu will show as below.

```
Slot  3  Gbe               === Slot Menu ===          16:18:38 03/24/2009


 [DISPLAY]                              [SETUP]
1 -> 1-Hour Perf. Report                 S -> Card Setup
2 -> 24-Hour Perf. Report                L -> LoopBack and Test
I -> Slot Summary Report                 M -> Alarm Setup
P -> Slot Port Monitor                   O -> CoS
T -> Slot Alarm Status                   K -> Clear Performance
H -> Slot Alarm History                  X -> Clear Alarm
Q -> Slot CAAS                           B -> Clear Current Interval Performance


[LOG]                                    [MISC]
                                         Y -> Load Default Config
U -> Choose a Slot
E -> Return to Main Menu


>>SPACE bar to refresh or enter a command ===>
```

7.2.1 1-Hour Perf. Report

- **Command Path** Slot Menu > (1) 1-Hour Perf. Report
- **Function** User can select the Performance Port and Performance Type. The Performance Port included Optical#1 and Optical#2. The Performance Type included Near_End_Line, Near_End_Path, Far_End_Line and Far_End_Path.

  There are two types for performance display: Current and History. "History" shows the performance values from system start-up to the current stage. "Current" shows the performance values from the last time the user cleans up the performance record to the current stage. Users are allowed to clean up the current performance values but not the history values. To clean up the current values, press K (Clear Performance) on the main menu.

- **Screen for 1-Hour Perf. Report**

```
Slot  3  Gbe           === 15min/1day Performance Report ===     00:03:29 08/01/2008
ARROW KEYS: CURSOR MOVE, TAB: ROLL OPTIONS

Performance Port : Optical#1
Performance Type : Near_End_Line

Display Type :    History

<< Press ESC key to abort, ENTER key to show Perf. Report >>
```

7.2.2 24-Hour Perf. Report

- **Command Path** Slot Menu > (2) 24-Hour Perf. Report
- **Function** User can select the Performance Port, Performance Type and Performance Regs. The Performance Port included Optical#1 and Optical#2. The Performance Type included Far_End_Line, Far_End_Path, Near_End_Line and Near_End_Path. The Performance Regs included ES and SES.

  There are two types for performance display: Current and History. "History" shows the performance values from system start-up to the current stage. "Current" shows the performance values from the last time the user cleans up the performance record to the current stage. Users are allowed to clean up the current performance values but not the history values. To clean up the current values, press K (Clear Performance) on the main menu.

- **Screen for 24-Hour Perf. Report**

```
Slot  3  Gbe          === 24hr/days Performance Report ===       01:43:20 08/01/2008
ARROW KEYS: CURSOR MOVE, TAB: ROLL OPTIONS

Performance Port : Optical#1
Performance Type : Far_End_Line
Performance Regs : ES

Display Type :    History

<< Press ESC key to abort, ENTER key to show Perf. Report >>
```

7.2.3 Slot Summary Report

- **Command Path** Slot Menu > (I) Slot Summary Report
- **Function** User can check for Slot Summary Report here.

- **Screen for Alarm Status: GbE**

```
Slot 3 Gbe              === Slot Summary Report ===         03:37:04 08/02/2008

     Link Mode Enable  SPEED        RANGE        RATE  LOOPBACK  PRBS
 ============================================================================
 port1 Up   RJ   Enable   AUTO       100-1000Mbps  20  *50 Mbps  OFF     OFF
 port2 Up   RJ   Enable   AUTO       100-1000Mbps  20  *50 Mbps  OFF     OFF

     Link Fault Propagation
 ============================
 Port1 Disable
 Port2 Disable

  Flow Control                      Actual Speed
 ====================              ==================
 Port1 Disable                     Port1 100-Full
 Port2 Disable                     Port2 100-Full
```

7.2.4 Slot Port Monitor

- **Command Path** Slot Menu > (P) Slot Port Monitor
- **Function** User can check the information for optical port#1 and optical #2.

