

# USER MANUAL

DSL-2740B

VERSION 2.0



**D-Link**<sup>®</sup>

**BROADBAND**

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## Package Contents

- DSL-2740B Wireless ADSL Router
- 3 Detachable Antennas
- Power Adapter
- CD-ROM with Installation Wizard, User Manual, and Special Offers
- One twisted-pair telephone cable used for ADSL connection
- One straight-through Ethernet cable
- One Quick Installation Guide

**Note:** Using a power supply with a different voltage rating than the one included with the DSL-2740B will cause damage and void the warranty for this product.



## System Requirements

- ADSL Internet service
- Computer with:
  - 200MHz Processor
  - 64MB Memory
  - CD-ROM Drive
  - Ethernet Adapter with TCP/IP Protocol Installed
  - Windows XP/2000
  - Internet Explorer v6 or later, FireFox v1.5
- D-Link Click'n Connect Utility
  - Computer with Windows 2000/XP

# Introduction

## **HIGH-SPEED ADSL2/2+ INTERNET CONNECTION**

Latest ADSL2/2+ standards provide Internet transmission of up to 24Mbps downstream, 1Mbps upstream.

## **HIGH-PERFORMANCE WIRELESS**

Embedded 802.11n technology for high-speed wireless connection, complete compatibility with 802.11b/g wireless devices

## **TOTAL SECURITY**

Firewall protection from Internet attacks, user access control, WPA/WPA2 wireless security.

## **ULTIMATE INTERNET CONNECTION**

The DSL-2740B ADSL2+ router is a versatile, high-performance remote router for home and the small office. With integrated ADSL2/2+ supporting up to 24Mbps download speed, firewall protection, Quality of Service (QoS), 802.11n wireless LAN and 4 Ethernet switch ports, this router provides all the functions that a home or small office needs to establish a secure and high-speed remote link to the outside world.

## **ULTIMATE WIRELESS CONNECTION WITH MAXIMUM SECURITY**

This router provides maximize wireless performance by connecting this router to computer interfaces and stay connected from virtually anywhere at home and in the office. The router can be used with 802.11b/g/n wireless networks to enable significantly improved reception. It supports WPA/WPA2 and WEP for flexible user access security and data encryption methods.

## **FIREWALL PROTECTION & QoS**

Security features prevents unauthorized access to the home and office network, be it from the wireless devices or from the Internet. The router provides firewall security using Stateful Packet Inspection (SPI) and hacker attack logging for Denial of Service (DoS) attack protection. SPI inspects the contents of all incoming packet headers before deciding what packets are allowed to pass through. Router access control is provided with packet filtering based on port and source/destination MAC/IP addresses. For Quality of Service (QoS), the router supports multiple priority queues to enable a group of home or office users to experience the benefit of smooth network connection of inbound and outbound data without concern of traffic congestion. This QoS support allows users to enjoy high ADSL transmission for applications such as VoIP and streaming multimedia over the Internet.

\*Maximum wireless signal rate derived from IEEE standard 802.11n specifications. Actual data throughput will vary. Network conditions and environmental factors, including volume of network traffic, building materials and construction, and network overhead, lower actual data throughput rate. Environmental factors will adversely affect wireless signal range.

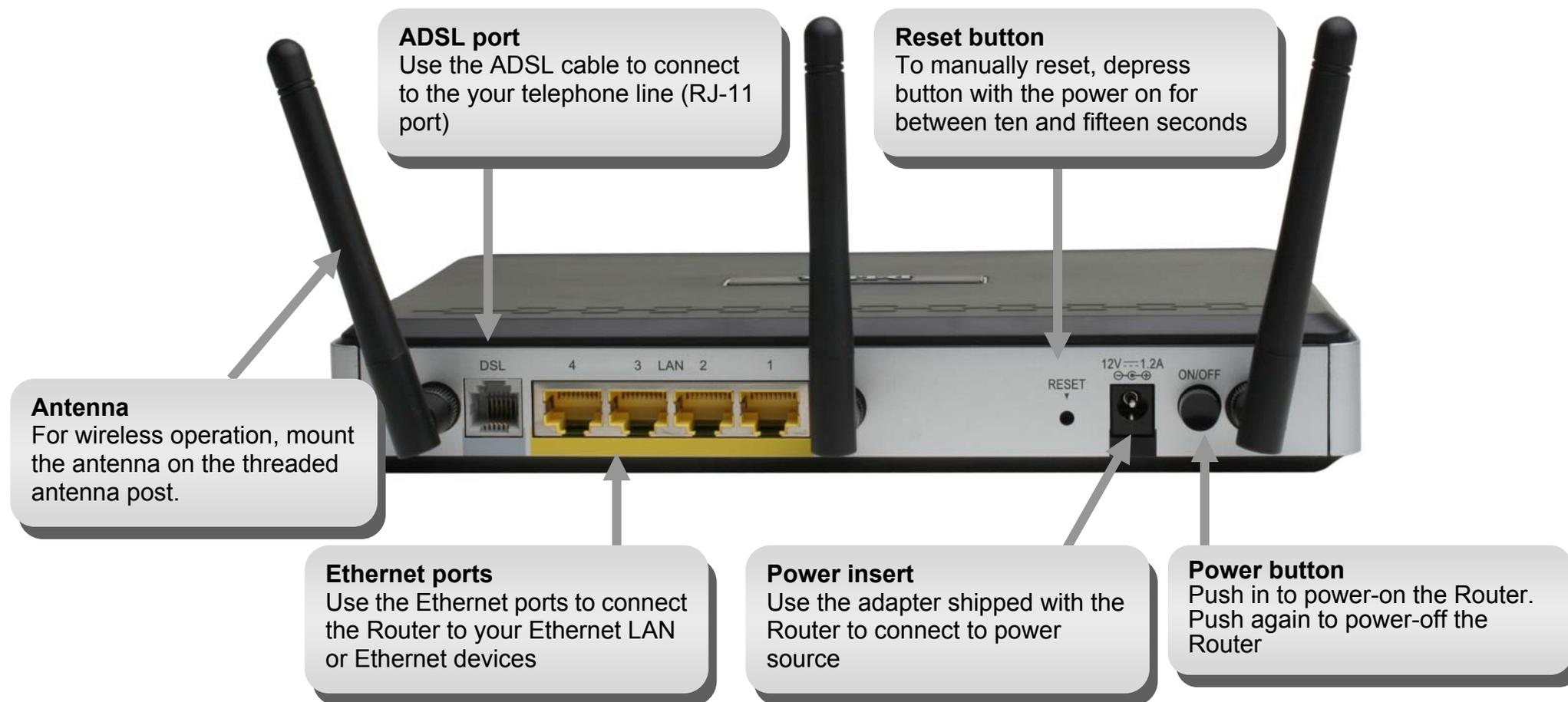
# Features

- **Faster Wireless Networking** - The DSL-2740B provides up to 270Mbps\* wireless connection with other 802.11n wireless clients. This capability allows users to participate in real-time activities online, such as video streaming, online gaming, and real-time audio.
- **Compatible with 802.11b and 802.11g Devices** - The DSL-2740B is still fully compatible with the IEEE 802.11b and g standards, so it can connect with existing 802.11b and g PCI, USB and FireWire adapters.
- **DHCP Support** - Dynamic Host Configuration Protocol automatically and dynamically assigns all LAN IP settings to each host on your network. This eliminates the need to reconfigure every host whenever changes in network topology occur.
- **Network Address Translation (NAT)** - For small office environments, the DSL-2740B allows multiple users on the LAN to access the Internet concurrently through a single Internet account. This provides Internet access to everyone in the office for the price of a single user. NAT improves network security in effect by hiding the private network behind one global and visible IP address. NAT address mapping can also be used to link two IP domains via a LAN-to-LAN connection.
- **Precise ATM Traffic Shaping** - Traffic shaping is a method of controlling the flow rate of ATM data cells. This function helps to establish the Quality of Service for ATM data transfer.
- **High Performance** - Very high rates of data transfer are possible with the Router. Up to 24Mbps downstream bit rate using the G.dmt standard. (For ADSL2+)
- **Full Network Management** - The DSL-2740B incorporates SNMP (Simple Network Management Protocol) support for web-based management and text-based network management via Telnet connection.
- **Easy Installation** - The DSL-2740B uses a web-based graphical user interface program for convenient management access and easy set up. Any common web browser software can be used to manage the Router.

\*Maximum wireless signal rate derived from IEEE standard 802.11n specifications. Actual data throughput will vary. Network conditions and environmental factors, including volume of network traffic, building materials and construction, and network overhead, lower actual data throughput rate. Environmental factors will adversely affect wireless signal range.

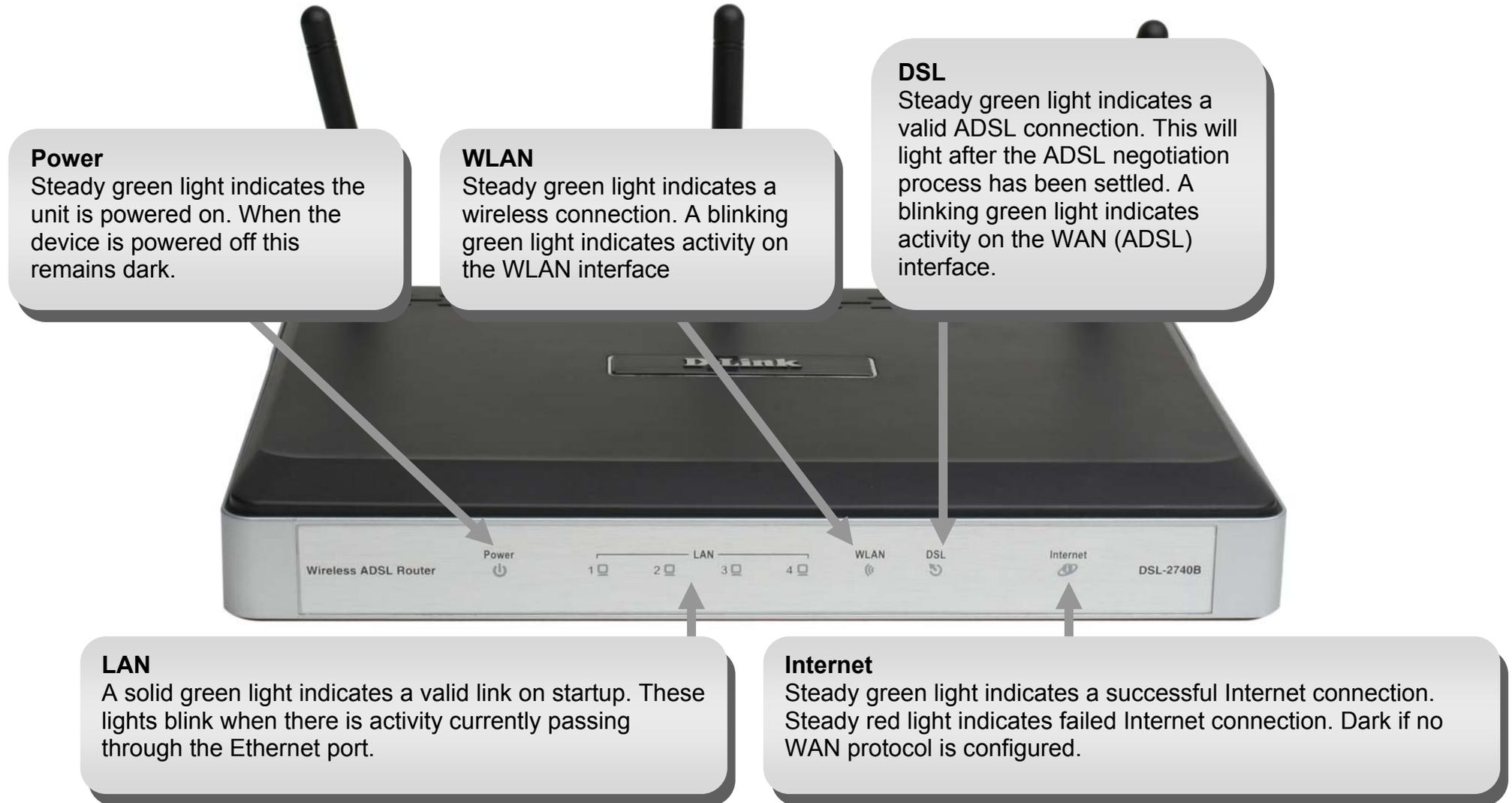
# Hardware Overview

## Connections



# Hardware Overview

## LEDs



# Installation

This section will walk you through the installation process. Placement of the router is very important. Do not place the router in an enclosed area such as a closet, cabinet, or in the attic or garage.

