



ACCULINK®
3162 DSU/CSU

QUICK REFERENCE

Document No. 3162-A2-GL11-50

Copyright © 2000 Paradyne Corporation.
All rights reserved.
Printed in U.S.A.

Notice

This publication is protected by federal copyright law. No part of this publication may be copied or distributed, transmitted, transcribed, stored in a retrieval system, or translated into any human or computer language in any form or by any means, electronic, mechanical, magnetic, manual or otherwise, or disclosed to third parties without the express written permission of Paradyne Corporation, 8545 126th Ave. N., Largo, FL 33773.

Paradyne Corporation makes no representation or warranties with respect to the contents hereof and specifically disclaims any implied warranties of merchantability or fitness for a particular purpose. Further, Paradyne Corporation reserves the right to revise this publication and to make changes from time to time in the contents hereof without obligation of Paradyne Corporation to notify any person of such revision or changes.

Changes and enhancements to the product and to the information herein will be documented and issued as a new release to this manual.

Warranty, Sales, Service, and Training Information

Contact your local sales representative, service representative, or distributor directly for any help needed. For additional information concerning warranty, sales, service, repair, installation, documentation, training, distributor locations, or Paradyne worldwide office locations, use one of the following methods:

- **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 by fax or to speak with a company representative.
 - Within the U.S.A., call 1-800-870-2221
 - Outside the U.S.A., call 1-727-530-2340

Document Feedback

We welcome your comments and suggestions about this document. Please mail them to Technical Publications, Paradyne Corporation, 8545 126th Ave. N., Largo, FL 33773, or send e-mail to userdoc@paradyne.com. Include the number and title of this document in your correspondence. Please include your name and phone number if you are willing to provide additional clarification.

Trademarks

ACCULINK is a registered trademark of Paradyne Corporation. All other products and services mentioned are the trademarks, service marks, registered trademarks, or registered service marks of their respective owners.



ACCULINK® 3162 DSU/CSU **Quick Reference**

Document Number 3162-A2-GL11-50

August 2000

Product Documentation on the World Wide Web

We provide complete product documentation online. This lets you search the documentation for specific topics and print only what you need, reducing the waste of surplus printing. It also helps us maintain competitive prices for our products.

Complete documentation for this product is available at **www.paradyne.com**.
Select *Library* → *Technical Manuals* → *T1/E1 Digital Access Devices*.

Select the following document:

3162-A2-GB20

ACCULINK 3162 DSU/CSU User's Guide

To order a paper copy of a Paradyne document:

- Within the U.S.A., call 1-800-PARADYNE (1-800-727-2396)
- Outside the U.S.A., call 1-727-530-8623

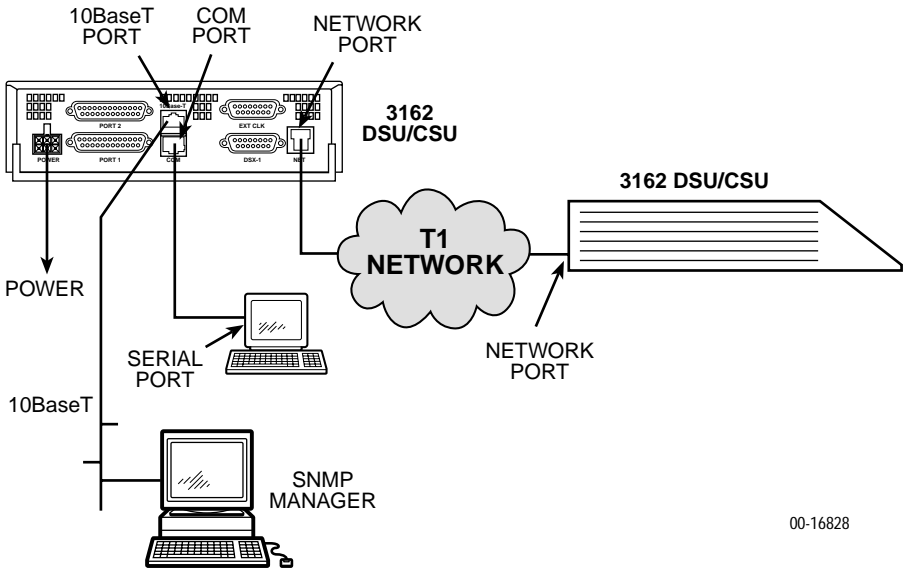
Quick Start Procedure

Before installing the DSU/CSU, read the *Important Safety Instructions* beginning on page 22.

The following procedure is for experienced DSU/CSU users who are familiar with the 3162 DSU/CSU installation process and have no special requirements for their application. See the *ACCULINK 3162 DSU/CSU User's Guide* for more information.

