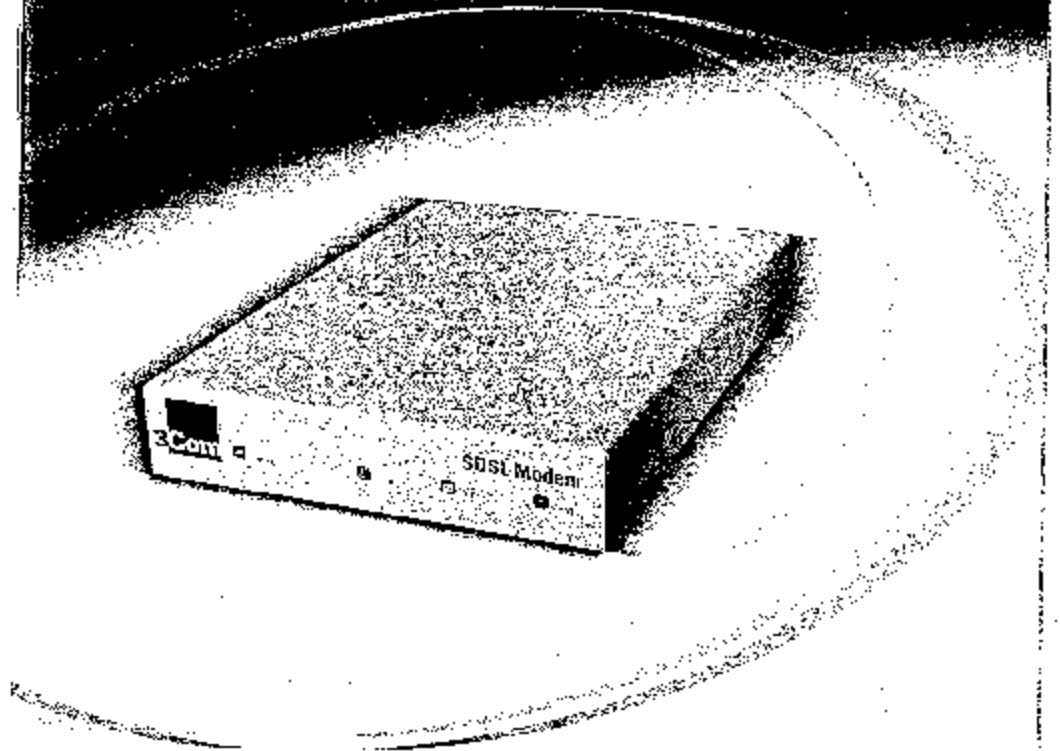


3Com SDSL Modem

Installation and Operating Guide



More connected.™

SDSL

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SDSL Modem User's Guide

Version 1.0

<http://www.3com.com>

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1 INTRODUCTION TO THE 3COM SDSL MODEM

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This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and

2. This device must accept any interference received, including interference that may cause undesired operation.

This device has been tested to comply with FCC standards and is acceptable for home or office use. The 3Com SDSL Modem has been determined to comply with Part 15 of the FCC rules under the manufacturer's authorization of Continual procedures in Title 47 of the Code of Federal Regulation, section 2.905 (a). The party responsible for the Declaration of Conformity is:

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Changes or modifications to this device not expressly approved by the party responsible for compliance could void the user's authority to operate the device.

The manufacturer's Declaration of Conformity implies that the device was tested at a laboratory recognized by the FCC and found to meet the limits for a Class B digital device. This notice has not been provided by the FCC.

- ### Introduction
- Welcome to the 3Com SDSL Modem
 - What's Included in the Package
 - Important Safety Instructions
 - Installation
 - Operation
 - FCC Information

Welcome to the 3Com SDSL Modem

The 3Com SDSL Modem is your passport to full inter-networking and high-speed multimedia communications from your home or office to a corporate network or the Internet.

With the SDSL Modem connected to your computer, and an account activated by your network service provider, the SDSL Modem provides a lightning-fast Digital Subscriber Line (DSL) connection between your PC or LAN and the service provider's network of high-speed digital facilities.

This booklet contains the information you need to hook up, use, and care for your 3Com SDSL Modem.



If necessary, you can obtain technical support from your Network Service Provider.

What's Included in the Package?

First, check your package to be sure it's complete. You should have the following items:

- The 3Com SDSL Modem
- An AC-to-DC power transformer (AC Adapter)
- RJ45 to RJ45 Ethernet Cable

- RJ11 to RJ11 telephone cable for connection to the DSL data line
- User's Guide

! *If anything is missing, contact your Network Service Provider.*

Important Safety Instructions

When using your telephone equipment, basic safety precautions should always be followed to reduce the risk of fire, electric shock, and injury to persons, including the following:

- Do not use this product near water, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool.
- Avoid using this telephone equipment during an electrical storm. There may be a remote risk of electric shock from lightning.
- Use only the power transformer indicated in this manual. The correct power transformer supplies 7.5 VDC at 500 mA and is listed by Underwriters Laboratories.