## Before you Begin

Please read and make sure you understand all the prerequisites for proper installation of your new Router. Have all the necessary information and equipment on hand before beginning the installation.

# Installation Notes

In order to establish a connection to the Internet it will be necessary to provide information to the Router that will be stored in its memory. For some users, only their account information (Username and Password) is required. For others, various parameters that control and define the Internet connection will be required. You can print out the two pages below and use the tables to list this information. This way you have a hard copy of all the information needed to setup the Router. If it is necessary to reconfigure the device, all the necessary information can be easily accessed. Be sure to keep this information safe and private.

## **Low Pass Filters**

Since ADSL and telephone services share the same copper wiring to carry their respective signals, a filtering mechanism may be necessary to avoid mutual interference. A low pass filter device can be installed for each telephone that shares the line with the ADSL line. These filters are easy to install passive devices that connect to the ADSL device and/or telephone using standard telephone cable. Ask your service provider for more information about the use of low pass filters with your installation.

## **Operating Systems**

The DSL-2740B uses an HTML-based web interface for setup and management. The web configuration manager may be accessed using any operating system capable of running web browser software, including Windows 98 SE, Windows ME, Windows 2000, and Windows XP.

## **Web Browser**

Any common web browser can be used to configure the Router using the web configuration management software. The program is designed to work best with more recently released browsers such as Opera, Microsoft Internet Explorer® version 6.0, Netscape Navigator® version 6.2.3, or later versions. The web browser must have JavaScript enabled. JavaScript is enabled by default on many browsers. Make sure JavaScript has not been disabled by other software (such as virus protection or web user security packages) that may be running on your computer.

## **Ethernet Port (NIC Adapter)**

Any computer that uses the Router must be able to connect to it through the Ethernet port on the Router. This connection is an Ethernet connection and therefore requires that your computer be equipped with an Ethernet port as well. Most notebook computers are now sold with an Ethernet port already installed. Likewise, most fully assembled desktop computers come with an Ethernet NIC adapter as standard equipment. If your computer does not have an Ethernet port, you must install an Ethernet NIC adapter before you can use the Router. If you must install an adapter, follow the installation instructions that come with the Ethernet NIC adapter.

### **802.11 Wireless LAN Configuration**

All the 802.11 wireless LAN settings may be configured on a single page using the web-based manager. For basic wireless communication you need to decide what channel to use and what SSID to assign. These two settings must be the same for any wireless workstations or other wireless access point that communicate with the DSL-2740B through the wireless interface.

Security for wireless communication can be accomplished in a number of ways. The DSL-2740B supports WPA (Wi-Fi Protected Access), WPA2, and mixed WPA/WPA2. Wireless access can also be controlled by selecting MAC addresses that are allowed to associate with the device. Please read the section on Wireless Configuration.

### **Additional Software**

It may be necessary to install software on your computer that enables the computer to access the Internet. Additional software must be installed if you are using the device a simple bridge. For a bridged connection, the information needed to make and maintain the Internet connection is stored on another computer or gateway device, not in the Router itself.

If your ADSL service is delivered through a PPPoE or PPPoA connection, the information needed to establish and maintain the Internet connection can be stored in the Router. In this case, it is not necessary to install software on your computer. It may however be necessary to change some settings in the device, including account information used to identify and verify the connection.

All connections to the Internet require a unique global IP address. For bridged connections, the global IP settings must reside in a TCP/IP enabled device on the LAN side of the bridge, such as a PC, a server, a gateway device such as a router or similar firewall hardware. The IP address can be assigned in a number of ways. Your network service provider will give you instructions about any additional connection software or NIC configuration that may be required.

# Information you will need from your ADSL service provider

## **Username**

This is the Username used to log on to your ADSL service provider's network. It is commonly in the form `user@isp.co.uk`. Your ADSL service provider uses this to identify your account.

## **Password**

This is the Password used, in conjunction with the Username above, to log on to your ADSL service provider's network. This is used to verify the identity of your account.

## **WAN Setting / Connection Type**

These settings describe the method your ADSL service provider uses to transport data between the Internet and your computer. Most users will use the default settings. You may need to specify one of the following WAN Setting and Connection Type configurations (Connection Type settings listed in parenthesis):

- PPPoE/PPoA (PPPoE LLC, PPoA LLC or PPoA VC-Mux)
- Bridge Mode (1483 Bridged IP LLC or 1483 Bridged IP VC Mux)
- IPoA/MER (Static IP Address) (Bridged IP LLC, 1483 Bridged IP VC Mux, 1483 Routed IP LLC, 1483 Routed IP VC-Mux or IPoA)
- MER (Dynamic IP Address) (1483 Bridged IP LLC or 1483 Bridged IP VC-Mux)

## **Modulation Type**

ADSL uses various standardized modulation techniques to transmit data over the allotted signal frequencies. Some users may need to change the type of modulation used for their service. The default DSL modulation (ADSL2+ Multi-Mode) used for the Router automatically detects all types of ADSL, ADSL2, and ADSL2+ modulation. However, if you are instructed to specify the modulation type used for the Router, you may choose among the numerous options available on the Modulation Type drop-down menu on the ADSL Configuration window (Advanced > ADSL)

## **Security Protocol**

This is the method your ADSL service provider will use to verify your Username and Password when you log on to their network. Your Router supports the PAP and CHAP protocols.

### **VPI**

Most users will not be required to change this setting. The Virtual Path Identifier (VPI) is used in conjunction with the Virtual Channel Identifier (VCI) to identify the data path between your ADSL service provider's network and your computer. If you are setting up the Router for multiple virtual connections, you will need to configure the VPI and VCI as instructed by your ADSL service provider for the additional connections. This setting can be changed in the WAN Settings window of the web management interface.

### **VCI**

Most users will not be required to change this setting. The Virtual Channel Identifier (VCI) used in conjunction with the VPI to identify the data path between your ADSL service provider's network and your computer. If you are setting up the Router for multiple virtual connections, you will need to configure the VPI and VCI as instructed by your ADSL service provider for the additional connections. This setting can be changed in the WAN Settings window of the web management interface.

# Information you will need about DSL-2740B

## **Username**

This is the Username needed access the Router's management interface. When you attempt to connect to the device through a web browser you will be prompted to enter this Username. The default Username for the Router is "admin." The user cannot change this.

## **Password**

This is the Password you will be prompted to enter when you access the Router's management interface. The default Password is "admin." The user may change this.

## **LAN IP addresses for the DSL-2740B**

This is the IP address you will enter into the Address field of your web browser to access the Router's configuration graphical user interface (GUI) using a web browser. The default IP address is 192.168.1.1. This may be changed to suit any IP address scheme the user desires. This address will be the base IP address used for DHCP service on the LAN when DHCP is enabled.

## **LAN Subnet Mask for the DSL-2740B**

This is the subnet mask used by the DSL-2740B, and will be used throughout your LAN. The default subnet mask is 255.255.255.0. This can be changed later.

# Information you will need about your LAN or computer:

## **Ethernet NIC**

If your computer has an Ethernet NIC, you can connect the DSL-2740B to this Ethernet port using an Ethernet cable. You can also use the Ethernet ports on the DSL-2740B to connect to other computer or Ethernet devices.

## **DHCP Client status**

Your DSL-2740B ADSL Router is configured, by default, to be a DHCP server. This means that it can assign an IP address, subnet mask, and a default gateway address to computers on your LAN. The default range of IP addresses the DSL-2740B will assign are from 192.168.1.2 to 192.168.1.254. Your computer (or computers) needs to be configured to Obtain an IP address automatically (that is, they need to be configured as DHCP clients.)

It is recommended that you collect and record this information here, or in some other secure place, in case you have to re-configure your ADSL connection in the future.

Once you have the above information, you are ready to setup and configure your DSL-2740B Wireless ADSL Router.

# Wireless Installation Considerations

DSL-2740B lets you access your network using a wireless connection from virtually anywhere within the operating range of your wireless network. Keep in mind, however, that the number, thickness and location of walls, ceilings, or other objects that the wireless signals must pass through, may limit the range. Typical ranges vary depending on the types of materials and background RF (radio frequency) noise in your home or business. The key to maximizing wireless range is to follow these basic guidelines:

1. Keep the number of walls and ceilings between the D-Link router and other network devices to a minimum - each wall or ceiling can reduce your adapter's range from 3-90 feet (1-30 meters.) Position your devices so that the number of walls or ceilings is minimized.
2. Be aware of the direct line between network devices. A wall that is 1.5 feet thick (.5 meters), at a 45-degree angle appears to be almost 3 feet (1 meter) thick. At a 2-degree angle it looks over 42 feet (14 meters) thick! Position devices so that the signal will travel straight through a wall or ceiling (instead of at an angle) for better reception.
3. Building Materials make a difference. A solid metal door or aluminum studs may have a negative effect on range. Try to position access points, wireless routers, and computers so that the signal passes through drywall or open doorways. Materials and objects such as glass, steel, metal, walls with insulation, water (fish tanks), mirrors, file cabinets, brick, and concrete will degrade your wireless signal.
4. Keep your product away (at least 3-6 feet or 1-2 meters) from electrical devices or appliances that generate RF noise.
5. If you are using 2.4GHz cordless phones or X-10 (wireless products such as ceiling fans, lights, and home security systems), your wireless connection may degrade dramatically or drop completely. Make sure your 2.4GHz phone base is as far away from your wireless devices as possible. The base transmits a signal even if the phone is not in use.

# Device Installation

The DSL-2740B Wireless ADSL Router maintains three separate interfaces, an Ethernet LAN, a wireless LAN and an ADSL Internet (WAN) connection. Carefully consider the Router's location suitable for connectivity for your Ethernet and wireless devices. You must have a functioning broadband connection via a bridge device such as a Cable or ADSL modem in order to use the Router's WAN function.

Place the Router in a location where it can be connected to the various devices as well as to a power source. The Router should not be located where it will be exposed to moisture, direct sunlight or excessive heat. Make sure the cables and power cord are placed safely out of the way so they do not create a tripping hazard. As with any electrical appliance, observe common sense safety procedures.

The Router can be placed on a shelf, desktop, or other stable platform. If possible, you should be able to see the LED indicators on the front if you need to view them for troubleshooting.

## Power on Router

The Router must be used with the power adapter included with the device.

1. Insert the AC Power Adapter cord into the power receptacle located on the rear panel of the Router and plug the adapter into a suitable nearby power source.
2. Push down the Power button, and you should see the Power LED indicator light up and remain lit.
3. If the Ethernet port is connected to a working device, check the Ethernet Link/Act LED indicators to make sure the connection is valid. The Router will attempt to establish the ADSL connection, if the ADSL line is connected and the Router is properly configured this should light up after several seconds. If this is the first time installing the device, some settings may need to be changed before the Router can establish a connection.

## Factory Reset Button

The Router may be reset to the original factory default settings by using a ballpoint or paperclip to gently push down the reset button in the following sequence:

1. Press and hold the reset button while the device is powered off.
2. Turn on the power.
3. Wait for 10~15 seconds and then release the reset button.

Remember that this will wipe out any settings stored in flash memory including user account information and LAN IP settings. The device settings will be restored to the factory default IP address **192.168.1.1** and the subnet mask is **255.255.255.0**, the default management Username is “admin” and the default Password is “admin.”

## Network Connections

### Connect ADSL Line

Use the ADSL cable included with the Router to connect it to a telephone wall socket or receptacle. Plug one end of the cable into the ADSL port (RJ-11 receptacle) on the rear panel of the Router and insert the other end into the RJ-11 wall socket. If you are using a low pass filter device, follow the instructions included with the device or given to you by your service provider. The ADSL connection represents the WAN interface, the connection to the Internet. It is the physical link to the service provider’s network backbone and ultimately to the Internet.

