

DSL-100D ADSL PCI Modem User's Guide

First Edition Version 2 (February 2001)

6DSL100D..02

Trademarks

Copyright ©2000 D-Link Corporation.

Contents subject to change without prior notice.

D-Link is a registered trademark of D-Link Corporation/D-Link Systems, Inc.

All other trademarks belong to their respective proprietors.

Copyright Statement

No part of this publication may be reproduced in any form or by any means or used to make any derivative such as translation, transformation, or adaptation without permission from D-Link Corporation/D-Link Systems Inc., as stipulated by the United States Copyright Act of 1976

FCC Warning

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 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 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 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.

VCCI Class B 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。

BSMI Warning

警告使用者 這是甲類的資訊產品,在居住的環境中使用時,可能會造成射頻干擾,在這種情況下使用者會被要求採取某些適當的對策.

Limited Warranty

Hardware:

D-LINK WARRANTS EACH OF ITS HARDWARE PRODUCTS TO BE FREE FROM DEFECTS IN WORKMANSHIP AND MATERIALS UNDER NORMAL USE AND SERVICE FOR A PERIOD COMMENCING ON THE DATE OF PURCHASE FROM D-LINK OR ITS AUTHORIZED RESELLER AND EXTENDING FOR THE LENGTH OF TIME STIPULATED BY THE AUTHORIZED RESELLER OR D-LINK BRANCH OFFICE NEAREST TO THE PLACE OF PURCHASE.

THIS WARRANTY APPLIES ON THE CONDITION THAT THE PRODUCT REGISTRATION CARD IS FILLED OUT AND RETURNED TO A D-LINK OFFICE WITHIN NINETY (90) DAYS OF PURCHASE. A LIST OF D-LINK OFFICES IS PROVIDED AT THE BACK OF THIS MANUAL, TOGETHER WITH A COPY OF THE REGISTRATION CARD.

IF THE PRODUCT PROVES DEFECTIVE WITHIN THE APPLICABLE WARRANTY PERIOD, D-LINK WILL PROVIDE REPAIR OR REPLACEMENT OF THE PRODUCT. D-LINK SHALL HAVE THE SOLE DISCRETION WHETHER TO REPAIR OR REPLACE, AND REPLACEMENT PRODUCT MAY BE NEW OR RECONDITIONED. REPLACEMENT PRODUCT SHALL BE OF EQUIVALENT OR BETTER SPECIFICATIONS, RELATIVE TO THE DEFECTIVE PRODUCT, BUT NEED NOT BE IDENTICAL. ANY PRODUCT OR PART REPAIRED BY D-LINK PURSUANT TO THIS WARRANTY SHALL HAVE A WARRANTY PERIOD OF NOT LESS THAN 90 DAYS, FROM DATE OF SUCH REPAIR, IRRESPECTIVE OF ANY EARLIER EXPIRATION OF ORIGINAL WARRANTY PERIOD. WHEN D-LINK PROVIDES REPLACEMENT, THEN THE DEFECTIVE PRODUCT BECOMES THE PROPERTY OF D-LINK.

WARRANTY SERVICE MAY BE OBTAINED BY CONTACTING A D-LINK OFFICE WITHIN THE APPLICABLE WARRANTY PERIOD, AND REQUESTING A RETURN MATERIAL AUTHORIZATION (RMA) NUMBER. IF A REGISTRATION CARD FOR THE PRODUCT IN QUESTION HAS NOT BEEN RETURNED TO D-LINK, THEN A PROOF OF PURCHASE (SUCH AS A COPY OF THE DATED PURCHASE INVOICE) MUST BE PROVIDED. IF PURCHASER'S CIRCUMSTANCES REQUIRE SPECIAL HANDLING OF WARRANTY CORRECTION, THEN AT THE TIME OF REQUESTING RMA NUMBER, PURCHASER MAY ALSO PROPOSE SPECIAL PROCEDURE AS MAY BE SUITABLE TO THE CASE.

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 PACKAGE MUST BE MAILED OR OTHERWISE SHIPPED TO D-LINK WITH ALL COSTS OF MAILING/SHIPPING/INSURANCE PREPAID. D-LINK SHALL NEVER BE RESPONSIBLE FOR ANY SOFTWARE, FIRMWARE, INFORMATION, OR MEMORY DATA OF PURCHASER CONTAINED IN, STORED ON, OR INTEGRATED WITH ANY PRODUCT RETURNED TO D-LINK PURSUANT TO THIS WARRANTY.

ANY PACKAGE RETURNED TO D-LINK WITHOUT AN RMA NUMBER WILL BE REJECTED AND SHIPPED BACK TO PURCHASER AT PURCHASER'S EXPENSE, AND D-LINK RESERVES THE RIGHT IN SUCH A CASE TO LEVY A REASONABLE HANDLING CHARGE IN ADDITION MAILING OR SHIPPING COSTS.

Software:

WARRANTY SERVICE FOR SOFTWARE PRODUCTS MAY BE OBTAINED BY CONTACTING A D-LINK OFFICE WITHIN THE APPLICABLE WARRANTY PERIOD. A LIST OF D-LINK OFFICES IS PROVIDED AT THE BACK OF THIS MANUAL, TOGETHER WITH A COPY OF THE REGISTRATION CARD. IF A REGISTRATION CARD FOR THE PRODUCT IN QUESTION HAS NOT BEEN RETURNED TO A D-LINK OFFICE, THEN A PROOF OF PURCHASE (SUCH AS A COPY OF THE DATED PURCHASE INVOICE) MUST BE PROVIDED WHEN REQUESTING WARRANTY SERVICE. THE TERM "PURCHASE" IN THIS SOFTWARE WARRANTY REFERS TO THE PURCHASE TRANSACTION AND RESULTING LICENSE TO USE SUCH SOFTWARE.

D-LINK WARRANTS THAT ITS SOFTWARE PRODUCTS WILL PERFORM IN SUBSTANTIAL CONFORMANCE WITH THE APPLICABLE PRODUCT DOCUMENTATION PROVIDED BY D-LINK WITH SUCH SOFTWARE PRODUCT, FOR A PERIOD OF NINETY (90) DAYS FROM THE DATE OF PURCHASE FROM D-LINK OR ITS AUTHORIZED RESELLER. D-LINK WARRANTS THE MAGNETIC MEDIA, ON WHICH D-LINK PROVIDES ITS SOFTWARE PRODUCT, AGAINST FAILURE DURING THE SAME WARRANTY PERIOD. THIS WARRANTY APPLIES TO PURCHASED SOFTWARE, AND TO REPLACEMENT SOFTWARE PROVIDED BY D-LINK PURSUANT TO THIS WARRANTY, BUT SHALL NOT APPLY TO ANY UPDATE OR REPLACEMENT WHICH MAY BE PROVIDED FOR DOWNLOAD VIA THE INTERNET, OR TO ANY UPDATE WHICH MAY OTHERWISE BE PROVIDED FREE OF CHARGE.

