

FrameSaver® SLV 9520 and 9520-ILM Quick Reference

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Select the following documents:

9520-A2-GB20

FrameSaver SLV 9520 and 9520-ILM User's Guide

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Getting Started

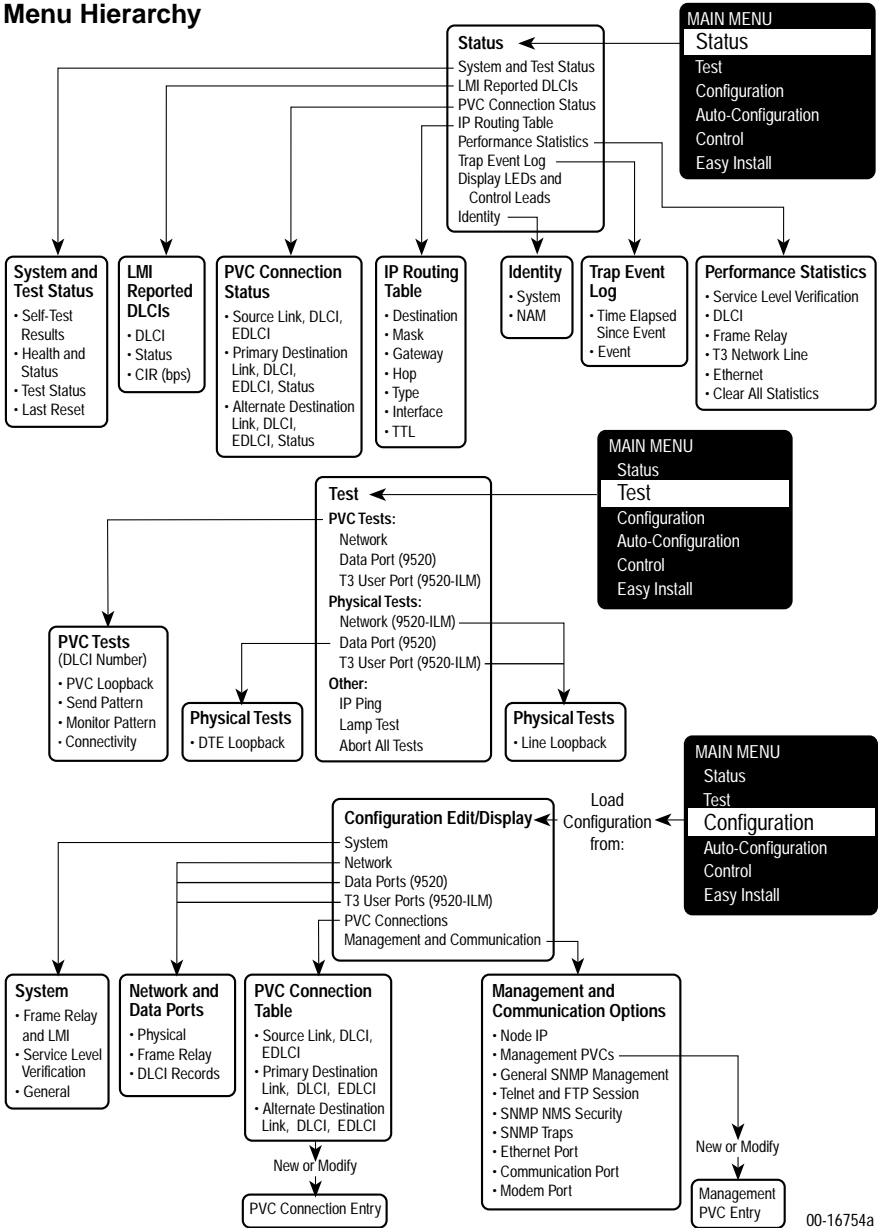
If you have not yet installed and set up the FrameSaver SLV unit, do so now. Refer to the *FrameSaver SLV 9520 Installation Instructions*, Document No. 9520-A2-GN10, or the *FrameSaver SLV 9520-ILM Installation Instructions*, Document No. 9520-A2-GN11-00, that came with the unit.

Before starting to use the FrameSaver SLV unit, it is recommended that you download the User's Guide so you have access to information about the unit, then print chapters or sections you may want to reference.