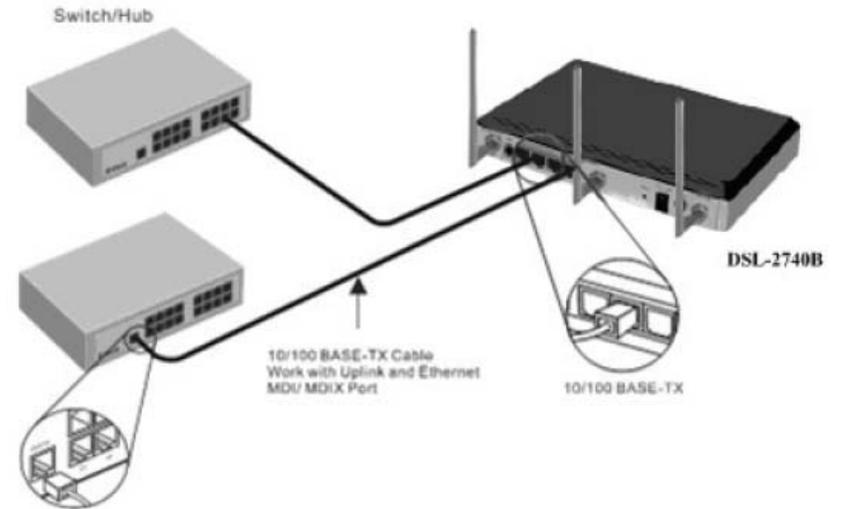
### Connect Router to Ethernet

The Router may be connected to a single computer or Ethernet device through the 10BASE-TX Ethernet port on the rear panel. Any connection to an Ethernet concentrating device such as a switch or hub must operate at a speed of 10/100 Mbps only. When connecting the Router to any Ethernet device that is capable of operating at speeds higher than 10Mbps, be sure that the device has auto-negotiation (NWay) enabled for the connecting port. Use standard twisted-pair cable with RJ-45 connectors. The RJ-45 port on the Router is a crossed port (MDI-X). Follow standard Ethernet guidelines when deciding what type of cable to use to make this connection. When connecting the Router directly to a PC or server use a normal straight-through cable. You should use a crossed cable when connecting the Router to a normal (MDI-X) port on a switch or hub. Use a normal straight-through cable when connecting it to an uplink (MDI-II) port on a hub or switch. The rules governing Ethernet cable lengths apply to the LAN to Router connection. Be sure that the cable connecting the LAN to the Router does not exceed 100 meters.

## Section 2 - Installation

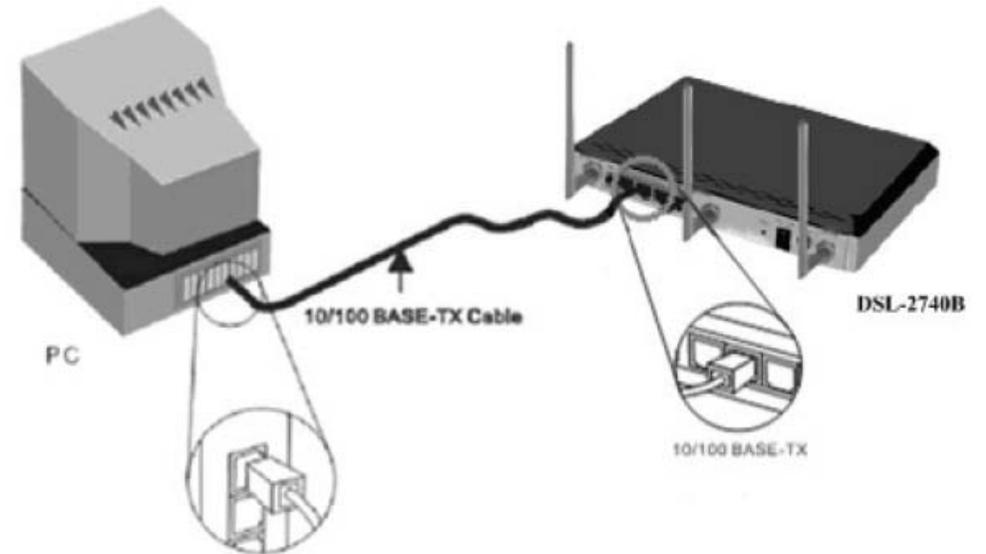
### Hub or Switch to Router Connection

Connect the Router to an uplink port (MDI-II) on an Ethernet hub or switch with a straight-through cable as shown in this diagram. If you wish to reserve the uplink port on the switch or hub for another device, connect to any on the other MDI-X ports (1x, 2x, etc.) with a crossed cable.



### Computer to Router Connection

You can connect the Router directly to a 10/100BASE-TX Ethernet adapter card (NIC) installed on a PC using the Ethernet cable provided as shown in this diagram.



# Configuration

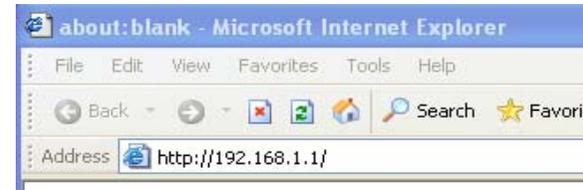
This section will show you how to configure your new D-Link wireless router using the web-based configuration utility.

## Web-based Configuration Utility

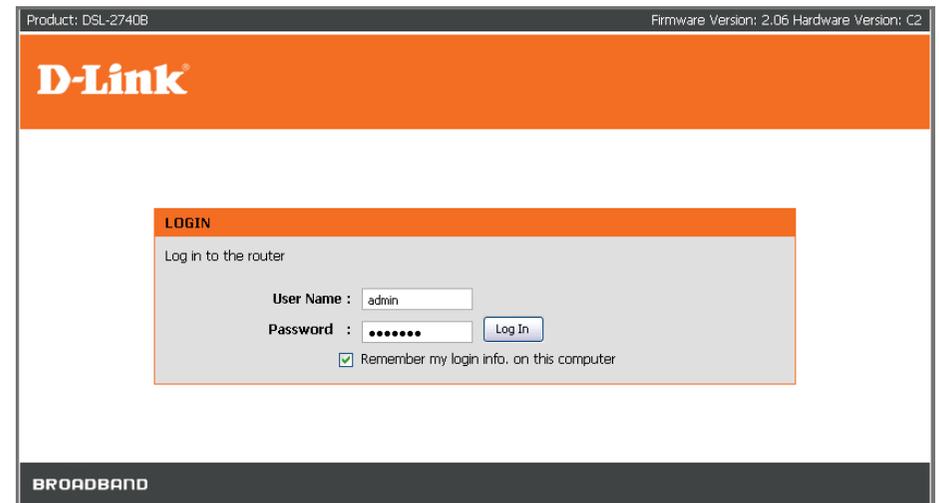
### Connect to the Router

To configure the WAN connection used by the Router it is first necessary to communicate with the Router through its management interface, which is HTML-based and can be accessed using a web browser. The easiest way to make sure your computer has the correct IP settings is to configure it to use the DHCP server in the Router. The next section describes how to change the IP configuration for a computer running a Windows operating system to be a DHCP client.

To access the configuration utility, open a web-browser such as Internet Explorer and enter the IP address of the router (192.168.1.1).



Type “**admin**” for the User Name and “**admin**” in the Password field. If you get a **Page Cannot be Displayed** error, please refer to the **Troubleshooting** section for assistance.



# SETUP

This chapter is concerned with using your computer to configure the WAN connection. The following chapter describes the various windows used to configure and monitor the Router including how to change IP settings and DHCP server setup.

# WIZARD

## ADSL SETUP

Click on the **Setup Wizard** button to launch the **Setup Wizard**.



## WELCOME TO D-LINK SETUP WIZARD

There are six steps to configuring your router. Click on the **Next** to continue.



### STEP 1: CHANGE YOUR DSL-2740B PASSWORD

The default password is "admin", in order to secure your network, please modify the password. Note: Confirm Password must be same as "New Password". Of course, you can click on the **Skip** to ignore the step.

#### STEP 1: CHANGE DEVICE LOGIN PASSWORD > 2 > 3 > 4 > 5 > 6

The factory default password of this router is admin. To help secure your network, D-Link recommends that you should choose a new password. If you do not wish to choose a new password now, just Click Skip to continue. Click Next to proceed to next step.

Current password :

New password :

Confirm password :

Back

Next

Skip

Cancel

## STEP 2: TIME

Check the **Enable NTP Server**.

Select specific time server to use from the **NTP Server Used** drop-down menu.

Select your operating time zone from the **Time Zone** drop-down menu.

Check the **Enable Daylight Saving** if needed and then select the proper **Daylight Saving Offset** drop-down menu. **Configure the Daylight Saving Dates** from start date to end.

Click on the **Save Settings** button to apply your settings.

### 1 > STEP 2: SET TIME AND DATE > 3 > 4 > 5 > 6

The Time Configuration option allows you to configure, update, and maintain the correct time on the internal system clock. From this section you can set the time zone that you are in and set the NTP (Network Time Protocol) Server. Daylight Saving can also be configured to automatically adjust the time when needed.

#### TIME SETTINGS

**Automatically synchronize with Internet time servers**

First NTP time server: ntp1.dlink.com

Second NTP time server: None

#### TIME CONFIGURATION

Current Router Time : 1.01.2000,23:12:27 Sat

Time Zone :

(GMT-12:00) International Date Line West

Enable Daylight Saving :

Daylight Saving Offset : -2:00

Daylight Saving Dates :

Month Week Day Time

Start Jan 1st Sun 12 am

End Jan 1st Sun 12 am

Back Next Cancel

## Section 3 - Configuration

### STEP 3: SELECT INTERNET CONNECTION TYPE

Please select your **Country** and **ISP**, **Protocol**, **Connection Type**, the VPI and VCI information Will display Automatically. Of course, you can modify the information.

If, you can not find the country and ISP in the list below; you can select "**Others**", and then input the "**VPI**" and "**VCI**" and Connection Type.

The **Auto PVC Scan** feature will not work in all cases so please enter the VPI/VCI numbers if provided by the ISP.

Click on the **Next** button to go to the next **Setup Wizard** window.

1 > 2 > STEP 3: SETUP INTERNET CONNECTION > 4 > 5 > 6

Please select your Country and ISP (Internet Service Provider) from the list below. If your Country or ISP is not in the list, please select "Other".

Country : (Click to select) v

ISP Provider : (Click to select) v

Protocol : (Click to select) v

Connection Type : (Click to Select) v

VPI : (Enter a number) v

VCI : (Enter a number) v

Enable DSL Auto-scan :

Back Next Cancel

### STEP 3: Setup Wizard - For PPPoE/PPPoA connection

### STEP 3: Setup Wizard - For PPPoE/PPPoA connection

Type in the **Username** and **Password** (and PPPoE Service Name, if required by your ISP).

Click on the **Next** button to go to the next **Setup Wizard** window.

1 > 2 > STEP 3: SETUP INTERNET CONNECTION > 4 > 5 > 6

Please select your Country and ISP (Internet Service Provider) from the list below. If your Country or ISP is not in the list, please select "Other".

Country : Others ▾

ISP Provider : Others ▾

Protocol : PPPoE ▾

Connection Type : LLC ▾

VPI : 0

VCI : 33

Mtu : 1492

Enable DSL Auto-scan :

Back Next Cancel

1 > 2 > STEP 3: SETUP INTERNET CONNECTION > 4 > 5 > 6

Please enter your Username and Password as provided by your ISP (Internet Service Provider). Please enter the information exactly as shown taking note of upper and lower cases. Click Next to continue.

Username : user@isp.com

Password : ●●●●

Confirm Password : ●●●●

Back Next Cancel

### STEP 3: Setup Wizard Using the Setup Wizard - For Dynamic IP Address connection

Please enter the appropriate information below as provided by your ISP. The **Auto PVC Scan** feature will not work in all cases so please enter the **VPI/VCI** numbers if provided by the ISP.

Maybe, you have to input your **PC MAC** address if ISP requires, and you can click on the button to copy it.

Click on the **Next button** to go to the next **Setup Wizard** window.

### STEP 3: Setup Wizard - For Static IP Address connection

Please enter the appropriate information below as provided by your ISP. The **Auto PVC Scan** feature will not work in all cases so please enter the **VPI/VCI** numbers if provided by the ISP.

Click on the **Next button** to go to the next **Setup Wizard** window.

1 > 2 > STEP 3: SETUP INTERNET CONNECTION > 4 > 5 > 6

Please select your Country and ISP (Internet Service Provider) from the list below. If your Country or ISP is not in the list, please select "Other".

Country : Others ▾  
ISP Provider : Others ▾  
Protocol : Dynamic IP ▾  
Connection Type : LLC ▾  
VPI : 0  
VCI : 33

Cloned MAC Address :

Enable DSL Auto-scan :

1 > 2 > STEP 3: SETUP INTERNET CONNECTION > 4 > 5 > 6

Please select your Country and ISP (Internet Service Provider) from the list below. If your Country or ISP is not in the list, please select "Other".

Country : Others ▾  
ISP Provider : Others ▾  
Protocol : Static IP ▾  
Connection Type : LLC ▾  
VPI : 0  
VCI : 33

Enable DSL Auto-scan :

## Section 3 - Configuration

### Using the Setup Wizard - For Static IP Address connection

Please enter the appropriate information below as provided by your ISP. The **Auto PVC Scan** feature will not work in all cases so please enter the **VPI/VCI** numbers if provided by the ISP.