D-LINK'S SOLE OBLIGATION UNDER THIS SOFTWARE WARRANTY SHALL BE TO REPLACE ANY DEFECTIVE SOFTWARE PRODUCT WITH PRODUCT WHICH SUBSTANTIALLY CONFORMS TO D-LINK'S APPLICABLE PRODUCT DOCUMENTATION. PURCHASER ASSUMES RESPONSIBILITY FOR THE SELECTION OF APPROPRIATE APPLICATION AND

SYSTEM/PLATFORM SOFTWARE AND ASSOCIATED REFERENCE MATERIALS. D-LINK MAKES NO WARRANTY THAT ITS SOFTWARE PRODUCTS WILL WORK IN COMBINATION WITH ANY HARDWARE, OR ANY APPLICATION OR SYSTEM/PLATFORM SOFTWARE PRODUCT PROVIDED BY ANY THIRD PARTY, EXCEPTING ONLY SUCH PRODUCTS AS ARE EXPRESSLY REPRESENTED, IN D-LINK'S APPLICABLE PRODUCT DOCUMENTATION AS BEING COMPATIBLE. D-LINK'S OBLIGATION UNDER THIS WARRANTY SHALL BE A REASONABLE EFFORT TO PROVIDE COMPATIBILITY, BUT D-LINK SHALL HAVE NO OBLIGATION TO PROVIDE COMPATIBILITY WHEN THERE IS FAULT IN THE THIRD-PARTY HARDWARE OR SOFTWARE. D-LINK MAKES NO WARRANTY THAT OPERATION OF ITS SOFTWARE PRODUCTS WILL BE UNINTERRUPTED OR ABSOLUTELY ERROR-FREE, AND NO WARRANTY THAT ALL DEFECTS IN THE SOFTWARE PRODUCT, WITHIN OR WITHOUT THE SCOPE OF D-LINK'S APPLICABLE PRODUCT DOCUMENTATION, WILL BE CORRECTED.

Warranty Period

FOR WARRANTY IN YOUR REGION, PLEASE CHECK WITH YOUR LOCAL D-LINK OFFICE AND AUTHORIZED AGENTS AS WARRANTY PERIODS MAY VARY FROM REGION TO REGION.

THE WARRANTY FOR POWER SUPPLIES AND POWER ADAPTERS IS ONE YEAR.

D-Link Offices for Registration and Warranty Service

THE PRODUCT'S REGISTRATION CARD, PROVIDED AT THE BACK OF THIS MANUAL, MUST BE SENT TO A D-LINK OFFICE. TO OBTAIN AN RMA NUMBER FOR WARRANTY SERVICE AS TO A HARDWARE PRODUCT, OR TO OBTAIN WARRANTY SERVICE AS TO A SOFTWARE PRODUCT, CONTACT THE D-LINK OFFICE NEAREST YOU. AN ADDRESS/TELEPHONE/FAX/E-MAIL/WEB SITE LIST OF D-LINK OFFICES IS PROVIDED IN THE BACK OF THIS MANUAL.

LIMITATION OF WARRANTIES

IF THE D-LINK PRODUCT DOES NOT OPERATE AS WARRANTED ABOVE, THE CUSTOMER'S SOLE REMEDY SHALL BE, AT D-LINK'S OPTION, REPAIR OR REPLACEMENT. THE FOREGOING WARRANTIES AND REMEDIES ARE EXCLUSIVE AND ARE IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, EITHER IN FACT OR BY OPERATION OF LAW, STATUTORY OR OTHERWISE, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. D-LINK NEITHER ASSUMES NOR AUTHORIZES ANY OTHER PERSON TO ASSUME FOR IT ANY OTHER LIABILITY IN CONNECTION WITH THE SALE, INSTALLATION MAINTENANCE OR USE OF D-LINK'S PRODUCTS

D-LINK SHALL NOT BE LIABLE UNDER THIS WARRANTY IF ITS TESTING AND EXAMINATION DISCLOSE THAT THE ALLEGED DEFECT IN THE PRODUCT DOES NOT EXIST OR WAS CAUSED BY THE CUSTOMER'S OR ANY THIRD PERSON'S MISUSE, NEGLECT, IMPROPER INSTALLATION OR TESTING, UNAUTHORIZED ATTEMPTS TO REPAIR, OR ANY OTHER CAUSE BEYOND THE RANGE OF THE INTENDED USE, OR BY ACCIDENT, FIRE, LIGHTNING OR OTHER HAZARD.

LIMITATION OF LIABILITY

IN NO EVENT WILL D-LINK BE LIABLE FOR ANY DAMAGES, INCLUDING LOSS OF DATA, LOSS OF PROFITS, COST OF COVER OR OTHER INCIDENTAL, CONSEQUENTIAL OR INDIRECT DAMAGES ARISING OUT THE INSTALLATION, MAINTENANCE, USE, PERFORMANCE, FAILURE OR INTERRUPTION OF A D- LINK PRODUCT, HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY. THIS LIMITATION WILL APPLY EVEN IF D-LINK HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

IF YOU PURCHASED A D-LINK PRODUCT IN THE UNITED STATES, SOME STATES DO NOT ALLOW THE LIMITATION OR EXCLUSION OF LIABILITY FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

TABLE OF CONTENTS

ABOUT THIS GUIDE	II
Purpose	II
BEFORE YOU BEGIN	II
INTRODUCTION	1
Features	1
System Requirements	
Operating Systems:	
GATHER INFORMATION	2
Determine Your Operating System	
Internet Service Protocol	
Connection Address and Configuration	
Configuration Form	4
STEP 1	5
HARDWARE INSTALLATION	5
STEP 2	6
SOFTWARE INSTALLATION AND CONFIGURATION	6
INSTALL SOFTWARE DRIVER	6
Windows 98/98SE Driver Installation	7
Windows 95 Driver Installation	
Windows 2000 Driver Installation	
Windows ME Driver Installation	
Windows NT 4.0 Driver Installation	
CONFIGURE MODEM	
Configure Modem for Windows 95/98/98SE, Windows ME and Windows NT 4.0	
STEP 3	
CONNECT TO INTERNET	
RFC 2364 PPPoA Users	
FOR RFC 1483 AND RFC 1577 USERS	
Windows 95 and Windows 98 (RFC 1483/RFC 1577)	
Windows 2000 (RFC 1483/RFC 1577)	
MODEM INDICATORS	
DIAGNOSTIC ICON FUNCTION	
LED Indicators	
UNINSTALL THE MODEM	
TECHNICAL SPECIFICATIONS	4
TECHNICAL CURRORT	1

About This Guide

Congratulations on your purchase of the ADSL PCI Modem Card for Windows® 95, 98, 2000 Me and NT 4.0. This internal modem card connects to a telephone line using a standard RJ-11 connector and follows all the latest PC industry guidelines, including Plug and Play.

