GIGAswitch/FDDI System

Out-of-Band Management (OBM) Guide

Part Number: EK-GOBMG-MG .B01

This guide describes the features available in the GIGAswitch/FDDI System OBM facility.

Revision/Update Information: This is a revised guide.

Digital Equipment Corporation Maynard, Massachusetts

Frist Printing, April 1995 Second Printing, March 1996

While Digital believes that information included in this publication is correct as of the date of publication, it is subject to change without notice

Digital Equipment Corporation makes no representations that the interconnection of its products in the manner described in this document will not infringe existing or future patent rights, nor do the descriptions contained in this document imply the granting of licenses to make, use, or sell equipment or software in accordance with the description.

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

Copyright @ 1996 Digital Equipment Corporation. All Rights Reserved. Printed in the United States of America.

The following are trademarks of Digital Equipment Corporation: GIGAswitch, and the DIGITAL Logo.

All other trademarks and registered trademarks are the property of their respective holders.

This document was prepared using VAX DOCUMENT, Version 2.1.

Contents

Pr	reface	v		
1 Out-of-Band Management (OBM)				
	OBM Terminal	1–2 1–3 1–4 1–5		
2	System Menu			
	Show Box Configuration Show/Set Slot Configuration Power Up a Card Power Down a Card Power Cycle a Card Redisplay Slot Configuration Show/Set System Time Clear Management Memory Reboot Menu Normal Reboot Reboot into Diagnostic mode	2-2 2-3 2-3 2-3 2-3 2-3 2-4 2-5 2-6 2-6 2-6		
3	Port Menu			
	Show LAN Address AssignmentsShow/Set Privileged and Bootserver PortsAdd Privileged PortRemove Privileged PortAdd Bootserver PortAdd Bootserver PortRemove Bootserver PortShow/Set Delayed PortsAdd Delayed PortRemove Delayed PortBoot PortBoot PortIP MenuShow IP Addresses Assigned to PortsShow Ports with IP addressesAdd IP AddressDeassign IP AddressShow Route InformationAdd Route InformationDelete Route Information	3-2 3-3 3-3 3-3 3-3 3-4 3-4 3-4 3-4 3-4 3-4		

4 Bridge Menu

	Bridge Menu Show Number of Addreesses Show Number of Addreesses Show IP Entry Show IP Entry Show 802 Entry Show 802 Entry Set linecard fwd'g database size	4–2 4–2 4–2 4–2 4–2
5	MIBs Menu	
	MIB Viewer Menu Choices	5–2
	Get	5–2
	Getnext	5–2
	Show SNMP Counters	5–2
	Show UDP Counters	5–2
	Show IP Counters	5–2
	Show ICMP Counters	5–2
6	Extensions Menu Extended Menu Statistics and Counters Menu	6–2 6–2
	Debug Options Menu	6–2
	Hunt Group Menu	6–4
7	OBM	
	OBM Menu	7–2
	Screen Mode Menu	7–2
	OBM Password	7–2
	OBM Prompt Menu	7–2
Fi	gures	
	1–1 Connecting the OBM Terminal	1–2
Та	bles	
	1–1 Start OBM	1–3

Preface

Intended Audience

This guide is intended for network managers who will manage a GIGAswitch/FDDI System in an extended local area network (LAN).

Structure of This Guide

This guide describes the features available in the GIGAswitch/FDDI System OBM facility. It is organized to reflect the menu options available on various OBM screens.

Conventions

The following conventions are used in this guide:

Bold typeface	A word or phrase is being emphasized. It also indicates MIB objects and filter disposition.
Italic typeface	The complete titles of manuals.
Return	You press the return key on the keyboard.
Ctrl/O	You must hold down the key labeled Ctrl while you press another key or a pointing device button.

1

Out-of-Band Management (OBM)

The GIGAswitch/FDDI Out-of-Band Management (OBM) facility provides a convenient way to observe and (in some cases) set certain system operating parameters and data. The OBM facility is a menu-based system that employs an ASCII terminal connected (directly or through a modem) to the CLK card of the GIGAswitch/FDDI System.

Some important OBM features referenced in other GIGAswitch/FDDI Guides are described in the chapters indicated in the table below.