► Procedure

1. Attach the power cord to the rear of the DSU/CSU and the other end to a grounded 115 VAC power outlet.
2. Attach the 3162 DSU/CSU network connection to the T1 network using the appropriate cable. Attach the 3162 DSU/CSU to the customer premises equipment via the DTE (DSX-1) and/or port connectors.
3. Power on the DSU/CSU to perform the power-on self-test.
4. During the power-on self-test, the **FAIL** LED flashes, then all LEDs blink twice. When the test is complete, verify that the DSU/CSU is functional by observing that the **OK**, **NETWORK SIG**, and **DTE SIG** LEDs are lit.
5. Connect the COM port to a terminal or PC to configure the DSU/CSU.
6. If you intend to manage the DSU/CSU with SNMP over an Ethernet LAN, connect the 10BaseT port to your LAN and assign an IP address to the port. See *Configuring the 10BaseT Port* on page 4.
7. Configure the ports and channels you intend to use and assign channels to the network interface. See *Configuring DS0 Channels* on page 5.
8. The Factory 1 configuration for ESF framing format and B8ZS line coding format is the default configuration and is appropriate for most networks. If this configuration does not work for you, try the Factory 2 configuration for D4 framing format and AMI line coding format. To further customize configuration options, refer to Appendix C, *Configuration Options*, in the *User's Guide*.



00-16828

Cabling Example

Displaying or Editing Configuration Options

► Procedure

To display or edit configuration options:

1. From the Main Menu screen, select Configuration.
The Load Configuration From screen appears.
2. From the Load Configuration From screen, select a configuration option set to load (**Current**, **Customer 1**, **Customer 2**, **Default Factory 1**, or **Default Factory 2**).
You cannot edit the Default Factory configuration options, but you can display them.
After selecting the set of configuration options to load, the Configuration Edit/Display screen appears.
3. Select a functional group to display or edit.

Saving Edit Changes

► Procedure

To save edit changes:

1. From the last edit screen, select Save.
The Save Configuration To screen appears.
2. From the Save Configuration To screen, select a configuration option set (**Current**, **Customer 1**, or **Customer 2**).

Configuring the 10BaseT Port

► Procedure

To configure the 10BaseT port:

1. From the Main Menu screen, select Configuration.
2. From the Load Configuration From screen, select Current.
3. From the Configuration Edit/Display screen, select User Interface.
4. From the User Interface screen, select Ethernet Port.
The Ethernet Port Options screen appears.
5. In the Port Use field, select **802.3** or **Version 2**.
6. Enter the IP Address, Subnet Mask, and Default Gateway Address.
7. When you are through making configuration option changes, select Save to store these changes in nonvolatile memory. If you want to return to the User Interface screen, press your Esc key and then save your changes from that screen.

Configuring DS0 Channels

To allocate DS0 channels, begin by defining the logical channel configuration for the network interface, and then the DTE Drop/Insert (DSX-1) interface, and then any ports, if desired.

Displaying DS0 Channel Assignments

► Procedure

To display the DS0 channel allocation:

1. From the Main Menu screen, select Configuration.
2. From the Load Configuration From screen, select Current.
3. From the Configuration Edit/Display screen, select Cross Connect.
4. From the Cross Connect screen, select DTE To Network Assignments.
The DTE to Network Assignments screen appears.
5. To view specific port assignments on the Network Channel Display screen, select NetChan at the bottom of the DTE to Network Assignments screen.

Allocating DS0 Channels from the DTE Drop/Insert Interface to the Network Interface

► Procedure

To allocate DS0 channels from the DTE Drop/Insert (DSX-1) interface to the network interface:

1. From the Main Menu screen, select Configuration.
The Load Configuration From screen appears.
2. From the Load Configuration From screen, select Current.
The Configuration Edit/Display screen appears.
3. From the Configuration Edit/Display screen, select Cross Connect.
The Cross Connect screen appears.
4. From the Cross Connect screen, select DTE To Network Assignments.
The DTE to Network Assignments screen appears.
5. Assign the DS0 channels from the DTE Drop/Insert (DSX-1) interface to the network interface.
6. Select Save to store these settings in nonvolatile memory.

Configuring DS0 Channels for Robbed Bit Signaling

► Procedure

To specify DTE Drop/Insert (DSX-1) channels used to carry voice information:

1. From the Main Menu screen, select Configuration.
The Load Configuration From screen appears.
2. From the Load Configuration From screen, select Current.
The Configuration Edit/Display screen appears.
3. From the Configuration Edit/Display screen, select DTE.
The DTE Interface Options screen appears.
4. Enter **RBS** for each DS0 channel that you want to configure for voice applications.
The designation **None** indicates the absence of RBS information. These channels (known as Clear Channels) are used for data applications.
5. Select Save to store these settings in nonvolatile memory.

