

FrameSaver™ 9620

Quick Reference

April 1998

This Quick Reference summarizes the configuration options accessed when you select Configuration from the Main Menu. The table references apply to the tables contained in the configuration sections in Chapter 4, *Setting Up*, of the *FrameSaver 9620 Technical Reference* (Document No. 9621-A2-GH30).

The Menu Hierarchy shows the menus or branches that appear when starting a session via an async (or other VT100-compatible) terminal, Telnet session, or PC running terminal emulation.

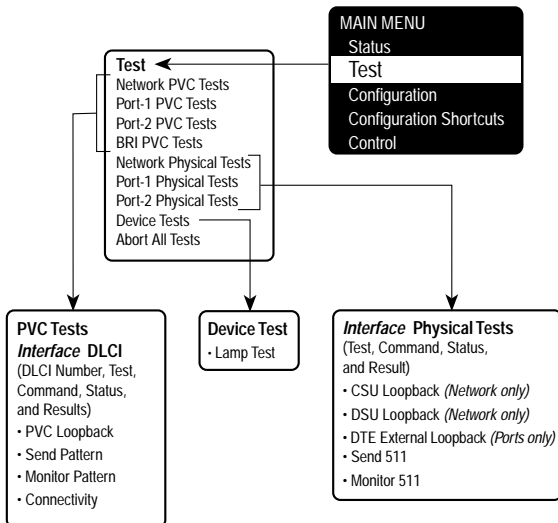
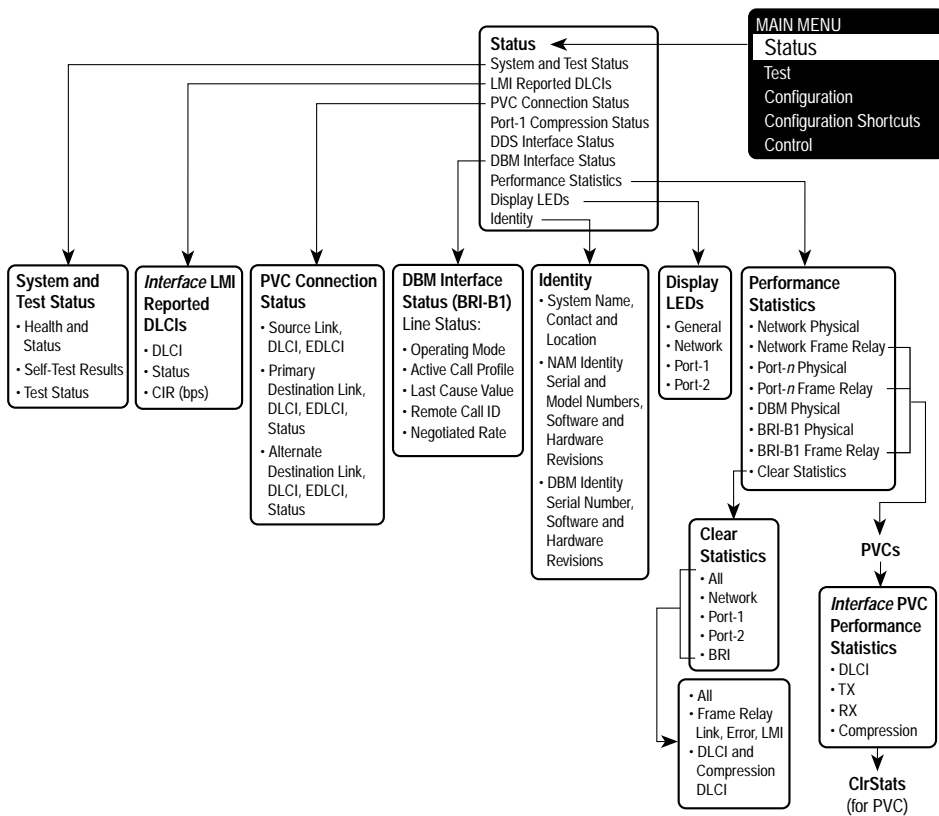
Configuration Menu