Features	Chapter	
Showing box configuration	2	
Showing slot configuration	2	
Rebooting into diagnostic mode	2	
Designating privileged ports	3	
Designating bootserver ports	3	
Setting IP addresses	3	
Setting the OBM password	7	

OBM Terminal

The OBM terminal connects directly, or through a modem, to the OBM port on the CLK card. A terminal, with modems meeting CCITT V.24, V.28, or V.32 standards, and associated cables are required. Figure 1–1 shows how to connect the OBM terminal.





mkv-0281-51

Number	Function
0	OBM port
0	Cables, part numbers BC22D- xx^1 ($xx =$ cable length in feet) (EIA RS-232 connector)
0	OBM terminal—9600 baud
0	Modem—9600 baud
6	Remote modem
6	Remote OBM terminal

¹BC22D cable meets Class A FCC requirements

Table 1-1 list the steps required to connect the OBM terminal and start the OBM session.

Table 1–1 Start OBM

Action
Locate the OBM port, the cables, and the OBM terminal (or the modem, remote modem, and remote OBM terminal).
Connect the RS-232 cable from the terminal (or modem) to the OBM port.
Install the remote modem and the remote OBM terminal, if needed.
Set up the terminal as follows:
9600 baud rate 8 bits, no parity 1 stop bit
Set the security switch to allow OBM access (position 2, 3, or 4).
Press Ctrl/D to get the CLK> prompt.
Press Ctrl/O to start the OBM session.

LAT Connectivity	The OBM port may also be connected to a LAT port for remote OBM access. The LATserver must pass escape sequences.			
	When connecting to a terminal server with remote LAT access, set LATserver port autobaud (disable) and access (remote).			
	Note the following restrictions:			
	- Cannot use the DECserver 90L or 90L+			
	- Cannot use the DECserver 90TL or 90M			

OBM Menus

OBM functions are performed via a series of menus which appear on the OBM terminal. Each menu has a name and a list of choices, preceded by numbers. The user selects the number of the desired choice.

The following conventions are used:

- A choice which ends with the word "menu" results in an additional menu of choices.
- A choice that begins with the word "Show" results in a display, followed by the same menu (or a subset, in the case of the Main Menu).
- A choice that begins with "Show/set" results in a display, followed by a menu of choices related to that display.
- All other choices result in some action, perhaps preceded by input requests or a warning.

When multiple input values are requested in a single prompt the values supplied should be separated by spaces.

When one or more port number is required as one of the inputs, the FPPN numbering scheme should be used in one of the following formats:

```
single port (10.4)
list of ports (10.1,10.2,12.2,14.1)
range of ports (10.1 - 12.4)
"all" - to indicate all ports
```

- The final choice for all menus (except for the Main Menu) returns to a previous menu—often to the Main Menu. The final choice in the Main Menu ends the OBM session.
- Pressing <CR> causes a previous menu or the main menu to reapear, except as indicated below.
- A display that cannot be shown on a single screen will have "(<cr>=More)" following the prompt. Press <CR> to continue the display.
- Ctrl/D will abort the OBM session at any time.

Main Menu

The first menu presented by OBM is called the Main Menu. The Main Menu consists of the System, Port, Bridge, MIBs, Extensions and OBM sections.

Main Menu	
System	 Show box configuration Show/set slot configuration Show/set system time Clear management memory Reboot menu
Port	 Show LAN address assignments Show/set privileged and bootserver ports Show/set delayed ports IP menu
Bridge	10. Bridge menu
MIBs	11. MIB viewer menu
Extensions	12. Extended options menu
OBM	13. OBM menu 14. End OBM session

Choice:

The six sections of the main menu are described in Chapters 2 through 7.

2 System Menu

This chapter describes the choices that can be made from the System section of the main menu.

- System
- Show box configuration
 Show/set slot configuration
 - 3. Show/set system time
 - 4. Clear management memory
 - 5. Reboot menu

Show Box Configuration

This choice displays the status of the power and cooling modules, and the key switch, as well as the range of LAN addresses unique to this box. The System section of the main menu is redisplayed along with the status information.