Please input the correct **IP address**, **Subnet Mask**, **Default Gateway** and **DNS information**. Note: Should you select to leave default Gateway and DNS information blank, they should be automatically generated.

Click on the **Next button** to go to the next **Setup Wizard** window.

### Using the Setup Wizard - For Bridge Mode connections

Please enter the appropriate information below as provided by your ISP. The **Auto PVC Scan** feature will not work in all cases so please enter the **VPI/VCI** numbers if provided by the ISP.

Click **Next** to go to the next **Setup Wizard** window.

Skip to Page 26: **Using the Setup Wizard - For WAN Connection Settings**

### Using the Setup Wizard - For Static IP Address connection

Please enter the appropriate information below as provided by your ISP. The **Auto PVC Scan** feature will not work in all cases so please enter the **VPI/VCI** numbers if provided by the ISP.

Please input the correct **IP address**, **Subnet Mask**, **Default Gateway** and **DNS information**. Note: Should you select to leave default Gateway and DNS information blank, they should be automatically generated.

#### 1 > 2 > STEP 3: SETUP INTERNET CONNECTION > 4 > 5 > 6

You have selected Static IP Internet connection. Please enter the appropriate information below as provided by your ISP.

The Auto PVC Scan feature will not work in all cases so please enter the VPI/VCI numbers if provided by the ISP.

Click Next to continue.

**IP Address :**

**Subnet Mask :**

**Default Gateway :**

**Primary DNS Server :**

#### 1 > 2 > STEP 3: SETUP INTERNET CONNECTION > 4 > 5 > 6

Please select your Country and ISP (Internet Service Provider) from the list below. If your Country or ISP is not in the list, please select "Other".

**Country :**

**ISP Provider :**

**Protocol :**

**Connection Type :**

**VPI :**

**VCI :**

Enable DSL Auto-scan :

## Section 3 - Configuration

Click on the **Next** button to go to the next **Setup Wizard** window.

### STEP 4: Using the Setup Wizard - For Wireless LAN Settings

Click the **Enable Wireless** box to allow the router to operate in the wireless environment.

The **SSID** identifies members of the Service Set. Accept the default name or change it to something else. If the default SSID is changed, all other devices on the wireless network must use the same SSID.

Set **security Mode**, select this option if your wireless adapters support

Click Next to go to the next window and complete the Setup Wizard.

1 > 2 > 3 > STEP 4: CONFIGURE WIRELESS NETWORK > 5 > 6

Your wireless network is enabled by default. You can simply uncheck to disable it and click "Next" to skip configuration of wireless network.

**Enable Your Wireless Network :**

Your wireless network needs a name so it can be easily recognized by wireless clients. For security purposes, it is highly recommended to change the pre-configured network name.

**Wireless Network Name (SSID) :**

Select "Visible" to publish your wireless network and SSID can be found by wireless clients, or select "Invisible" to hide your wireless network so that users need to manually enter SSID in order to your wireless network.

**Visibility Status:**  Visible  Invisible

In order to protect your network from hackers add unauthorized users, it is highly recommended you choose one of the following wireless network security settings.

None	Security Level		Best
<input checked="" type="radio"/> None	<input type="radio"/> WEP	<input type="radio"/> WPA-PSK	<input type="radio"/> WPA2-PSK

**Security Mode :**

Select this option if you wireless adapters support

Note: you will need to enter the same key here into your wireless clients in order to enable proper wireless connection.

### STEP 5: Setup Wizard - For LAN Settings

You can configure the LAN IP address to suit your preference. Many users will find it convenient to use the default settings together with DHCP service to manage the IP settings for their private network. The IP address of the Router is the base address used for DHCP. In order to use the Router for DHCP on your LAN, the IP address pool used for DHCP must be compatible with the IP address of the Router. The IP addresses available in the DHCP IP address pool will change automatically if you change the IP address of the Router.

Enter the desired **IP address** and **Subnet Mask**.

Enter the **Start** and **Stop IP Address** for the **DHCP Server**, or disable **DHCP Server**.

Click **Next** to go to the next **Setup Wizard** window.

### STEP 6: RESTART

Click **Back** to review or modify settings. Click on **Restart** to apply current settings and reboot the DSL-2740B router. If your Internet connection does not work after the router restarts, you can try the **Setup Wizard** again with alternative settings or use **Manual Setup** instead provided you have your Internet connection details as provided to you by your ISP.

1 > 2 > 3 > 4 > STEP 5: CONFIGURE LOCAL NETWORK > 6

Configure the DSL Router IP Address and Subnet Mask for LAN interface.

#### DEVICE SETUP

IP Address:   
Subnet Mask:

Disable DHCP Server  
 Enable DHCP Server

Start IP Address:   
End IP Address:   
Leased Time (hour):

Configure the second IP Address and Subnet Mask for LAN interface

IP Address:   
Subnet Mask:

1 > 2 > 3 > 4 > 5 > STEP 6: COMPLETED AND RESTART

Setup complete. Click Back to review or modify settings. Click Restart to apply current settings and reboot the DSL-2640B router.

If your Internet connection does not work after restart, you can try the Setup Wizard again with alternative settings or use Manual Setup instead if you have your Internet connection details as provided by your ISP.

## Section 3 - Configuration

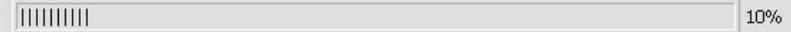
### DSL ROUTER REBOOT

**Please ensure you do not turn the Router off while it is rebooting.** After the Router has successfully rebooted, you can again configure the Router as desired. You can also test the WAN connection by accessing the Internet with your browser.

Close the DSL Router Configuration window and wait for 1 minute before reopening your web browser. If necessary, please reconfigure your computer's IP address to match your new configuration.

#### DSL ROUTER REBOOT

The DSL Router has been configured and is rebooting. Please wait...  
If necessary, reconfigure your PC's IP address to match your new configuration after reboot finishes.



# INTERNET SETUP

To access the **INTERNET SETUP** (WAN) settings window, click on the **INTERNET Setup** button in the **SETUP** directory and select the **Manual Setup** to configure the MANUAL ADSL interface in this page:

## INTERNET SETUP

Check the **Manual Setup** item and configure the below messages as in **WIZARD**.

Click on the **Add** button to set your settings.

## Service Category

The ATM settings allow the user to adjust ATM Quality of Service (QoS) or traffic parameters to suit specific traffic requirements. For applications or circumstances where packet loss or packet delay is a concern, ATM QoS can be adjusted to minimize problems. For most accounts, it will not be necessary to change these settings. Altering QoS settings can adversely affect performance of some commonly used Internet applications.

If you plan to change QoS or traffic parameters, contact your ISP or network services provider for information on what types of adjustment are available or possible for your account. Your ISP may not support the class of service you want to use.

To adjust ATM QoS parameters, select one of the Service Categories listed here and type in the PCR value in the entry field below. For the VBR service category, an additional parameter (SCR) must also be defined.

### Section 3 - Configuration

Now select the Connection Type used for the Internet connection. Your ISP has given this information to you. The connection types available are **PPPoA**, **PPPoE**, **MER**, **IPoA** and **Bridge Mode**. The Encapsulation Mode includes **LLC/SNAP-BRIDGING** and **VC/MUX**. Each connection type has different settings that are configured in the next **Setup Wizard** window.

**CONNECTION TYPE**

PPP over ATM (PPPoA)

PPP over Ethernet (PPPoE)

MAC Encapsulation Routing (MER)

IP over ATM (IPoA)

Bridging

**Encapsulation Mode**

LLC/SNAP-BRIDGING ▾

Back Next Cancel

## For PPPoE/PPPoA connection

Type in the **Username** and **Password** (and PPPoE Service Name, if required by your ISP).

Select the specific **Authentication Method** from the drop-down menu (PAP or CHAP). Or user default AUTO to allow Router to negotiate with PPP server automatically.

### Dial on demand

If checked, will tear down the PPP link automatically when there is no incoming/outgoing packet via WAN interface for the programmed period of time that is set below (in minutes). Router activates PPPoE connection automatically when user wants to access Internet.

### PPP IP extension

Router passes the obtained IP address to the local PC and acts as a bridge only modem.

### Use Static IP Address

Type in the IP address given by your ISP in this field if your Router's IP address is not dynamically assigned.

### Default gateway

Select Obtain default gateway automatically or set default gateway manually

Click on the **Next button** to go to the next window.

PPP USERNAME AND PASSWORD

PPP Username:

PPP Password:

Confirm PPP Password:

Authentication Method:

MTU:

Dial on demand (with idle timeout timer)

Inactivity Timeout (minutes) [1-4320]:

PPP IP extension

Keep Alive

Use Static IP Address

IP Address:

Obtain default gateway automatically.

Use the following default gateway:

Use IP Address:

Use WAN Interface:

Back Next Cancel

### For Dynamic IP (1483 Bridge) connection

Select **Obtain an IP address/Default gateway/DNS server automatically**.

Click on the **Next button** to go to the next window.

The screenshot shows the 'WAN IP SETTINGS' window. The 'Obtain an IP address automatically' option is selected. Below it is a 'Cloned MAC Address' field with a 'Copy Your PC's MAC Address' button. The 'Obtain default gateway automatically' and 'Obtain DNS server addresses automatically' options are also selected. At the bottom are 'Back', 'Next', and 'Cancel' buttons.

### For Static IP Address (1483 Bridge) connection

Enter the **WAN IP Address**, **WAN Subnet Mask** provided by your ISP.

Select **Use the following default gateway/DNS server addresses** and enter the **ISP Gateway Address**, **Primary DNS Address**, and **Secondary DNS Server IP Address** as instructed by your ISP.

Click on the **Next button** to go to the next window.

The screenshot shows the 'WAN IP SETTINGS' window with static IP configuration. The 'Use the following IP address' option is selected, with 'WAN IP Address' set to 192.168.38.48 and 'WAN Subnet Mask' set to 255.255.255.0. The 'Use the following default gateway' option is also selected, with 'Use IP Address' set to 192.168.38.2. The 'Use the following DNS server addresses' option is selected, with both 'Primary DNS server' and 'Secondary DNS server' set to 192.168.1.1. At the bottom are 'Back', 'Next', and 'Cancel' buttons.

## Using the Setup Wizard - For Static IP Address (IPoA) connection

Enter the **WAN IP Address**, **WAN Subnet Mask** provided by your ISP.

Select **Use the following default gateway/DNS server addresses** and enter the **ISP Gateway Address**, **Primary** and **Secondary DNS Server** IP Address as instructed by your ISP.

Click on the **Next button** to go to the next window.

**WAN IP SETTINGS**

WAN IP Address: 192.168.38.48  
WAN Subnet Mask: 255.255.255.0

Obtain default gateway automatically  
 Use the following default gateway:  
 Use IP Address: 192.168.38.2  
 Use WAN Interface: mer\_3\_38/ipa\_3\_38

Use the following DNS server addresses:  
Primary DNS server: 168.95.1.1  
Secondary DNS server: 168.95.192.1

Back Next Cancel

# WIRELESS

Use this section to configure the wireless settings for your D-Link router. Please note that changes made in this section will also need to be duplicated onto your wireless clients and PC.

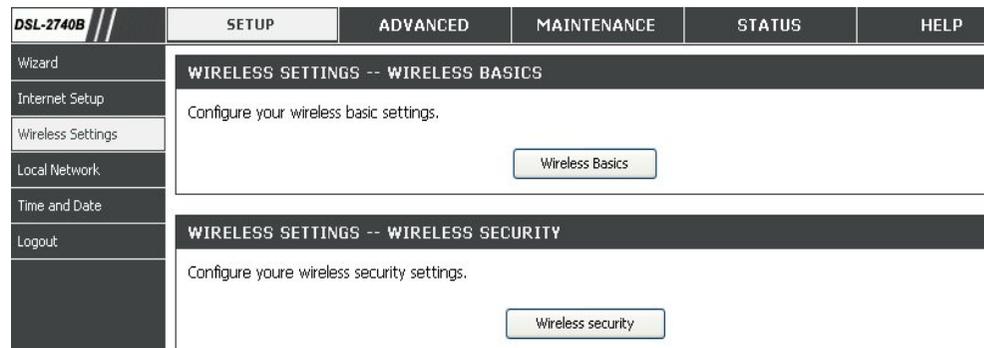
To access the **WIRELESS** (WLAN) settings window, click on the **Wireless Setup** button in the **SETUP** directory.

## Set wireless basics

Configure your wireless basic settings.

