D-Link ®

DCM-200

DOCSIS 1.0

USB/Ethernet Cable Modem

User's Manual

Table of Contents

Introduction

Thank you for choosing the D-Link DCM-200 digital, two-way DOCSIS 1.0-compliant USB/Ethernet Cable Modem.

The DCM-200 provides customers with high-speed access to the Internet through the cable TV (CATV) network. It works on any cable system that complies with MCNS DOCSIS specifications and provides a high-bandwidth connection to the Internet. It can download Web pages almost instantly, transfers files at exceptionally fast speeds, and delivers real-time video and music with unsurpassed quality.

The DCM-200 modem digitizes data and sends it over the cable at up to 10.2 Mbps and can receive transmissions at up to 42.88 Mbps. To give you an idea of just how fast this is, digitized television quality video and audio are transmitted together at about 3 Mbps.

The DCM-200 includes both a USB cable interface and a standard RJ-45 port for a 10BASE-T connection to a computer or computer network. When properly configured these connections allow simultaneous data transfers to an existing IP data network or the Internet via the cable company' s network.

Features

Designed for versatility and performance, the USB/Ethernet Cable Modem provides the following:

Product Features

♦ MCNS/DOCSIS 1.0 compliant

♦ DOCSIS 1.1 upgradeable from DOCSIS 1.0 by software

♦ Building MCNS MIB

♦ Frequency Agility

♦ DES Encryption and Decryption

♦ Automatic Signal Power Recognition/Adjustment

♦ Baseline Privacy Interface

♦ QPSK/16 QAM Upstream Modulation

♦ 64/256 QAM Downstream Modulation

♦ USB 1.1 compliant

Contents and Identification

Contents

Open the shipping carton and carefully remove all items. In addition to this User's Manual, ascertain that you have:

- ♦ DCM-200 USB/Ethernet Cable Modem
- ♦ DCM-200 driver diskette
- ♦ External power adapter
- ♦ USB cable
- ♦ Category 5 Ethernet cable
- ♦ Quick Install Guide

If any item is found missing or damaged, please contact your local reseller or D-Link directly at one of the offices listed at the rear of the manual for replacement.

Identifying External Components

This section identifies all the major external components of the device. Both the front and rear panels are shown below followed by a description of each panel feature. The indicator panel is described in detail in the next chapter.
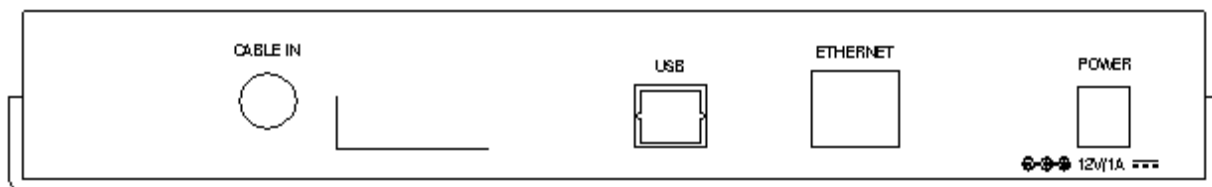
Front Panel

The figure below shows the front panel of the device.
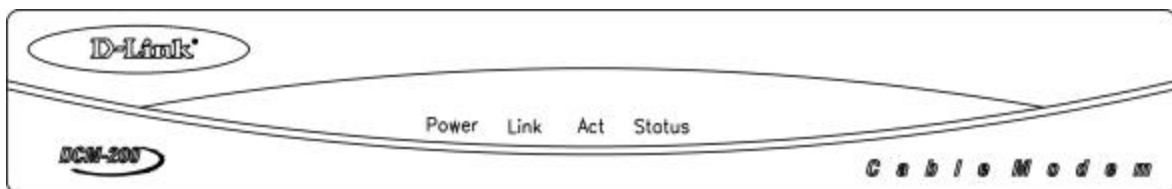
- ♦ **LED Indicator Panel** Refer to the next chapter, "*Understanding Indicators*," for detailed information about each of the DCM-200's LED indicators.

Rear Panel

The figure below shows the rear panel of the device.

- **AC Power Connector** For the included power adapter, if you use a power adapter other than the one included with the product, please make sure it has a DC output of 12V/1A.

- **Ethernet 10BASE-T Port** The 10BASE-T Ethernet port is fitted with an RJ-45 connector used to connect the DCM-200 to a LAN device (hub, switch, PC, etc.). This port accepts Category 5 or better UTP cabling with an RJ-45 connector.

- **Cable In** This jack is used to connect the DCM-200 to the splitter. This connection is achieved using a length of cable TV wire supplied by your cable company during installation.

- **USB Port** Connect this port on the DCM-200 directly to your PC.

Connection Architecture

In order for you to enjoy the benefits of your Cable Modem, your PC and TV must be properly connected to the cable TV wire. The following diagram illustrates a typical PC/TV installation.
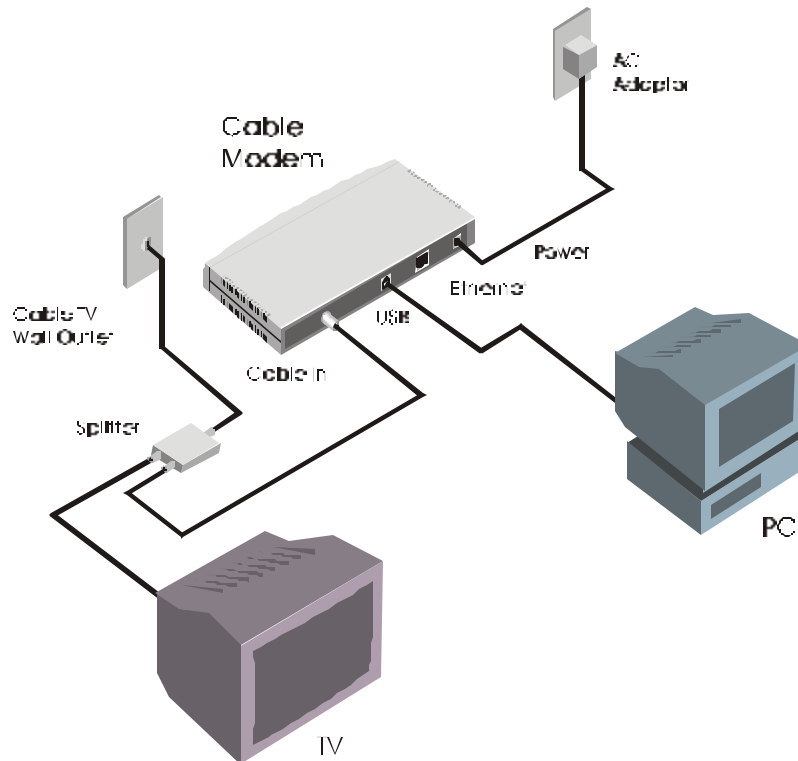

- **Cable TV Wall Outlet** This is the normal cable TV wall outlet installed by your cable company. If you plan to connect both your TV and your computer to the cable TV wire, the cable TV wall outlet should connect to a splitter.
- **Splitter** This unit, usually provided by your cable TV company during installation, splits the signal onto a second wire. The two wires coming out of the splitter can be connected to your TV (or set-top box), and the cable modem.