Purpose

The purpose of this manual is to discuss the installation and use of your ADSL PCI Modem Card.

Before you Begin

This manual has all the information you need to install and configure the PCI Modem card and it will walk you through the steps. However, it is very important that you follow each step and gather the information you will need before you begin. This will make the installation smoother and easier. Be sure to read each instruction before you begin.

Introduction

This section describes the ADSL PCI modem card, its features, and system requirements.

Features

The ADSL PCI Modem Card is an internal PCI device designed for use with Windows 95, 98, 2000, Me and NT 4.0. This modem card connects to an ADSL/telephone line using a standard RJ-11 connector and follows all the latest PC industry guidelines, including Plug 'n Play. For added convenience, an additional RJ-11 receptacle provides an outlet for a standard telephone or fax machine. To insure interoperability with service provider DSL systems your ADSL modem card supports DMT (Discrete Multi-Tone) modulation.

Performance features:

- Remote bridging with RFC 1483 encapsulation, both LLC-SNAP and VC multiplexing options
- Classical IP over ATM per RFC 1577
- PPP (Point-to-Point Protocol) over ATM per RFC 2364
- Full LCP: NBCP, IPCP, and IPXCP
- Authentication: PAP, CHAP, SPAP, and Microsoft(r) password encryption extensions
- TAPI style interface
- Van Jacobsen IP header compression
- Software frame compression LED indicators:
 - Link indicates a valid ADSL connection
 - Data indicates data is currently being transferred via the ADSL connection

System Requirements

D-Link recommends that your PC system meet the following minimum requirements to be able to use the ADSL PCI Modem Card:

- An IBM PC or compatible computer with a Pentium 100Mhz or faster processor
- 30 megabytes of free hard disk space
- 32 megabytes or more of main memory (RAM)
- A 8x or faster CD-ROM drive
- Microsoft Windows 95, 95 OSR2, 98, 98 second edition, 2000, Windows Millennium Edition or NT 4.x (Service Pack 3 or above)

Operating Systems:

- Windows 95, 95 OSR2
- Windows 98, 98 second edition
- Windows 2000
- Windows Me
- Windows NT 4.0

NOTE: You will need the original Windows operating system installation CD-ROM to complete the installation.

The installation procedure varies according to the operating system you are using. It is critical that you use the correct installation procedure for your operating system.

Gather Information

To make connecting and configuring your modem as easy and straightforward as possible, gather the information listed on the form that follows. Fill out the appropriate sections of the form for your operating system and ISP. Refer to the information during the installation and store the form in case you need to update the information at a later date.

If you are using Windows 95, you must upgrade your Dial-Up Networking (DUN) application to version 1.3 or above. Open the file "MSDUN13.EXE" located on the Driver CD. The Microsoft DUN is also available for download from Microsoft at www.microsoft.com.

Determine Your Operating System

You must use the correct installation procedure for your operating system. If you are not sure exactly which operating system you are using, follow the instructions and write down the information on the form provided.

Follow these steps to determine your operating system:

- 1. Go to the desktop. Right click on My Computer and select Properties.
- 2. Click on the General tab. The version number of your operating system is displayed. Refer to the table for more detailed information.

SYSTEM DESCRIPTION	VERSION	RELEASE NAME
Win 95A	4.00.950	Windows 95
Win 95B	4.00.950 B	Windows 95 OSR2
Win 98	4.10.1998	Windows 98
Win 98SE	4.10.2222 A	Windows 98 2 nd Edition
Win 2000	5.00.2195	Windows 2000
Win Me	4.90.3000	Windows Millennium Edition
Win NT	4.00.1381	Windows NT 4.0

Internet Service Protocol

Your Internet Service Provider (ISP) uses one of the protocols listed below. Look over the information provided by your ISP or call their technical support if you are not sure which protocol they are using.

- RFC 2364 Point-to-Point Protocol over ATM
- RFC 1483 Multi-protocol Encapsulation over ATM, a.k.a. "Bridged Ethernet"
- RFC 1577 Classical Internet Protocol over ATM

Connection Address and Configuration

You need to know the connection address and configuration information for your ISP.

Configuration Form

Before beginning the installation, photocopy or print this page and fill out the form provided. Refer to this form when you reach the Service Options panel and enter the proper configurations.

ADSL COMMUNICATION SETTINGS:			
Protocol:	RFC 1483 Multi-protocol Encapsulation over ATM		
	RFC 2364 Point-to-Point Protocol over ATM		
	RFC 1577 Classical Internet Protocol over ATM		
VPI value:			
VCI value:			
Framing: LLC/SNAP			
	VC MUX		
ADSL Mod	e: ANSI T1.413 Issue 2		
	ITU G.992.2 Annex A (G.lite)		
	ITU G.992.1 Annex A (G.dmt)		

NETWORK CONFIGURATION FOR RFC 1483 (MULTI-PROTOCOL ENCAPSULATION OVER ATM) AND RFC 1577 (CLASSICAL IP OVER ATM):
IP Address:
Subnet Mask:
Gateway:
DNS Host Name:
DNS Domain:
DNS Server:

ACCOUNT INFORMATION FOR RFC 2364 POINT-TO-POINT PROTOCOL OVER ATM
User Name:
Password:

Step 1

Hardware Installation

The card must be installed on the computer's mainboard. Since this is an electrical device, safety is important. First, properly shutdown the computer and unplug the computer's power cord. Touch an unpainted screw on the back of the power supply with the tip of your screwdriver to discharge any static electricity and prevent possible damage to the card and computer components. Open the computer's case.

Insert the card into an open PCI slot. Insert the card straight in and gently push straight down until it seats firmly and has good connection. Screw the bracket on the back of the card to the case so the card is firmly held in place.

Put the case back on the computer and plug the power cord back in. The physical installation of the card is now complete.

