



***DSL-300***  
***ADSL Ethernet Modem***  
***User's Guide***

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## About This User's Guide

This user's guide provides instructions on how to install the DSL-300 ADSL Modem and use it to connect a PC or Ethernet LAN to the Internet or a remote LAN. For the sake of simplicity, this document uses the terms Modem (first letter upper case) to refer specifically to the DSL-300 ADSL Modem, and modem (first letter lower case) to refer to all such devices including the DSL-300.

This guide assumes that the reader has some familiarity with Ethernet networks, networking devices, and the TCP/IP suite of protocols.

### ***Before You Start***

For the smoothest possible installation process, please read and make sure you understand all the prerequisites for proper installation of your new Modem. Have all the necessary information and equipment on hand before you begin.

### **ADSL Service**

In order to use the Router you must first have ADSL service established with an ADSL service provider, usually your local telephone company, or an Internet service provider (ISP). Contact your local telephone company for information on the availability of ADSL service in your area.

### **Micro-filters**

Since ADSL and telephone services share the same copper wire to carry their respective signals, a filtering mechanism may be necessary to avoid mutual interference. You will need to install a micro-filter (low pass filter) device for each telephone that shares the line with the ADSL line. Micro-filters are easy to install in-line devices, which attach to the telephone cable between the telephone and wall jack. This device will not affect normal telephone services. Your telephone company or ADSL service provider will have more information regarding the use and installation of micro-filters.

### **VPI and VCI Settings**

Your ADSL service provider will provide two numbers, a Virtual Path Identifier (VPI) and a Virtual Channel Identifier (VCI). You will need to enter these two numbers during the configuration of the Router.

In order to ensure high quality of service and maximum performance, ADSL technology employs Asynchronous Transfer Mode (ATM) networks (via the DSLAM). ATM networks use Permanent Virtual Circuits (PVCs) to establish end-to-end software defined logical connections. The VPI and VCI are contained in the ATM cell header. These numbers help manage ATM network connections and identify logical links formed by PVCs.

For convenient reference, you may want to record the VPI and VCI numbers here, as well as the MAC (Physical) Address of the Modem.

## **Introduction**

ADSL technology is a relatively new technology and may be unfamiliar to the reader. In this section, we introduce you to ADSL technology and give a brief description of its key attributes. We also give a general description of the D-Link DSL-300 Modem and its main features.

### ***What is ADSL?***

Asymmetric Digital Subscriber Line (ADSL) is an access technology that utilizes ordinary copper telephone lines to enable broadband high-speed digital data transmission and interactive multimedia applications for business and residential customers. Using existing phone lines means there is no need to add expensive new fiber-optic cable or line conditioning.

ADSL modems greatly increase the signal carrying capacity of copper telephone lines without interfering with regular telephone services. For the ADSL user, this means much faster data communications and interactive multimedia capabilities. ADSL devices make it possible to enjoy benefits such as high-speed Internet access, telecommuting (remote LAN access), collaborative computing, distance learning, movies on demand and multiplayer video gaming without experiencing any loss of quality or disruption of voice/fax telephone capabilities.

ADSL provides a dedicated service over a single telephone line operating at speeds of up to 8 Mbps downstream and up to 640 Kbps upstream, depending on local telephone line conditions. These conditions are ideal for many user applications. A secure point-to-point connection is established between the user and the central office of the local telephone service provider. The user is always connected thus eliminating dial-up time and simplifying connectivity issues.

D-Link ADSL devices incorporate the recommendations of the ADSL Forum regarding framing, data format, and upper layer protocols.

## **Modem Description and Operation**

The DSL-300 ADSL Ethernet Modem is easy to install and use. The DSL-300 connects to an Ethernet LAN via a standard Ethernet 10BASE-T interface. Your ADSL connection is made using ordinary twisted-pair telephone line with standard RJ-11 connectors. Several PCs can be networked in an Ethernet LAN and connected to the Internet via the Modem.

## **Product Features**

The DSL-300 ADSL Ethernet Modem utilizes the latest ADSL enhancements and technologies to provide a reliable Internet portal suitable for most small to medium sized offices.

### **G.hs (Auto-handshake)**

This feature allows the Modem to use either the G.lite, G.dmt or ANSI T1.413 (Issue 2) ADSL connection standards.

### **High Performance**

Very high data transfer rates can be realized with the Modem. Up to 8 Mbps downstream bit rate using the G.dmt.

### **Ethernet Ready**

The Modem connects to your Ethernet LAN via a standard 10BASE-T Ethernet port.

### **ATM (Asynchronous Transfer Mode)**

The DSL-300 supports *Bridged Ethernet over ATM* (RFC 1483).

### **Precise ATM Traffic Shaping**

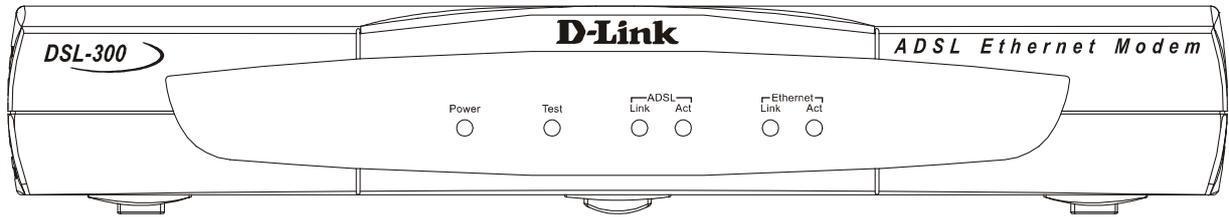
Traffic shaping is a method of controlling the flow rate of ATM data cells used to establish the Quality of Service (QoS) on an ATM network.

### **Easy Installation**

The DSL-300 uses a Windows® based graphical user interface (GUI) for easy installation and management.

## Front Panel

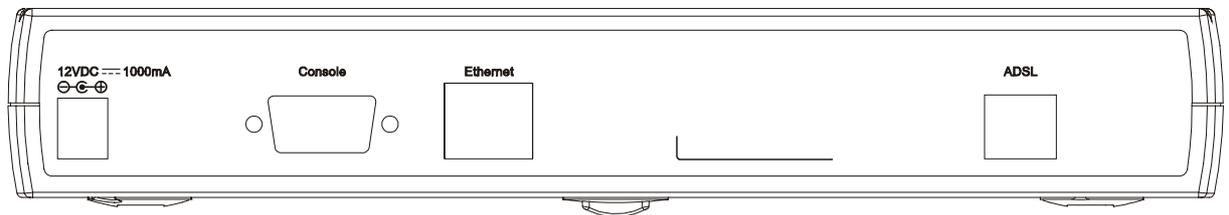
Place the Modem in a location that allows a view of the LED indicators shown in the front panel diagram below.



**Front Panel**

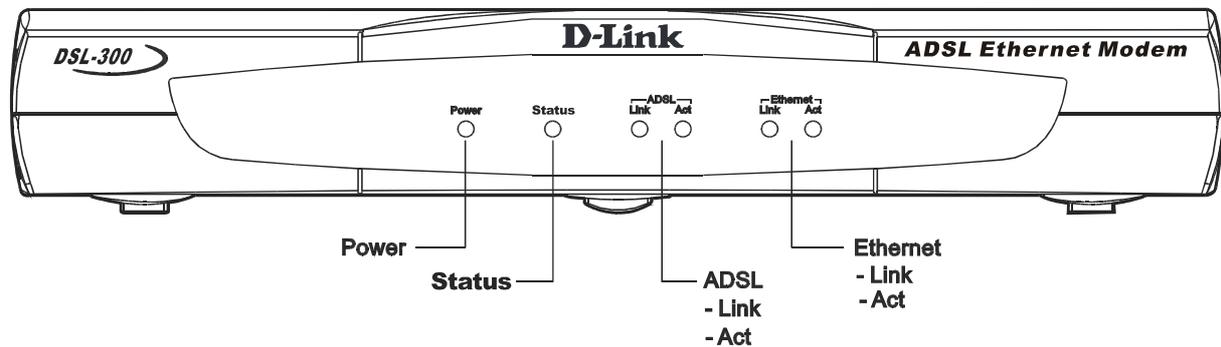
## Rear Panel

The rear panel of the Modem provides access to the power cord connection as well as the various communication port connections.



**Rear Panel**

## LED Indicators



### LED Indicators

The LED Indicators read as follows:

**Power** Steady green light indicates the unit is powered on.

**Status** Lights steady green during the ADSL negotiation phase. Once the connection status has been settled, the light will blink green.

**ADSL: Link** Steady green light indicates a valid ADSL connection. This will light after the ADSL negotiation process has been settled.

**ADSL: Act** Blinking green light indicates an active WAN session.

**Ethernet: Link** Steady green light indicates a valid Ethernet connection.

**Ethernet: Act** Blinking green indicates an active Ethernet session.

## Unpacking

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

1. DSL-300 ADSL Ethernet Modem
2. DSL-300 tool kit on CD-ROM containing The User's Guide and the DSL- 300 Configuration Utility software installation program
3. Twisted-pair telephone cable or appropriate connector for ADSL connection (Use AWG 26 twisted-pair telephone cable where not provided)
4. Straight-through Ethernet cable
5. One AC power adapter suitable for your electric service

## **Hardware Installation**

In this chapter you will learn about the various connections you will need to make in order to use the Modem.