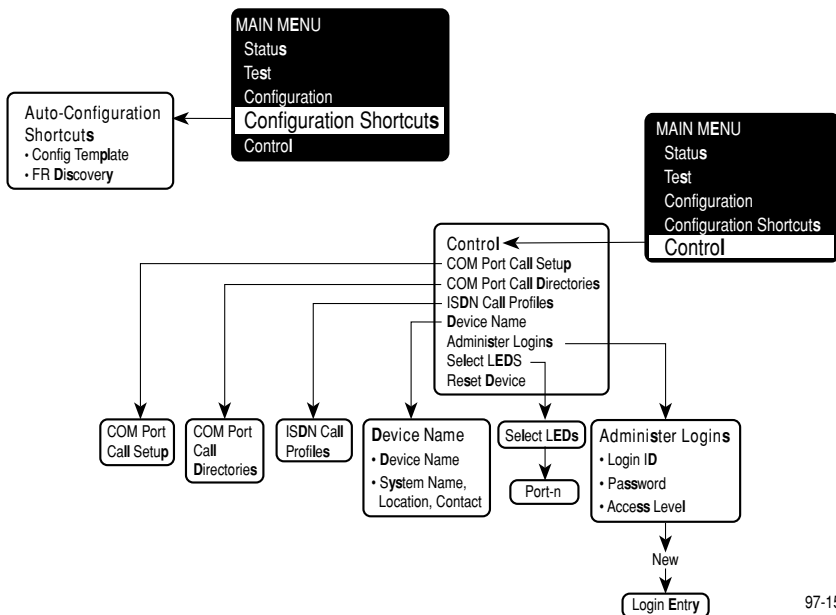
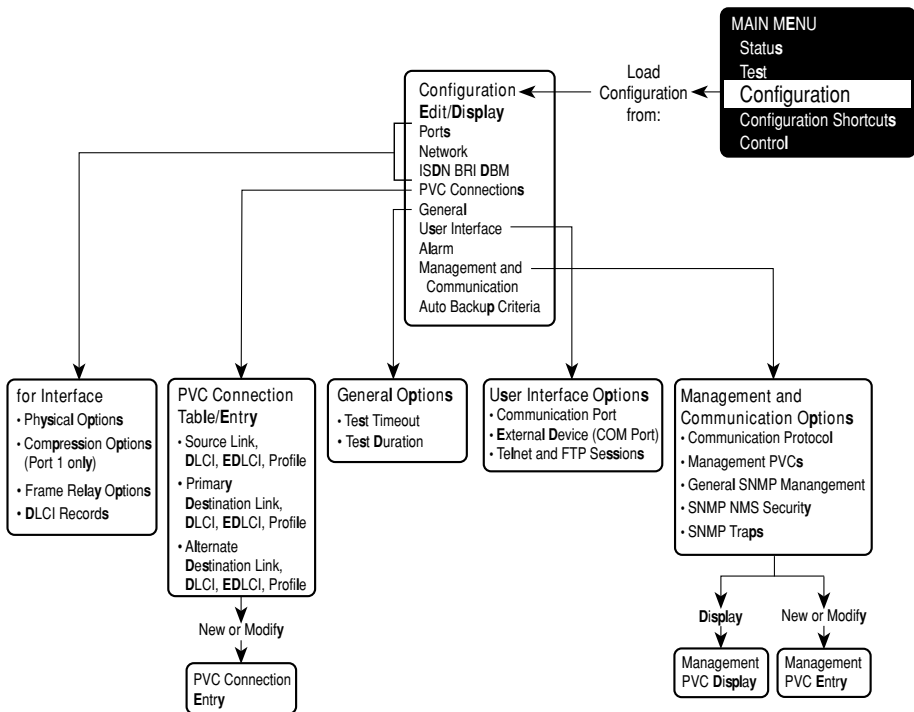
- Ports (including Physical, Frame Relay, and DLCI Records)
- Network (including Physical, Frame Relay, and DLCI Records)
- ISDN BRI DBM (including Physical, Frame Relay, and DLCI Records)
- PVC Connections
- General
- User Interface
- Alarm
- Management and Communication
- Auto Backup Criteria

Configuration Shortcuts

This feature is provided to simplify basic setup of the access unit and its features.

- Select Configuration Templates to speed setup of the access unit.
- Select Frame Relay Discovery for automatic configuration and cross-connection of DLCIs (and EDLCIs) and management PVCs based upon information coming from the network via the LMI protocol.





Configuration Options

Physical

Select to configure the physical characteristics of each interface, the data ports, DDS network, and ISDN BRI DBM (if installed).

Ports

Select Ports to configure the physical characteristics of Port 1 or Port 2.