## Set Wireless security

Configure your wireless security settings.



### WIRELESS NETWORK SETTINGS

Click on the **Enable Wireless** box to allow the router to operate in the wireless environment.

The **SSID** identifies members of the Service Set. Accept the default name or change it to something else. If the default SSID is changed, all other devices on the wireless network must also use the same SSID.

**Enable Auto Channel Scan** so that the router can select the best possible channel for your wireless network to operate on.

The **Wireless Channel** can let you select the channel of your access point. Channel availability is different for different countries due to their regulation.

Select **Mixed 802.11 Mode** to operate in b/g/n mode. Or select specified mode to use.

**Channel Width**, Maximum rate for **20 MHz** is 130 Mbps. Maximum rate for **40 MHz** is 270 Mbps

**Transmission Rate**, suggest keeping the Best (automatic) selection.

Click on the **Visibility Status** box to allow the router to broadcast its SSID.

#### WIRELESS

Use this section to configure the wireless settings for your D-Link router. Please note that changes made on this section will also need to be duplicated to your wireless clients and PC.

#### WIRELESS NETWORK SETTINGS

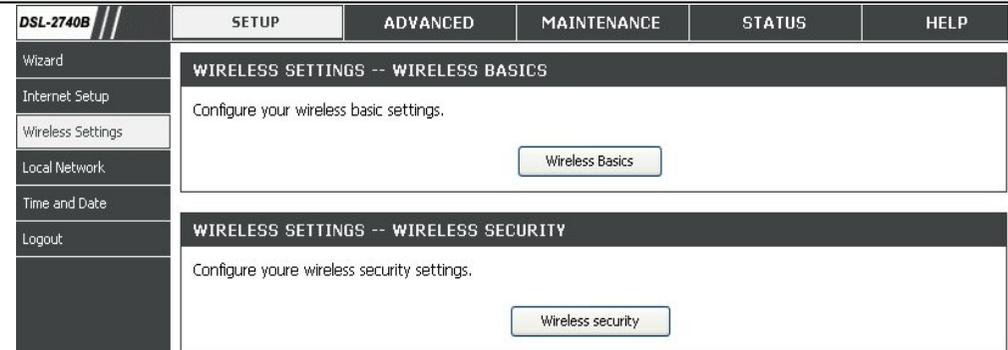
Enable Wireless :	<input checked="" type="checkbox"/>
Wireless Network Name (SSID) :	<input type="text" value="D-Link ADSL Router"/>
Visibility Status :	<input checked="" type="checkbox"/>
Country :	<input type="text" value="UNITED KINGDOM"/>
Enable Auto Channel Scan :	<input type="checkbox"/>
Wireless Channel :	<input type="text" value="2.437 GHz - CH 6"/>
802.11 Mode :	<input type="text" value="Mixed 802.11n, 802.11g and 802.11b"/>
Channel Width :	<input type="text" value="20 MHz"/>
Transmission Rate :	<input type="text" value="Best (automatic)"/> (Mbit/s)

Please take note of your SSID and security Key as you will need to duplicate the same settings to your wireless devices and PC.

## Section 3 - Configuration

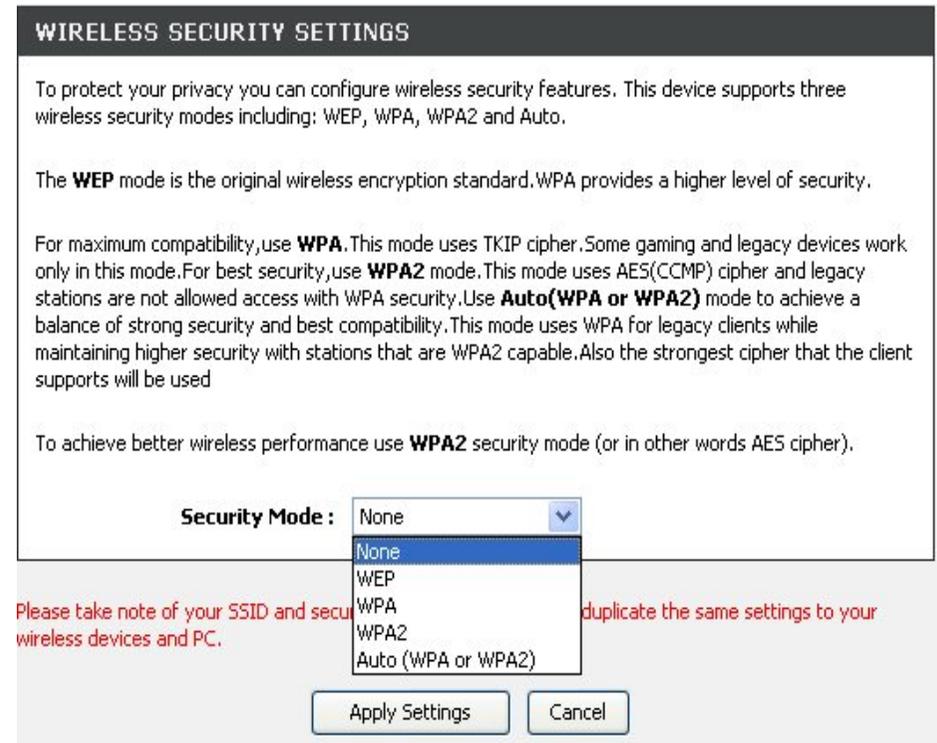
### WIRELESS SECURITY WIZARD

Click on the **Wireless Security** button to enter the **WIRELESS Security Setting** window.



Select the **Security Mode** type. **WPA-PSK** is more secure than **WEP 64 bit**.

Click on the **Apply Settings** button to apply the settings



## WIRELESS SECURITY MODE - WEP

**WEP (Wireless Encryption Protocol)** encryption can be enabled for security and privacy. WEP encrypts the data portion of each frame transmitted from the wireless adapter using one of the predefined keys. The router offers 64 or 128 bit encryption with four keys available.

Select **WEP Key Length** from the drop-down menu. (**128 bit** is stronger than **64 bit**)

Enter the key into the **WEP Key** field 1~4. (Key length is outlined at the bottom of the window.)

Select **Authentication** type from the drop-down menu. (**Shared** is better than **Open**)

Click on the **Apply Settings** button to apply settings.

### WEP

If you choose the WEP security option this device will **ONLY** operate in **Legacy Wireless mode (802.11B/G)**. This means you will **NOT** get 11N performance due to the fact that WEP is not supported by the Draft 11N specification.

WEP is the wireless encryption standard. To use it you must enter the same key(s) into the router and the wireless stations. For 64 bit keys you must enter 10 hex digits into each key box. For 128 bit keys you must enter 26 hex digits into each key box. A hex digit is either a number from 0 to 9 or a letter from A to F. For the most secure use of WEP set the authentication type to "Shared Key" when WEP is enabled.

You may also enter any text string into a WEP key box, in which case it will be converted into a hexadecimal key using the ASCII values of the characters. A maximum of 5 text characters can be entered for 64 bit keys, and a maximum of 13 characters for 128 bit keys.

**WEP Key Length :** 64 bit (10 hex digits)  (The length applies to all keys)

**WEP Key 1 :**

**WEP Key 2 :**

**WEP Key 3 :**

**WEP Key 4 :**

**Authentication :** Open

Please take note of your SSID and security Key as you will need to duplicate the same settings to your wireless devices and PC.

## WIRELESS SECURITY MODE – WPA-Personal

### WPA-PSK

WPA-PSK configuration is similar to WEP. The key length is between 8 to 63 ASCII codes.

**WPA**

WPA-Personal does not require an authentication server. The WPA-Enterprise option requires an external RADIUS server

**WPA Mode :**  (v)

**Group Key Update Interval :**  (seconds)

**PRE-SHARED KEY**

**Pre-Shared Key :**

Please take note of your SSID and security Key as you will need to duplicate the same settings to your wireless devices and PC.

## WIRELESS SECURITY MODE – WPA-Enterprise

### 802.1x

Some network-security experts now recommend that wireless networks use 802.1X security measures to overcome some weaknesses in standard WEP applications. A RADIUS server is used to authenticate all potential users. .

Enter your RADIUS server data: **IP Address, Port, and Key.**

Click on the **Save Settings** button to apply settings.

**EAP (802.1X)**

When WPA enterprise is enabled, the router uses EAP (802.1x) to authenticate clients via a remote RADIUS server.

**Authentication Timeout :**  (minutes)

**RADIUS server IP Address :**

**RADIUS Port :**

**RADIUS key :**

Please take note of your SSID and security Key as you will need to duplicate the same settings to your wireless devices and PC.

# LOCAL NETWORK

You can configure the LAN IP address to suit your preference. Many users will find it convenient to use the default settings together with DHCP service to manage the IP settings for their private network. The IP address of the Router is the base address used for DHCP. In order to use the Router for DHCP on your LAN, the IP address pool used for DHCP must be compatible with the IP address of the Router. The IP addresses available in the DHCP IP address pool will change automatically if you change the IP address of the Router.

To access the **Local Network** setting window, click on the **Local Network** button in the **SETUP** directory.

## ROUTER SETTINGS

To change the **Router IP Address** or **Subnet Mask**, type in the desired values.

**Second IP Address** is used to configure the router only. No routing functions will be executed through this IP address.

DSL-2740B	SETUP	ADVANCED	MAINTENANCE	STATUS
Wizard	<b>LAN SETUP</b>			
Internet Setup	This section allows you to configure the local network settings of your router. Please note that this section is optional and you should not need to change any of the settings here to get your network up and running.			
Wireless Settings	<b>ROUTER SETTINGS</b>			
Local Network	Use this section to configure the local network settings of your router. The IP Address that is configured here is the IP Address that you use to access the Web-based management interface. If you change the IP Address here, you may need to adjust your PC's network settings to access the network again.			
Time and Date	<b>Router IP Address :</b> <input type="text" value="192.168.1.1"/> <b>Subnet Mask :</b> <input type="text" value="255.255.255.0"/>  <b>Enable UPNP:</b> <input checked="" type="checkbox"/>			
Logout	<input type="checkbox"/> <b>Configure the second IP Address and Subnet Mask for LAN interface</b> <b>IP Address:</b> <input type="text"/> <b>Subnet Mask:</b> <input type="text"/>			

## Section 3 - Configuration

### DHCP SERVER SETTINGS (OPTIONAL)

The **Enable DHCP Server** is selected by default for the Router's Ethernet LAN interface. DHCP service will supply IP settings to workstations configured to automatically obtain IP settings that are connected to the Router through the Ethernet port. When the Router is used for DHCP it becomes the default gateway for DHCP client connected to it. Keep in mind that if you change the IP address of the Router the range of IP addresses in the pool used for DHCP on the LAN will also be changed. The IP address pool can be up to 253 IP addresses.

### ADD DHCP RESERVATION (OPTIONAL)

Select the **Enable** can let you reserve the **IP Address** for the designate PC with the configured **MAC Address**.

The **Computer Name** can help you recognize the PC with the **MAC Address**, such as "Father's Laptop".

Clicking on the **Copy Your PC's MAC Address** button will help you get the Mac address from the PC you are using now browsing this web page.

Click on the **Save button** to save the settings

### DHCP SERVER SETTINGS (OPTIONAL)

Use this section to configure the built-in DHCP Server to assign IP addresses to the computers on your network.

Enable DHCP Server :

DHCP IP Address Range :  to

DHCP Lease Time :  (hours)

### ADD/EDIT DHCP RESERVATION (OPTIONAL)

Enable :

Computer Name :

IP Address :

MAC Address :

## Section 3 - Configuration

### DHCP RESERVATIONS LIST

After saved the DHCP reservation, the **DHCP RESERVATIONS LIST** will list the configuration.

The **NUMBER OF DYNAMIC DHCP CLIENTS** shows how many DHCP clients (PC or Laptop) connected to the router currently.

Click on the **Save Settings** button. You will be asked to reboot by a pop-up window. Click on the **OK** to reboot the router.

### LAN SETUP

Do not turn the Router off while it is rebooting.

You might need to re-configure your PC NIC settings to enter the Router's web manager after reboot.

DHCP RESERVATIONS LIST				
	Enable	Computer Name	MAC Address	IP Address
<input type="checkbox"/>	Enable	Father	00:18:8B:BF:5A:F4	192.168.1.5

NUMBER OF DYNAMIC DHCP CLIENTS : 1			
Computer Name	MAC Address	IP Address	Expire Time
06967NBWINXPSP2	00:18:8B:BF:5A:F2	192.168.1.2	23 hours, 57 minutes, 7 seconds

**DSL ROUTER REBOOT**

The DSL Router has been configured and is rebooting. Please wait...  
If necessary, reconfigure your PC's IP address to match your new configuration after reboot finishes.