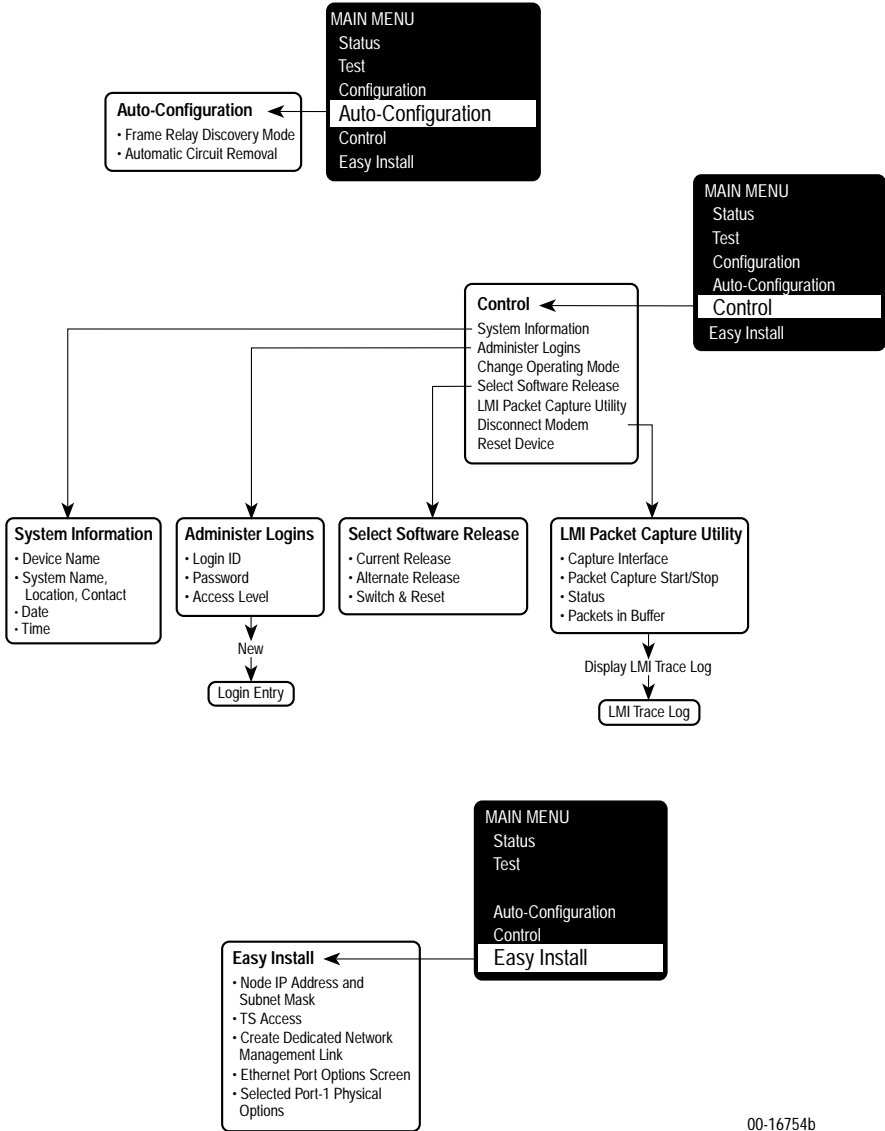
Menu Hierarchy

The Menu Hierarchy shows a pictorial view of the organization of the FrameSaver unit's screens, which can help you navigate the menus and access information.

Menu Hierarchy



00-16754a



00-16754b

Easy Install

If the factory default settings are generally suitable for your installation, select Easy Install from the Main Menu to access the minimal set of configuration options.

| Easy Install | |
|--|---|
| Configuration Option | Settings Default in [Bold] |
| Node IP Address | 001.000.000.000–223.255.255.255, [Clear] |
| Node Subnet Mask | [000.000.000.000] –255.255.255.255, Clear |
| TS Access [Type] | [none] , DLCI |
| TS Access [DLCI] | [blank] , 16-1007 |
| Create a Dedicated Network Management Link | (Select to create a management link DLCI.) |
| Ethernet Port Options Screen | (Select to configure the Ethernet Port configuration options.) |
| Network 1 Line Build Out | [Short] , Long |
| Port1 Line Build Out (9520-ILM) | [Short] , Long |
| Port 1 Port Type (9520) | [HSSI] , V.35 |
| Port 1 Port Rate (9520) | <i>HSSI</i> : 7456, 11184, 17250, 25875, 44736, [51750] <i>V.35</i> : 512, 1025, 1537, 2050, 2562, 3074, 3587, 4099, 4611, 5124, 5636, [6149] , 6661, 7073, 7685, 8197 |

Configuration Option Summaries

The following sections summarize the configuration options accessed when you select Configuration from the Main Menu.

