PARADYNE®

FrameSaver® SLV 9128
Quick Reference

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Select the following document:

9128-A2-GB20
FrameSaver SLV 9126/9128 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 installation instructions that came with the unit.

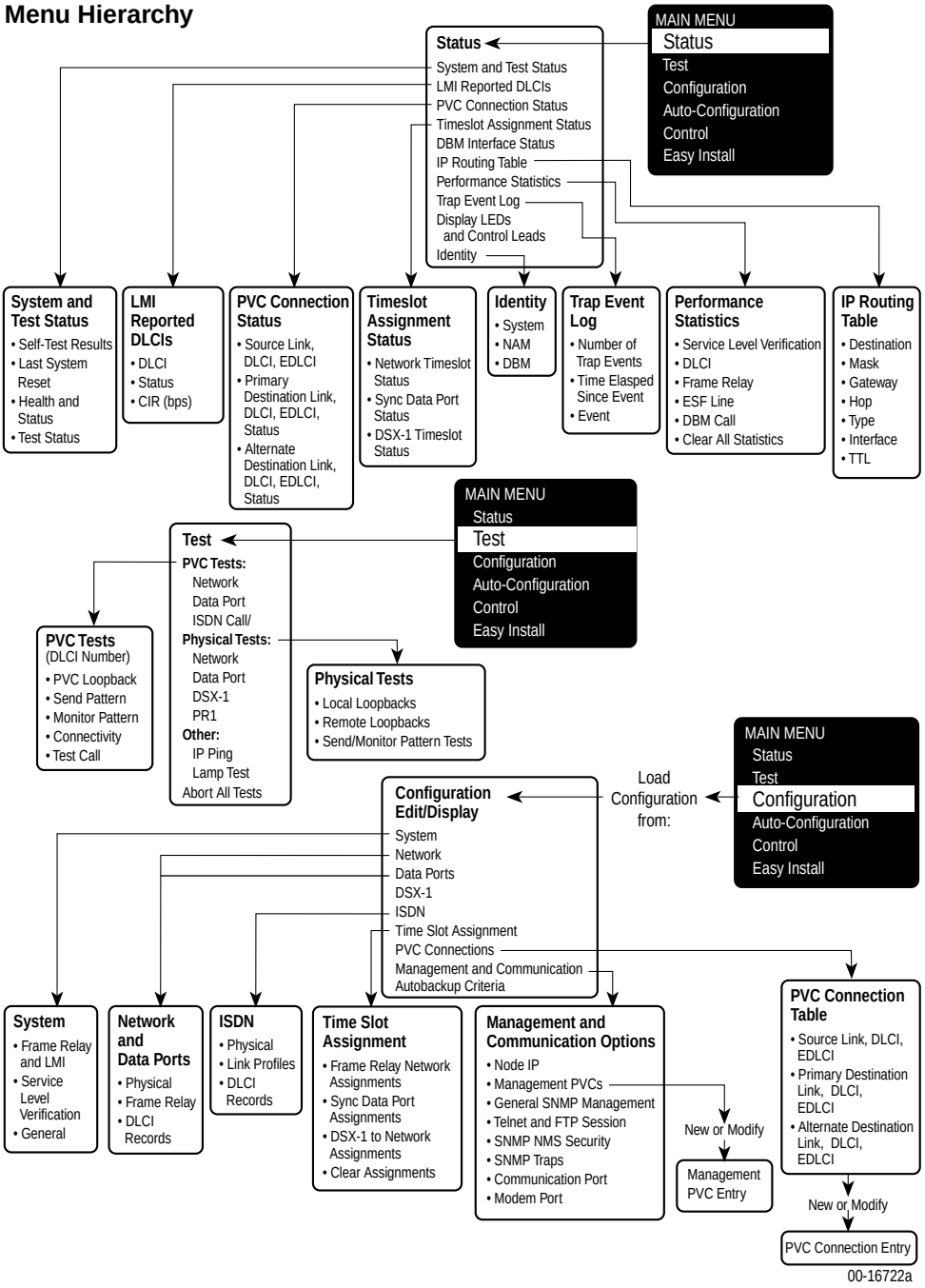
- *FrameSaver SLV 9128 1-Slot Unit Installation Instructions* (Document No. 9128-A2-GN10)
- *FrameSaver SLV 9128 Network Access Module (NAM) Installation Instructions* (Document No. 9128-A2-GN11)