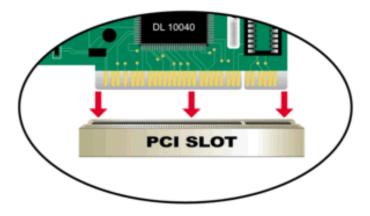


Figure 1: Insert the card into the PCI slot.

Step 2

Software Installation and Configuration

Windows automatically detects new hardware when it is added to the computer. The Add New Hardware Wizard appears to guide you through the Software Installation.

In order for the Modem to work you must configure it properly. The following sections show you the steps. You must enter the proper configurations for the DSLAM. You will enter one of the following:

- VPI
- VCI
- Framing Method
- ADSL Mode

The Digital Subscriber Line Access Multiplexer (DSLAM) is a machine at the phone company's central office that links many DSL connections to a single high speed Internet connection. Please refer to your DSL provider's documentation for information on the settings you should use. If you have questions about these settings, contact your DSL provider. Your DSL provider can tell you the specific configurations that you need.

Install Software Driver

For Windows 95, 98/98SE, 2000 and ME users, the device will be detected when you restart the PC. The Plug-and-Play installation will walk you through the entire process. Follow the installation steps in this guide for the operating system you are using. Windows NT 4.0 does not support the Plug-and-Play feature but you can use the step-by-step instructions in this installation guide.

The drivers for the device are specific to the Windows operating system with which they are used. The following table lists the names of the driver folders each operating system and protocol.

WINDOWS OS	RFC 1483 (MPoA)	RFC 1577 (IPoA)	RFC 2364 (PPPoA)
Win 95/95OSR2	1483W95	1577W95	2364W95
Win 98/98SE	1483W98	1577W98	2364W98
Win NT 4.0	1483NT4	1577NT4	2364NT4
Win 2000	1483W2K	1577W2K	2364W2K
Win Me	1483WME	1577WME	2364WME

Follow the instructions appropriate to your system after you have installed the PCI Modem and restarted the PC.

Windows 98/98SE Driver Installation

1. The **Add New Hardware Wizard** window automatically appears and indicates that the new PCI Network Controller (PCI Modem) has been found. Click **Next**.



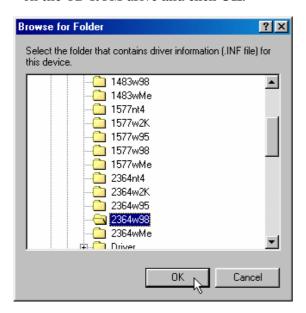
2. Still in the **Add New Hardware** window, you will be asked 'What do you want Windows to do?' Select 'Search for the best driver for your device,' then click **Next**.



- 3. Insert the driver CD.
- 4. Choose "Specify a location" and click Browse.



5. Find the folder 1483w98, 1577w98, or 2364w98 (according to the protocol used by your ISP) on the CD-ROM drive and click **OK**.



6. Again the **Add New Hardware Wizard** window appears indicating the location of the driver. Click **Next** to install the driver.



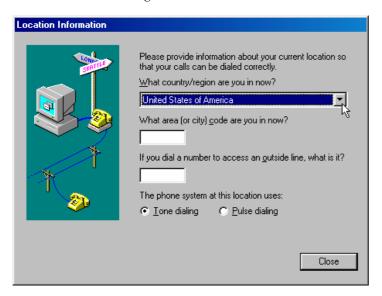
7. After the driver has finished installing, click Finish.



8. You must restart the computer to finish the installation. You can do that now if you wish.



9. If you install the RFC2364 (PPPoA) driver, after you restart, the **Location Information** window appears automatically. Choose the country and enter the area code where you are located. Click **Close** when you are finished. You next need to configure the device. Proceed to the section on Configuration.



Windows 95 Driver Installation

If you want to install the RFC2364 (PPPoA) driver, you must upgrade the Dial-Up Networking Application. The self-executing file is located on the Driver CD. The file name is 'MSDUN13.EXE'. Double-click on this file to update Dial-up Networking. You will be prompted to restart your computer after running the application.

1. The **Update Device Driver Wizard** prompts you to begin the installation of the PCI Network Controller (PCI Modem). Insert the driver CD and click **Next**.



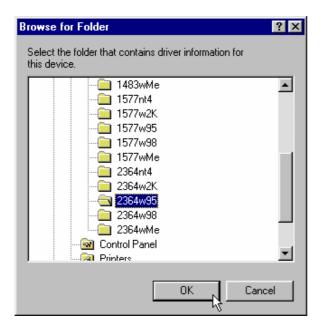
2. You will need to search for the driver. Click **Other Locations...** to continue.



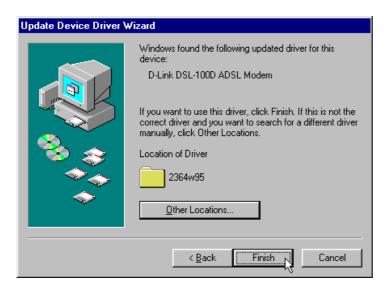
3. In the **Select Other Location** window, click **Browse** to search for the driver on your CD-ROM drive.



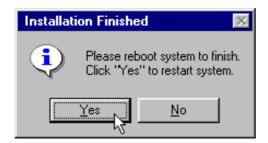
4. Find the folder 1483w95, 1577w95, or 2364w95 (according to the protocol used by your ISP) on the CD-ROM drive and click **OK**.



5. The driver is now ready to be installed. Click Finish to install it.



6. You must restart the computer to finish the installation. You can do that now if you wish. After you have restarted, you will next need to configure the device. Proceed to the section on Configuration.

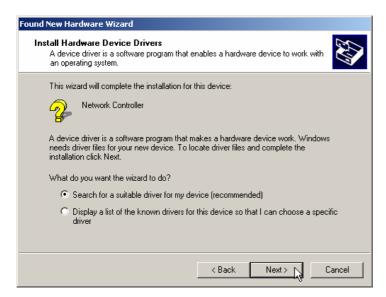


Windows 2000 Driver Installation

1. The Found New Hardware Wizard window automatically appears. Click Next.



2. The **Found New Hardware Wizard** explains that it can install the driver for the Network Controller (PCI Modem). Select "Search for a suitable driver..." and click **Next** to proceed.