> *NOTE:* **1.** If your cable TV company does not provide a splitter or you chose to buy your own, make sure you get one with sufficient frequency range (the range should be printed on the splitter). A range of 5 to 1000 MHz should be adequate. The splitter should provide EMI isolation.
> **2.** Only one splitter should be placed between the point where the cable TV line enters the house and the Cable Modem/PC (see figure above). If you have multiple TVs, split the line between the first splitter and the TV, not the line between the splitter and the Cable Modem.
> **3. WARNING:** Do not use amplifiers in the line leading to your Cable Modem. Not only do most amplifiers only amplify incoming signals, while your Cable Modem receives and sends signals, but they are also likely to distort cable modem signals.

Understanding Indicators

Before setting up your USB/Ethernet Cable Modem for the first time, take a few minutes to look over this section and familiarize yourself with the front panel LED indicators depicted below.
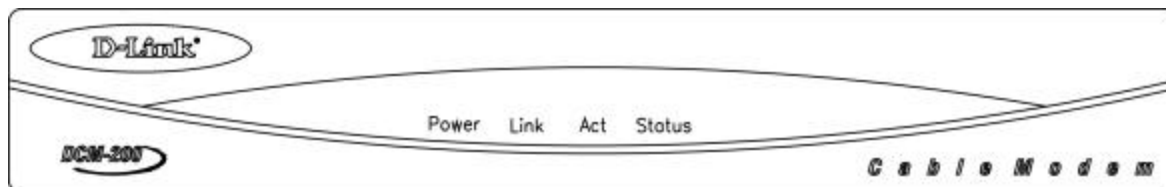
- ♦ **Power** This LED is lit red when the device is receiving power; otherwise, it is unlit.

- ♦ **Link** This LED is lit green to indicate that a valid connection exists between the Ethernet port on the Cable Modem and your PC. If it is unlit, there is no valid connection.

- ♦ **Act** A blinking green LED indicates that traffic activity is passing through your cable modem port.

- ♦ **Status** This LED is lit green when either the USB or Ethernet cable is successfully connected to your PC and a traditional coaxial cable is connected to your Cable Modem tuner. This indicates a successful connection with CMTS. The LED will now start quickly blinking as the DCM-200 attempts to lock a downstream frequency. If this is successful, the LED will begin to blink slowly. This indicates the modem is waiting for authentication, setting up an upstream connection, requesting an IP through DHCP, and then requesting a configuration file through TFTP to establish contact, in that order. When the blinking stops and the LED remains steady, the Cable Modem is ready to transmit data through the CATV network.

NOTE: If a powered-up device is connected to a port and the port' s Link status indicator is unlit, the most probable cause is a cabling or connection problem (for example, the wrong cable type or a bad contact) or a device malfunction.

Powering Up the First Time

You must allow at least 1 to 3 minutes to power up the first time because the DCM-200 must find and secure a connection.

Setting Up the Device

Before You Start

Local Cable Service

You will need to establish two-way service with your local cable operator in order to access the Internet with this modem. They will assist you in setting up the modem to operate on their network.

In order for your modem to communicate with the cable service network server it will first need to be able to identify the cable modem. The Cable Media Access Control (CMAC) address is a unique number that is used for the purpose of identifying the modem on the network. The CMAC address is found on the rear panel of the modem. You may be required to provide this information to your cable service operator. For convenient reference you can write the CMAC address in the space provided below.

CMAC address _____

System Requirements

The capabilities and limitations of your computer equipment and configuration can affect the overall performance of your Internet connection.

The DCM-200 USB/Ethernet Cable Modem is designed to work with the following operating systems:

- Windows 98/98 SE (Second Edition)
- Windows 2000
- Windows ME (Millennium Edition)
- Active Ethernet Port or NIC installed
- TCP/IP installed on all devices

All computers not using the USB interface that are connected to the modem must have either an active Ethernet interface or network interface card (NIC) installed. You will need to enable TCP/IP protocol on each computer. TCP/IP should already be installed in any computer with an active Ethernet interface. The instructions for installing TCP/IP vary depending on the type of system used. These instructions will be included with the NIC or discussed in the computer's manual if your PC comes equipped with an Ethernet port. Your cable operator may have additional instructions for TCP/IP configuration that must be followed.

Installation

The installation of the DCM-200 USB/Ethernet Cable Modem can be completed in a matter of minutes. Be careful to insure the cables are properly locked into position. Follow these steps (see the figure of the rear panel in Chapter Two):

1. Connect the coaxial TV cable to the DCM-200 jack labeled "**CABLE IN**."

2. Connect the external power adapter into the connector labeled "**POWER**" and the other end to the electrical outlet.

3. Connect one end of the USB cable into one of your PC's USB ports and the other end into the Cable Modem connector labeled "**USB**," or, in the event a USB port is not available on your PC, connect one end of the 10BASE-T Ethernet cable (Category 5 or better) to one of your PC's Ethernet ports and the other end into the DCM-200 connector labeled "**ETHERNET**."

After you attach the cables, the operating system of your PC should detect the new device when the DCM-200 is powered on. The final step is to install a driver for the DCM-200 on either your desktop or laptop computer.

Your setup should look something like this:
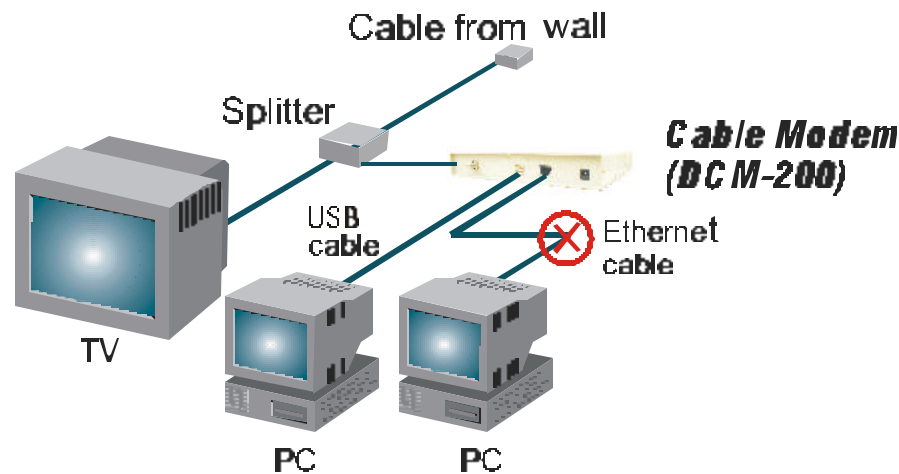
Important Notice:

♦ The DCM-200 USB/Ethernet Cable Modem can only work with either the Ethernet port or the USB port at one time. **They CANNOT work simultaneously**.

♦ If you connect both the USB port and Ethernet port to different PCs, only the PC connected to the USB port will be able to get the IP address and establish a link onto the Internet.

♦ If you first connect the DCM-200 to the Ethernet port on your PC and then later connect the USB port, the Ethernet connection will be dropped and the DCM-200 will begin the process of finding a downstream channel to lock into by the USB connection. At this juncture the DCM-200 Status LED will start blinking quickly. Once a channel has been secured, the LED will begin to blink slowly, until the connection has been established. At that point, the LED will remain lit.