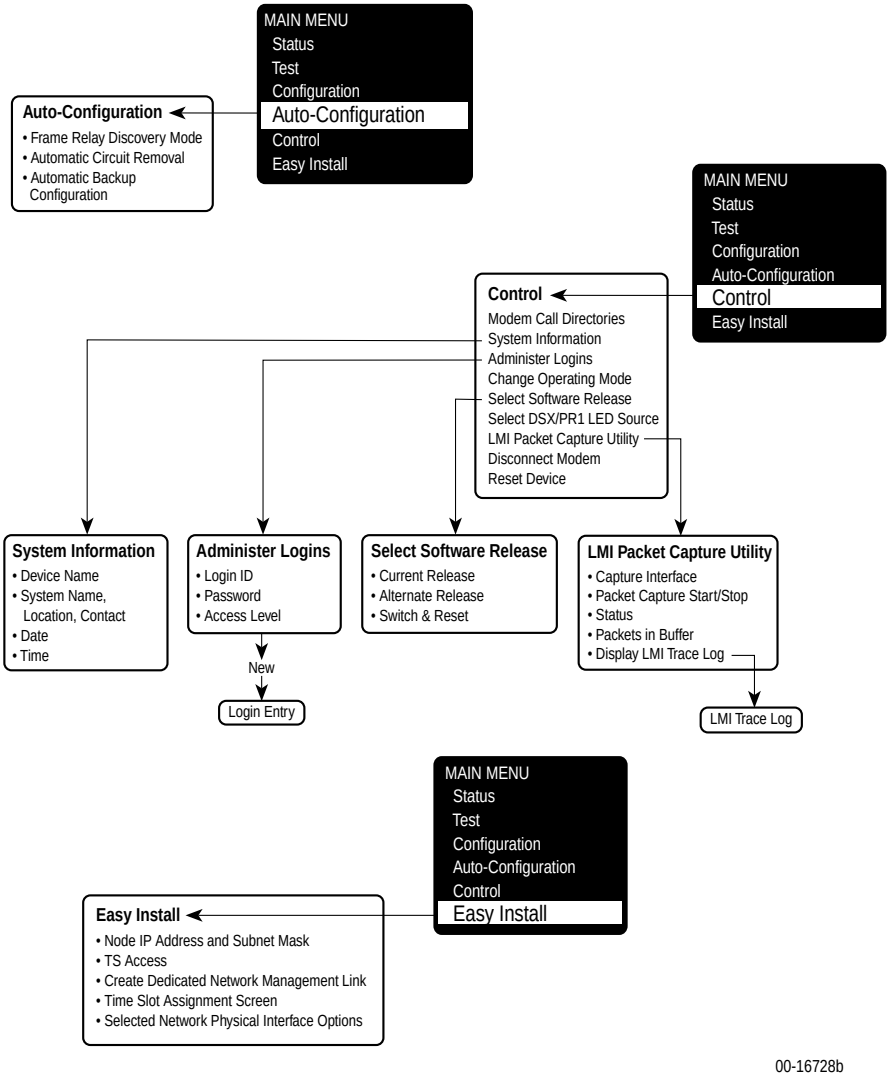
Before starting to use the FrameSaver SLV unit, it is recommended that you download the User's Guide so you have access to information about the unit, then print chapters or sections you may want to reference.

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





Configuration Option Summaries

This section summarizes the configuration options accessed when you select Configuration from the Main Menu.

- System
- Physical (Network, Data Port, and ISDN)
- ISDN (Link Profiles)
- DSX-1
- Time Slot Assignment
  - Frame Relay Network Assignments
  - DSX-1 to Network Assignments
  - Sync Data Port Assignments
- Frame Relay (Network and Data Port)
- DLCI Records (Network, Data Port, and ISDN)
- PVC Connections
- Management and Communication
- Auto Backup Criteria

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, Port-2_Follows_Net1-FR1, All_Ports_Follow_Net1-FR1 Net1-FR1_Follows_Port-1, Net1-FR1_Follows_Port-2, Port-1_Codependent_with_Net1-FR1, Port-2_Codependent_with_Net1-FR1
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 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, a primary and secondary clock source for the system, and a system alarm relay.