When selecting the location for the Modem be sure to allow room to access the connections on the rear panel. You will want to place the Modem so that you will be able to see the LED indicators on the front panel. Allow some space above the Modem for ventilation to avoid problems with overheating.

### ***Connect the Power***

Insert the AC Power Adapter cord into the power receptacle located on the rear panel of the Modem and plug the adapter into a nearby power source. You should see the Power LED indicator light up and remain lit. The Test LED should light for a few seconds and turn off.

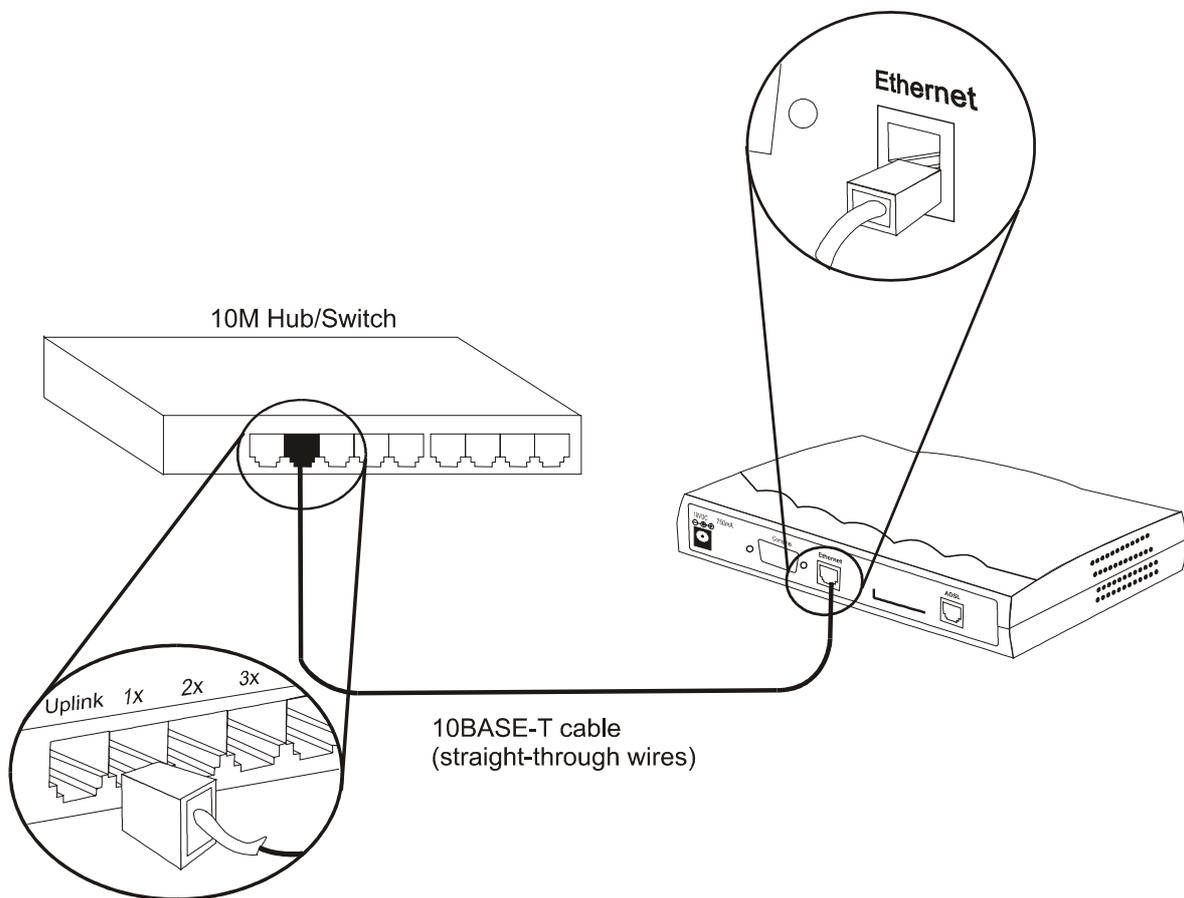
### ***Connect ADSL Line***

You can use the twisted-pair telephone ADSL cable included with the Modem to connect to your telephone line. Simply plug one end of the cable into the ADSL port (RJ-11 receptacle) on the rear panel of the Modem and insert the other end into the wall jack.

## Connect Ethernet LAN to Modem

The Modem may be connected to any 10BASE-T Ethernet LAN. Any connection to an Ethernet concentrating device such as a switch or hub must operate at a speed of 10 Mbps only. Use standard twisted-pair cable with RJ-45 connectors. The RJ-45 port on the Modem is a crossed (MDI-X) port. Follow standard Ethernet guidelines when deciding what type of cable to use to make this connection. You should use a normal straight-through cable when connecting the Modem to a normal (MDI-X) port on a switch or hub. Use a straight-through cable when connecting it to an uplink (MDI-X) port on a hub or switch. When connecting the Modem directly to a PC or server use a straight-through cable. A valid connection will be indicated by the Ethernet Link LED indicator.

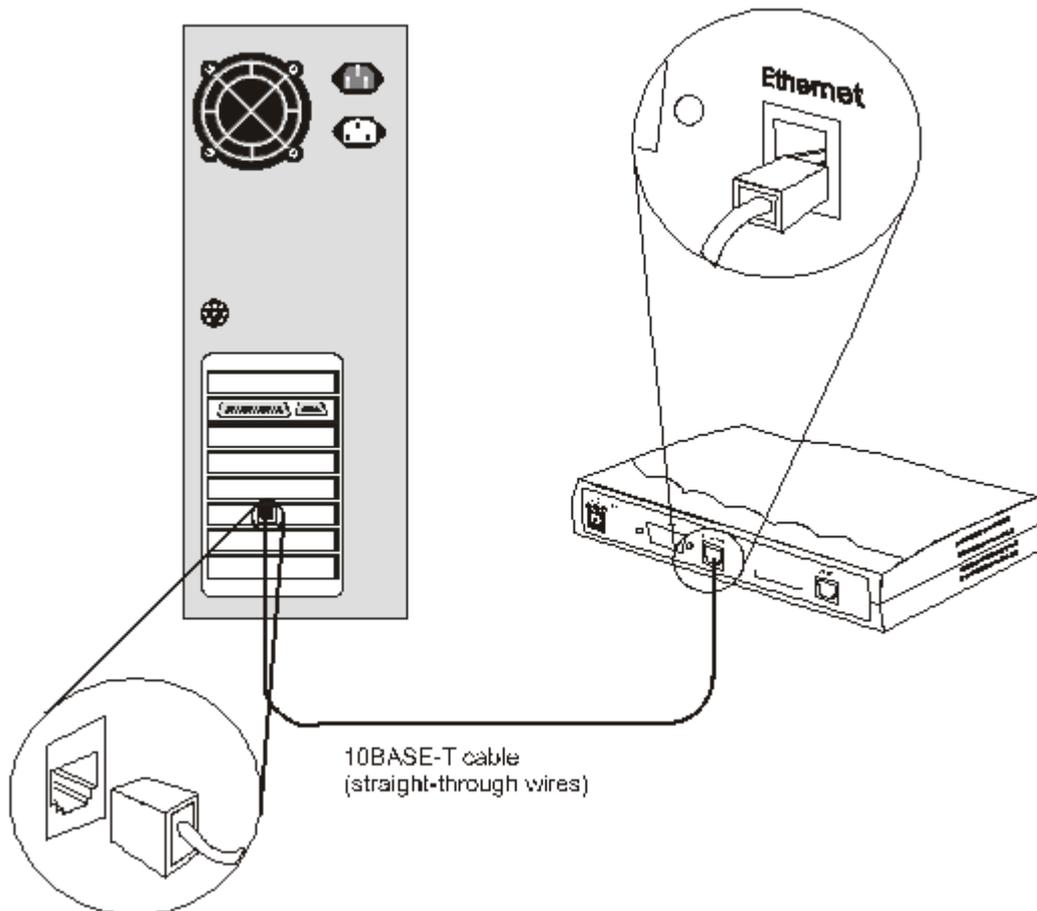
The rules governing Ethernet cable lengths apply to the LAN to Modem connection. Be sure that the cable connecting the LAN to the Modem does not exceed 100 meters.