♦ If you have established a connection between the DCM-200 and a USB port on a PC and then later decide to plug the USB cable into a USB port on another PC, the DCM-200 will restart. See the Status LED entry of the *"Understanding Indicators"* chapter for further information.

♦ If you shift the Ethernet cable from one PC to another PC, the second PC will not be able to link onto the Internet until you reboot the DCM-200 by unplugging the power cord and then reinserting it into the DCM-200.

Windows 98/98 SE (Second Edition)

If your PC is running Windows 95/98/98 SE, it should detect the new hardware automatically. However, if it does not, please follow the steps below to install the necessary driver:

1. Click **Start**-> **Settings**-> **Control Panel**-> **Add New Hardware**. The following window will open:

Add New Hardware Wizard

This wizard searches for new drivers for:

USB Composite Device

A device driver is a software program that makes a hardware device work.

< Back | Next > | Cancel

2. Click **Next >** on the window above.

Add New Hardware Wizard

What do you want Windows to do?

⊙ Search for the best driver for your device. (Recommended).

○ Display a list of all the drivers in a specific location, so you can select the driver you want.

< Back | Next > | Cancel

3. Select "**Search for the best driver for your device (Recommended)**." and then click **Next >**.

4. Check ( ) "**Floppy disk drives**" and then click **Next >**.
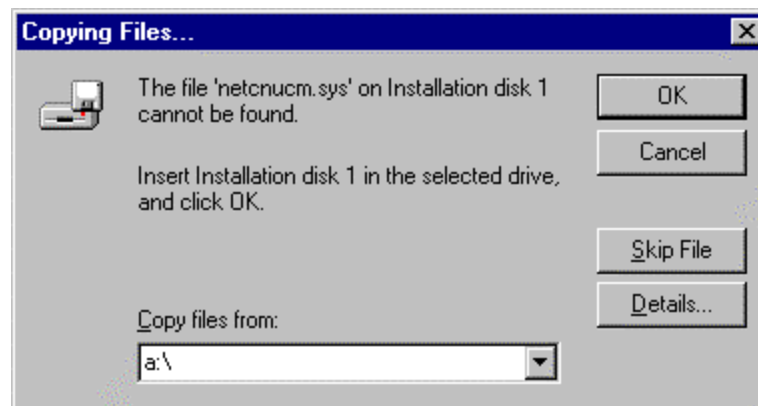

5. Select "**The updated driver (Recommended) D-Link USB Cable Modem**" and then click **Next >**.
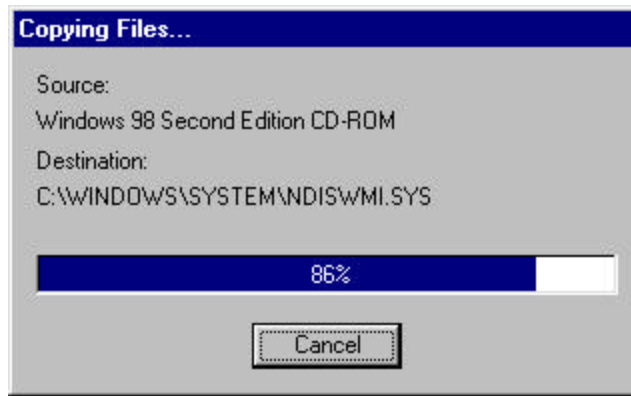
6. If a warning message as the following appears, insert the installation disk and click **OK.**
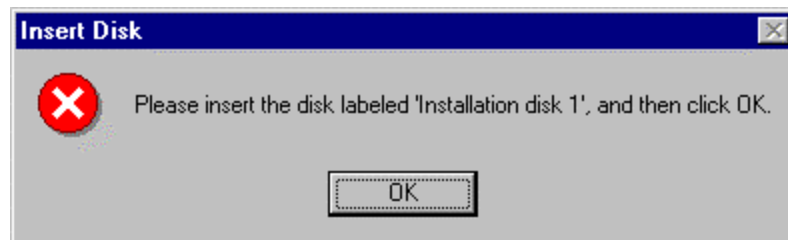
7. Indicate the location of driver by typing **a:** in the space of "Copy files from:"

8. Click **OK** to allow Windows to install the driver for your USB Cable Modem.

Copying Files...

Source:
Windows 98 Second Edition CD-ROM

Destination:
C:\WINDOWS\SYSTEM\NDISWMI.SYS

86%

[Cancel]

9. Once the necessary driver files have been copied, the following window will be displayed. In the event of a version conflict, we recommend keeping all previous versions.

Add New Hardware Wizard

D-Link USB Cable Modem

Windows has finished installing the software that your new hardware device requires.

< Back   Finish   Cancel

10. Click **Finish** to complete the driver installation procedure. The DCM-200 is now installed.

System Settings Change

? To finish setting up your new hardware, you must restart your computer.

Do you want to restart your computer now?

Yes   No
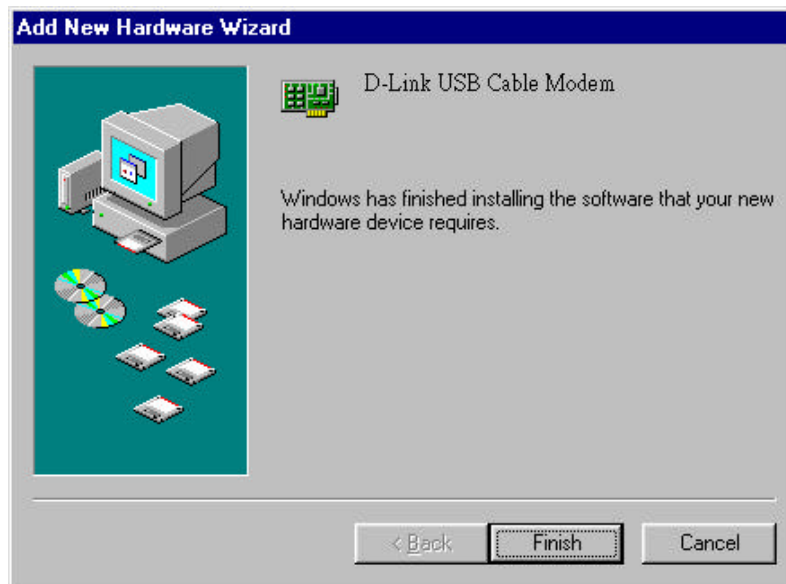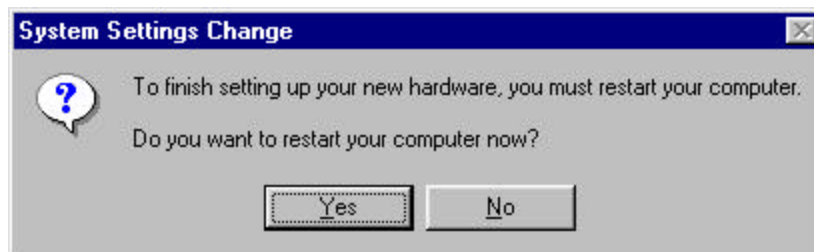
11. Before you can begin using the USB/Ethernet Cable Modem, you must reboot your PC. Click "**Yes**" to proceed with this operation.