Allocating Data Ports Using the Block or ACAMI Assignment Method

► Procedure

To assign data ports by the block or ACAMI method:

1. From the Main Menu screen, select Configuration.
2. From the Load Configuration From screen, select Current.
3. From the Configuration Edit/Display screen, select Cross Connect.
4. From the Cross Connect screen, select Sync Data Port Assignments.
5. Use the Assign To field to specify the destination T1 interface (Network or DTE).
6. Use the Assign By field to specify the assignment method (Block or ACAMI).
7. After filling in the Port Rate field, specify a port assignment for the initial DS0 channel in a block of contiguous, available DS0 channels.
8. Select Save or, if you want to return to the Cross Connect screen, press your Esc key and then save your changes from that screen.

Allocating Data Ports Using the Individual Channel Assignment Method

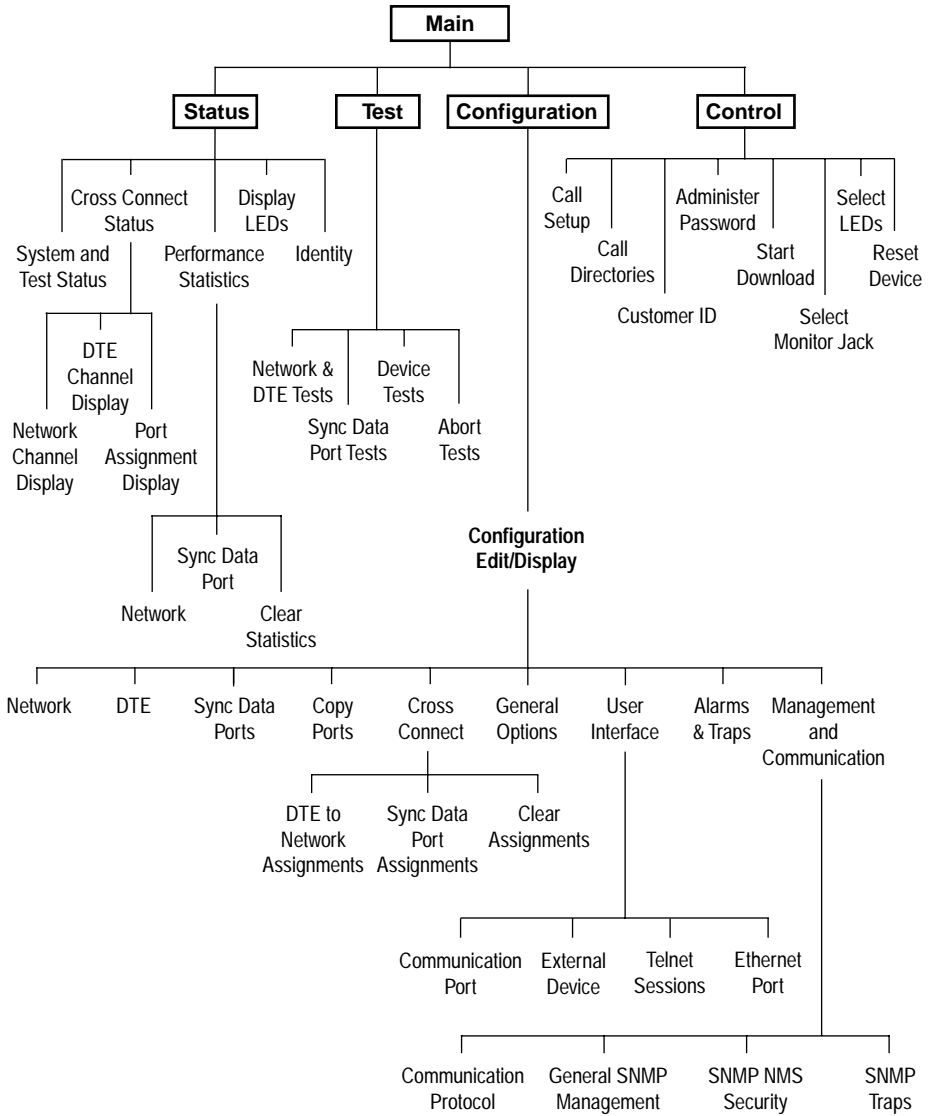
► Procedure

To assign data ports by the individual channel method:

1. From the Main Menu screen, select Configuration.
2. From the Load Configuration From screen, select Current.
3. From the Configuration Edit/Display screen, select Cross Connect.
4. From the Cross Connect screen, select Sync Data Port Assignments.
5. Use the Assign To field to specify the destination T1 interface (Network or DTE).
6. Use the Assign By field to specify the assignment method (Channel).
7. Specify the port assignments for the individual DS0 channels. The DS0 channels do not need to be contiguous.
The port rate increases as the port is assigned to additional DS0 channel. For two DS0 channels (at 64 kbps each), a port rate of 128 kbps is required.
8. Select Save or, if you want to return to the Cross Connect screen, press your Esc key and then save your changes from that screen.

Configuration Options

Configuration options are accessed from the Configuration branch of the asynchronous terminal interface menu.