**Ethernet LAN to Modem Connection**

## **PC/Server to Modem Connection**

You can connect the Modem directly to a 10BASE-T (10 Mbps) Ethernet adapter card (NIC) installed on a PC using the Ethernet cable cable as shown in the diagram below:



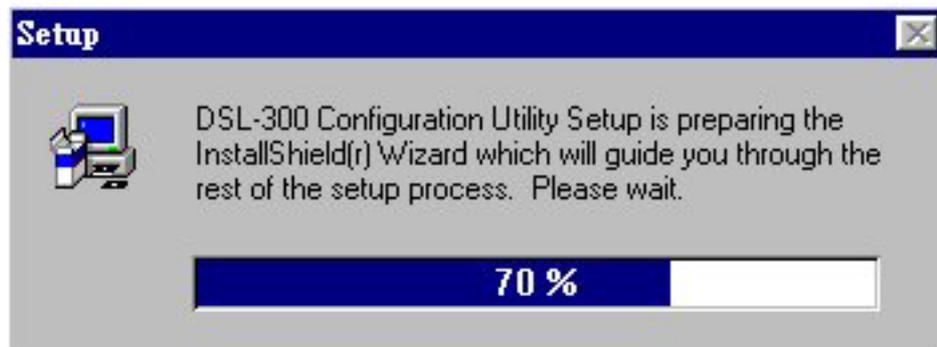
## **PC to Modem Connection**

## Software Installation

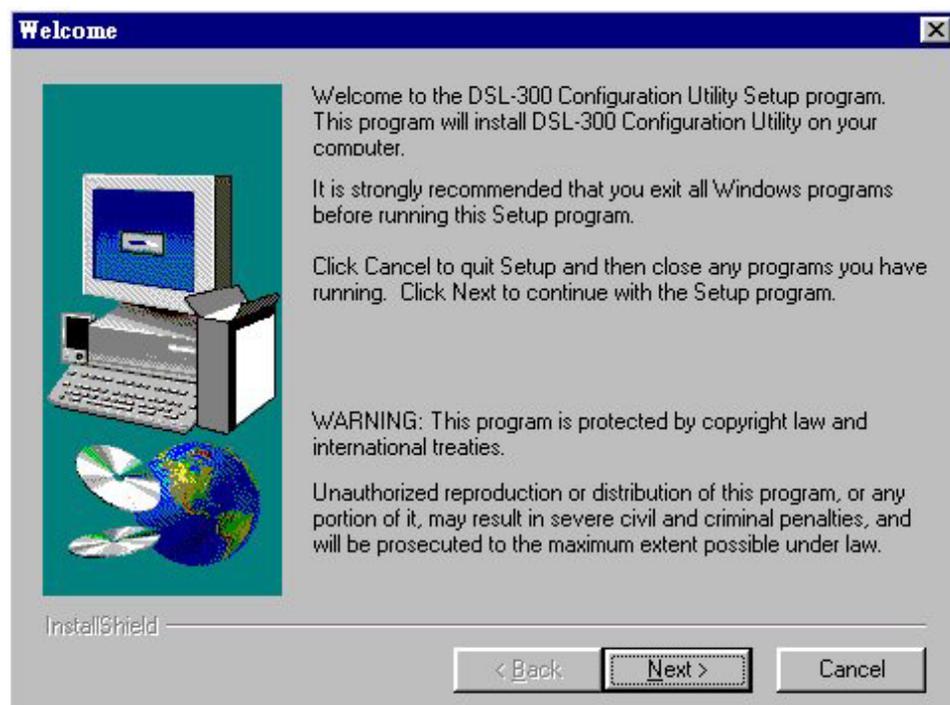
In order to install the software driver for the Modem, you first need to install the *DSL-300 Configuration Utility*, D-Link's GUI based management software. After using it for the initial setup and configuration you can use this utility to monitor the device or change its settings. Install the DSL-300 Configuration Utility software on the PC directly connected to the device, or any PC connected to the same Ethernet LAN as the Modem.

### ***Install DSL-300 Configuration Utility***

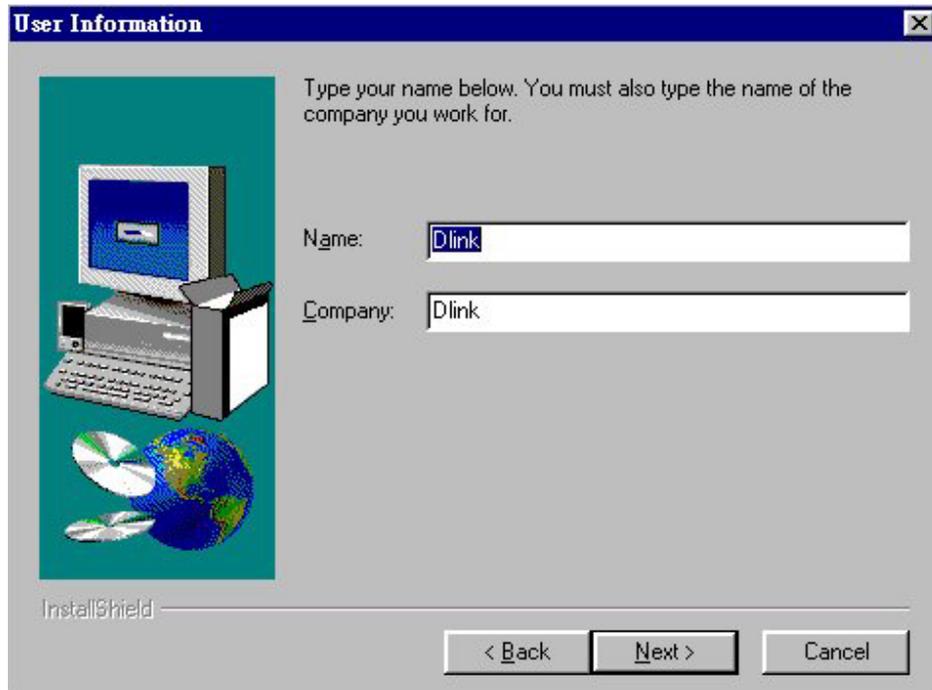
Install DSL-300 Configuration Utility software by inserting the setup CD-ROM disc into your CD-ROM drive and wait for the following screen prompts to appear:



1. The *Setup* window informs you that it is preparing the "InstallShield Wizard".



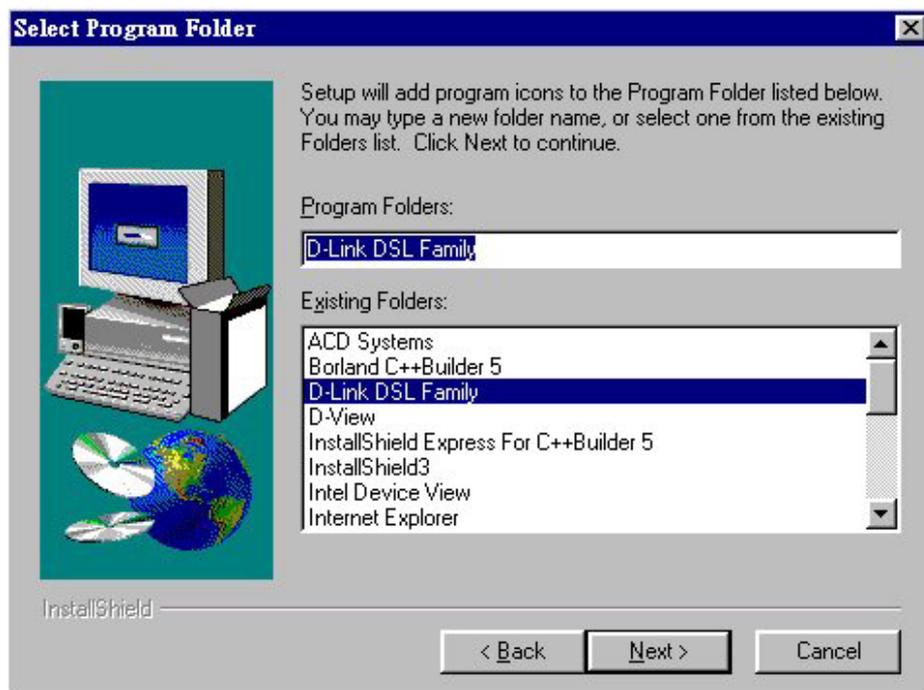
2. The *Welcome* window recommends exiting all other programs before starting the setup procedure. If you do not wish to close other programs click **Cancel**, otherwise quit all other programs and click **Next**.