General	
Configuration Option	**Settings** Default in [**Bold**]
Test Timeout	[**Enable**], Disable
Test Duration (min)	1–120 [**10**]
Primary Clock Source	[**Net1**], DSX, Internal, DBM
Secondary Clock Source	Net1, DSX, [**Internal**], DBM
System Alarm Relay	Enable, [**Disable**]

Physical

Select Physical to configure the physical characteristics of each interface:

- Network
- Data Ports
- ISDN

Network

Select Network, then Physical to configure physical characteristics for the T1 network interface.

Network	
Configuration Option	**Settings** Default in [**Bold**]
Line Framing Format	D4, [**ESF**]
Line Coding Format	AMI, [**B8ZS**]
Line Build Out (LBO)	[**0.0**], –7.5, –15, –22.5
Bit Stuffing	[**62411**], Disable
Transmit Timing	[**System**], Interface
Network Initiated LLB	[**Enable**], Disable
Network Initiated PLB	[**Enable**], Disable
Network Initiated DCLB	Disable, [**V.54_&_ANSI**]
ANSI Performance Report Messages	Enable, [**Disable**]
Excessive Error Rate Threshold	[**10E-4**], 10E-5, 10E-6, 10E-7, 10E-8, 10E-9
Circuit Identifier	*Text Field,* [**Clear**]

Data Ports

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

Data Ports	
Configuration Option	**Settings** Default in [**Bold**]
Port Status	[**Enable**], Disable
Port Use *(Port-2 only)*	[**Frame Relay**], Synchronous Data
For Port-1 or when Port Use is set to Frame Relay on Port-2:	
Max Port Rate (Kbps) *(Port-2 only)*	[**1536**], 2048
Invert Transmit Clock	[**Auto**], Enable, Disable
Transmit Clock Source	[**Internal**], External
Monitor DTR	[**Enable**], Disable
Monitor RTS (Control)	[**Enable**], Disable
Port (DTE) Initiated Loopback	[**Disable**], Local, Both
When Port Use is set to Synchronous Data on Port-2:	
Port Base Rate (Kbps)	[**Nx64**], Nx56
Invert Transmit Clock	[**Auto**], Enable, Disable
Transmit Clock Source	[**Internal**], External
Monitor DTR	[**Enable**], Disable
Monitor RTS (Control)	[**Enable**], Disable
Port (DTE) Initiated Loopback	[**Disable**], DTPLB, DCLB, Both
Invert Transmit and Receive Data	Enable, [**Disable**]
Action on Network Yellow Alarm	None, [**Halt**]
Network Initiated Data Channel Loopback	[**Disable**], V.54, ANSI_FT1, V.54_&_ANSI

ISDN

Select ISDN, then Physical to configure physical characteristics for the ISDN interface if an ISDN DBM is installed.

The following table shows the configuration options for an ISDN BRI DBM.

ISDN BRI	
Configuration Option	**Settings** Default in [**Bold**]
Interface Status	Enable, [**Disable**]
Originate or Answer	[**Originate**], Answer
Service Profile ID 1 or 2 (SPID)	[**Clear**] (3–20 digits)
Local Phone Number 1 or 2	[**Clear**] (up to 10 digits)

The following table shows the configuration options for an ISDN PRI DBM.

ISDN PRI	
Configuration Option	**Settings** Default in [**Bold**]
Interface Status	Enable, [**Disable**]
Originate or Answer	Originate, [**Answer**]
Switch Type	[**NI-2**], ATT_4ESS, ATT_5ESS
Local Phone Number	[**Clear**] (up to 10 digits)
Line Framing Format	D4, [**ESF**]
Line Build Out (LBO)	[**0.0**], –7.5, –15, –22.5
Network Initiated LLB	[**Enable**], Disable
Network Initiated PLB	[**Enable**], Disable
ANSI Performance Report Messages	Enable, [**Disable**]
Excessive Error Rate Threshold	[**10E-4**], 10E-5, 10E-6, 10E-7, 10E-8, 10E-9
Circuit Identifier	*Text Field,* [**Clear**]

ISDN Link Profiles

Select ISDN, then Link Profiles to configure the ISDN Link Profiles.