3. You will be asked where you want the computer to search for the driver. Select the "Specify a location..." option. Insert the Driver CD and click **Next.**



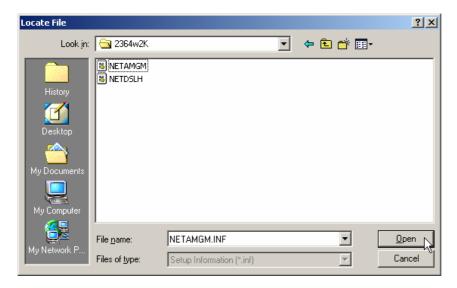
4. Click **Browse** to search the CD for the driver folder.



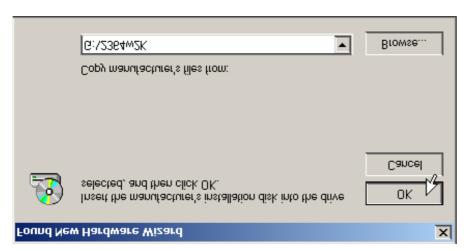
5. Find the folder 1483w2k, 1577w2k, or 2364w2k (according to the protocol used by your ISP) and double-click on it to open it. Or highlight it and click **Open**.



6. Click **Open** to proceed to the next window.



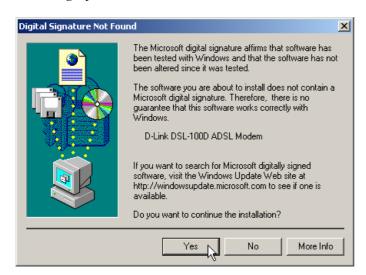
7. The driver folder location will now appear in the Found New Hardware Wizard window. Click \mathbf{OK} .



8. The driver is now ready to be installed. Check to be sure the driver file path is correct and click **Next**.



9. A warning appears telling you the Microsoft digital signature has not been found. D-Link has thoroughly tested the driver for Windows 2000. Click **Yes** to continue.



10. Windows has completed the driver installation. Click Finish and proceed to the Configuration section of this guide.



Windows ME Driver Installation

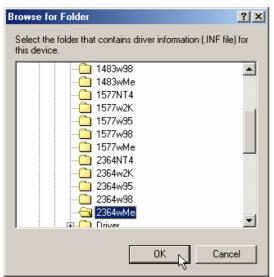
1. The **Add New Hardware Wizard** window automatically appears and indicates that the new PCI Network Controller (PCI Modem) has been found. Click **Next**. Insert the driver CD into the CD-ROM drive.



2. Still in the **Add New Hardware** window, select "Search for the best driver for the device option", then choose "Specify a location:" and click **Browse**.



3. Find the folder 1483wMe, 1577wMe, or 2364wMe (according to the protocol used by your ISP) and highlight it. Click **OK**.



4. The location of the driver is now listed. Click Next.



5. Again the **Add New Hardware Wizard** window appears indicating the location of the driver. Click **Next** to install the driver.



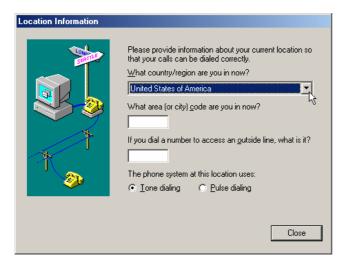
6. After the driver has finished installing, click Finish.



7. You must restart the computer to finish the installation. You can do that now if you wish.

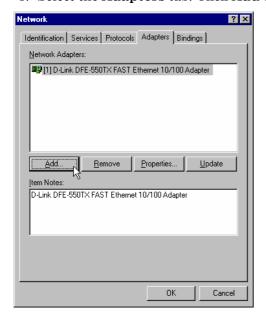


8. If you install the RFC2364 (PPPoA) driver, after you restart the **Location Information** window appears automatically. Choose the country and enter the area code where you are located. Click Close when you are finished. You next need to configure the device. Proceed to the section on Configuration.

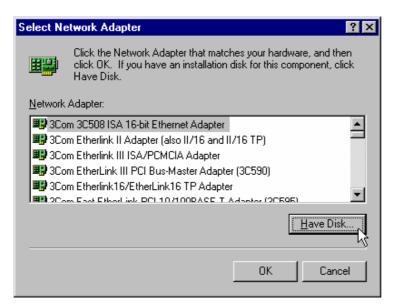


Windows NT 4.0 Driver Installation

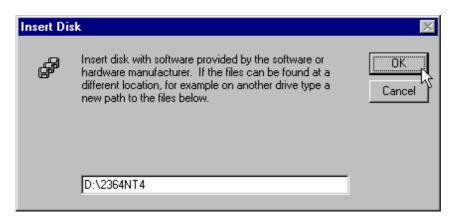
- 1. From the **Start** menu, go to **Settings** and open the **Control Panel** folder.
- 2. Double-click the **Network** icon.
- 3. Select the Adapters tab. Click Add to add the new hardware.



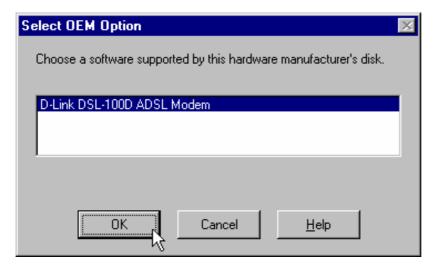
4. Click the **Have Disk** button to search for the driver.



5. Insert the driver CD and click **OK**. Assuming your CD-ROM drive is labeled the D drive you would type **D:**\1483NT4, **D:**\1577NT4 or **D:**\2364NT4 (according to the protocol used by your ISP) and click **OK**.



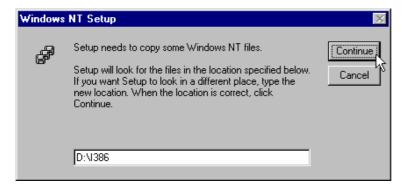
6. The **Select OEM Option** window appears. The DSL-100D ADSL Modem will be listed if you typed in the correct path in the previous window, click **OK**.



7. The **Setup Message** window tells you that Remote Access Services will be installed. Click **OK**



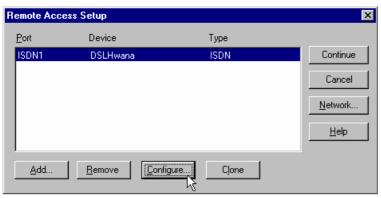
8. Replace the driver CD with the NT 4.0 CD. Type in the directory name and click **Continue**. For example, if your CD-ROM drive is labeled as the D drive, type 'D:\1386'.