Windows 2000

If your PC is running Windows 2000, it will automatically detect the new hardware through a series of windows displayed below. Follow the steps described below to add the driver for the USB/Ethernet Cable Modem.

1. Once the USB cable is connected to the USB interface, the following window will be displayed:
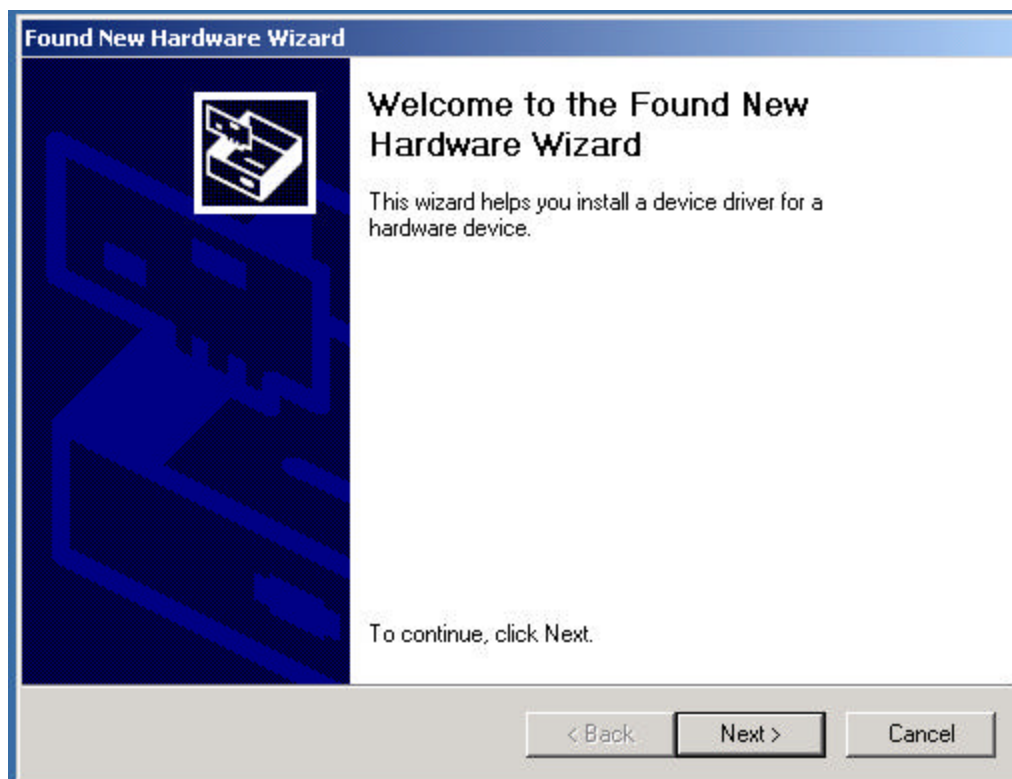
2. Click **Next >**.

3. Select "**Search for a suitable driver for my device (recommended)**" and then click **Next >**

4. Check ( ) "Floppy disk drives" and then click **Next >**.

5. Click **Next >** to allow Windows to install the driver for your USB/Ethernet Cable Modem.

Digital Signature Not Found

The Microsoft digital signature affirms that software has been tested with Windows and that the software has not been altered since it was tested.

The software you are about to install does not contain a Microsoft digital signature. Therefore, there is no guarantee that this software works correctly with Windows.

D-Link USB Cable Modem

If you want to search for Microsoft digitally signed software, visit the Windows Update Web site at http://windowsupdate.microsoft.com to see if one is available.

Do you want to continue the installation?

| Yes | No | More Info |

6. Click **Yes** to continue.

Found New Hardware Wizard

Completing the Found New Hardware Wizard

D-Link USB Cable Modem

Windows has finished installing the software for this device.

To close this wizard, click Finish.

| < Back | Finish | Cancel |

7. Click **Finish** to complete the driver installation procedure. The DCM-200 is now installed.

Windows ME (Millennium Edition)