- **Screen for Slot Port Monitor**

```
 Slot 1 Gbe              === Slot Port Monitor ===       00:13:38 08/01/2008



 Port1   Total    Unicast  Multicast  Broadcast       CRC      Drop     Pause
 =====   ============================================================================
 RX         0         0         0         0         0         0         0
 TX         0         0         0         0         0         0         0

 Port2   Total    Unicast  Multicast  Broadcast       CRC      Drop     Pause
 =====   ============================================================================
 RX         0         0         0         0         0         0         0
 TX         0         0         0         0         0         0         0



 *** left arrow key -- clear port#1 static
 *** down arrow key -- clear port#2 static



 << Press ESC key to return to previous menu >>
```

7.2.5 Slot Alarm Status

- **Command Path** Slot Menu > (T) Slot Alarm Status
- **Function** User can check for the Alarm Status here. You can select Port 1 or Port 2 for GBE card.

```
Slot  3  Gbe              === Slot Alarm Report ===       00:16:26 08/01/2008
ARROW KEYS: CURSOR MOVE, TAB: ROLL OPTIONS


  GBE PORT: PORT1




<< Press ESC key to return to previous menu >>
```

- **Screen for Slot Alarm Status**

```
Slot  3  Gbe               === Slot Alarm Report ===       01:53:02 08/01/2008
ARROW KEYS: CURSOR MOVE, TAB: ROLL OPTIONS

  [----- TYPE -----]   [ALARM]   [COUNT]
  Link Change            ALM         1
  LCV(BPV)               OK          0
  PCV                    OK          0
  LES                    OK          0
  PES                    OK          0
  LSES                   OK          0
  PSES                   OK          0
  UAS                    OK          0
  Receive Packet      Disable        0
  LFP                 Disable        0


<< ESC key to return to previous menu, SPACE bar to refresh >>
```

7.2.6 Slot Alarm History

- **Command Path** Slot Menu > (H) Slot Alarm History
- **Function** User can check for the Slot Alarm History.

- **Screen for Slot Alarm History**

```
Slot  3  Gbe              === Slot Alarm History ===          00:36:00 08/01/2008


  1  Slot1 GBE   Port2 Link Change  Critical      Clear 00:34:40 08/01/2008
  2  Slot1 GBE   Port2 Link Change  Critical            00:33:42 08/01/2008
  3  Slot1 GBE   Port2 Link Change  Critical      Clear 00:26:35 08/01/2008
  4  Slot1 GBE   Port2 Link Change  Critical            00:26:15 08/01/2008




<< SPACE bar to refresh or ESC key return to main menu >>
```

7.2.7 Slot CAAS

- **Command Path** Slot Menu > (Q) Slot CAAS
- **Function** User can check for GBE card's Currently Active Alarm Summary here.

- **Screen for Slot CAAS**

```
Slot  3  Gbe        === Currently  Active Alarm Summary ===     00:24:15 08/01/2008









<< ESC key to previous menu, SPACE key to another page >>
```

7.2.8 Card Setup

- **Command Path** Slot Menu > (S) Card Setup
- **Function** User can Enable/Disable Optical port, setup Speed, Range and Rate. Note that the available range for link rate differs according to the link range (0-1Mbps, 1-10Mbps, 10-100Mbps, 100-1000Mbps). Set up the range first and move your cursor to **RATE** column. You will see the range for link rate on the top of the screen. After you change the configuration, press **Y** to save.

Field	Setting Options	Default
Enable	Enable, Disable	Enable
Speed	Auto, 10-Half, 10-Full, 100-Half, 100-Full, 1000-Half, 1000-Full	Auto
Range	0-1Mbps, 1-10Mbps, 10-100Mbps, 100-1000Mbps	100~1000M
Rate	0-1Mbps: 00 *256 Kbps 1-10Mbps: 02 *512 Kbps 10-100Mbps: 02 *5 Mbps 100-1000Mbps: 02 *50 Mbps	100-1000Mbps: 02 *50 Mbps
Link Fault Propagation		
Port 1	Enable, Disable	Disable
Port 2	Enable, Disable	Disable
Flow Control		
Port 1	Enable, Disable	Disable
Port 2	Enable, Disable	Disable