GIGAswitch Box Configuration

Power System Controler Cabinet Temperature Left Fan Right Fan	ok Hardware rev: CO1 Firmware rev: 1.0 normal ok ok
Left Front-end Unit	ok Power source: AC
Right Front-end Unit	not present
Keyswitch Position	4 (world access)
LAN Address Range:	08-00-2B-20-FB-00 through 08-00-2B-20-FB-7F
System Configuration Menu	 Show box configuration Show/set slot configuration Show/set system time Clear management memory Reboot menu Return to main menu
Choice:	

Choice:

Show/Set Slot Configuration

This choice displays the contents and status of each logic slot. A sub menu is displayed with choices for powering linecards on or off, as described below.

GI Slot Card Type 1 Switch Engine 2 - 3 - 4 -	GAswitch Slo State Powered Up - -	t Config HW H	FW	.00 BB2.00	Status Elected SCP		
5 SCP 6 -	Powered UP	Н	2.13/dl1	.00/bb2.00	Initialized		
7 Clock 8 CBS 9 FGL-4	Powered Up Powered Up Powered Up	B03 -	8 2.10		Initialized Initialized		
10 FGL-2 11 -	Powered Up	В			Initialized		
12 FGL-2 13 FGL-2 14 -	Powered Up Powered Up -	C B	1.34 2.34		Initialized Initialized		
Slot Configuration Menu	2. Pow 3. Pow 4. Red		card card slot confi	guration			
Choice:	5. Ret	urn to m	nain menu				
Power Up a Card	This choi Input:	e allows	s power to	be applied	to a card.		
	slot n	umber					
Power Down a Card	This choice allows power to be removed from a card. Input:						
	slot n	slot number					
Power Cycle aThis choice allows powerCardthen up.Input:Input:			s power to	be cycled;	the card is powered down,		
	slot n	umber					
Redisplay Slot Configuration	This choi	ce redisp	olays the s	slot configui	ration screen.		

Show/Set System Time

This choice displays the current system time, time since last reboot and a prompt to change current date and time. Press <CR> to return to the main menu. If a new time is not entered no change will be made.

System Time

Current time: 03/04/96 13:47:05 Time since last switch reboot: 000:00:10:12.895 Enter date and time (mmddyyhhmmss):

Clear Management Memory

This choice allows the management memory to be cleared. The following warning is displayed.

Management Memory Reset Action

WARNING: You have chosen to ERASE management memory and REBOOT the GIGAswitch. All values that have been set by SNMP and by OBM will be lost.

Do you really want to do this? (yes/no):

Reboot Menu

	This choice allows the switch to be rebooted normally, or into diagnostic mode.				
	Reboot Menu 1. Normal Reboot 2. Reboot into Diagnostic mode 3. Return to main menu				
	Choice:				
Normal Reboot	This choice allows the GIGAswitch to be rebooted. The following warning message is displayed:				
	Warning: This will terminate your OBM session and REBOOT the GIGAswitch.				
	Do you want to do this? (yes/no):				
Reboot into Diagnostic	This choice allows the GIGAswitch to be rebooted into diagnostic mode. The following warning message is displayed:				
mode	Warning: This will terminate your OBM session and REBOOT the GIGAswitch into diagnostic mode.				
	Do you want to do this? (yes/no):				

3 Port Menu

This chapter describes the choices that can be made from the Port section of the main menu.

- Port 6. Show LAN address assignments
 - 7. Show/set privileged and bootserver ports
 - 8. Show/set delayed ports
 - 9. IP menu

Show LAN Address Assignments

This choice displays each logical port's FPPN, SPN, and assigned LAN address. Three screens are required to show all 64 assignments. To display the next screen press <cr>.

The port section of the main menu is redisplayed at the bottom of each screen.