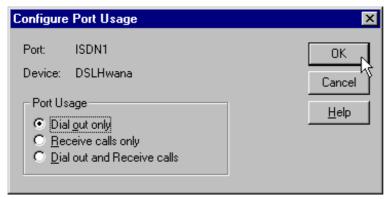
9. If you install the RFC2364 (PPPoA) driver, the **Add RAS Device** window will appear. The RAS Capable Device listed will be "ISDN1 – DSLHwana'. Click OK.



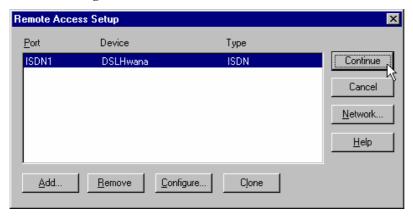
10. The Remote Access Setup window confirms your selection. Click Configure.



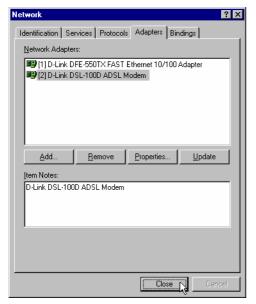
11. In the Configure Port Usage window, select 'Dial out only' and click OK.



12. You are again asked to confirm the selection. Click Continue.



13. Finally the **Network** window again appears. You will see the PCI Modem has been added to the list of network adapters. Click **Close**.



14. You need to restart the computer to save the settings changes, click Yes.



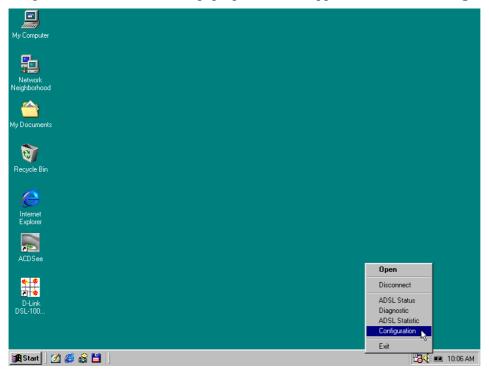
Configure Modem

The third step of the installation procedure is to configure the Modem. The configuration process is identical for all Windows operating systems except Windows 2000. This section describes both configuration processes.

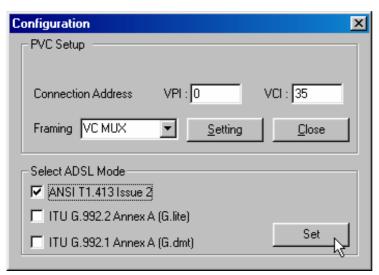
Configure Modem for Windows 95/98/98SE, Windows ME and Windows NT 4.0

Follow these steps to configure the Modem on a PC running Windows 95/98/98SE, Windows ME or Windows NT 4.0:

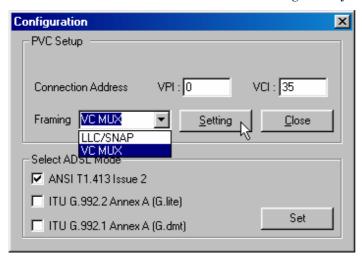
1. After you have installed the driver, a new icon will appear in the system tray of your PC display on the right side. This icon mirrors the LED indicators located on the PCI modem. Right-click on the icon and a pop-up menu will appear. Select the **Configuration** option.



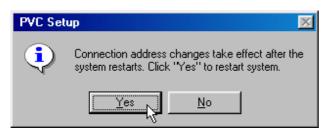
2. In the Configuration menu, you will need to choose the ADSL connection mode as instructed by your ADSL service provider. Select **ANSI T1.413 Issue 2**, **ITU G992.2 Annex A** (**G.lite**), or **ITU G992.2 Annex A** in the Select ADSL Mode field by checking the box to the left of the mode. If you are unsure which mode to select you can select all three, the correct one will be detected automatically. Click **Set** when finished.



3. In the same window, you must define the data framing method used in the Framing pull-down menu. If your ADSL service provider doesn't instruct you which framing method to use, choose VC MUX for RFC 2364 (PPPoA), LLC/SNAP for RFC 1483 (MPoA) and RFC 1577 (IPoA). You must also enter the VPI and VCI values assigned to you. Click **Setting** when finished.



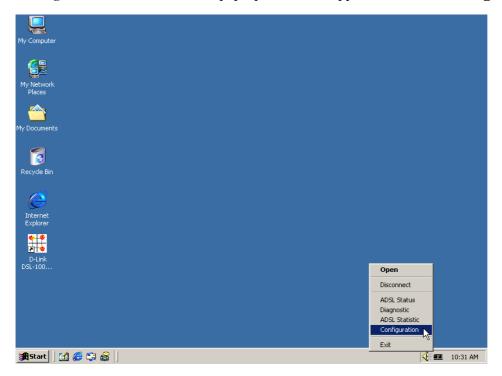
1. You must restart for the settings to take effect. Click Yes.



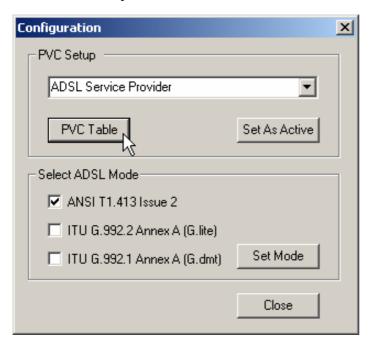
Configure Modem for Windows 2000

To configure the Modem for the Windows 2000 environment, follow these steps:

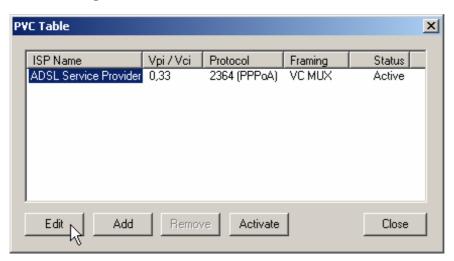
1. After you have installed the driver, a new icon will appear in the system tray of your PC display on the right side. This icon mirrors the LED indicators located on the PCI modem. Right-click on the icon and a pop-up menu will appear. Select the **Configuration** option.



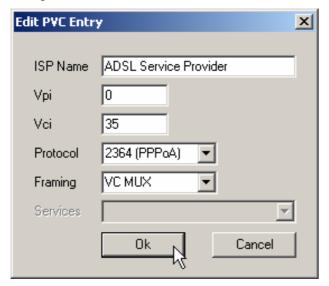
2. In the Configuration window you will see the name of your ADSL service provider listed in the PVC Setup field. Click the **PVC Table** button to view and edit the PVC settings.



