

## Model 7510 DSU Startup Instructions

Document Number 7510-A2-GN10-30

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Select the following document:

7510-A2-GB20  
*Model 7510 DSU User's Guide*

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

### Cables You May Need to Order

The following table describes typical equipment. Identify the connectors required for your equipment before you contact your sales or service representative to order cables. For cable details, refer to Appendix C, *Cables and Pin Assignments*, in the User's Guide.

If connecting . . .	Order a . . .
A VT100-compatible terminal to the Terminal port	Standard straight-through EIA-232 cable with DB25 plug connectors on both ends.
A PC to the Terminal port	Standard straight-through EIA-232 cable with a DB25 plug connector on one end and a DB9 or DB25 socket connector, as required, on the other end.
An External Modem to the Terminal port	Standard crossover EIA-232 cable with DB25 plug connectors on both ends.
A DTE with a V.35 connector to the DTE port	V.35 cable with an MS34 plug connector on one end and an MS34 socket connector on the other end.

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## Package Checklist

Verify that your package contains the following:

- A Model 7510 DSU
- Power cord with power transformer
- RJ48S modular cable for U.S. network access (14')

No DTE cables are provided. Additional cables may need to be ordered; see *Cables You May Need to Order* on page 1.

## Preparation

Make sure you have:

- A dedicated, grounded ac outlet that is protected by a circuit breaker within 6 feet of the access unit.
- A clean, well-lit, and ventilated site that is free from environmental extremes.
- An operable network connection.
- A VT100-compatible asynchronous terminal or PC (personal computer) running terminal emulation software.

Before installing your DSU, read the *Important Safety Instructions* on page 7.

## Installing the DSU

### ► Procedure

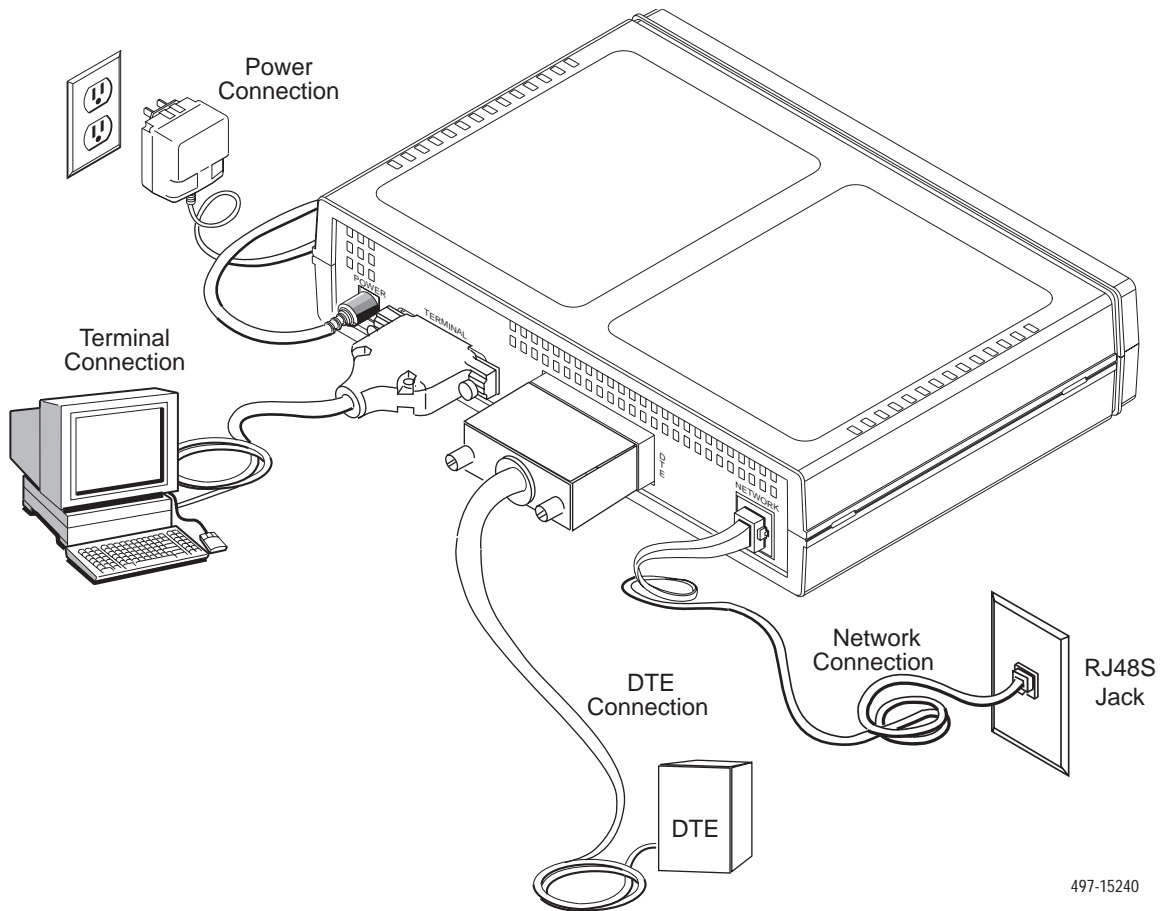
To install the DSU:

1. Plug the end of the power cord into the POWER jack on the DSU. Plug the power transformer into an ac outlet.

#### **CAUTION:**

**Use no power supply except the one provided with the DSU. Using the wrong power supply can destroy the DSU.**

2. Plug the 8-pin connector on the RJ48S network cable into the NETWORK connector on the DSU. Plug the other end of the cable into the RJ48S modular jack.
3. Plug one end of the 34-pin V.35 cable into the DTE port of the DSU. Plug the other end of the V.35 cable into the DTE connector.
4. Plug the 25-pin end of an EIA-232 cable into the TERMINAL port of the DSU. Plug the other end of the cable into the VT100-compatible user interface connector.



497-15240

### NOTES:

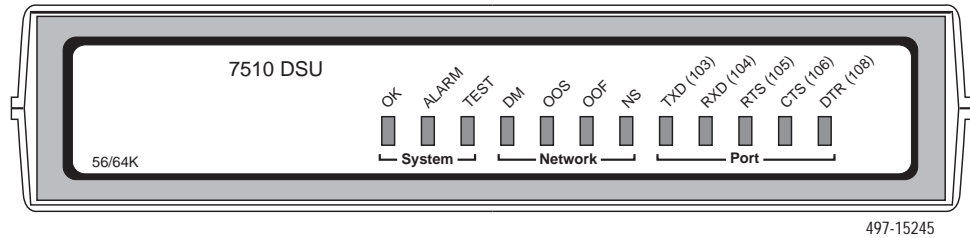
Your terminal or PC software must be set to communicate at a rate of 9.6 kbps, using characters of 8 bits, one stop bit, and no parity.

If you connect an external modem instead of an asynchronous terminal or PC:

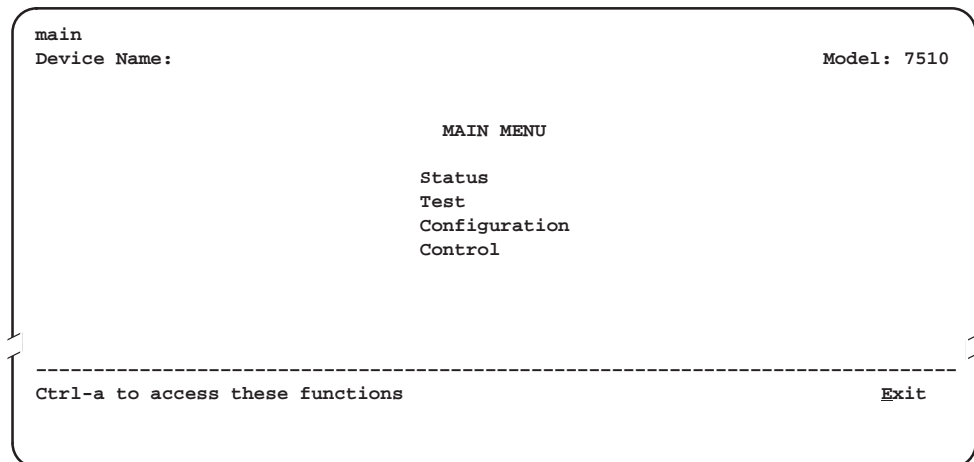
- Use an EIA-232 crossover cable as described in Appendix C, *Cables and Pin Assignments*, in the User's Guide.
- If possible, configure your modem to use standard RS232 detection and control for CTS, DSR, DTR, LSD, and RTS.
- If possible, disable AT commands on your modem.

## Hardware Verification

- Verify that the OK LED lights up.
- Verify that the ALARM LED is off.



- Verify that the User Interface Idle screen is displayed on the terminal or PC. Press the Enter key. Verify that the Main Menu appears.

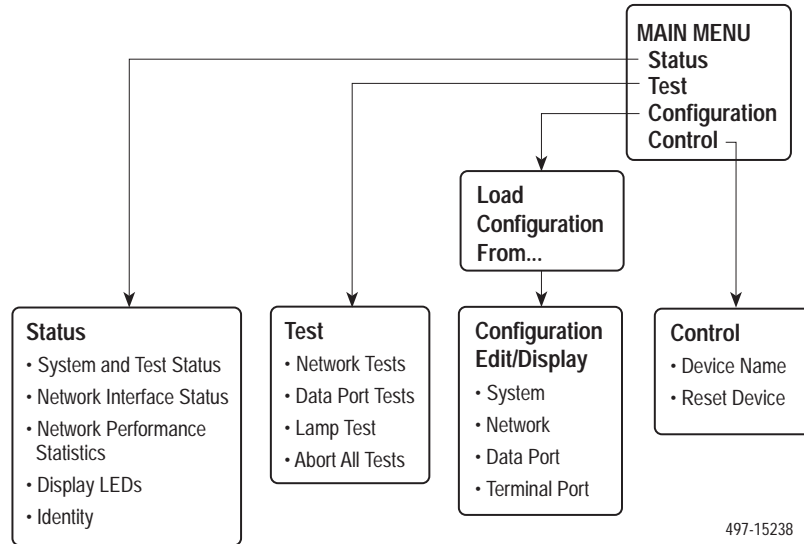


If the DSU fails to respond as described, refer to Chapter 6, *Messages and Troubleshooting*, in the User's Guide.