10%

# TIME

The **TIME** configuration option allows you to configure, update, and maintain the correct time on the internal system clock. From this section you can set the time zone that you are in and set the NTP (Network Time Protocol) Server. Daylight Saving can also be configured to automatically adjust the time when needed.

To access the **TIME** setting window, click on the **Time and Date** button in the **SETUP** directory

## TIME

Check the **Enable NTP Server**.

Select specific time server to use from the **NTP Server Used** drop-down menu.

Select your operating time zone from the **Time Zone** drop-down menu.

Check the **Enable Daylight Saving** if needed and then select the proper **Daylight Saving Offset** drop-down menu. **Configure the Daylight Saving Dates** from start date to end.

Click on the **Save Settings** button to apply your settings.

The screenshot shows the configuration interface for the TIME settings on a D-Link DSL-2740B router. The interface is organized into several sections:

- TIME SETTINGS:** Contains a checked checkbox for "Automatically synchronize with Internet time servers". Below this are two rows for NTP servers:
  - First NTP time server: Other (dropdown), clock.fmt.he.net (text input)
  - Second NTP time server: Other (dropdown), time.cachenetworks.cor (text input)
- TIME CONFIGURATION:** Displays the current router time as "1.01.2000,00:09:22 Sat". The Time Zone is set to "(GMT+01:00) Sarajevo, Skopje, Warsaw, Zagreb" (dropdown). The "Enable Daylight Saving" checkbox is unchecked. The Daylight Saving Offset is set to "-2:00" (dropdown). The Daylight Saving Dates section has two rows for Start and End dates, each with dropdowns for Month, Week, Day, and Time.
- SET THE DATE AND TIME MANUALLY:** Provides manual input fields for Date And Time:
  - Year: 2005 (dropdown), Month: Jan (dropdown), Day: 1 (dropdown)
  - Hour: 12 am (dropdown), Minute: 9 (dropdown), Second: 22 (dropdown)
  - A button labeled "Copy Your Computer's Time Settings"

At the bottom of the page, there are "Apply" and "Cancel" buttons.

# LOGOUT

The **LOGOUT** page enables you to logout of your router configuration and close the browser.

To access the **LOGOUT** setting window, click on the **Logout** button in the **SETUP** directory

## LOGOUT

Click on the **Logout** button to logout of the router configuration settings and close the browser.



# ADVANCED

This chapter include the more advanced features used for network management and security as well as administrative tools to manage the router, view status and other information used to examine performance and for troubleshooting.

## ADVANCED WIRELESS

These options are for users that wish to change the behavior of their 802.11g wireless radio from the standard setting. D-Link does not recommend changing these settings from the factory default. Incorrect settings may impair the performance of your wireless radio. The default settings should provide the best wireless radio performance in most environments.

To access the **ADVANCE WIRELESS** setting window, click on the **Advanced Wireless** button in the **ADVANCED** directory.

### ADVANCED SETTINGS

Allows you to configure advanced features of the wireless LAN interface

### MAC FILTER

Allows you to configure wireless firewall by denying or allowing designated MAC addresses.

### BRIDGE

Allows you to configure wireless bridge (also known as Wireless Distribution System) features of the wireless LAN interface.

### QOS (QUALITY OF SERVICE)

Allows you to configure wireless QoS.

DVA-G3670B	SETUP	ADVANCED	VOICE	MAINTENANCE	STATUS	HELP
Advanced Wireless	<b>WIRELESS -- ADVANCED SETTINGS</b>					
Port Forwarding	Allows you to configure advanced features of the wireless LAN interface.					
Port Triggering	<input type="button" value="Advanced Setting"/>					
DMZ	<b>WIRELESS -- MAC FILTER</b>					
Parental Control	Allows you to configure wireless firewall by denying or allowing designated MAC addresses.					
Filtering Options	<input type="button" value="MAC Filter"/>					
Firewall Settings	<b>WIRELESS -- BRIDGE</b>					
DNS	Allows you to configure wireless bridge (also known as Wireless Distribution System) features of the wireless LAN interface.					
Dynamic DNS	<input type="button" value="Bridge"/>					
Network Tools	<b>WIRELESS -- QOS (QUALITY OF SERVICE)</b>					
Routing	Allows you to configure wireless QoS.					
Schedules	<input type="button" value="Quality of Service"/>					
TR-069 Client						
Print Server						
Logout						

## Section 3 - Configuration

### ADVANCE WIRELESS SETTINGS

**Transmit Power:** 3-levels of transmit power are available: High, Medium and Low.

**Beacon Period:** This value indicates the frequency interval of the beacon. A beacon is a packet broadcast by the router to synchronize the wireless network. The value is **1~65535** milliseconds.

**RTS Threshold:** If a network packet is smaller than the preset RTS threshold size, the RTS/CTS mechanism will not be enabled. The router sends Request to Send (RTS) frames to a particular receiving station and negotiates the sending of a data frame. After receiving an RTS, the wireless station responds with a Clear to Send (CTS) frame to acknowledge the right to begin transmission. The range is **1~2347** bytes.

**Fragmentation Threshold:** Maximum frame size. Frame larger than the threshold are fragmented into multiple packets and transmitted. The range is **256~2346** bytes.

**DTIM Interval:** Interval of the Delivery Traffic Indication Message (DTIM). A DTIM field is a countdown field informing clients of the next window for listening to broadcast and multicast messages. When the router has buffered broadcast or multicast for associated clients, it sends the next DTIM with a DTIM Interval value. Its clients hear the beacons and awaken to receive the broadcast and multicast message. The range is **1~255** milliseconds,

**802.11d Enable:** Enable/Disable 802.1d

### ADVANCED SETTINGS

AP Isolation:	Off	
Band:	2.4GHz	
Channel:	6	Current: 6
Auto Channel Timer(min)	2097257	
802.11n/EWC:	Auto	
Bandwidth:	40 MHz	Current: 20MHz
Control Sideband:	Lower	Current: None
802.11n Rate:	Auto	
802.11n Protection:	Auto	
54g™ Rate:	1 Mbps	
Multicast Rate:	Auto	
Basic Rate:	Default	
Fragmentation Threshold:	2346	
RTS Threshold:	2347	
DTIM Interval:	1	
Beacon Interval:	100	
XPress™ Technology:	Disabled	
Afterburner Technology:	Disabled	
Preamble Type:	long	
Transmit Power:	100%	
<input type="checkbox"/> Enable Wireless Guest Network		
Guest SSID:	Guest	

Apply

Cancel

### ADD MAC FILTER

Select the **Wireless Mac Filter Policy** as **Disabled** to disable this filter

Select the **Wireless Mac Filter Policy** as **Deny All** to filter out all wireless MAC address besides the MAC addresses in the Wireless Mac Filter lists.

Select the **Wireless Mac Filter Policy** as **Allow All** to filter out all wireless MAC address in the Wireless Mac Filter lists.

Enter the **Filter name** and the **Wireless MAC Address**. Click on the **Add/Apply** button to add in the wireless MAC filter list.

This page allows you to configure wireless bridge features of the wireless LAN interface. You can select **Wireless Bridge** (also known as Wireless Distribution System) to disables access point functionality.

Select **Enabled** from the **Bridge Restrict** and enter the peer AP MAC address(es); or select **Enabled (Scan)** to find the available APs for you to choose.

Click "**Refresh**" to update the remote bridges. Wait for few seconds to update.

Click "**Apply**" to configure the wireless bridge options.

**Note: Wireless Bridge** only works on **11b/g** mode. Only the APs operating in the same channel can be bridged.

WIRELESS -- MAC FILTER

MAC Restrict Mode:  Disabled  Allow  Deny

MAC Address	Remove
-------------	--------

Add Delete

WIRELESS -- BRIDGE

AP Mode: Access Point

Bridge Restrict: Enabled

Remote Bridges MAC Address:

Refresh Apply

## WIRELESS QoS RULES CONFIGURATION

**WMM** is used to prioritize the data packets from LAN to WLAN. It is very useful when transmitting delay-sensitive packets like VoIP.

Select **Disabled** of **WMM No Acknowledgment** to avoid re-transmission of highly delay-sensitive packets

Click **Add QoS Entry** to configure your own rule.

**Note:** **WMM** only operates In **11b/g mode**.

Enter the **Name** and **Priority** (0~7, 7 is the highest) of the rule.

Specify traffic classification rules. The classification can be defined in the following parameters: **Protocol**, **Source/Destination IP Range**, and **Source/Destination Port Range**. If multiple conditions are entered, all conditions must be matched to take effect.

Click on the **Apply** button to apply this rule.

### Activate Wireless QoS Rules

Click on the **Apply WME Settings** button to activate the WMM QoS rule. Check the specified rule and click on the **Remove** button to delete.

### WMM(WI-FI MULTIMEDIA) SETTINGS

WMM(Wi-Fi Multimedia):    
 WMM No Acknowledgment:

### WIRELESS QoS CLASSES

Class Name	Priority	TRAFFIC CLASSIFICATION RULES				
		Protocol	Source Addr./Mask	Source Port	Dest. Addr./Mask	Dest. Port

### ADD/EDIT WIRELESS QUALITY OF SERVICE RULE

Traffic Class Name:

**Assign Wireless Priority**  
 Wireless Transmit Priority:

**Specify Traffic Classification Rules**

Protocol:

Source IP Address:

Source Subnet Mask:

UDP/TCP Source Port (port or port:port):

Destination IP Address:

Destination Subnet Mask:

UDP/TCP Destination Port (port or port:port):

# PORT FORWARDING

Use the **PORT FORWARDING** window to open ports in your router and re-direct data through those ports to a single PC on your network (WAN-to-LAN traffic). The Port Forwarding function allows remote users to access services on your LAN such as FTP for file transfers or SMTP and POP3 for e-mail. The DSL-2740B will accept remote requests for these services at your Global IP Address, using the specified TCP or UDP protocol and port number, and then redirect these requests to the server on your LAN with the LAN IP address you specify. Remember that the specified Private IP Address must be within the useable range of the subnet occupied by the Router.

To access the **PORT FORWARDING** settings window, click on the **PORT FORWARDING** button in the **ADVANCED** directory

## PORT FORWARDING RULES CONFIGURATION

Click **Add** button to set Port Forwarding Setup setting

**DSL-2740B** // SETUP ADVANCED MAINTENANCE STATUS

Advanced Wireless  
 Port Forwarding  
 Port Triggering  
 DMZ  
 Parental Control  
 Filtering Options  
 Firewall Settings  
 DNS  
 Dynamic DNS  
 Network Tools  
 Routing  
 Schedules  
 Logout

**PORT FORWARDING**

Port Forwarding allows you to direct incoming traffic from the WAN side (identified by protocol and external port) to the internal server with a private IP address on the LAN side. The internal port is required only if the external port needs to be converted to a different port number used by the server on the LAN side. A maximum of 32 entries can be configured.

Select the service name, and enter the server IP address and click "Apply" to forward IP packets for this service to the specified server. **NOTE: The "Internal Port End" cannot be changed. It is the same as "External Port End" normally and will be the same as the "Internal Port Start" or "External Port End" if either one is modified**

**PORT FORWARDING SETUP**

Server Name	External Port Start	External Port End	Protocol	Internal Port Start	Internal Port End	Server IP Address	Schedule Rule

Add Edit Delete

### Section 3 - Configuration

Select a name from the **Application Name** drop-down menu for a pre-configured application or type a name in the **Name** input box to define your own application.

Select a name from the **Computer Name** drop-down menu or type an IP address in the **IP address** input box to appoint the PC to receive the forwarded packets.

The **External Port** shows the ports opened for remote users in the WAN side of the router. The **TCP/UDP** means the protocol type of the opened ports.

The **Internal Port** shows the ports opened in the PC with the appointed **IP Address**. The **TCP/UDP** means the protocol type of the opened ports.