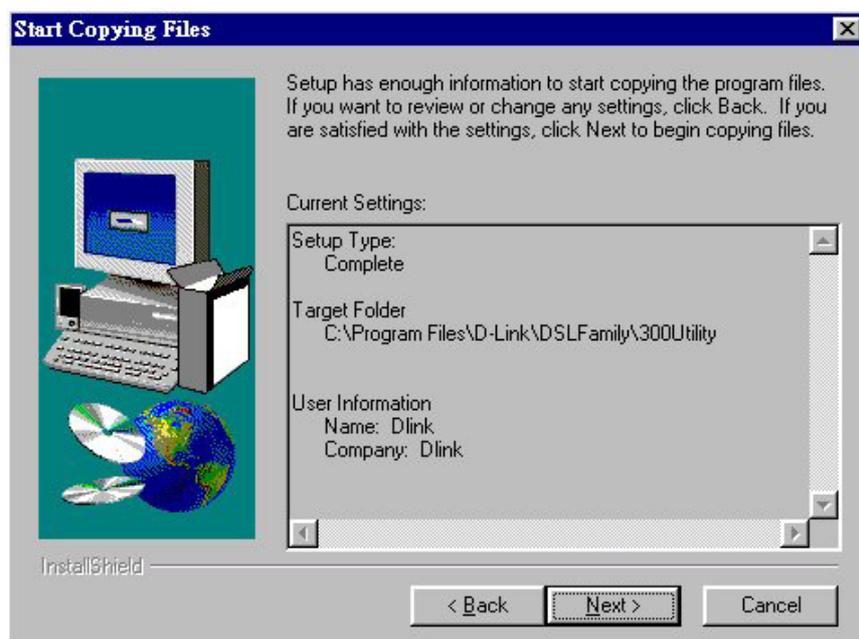
3. The *User Information* window asks you for your name and company name. Enter this information in the appropriate field and click **Next**.



4. In the *Choose Destination Location* window you may accept to install DSL-300 Configuration Utility in the automatically chosen directory by clicking **Next**. Or you can click **Browse** if you wish to select a different directory.



5. The *Select Program Folder* window asks you to select a different folder or you can rename the D-Link DSL Family folder that has been created for the program icon. You can rename the folder by typing in a new name in the "Program Folder:" field. Click **Next** to continue.



6. The *Start Copying Files* window provides an opportunity to review the information you have just entered. If you are satisfied with the information as it is listed, click **Next**. If you need to change any of the information click **Back** to go to the previous window(s) to make the changes.



7. In the *Setup Complete* window you are presented with the option to launch the DSL-300 Configuration Utility program. If you wish to start the program now, click in the vacant box next to the “Yes, Launch the program file” option. A check mark (✓) should appear in the box indicating it has been selected. Click **Finish** to launch DSL-300 Configuration Utility.

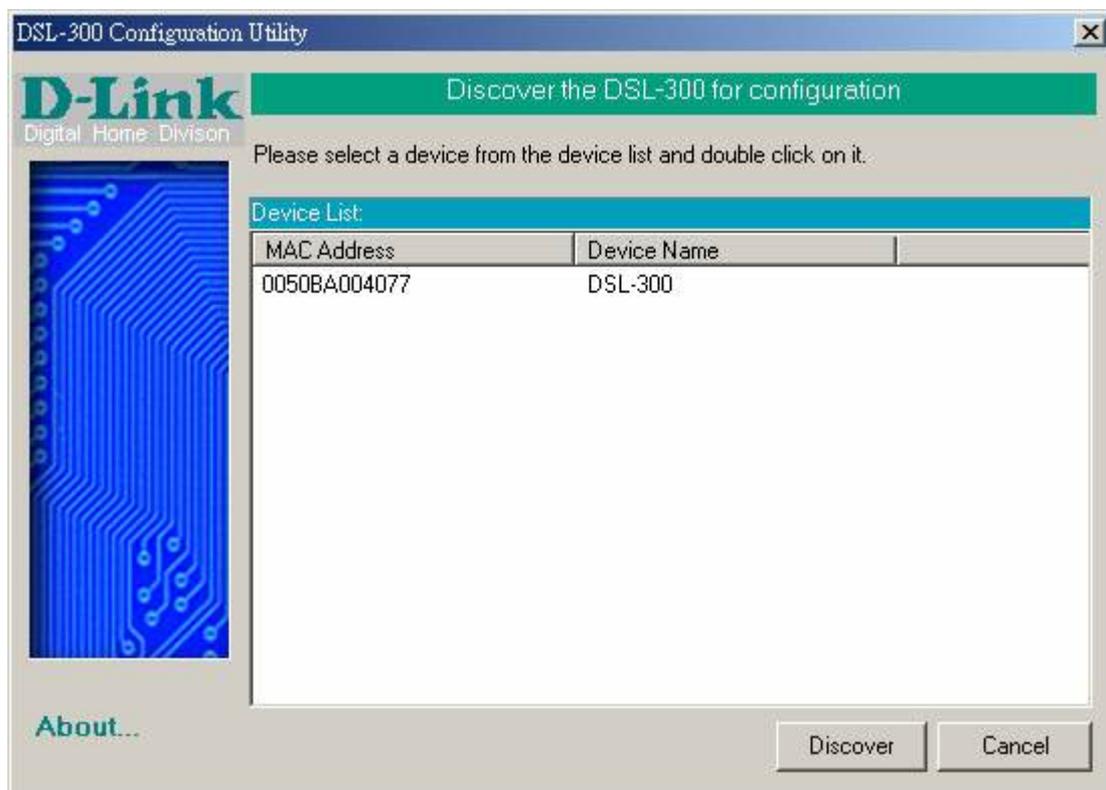
A DSL-300 Configuration Utility icon should now be seen on your desktop screen.

## Configure The Modem

With the DSL-300 Configuration Utility software installed, you are ready to configure the Modem. You must enter the VPI and VCI values that have been given to you by your ADSL service provider to define the path of connection to the ATM network backbone.



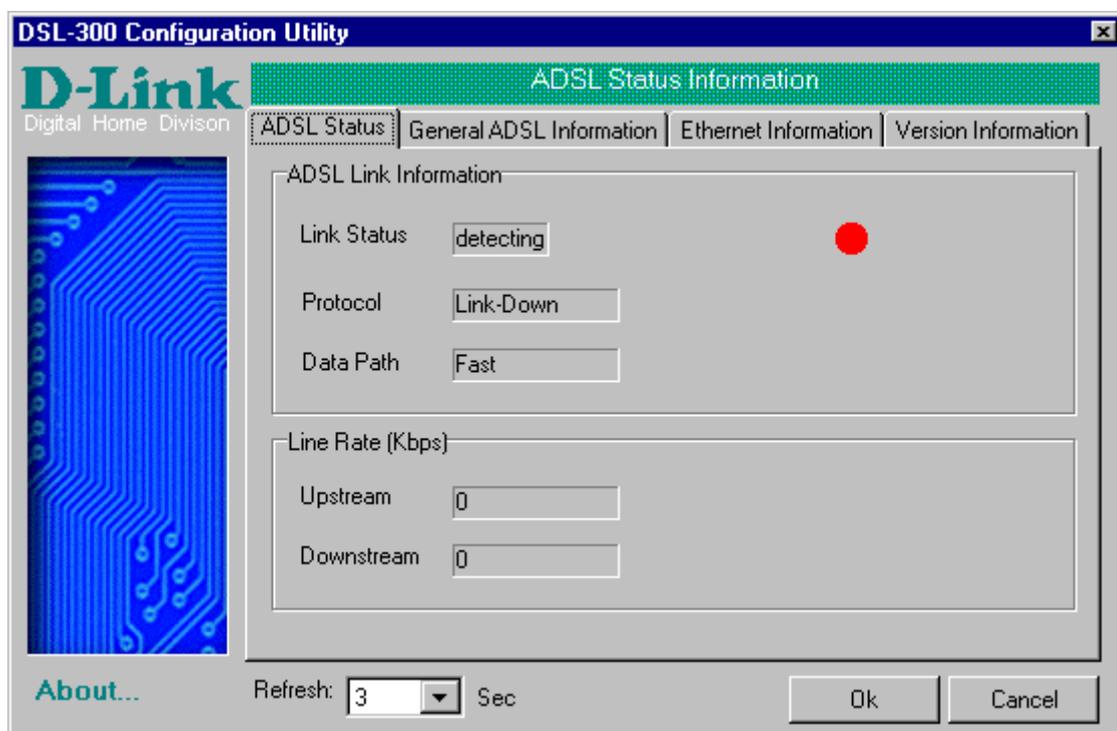
Click the **DSL-300 Configuration Utility** icon to initiate the configuration of the Modem. The DSL-300 Configuration Utility will locate the Modem on your LAN.