Port LAN Address Assignments

FPPN	SPN	LAN Address	FPPN	SPN	LAN Address		
1.1	(1)	08-00-2B-20-FB-08	1.2	(2)	08-00-2B-20-FB-09		
2.1	(3)	08-00-2B-20-FB-0a	2.2	(4)	08-00-2B-20-FB-0b		
3.1	(5)	08-00-2B-20-FB-0c	3.2	(6)	08-00-2B-20-FB-0d		
4.1	(7)	08-00-2B-20-FB-0e	4.2	(8)	08-00-2B-20-FB-0f		
5.1	(9)	08-00-2B-20-FB-10	5.2	(10)	08-00-2B-20-FB-11		
5.3	(11)	08-00-2B-20-FB-1b	5.4	(12)	08-00-2B-20-FB-13		
6.1	(13)	08-00-2B-20-FB-14	6.2	(14)	08-00-2B-20-FB-15		
6.3	(15)	08-00-2B-20-FB-16	6.4	(16)	08-00-2B-20-FB-17		
9.1	(17)	08-00-2B-20-FB-18	9.2	(18)	08-00-2B-20-FB-19		
9.1	(17)	08-00-2B-20-FB-1a	9.2	(18)	08-00-2B-20-FB-1b		
10.1	(21)	08-00-2B-20-FB-1c	10.2	(22)	08-00-2B-20-FB-1d		
10.3	(23)	08-00-2B-20-FB-1e	10.4	(24)	08-00-2B-20-FB-1f		
Port	Monu	1. Show LAN addr	ogg oggignmo	nta			
POIL	Mentu		-		arvar parta		
	2. Show/set privileged and bootserver ports						
	 Show/set delayed ports IP menu 						
5. Return to main menu							
Choice (<cr>= More):</cr>							
CHOICE (CCI>= MOTE).							

Show/Set Privileged and Bootserver Ports

This choice displays which ports are set to be privileged, and which ports are bootserver ports. It also indicates that a port is in the forwarding state. Two screens are required to display all the information.

A sub menu is displayed at the bottom of each screen, This menu allows one to add or remove privileged and bootserver ports.

Pr	<pre>ivileged (P) and Bootserver (B) Ports</pre>			
FPPN SPN P B 1.1 (1) P 2.1 (3) P B 3.1 (5) P	FPPN SPN P B FPPN SPN P B 1.2 (2) P 2.2 (4) P B 3.2 (6) P 4.2 (6) P C			
4.1 (7) P 5.1 (9) P 6.1 (13) P 9.1 (17)* P 10.1 (21) P B 11.1 (25) P 12.1 (29) P B 13.1 (33) P 14.1 (35) P	4.2 (8) P 5.2 (10) P 5.3 (11) P 5.4 (12) P 6.2 (14) P 6.3 (15) P 6.4 (16) P 9.2 (18)* P 9.1 (17) P 9.2 (18) P 10.2 (22) P B 10.3 (23) P B 10.4 (24) P B 11.2 (26) P 11.3 (27) P 11.4 (28) P 12.2 (30) P B 12.3 (31) P B 12.4 (32) P B 13.2 (34) P 14.2 (36) P 12.3 12.4 12.4 12.4			
Privileged and Bootserver Menu	 Add privileged port Remove privileged port Add bootserver port Remove bootserver port Return to main menu 			
Choice (<cr>=More):</cr>				
Choice (<cr>=Mor</cr>	e):			
Add Privileged Port	e): This choice allows privileged ports to be added. Input:			
Add Privileged	This choice allows privileged ports to be added.			
Add Privileged	This choice allows privileged ports to be added. Input:			
Add Privileged Port Remove	This choice allows privileged ports to be added. Input: Port# (or range or 'all') This choice allows privileged ports to be removed.			
Add Privileged Port Remove Privileged Port Add Bootserver	This choice allows privileged ports to be added. Input: Port# (or range or 'all') This choice allows privileged ports to be removed. Input:			
Add Privileged Port Remove Privileged Port Add	This choice allows privileged ports to be added. Input: Port# (or range or 'all') This choice allows privileged ports to be removed. Input: Port# (or range or 'all') This choice allows bootserver ports to be added.			
Add Privileged Port Remove Privileged Port Add Bootserver	This choice allows privileged ports to be added. Input: Port# (or range or 'all') This choice allows privileged ports to be removed. Input: Port# (or range or 'all') This choice allows bootserver ports to be added. Input:			

Show/Set Delayed Ports

This choice displays the delayed port information. A sub menu is displayed at the bottom of the screen. This menu allows one to add or remove delayed ports, or to boot a port whose booting has been delayed.