If your PC is running Windows ME, it will automatically detect the new hardware through a series of windows displayed below. Follow the steps described below to add the driver for the USB/Ethernet Cable Modem.
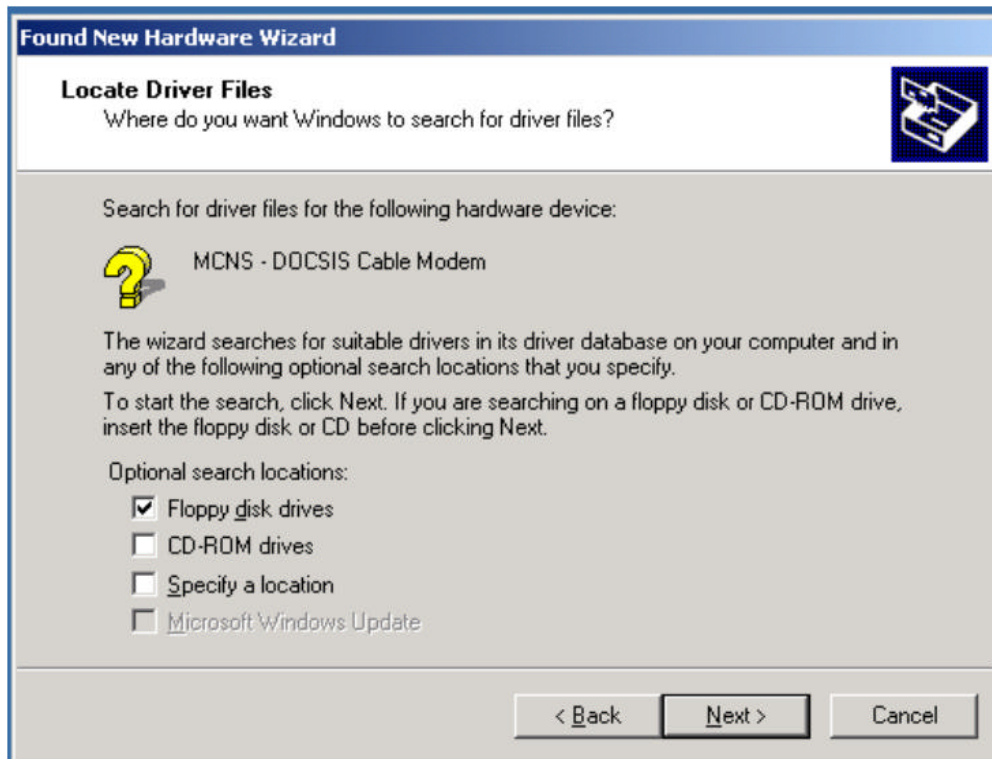
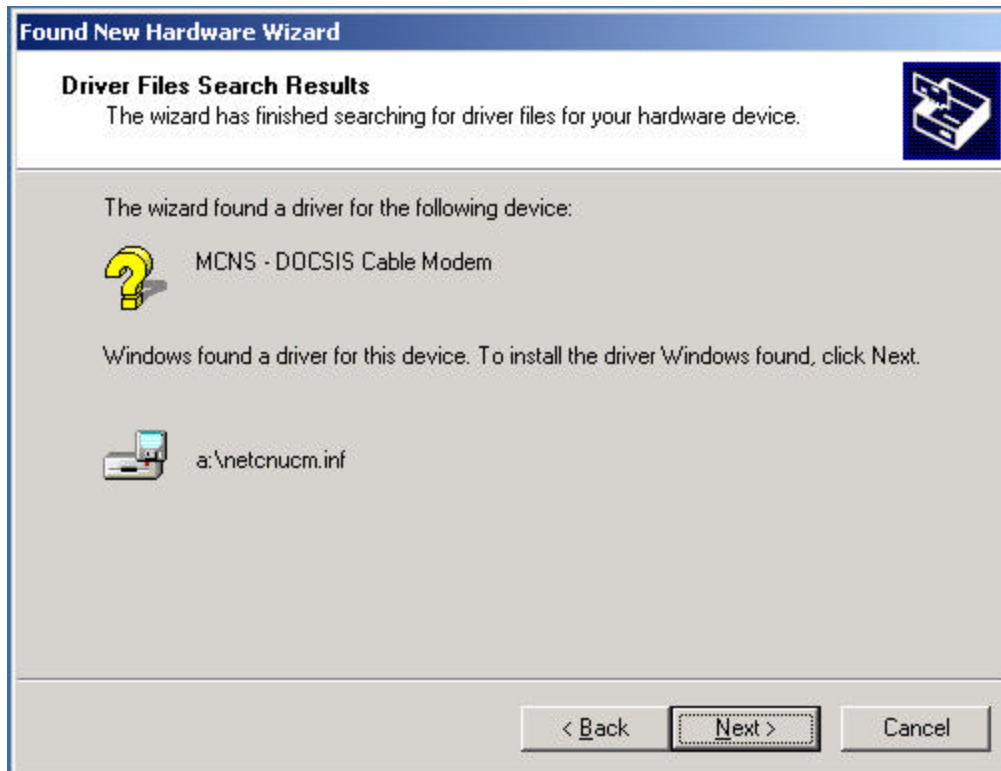1. Once the USB cable is connected to the USB interface, the following window will be displayed:
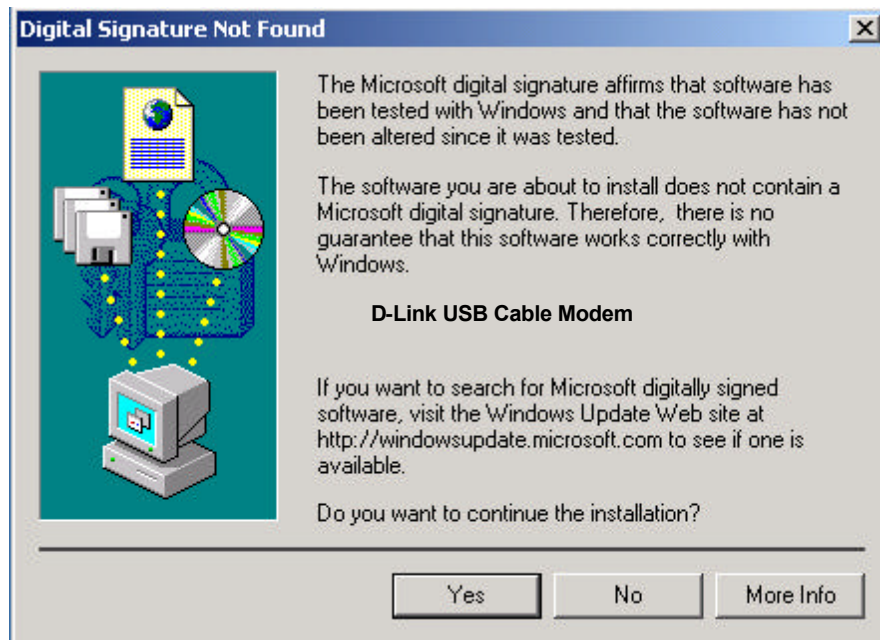

2. Select "**Automatic search for a better driver (Recommended)**." and then click **Next >**.

3. The following window will appear:
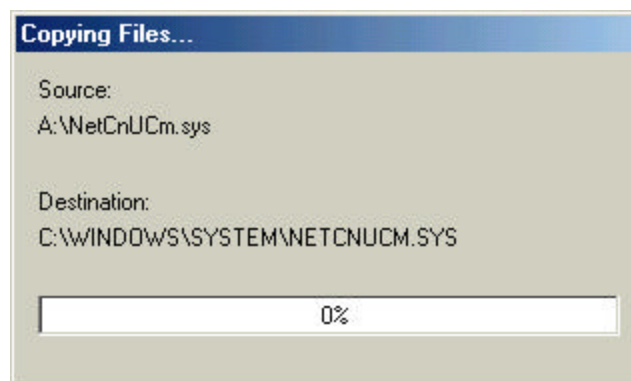
4. Once the necessary driver files have been copied, the following window will be displayed. In the event of a version conflict, we recommend keeping all previous versions.

5. Click **Finish** to complete the driver installation procedure. The DCM-200 is now installed.

6. Please note that before you can begin using the USB/Ethernet Cable Modem, you must reboot your PC.

Important Rules for Safe Operation

Your DCM-200 USB/Ethernet Cable Modem has been designed and manufactured to meet high standards of quality and safety. This section lists important information that will help assure your enjoyment and proper use of the cable modem and accessory equipment. Please read them carefully before operating and using your DCM-200.

♦ **Read and Follow Instructions** - Read all the operating instructions before operating the modem. Follow all operating instructions.

♦ **Ventilation** - Openings in the housing of your cable modem are necessary for ventilation to protect it from overheating. Do not block or cover these openings. Do not place this product in an enclosed area such as a bookcase, unless you can provide proper ventilation. Never place this product over or near a heat source such as a heat register, amplifier, steamer or stove.

♦ **Do Not Use Near Water** - Do not use this product near water-for example, near a bathtub, toilet or sink.

♦ **Placement** - Do not place this product on an unstable surface. The product may fall, causing serious injury to a child or adult, as well as serious damage to the product.

♦ **Disconnecting Cable** - Do not disconnect cable wire from your cable modem while the power to your modem is on.

♦ **Unplug Power Before Cleaning** - Do not use liquid cleaner or aerosol cleaner. Use a damp cloth for cleaning.

♦ **Keep Objects Out of Openings** - Never push objects of any kind into this product through openings, as they may touch dangerous voltage or cause unit to short circuit, which can result in a fire or electric shock. Never spill liquid on the product.

♦ **Protect From Lightning** - For added protection for this product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet, and disconnect the cable system. This will prevent damage to the product due to lightning and power line surges.

♦ **Do Not Remove Covers** - Do not attempt to service this product yourself, as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

Refer Servicing to Qualified Service Personnel Under the Conditions Listed Below:

♦ If the power cord or plug is damaged

♦ If liquid has been spilled or objects have fallen into the product

♦ If the product has been exposed to rain or water

♦ If the product does not operate normally by following the operating instructions

♦ If the product has been dropped or the product housing has been damaged

♦ If the product exhibits a distinct change in performance, such as the inability to perform basic functions

Troubleshooting

If your USB/Ethernet Cable Modem has been properly set up it is unlikely that you should experience any problems with it under normal circumstances. However, we list here some possible solutions to problems that you might experience.