Factory default configuration options are shown in **boldface** type in the following tables.

Table 1. Network Interface Configuration Options

Option	Factory 1	Factory 2	Comments/Description
Line Framing Format:	D4	D4	Selects D4 or ESF framing format.
	ESF	ESF	
Line Coding Format:	AMI	AMI	Selects AMI or B8ZS line coding format.
	B8ZS	B8ZS	
Bit Stuffing:	62411	62411	Provides enforcement of ones density protection per AT&T TR 62411.
	Disable	Disable	
Line Build Out (LBO):	0.0	0.0	Provides Line Build Out in dB.
	-7.5	-7.5	
	-15	-15	
	-22.5	-22.5	
Management Link:	Enable	Enable	Specifies whether the FDL's Management Link is enabled.
	Disable	Disable	
ANSI Performance Report Messages:	Enable	Enable	Sends ANSI Performance Report Messages.
	Disable	Disable	
Network Initiated LLB:	Enable	Enable	Network-initiated LLB allows LLB to be controlled by inband LLB codes.
	Disable	Disable	
Network Initiated PLB:	Enable	Enable	Network-initiated PLB allows PLB to be controlled by FDL PLB messages.
	Disable	Disable	
Circuit Identifier:	[Text Field]	[Text Field]	Specifies the transmission vendor's circuit identifier.
	Clear	Clear	

Table 2. DTE Interface Configuration Options

Option	Factory 1	Factory 2	Comments/Description
Interface Status:	Enable	Enable	Enables the use of the DTE Drop/Insert port.
	Disable	Disable	
Line Framing Format:	D4	D4	Selects D4 or ESF framing format.
	ESF	ESF	
Line Coding Format:	AMI	AMI	Selects AMI or B8ZS line coding format.
	B8ZS	B8ZS	
Line Equalization:	0–133	0–133	Provides selectable extended DTE range capability.
	133–266	133–266	
	266–399	266–399	
	399–533	399–533	
	533–655	533–655	
DTE LB on External Contact:	Enable	Enable	Allows control of DLB on external contact closure.
	Disable	Disable	
Send All Ones on DTE Failure:	Enable	Enable	Sends all ones on channels allocated to the network T1 on LOS, LOF, or AIS.
	Disable	Disable	
Line 1 Displays:	Line 2 Displays:	Meaning	Comments/Description
DTE Signaling D01 D02... D24:	RBS	Voice Channel	Specifies which channels from the DTE Drop/Insert interface are voice channels and should pass RBS information to the network.
	None	Data Channel	

Table 3. Synchronous Data Port Configuration Options (1 of 2)

Option	Factory 1	Factory 2	Comments/Description
Port Type:	E530	E530	Selects the port type: EIA-530A, V.35, RS449, or X.21.
	V.35	V.35	
	RS449	RS449	
	X.21	X.21	
Port Base Rate:	Nx64	Nx64	Enables the port to either Nx56 or Nx64 rates.
	Nx56	Nx56	
Transmit Clock Source:	Internal	Internal	Selects whether the transmitted data clock is internal (TXC) or external (XTXC).
	External	External	
Embedded Data Link:	Enable	Enable	Specifies whether the Embedded Data Link is enabled.
	Disable	Disable	
EDL Management Link:	Disable	Disable	Specifies whether the EDL Management Link is Enabled.
	Enable	Enable	
Invert Transmit Clock:	Enable	Enable	Selects phase inversion of the transmit clock (TXC).
	Disable	Disable	
Invert Transmit and Received Data:	Enable	Enable	Allows the data on the port to be inverted.
	Disable	Disable	
Send All Ones on Data Port Not Ready:	Disable	Disable	All ones sent to network (DTE) T1 when DTR or RTS interrupted.
	DTR	DTR	
	RTS	RTS	
	Both	Both	
Action on Network Yellow Alarm:	None	None	Data port remains enabled, or is disabled, on receiving Yellow on network T1.
	Halt	Halt	
Network Init. Data Channel Loopback:	Disable	Disable	Network-initiated DCLB, allows DCLB to be controlled by inband V.54 or FT1 (ANSI) codes.
	V.54	V.54	
	FT1	FT1	
	Both	Both	

Table 3. Synchronous Data Port Configuration Options (2 of 2)

Option	Factory 1	Factory 2	Comments/Description
Port (DTE) Initiated Loopbacks:	Disable	Disable	Port-initiated Loopbacks, allows Loopbacks to be initiated through the port by the external DTE.
	DTLB	DTLB	
	DCLB	DCLB	
	Both	Both	
Near-End Performance Statistics:	Disable	Disable	Specifies whether the device will maintain near-end performance statistics.
	Maint	Maint	
	Send	Send	
	Both	Both	
Far-End Performance Statistics:	Disable	Disable	Specifies whether the device will maintain far-end performance statistics.
	Maint	Maint	
Excessive Error Rate Threshold:	10E-4	10E-4	Selects the error rate threshold for Excessive Error Rate Alarm.
	10E-5	10E-5	
	10E-6	10E-6	
	10E-7	10E-7	
	10E-8	10E-8	
	10E-9	10E-9	