Link Profiles	
Configuration Option	**Settings** Default in [**Bold**]
Link Name	*ASCII text entry,* [**HQ_Site**]
Link Status	Auto, [**Disable**]
Outbound Phone Number	0–9, *****, #, <space>, _, –,), or (
Inbound Calling ID 1 or 2	0–9
Maximum Link Rate (Kbps)	BRI DBM: [**64**], 128 PRI DBM: [**64**], 128, . . . 1472

DSX-1

Select DSX-1 to configure the DSX-1 interface.

DSX-1	
Configuration Option	**Settings** Default in [**Bold**]
Interface Status	Enable, [**Disable**]
Line Framing Format	D4, [**ESF**]
Line Coding Format	AMI, [**B8ZS**]
Line Equalization	[**0–133**], 133–266, 266–399, 399–533, 533–655
Send all Ones on DSX-1 Failure	[**Enable**], Disable

Time Slot Assignment

Select Time Slot Assignment to make cross-connection assignments.

Select Frame Relay Network Assignments to assign DS0s on the T1 network interface(s) for frame relay links.

Frame Relay-to-Network Interface Time Slot Assignment	
Network Channel	**Settings** Default in [**Bold**]
Time Slot Discovery	[**Enable**], Disable
N01–N24	[**Available**], Assigned, FrameRly1

Select DSX-1-to-Network Assignments to assign or unassign DSX-1 timeslots to T1 network interface timeslots.

DSX-1-to-Network Interface Time Slot Assignment	
Network Channel	**Settings** Default in [**Bold**]
N01–N24	[**Available**], Assigned, DSX-1*/yy*
Signaling and Trunk Conditioning	None, [**RBS**], E&M-idle, E&M-busy, FXSg-idle, FXSg-busy, , FXS1-idle, FXS1-busy, FXSD-idle, FXSD-busy, PLAR3idle, PLAR3busy, PLAR4idle, PLAR4busy, DPO-idle, DPO-busy, FXOg-idle, FXOg-busy, FXO1-idle, FXO1-busy, FXOD-idle, FXOD-busy, DPT-idle, DPT-busy, USER-0000, USER-0001, USER-0010, USER-0011, USER-0100, USER-0101, USER-0110, USER-0111, USER-1000, USER-1001, USER-1010, USER-1011, USER-1100, USER-1101, USER-1110, USER-1111

Select Sync Data Port Assignments to assign or unassign a synchronous data port to the Network or DSX-1 interface timeslots.

Sync Data Port-to-Network or DSX-1 Interface Time Slot Assignment	
Network or DSX-1 Channel	**Settings** Default in [**Bold**]
Assign To	[**Net1**], DSX1-1
N01–N24 (Net1) D01–N24 (DSX1-1)	[**Available**], Assigned, S*s*P*n*

Frame Relay

Select Frame Relay to configure the Frame Relay characteristics of the following interfaces:

- Network
- Data Ports

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 a data port link. [**Auto_On_LMI_Fail**] for a network link.
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:	
Frame Relay DS0s Base Rate	[**Nx64**], Nx56
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.

Select DLCI Records to configure the DLCI Records for the following interfaces:

- Network
- Data Port
- ISDN

The Auto-Configuration feature provides automatic DLCI record configuration.