Problem	Possible Solution
Cannot access Internet or e-mail service.	Check all connections. Make sure the cable TV line and either the USB cable or the Ethernet (RJ-45) cable are securely connected at all points. Make sure the AC power adapter is plugged into the device and the power source. Check the LED indicators to see that the **Power**, **Link** and **Status** indicators are steadily lit for an Ethernet-connected device, or the **Power** and **Status** indicators are steadily lit for a USB-connected device.
	Contact your cable service operator to verify that your account is up to date and that you have two-way service.
	There may be a problem with your NIC. Refer to the literature for the NIC to find a possible solution.
	The TCP/IP configuration for the computer may be incorrect. Double-check to see that these network settings comply with the instructions given by the cable service operator. Call your cable company to make they have given you the proper settings.
Status LED indicator blinks continuously.	Check the cable line connection. If this is secure then there may be a weak signal coming from the central office. Report the problem to your cable operator if the cable connection appears to be OK.
LED indicators appear to be normal but Internet access can not be established	Try to establish a new communication with your cable operator's central office. This can be accomplished by powering off the computer and turning it back on.
	The TCP/IP configuration for the computer may be incorrect.
The PC Link light is not green. The light is off.	The modem is not detecting the Network Interface Card. Make sure the cables are firmly attached to the network card in the back of your computer and the modem as well.
	Try replacing the Ethernet cable or the network card with known working components.
	Run diagnostic program that came with your network card.
	If this is a card that we support, troubleshoot the NIC. Otherwise, contact the organization that installed or manufacturers the card.
The power light is not on	Check to make sure the power cable is firmly plugged into the cable modem. Also, make sure that the power converter is plugged into a functional socket.
	Change outlets with one you know to have power.
	Replace Cable Modem.

Note: If your TV's picture quality is diminished when the USB/Ethernet Cable Modem is in operation, you may need to contact your Cable TV operator to obtain a High Pass Filter. This should be placed between the

splitter and the TV (or if you have a digital set-top box, between the splitter and the set-top box that precedes the TV).

Contacting Technical Support

D-Link provides free technical support for customers within the United States.

U.S. customers can contact D-Link technical support through our web site,

e-mail, or by phone.

United States technical support is available Monday through Friday from 6:00 a.m. to 6:00 p.m. (PST).

Web:

http://www.dlink.com

Email:

support@dlink.com

Phone:

949-788-0805 (option #4)

If you are a customer residing outside of the United States, please refer to the list of D-Link locations that is included in this manual.

Thank you for purchasing this product. We like to receive feedback from our customers concerning our products. Please take a moment to visit our web site. You can register your purchase on-line, learn more about the newest networking products, and let us know the things your new network has empowered you to do.

D-Link Offices

AUSTRALIA	**D-LINK AUSTRALIA** Unit 16, 390 Eastern Valley Way, Roseville, NSW 2069, Australia TEL: 61-2-9417-7100 FAX: 61-2-9417-1077 TOLL FREE: 1800-177-100 (Australia), 0800-900900 (New Zealand) URL: www.dlink.com.au E-MAIL: support@dlink.com.au, info@dlink.com.au
CANADA	**D-LINK CANADA** #2180 Winston Park Drive, Oakville, Ontario, L6H 5W1 Canada TEL: 1-905-829-5033 FAX: 1-905-829-5095 BBS: 1-965-279-8732 FREE CALL: 1-800-354-6522 URL: www.dlink.ca E-MAIL: techsup@dlink.ca FTP: ftp.dlinknet.com
CHILE	**D-LINK SOUTH AMERICA** Isidora Goyeechea 2934 of 702, Las Condes, Santiago – Chile S.A. TEL: 56-2-232-3185 FAX: 56-2-232-0923 URL: www.dlink.cl E-MAIL: ccasassu@dlink.cl, tsilva@dlink.cl
CHINA	**D-LINK CHINA** 2F., Sigma Building, 49 Zhichun Road, Haidian District, 100080 Beijing, China TEL: 86-10-88097777 FAX: 86-10-88096789 URL: www.dlink.com.cn
DENMARK	**D-LINK DENMARK** Naverland 2, DK-2600 Glostrup, Copenhagen, Denmark TEL:45-43-969040 FAX:45-43-424347 URL: www.dlink.dk E-MAIL: info@dlink.dk
EGYPT	**D-LINK MIDDLE EAST** 7 Assem Ebn Sabet Street, Heliopolis Cairo, Egypt TEL: 202-2456176 FAX: 202-2456192 URL: www.dlink-me.com E-MAIL: support@dlink-me.com, fateen@dlink-me.com
FRANCE	**D-LINK FRANCE** Le Florilege #2, Allee de la Fresnerie 78330 Fontenay le Fleury France TEL: 33-1-302-38688 FAX: 33-1-3023-8689 URL: www.dlink-france.fr E-MAIL: info@dlink-france.fr
GERMANY	**D-LINK Central Europe/D-Link Deutschland GmbH** Schwalbacher Strasse 74 D-65760 Eschborn, Germany TEL: 49-6196-77990 FAX: 49-6196-7799300 URL: www.dlink.de BBS: 49-(0)6192-971199 (Analog) 49-(0)6192-971198 (ISDN) INFO LINE: 00800-7250-0000 (toll free) HELP LINE: 00800-7250-4000 (toll free) REPAIR LINE: 00800-7250-8000 E-MAIL: info@dlink.de
INDIA	**D-LINK INDIA** Plot No.5, Kurla-Bandra Complex Road, Off Cst Road, Santacruz (E), Bombay - 400 098 India TEL: 91-22-652-6696 FAX: 91-22-652-8914 URL: www.dlink-india.com E-MAIL: service@dlink.india.com
ITALY	**D-LINK ITALIA** Via Nino Bonnet No. 6/b, 20154 Milano, Italy TEL: 39-02-2900-0676 FAX: 39-02-2900-1723 URL: www.dlink.it E-MAIL: info@dlink.it
JAPAN	**D-LINK JAPAN** 10F, 8-8-15 Nishi-Gotanda, Shinagawa-ku, Tokyo 141, Japan TEL: 81-3-5434-9678 FAX: 81-3-5434-9868 URL: www.d-link.co.jp E-MAIL: kida@d-link.co.jp
RUSSIA	**D-LINK RUSSIA** Michurinski Prospekt 49, 117607 Moscow, Russia TEL: 7-095-737-3389, 7-095-737-3492 FAX: 7-095-737-3390 URL: www.dlink.ru E-MAIL: vl@dlink.ru
SINGAPORE	**D-LINK INTERNATIONAL** 1 International Business Park, #03-12 The Synergy, Singapore 609917 TEL: 65-774-6233 FAX: 65-774-6322 URL: www.dlink-intl.com E-MAIL: info@dlink.com.sg
S. AFRICA	**D-LINK SOUTH AFRICA** 102-106 Witchhazel Avenue, Einetein Park 2, Block B, Highveld Technopark Centurion, South Africa TEL: 27(0)126652165 FAX: 27(0)126652186 URL: www.d-link.co.za E-MAIL: attie@d-link.co.za
SWEDEN	**D-LINK SWEDEN** P.O. Box 15036, S-167 15 Bromma Sweden TEL: 46-(0)8564-61900 FAX: 46-(0)8564-61901 E-MAIL: info@dlink.se URL: www.dlink.se
TAIWAN	**D-LINK TAIWAN** 2F, No. 119 Pao-Chung Road, Hsin-Tien, Taipei, Taiwan, TEL: 886-2-2910-2626 FAX: 886-2-2910-1515 URL: www.dlinktw.com.tw E-MAIL: dssqa@tsc.dlinktw.com.tw
U.K.	**D-LINK EUROPE** 4[h] Floor, Merit House, Edgware Road, Colindale, London, NW9 5AB, U.K. TEL: 44-20-8731-5555 FAX: 44-20-8731-5511 URL: www.dlink.co.uk E-MAIL: info@dlink.co.uk
U.S.A.	**D-LINK U.S.A.** 53 Discovery Drive, Irvine, CA 92618 USA TEL: 1-949-788-0805 FAX: 1-949-753-7033 INFO LINE: 1-800-326-1688 BBS: 1-949-455-1779, 1-949-455-9616 URL: www.dlink.com E-MAIL: tech@dlink.com, support@dlink.com