Table 4. Cross Connect – DTE to Network Assignment Options

Line 1 Displays:	Line 2 Displays:	Meaning	Comments/Description
N01 N02... N24:	Available	DS0 channel is unallocated.	Assigns DS0 channels from the DTE Drop/Insert (DSX-1) interface to the network interface.
	Assigned	DS0 channel is allocated to a synchronous data port.	
	DTE01 DTE02 . DTE24	DS0 channel allocated to DTE Drop/Insert interface DS0 channel 01–24.	

Table 5. Cross Connect – Sync Data Port Assignment Options

Option	Factory 1	Factory 2	Comments/Description
Assign To:	Network	Network	Assigns this port to channels on the Network or DSX-1 T1 interface, or to another port.
	DTE	DTE	
	Port	Port	
Assign By:	Block	Block	Determines how channels are assigned: contiguous blocks, ACAMI or individual channels.
	ACAMI	ACAMI	
	Chan	Chan	
Port Data Rate:	64 (56) 128 (112) 192 (168) 256 (224) 320 (280) 384 (336) 448 (392) 512 (448) 576 (504) 640 (560) 704 (616) 768 (672) 832 (728) 896 (784) 960 (840) 1024 (896) 1088 (952) 1152 (1008) 1216 (1064) 1280 (1120) 1344 (1176) 1408 (1232) 1472 (1288) 1536 (1344)	64 (56) 128 (112) 192 (168) 256 (224) 320 (280) 384 (336) 448 (392) 512 (448) 576 (504) 640 (560) 704 (616) 768 (672) 832 (728) 896 (784) 960 (840) 1024 (896) 1088 (952) 1152 (1008) 1216 (1064) 1280 (1120) 1344 (1176) 1408 (1232) 1472 (1288) 1536 (1344)	Selects the data rate for the port. The possible rates depend on whether the port is configured for Nx56 or Nx64. This configuration option only appears if the "Assigned By" configuration option is Block or ACAMI.
Line 1 Displays:	Line 2 Displays:	Meaning	Comments/Description
N1 N2 N3 N24: (If assigned to NET) D1 D2 D3 D24: (If assigned to DTE)	P1 P2	Channel assigned to port 1 or 2	Designates the DS0 channel to allocate to this port.
	D01, D02... D24	Channel assigned to this DTE channel	
	N01, N02... N24	Channel assigned to this NET channel	

Table 6. General Configuration Options

Option	Factory 1	Factory 2	Comments/Description
Generate Yellow Alarm Signals:	Enable	Enable	Yellow alarm is generated by the DSU/CSU on LOS, LOF, or AIS.
	Disable	Disable	
Self-Test:	Enable	Enable	Allows bypass of self-test on initialization.
	Disable	Disable	
Test Timeout:	Enable	Enable	Specifies whether the durations of user-initiated tests are limited by Tst Duration.
	Disable	Disable	
Test Duration:	10	10	Specifies the duration of user-initiated loopback and pattern tests.
	Up	Up	
	Down	Down	
	Save	Save	
Primary Clock Source:	Network	Network	Selects the clock source to be used as the master clock for the DSU/CSU.
	DTE	DTE	
	Internal	Internal	
	External	External	
	Port 1	Port 1	
External Clock Rate:	2048	2048	Selects the clock rate of the source if external.
	1544	1544	
	8	8	

Table 7. User Interface – Communication Port Configuration Options (1 of 2)

Option	Factory 1	Factory 2	Comments/Description
Port Use:	Mgmt	Mgmt	Controls how the COM port is used.
	ASCII	ASCII	
	Daisy	Daisy	
	Terminal	Terminal	
Port Type:	Asynchronous	Asynchronous	Controls whether the COM port is synchronous or asynchronous.
	Synchronous	Synchronous	
Clock Source:	Internal	Internal	Controls whether the COM port uses an internal or external clock.
	External	External	
Data Rate:	1.2	1.2	Selects the bit rate for the COM port.
	2.4	2.4	
	4.8	4.8	
	9.6	9.6	
	14.4	14.4	
	19.2	19.2	
	38.4	38.4	
Character Length:	7	7	Selects the character length for the COM port.
	8	8	
Parity:	None	None	Selects the parity for the COM port.
	Even	Even	
	Odd	Odd	
Stop Bits:	1	1	Selects the number of stop bits for the COM port.
	1.5	1.5	
	2	2	
Ignore Control Leads:	Disable	Disable	Specifies whether the COM port ignores DTR.
	DTR	DTR	
Password Required:	Enable	Enable	Controls whether a password is required during a call setup.
	Disable	Disable	
Inactivity Timeout:	Enable	Enable	Specifies whether the communication port disconnects after a certain period of inactivity.
	Disable	Disable	