- **Screen for Card Setup**

```
Slot  3  Gbe                 === Gbe Card Setup ===          22:44:42 08/01/2008
ARROW KEYS: CURSOR MOVE, TAB: ROLL OPTIONS



     Link Mode Enable  SPEED         RANGE        RATE       LOOPBACK  PRBS
 ============================================================================
 port1 Up   RJ   Enable   AUTO       100-1000Mbps  20  *50 Mbps  OFF     OFF
 port2 Up   RJ   Enable   AUTO       100-1000Mbps  20  *50 Mbps  OFF     OFF

     Link Fault Propagation
 ============================
 Port1 Disable
 Port2 Disable

     Flow Control
 ====================
 Port1 Disable
 Port2 Disable




<< Press ESC key to return to previous menu >>
```

7.2.9 Loopback and Test

- **Command Path** Slot Menu > (L) Loopback and Test
- **Function** User can setup local Bert for port one and port 2. Press **Y** to save configuration.

Field	Setting Options	Default
Local Unit	Off, Local, Remote	Off
Local Bert	Off, On	Off
Recover Timer (sec)	0~36000	60

- **Screen for Loopback and Test**

To activate Loopback and test, turn on the port you need and set Local Bert to **ON**. Press **ESC** after set up, and press **Y** to confirm your settings.

```
Slot 4 Gbe              === LoopBack and Test ===    01:08:13 08/01/2008
ARROW KEYS: CURSOR MOVE, BACKSPACE to edit, ESC to abort

Port 1:  Local Unit  OFF  Remote Unit  OFF  Local Bert  OFF
Port 2:  Local Unit  OFF  Remote Unit  OFF  Local Bert  OFF
Recover Timer (sec):  60 (0 = forever)




<< Press ESC key to return to previous menu >>
```

Once you activate Local Bert, the current data for Bert transmission will show on the screen. The type for GbE loopback test is 2^15-1.

```
Slot  3  Gbe            === LoopBack and Test ===        00:20:15 08/01/2008
ARROW KEYS: CURSOR MOVE, TAB: ROLL OPTIONS


 Port 1:  Local Unit    OFF    Remote Unit    OFF    Local Bert ON
 Port 2:  Local Unit    OFF    Remote Unit    OFF    Local Bert ON
 Recover Timer (sec):  60 (0 = forever)

             TYPE    STATUS  BIT_ERR    ES  EPSED_SECs  UNSYNC_SECs  PLR (10Sec)
Port1 BERT: 2^15-1  UNSYNC       0     0         18          18       14880950
Port2 BERT: 2^15-1  UNSYNC       0     0          0           0        0









*** left arrow key -- clear port#1 static
*** down arrow key – clear port#2 static
*** ESC key -- escape
>> Change configuration (Y/N)? Y
```

7.2.10 Alarm Setup

- **Command Path** Slot Menu > (M) Alarm Setup
- **Function** User can setup GBE alarm here.

Field	Setting Options	Default
ThresHold Type	15 min, 1 hr, 24 hr, Others	15 min

ThresHold Type: 15 min/1 hr/24 hr

```
Slot  3  Gbe                  === Alarm Setup ===          02:31:57 08/01/2008
ARROW KEYS: CURSOR MOVE, TAB: ROLL OPTIONS


   ThresHold Type:  15 min


<< Press ESC key to return to previous menu >>
```

Alarm Type	THRESHOLD		ALARM		SEVERITY	
	Setting Options	Default	Setting Options	Default	Setting Options	Default
Link Change	N/A	N/A	Enable/Disable	Enable	Critical, Major, Minor, Warning, Informative	Info
LCV(BPV)	0~65535	0		Enable		Info
PCV	0~65535	0		Enable		Info
LES	0~65535	100		Enable		Minor
PES	0~65535	100		Enable		Minor
LSES	0~65535	10		Enable		Major
PSES	0~65535	10		Enable		Major
UAS	0~65535	0		Enable		Info
LFP	N/A	N/A		Enable	N/A	N/A