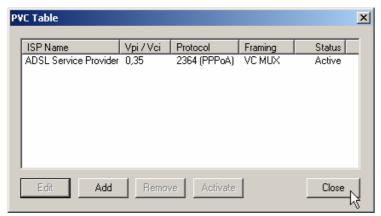
3. In the PVC Table window you will see your ADSL service provider listed as well as the default VPI/VCI settings, the ADSL protocol (RFC 2364 PPP over ATM), the framing method used (Virtual Circuit Multiplexing) and the status of the ADSL link (Active). Highlight the 'ADSL Service Provider' and click **Edit** or double-click the 'ADSL Service Provider' to change the settings.



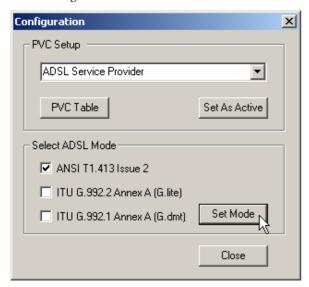
4. In the Edit PVC Entry window you can change the VPI, VCI values as well as the ADSL protocol used and the framing method. Choose the protocol and framing method according to the instructions provided by your ADSL service provider. If your ADSL service provider doesn't instruct you which framing method to use, choose VC MUX for RFC2364 (PPPoA), LLC/SNAP for RFC 1483 (MPoA) and RFC 1577 (IPoA). In addition to this information, your service provider should have assigned a VPI and VCI value to use for your connection. Enter those values here as well. Click **OK** when you are satisfied with the PVC settings you have specified.



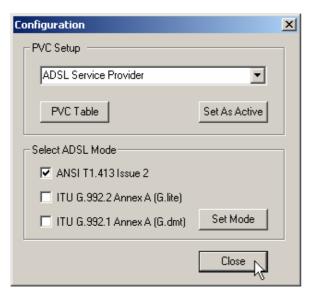
5. The PVC Table will again appear with a summary of the PVC settings. Check them again to be certain they are correct and click **Close** to exit this menu.



6. The Configuration window will appear one more time. Select the ADSL Mode according to the instruction of your ADSL service provider. If you are unsure which mode to select you can select all three, the correct one will be detected automatically. Click **Set Mode** to finalize this setting.



7. You may now close the Configuration window. Click Close to end the configuration process.



Step 3

Connect to Internet

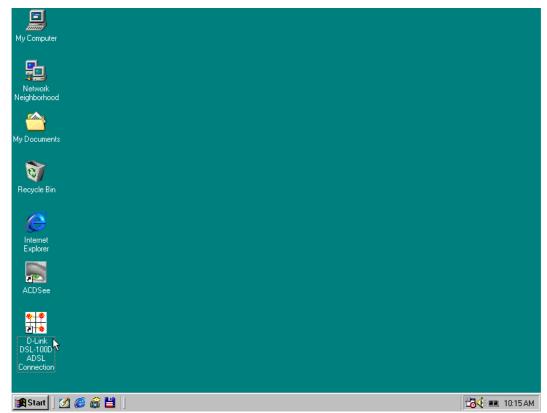
How you connect to the Internet using ADSL is effected by which protocol is used to establish that connection. The instructions here are given according to the connection method used. For ADSL connections using RFC 2364 (Point-to-Point Protocol over ATM), follow the instructions below.

The procedure for establishing Internet connection using RFC 1483 (Multi-protocol Encapsulation over ATM) and RFC 1577 (Classical IP over ATM) requires you to enter information given to you by your ISP or ADSL service provider. The procedures for the different Windows OS environments differ slightly and are presented in separate sections. Follow the instruction appropriate for your operating system.

RFC 2364 PPPoA Users

If you have configured the modem for the RFC 2364 PPPoA, the final step in the setup process is to establish the actual connection. The Modem uses the same system software as an analog modem to make the connection. However there is no actual dial-up. The ADSL connection is completely separate from regular voice telephone service.

 To complete the ADSL connection (using RFC 2364), double-click the DSL-100D ADSL Connection icon that now appears on your desktop.



2. You now need only to provide a **User Name** and **Password**, no other information is required. The sample window pictured below appears on a PC running Windows 95 or 98/98SE after you click on the icon.



- 3. Enter the User Name and Password here and click on **Connect**. You do not need to enter a phone number or in the case of Windows NT 4.0, you do not need to enter the domain information. Windows 2000 users will click on **Dial** to connect. Windows NT 4.0 users click on **OK** to connect.
- 4. A few seconds may be required for the negotiation phase of the connection procedure. Once the connection is established, a new window will confirm the connection.



5. Click on Close and you are done.

For RFC 1483 and RFC 1577 Users

If your ADSL connection uses either the RFC 1483 or the RFC 1577 protocol, you must set your own TCP/IP configuration. The following information should be provided by your ISP or ADSL service provider:

- ♦ IP Address,
- ♦ Subnet Mask,
- ♦ Gateway

- ♦ DNS Host Name
- ♦ DNS Domain
- ♦ DNS Server

Windows 95 and Windows 98 (RFC 1483/RFC 1577)

Follow these steps if you are using the RFC 1483 or RFC 1577 protocol on a computer running Windows 95 or Windows 98.

- 1. From the **Start** menu, select **Settings**, **Control Panel**, and then double-click on the **Network** icon.
- 2. The **Network** window appears. Select the **Configuration** tab, scroll down the installed network components list and click on **TCP/IP→ D-Link DSL-100D ADSL Modem**
- 3. Click the **Properties** button.
- 4. The TCP/IP Properties window will appear. Select the IP Address tab and then select the Select an IP address option. Enter the IP Address and Subnet Mask settings given to you by your ISP or ADSL service provider.
- 5. Select the Gateway tab and enter the IP settings in the New gateway field. Click Add.
- 6. Select the DNS Configuration tab. Select the Enable DNS option.
- 7. Type in your host name in the **Host:** field.
- 8. Type in your domain name in the **Domain:** field.
- 9. Enter the **DNS** settings in the **DNS** Server Search Order field and click Add. If you have more than one DNS IP address, repeat this step. You can have up to 3 DNS servers listed here.
- 10. After all the TCP/IP information has been entered, click **OK**.
- 11. The **Network** window again appears, click **OK**.
- 12. The **System Settings Change** window appears. You need to restart your computer for the changes to go into effect. Click **Yes**.