Table 7. User Interface – Communication Port Configuration Options (2 of 2)

Option	Factory 1	Factory 2	Comments/Description
Disconnect Time:	5	5	Specifies the period of inactivity (1 to 60 minutes) that causes a disconnect if Inactivity Timeout is enabled.
	Up	Up	
	Down	Down	
	Save	Save	

Table 8. User Interface – External Device Configuration Options

Option	Factory 1	Factory 2	Comments/Description
External Device Commands:	Disable	Disable	Controls whether no commands, AT commands, or user-configurable commands are sent out the COM port.
	AT	AT	
	Other	Other	
Dial-In Access:	Enable	Enable	Controls whether dial-in access is allowed from the external device connected to the COM port.
	Disable	Disable	
Connect Prefix:	[Text Field]	[Text Field]	Allows you to enter up to 20 characters to be used with the dial directory phone number.
	Clear	Clear	
Connect Indication String:	[Text Field]	[Text Field]	Allows you to enter up to 20 characters used to determine whether a connection has been established.
	Clear	Clear	
Escape Sequence:	[Text Field]	[Text Field]	Allows you to enter up to 20 characters to identify the COM port's escape sequence.
	Clear	Clear	
Escape Sequence Delay (sec):	None	None	Specifies the delay in seconds required before and after the user-defined escape sequence.
	0.2	0.2	
	0.4	0.4	
	0.6	0.6	
	0.8	0.8	
	1.0	1.0	
Disconnect String:	[Text Field]	[Text Field]	Allows you to enter up to 20 characters to be used as the COM port's disconnect string.
	Clear	Clear	

Table 9. User Interface – Telnet Sessions Configuration Options

Option	Factory 1	Factory 2	Comments/Description
Telnet Session:	Enable	Enable	Specifies whether the DSU/CSU responds to Telnet session requests.
	Disable	Disable	
Password Required:	Enable	Enable	Specifies whether a password is required for Telnet sessions.
	Disable	Disable	
Inactivity Timeout:	Enable	Enable	Specifies whether a Telnet session disconnects after a certain period of inactivity.
	Disable	Disable	
Disconnect Time:	5	5	The period of inactivity (1 to 60 minutes) that causes a disconnect if Inactivity Timeout is enabled.
	1–60	1–60	

Table 10. User Interface – Ethernet Port Configuration Options

Option	Factory 1	Factory 2	Comments/Description
Port Use:	Version 2	Version 2	Specifies whether the Ethernet port is used, and if so which protocol is used.
	802.3	802.3	
	Disable	Disable	
IP Address:	[Text Field]	[Text Field]	The IP address for the 10BaseT port.
	Clear	Clear	
Subnet Mask:	[Text Field]	[Text Field]	The subnet mask associated with the IP address.
	Clear	Clear	
Default Gateway Address	[Text Field]	[Text Field]	The destination for messages for other subnets.
	Clear	Clear	

Table 11. Alarm Configuration Options

Option	Factory 1	Factory 2	Comments/Description
ASCII Alarm Messages:	Disable	Disable	Does not display alarm messages.
	Com	Com	Sends alarm messages to COM port.
Alarm & Trap Dial-Out:	Enable	Enable	Provides the option to allow automatic dial-out to send alarm messages on the COM port external device connection.
	Disable	Disable	
Trap Disconnect:	Enable	Enable	Specifies whether the COM port external device connection will disconnect after a trap is sent.
	Disable	Disable	
Call Retry:	Enable	Enable	Specifies whether an outgoing call is retried on a busy or failed call attempt.
	Disable	Disable	
Dial Out Delay Time (min):	1–4	1–4	The time (in minutes) to delay between successive alarm dial-outs or retry attempts.
	5	5	
	6–10	6–10	
Alternate Dial-Out Directory:	None	None	The alternate dial-out directory to use if a call to the primary number cannot be completed.
	1–5	1–5	

Table 12. Management and Communication – Communication Protocol Configuration Options

Option	Factory 1	Factory 2	Comments/Description
Node IP Adr:	[Text Field]	[Text Field]	The IP address needed to access the DSU/CSU.
	Clear	Clear	
Node Subnet Mask:	[Text Field]	[Text Field]	The Subnet Mask needed to access the device.
	Clear	Clear	
Default Network Destination:	None	None	Specifies the default network destination.
	Com	Com	
	FDL	FDL	
	EDL _n	EDL _n	
Communications Port IP Address:	[Text Field]	[Text Field]	The IP address for the COM port when the Port Use configuration option is set to Mgmt.
	Clear	Clear	
Communication Port Subnet Mask:	[Text Field]	[Text Field]	The Subnet Mask needed to access the device when the Port Use configuration option is set to Mgmt.
	Clear	Clear	
Com Link Protocol:	PPP	PPP	The link layer protocol for the COM port when the Port Use configuration option is set to Mgmt.
	SLIP	SLIP	