In Case of a Problem

First, carefully review the contents of this booklet. Check all of the connection points. Ensure that cables and wires are intact and properly connected between:

- Your 3Com SDSL Modem and your computer.
- Your 3Com SDSL Modem and the DSL data line.
- Your 3Com SDSL Modem and the AC adapter.

Check that the AC adapter is plugged into a live AC socket. If all of the connections are correct, and you are still having difficulties, contact your Network Service Provider for assistance.

If you experience trouble with your SDSL Modem that 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.

Service and Repair of the 3Com SDSL Modem by the User

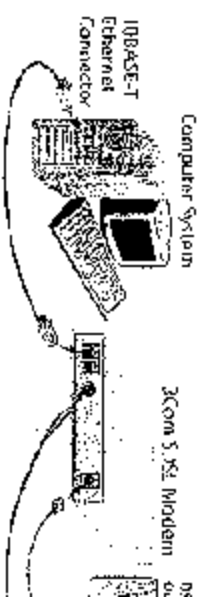
There are no user serviceable parts inside.

Installation of the 3Com SDSL Modem

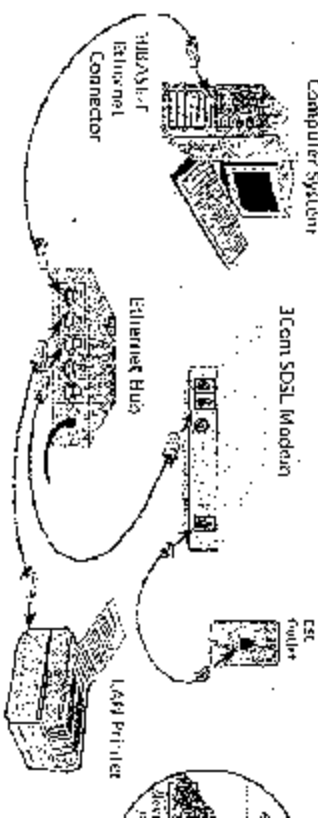
For protection against damage due to local lightning and other electrical surges, we recommend that you install an AC surge arrester in the AC outlet to which this device is connected.

Installation

Connecting directly to your computer



Connecting through an Ethernet Hub



Connecting the SDSL Modem is easy. Pick the applicable hookup for your system from one of the two diagrams.

shown. Then, using the picture as a guide, just follow these steps:

- 1 Place your SDSL Modem in a convenient spot where all of the cables can reach it, and where air can flow freely through the air holes in the bottom of the unit.
- 2 Plug the AC adapter into an AC socket, and connect the DC cable from the adapter to the 7.5 VDC connector on the rear of the SDSL Modem.

- 3 Connect one end of the Ethernet cable to the Ethernet connector on your computer and connect the other end to the connector on the rear of the SDSL Modem.

If you are connecting your computer or other data source through an Ethernet hub, connect the Ethernet cable between the hub and the connector on the rear of the SDSL Modem. The connector avoids the need for a special crossover cable.

CAUTION: The SDSL Modem can only support one physical connection at a time; either the hub or computer plug can be connected, but not both.

- 4 Connect one end of the modular phone cable to the DSL LINE connector on the rear of the SDSL Modem, and connect the other end to the telephone-style outlet of your DSL data line.

CAUTION: The DSL line outlet uses the same type connector as a normal voice telephone line. Take care not to accidentally connect your SDSL Modem to a telephone outlet, and never connect a phone to your SDSL Modem.

Operation

After you have properly connected your SDSL Modem, and your new DSL link has been activated by your Network Service Provider, all you need to do is enjoy the high-speed DSL access to your network. There are no controls or adjustments to make. Just make sure that power is provided to your SDSL Modem at all times, and that adequate ventilation is maintained.

LED Indicators

If power to the unit is interrupted, the SDSL Modem automatically reconnects to the network when power is restored. The connection process is not instantaneous, however, and it may take several minutes for your service provider's central-office equipment to perform periodic check of your line and then do the necessary "handshaking" to restore full communication.

There are four indicator lights (LEDs) on the front of the SDSL Modem. Each of the LEDs can light red, orange, green, depending on the status of the unit.