- System
- Physical
- Frame Relay
- DLCI Records
- PVC Connections
- Management and Communication

System

Select System Options to configure options applicable to the entire system.

- Frame Relay and LMI
- Service Level Verification
- General

Frame Relay and LMI

Select Frame Relay and LMI to configure the general frame relay options for the system.

| Frame Relay and LMI | |
|--------------------------------|---|
| Configuration Option | Settings Default in [Bold] |
| LMI Behavior | [Independent] , Port-1_Follows_Net1-FR1, Net1-FR1_Follows_Port-1, Port-1_Codependent_with_Net1-FR1, Port-2_Follows_Net1-FR1 (9520), All_Ports_Follow_Net1-FR1 (9520) Port-2_Codependent_with_Net1-FR1 (9520) |
| Traffic Policing | Enable, [Disable] |
| LMI Error Event (N2) | 1, 2, [3] , 4, 5, 6, 7, 8, 9, 10 |
| LMI Clearing Event (N3) | [1] , 2, 3, 4, 5, 6, 7, 8, 9, 10 |
| LMI Status Enquiry (N1) | 1, 2, 3, 4, 5, [6] , . . . 255 |
| LMI Heartbeat (T1) | 5, [10] , 15, 20, 25, 30 |
| LMI Inbound Heartbeat (T2) | 5, 10, [15] , 20, 25, 30 |
| LMI N4 Measurement Period (T3) | 5, 10, 15, [20] , 25, 30 |

Service Level Verification

Select Service Level Verification (SLV) to configure the SLV options for the system.

| Service Level Verification | |
|--------------------------------------|--|
| Configuration Option | Settings Default in [Bold] |
| SLV Sample Interval (secs) | 10–3600 [60] |
| SLV Delivery Ratio | Enable, [Disable] |
| DLCI Down on SLV Timeout | Enable, [Disable] |
| SLV Timeout Error Event Threshold | 1, 2, [3] , . . . 20 |
| SLV Timeout Clearing Event Threshold | [1] , 2, 3, . . . 20 |
| SLV Packet Size (bytes) | [64] –2048 |
| SLV Synchronization Role | [Tributary] , Controller, None |

General

Select General to configure a timeout period and duration for user-initiated loopbacks and pattern tests, and a primary and secondary clock source for the system.

| General | |
|----------------------|--|
| Configuration Option | Settings Default in [Bold] |
| Test Timeout | [Enable] , Disable |
| Test Duration (min) | 1–120 [10] |
| Power Up Selftest | [Enable] , Disable |

Physical

Select Physical to configure the physical characteristics of each interface.

- Network
- Data Ports

Network

Select Network, then Physical to configure physical characteristics for the T3 network interface.

| Network | |
|-----------------------|--|
| Configuration Option | Settings Default in [Bold] |
| Line Build Out (LBO) | [Short] , Long |
| Network Initiated LLB | [Enable] , Disable |
| Circuit Identifier | <i>Text Field</i> , [Clear] |

Data Ports

Select Data Ports, then Physical to configure physical characteristics for the user data port connected to a DTE.

| Data Ports (9520) | |
|---------------------------------------|---|
| Configuration Option | Settings Default in [Bold] |
| Port Status | [Enable] , Disable |
| Port Type | [HSSI] , V.35 |
| Monitor DTR | [Enable] , Disable |
| Port (DTE) Initiated Loopback | [Disable] , Local, Both |
| When Port Type is set to HSSI: | |
| Port Rate | 7456, 11184, 17250, 25875, 44736, [51750] |
| When Port Type is set to V.35: | |
| Port Rate | 512, 1025, 1537, 2050, 2562, 3074, 3587, 4099, 4611, 5124, 5636, [6149] , 6661, 7073, 7685, 8197 |
| Transmit Clock Source | [Internal] , External |
| Invert Transmit Clock | [Auto] , Enable, Disable |
| Monitor RTS (Control) | [Enable] , Disable |
| Data Ports (9520-ILM) | |
| Configuration Option | Settings Default in [Bold] |
| Line Build Out | [Short] , Long |