			D	_		ot Ports ed delay		orts)		
	SPN (1) (3) * (5) (7)	D D D D D	FPPN 1.2 2.2 3.2 4.2	SPN (2) (4) (6) (8) *	D D D D	FPPN	SPN	D	FPPN	SPN D
5.1 6.1 9.1 10.1 11.1 12.1	(9) (13) (17) (21) (25)	D D	5.2 6.2 9.2 10.2 11.2 12.2 13.2 14.2	(10) (14) (18) (22) (26)	D	6.3 9.1 10.3 11.3	(11) (15) (17) (23) (27) (31)		5.4 6.4 9.2 10.4 11.4 12.4	(12) D (16) D (18) (24) (28) (32)
Delay Choic	ed Port	Menu	2. 3.	Remove Boot p	e port port	delayed from de ain menu	elayed			

Add Delayed Port	This choice allows ports to be added to the delayed list. Input:
	Port# (or range or 'all')
Remove Delayed Port	This choice allows ports to be removed from the delayed list. Input:
	Port# (or range or 'all')
Boot Port	This choice allows a delayed port to be booted. Note: Port must be in the delayed state to use this option. Input:
	Port# (or range or 'all')

IP Menu

This choice displays the IP address menu which allows one to set or deassign IP addresses, and to add or delete route information.

	IP Menu Choice:	 Show IP addresses assigned to ports Show ports with IP addresses Add IP address Deassign IP address Show route information Add route information Delete route information Return to main menu
Show IP Addresses Assigned to Ports	along with a list requires more shown followin	plays each IP Address assigned to the switch, st of ports to which it is assigned. If this display than one screen a (" <cr>= More") indicator will be g the prompt. Each screen of the display has the nu following the display.</cr>
		IP Addresses Assigned to Ports
	IP Address	Mask Port List
	16.20.233.45	255.255.255.0 1.1-1.2,10.1-12.4
	IP Menu	 Show IP addresses assigned to ports Show ports with IP addresses Add IP address Deassign IP address Show route information Add route information Delete route information Return to main menu
	Choice:	
Show Ports with IP addresses	Input:	wws ports with IP address.
Add IP Address	This choice allo ports. Inputs (separat	ows assignment of an IP address to one or more ted by spaces):
	Port # (or : IPAddress NetMask	range or 'all')

Deassign IP Address	This choice allows the deassigment of an IP address from one or more ports. Inputs (separated by spaces):
	Port # (or range or 'all') IPAddress
Show Route Information	This choice displays the route information.
	Destination Mask First Hop: None
Add Route Information	This choice allows route information to be added. Inputs (separated by spaces):
	Route Destination
Delete Route Information	This choice allows the route information to be deleted. Inputs (separated by spaces):
	Route Destination

4 Bridge Menu

This chapter describes the choices that can be made from the Bridge section of the main menu.

Bridge

10. Bridge menu

Bridge Menu

Bridge Menu 1. Show number of addreesses in SCP fwd'g database 2. Show IP entry 3. Show 802 entry 4. Set linecard fwd'g database size 5. Return to main menu Choice: Show Number Displays the number of addresses in the SCP's bridge forwarding of Addreesses database. Show IP Entry Displays information from records in the translation table for the IP address. Input: IP address Displays information from records in the translation table for the Show 802 Entry 802 address. Input: 802 Hardware Address (hex) Set linecard On entering this menu, the current forwarding table size is fwd'g database displayed along with the lincard forwarding table size menu: size The current linecard forwarding table size is 7737 addesses. Linecard Forwarding 1. Set table size to 3737 addresses Table Size Menu 2. Set table size to 7737 addresses 3. Set table size to 15737 addresses 4. Set table size to 23993 addresses 5. Return to previous menu Choice: If you choose to make a change in the forwarding line card table size the following message is displayed: You have asked to change the linecard forwarding table size to XXXXX addresses. Warning: After the size is set the switch will REBOOT and begin operation with the new size. Do you want to do this? (yes/no)

This choice displays the bridge menu which allows access to

information concerning the forwarding database.

5 MIBs Menu

This chapter describes the choices that can be made from the MIBs section of the Main Menu.