Ports	
Configuration Option	Settings Default in [Bold]
Port- <i>n</i>	[Enable], Disable
Physical Characteristics of the Port Table 4-1	
Port Type	EIA-232, [V.35]
Port Rate (Kbps) configured as EIA232 ports:	4.8, 9.6, 14.4, 16.8, 19.2, 24, 28.8, 38.4, 48, [56], and 64 kbps
configured as V.35 ports:	4.8, 9.6, 14.4, 16.8, 19.2, 24, 28.8, 38.4, 48, [56], 64, 128, 192, and 256 kbps ¹ , and Auto
Timing Options	[Internal], External, Terminal ²
Invert Transmit Clock	Enable, [Disable]
Port (DTE) Initiated Loopbacks	Local, [Disable]
Control Leads Supported	Force, DTR, RTS, [Both]
Compression for Port 1 Table 4-2	
DTE Type ³	[Frame Relay], Bit Synchronous
Compression Ratio Alarm ³	Enable, [Disable]
Connection Failure Alarm ³	Enable, [Disable]
Compression	Enable, [Disable]
Flow Control ³	[Clock], CTS, None
Short Packet Bypass ³	[Enable], Disable
Optimize Based On ³	Throughput, [Latency]
¹ Rates 128, 192, and 256 kbps are used to reduce latency with very bursty traffic, or when running in compressed mode.	
² For Port 2 only.	
³ Not shown when Compression is set to Disable.	

Network

Select Network to configure the physical characteristics of the DDS network interface.

Network		Table 4-3
Configuration Option	Settings	Default in [Bold]
Operating Mode	[DDS], LADS	
LADS Timing ¹	Internal, [Receive]	
DDS Line Rate (Kbps)	56, 64CC, [Autobaud]	
DSU Latching Loopback	[Enable], Disable	
Cross Pair Detection Alarm	[Enable], Disable	
No Signal Alarm	[Enable], Disable	
Out of Service Alarm	[Enable], Disable	
Out of Frame Alarm	[Enable], Disable	
Excessive BPV Alarm	[Enable], Disable	
¹ Only appears when Operating Mode is set to LADS		

ISDN BRI DBM

Select ISDN BRI DBM to configure an internal Basic Rate Interface Dial Backup Module for dial backup.

ISDN BRI DBM		Table 4-4
Configuration Option	Settings	Default in [Bold]
BRI-B1	Enable, [Disable]	
Physical Characteristics of the ISDN BRI DBM		
Originate or Answer	Originate, [Answer]	
Switch Type	NI-1	(Read only)
BRI-B1 Service Profile ID (SPID) ¹	ASCII text entry, Clear	[3 – 20 digits]
BRI-B1 Phone Number ¹	ASCII text entry, Clear	[7 – 19 digits]
¹ Initially blank when <u>N</u> ew is selected; no factory default. Tab to field, and press the spacebar. The first valid value appears.		

Frame Relay

Select Frame Relay to configure frame relay connectivity for each interface, specifying the characteristics of the LMI (local management interface) that manage PVCs.

Frame Relay for Each Interface		Table 4-5
Configuration Option	Settings	Default in [Bold]
Link Status ¹	[Enable], [Auto], Disable	
Inbound CIR Enforcement Mode	[Forced], Standard, Discard	
Outbound CIR Enforcement Mode	[Forced], Standard, Buffered	
LMI Behavior	[Independent], Port-1_Follows_Network, Port-2_Follows_Network, Both_Ports_Follow_Network, Network_Follows_Port-1, Network_Follows_Port-2, Port-1_Codependent_with_Network, Port-2_Codependent_with_Network	
LMI Personality ²	[User Side], [Network Side], None ⁶	
LMI Protocol ^{3, 4}	Standard, Annex-A, [Annex-D]	
LMI Error Event (N2) ³	1, 2, [3], 4, 5, 6, 7, 8, 9, 10	
LMI Clearing Event (N3) ³	[1], 2, 3, 4, 5, 6, 7, 8, 9, 10	
LMI Status Enquiry (N1) ^{3, 4}	1, 2, 3, 4, 5, [6], . . . 255	
LMI Heartbeat (T1) ^{3, 4}	5, [10], 15, 20, 25, 30	
LMI Inbound Heartbeat (T2) ^{3, 5}	5, 10, [15], 20, 25, 30	
LMI N4 Measurement Period (T3) ^{3, 5}	5, 10, 15, [20], 25, 30	
LMI Link Status Change Alarm ³	[Enable], Disable	
DLCI Status Change Alarm ^{3, 4}	[Enable], Disable	
¹ Enable is the default for data ports and the network interface; Auto is the default for an ISDN BRI DBM. ² User Side is the default for the network interface; Network Side is the default for the Port <i>n</i> interface and answering BRI B-channel. ³ Not shown when the port's LMI Personality is set to None. ⁴ Not shown when the interface's LMI Personality is set to Network Side. ⁵ Not shown when the interface's LMI personality is set to User Side. ⁶ Not shown for the network interface.		