- **Screen for Alarm Setup**

```
Slot  3  Gbe                  === Alarm Setup ===          02:33:19 08/01/2008
ARROW KEYS: CURSOR MOVE, TAB: ROLL OPTIONS


  [-- TYPE --]   [THRESHOLD] [ALARM]   [SEVERITY]
  Link Change                Disable   Critical
  LCV(BPV)              0    Disable   Critical
  PCV                   0    Disable   Critical
  LES                   0    Disable   Critical
  PES                   0    Disable   Critical
  LSES                  0    Disable   Critical
  PSES                  0    Disable   Critical
  UAS                   0    Disable   Critical
  LFP                        Disable




<< Press ESC key to return to previous menu >>
```

Threshold Type: Others

- **Alarm Setup Screens:**

```
Slot 1 Gbe                === Alarm Setup ===          00:17:50 08/01/2008
ARROW KEYS: CURSOR MOVE, TAB: ROLL OPTIONS


   ThresHold Type: Others




<< Press ESC key to return to previous menu >>
```

```
Slot 1 Gbe                === Alarm Setup ===          00:18:28 08/01/2008
ARROW KEYS: CURSOR MOVE, Input DECIMAL number: 1~10, BACKSPACE to edit


  [-- TYPE --]           [THRESHOLD]       [ALARM]   [SEVERITY]
   Receive Packet       1  Min 1    pkts    Disable   Critical









<< Press ESC key to return to previous menu >>
```

THRESHOLD			ALARM		SEVERITY	
Setting Options		**Default**	**Setting Options**	**Default**	**Setting Options**	**Default**
Min	1~10	1	Enable/Disable	Disable	Critical, Major, Minor, Warning, Informative	Critical
pkts	1~65535	1				

7.2.11 CoS

- **Command Path** Slot Menu > (O) CoS
- **Function** Users can set up priority queue for GBE port 1 and port 2.

- **Screen for CoS**

First, select the GBE port you wish to set up priority queue.

```
Slot  3  Gbe                  === COS ===            02:43:58 08/01/2008
ARROW KEYS: CURSOR MOVE, TAB: ROLL OPTIONS


   GBE PORT:PORT1


<< Press ESC key to return to previous menu >>
```

Setting up Priority Queue：

Turn the mode to Priority Queue. O9340 provides 4 priority queue number, which determines the order of data transmission. Uses can set 8 priority data and untag to 1~4 priority queue. Priority means packet with Vlan, and Untag means packet without Vlan.

```
Slot  3  Gbe                  === COS ===            04:27:38 08/01/2008
ARROW KEYS: CURSOR MOVE, BACKSPACE to edit, ESC to abort


   GBE PORT:PORT1
 Mode :     Priority       ( Queue Priority: Q1 > Q2 > Q3 > Q4 )
 Priority 0 : Queue 1
 Priority 1 : Queue 2
 Priority 2 : Queue 3
 Priority 3 : Queue 4
 Priority 4 : Queue 1
 Priority 5 : Queue 2
 Priority 6 : Queue 3
 Priority 7 : Queue 4
 Untag :      Queue 1









<< Press ESC key to return to previous menu >>
```

Setting up Weighted Round-Robin：

Turn the mode to Round Robin and set the rate for all the 8 priority data (priority 0~7) and Untag. After Setting up the queue priority for each mode, the user must setup the Weight Ratio (1~4) as well. Weight Ratio means the polling times for each queue, implying the amount of packets being transmitted. That is to say, if the O9340S polls the queue just once, then the queue will only transmit one packet to the optical interface. For example, if the Weight Ratio of Queue1 and Queue2 are 4 and 2 respectively, then the O9340S system will poll Queue1 four times and four packets will be transmitted. After Queue1 completes the transmission, the system will poll Queue2 twice, and the 2 packets will be transmitted. Then, the system will goes back to poll Queue1 again. Thus, this is called Weighted Round Robin.

```
Slot  3  Gbe                    === COS ===            22:45:54 08/01/2008
ARROW KEYS: CURSOR MOVE, BACKSPACE to edit, ESC to abort


  GBE PORT:PORT1
 Mode :     Round Robin
 Priority 0 : Queue 1
 Priority 1 : Queue 2
 Priority 2 : Queue 3
 Priority 3 : Queue 4
 Priority 4 : Queue 1
 Priority 5 : Queue 2
 Priority 6 : Queue 3
 Priority 7 : Queue 4
 Untag :     Queue 1

 [ Weight Ratio ]
 Queue 1 : 0
 Queue 2 : 0
 Queue 3 : 0
 Queue 4 : 0

<< Press ESC key to return to previous menu >>
```

7.2.12 Clear Performance

- **Command Path** Slot Menu > (K) Clear Performance
- **Function** User can clear performance here. Press Y to confirm or press N to abort.