#### PORT FORWARDING SETUP

Remaining number of entries that can be configured:16

Server Name :

**Select a Service** : (Click to select)

**Custom Server** :

**Schedule** : Always  [View Available Schedules](#)

**Server IP Address** :

External Port Start	External Port End	Protocol	Internal Port Start	Internal Port End
<input type="text"/>	<input type="text"/>	TCP <input type="button" value="v"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	TCP <input type="button" value="v"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	TCP <input type="button" value="v"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	TCP <input type="button" value="v"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	TCP <input type="button" value="v"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	TCP <input type="button" value="v"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	TCP <input type="button" value="v"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	TCP <input type="button" value="v"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	TCP <input type="button" value="v"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	TCP <input type="button" value="v"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	TCP <input type="button" value="v"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	TCP <input type="button" value="v"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	TCP <input type="button" value="v"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	TCP <input type="button" value="v"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	TCP <input type="button" value="v"/>	<input type="text"/>	<input type="text"/>

# PORT TRIGGERING

Some applications require that specific ports in the Router's firewall be opened for access by the remote parties. Application rules dynamically open up the **Firewall** ports when an application on the LAN initiates a TCP/UDP connection to a remote party using the **Trigger** ports. The router allows the remote party from the WAN side to establish new connections back to the application on the LAN side using the **Firewall** ports. A maximum of 16 entries can be configured.

To access the **PORT TRIGGER** setting window, click on the **PORT TRIGGER** button in the **ADVANCED** directory.

## PORT TRIGGER

Click **Add** button to set Port Forwarding Setup setting

**DSL-2740B** // SETUP ADVANCED MAINTENANCE STATUS

Advanced Wireless  
Port Forwarding  
**Port Triggering**  
DMZ  
Parental Control  
Filtering Options  
Firewall Settings  
DNS  
Dynamic DNS  
Network Tools  
Routing  
Schedules  
Logout

**PORT TRIGGERING**

Some applications require that specific ports in the Router's firewall be opened for access by the remote parties. Port Trigger dynamically opens up the 'Open Ports' in the firewall when an application on the LAN initiates a TCP/UDP connection to a remote party using the 'Triggering Ports'. The Router allows the remote party from the WAN side to establish new connections back to the application on the LAN side using the 'Open Ports'.

Some applications such as games, video conferencing, remote access applications and others require that specific ports in the Router's firewall be opened for access by the applications. You can configure the port settings from this screen by selecting an existing application or creating your own (Custom application) and click "Apply" to add it.

**A maximum of 32 entries can be configured.**

**PORT TRIGGERING**

Application	Trigger		Open		Schedule Rule
Name	Protocol	Port Range		Protocol	Port Range
		Start	End		Start End

Add Edit Delete

### Section 3 - Configuration

Select a name from the drop-down menu for pre-configured application or type a name in the **Name** input box to define your own rules.

Enter your **Trigger** and **Firewall** port(s), and select the **Traffic Type**.

Click on the **Apply** button to apply settings.

#### PORT TRIGGERING

Remaining number of entries that can be configured :16

**Application Name :**

**Select an application :** (Click to select)

**Custom application :**

**Schedule :** Always  [View Available Schedules](#)

Trigger Port Start	Trigger Port End	Trigger Protocol	Open Port Start	Open Port End	Open Protocol
<input type="text"/>	<input type="text"/>	TCP <input type="button" value="v"/>	<input type="text"/>	<input type="text"/>	TCP <input type="button" value="v"/>
<input type="text"/>	<input type="text"/>	TCP <input type="button" value="v"/>	<input type="text"/>	<input type="text"/>	TCP <input type="button" value="v"/>
<input type="text"/>	<input type="text"/>	TCP <input type="button" value="v"/>	<input type="text"/>	<input type="text"/>	TCP <input type="button" value="v"/>
<input type="text"/>	<input type="text"/>	TCP <input type="button" value="v"/>	<input type="text"/>	<input type="text"/>	TCP <input type="button" value="v"/>
<input type="text"/>	<input type="text"/>	TCP <input type="button" value="v"/>	<input type="text"/>	<input type="text"/>	TCP <input type="button" value="v"/>
<input type="text"/>	<input type="text"/>	TCP <input type="button" value="v"/>	<input type="text"/>	<input type="text"/>	TCP <input type="button" value="v"/>
<input type="text"/>	<input type="text"/>	TCP <input type="button" value="v"/>	<input type="text"/>	<input type="text"/>	TCP <input type="button" value="v"/>
<input type="text"/>	<input type="text"/>	TCP <input type="button" value="v"/>	<input type="text"/>	<input type="text"/>	TCP <input type="button" value="v"/>

# DMZ

Since some applications are not compatible with NAT, the Router supports use of a DMZ IP address for a single host on the LAN. This IP address is not protected by NAT and will therefore be visible to agents on the Internet with the right type of software. Keep in mind that any client PC in the DMZ will be exposed to various types of security risks. If you use the DMZ, take measures (such as client-based virus protection) to protect the remaining client PCs on your LAN from possible contamination through the DMZ.

To access the **DMZ** setting window, click on the **DMZ** button under the **ADVANCED** tab.

The DSL Router will forward IP packets from the WAN that do not belong to any of the applications configured in the Port Forwarding table to the **DMZ** host computer.

Enter the computer's IP address and click **Apply** to activate the DMZ host.

Clear the IP address field and click **Apply** to deactivate the DMZ host.

DSL-2740B	SETUP	ADVANCED	MAINTENANCE	STATUS
Advanced Wireless	<div style="background-color: #f4a460; padding: 5px;"><b>DEMILITARIZED ZONE</b></div> <p>The DSL Router will forward IP packets from the WAN that do not belong to any of the applications configured in the Port Forwarding table to the DMZ host computer.</p> <p>Enter the computer's IP address and click "Apply" to activate the DMZ host.</p> <p>Clear the IP address field and click "Apply" to deactivate the DMZ host.</p>			
Port Forwarding				
Port Triggering				
DMZ				
Parental Control				
Filtering Options				
Firewall Settings				
DNS				
Dynamic DNS				
Network Tools				
Routing	<div style="background-color: #333; color: white; padding: 5px;"><b>DMZ HOST</b></div> <p>DMZ Host IP Address : <input type="text"/></p> <p style="text-align: right;"> <input type="button" value="Apply"/> <input type="button" value="Cancel"/> </p>			
Schedules				
Logout				

# PARENTAL CONTROL

The **PARENT CONTROL** provides two useful tools for restricting Internet access. **Block Websites** allows you to quickly create a list of all web sites that you wish to stop users from accessing. **Time Restrictions** allows you to control when clients or PCs connected to Router are allowed to access the Internet.

To access the **PARENT CONTROL** setting window, click on the **Parent Control** button in the **ADVANCED** directory

## BLOCK WEBSITE

Uses URL (i.e. www.yahoo.com) to implement filtering.

## BLOCK MAC ADDRESS

Uses MAC address to implement filtering



### BLOCKED WEBSITES SCHEDULING

Type the **Website** and select the **Schedule**. Click on the **Apply** button to add to your blocked websites scheduling configuration.

#### Schedule

Select to block the configured web site for **Always**, **Never** or **user defined schedule**.

The screenshot shows a configuration window titled "BLOCK WEBSITE". It contains a text input field for "URL :". Below it is a "Schedule:" label followed by a dropdown menu currently set to "Always" and a link "View Schedule Details". At the bottom of the window are two buttons: "Apply" and "Cancel".

### BLOCK MAC ADDRESS

In a home setting, parents can also restrict certain computers' accessibility to the internet for the time and day of the week.

Enter the name and MAC address of the restricted PC.

Select the schedule for the rule to take effect in **Blocking on Schedule**.

Click on the **Apply** button to apply settings

The screenshot shows a configuration window titled "TIME OF DAY RESTRICTION". It contains a "User Name" text input field. Below it are two radio button options: "Browser's MAC Address" (which is selected) and "Other MAC Address". The "Browser's MAC Address" option has a text input field containing "00:50:BA:EA:25:B1". Below the "Other MAC Address" option is a text input field with the placeholder "(xx:xx:xx:xx:xx:xx)". At the bottom, there is a "Blocking on Schedule:" label with a dropdown menu set to "Always" and a link "View Schedule Details". At the very bottom are two buttons: "Apply" and "Cancel".

# FILTERING OPTION

Use this section to configure the **FILTER OPTION** setting for your D-Link router. Please note that changes made in this section will also need to be duplicated onto your wireless clients and PC.

To access the **FILTER OPTION** settings window, click on the **FILTER OPTION** button in the **ADVANCED** directory.

## INBOUND IP FILTER

Manage incoming traffic. The filter can be used when NAT is disabled or co-work with Port Triggering.

## OUTBOUND IP FILTER

Manage outgoing traffic.

## BRIDGE FILTER

Uses MAC address to implement filtering. Useful only in bridge mode.

DSL-2740B	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
Advanced Wireless	<div style="border: 1px solid black; padding: 5px;"> <p><b>FILTER -- INBOUND IP FILTER</b></p> <p>Manage incoming traffic.</p> <p style="text-align: right;"><input type="button" value="Inbound"/></p> </div>				
Port Forwarding					
Port Triggering					
DMZ					
Parental Control					
Filtering Options					
Firewall Settings					
DNS					
Dynamic DNS					
Network Tools					
Routing	<div style="border: 1px solid black; padding: 5px;"> <p><b>FILTER -- OUTBOUND IP FILTER</b></p> <p>Manage outgoing traffic.</p> <p style="text-align: right;"><input type="button" value="Outbound"/></p> </div>				
Schedules	<div style="border: 1px solid black; padding: 5px;"> <p><b>FILTER -- BRIDGE FILTER</b></p> <p>Uses MAC address to impliment filtering. Usefull only in bridge mode.</p> <p style="text-align: right;"><input type="button" value="Bridge"/></p> </div>				
Logout					

## ADD INBOUND IP FILTER

Click **Add** button to set inbound IP filter rule.

Enter the **Filter name** and **Source IP Address** (All other criteria are reserved for future applications.) and select the **Schedule** and **WAN Interface** which the rule would take effect.

Click on the **Apply** button to apply settings.

**Note:** This section only applies when the Firewall is enabled. Do not confuse Inbound IP Filter with Port Forward. If Port Forward is configured, the incoming packets will be forwarded before checked by Incoming Filter.

### ACTIVE INBOUND FILTER

Name	VPI/VCI	Protocol	Source Address / Mask	Source Port	Dest. Address / Mask	Dest. Port	Schedule Rule
------	---------	----------	-----------------------	-------------	----------------------	------------	---------------

Add Edit Delete

### INBOUND IP FILTERING

Filter Name :

Protocol : (Click to select)

Source IP address :

Source Subnet Mask :

Source Port :  (port or port:port)

Destination IP address :

Destination Subnet Mask :

Destination Port :  (port or port:port)

Schedule : Always  [View Available Schedules](#)

**WAN Interfaces (Configured in Routing mode and with firewall enabled only)**  
Select at least one or multiple WAN interfaces displayed below to apply this rule.

Select All

Apply Cancel

## ADD OUTBOUND IP FILTER

Click **Add** button to set Port Forwarding Setup setting

Enter the **Filter name** and at least one of the following criteria: **Protocol**, **Source/Destination IP Address** and **Subnet Mask**, and **Source/Destination Port**.

Click on the **Apply** button to apply settings.

The screenshot shows a web-based configuration interface for an active outbound filter. It is divided into two main sections: 'ACTIVE OUTBOUND FILTER' and 'OUTBOUND IP FILTERING'.

**ACTIVE OUTBOUND FILTER**

Name	Protocol	Source Address / Mask	Source Port	Dest. Address / Mask	Dest. Port	Schedule Rule
------	----------	-----------------------	-------------	----------------------	------------	---------------

Below the table are three buttons: Add, Edit, and Delete.

**OUTBOUND IP FILTERING**

Filter Name :

Protocol : (Click to select)

Source IP address :

Source Subnet Mask :

Source Port :  (port or port:port)

Destination IP address :

Destination Subnet Mask :

Destination Port :  (port or port:port)

Schedule : Always  [View Available Schedules](#)

At the bottom are two buttons: Apply and Cancel.

### Section 3 - Configuration

**Bridge Filtering** is only effective on ATM PVCs configured in Bridge mode.

First select the Global Policy of the filter rules to allow or deny the specified packets.

Click on the **Apply** button to apply setting.

**Note: all bridge filter rules will be deleted when the global policy is changed.**

Click the **Add** button to set Bridge Filter setting

Also known as MAC address filter. You can forward or deny incoming traffic based on the source MAC address or the destination MAC address.

**Note: the bridge filter will work with the Bridge WAN interfaces.**

Click on the **Apply** button apply settings.

#### BRIDGE FILTERING

Bridge Filtering is only effective on ATM PVCs configured in Bridge mode. **ALLOW** means that all MAC layer frames will be **ALLOWED** except those matching with any of the specified rules in the following table. **DENY** means that all MAC layer frames will be **DENIED** except those matching with any of the specified rules in the following table.

Create a filter to identify the MAC layer frames by specifying at least one condition below. If multiple conditions are specified, all of them take effect. Click "Apply" to save and activate the filter.