Specifications

Cable Network Subsystem

RF MAC Protocol:

MCNS/DOCSIS 1.0 Compliant

Security

RSA and MCNS 40/56 bit DES data encryption security

Downstream – Receiver

Demodulation — 64 QAM/256 QAM

Data Speed — 30.342Mbps (64 QAM)/42.88Mbps (256 QAM)

Frequency Range — 91 MHz – 857 MHz

Channel Bandwidth — 6 MHz

Receive Level — -15dBmV to +15dBmV

Upstream – Transmitter

Modulation — QPSK/16 QAM

Data Speed — 320K, 640K, 1280K, 2560K, 5120Kbps (QPSK)

640K, 1280K, 2560K, 5120K, 10240Kbps (16 QAM)

Frequency Range — 5 MHz to 42 MHz

Channel Bandwidth — 200K, 400K, 800K, 1.6M, 3.2M (Hz)

Transmission Level — +8 to +55dBmV (16 QAM)

+8 to +58dBmV (QPSK)

Error Correction — Reed-Solomon

Interface

CPE Interface — 10BASE-T Ethernet (RJ45)

RF Interface — F-Type Female 75 ohm connector

USB Interface — USB 1.1 compliant, Type B receptacle

LEDs

Power

Link

Act

Status

Power Supply

AC-to-DC power adapter (provided)

DC Input: 12VDC/1A

Power Consumption

12W (maximum)

Operating Temperature

32°- 104°F (0°- 40°C)

Operating Humidity

10% - 90%

Storage Temperature

-4°- 140°F (-20°- 60°C)

Dimensions

22 (W) x 174 (D) x 35 (H) mm

Weight

578 grams (1.271b)

EMI Certification

FCC Class B

CE Class B

C-Tic

LIMITED WARRANTY

D-Link provides this limited warranty for its product only to the person or entity who originally purchased the product from D-Link or its authorized reseller or distributor.

Limited Hardware Warranty: D-Link warrants that the hardware portion of the D-Link products described below ("Hardware") will be free from material defects in workmanship and materials from the date of original retail purchase of the Hardware, for the period set forth below applicable to the product type ("Warranty Period") if the Hardware is used and serviced in accordance with applicable documentation; provided that a completed Registration Card is returned to an Authorized D-Link Service Office within ninety (90) days after the date of original retail purchase of the Hardware. If a completed Registration Card is not received by an authorized D-Link Service Office within such ninety (90) period, then the Warranty Period shall be ninety (90) days from the date of purchase.

Product Type	*Warranty Period*
Product (excluding power supplies and fans)	One (1) Year
Power Supplies and Fans	One (1) Year
Spare parts and spare kits	Ninety (90) days

D-Link's sole obligation shall be to repair or replace the defective Hardware at no charge to the original owner. Such repair or replacement will be rendered by D-Link at an Authorized D-Link Service Office. The replacement Hardware need not be new or of an identical make, model or part; D-Link may in its discretion may replace the defective Hardware (or any part thereof) with any reconditioned product that D-Link reasonably determines is substantially equivalent (or superior) in all material respects to the defective Hardware. The Warranty Period shall extend for an additional ninety (90) days after any repaired or replaced Hardware is delivered. If a material defect is incapable of correction, or if D-Link determines in its sole discretion that it is not practical to repair or replace the defective Hardware, the price paid by the original purchaser for the defective Hardware will be refunded by D-Link upon return to D-Link of the defective Hardware. All Hardware (or part thereof) that is replaced by D-Link, or for which the purchase price is refunded, shall become the property of D-Link upon replacement or refund.

Limited Software Warranty: D-Link warrants that the software portion of the product ("Software") will substantially conform to D-Link's then current functional specifications for the Software, as set forth in the applicable documentation, from the date of original delivery of the Software for a period of ninety (90) days ("Warranty Period"), if the Software is properly installed on approved hardware and operated as contemplated in its documentation. D-Link further warrants that, during the Warranty Period, the magnetic media on which D-Link delivers the Software will be free of physical defects. D-Link's sole obligation shall be to replace the non-conforming Software (or defective media) with software that substantially conforms to D-Link's functional specifications for the Software. Except as otherwise agreed by D-Link in writing, the replacement Software is provided only to the original licensee, and is subject to the terms and conditions of the license granted by D-Link for the Software. The Warranty Period shall extend for an additional ninety (90) days after any replacement Software is delivered. If a material non-conformance is incapable of correction, or if D-Link determines in its sole discretion that it is not practical to replace the non-conforming Software, the price paid by the original licensee for the non-conforming Software will be refunded by D-Link; provided that the non-conforming Software (and all copies thereof) is first returned to D-Link. The license granted respecting any Software for which a refund is given automatically terminates.

What You Must Do For Warranty Service:

Registration Card. The Registration Card provided at the back of this manual must be completed and returned to an Authorized D-Link Service Office for each D-Link product within ninety (90) days after the product is purchased and/or licensed. The addresses/telephone/fax list of the nearest Authorized D-Link Service Office is provided in the back of this manual. FAILURE TO PROPERLY COMPLETE AND TIMELY RETURN THE REGISTRATION CARD MAY AFFECT THE WARRANTY FOR THIS PRODUCT.

Submitting A Claim. Any claim under this limited warranty must be submitted in writing before the end of the Warranty Period to an Authorized D-Link Service Office. The claim must include a written description of the Hardware defect or

Software nonconformance in sufficient detail to allow D-Link to confirm the same. The original product owner must obtain a Return Material Authorization (RMA) number from the Authorized D-Link Service Office and, if requested, provide written proof of purchase of the product (such as a copy of the dated purchase invoice for the product) before the warranty service is provided. After an RMA number is issued, the defective product must be packaged securely in the original or other suitable shipping package to ensure that it will not be damaged in transit, and the RMA number must be prominently marked on the outside of the package. The packaged product shall be insured and shipped to D-Link, 53 Discovery Drive, Irvine CA 92618, with all shipping costs prepaid. D-Link may reject or return any product that is not packaged and shipped in strict compliance with the foregoing requirements, or for which an RMA number is not visible from the outside of the package. The product owner agrees to pay D-Link's reasonable handling and return shipping charges for any product that is not packaged and shipped in accordance with the foregoing requirements, or that is determined by D-Link not to be defective or non-conforming.