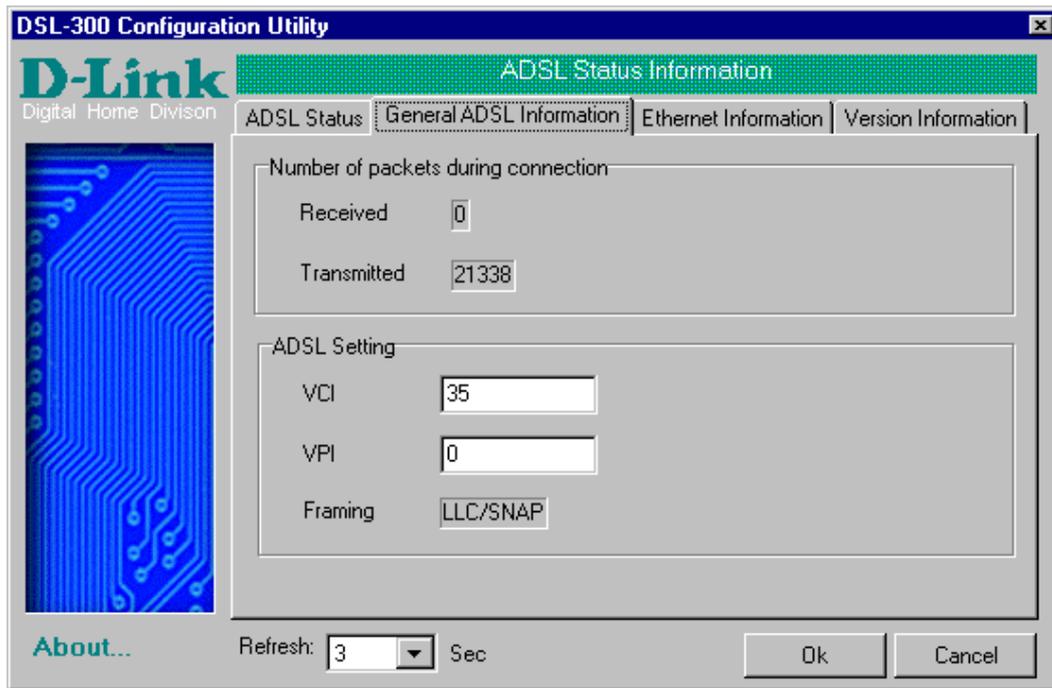
1. If the DSL-300 and corresponding MAC address does not appear in the *Device List* of the *DSL-300 Configuration Utility* window, click the **Discover** button on the bottom of the window. The DSL-300 should appear in the *Device Name* column preceded by the *MAC Address* of the device. If there are other DSL-300 Modems on the same network, these will also appear in the list.
2. Double-click on the Modem in the list or highlight it and depress the Enter key.



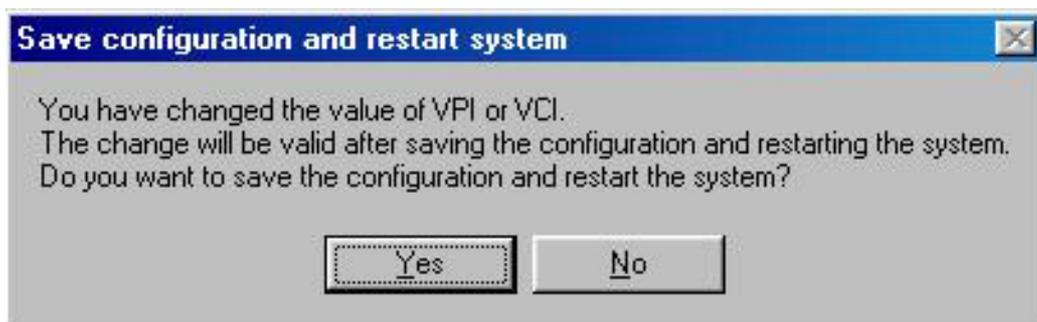
3. In the *Enter Password* window, type in the password and click **OK**. The default password is “**admin**”. You can change this password using a console manager as described in Appendix B.



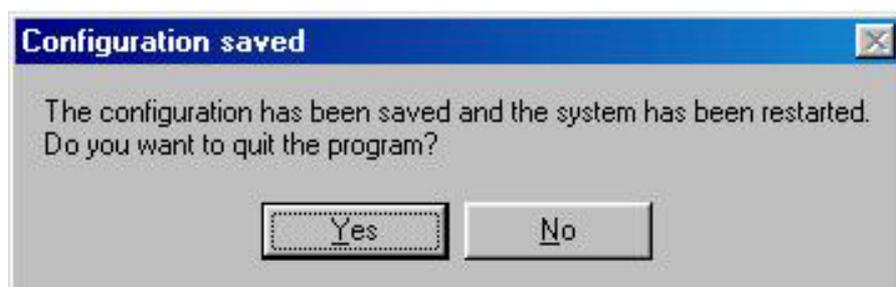
4. The main menu appears, click on the *General ADSL Information* tab to configure the Modem.



5. In the new window you must enter the **VPI** and **VCI** numbers (assigned to you by your ADSL service provider). Type in these numbers in the **ADSL Setting** field and click **Finish**.



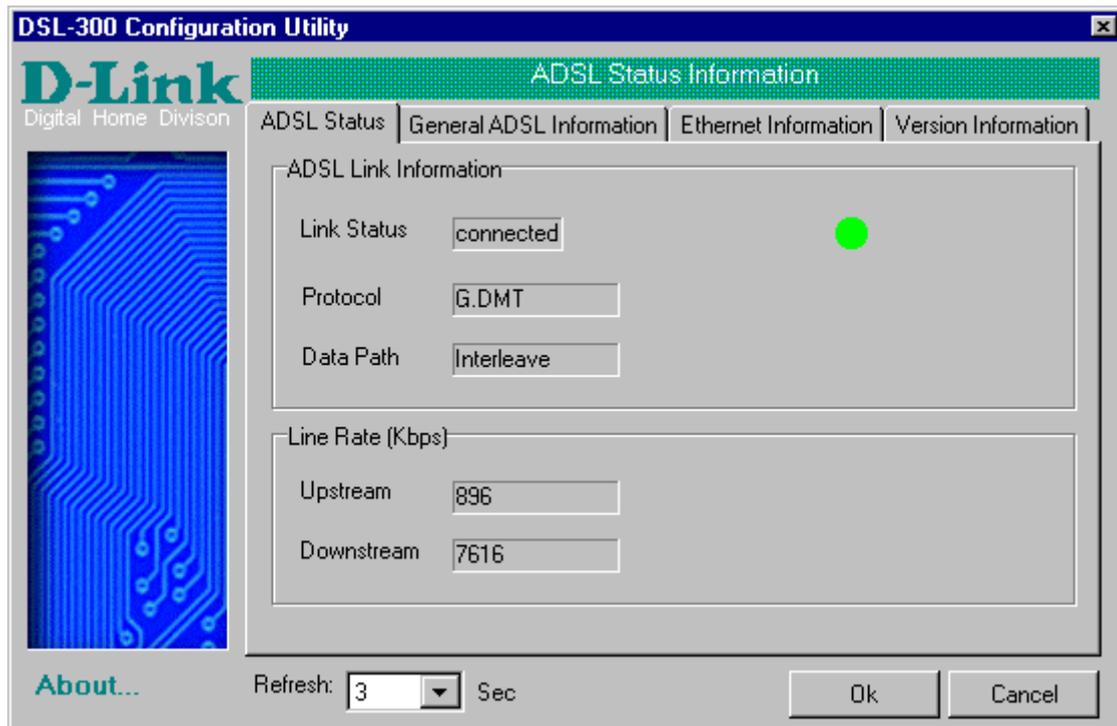
6. The *Save configuration and restart system* window will appear. You will be asked if you would like to save the changes you have made (the VPI and VCI numbers) and restart the Modem. Click **Yes** if you have correctly entered the necessary information.



7. The final window, *Configuration saved*, confirms that you have made changes to the configuration of the Modem and restarted it. If you wish to quit DSL-300 Configuration Utility, click **Yes**.

## Modem Diagnostics

The DSL-300 Configuration Utility can be used to monitor the activity and performance of the Modem. The four status windows are read-only with the exception of the General ADSL Information. Once you have set the VCI and VPI values there should not be any need to change them. You can choose the interval in which the statistics are refreshed from the pull-down menu on the bottom of the window.

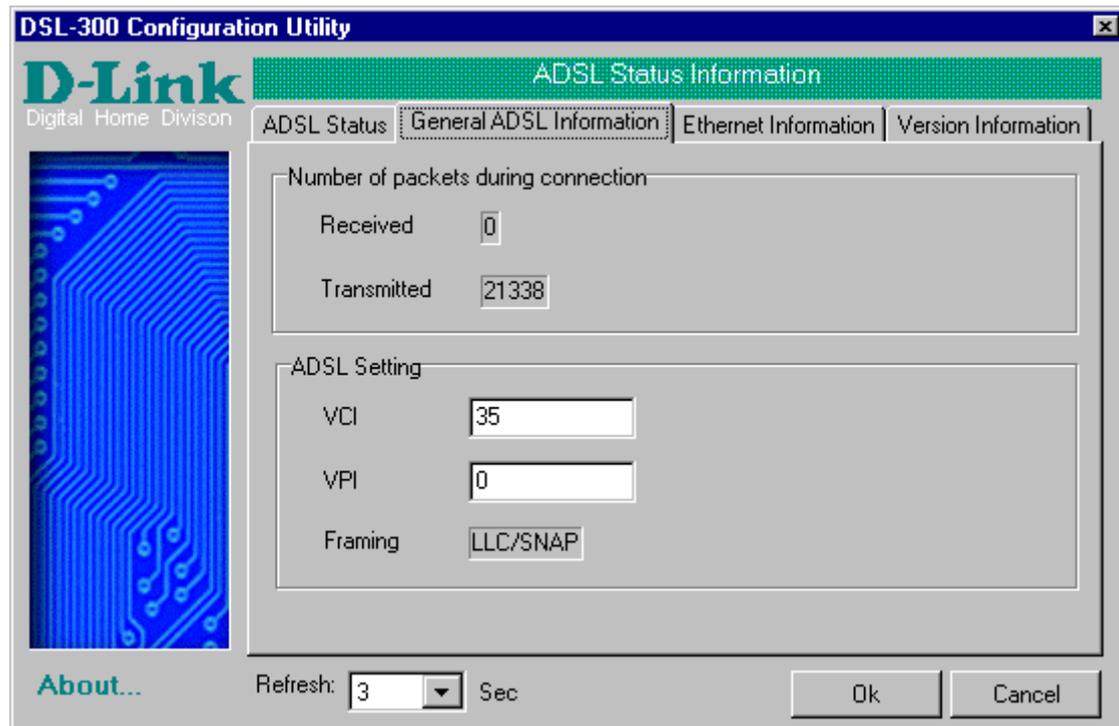


Clicking on the *ADSL Status* tab provides information about the status of the ADSL link and the data. In this window you can view the following information:

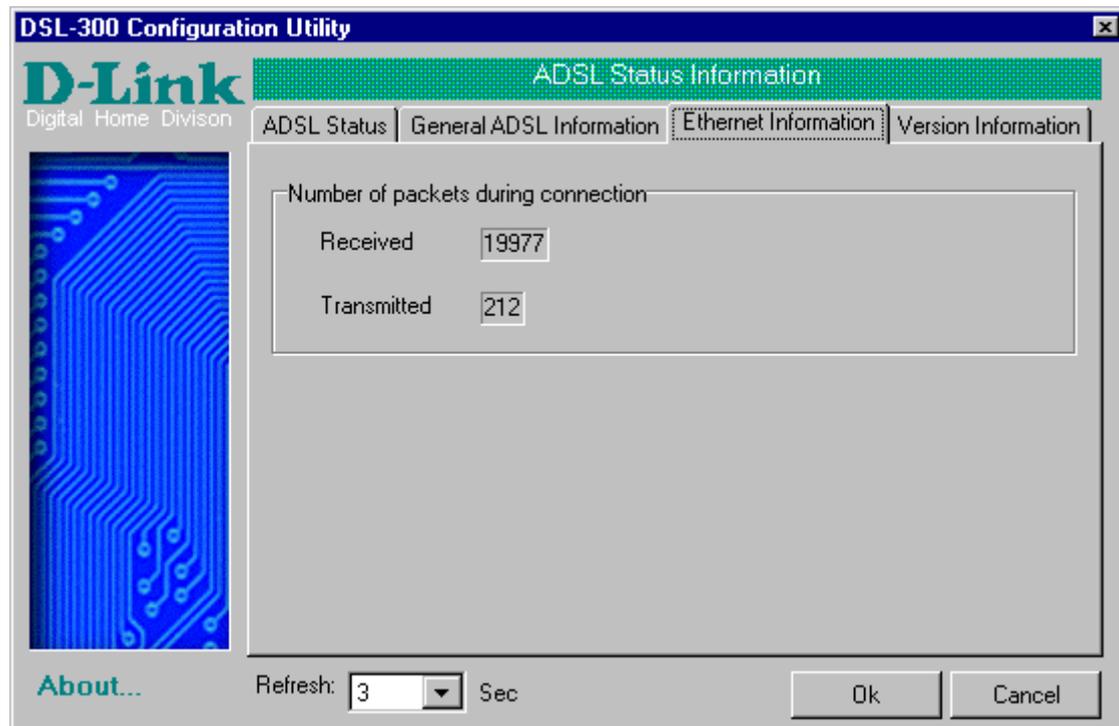
- ◆ **Link Status** – current status of the ADSL link
- ◆ **Protocol** – ADSL protocol used to provide the connection
- ◆ **Data Path** – Fast or Interleave mode (depending on the DSLAM)
- ◆ **Upstream** - Displays upstream data bit rate in Kbps
- ◆ **Downstream** - Displays downstream data bit rate in Kbps

The lighted indicator indicates the connection status by its color.

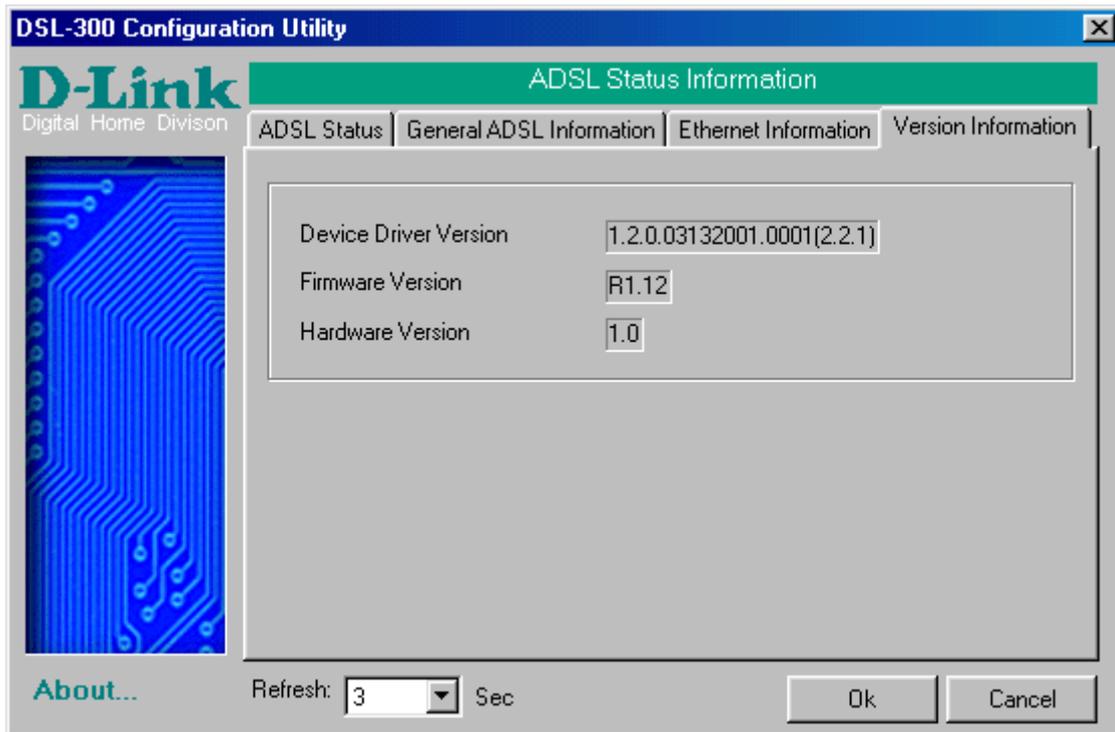
- ◆ **Red light** – not connected
- ◆ **Yellow/Black flashing light** – connecting
- ◆ **Green light** - connected



The *General ADSL Information* menu displays information on packets received and transmitted via the ADSL line as well as the ADSL settings. This is where you can change the VCI and VPI values, as described in the previous section.



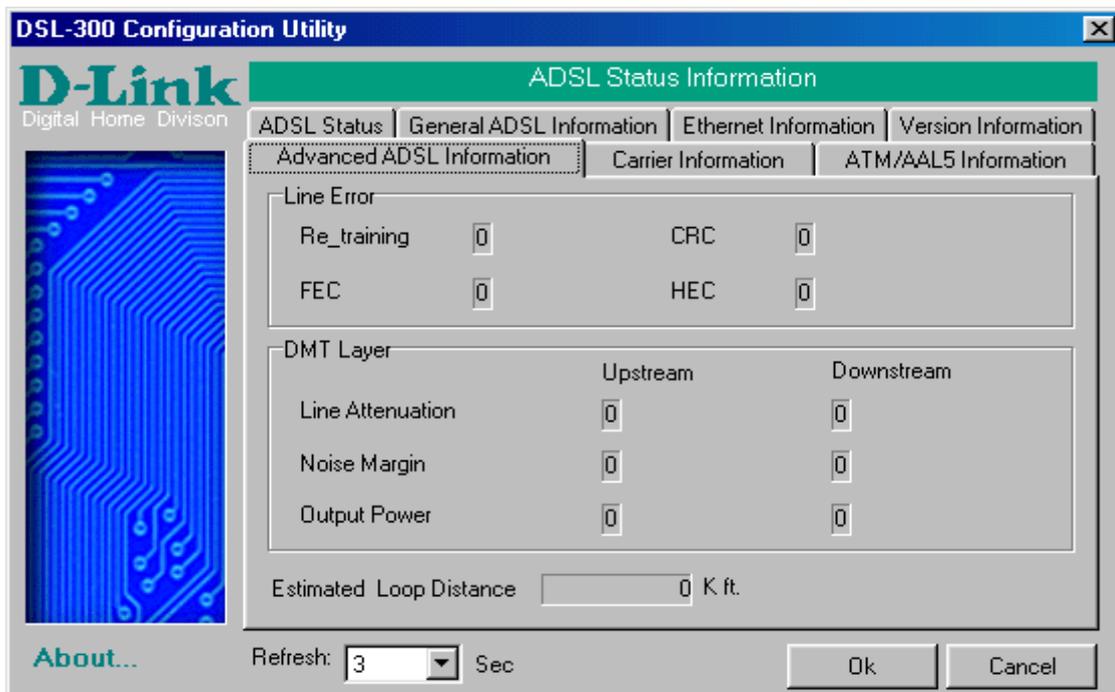
The *Ethernet Information* menu provides information about packets received and transmitted via the Ethernet interface.