- **Screen for Clear Performance**

```
Slot  3  Gbe                === Slot Menu ===          01:36:23 08/01/2008


[DISPLAY]                             [SETUP]
1 -> 1-Hour Perf. Report                S -> Card Setup
2 -> 24-Hour Perf. Report               L -> LoopBack and Test
I -> Slot Summary Report                M -> Alarm Setup
P -> Slot Port Monitor                  O -> CoS
T -> Slot Alarm Status                  K -> Clear Performance
H -> Slot Alarm History                 X -> Clear Alarm
Q -> Slot CAAS                           B -> Clear Current Interval Performance


[LOG]                                 [MISC]
                                          Y -> Load Default Config
U -> Choose a Slot
E -> Return to Main Menu

>> Clear Performance - are you sure (Y/N)?
```

7.2.13 Clear Alarm

- **Command Path** Slot Menu > (X) Clear Alarm
- **Function** User can clear alarm history and CAAS table.

- **Screen for Clear Alarm**

```
Slot  3  Gbe                  === Slot Menu ===          01:36:23 08/01/2008


[DISPLAY]                             [SETUP]
1 -> 1-Hour Perf. Report                S -> Card Setup
2 -> 24-Hour Perf. Report               L -> LoopBack and Test
I -> Slot Summary Report                M -> Alarm Setup
P -> Slot Port Monitor                  O -> CoS
T -> Slot Alarm Status                  K -> Clear Performance
H -> Slot Alarm History                 X -> Clear Alarm
Q -> Slot CAAS                           B -> Clear Current Interval Performance


[LOG]                                 [MISC]
                                          Y -> Load Default Config
U -> Choose a Slot
E -> Return to Main Menu


>> *History   CAAS table
```

7.2.14 Clear Current Interval Performance

- **Command Path** Slot Menu > (B) Clear Current Interval Performance
- **Function** User can clear the latest 15 minutes' performance data here. First select the port you need to clear the performance data and press Enter, then, press **Y** to confirm or press **N** to abort.

- **Screen for Clear Performance**

```
Slot  3  Gbe               === Slot Menu ===          02:42:37 08/01/2008


[DISPLAY]                            [SETUP]
1 -> 1-Hour Perf. Report               S -> Card Setup
2 -> 24-Hour Perf. Report              L -> LoopBack and Test
I -> Slot Summary Report               M -> Alarm Setup
P -> Slot Port Monitor                 O -> CoS
T -> Slot Alarm Status                 K -> Clear Performance
H -> Slot Alarm History                X -> Clear Alarm
Q -> Slot CAAS                         B -> Clear Current Interval Performance


[LOG]                                 [MISC]
                                        Y -> Load Default Config
U -> Choose a Slot
E -> Return to Main Menu


>> Use TAB key to select port, and ENTER key to clear performance: Optical#1
```

7.2.15 Load Default Config

- **Command Path** Slot Menu > (Y) Load Default Config
- **Function** User can load default config here. Press **Y** to confirm or press **N** to abort.

- **Screen for Load Default Config**

```
Slot  3  Gbe               === Slot Menu ===          01:36:23 08/01/2008


[DISPLAY]                            [SETUP]
1 -> 1-Hour Perf. Report               S -> Card Setup
2 -> 24-Hour Perf. Report              L -> LoopBack and Test
I -> Slot Summary Report               M -> Alarm Setup
P -> Slot Port Monitor                 O -> CoS
T -> Slot Alarm Status                 K -> Clear Performance
H -> Slot Alarm History                X -> Clear Alarm
Q -> Slot CAAS                         B -> Clear Current Interval Performance


[LOG]                                [MISC]
                                       Y -> Load Default Config
U -> Choose a Slot
E -> Return to Main Menu


>> Return to default - are you sure ? [Y/N]
```