Table 13. Management and Communication – General SNMP Management Configuration Options

Option	Factory 1	Factory 2	Comments/Description
SNMP Management:	Disable	Disable	Specifies whether the DSU/CSU responds to SNMP session requests.
	Enable	Enable	
Community Name 1:	[Text Field]	[Text Field]	A community name that is allowed access to this device. Defaults to <i>public</i> .
	Clear	Clear	
Name 1 Access:	Read	Read	The type of access allowed for community name 1.
	Read/Write	Read/Write	
Community Name 2:	[Text Field]	[Text Field]	A community name that is allowed access to this device.
	Clear	Clear	
Name 2 Access:	Read	Read	The type of access allowed for community name 2.
	Read/Write	Read/Write	

Table 14. Management and Communication – SNMP NMS Security Configuration Options

Option	Factory 1	Factory 2	Comments/Description
NMS IP Validation:	Disable	Disable	Specifies whether the DSU/CSU validates the IP address of an SNMP manager attempting access.
	Enable	Enable	
Number of Managers:	1	1	The number of SNMP managers allowed to access the DSU/CSU.
	2–10	2–10	
NMS <i>n</i> IP Address:	[Text Field]	[Text Field]	Allows you to define or clear the allowable IP address of an SNMP manager.
	Clear	Clear	
Access Level:	Read	Read	The type of access allowed for an SNMP manager using community name 1.
	Read/Write	Read/Write	

Table 15. Management and Communication – SNMP Traps Configuration Options

Option	Factory 1	Factory 2	Comments/Description
SNMP Traps:	Enable	Enable	Specifies whether SNMP traps are sent over the SNMP management link.
	Disable	Disable	
Number of Trap Managers:	1	1	The number of trap managers supported by the device.
	2–6	2–6	
NMS <i>n</i> IP Address:	[Text Field]	[Text Field]	Specifies the IP address for each trap manager. This configuration option is repeated for all <i>n</i> managers.
	Clear	Clear	
Destination:	None	None	Specifies the network destination for Trap Manager <i>n</i> .
	Com	Com	
	FDL	FDL	
	EDL _{<i>n</i>}	EDL _{<i>n</i>}	
General Traps:	Disable	Disable	Specifies the general trap types to enable: WarmStart, Authentication Failure or both.
	Warm	Warm	
	AuthFail	AuthFail	
	Both	Both	
Enterprise Specific Traps:	Enable	Enable	Specifies whether the enterpriseSpecific traps are enabled.
	Disable	Disable	
Link Traps:	Disable	Disable	Specifies the link trap type to Enable: Trap on Link Up, Link Down, or both.
	Up	Up	
	Down	Down	
	Both	Both	
Link Trap Interfaces:	Network	Network	When any link trap types are Enabled, specifies which links to send traps for.
	DTE	DTE	
	T1s	T1s	
	Ports	Ports	
	All	All	

▲ Important Safety Instructions

1. Read and follow all warning notices and instructions marked on the product or included in the manual.
2. This product is intended to be used with a 3-wire grounding type plug – a plug which has a grounding pin. This is a safety feature. Equipment grounding is vital to ensure safe operation. Do not defeat the purpose of the grounding type plug by modifying the plug or using an adapter.
Prior to installation, use an outlet tester or a voltmeter to check the ac receptacle for the presence of earth ground. If the receptacle is not properly grounded, the installation must not continue until a qualified electrician has corrected the problem.
If a 3-wire grounding type power source is not available, consult a qualified electrician to determine another method of grounding the equipment.
3. Slots and openings in the cabinet are provided for ventilation. To ensure reliable operation of the product and to protect it from overheating, these slots and openings must not be blocked or covered.
4. Do not allow anything to rest on the power cord and do not locate the product where persons will walk on the power cord.
5. Do not attempt to service this product yourself, as opening or removing covers may expose you to dangerous high voltage points or other risks. Refer all servicing to qualified service personnel.
6. General purpose cables are provided with this product. Special cables, which may be required by the regulatory inspection authority for the installation site, are the responsibility of the customer.
7. When installed in the final configuration, the product must comply with the applicable Safety Standards and regulatory requirements of the country in which it is installed. If necessary, consult with the appropriate regulatory agencies and inspection authorities to ensure compliance.
8. A rare phenomenon can create a voltage potential between the earth grounds of two or more buildings. If products installed in separate buildings are **interconnected**, the voltage potential may cause a hazardous condition. Consult a qualified electrical consultant to determine whether or not this phenomenon exists and, if necessary, implement corrective action prior to interconnecting the products.
9. Input power to the ac voltage configuration of this product must be provided by a UL-listed or CSA-certified power source with a Class 2 or Limited Power Source (LPS) output. Input power to the dc voltage configurations of this product must be provided by a National Electric Code (NEC) or a Canadian Electric Code (CEC) Class 2 circuit.
10. This product contains a coin cell lithium battery that is only to be replaced at the factory. **Caution:** There is a danger of explosion if the battery is incorrectly replaced. Replace only with the same type. Dispose of used batteries according to the battery manufacturer's instructions. **Attention:** Il y a danger d'explosion s'il y a un remplacement incorrect de la batterie. Remplacer uniquement avec une batterie du même type. Mettre au rebut les batteries usagées conformément aux instructions du fabricant.