The *Version Information* menu lists the current device driver, firmware version and hardware version.

### Advanced Diagnostics

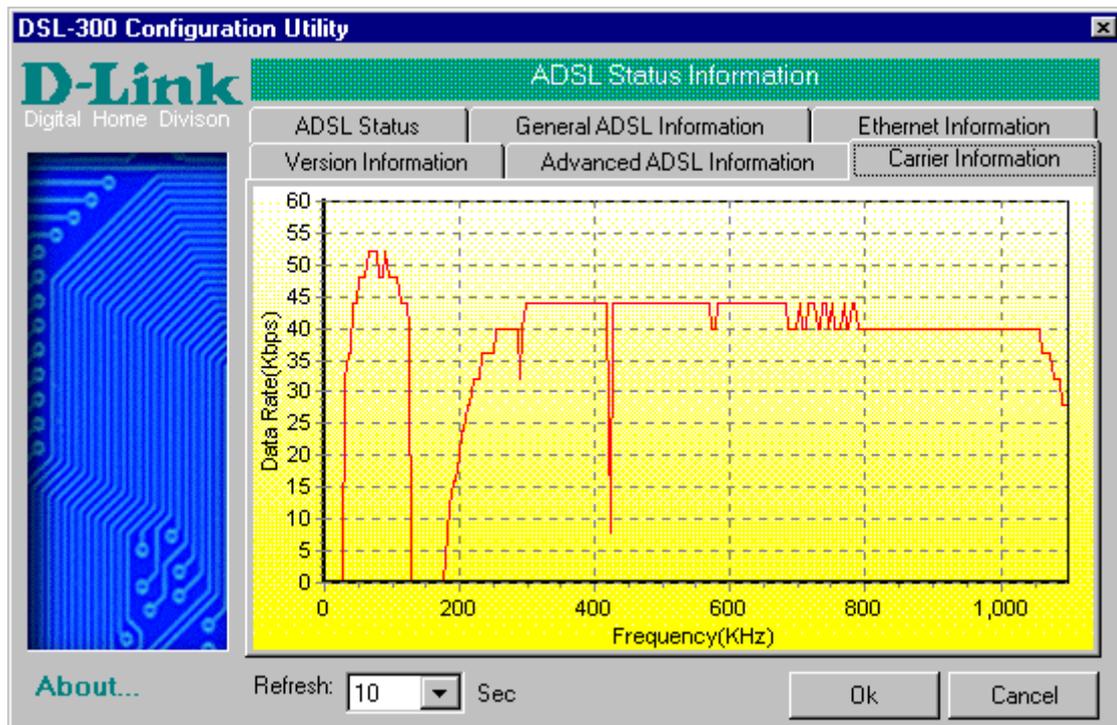
To view the advanced diagnostics menus available with the configuration utility depress CTRL + V while the utility is displayed.



The *Advanced ADSL Information* menu lists information about errors, signal characteristics and loop distance.

The data provided in the Advanced ADSL Information window includes:

- ◆ **Re\_training** – number of attempts to establish the ADSL connection
- ◆ **CRC** – Cyclic Redundancy Checking, number of CRC errors since ADSL connection established
- ◆ **FEC** – Forward Error Correction, number of FEC errors since ADSL connection established
- ◆ **HEC** – Header Error Checking, number of HEC errors since ADSL connection established
- ◆ **Line Attenuation** – measured in dB
- ◆ **Noise Margin** – measured in dB
- ◆ **Output Power** – measured in dBm



The *Carrier Information* menu displays the frequency distribution of the upstream and downstream bandwidth. The upstream portion occupies the lower frequency block.

## Contacting Technical Support

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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](mailto: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

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URL: [www.dlink-me.com](http://www.dlink-me.com)  
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URL: [www.dlink.de](http://www.dlink.de)  
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## Technical Specifications

General	
Standards:	ITU G.992.1 (G.dmt) ITU G.992.2 (G.lite) ITU G.994.1 (G.Hs) ANSI T1.413 (Issue 2)
Protocol:	TCP/IP
Data Transfer Rate:	G.dmt full rate: Downstream up to 8 Mbps Upstream up to 640 Kbps G.lite: Downstream up to 1.5 Mbps Upstream up to 512 Kbps
Media Interface Exchange:	RJ-11 port ADSL telephone line connection RJ-45 port for 10BASET Ethernet connection

Physical and Environmental	
DC inputs: Power Adapter:	Input: 120V AC 60Hz 24W Output: 12V DC 1000 mA
Power Consumption:	10 Watts (Max)
Operating Temperature:	0° to 50° C (32° - 122° F)
Humidity:	5 to 95% (non-condensing)
Dimensions:	223.3mm x 131.7mm x 35mm
Weight:	455gm (1 lb.)
EMI:	CE Class B FCC Class B C-Tick BSMI
Safety:	UL/CUL TUV

## Creating a New Password

You should change the access password for the DSL-300 Configuration Utility program when you first setup the device. In order to change the password you will need a console program such as Microsoft HyperTerminal installed on your PC and an RS-232 cable.

The HyperTerminal program is included with Windows operating systems. If it is not available see the instructions for installing HyperTerminal from the Windows installation program. Once it is installed, you can access HyperTerminal from the **Start** menu. To access HyperTerminal, choose Accessories, then select the Communications file, open the HyperTerminal file, double-click on the HYPERTERMINAL.EXE file and follow the instructions from the prompts.

Once you have the active HyperTerminal screen in view on your desktop, hit the **Enter** key. The Internet Protocol (IP) address of the DSL-300 will be displayed. The cursor in the terminal screen should be blinking immediately to the right of the IP address. Type in `diap passwd` followed by a space and the new password, and hit the **Enter** key. For example, if you want to create a new password such as "Open", you would type `diap passwd Open` and the new password is now "Open". This will be confirmed by a message on the terminal screen stating that the new password is Open. The password is case sensitive, so enter it exactly how you would like the password to be entered.

When you have entered the new password and received confirmation you must save it for the change to go into effect. To save the new password type `config save` and hit the **Enter** key. A message will inform you that the configuration is being saved followed by a confirmation that the configuration has been saved.

When you have successfully changed and saved the password you can end the session by simply closing the HyperTerminal window or by typing `exit` and closing the window.

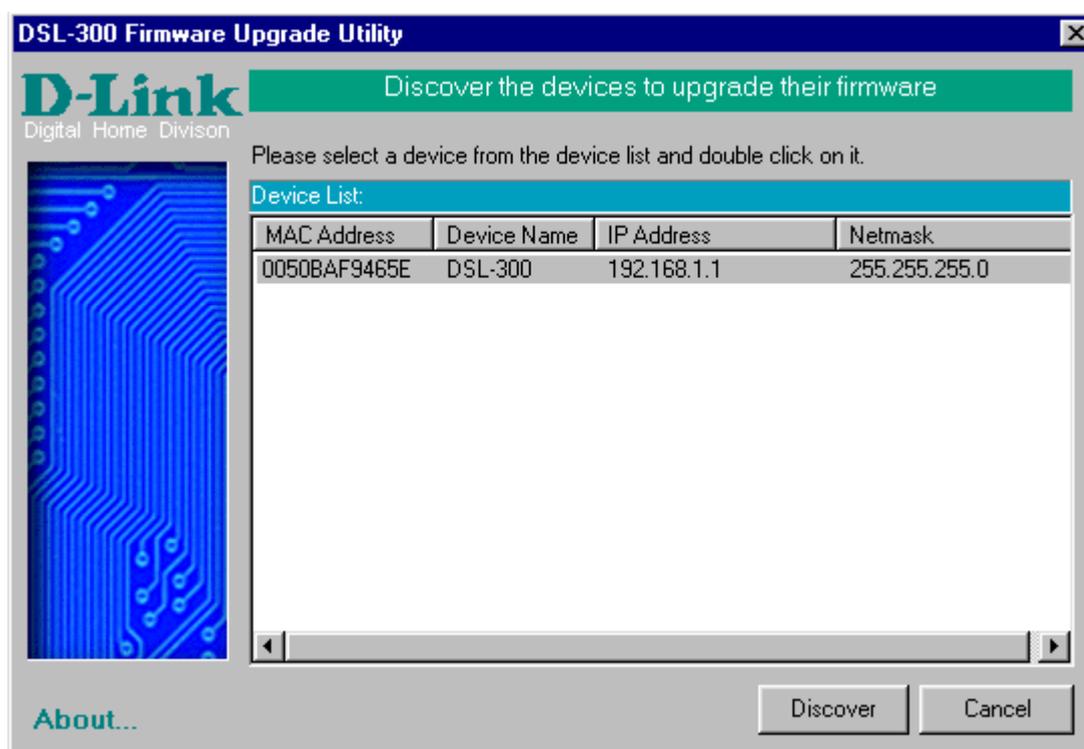


## DSL-300 Firmware Upgrade Utility

You can update system firmware using the DSL-300 Firmware Upgrade Utility. To upgrade the Router's firmware you must have installed this software on the PC you wish to use for this purpose. Install the utility by clicking the self-executing file **setup.exe** located on the Installation CD-ROM. It will be installed automatically. It is recommended that the PC be directly connected to the Router using a crossed cable, however you may upgrade it through the LAN from a remote host.