DLCI Records

Select DLCI Records to manually configure DLCI records for each interface. The Configuration Shortcuts feature provides automatic DLCI record configuration.

DLCI Records for Each Interface		Table 4-6
Configuration Option	Settings	Default in [Bold]
DLCI Number	16, 17, 18, . . . 1007	
DLCI Status	[Active], Inactive	
DLCI Type	[Standard], Multiplexed	
CIR (bps)	0 – 64000	[56,000 for BRI] [64,000 for other interfaces]
Excess Burst Size (Bits)	[0] – 999,999	
DLCI Priority	Low, [Medium], High	
DLCI Compression	Enable, [Disable]	
DLCI Compr Ratio Alarm Threshold	[1.0:1], 2.0:1, 3.0:1, 4.0:1	

PVC Connections

Select PVC Connections to configure the logical connections between the network interface and the data ports. The Configuration Shortcuts feature provides automatic configuration of PVC connections.

PVC Connections		Table 4-7
Configuration Option	Settings	Default in [Bold]
Source Link ¹	Network, Port-1, Port-2, BRI-B1, Clear	
Source DLCI ¹	16 – 1007	
Source EDLCI ¹	0 – 62	
Source Profile ^{1, 2}	<i>ISDN Call Profiles Source</i>	
Primary Destination Link ¹	Network, Port-1, Port-2, BRI-B1, Clear	
Primary Destination DLCI ¹	16 – 1007	
Primary Destination EDLCI ¹	0 – 62	
Primary Destination Profile ^{1, 2}	<i>ISDN Call Profiles Destinations</i>	
Alternate Destination Link ¹	Network, Port-1, Port-2, BRI, Clear	
Alternate Destination DLCI ¹	16 – 1007	
Alternate Destination EDLCI ¹	0 – 62	
Alternate Destination Profile ^{1, 2}	<i>ISDN Call Profiles Destinations</i>	

¹ Initially blank when **N**ew is selected; no factory default. Tab to field, and press the spacebar. The first valid value appears.

² Only appears when the link is set to BRI. Select ISDN Call Profiles from the Control menu to define profile destinations.

General

Select General to configure a timeout period and duration for user-initiated loopbacks and pattern tests.

General		Table 4-8
Configuration Option	Settings	Default in [Bold]
Test Timeout	[Enable], Disable	
Test Duration (min)	1 – 120	[10]

User Interface

Select User Interface to configure the access unit's communications port, or to configure for connection to an external modem for sending ASCII alarms and SNMP traps or for Telnet sessions.

User Interface		Table 4-9
Configuration Option	Settings	Default in [Bold]
Communication Port		
Port Use	[Terminal], Net Link, Alarm	
Port Type	[Asynchronous], Synchronous	
Data Rate (Kbps)	9.6, 14.4, [19.2], 28.8, 38.4, 57.6, 115.2	
Port Type – Synchronous		
Clock Source ¹	[Internal], External	
RIP ¹	[None], Proprietary	
Port Type – Asynchronous		
Character Length ²	7, [8]	
Parity ²	[None], Even, Odd	
Stop Bits ²	[1], 2	
Ignore Control Leads ²	[Disable], DTR	
Login Required ²	Enable, [Disable]	
Port Access Level ²	[Level-1], Level-2, Level-3	
Inactivity Timeout ²	[Enable], Disable	
Disconnect Time (Minutes) ^{2, 3}	1 – 60	[10]
¹ Only appears when Port Use is set to Net Link. ² Only appears when Port Use is set to Terminal. ³ Only appears when Inactivity Timeout is set to Enable.		

User Interface (cont'd)	
Configuration Option	Settings Default in [Bold]
External Device (COM Port) Table 4-10	
External Device Commands	[Disable] , AT, Other
Dial-In Access	Enable, [Disable]
Connect Prefix ⁴	ASCII text entry, [Clear]
Connect Indication String ⁴	ASCII text entry, [Clear]
Escape Sequence ⁴	ASCII text entry, [Clear]
Escape Sequence Delay (Sec) ⁴	[None] , 0.2, 0.4, 0.6, 0.8, 1.0
Disconnect String ⁴	ASCII text entry, [Clear]
Telnet and FTP Sessions Table 4-11	
Telnet Session	[Enable] , Disable
Telnet Login Required	Enable, [Disable]
Session Access Level	[Level-1] , Level-2, Level-3
Inactivity Timeout	[Enable] , Disable
Disconnect Time (Minutes)	1 – 60 [10]
FTP Session	[Enable] , Disable
FTP Login Required	Enable, [Disable]
⁴ Only appears when External Device Commands is set to Other.	