MIBs

11. MIB viewer menu

Choice:

MIB Viewer Menu Choices

This choice displays the MIB viewer menu. This menu allows one to see the values of MIB objects, and to see the SNMP, UDP, IP, and the ICMP counters. MIB Viewer Menu 1. Get 2. Getnext 3. Show SNMP counters 4. Show UDP counters 5. Show IP counters 6. Show ICMP counters 7. Return to main menu Choice: Displays the SNMP value for an object specified by OID. This OID Get can be in a dotted decimal format or leafname.instance format. Input: Object Identifier Getnext Dispalys the SNMP value that follows the given OID. This OID can be in dotted decimal format, leafname.instance format, or "x". If "x" is entered the OBM will use the last OID entered to get the next value. Input: Object Identifier Show SNMP Displays the SNMP counters in mib2.snmp. Counters Show UDP Displays the UDP counters in mib2.udp. **Counters** Show IP Displays the IP counters in mib2.ip. Counters Show ICMP Displays the ICMP counters in mib2.icmp. Counters

6 Extensions Menu

This chapter describes the choices that can be made from the extensions section of the main menu.

Extensions 12. Extended options menu

Extended Menu

	This choice allows access to extended option menu.						
	Extended Options Menu	 Statistics and counters menu Debug options menu Hunt group menu Return to main menu 					
	Choice:						
Statistics and Counters Menu	This choice allows access to the statistics and counters menu.						
	Statistics and Counters Menu Choice:	 AT statistics PortUpdate statistics Spanning tree statistics menu Hunt group statistics menu Flooding counters RMC error counters menu SNMP slot counters menu Return to previous menu 					
		items are not covered in this guide. They are					
	used when trouble	e					
Debug Options Menu	This choice allows access to the Debug Option Menu.						
Menu	Debug Options Menu	 Error log menu Expanded SCP firmware versions Expanded AGL firmware versions Management memory dump Linecard options menu Monitor messages Return to previous menu 					
	Choice:	-					
	Display Error log — Displays the error log in two ways.						
	Error log Menu	 Short display Short display - paged Full display Return to previous menu 					
	Choice:	4. Recuiri co previous menu					
	Short Display — I	Displays entries continuously one entry per line.					
		aged — Displays a page of entries one entry per screen and displays next page.					
	<i>Full Display</i> — D	isplays a single entry.					

Expanded SCP Firmware Versions — Displays the expanded firmware versions, followed by the debug option menu.

diagnostics (200): Tue Apr 5 14:35:21 EDT 1994 /scp-fw/src/bootimage_sources.ol network download (100): Wed Aug 4 17:58:23 EDT 1993 /two/scpdump/bootimage_soul operational (2BAD00): Fri Jun 2 17:15:12 EDT 1995 /users/segool/pg/src hpnux2.nal Debug Options 1. Error log menu 2. Expanded SCP firmware versions Menu 3. Expanded AGL firmware versions 4. Management memory dump 5. Linecard options menu 6. Monitor messages 7. Return to previous menu

Choice:

Expanded AGL Firmware Versions — Displays the expanded AGL firmware versions, followed by the debug option menu.

AGL Expanded Firmware Versions slot card type fw Debug Options 1. Error log menu 2. Expanded SCP firmware versions Menu 3. Expanded AGL firmware versions 4. Management memory dump 5. Linecard options menu 6. Monitor messages 7. Return to previous menu Choice:

Management Memory Dump — Causes the management memory to be dumped.

:2000000030168101355B979FD87EF4F00BBC929954C000003010 200030226250800030019 10401020004010C010075 :0400400004010200B5

Debug Options Menu	 Error log menu Expanded SCP firmware versions Expanded AGL firmware versions Management memory dump Linecard options menu Monitor messages Return to previous menu
Choice:	

Linecard Options Menu — Displays the linecard option menu.

		Menu ange linecard diagnostics timeout turn to previous menu					
	<i>Change Linecard</i> timeout on a linec Input:	<i>Diagnostics Timeout</i> — Allows the diagnostics ard to changed.					
	Slot number						
	Monitor Messag	Monitor Messages — Displays the SCP messages.					
Hunt Group	buffer. This is rea the screen will ren until any key is p	is displayed, only if there is a message in the l time so, if there is no messages in the buffer main blank until an scp message is recieved, or ressed.					
Menu							
	Hunt Group Menu	 Hunt group configuration menu Set/disable hunt group support Return to previous menu 					
	Choice:						
	Hunt Group Con configuration men	nfiguration Menu—Displays the hunt group u.					
	Hunt Group Config	Menu 1. Show hunt group (SPN) 2. Show hunt group (FPPN) 3. Show hunt group (SPN & FPPN)					

4. Return to previous menu

Choice:

Show hunt group (SPN)—Displays the SPN

	Hunt group (Configuration (SPN)	
Physical Hunt Group 1 37 2 37 3 37 4 37 5 6 7 8 9 10 11		-	
12	24	36	
Hunt Group Config M Choice:	 Show hunt Show hunt Show hunt 		
CITOTCE.			