Windows 2000 (RFC 1483/RFC 1577)

- 1. Double-click on the My Computer icon, then the Control Panel icon, and then the Network and Dial-up Connections icon.
- 2. The Network and Dial-up Connections window appears. Right click on the Local Area Connection for the D-Link DSL-100D ADSL PCI Modem.
- 3. The Local Area Connection window appears. Click on Internet Protocol (TCP/IP), then click on Properties.
- 4. The Internet Protocol (TCP/IP) window appears. Under the General tab, select Use the following IP address. Enter the IP address, Subnet Mask, and Default Gateway given to you by your ISP or ADSL service provider. Click OK.
- 5. The General tab will again appear. Click OK.
- 6. The **Network and Dial-up Connection** window appears. Close this window to complete the connection.

Modem Indicators

Diagnostic Icon Function

Once you have installed the software driver a new **Diagnostic Tool** icon will appear in the lower right corner of your desktop in the system tray. This icon serves to help you monitor some of the characteristics of the ADSL connection. It can also be used to access the Configuration menu (see the next section). The table below summarizes the icon display function.

COLOR	STATUS DESCRIPTION
RED RED	No connection. Check your cable
BLACK YELLOW	Handshake process in progress
BLACK BLACK	Connection established, line is idle
BLACK GREEN	Connection established, data being received
GREEN BLACK	Connection established, data being transmitted
GREEN GREEN	Data being transmitted and received
Icon with 0 symbol	PCI Modem is disconnected or there is a problem with the driver

LED Indicators

There are two LED indicators on the PCI Modem. The **Link** indicator will light green when an ADSL link has been established. The **Act** indicator will blink green when there is activity on the ADSL line.

Uninstall the Modem

To uninstall this PCI ADSL Modem, follow these steps

- 1. Click on "Start",
- 2. Go to "Program",
- 3. Select "D-Link DSL-100D"
- 4. Click "Un-Installer" and follow the instructions when prompted

Appendix A

TECHNICAL SPECIFICATIONS

Interfaces: Edge connector for PCI bus; two RJ-11 jacks (ADSL connection and telephone connection).

Standards Compliance:

- ANSI T1.413 issue 2 (full-rate DMT over analog POTS)
- ITU G.992.1 (G.dmt)
- ITU G.992.2 (G.lite)

Data Rate:

DMT full rate: Downstream data rate to 8 Mbps, upstream data rate to 800 Kbps.

G.lite ADSL: Downstream data rate to 1.5 Mbps, upstream data rate to 800 Kbps.

Dimensions (H x W x D): 168.5 x 95 x 18 mm.

Operating temperature: 0° to 55° C.

Operating humidity: 5% to 95% (non-condensing).

EMI: CE class B, FCC class B

Safety: UL, CSA

Technical Support

Contact D-Link Technical Support at the phone numbers or Internet addresses listed below:

Technical Support: (949) 788-0805.

Web: www.dlink.com



AUSTRALIA D-LINK AUSTRALASIA

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: 1-905-829-5223 BBS: 1-965-279-8732

FREE CALL: 1-800-354-6522

URL: www.dlink.ca FTP: ftp.dlinknet.com E-MAIL: techsup@dlink.ca

CHILE D-LINK SOUTH AMERICA

Isidora Goyenechea #2934 of.702, Las Condes, Santiago, Chile

TEL: 56-2-232-3185 FAX: 56-2-2320923

URL: www.dlink.cl

E-MAIL: ccasassu@dlink.cl, tsilva@dlink.cl

DENMARK D-LINK DENMARK

Naverland 2, DK-2600 Glostrup, Copenhagen, Denmark

 $TEL: 45-43-969040 \qquad FAX: 45-43-424347$

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: 33-1-30238688 FAX: 33-1-3023-8689

URL: www.dlink-france.fr E-MAIL: info@dlink-france.fr

GERMANY D-LINK CENTRAL EUROPE/D-LINK DEUSTSCHLAND GMBH

Schwalbacher Strasse 74, 65760 Eschborn Germany TEL: 49-(0) 6196-7799-0 FAX: 49-(0) 6196-7799-300

URL: www.dlink.de

E-MAIL: mbischoff@dlink.de, mboerner@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 ITALY

Via Nino Bonnet No. 6/b, 20154 Milano, Italy

TEL: 39-02-2900-0676 FAX: 39-02-2900-1723 E-MAIL: info@dlink.it URL: www.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

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

Unit 2, Parkside 86 Oak Avenue

Highveld Technopark Centurion, Gauteng, Republic of South Africa

TEL: 27(0)126652165 FAX: 27(0)126652186

CELL NO: 0826010806 (Bertus Moller) CELL NO: 0826060013 (Attie Pienaar)

E-MAIL: bertus@d-link.co.za, 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

 $\begin{array}{lll} \hbox{D-Link (Europe) Ltd. $4^{\rm th}$ Floor Merit House,} \\ \hbox{Edgware Road, Colindale, London NW95AB U.K.} \\ \hbox{TEL: $44\text{-}20\text{-}8731\text{-}5555} & \hbox{FAX: $44\text{-}20\text{-}8731\text{-}5511} \end{array}$

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

 $E-MAIL: tech@dlink.com, \\ support@dlink.com$

Registration Card

Print, type or use block letters.					
Your name: Mr./Ms					
Organization:Dept Your title at organization:					
		Fax:			
Date of purch	ase (Month/Day/Year):				
Product	Product Serial No.	* Product installed in type of	* Product installed in computer serial No.		
Model		committee (o.e. Common 496)			
		computer (e.g., Compaq 486)			
(* Applies to a	adapters only)		<u></u>		
Product was p	purchased from:				
	me:				
		Fax:			
Reseller's full	address:				
Answers to t	he following questions help us t	o support your product:			
1. Where and	d how will the product primarily l	be used?			
		ess □Home Business □Personal Use			
_	employees work at installation				
	ee □2-9 □10-49 □50-99 □100-4 <i>ork protocol(s) does your organ</i>				
	□TCP/IP □DECnet □Others				
	vork operating system(s) does yo				
		/are Lite □SCO Unix/Xenix □PC NFS	3 □3Com 3+Open		
□Banyan \	/ines □DECnet Pathwork □Windo	ws NT □Windows NTAS □Windows '	95		
□Others					
5. What network management program does your organization use ?					
□D-View □HP OpenView/Windows □HP OpenView/Unix □SunNet Manager □Novell NMS					
□NetView 6000 □Others 6. What network medium/media does your organization use ?					
□Fiber-opti	ics □Thick coax Ethernet □Thin co	oax 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					
B. What category best describes your company?					
	□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □				
		□Transportation/Utilities/Communicat	ion □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 on this product?					
10. Four Comments on this product?					