Frame Relay

Select Frame Relay to configure unique frame relay characteristics for the network interface and the user data port.

| Frame Relay | |
|--|--|
| Configuration Option | Settings Default in [Bold] |
| LMI Protocol | Initialize_From_Net1FR1, Initialize_From_Interface, Auto_On_LMI_Fail, Standard, Annex-A, Annex-D [Initialize_From_Interface] for data port links. [Auto_On_LMI_Fail] for network links. |
| LMI Parameters | [System], Custom |
| When LMI Parameters is set to System: | |
| Frame Relay DS0s Base Rate | [Nx64], Nx56 |
| When LMI Parameters is set to Custom: | |
| LMI Error Event (N2) | 1, 2, [3], 4, 5, 6, 7, 8, 9, 10 |
| LMI Clearing Event (N3) | [1], 2, 3, 4, 5, 6, 7, 8, 9, 10 |
| LMI Status Enquiry (N1) | 1, 2, 3, 4, 5, [6], . . . 255 |
| LMI Heartbeat (T1) | 5, [10], 15, 20, 25, 30 |
| LMI Inbound Heartbeat (T2) | 5, 10, [15], 20, 25, 30 |
| LMI N4 Measurement Period (T3) | 5, 10, 15, [20], 25, 30 |

DLCI Records

Select DLCI Records to manually configure DLCI records for each interface. The Auto-Configuration feature provides automatic configuration of DLCI records.

| DLCI Records for Each Interface | |
|---------------------------------|--|
| Configuration Option | Settings Default in [Bold] |
| DLCI Number | 16–1007 |
| DLCI Type | Standard, [Multiplexed] |
| CIR (bps) | 0–44210000 [64000] |
| Tc | <i>This field displays the committed rate measurement interval to be used for the DLCI based upon the displayed option settings.</i> |
| Committed Burst Size Bc (Bits) | [CIR] , Other |
| Bc | 0–44210000 [64000] |
| Excess Burst Size Be (Bits) | |
| Be | 0–44210000 [44146000] |

PVC Connections

Select PVC Connections to manually configure the logical connections between the selected interface and the data ports. The Auto-Configuration feature provides automatic configuration of PVC connections.

| PVC Connections | |
|-----------------------------|--|
| Configuration Option | Settings Default in [Bold] |
| Source Link | Port- <i>n</i> , Net1-FR1 |
| Source DLCI | 16–1007 |
| Source EDLCI | 0–62 |
| Destination Link | Net1-FR1 |
| Destination DLCI | 16–1007 |
| Destination EDLCI | 0–62 |
| Alternate Destination Link | Net1-FR1 |
| Alternate Destination DLCI | 16–1007 |
| Alternate Destination EDLCI | 0–62 |

Management and Communication

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

- Node IP
- Management PVCs
- General SNMP Management
- Telnet and FTP Sessions
- SNMP NMS Security
- SNMP Traps
- Ethernet Port
- Communication Port
- Modem Port

Node IP

Select Node IP to configure support of the IP communication network.

| Node IP | |
|---------------------------------|--|
| Configuration Option | Settings Default in [Bold] |
| Node IP Address | 001.000.000.000–223.255.255.255, [Clear] |
| Node Subnet Mask | [000.000.000.000] –255.255.255.255, Clear |
| Default IP Destination | [None] , Modem, Ethernet, COM, <i>PVCname</i> |
| TS Access Management Link | [None] , <i>PVCname</i> |
| TS Management Link Access Level | [Level-1] , Level-2, Level-3 |

Management PVCs

Select Management PVCs to configure a Management PVC for in-band management. The Auto-Configuration feature provides automatic configuration of Management PVCs on the Network interface.

| Management PVCs | |
|----------------------|--|
| Configuration Option | Settings Default in [Bold] |
| Name | <i>ASCII text entry</i> (8 characters) |
| Intf IP Address | [Node-IP-Address] , Special (<i>address entry</i> : 001.000.000.000 – 223.255.255.255) |
| Intf Subnet Mask | [Node-Subnet-Mask] , Calculate, Special (<i>address entry</i> : 000.000.000.000 – 255.255.255.255) |
| Set DE | Enable, [Disable] |
| Primary Link | Net1-FR1, Port- <i>n</i> , Clear |
| Primary DLCI | 16–1007 |
| Primary EDLCI | 0–62 |
| Primary Link RIP | [None] , Standard_out |
| Alternate Link | Net1-FR1, Port- <i>n</i> , Clear |
| Alternate DLCI | 16–1007 |
| Alternate EDLCI | 0–62 |