Alarm

Select Alarm to configure ASCII alarms and SNMP traps.

Alarm	
Configuration Option	Settings Default in [Bold]
ASCII Alarm Messages	Com Port, [Disable]
Alarm & Trap Dial-Out	Enable, [Disable]
Trap Disconnect	[Enable] , Disable
Call Retry	Enable, [Disable]
Dial-Out Delay Time (Min)	1 – 10 [5]
Alternate Dial-Out Directory	[None] , 1 – 5

Management and Communication

Select Management and Communication to configure the access unit so it can be managed by an NMS or Telnet terminal, and to select the appropriate protocols.

Management and Communication	
Configuration Option	Settings Default in [Bold]
Communication Protocol Table 4-13	
Node IP Address	[000.000.000.000] – 223.255.255.255, ¹ Clear
Node Subnet Mask	[000.000.000.000] – 255.255.255.255, Clear
Default Network Destination	[None], COM, PVCname
Communication Port:	
IP Address	[000.000.000.000] – 223.255.255.255, ¹ Clear
Subnet Mask	[000.000.000.000] – 255.255.255.255, Clear
Link Protocol	[PPP], SLIP
Alternate IP Address	[000.000.000.000] – 223.255.255.255, ¹ Clear
Alternate Subnet Mask	[000.000.000.000] – 255.255.255.255, Clear
Management PVCs Table 4-14	
Name	ASCII text entry [4 characters]
Interface IP Address	[Node-IP-Address], Special (address entry: 000.000.000.000 – 223.255.255.255 ¹)
Interface Subnet Mask	[Node-Subnet-Mask], Calculate, Special
Primary Link	Network, ² Port-1, Port-2, BRI-B1, ² Clear
Primary DLCI ³	16 – 1007
Primary EDLCI ³	0 – 62
Primary Profile ⁴	ASCII text entry [8 characters]
Alternate Link	Network, ² Port-1, Port-2, BRI-B1, ² Clear
Alternate DLCI ³	16 – 1007
Alternate EDLCI ³	0 – 62
Alternate Profile ⁴	ASCII text entry [8 characters]
Set DE	Enable, [Disable]
RIP ²	[None], [Proprietary]
¹ First digit (i.e., 001.) cannot be 127; 127 is a reserved number. ² None is the default for data ports, Proprietary (Prop) is the default for the network and BRI. ³ Initially blank when <u>N</u> ew is selected; no factory default. Tab to field, and press the spacebar. The first valid value appears. ⁴ Only appears when the link is set to BRI and an ISDN Call Profile has been defined (selected from the Control menu).	

Management and Communication (cont'd)	
Configuration Option	Settings Default in [Bold]
General SNMP Management Table 4-15	
SNMP Management	[Enable] , Disable
Community Name 1	ASCII text entry, [Public] , Clear
Name 1 Access	[Read] , Read/Write
Community Name 2	ASCII text entry, [Clear]
Name 2 Access	[Read] , Read/Write
SNMP NMS Security Table 4-16	
NMS IP Validation	Enable, [Disable]
Number of Managers	[1] – 10
NMS <i>n</i> IP Address	[000.000.000.000] – 223.255.255.255, ¹ Clear
Access Type	[Read] , Read/Write
SNMP Traps Table 4-17	
SNMP Traps	Enable, [Disable]
Number of Trap Managers	[1] – 6
NMS <i>n</i> IP Address	001.000.000.000 – 223.255.255.255, ¹ [Clear]
Destination	[Default] , COM, <i>PVCname</i>
General Traps	Disable, Warm, AuthFail, [Both]
Enterprise Specific Traps	Enable, [Disable]
Link Traps	Disable, Up, Down, [Both]
Link Traps Interfaces	Network, Ports, DBM, [All]
DLCI Traps on Interfaces	Network, Ports, DBM, [All]

¹ First digit (i.e., 001.) cannot be 127; 127 is a reserved number.

Auto Backup Criteria

Select Auto Backup Criteria to configure automatic backup.

Auto Backup Criteria Table 4-18	
Configuration Option	Settings Default in [Bold]
Auto Backup	Enable, [Disable]