What Is Not Covered:

This limited warranty provided by D-Link does not cover:

Products that have been subjected to abuse, accident, alteration, modification, tampering, negligence, misuse, faulty installation, lack of reasonable care, repair or service in any way that is not contemplated in the documentation for the product, or if the model or serial number has been altered, tampered with, defaced or removed;

Initial installation, installation and removal of the product for repair, and shipping costs;

Operational adjustments covered in the operating manual for the product, and normal maintenance;

Damage that occurs in shipment, due to act of God, failures due to power surge, and cosmetic damage; and

Any hardware, software, firmware or other products or services provided by anyone other than D-Link.

Disclaimer of Other Warranties: EXCEPT FOR THE LIMITED WARRANTY SPECIFIED HEREIN, THE PRODUCT IS PROVIDED "AS-IS" WITHOUT ANY WARRANTY OF ANY KIND INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT. IF ANY IMPLIED WARRANTY CANNOT BE DISCLAIMED IN ANY TERRITORY WHERE A PRODUCT IS SOLD, THE DURATION OF SUCH IMPLIED WARRANTY SHALL BE LIMITED TO NINETY (90) DAYS. EXCEPT AS EXPRESSLY COVERED UNDER THE LIMITED WARRANTY PROVIDED HEREIN, THE ENTIRE RISK AS TO THE QUALITY, SELECTION AND PERFORMANCE OF THE PRODUCT IS WITH THE PURCHASER OF THE PRODUCT.

Limitation of Liability: TO THE MAXIMUM EXTENT PERMITTED BY LAW, D-LINK IS NOT LIABLE UNDER ANY CONTRACT, NEGLIGENCE, STRICT LIABILITY OR OTHER LEGAL OR EQUITABLE THEORY FOR ANY LOSS OF USE OF THE PRODUCT, INCONVENIENCE OR DAMAGES OF ANY CHARACTER, WHETHER DIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL (INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF GOODWILL, WORK STOPPAGE, COMPUTER FAILURE OR MALFUNCTION, LOSS OF INFORMATION OR DATA CONTAINED IN, STORED ON, OR INTEGRATED WITH ANY PRODUCT RETURNED TO D-LINK FOR WARRANTY SERVICE) RESULTING FROM THE USE OF THE PRODUCT, RELATING TO WARRANTY SERVICE, OR ARISING OUT OF ANY BREACH OF THIS LIMITED WARRANTY, EVEN IF D-LINK HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. THE SOLE REMEDY FOR A BREACH OF THE FOREGOING LIMITED WARRANTY IS REPAIR, REPLACEMENT OR REFUND OF THE DEFECTIVE OR NON-CONFORMING PRODUCT.

GOVERNING LAW: This Limited Warranty shall be governed by the laws of the state of California.

Some states do not allow exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the foregoing limitations and exclusions may not apply. This limited warranty provides specific legal rights and the product owner may also have other rights which vary from state to state.

Trademarks

Copyright Statement

FCC 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 this 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 that to which the receiver is connected.
-Consult the dealer or an experienced radio/ TV technician for help.

CE Mark Warning

This is a Class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

Warnung!

Dies ist in Produkt der Klasse B. Im Wohnbereich kann dieses Produkt Funkstoerungen verursachen. In diesem Fall kann vom Benutzer verlangt werden, angemessene Massnahmen zu ergreifen.

Advertencia de Marca de la CE

Este es un producto de Clase B. En un entorno doméstico, puede causar interferencias de radio, en cuyo case, puede requerirse al usuario para que adopte las medidas adecuadas.

Attention!

Ceci est un produit de classe B. Dans un environnement domestique, ce produit pourrait causer des interférences radio, auquel cas l`utilisateur devrait prendre les mesures adéquates.

Attenzione!

VCCI Warning

この装置は、情報処理装置等電波障害自主規制協議会（ＶＣＣＩ）の基準に基づくクラスＢ情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。
取扱説明書に従って正しい取り扱いをして下さい。

Registration Card

Print, type or use block letters.

Your name: Mr./Ms _____

Organization: _____Dept. _____

Your title at organization:_____

Telephone:_____ Fax:_____

Organization's full address: _____

_____ _____

Country:_____ _____

Date of purchase (Month/Day/Year):_____

Product Model	Product Serial No.	* Product installed in type of computer (e.g., Compaq 486)	* Product installed in computer serial No.

(* Applies to adapters only)

Product was purchased from:

Reseller's name:_____

Telephone:_____ Fax:_____

Reseller's full address:_____

_____

_____

Answers to the following questions help us to support your product:

1.Where and how will the product primarily be used?

☐Home ☐Office ☐Travel ☐Company Business ☐Home Business ☐Personal Use

2. How many employees work at installation site?

☐1 employee ☐2-9 ☐10-49 ☐50-99 ☐100-499 ☐500-999 ☐1000 or more

3. What network protocol(s) does your organization use?

☐XNS/IPX ☐TCP/IP ☐DECnet ☐Others_____

4. What network operating system(s) does your organization use?

☐D-Link LANsmart ☐Novell NetWare ☐NetWare Lite ☐SCO Unix/Xenix ☐PC NFS ☐3Com 3+Open

☐Banyan Vines ☐DECnet Pathwork Windows NT   Windows NTAS   Windows '95

Others_____

5. What network management program does your organization use?

D-View   HP OpenView/Windows   OpenView/Unix   SunNet Manager Novell NMS

NetView 6000 Others_____

6. What network medium/media does your organization use ?

Fiber-optics   Thick coax Ethernet   Thin coax Ethernet   10BASE-T UTP/STP

100BASE-TX   100BASE-T4   100VGAnyLAN   Others_____

7. What applications are used on your network?

Desktop publishing   Spreadsheet   Word processing   CAD/CAM

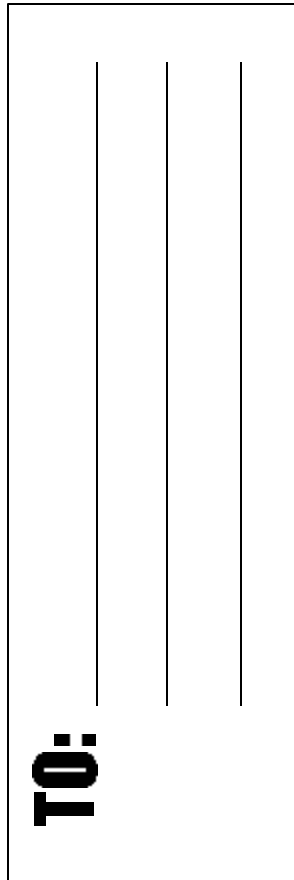Database management   Accounting   Others_____

8. What category best describes your company?

Aerospace   Engineering   Education   Finance   Hospital   Legal   Insurance/Real Estate   Manufacturing

Retail/Chainstore/Wholesale   Government   Transportation/Utilities/Communication   VAR

System house/company   Other_____

9. Would you recommend your D-Link product to a friend?

Yes   No   Don't know yet

10.Your comments regarding this product?

PLEASE
PLACE STAMP
HERE

TO:

D-Link ®