General SNMP Management

Select General SNMP Management to configure the FrameSaver unit so it can be managed as an SNMP agent.

| General SNMP Management | |
|-------------------------|--|
| Configuration Option | Settings Default in [Bold] |
| 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 |

Telnet and FTP Sessions

Select Telnet and FTP Sessions to configure access to the FrameSaver unit through Telnet or FTP, and to determine whether security will be required.

| Telnet and FTP Sessions | |
|---------------------------|--|
| Configuration Option | Settings Default in [Bold] |
| 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] |

SNMP NMS Security

Select SNMP NMS Security to configure access to the unit.

| SNMP NMS Security | |
|-------------------------|--|
| Configuration Option | Settings Default in [Bold] |
| NMS IP Validation | Enable, [Disable] |
| Number of Managers | [1] –10 |
| NMS <i>n</i> IP Address | 001.000.000.000–223.255.255.255, [Clear] |
| Access Type | [Read] , Read/Write |

SNMP Traps

Select SNMP Traps to configure desired SNMP traps and dialing out when SNMP traps occur.

| SNMP Traps | |
|---------------------------|--|
| Configuration Option | Settings Default in [Bold] |
| SNMP Traps | Enable, [Disable] |
| Number of Trap Managers | [1] –6 |
| NMS <i>n</i> IP Address | 001.000.000.000–223.255.255.255, [Clear] |
| Initial Route Destination | [AutoRoute] , Modem, Ethernet, 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, [All] |
| DLCI Traps on Interfaces | Network, Ports, [All] , None |
| RMON Traps | [Enable] , Disable |

Ethernet Port

Select Ethernet Port to configure access to the LAN port.

| Ethernet Port | |
|-------------------------|--|
| Configuration Option | Settings Default in [Bold] |
| Interface Status | [Enable] , Disable |
| IP Address | 000.000.000.000–223.255.255.255, [Clear] |
| Subnet Mask | [000.000.000.000] –255.255.255.255, Clear |
| Default Gateway Address | 000.000.000.000–223.255.255.255, [Clear] |

Communication Port

Select Communication Port to configure the FrameSaver unit's Terminal port.

| Communication Port | |
|--|--|
| Configuration Option | Settings Default in [Bold] |
| Port Use | [Terminal] , Net Link |
| When Port Use is set to Terminal: | |
| Data Rate (Kbps) | 9.6, 14.4, [19.2] , 28.8, 38.4 |
| Parity | [None] , Even, Odd |
| Stop Bits | [1] , 2 |
| Ignore Control Leads | [Disable] , DTR |
| Login Required | Enable, [Disable] |
| Port Access Level | [Level-1] , Level-2, Level-3 |
| Inactivity Timeout | [Enable] , Disable |
| Disconnect Time (Minutes) | 1–60 [10] |
| When Port Use is set to Net Link: | |
| Data Rate (Kbps) | 9.6, 14.4, [19.2] , 28.8, 38.4 |
| Parity | [None] , Even, Odd |
| Stop Bits | [1] , 2 |
| Ignore Control Leads | [Disable] , DTR |
| IP Address | 001.000.000.000–223.255.255.255, [Clear] |
| Subnet Mask | [000.000.000.000] –255.255.255.255, Clear |
| RIP | [None] , Standard_out |

Modem Port

Select Modem Port to configure the internal modem.

| Modem Port | |
|--|---|
| Configuration Option | Settings Default in [Bold] |
| Port Use | [Terminal] , Net Link |
| Dial-In Access | [Enable] , Disable |
| When Port Use is set to Terminal: | |
| Login Required | Enable, [Disable] |
| Port Access Level | [Level-1] , Level-2, Level-3 |
| Inactivity Timeout | [Enable] , Disable |
| Disconnect Time (Minutes) | 1–60 [10] |
| When Port Use is set to Net Link: | |
| IP Address | 001.000.000.000–223.255.255.255, [Clear] |
| Subnet Mask | [000.000.000.000] –255.255.255.255, Clear |

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