You also need to download the latest firmware version file from the D-Link web site to the PC on which you will use the Upgrade Utility. Instructions for downloading the firmware are located on the web site at [www.dlink.com](http://www.dlink.com).

To launch the DSL-300 Firmware Upgrade Utility, click on the icon. Allow a few moments for the software to discover the Router on the network. After the discovery phase the following window will appear. You will see all the DSL-300 Routers on your network. You can identify individual devices by either its IP address or its MAC address. Select the device you wish to upgrade by double clicking on it.

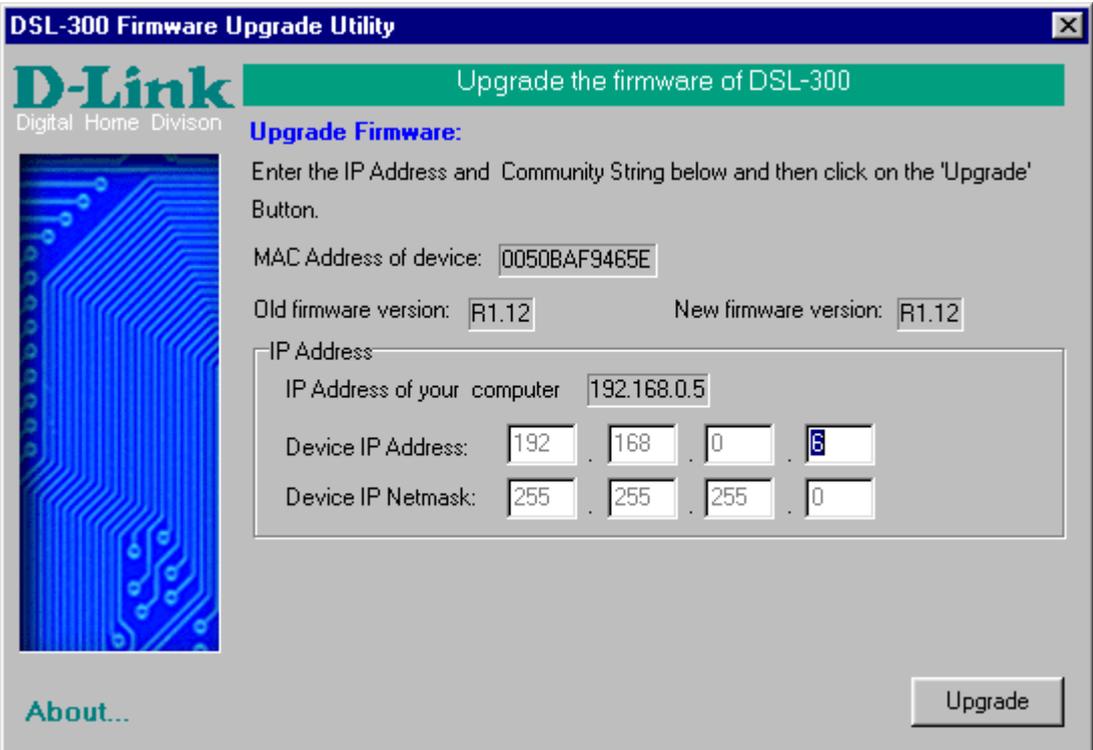


When you select a Router to upgrade you will be prompted for a password. The default password is **Admin**. If you want to change the password, you can change it using the console manager interface as described in Appendix B.



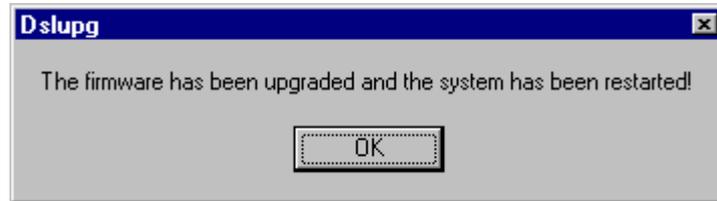
Enter the password and click **OK**.

In the new window you will see the MAC address of the Router and the IP address of the PC you are using. The PC and the Router must be on the same subnet for the upgrade to be completed. The upgrade utility will suggest a new IP address to be temporarily assigned to the device during the firmware upgrade procedure. Check the suggested IP address listed for the Router to be sure that it does not conflict with any existing IP addresses on your network. To change the temporary IP address of the Router, type in an available IP address in the space provided. You should change only the host portion of the address.



To upload the new firmware to the selected Router click the 'Upgrade' button. The utility will automatically load the new firmware. During the upgrade process it is important that you allow the entire file to load onto the device. Do not turn off the Router while the flash memory is being updated. A warning will appear during the upgrade reminding you not to power off the device.

When the new firmware has been successfully loaded a new window will inform you of the upgrade and tell you that the Router has been restarted. Click OK to proceed.



## **Wichtige Sicherheitshinweise**

1. Bitte lesen Sie sich diese Hinweise sorgfältig durch.
2. Heben Sie diese Anleitung für den spätern Gebrauch auf.
3. Vor jedem Reinigen ist das Gerät vom Stromnetz zu trennen. Verwenden Sie keine Flüssig- oder Aerosolreiniger. Am besten dient ein angefeuchtetes Tuch zur Reinigung.
4. Um eine Beschädigung des Gerätes zu vermeiden sollten Sie nur Zubehörteile verwenden, die vom Hersteller zugelassen sind.
5. Das Gerät is vor Feuchtigkeit zu schützen.
6. Bei der Aufstellung des Gerätes ist auf sichern Stand zu achten. Ein Kippen oder Fallen könnte Verletzungen hervorrufen. Verwenden Sie nur sichere Standorte und beachten Sie die Aufstellhinweise des Herstellers.
7. Die Belüftungsöffnungen dienen zur Luftzirkulation die das Gerät vor Überhitzung schützt. Sorgen Sie dafür, daß diese Öffnungen nicht abgedeckt werden.
8. Beachten Sie beim Anschluß an das Stromnetz die Anschlußwerte.
9. Die Netzanschlußsteckdose muß aus Gründen der elektrischen Sicherheit einen Schutzleiterkontakt haben.
10. Verlegen Sie die Netzanschlußleitung so, daß niemand darüber fallen kann. Es sollete auch nichts auf der Leitung abgestellt werden.
11. Alle Hinweise und Warnungen die sich am Geräten befinden sind zu beachten.
12. Wird das Gerät über einen längeren Zeitraum nicht benutzt, sollten Sie es vom Stromnetz trennen. Somit wird im Falle einer Überspannung eine Beschädigung vermieden.
13. Durch die Lüftungsöffnungen dürfen niemals Gegenstände oder Flüssigkeiten in das Gerät gelangen. Dies könnte einen Brand bzw. Elektrischen Schlag auslösen.
14. Öffnen Sie niemals das Gerät. Das Gerät darf aus Gründen der elektrischen Sicherheit nur von autorisiertem Servicepersonal geöffnet werden.
15. Wenn folgende Situationen auftreten ist das Gerät vom Stromnetz zu trennen und von einer qualifizierten Servicestelle zu überprüfen:
  - a – Netzkabel oder Netzstecker sint beschädigt.
  - b – Flüssigkeit ist in das Gerät eingedrungen.
  - c – Das Gerät war Feuchtigkeit ausgesetzt.
  - d – Wenn das Gerät nicht der Bedienungsanleitung entsprechend funktioniert oder Sie mit Hilfe dieser Anleitung keine Verbesserung erzielen.
  - e – Das Gerät ist gefallen und/oder das Gehäuse ist beschädigt.
  - f – Wenn das Gerät deutliche Anzeichen eines Defektes aufweist.
16. Bei Reparaturen dürfen nur Orginalersatzteile bzw. den Orginalteilen entsprechende Teile verwendet werden. Der Einsatz von ungeeigneten Ersatzteilen kann eine weitere Beschädigung hervorrufen.
17. Wenden Sie sich mit allen Fragen die Service und Repartur betreffen an Ihren Servicepartner. Somit stellen Sie die Betriebssicherheit des Gerätes sicher.
18. Zum Netzanschluß dieses Gerätes ist eine geprüfte Leitung zu verwenden, Für einen Nennstrom bis 6A und einem Gerätegewicht großer 3kg ist eine Leitung nicht leichter als H05VV-F, 3G, 0.75mm<sup>2</sup> einzusetzen

## **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.

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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.

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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.

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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 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 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**

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