DLCI Records for Each Interface	
Configuration Option	**Settings** Default in [**Bold**]
DLCI Number	16–1007
DLCI Type	Standard, Multiplexed [**Standard**] for DLCIs on user data ports. [**Multiplexed**] for network and ISDN interfaces.
CIR (bps)	0–1536000 [**64000**]
Tc	*This field displays the committed rate measurement interval to be used for the DLCI based upon the displayed option settings.*
Committed Burst Size Bc (Bits)	[**CIR**], Other
Bc	0–1536000 [**64000**]
Excess Burst Size Be (Bits) Be	 0–1536000 [**1472000**]
DLCI Priority	Low, Medium, [**High**]
Outbound Management Priority	Low, [**Medium**], High

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-*n*, *ISDN Link Name*, Net1-FR1
Source DLCI	16 –1007
Source EDLCI	0 – 62
Primary Destination Link	*ISDN Link Name*, Net1-FR1
Primary Destination DLCI	16 –1007
Primary Destination EDLCI	0 – 62
Alternate Destination Link	*ISDN Link Name*, 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
- 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, COM, *PVCname*
TS Access Management Link	[**None**], *PVCname*
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	*ASCII text entry* (8 characters)
Intf IP Address	[**Node-IP-Address**], Special (a*ddress entry: 001.000.000.000 – 223.255.255.255*)
Intf Subnet Mask	[**Node-Subnet-Mask**], Calculate, Special (a*ddress entry: 000.000.000.000 – 255.255.255.255*)
Set DE	Enable, [**Disable**]
Primary Link	Net1-FR1, Port-*n*, *ISDN Link Name*, Clear
Primary DLCI	16–1007
Primary EDLCI	0–62
Primary Link RIP	None, Standard_out, Proprietary [**Proprietary**] for management links on multiplexed DLCIs. [**Standard_out**] for management links on standard DLCIs.
Alternate Link	Net1-FR1, Port-*n*, *ISDN Link Name*, 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**]
FTP Max Receive Rate (Kbps)	1–[**1536**]

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 *n* 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 *n* IP Address	001.000.000.000–223.255.255.255, [**Clear**]
Initial Route Destination	[**AutoRoute**], Modem, COM , *PVCname*
General Traps	Disable, Warm, AuthFail, [**Both**]
Enterprise Specific Traps	Enable, [**Disable**]
Link Traps	Disable, Up, Down, [**Both**]
Link Traps Interfaces	Network, DSX-1, T1s, Ports, DBM, [**All**]
DLCI Traps on Interfaces	Network, Ports, [**All**]
RMON Traps	[**Enable**], Disable
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

Communication Port

Select Communication Port to configure the FrameSaver unit's COM 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, 57.6, 115.2
Character Length	7, [**8**]
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, 57.6, 115.2
Character Length	7, [**8**]
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
Link Protocol	[**PPP**], SLIP
RIP	[**None**], Standard_out

Modem Port

Select Modem Port to configure the FrameSaver unit's Modem port.

Modem Port	
Configuration Option	**Settings** Default in [**Bold**]
Port Use	[**Terminal**], Net Link
When Port Use is set to Terminal:	
Dial-In Access	[**Enable**], Disable
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:	
Dial-In Access	[**Enable**], Disable
IP Address	001.000.000.000–223.255.255.255, [**Clear**]
Subnet Mask	[**000.000.000.000**]–255.255.255.255, Clear
Link Protocol	[**PPP**], SLIP
Alternate IP Address	001.000.000.000 –223.255.255.255, [**Clear**]
Alternate Subnet Mask	[**000.000.000.000**]–255.255.255.255, Clear
RIP	[**None**], Proprietary, Standard_out

Auto Backup Criteria

Select Auto Backup Criteria to control when automatic backup will take place.

Auto Backup Criteria	
Configuration Option	**Settings** Default in [**Bold**]
Auto Backup	Enable, [**Disable**]
When Auto Backup Allowed	[**Always**], Restrict
Backup Allowed From	Monday–Sunday, [**00:00**] –23:00
Backup Allowed To	Monday–Sunday, 00:00 –[**24:00**]

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- **Internet:** Visit the Paradyne World Wide Web site at **www.paradyne.com**. (Be sure to register your warranty at **www.paradyne.com/warranty**.)
- **Telephone:** Call our automated system to receive current information via fax or to speak with a company representative.
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FrameSaver SLV products are protected by U.S. Patents: 5,550,700 and 5,654,966. Other U.S. patents pending.