11. In addition, if the equipment is to be used with telecommunications circuits, take the following precautions:

- Never install telephone wiring during a lightning storm.
- Never install telephone jacks in wet locations unless the jack is specifically designed for wet locations.
- Never touch uninsulated telephone wires or terminals unless the telephone line has been disconnected at the network interface.
- Use caution when installing or modifying telephone lines.
- Avoid using a telephone (other than a cordless type) during an electrical storm. There may be a remote risk of electric shock from lightning.
- Do not use the telephone to report a gas leak in the vicinity of the leak.

⚠ UNITED STATES – EMI NOTICE:

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 manual, 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 his own expense.

The authority to operate this equipment is conditioned by the requirements that no modifications will be made to the equipment unless the changes or modifications are expressly approved by Paradyne Corporation.

⚠ CANADA – EMI NOTICE:

This Class A digital apparatus meets all requirements of the Canadian interference-causing equipment regulations.

Cet appareil numérique de la classe A respecte toutes les exigences du règlement sur le matériel brouilleur du Canada.

Government Requirements and Equipment Return

Certain governments require that instructions pertaining to CSU connection to the telephone network be included in the installation and operation manual. Specific instructions are listed in the following sections.

Notice to Users of the United States Telephone Network

1. This equipment complies with Part 68 of the FCC rules. On the equipment is a label that contains, among other information, the FCC registration number for this equipment. The label is on the bottom of the DSU/CSU. If requested, this information must be provided to the telephone company.
2. The T1 network RJ connection should be made using a Universal Service Order Code (USOC) type RJ48C jack. The Service Order Code 6.0F should be specified to the telephone company when ordering the T1 line. In addition, the proper Facility Interface Code must be specified to the Telephone Company. The DSU/CSU can be configured to support any of the following framing format and line signaling techniques. The DSU/CSU's configuration must correspond to the T1 line's parameters.

3162 DSU/CSU Facility Interface Codes

Code	Description
04DU9-BN	1.544 Mbps superframe format (SF) without line power
04DU9-DN	1.544 Mbps SF and B8ZS without line power
04DU9-1KN	1.544 Mbps ANSI ESF without line power
04DU-1SN	1.544 Mbps ANSI ESF and B8ZS without line power

3. If the DSU/CSU causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. But if advance notice is not practical, the telephone company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary.
4. The telephone company may make changes in its facilities, equipment, operations, or procedures that could affect the operation of the equipment. If this happens, the telephone company will provide advance notice in order for you to make the necessary modifications in order to maintain uninterrupted service.

5. If you experience trouble with this equipment, please contact your sales or service representative (as appropriate) for repair or warranty information. If the product needs to be returned to the company service center for repair, contact them directly for return instructions using one of the following methods:

- **Internet:** Visit the Paradyne World Wide Web site at <http://www.paradyne.com>
- **Telephone:** Call our automated call system to receive current information or to speak with a company representative.
Within the U.S.A., call 1-800-870-2221
Outside the U.S.A., call 1-727-530-2340

If the trouble is causing harm to the telephone network, the telephone company may request that you remove the equipment from the network until the problem is resolved.

6. FCC compliant telephone line cords with modular plugs are provided with this equipment. This equipment is designed to be connected to the telephone network or premises wiring using a compatible modular jack which is Part 68 compliant.

Notice to Users of the Canadian Telephone Network

The Industry Canada label identifies certified equipment. This certification means that the equipment meets telecommunications network protective, operational and safety requirements as prescribed in the appropriate Terminal Equipment Technical Requirements document(s). The Department does not guarantee the equipment will operate to the user's satisfaction.

Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations.

Repairs to certified equipment should be coordinated by a representative designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request to disconnect the equipment.

Users should ensure for their own protection that the electrical ground connections of the power utility, telephone lines and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas.

CAUTION:

Users should not attempt to make such connections themselves, but should contact the appropriate electric inspection authority, or electrician, as appropriate.

The Ringer Equivalence Number (REN) assigned to each terminal device provides an indication of the maximum number of terminals allowed to be connected to a telephone interface. The termination on an interface may consist of any combination of devices subject only to the requirement that the sum of the Ringer Equivalence Numbers of all the devices does not exceed 5.

If your equipment is in need of repair, refer to *Warranty, Sales, Service, and Training Information* in the front of this document.



3162-A2-GL11-50