Show hunt group (FPPN)—Displays the FPPN

Hunt group Configuration (FPPN)

Physical Hur	nt Group Ph 99.37	nysical Hunt 6.1	Group P	hysical 11.1	Hunt Group 99.40
	99.37	6.2		11.2	99.40
	9.37	6.3		11.3	99.40
2.2 9	99.37	6.4		11.4	99.40
3.1		9.1		12.1	
3.2		9.2		12.2	
4.1		9.3		12.3	
4.2		9.4		12.4	
5.1		10.1		13.1	
5.2		10.2		13.2	
5.3		10.3		14.1	
5.4		10.4		14.2	
Hunt Group (Config Menu				
		Show hunt gro	± · ·	١	
		Show hunt gro Show hunt gro	-		

Show hunt group (SPN & FPPN)
 Return to previous menu

Choice:

Show hunt group (SPN & FPPN)—Displays the SPN and FPPN.

SPN Phy 1 2 3 4	FPN Phy 1.1 1.2 2.1 2.2	SPN HG 37 37 37 37	Fppn HG 99.37 99.37 99.37 99.37	SPN Phy 13 14 15 16	PHY 6.1 6.2 6.3 6.4	SPN HG	Fppn HG	SPN PHY 25 26 27 28	Fppn PHY 11.1 11.2 11.3 11.4	SPN HG 40 40 40 40	Fppn HG 99.40 99.40 99.40 99.40
5 6 7 8 9 10 11 12	3.1 3.2 4.1 4.2 5.1 5.2 5.3 5.4			17 18 19 20 21 22 23 24	9.1 9.2 9.3 9.4 10.1 10.2 10.3 10.4			29 30 31 32 33 34 35 36	12.1 12.2 12.3 12.4 13.1 13.2 14.1 14.2		
		p Co	nfig Mer 1. 2.	u Show Show	hunt hunt	group	(SPN) (FPPN)				

Hunt group Configuration (SPN & FPPN)

3. Show hunt group (SPN & FPPN)

4. Return to previous menu

Choice:

Set/disable hunt group support—allows you to disable hunt group support. The following message will appear:

Hunt groups are currently supported

Do you want to change the configuration to disable hunt groups? Warning: If you answer yes, the switch will REBOOT.

Do you want to do this? (yes/no):

7 0BM

This chapter describes the choices that can be made from the OBM section of the Main Menu.

OBM 13. OBM menu

OBM Menu

	-	ays the OBM menu which allows access to erning how the OBM is displayed.					
	OBM Menu	 Screen mode menu Set OBM password OBM prompt menu Return to main menu 					
	Choice:						
Screen Mode Menu	This choice allows access to the screen mode menu, which specifies what occurs on the screen immediately after a menu selection is made.						
	The current scree	en mode is : Clear screen mode					
	Screen Mode Menu	1. Clear screen mode 2. Scroll screen mode 3. Text mode					
	Choice:	4. Return to previous menu					
	Clear Screen - M OBM displays.	Mode — Causes the screen to clear between					
	Scroll Screen - Mode — Causes the screen to scroll between OBM displays.						
	Text Mode — Ol or clearing.	3M displays follow each other with no scrolling					
OBM Password	the OBM. The pa	s the user to set a password to gain entrance to ssword is checked only if the keyswitch on the cal" or "remote" access position. The password aracters.					
	New Password:						
	Re-enter new p	password:					
OBM Prompt Menu		s access to the OBM prompt menu. A custom lly useful when managing more than one I System.					
-	prompt is especia	lly useful when managing more than one					
-	prompt is especia GIGAswitch/FDD OBM Prompt Menu Choice:	Ily useful when managing more than one I System. Set a custom prompt Set the default prompt Return to previous menu 					
-	prompt is especia GIGAswitch/FDD OBM Prompt Menu Choice: Set a custom pr	 Ily useful when managing more than one I System. 1. Set a custom prompt 2. Set the default prompt 					