When power is first applied, the indicator's cycle through self-test sequence. All of the LEDs flash orange, allow each switches to its normal condition. If your network provider is downloading software to the SDSL Modem of the LEDs will sequentially flash orange while the download is in progress, and then will revert to their normal status. This may happen the first time power is applied to your SDSL Modem.

Power Indicator

Lights green when power is applied. If this indicator is checked to be sure that the 7.5 VDC cable is connected at rear panel, and that the power transformer is plugged in the power LED lights red, there is a problem with your power.

LAN Indicator

Lights green when your SDSL Modem is connected to PC or Ethernet LAN. As data packets are transmitted, a LED will appear to blink as the LED is turned off during time each packet is sent. Note that if a continuous stream of packets is transmitted, this LED could be turned off the transmission is complete.

If connection to the LAN is broken, the LAN indicator's go off and remain off. Be sure that the computer or hub cables are properly connected at the SDSL Modem rear panel and at your PC or Ethernet hub.

Occasionally there may be errors in the Ethernet data stream, causing this LED to flash red. If everything else

seems to be working, these red flashes may be normal for your system.

DSL Indicator

Lights green if the DSL connection between your SDSL Modem and the central office has linked and is properly trained.

During power-up, there may be a short delay until this LED illuminates. After a few seconds, the LED should light orange as the unit attempts to connect with your service-provider's central office equipment (this will take from a few seconds to several minutes). The LED switches to green when the connection is made; if a connection is not established after three attempts, the SDSL Modem will keep trying to connect, but this LED will light red.

Data Indicator

Blinks green to indicate successful exchange of data packets over the DSL link. Blinks red if a packet error is detected. Occasional packet errors are normal, and these packets are simply resent. If excessive errors occur, contact your service provider.

Power Requirements

- AC Voltage: External DC adapter, 110 to 120 VAC, 60 Hz
- Power: 6 watts maximum

Operating Environment

- Temperature: 50° to 104° F (10° to 40° C)
- Humidity: 5-95%¹, non-condensing

3Com Corporation LIMITED WARRANTY

HARDWARE

3Com warrants its hardware products to be free from defects in workmanship and materials, under normal use and service, for the duration of the term from the date of purchase from 3Com or its Authorized Reseller.

Parts & Labor, Factory Repair, or Replacement of Unit

2 years

If a product does not operate as warranted, please return the appropriate warranty product, 3Com will, at its option and expense, repair the defective product or part, deliver to customer an equivalent product or part to replace the defective item, or refund to Customer the purchase price paid for the defective product. All products that are replaced will become the property of 3Com. Replacement products may be new or second-hand. Any product or repaired product or part has a ninety (90) day warranty or the remainder of the original warranty period, whichever is longer.

3Com shall not be responsible for any software, firmware, information, or memory that of Customer's contained in, stored on, or integrated with any products returned to 3Com for repair, whether under warranty or not.

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If necessary, you can contact 3Com Technical Support at 800-876-3COM.

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FCC CLASS B STATEMENT

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

WARNING: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If the equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment "off" and "on", the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from the one which the receiver is connected to.
- Consult the dealer or an experienced radio/TV technician for help.

The user may find the following booklet prepared by the Federal Communications Commission helpful: *The Interference Handbook*

This booklet is available from the U.S. Government Printing Office, Washington, D.C. 20401, Stock No. OMA-000-203241-4.

NOTE: In order to maintain compliance with the limits of a Class B digital device, 3Com requires that you use quality interface cables when connecting to this device. Changes or modifications not expressly approved by 3Com could void the user's authority to operate this equipment. Refer to the manual for specifications on cabling types.

3Com SDSL Modem

Performance

Rates and reach

- 1.544 Mbps up to 9,500 feet*
- 1.024 Mbps up to 12,500 feet
- 768 kbps up to 14,900 feet
- 384 kbps up to 17,900 feet
- 256 kbps up to 19,000 feet
- 192 kbps up to 20,500 feet
- 128 kbps up to 22,770 feet

* Distance from Central Office

Network Management

- SNMP proxy management
- Remote software upgrade

DSL interface

- Standard RJ11 jack

10BASE-T Ethernet (IEEE 802.3)

- MDI connector (RJ45)
- MDI-X connector (RJ45)

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Regulatory

- FCC Class B
- UL Listed

Physical Dimensions

- Size: 1.1"H x 4.7"W x 6.5"D
- Mounting: Desktop or wall-mount

Power Requirements

- AC Voltage: External DC adapter,
110 to 120 VAC, 60 Hz
- Power: 6 watts maximum

Operating Environment

- Temperature: 50° to 104° F
(10° to 40° C)
- Humidity: 5-95% non-condensing
- Altitude: To 12000 feet.



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More connected.