# Menu Tree

Entry to all of the DSU's tasks begins at the Main Menu screen, which has four menus or branches.

Select . . .	To . . .
Status	View results of diagnostic tests, network status of interfaces, statistics, LEDs, and DSU identity information.
Test	Select and cancel tests for the DSU's interfaces.
Configuration	Display and edit the configuration options.
Control	Establish identification for the DSU and system, or to initiate a power-up reset of the DSU.



497-15238

## Configuration Options

The following tables list the configuration options of the Model 7510 DSU.

<b>System</b>	
<b>Configuration Option</b>	<b>Settings</b> <i>Default in [Bold]</i>
Operating Mode	[ <b>DDS</b> ], LADS
DDS Line Rate (Kbps)	56, 64CC, [ <b>Autobaud</b> ]
LADS Timing	[ <b>Internal</b> ], External, Receive
LADS Line Rate (Kbps)	56, [ <b>64</b> ]
Test Timeout	[ <b>Enable</b> ], Disable
Test Duration (min)	1–120, [ <b>10</b> ]

<b>Network Interface</b>	
<b>Configuration Option</b>	<b>Settings</b> <i>Default in [Bold]</i>
Network-initiated DSU Loopback (64K CC)	[ <b>Enable</b> ], Disable
Data Scrambling (64K CC)	Enable, [ <b>Disable</b> ]
V.54 Initiated DSU Loopback	Enable, [ <b>Disable</b> ]

<b>Data Port</b>	
<b>Configuration Option</b>	<b>Settings</b> <i>Default in [Bold]</i>
Invert Transmit Clock	Enable, [ <b>Disable</b> ]
Port (DTE) Initiated Loopbacks	[ <b>Disable</b> ], Local, Remote, Both
Bilateral Loopback	Enable, [ <b>Disable</b> ]
Carrier Control by RTS	[ <b>Constant</b> ], Switched
CTS Control	[ <b>Standard</b> ], Follow RTS, Forced On, Circuit Assurance
RLSD Control	[ <b>Standard</b> ], Forced On
DSR Control	[ <b>Standard</b> ], Forced On, On During Test
Monitor DTR	[ <b>Enable</b> ], Disable

<b>Terminal Port</b>	
<b>Configuration Option</b>	<b>Settings</b> <i>Default in [Bold]</i>
Monitor DTR	[ <b>Enable</b> ], Disable
Inactivity Timeout	Enable, [ <b>Disable</b> ]
Disconnect Time(minutes)	range 1 – 60 [ <b>5</b> ]

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## Important Safety Instructions

1. Read and follow all warning notices and instructions marked on the product or included in the manual.
2. 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.
3. Do not allow anything to rest on the power cord and do not locate the product where persons will walk on the power cord.
4. 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.
5. 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.
6. 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.
7. Input power to this product must be provided by one of the following: (1) a UL Listed/CSA certified power source with a Class 2 or Limited Power Source (LPS) output for use in North America, or (2) a certified power source with a Safety Extra Low Voltage (SELV) output for use in the country of installation.
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. 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.

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## Notices

### **⚠ WARNING:**

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.

### **⚠ WARNING:**

**To Users of Digital Apparatus in Canada:**

**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

Certain governments require that instructions pertaining to 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**

This equipment complies with Part 68 of the FCC rules. On the bottom of the equipment is a label that contains, among other information, the FCC registration number for this equipment. If requested, please provide this information to your telephone company.

If your DSU causes harm to the telephone network, the telephone company may discontinue your service temporarily. If possible, they will notify you in advance. But if advance notice is not practical, you will be notified as soon as possible. You will be advised of your right to file a complaint with the FCC.

Your telephone company may make changes in facilities, equipment, operations, or procedures that could affect the proper operation of your equipment. If so, you will be given advance notice so as to give you an opportunity to maintain uninterrupted service.

No repairs may be performed by the user. Should you experience difficulty with this equipment, refer to *Warranty, Sales, and Service Information* on page 10.

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For Digital Data Service (DDS) installations, inform the local telephone company of the appropriate facility interface code for the service you desire.

DDS Facility	
Interface Code	Data Rate
04DU5-56	56 Kbps
04DU5-64	64 Kbps

The DDS Service Order Number is 6.0Y. The jack configuration required is RJ48S. Refer to Appendix D, *Technical Specifications*, in the User's Guide.

After the telephone company has installed the requested service and jack, you can connect the DSU with the cable provided. An FCC-compliant telephone cord and modular plug are provided with this equipment. This equipment is designed to be connected to the telephone network or premises wiring using a compatible modular jack that 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 the procedures described in the next section.

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## Warranty, Sales, and Service 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:

- **Via the Internet:** Visit the Paradyne World Wide Web site at <http://www.paradyne.com>
- **Via Telephone:** Call our automated call system to receive current information via 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



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