##### Bridge Filtering Global Policy:

- ALLOW** all packets but **DENY** those matching any of specific rules listed
- DENY** all packets but **ALLOW** those matching any of specific rules listed

Apply

Cancel

#### ADD BRIDGE FILTER

Protocol Type : (Click to select) ▼

Destination MAC Address :

Source MAC Address :

Frame Direction : LAN<=>WAN ▼

Schedule: Always Allowed ▼ [View Schedule Details](#)

WAN Interfaces (Configured in Bridge mode only)

- Select All
- br\_0\_88/nas\_0\_88

Apply

Cancel

# FIREWALL

The **Firewall** window allows the Router to enforce specific predefined policies intended to protect against certain common types of attacks. There are two general types of protection (DoS, Port Scan) that can be enabled on the Router, as well as filtering for specific packet types sometimes used by hackers. The parameters used here are region-dependant. Please contact your local ISP for the optimized values.

To access the **FIREWALL** setting window, click on the **Firewall** button under the **ADVANCED** tab.

## FIREWALL SETTINGS

**SPI:** SPI (Stateful Packet Inspection) is a firewall feature that checks the state of network connections. Only legitimate packets are allowed to pass through.

**DoS and Port Scan Protection:** A DoS (denial-of-service) attack is characterized by an explicit attempt by attackers to prevent legitimate users of a service from using that service. Examples include: attempts to "flood" a network, thereby preventing legitimate network traffic, attempts to disrupt connections between two machines, thereby preventing access to a service, attempts to prevent a particular individual from accessing a service, or, attempts to disrupt service to a specific system or person.

Port scan protection is designed to block attempts to discover vulnerable ports or services that might be exploited in an attack from the WAN.

**Rate & Burst** The Rate is the trigger threshold. When the specified packets number has reached this rate, it triggers once.

The Burst is the consecutive trigger number allowed.

The router will stop all related application when the Burst is matched and resume working after the Rate is reduced below the configured number.

DSL-2740B	SETUP	ADVANCED	MAINTENANCE	STATUS												
Advanced Wireless	<b>FIREWALL SETTINGS</b> Click "Apply" button to make the changes effective immediately.  <b>FIREWALL CONFIGURATION</b>  <input checked="" type="checkbox"/> <b>Enable Attack Prevent</b>  <table border="1"> <thead> <tr> <th>Type</th> <th>Rate(pkt/sec)</th> <th>Burst</th> </tr> </thead> <tbody> <tr> <td>TCP DoS :</td> <td><input type="text" value="0"/></td> <td><input type="text" value="0"/></td> </tr> <tr> <td>Ping DoS :</td> <td><input type="text" value="0"/></td> <td><input type="text" value="0"/></td> </tr> <tr> <td>Port Scan :</td> <td><input type="text" value="0"/></td> <td><input type="text" value="0"/></td> </tr> </tbody> </table> Prevent IP Spoofing : <input type="checkbox"/>				Type	Rate(pkt/sec)	Burst	TCP DoS :	<input type="text" value="0"/>	<input type="text" value="0"/>	Ping DoS :	<input type="text" value="0"/>	<input type="text" value="0"/>	Port Scan :	<input type="text" value="0"/>	<input type="text" value="0"/>
Type					Rate(pkt/sec)	Burst										
TCP DoS :					<input type="text" value="0"/>	<input type="text" value="0"/>										
Ping DoS :					<input type="text" value="0"/>	<input type="text" value="0"/>										
Port Scan :					<input type="text" value="0"/>	<input type="text" value="0"/>										
Port Forwarding																
Port Triggering																
DMZ																
Parental Control																
Filtering Options																
Firewall Settings																
DNS																
Dynamic DNS																
Network Tools																
Routing																
Schedules																
Logout																

# DNS

**Domain Name Server (DNS)** is a server that translates URL/Domain Names to the corresponding IP address. Since URL/Domain Names are alphabetical, they are easier to remember. But the internet is based on IP address. For example, the URL/Domain Name www.dlink.com is actually 64.7.210.132

To access the **DNS** setting window, click on the **DNS** button under the **ADVANCED** tab.

## DNS SERVER CONFIGURATION

If you are using the Router for DHCP service on the LAN and are using DNS servers on the ISP's network, check **Obtain DNS server address automatically** box.

If you have DNS IP addresses provided by your ISP, enter these IP addresses in the available entry fields for the **Primary DNS Server** and the **Secondary DNS Server**.

The screenshot displays the router's configuration interface. On the left is a sidebar menu with the following items: DSL-2740B, Advanced Wireless, Port Forwarding, Port Triggering, DMZ, Parental Control, Filtering Options, Firewall Settings, DNS (highlighted), Dynamic DNS, Network Tools, Routing, Schedules, and Logout. The main content area has four tabs: SETUP, ADVANCED (selected), MAINTENANCE, and STATUS. Under the ADVANCED tab, there is a 'DNS' section with an orange header and a message: 'Click "Apply" button to save the new configuration. You must reboot the router to make the new configuration effective.' Below this is the 'DNS SERVER CONFIGURATION' section, which contains two radio button options: 'Obtain DNS server address automatically' (which is selected) and 'Use the following DNS server addresses'. Under the second option, there are two input fields labeled 'Preferred DNS server' and 'Alternate DNS server'. At the bottom right of the configuration area are 'Apply' and 'Cancel' buttons.

# DDNS

The **Dynamic DNS** feature allows you to host a server (Web, FTP, Game Server, etc.) using a domain name that you have purchased (www.whateveryournameis.com) with your dynamically assigned IP address. Most broadband Internet Service Providers assign dynamic (changing) IP addresses. When you use a Dynamic DNS service provider, your friends can enter your host name to connect to your server, no matter what your IP address is.

To access the **DDNS** setting window, click on the **DDNS** button under the **ADVANCED** tab.

**DDNS CONFIGURATION** Click the **Add** button to set DDNS setting. Select DDNS Service provider from the **D-DNS provider** drop-down menu and enter your account data.

After configure the DNS settings as desired, click on the **Apply** button to apply settings.

The screenshot shows the router's configuration interface for the DSL-2740B. The top navigation bar includes 'SETUP', 'ADVANCED', 'MAINTENANCE', and 'STATUS'. The left sidebar lists various configuration options, with 'Dynamic DNS' highlighted. The main content area is titled 'DDNS' and contains the following text:

This page allows you to add a Dynamic DNS address.

The Dynamic DNS service allows you to alias a dynamic IP address to a static hostname in any of the many domains, allowing your DSL router to be more easily accessed from various locations on the Internet.

Choose Add or Remove to configure Dynamic DNS.

Below this text is a section titled 'DYNAMIC DNS' which contains a table with the following headers: Hostname, Username, Service, and Interface. At the bottom of the page, there are three buttons: 'Add', 'Edit', and 'Delete'.

## Section 3 - Configuration

**D-DNS provider:** Select one of the DDNS registration organizations from those listed in the pull-down menu. Available servers include DynDns.org and D-Link DDNS.

**Host Name:** Enter the Host Name that you registered with your DDNS service provider.

**Username or Key:** Enter the Username for your DDNS account.

**Password or Key:** Enter the Password for your DDNS account.

**ADD DYNAMIC DNS**

**D-DNS provider :**  ▼

**Hostname :**

**Interface :**  ▼

**Username :**

**Password :**

Apply

Cancel

# NETWORK TOOL

The **NETWORK TOOL** feature allows you to configure **PORT MAPPING, IGMP, QOS, ADSL, SNMP AND TR-069**.

To access the **NETWORK TOOL** setting window, click on the **NETWORK TOOL** button under the **ADVANCED** tab.

## PORT MAPPING

Port Mapping supports multiple port to PVC and bridging groups. Each group will perform as an independent network.

## IGMP

Transmission of identical content, such as multimedia, from a source to a number of recipients.

## QOS

Allows you to manually configure special routes that your network might need.

## ADSL

Allows you to configure Default Gateway used by WAN Interface.

## SNMP

Allows you to configure SNMP (Simple Network Management Protocol).

## TR-069

DSL-2740B	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
Advanced Wireless	<b>NETWORK TOOLS -- PORT MAPPING</b>				
Port Forwarding	Port Mapping supports multiple port to PVC and bridging groups. Each group will perform as an independent network.				
Port Triggering	<a href="#">Port Mapping</a>				
DMZ	<b>NETWORK TOOLS -- IGMP</b>				
Parental Control	Transmission of identical content, such as multimedia, from a source to a number of recipients.				
Filtering Options	<a href="#">IGMP</a>				
Firewall Settings	<b>NETWORK TOOLS -- QOS</b>				
DNS	Allows you to manually configure special routes that your network might need.				
Dynamic DNS	<a href="#">Quality of Service</a>				
Network Tools	<b>NETWORK TOOLS -- ADSL</b>				
Routing	Allows you to configure Default Gateway used by WAN Interface.				
Schedules	<a href="#">ADSL Settings</a>				
Logout	<b>NETWORK TOOLS -- SNMP</b>				
	Allows you to configure SNMP (Simple Network Management Protocol).				
	<a href="#">SNMP</a>				
	<b>NETWORK TOOLS -- TR-069</b>				
	Allows you to configure TR-069 protocol.				
	<a href="#">TR-069</a>				

## Section 3 - Configuration

Allows you to configure TR-069 (Remote Management Protocol).

### Port Mapping

Port Mapping supports multiple ports to PVC and bridging groups. Each group will perform as an independent network. To support this feature, you must create mapping groups with appropriate LAN and WAN interfaces. All interfaces, by default are grouped to Default Group.

Check the **Enable virtual ports on** box to separate 4 LAN ports, otherwise they are grouped as one interface: eth0.

**Note: Only interfaces in the Default Group can access router's web page.**

Click the **Add** button to set Port Mapping setting.

#### PORT MAPPING

Enable virtual ports on

Group Name	Interfaces	Remove	Edit
Default	LAN4, LAN3, LAN2, LAN1, nas_0_88, Wireless, Wireless_Guest		

Add

### Section 3 - Configuration

Enter the **Group name** and select interfaces from the available interface list and add it to the grouped interface list using the arrow buttons to create the required mapping of the ports. The group name must be unique.

Click the **Apply** button to set Port Mapping setting.

The screenshot shows the 'PORT MAPPING CONFIGURATION' window. At the top, there is a 'Group Name:' text input field. Below this, the window is divided into two main sections: 'Grouped Interfaces' on the left and 'Available Interfaces' on the right. The 'Available Interfaces' list contains 'eth0', 'nas\_0\_88', 'Wireless', and 'Wireless\_Guest'. Between these two lists are two arrow buttons: '->' and '<-', used for moving interfaces between the lists. Below the 'Grouped Interfaces' list, there is a section titled 'Automatically Add Clients With the following DHCP Vendor IDs' followed by five empty text input fields. At the bottom of the window, there are 'Apply' and 'Cancel' buttons.

### IGMP

Transmission of identical content, such as multimedia, from a source to a number of recipients.

The screenshot shows the 'IGMP SETUP' window. It features a single checkbox labeled 'Enable IGMP Snooping', which is currently unchecked. At the bottom of the window, there are 'Apply' and 'Cancel' buttons.

### QoS

Quality of Service is a feature that allows you to prioritize the upstream traffics and optionally, mark the IP headers.

Click the **Add** button to set QoS setting.

#### QUALITY OF SERVICE SETUP

MARK						
Name	Priority	IP Precedence	Type of Service	WAN 802.1P	Details	Remove

#### DIFFERENTIATED SERVICE CONFIGURATION

MARK				
Class Name	Priority	DSCP Mark	Details	Remove

### Section 3 - Configuration

Enter the traffic class name, assign queuing priority and optionally overwrite the IP header TOS byte. A rule consists of a class name and at least one condition below. All of the specified conditions in this classification rule must be satisfied for the rule to take effect.

Click the **Apply** button to save and activate the rule

#### NETWORK TRAFFIC CLASS RULE

Traffic Class Name:

Enable Differentiated Service Configuration

Assign ATM Transmit Priority:	<input type="text"/>
Mark IP Precedence:	<input type="text"/>
Mark IP Type Of Service:	<input type="text"/>
Mark 802.1p if 802.1q is enabled on WAN:	<input type="text"/>

**Specify Traffic Classification Rules**  
Enter the following conditions either for IP level, SET-1, or for IEEE 802.1p, SET-2.

**SET-1**

Protocol:	<input type="text"/>
Source IP Address:	<input type="text"/>
Source Subnet Mask:	<input type="text"/>
UDP/TCP Source Port (port or port:port):	<input type="text"/>
Destination IP Address:	<input type="text"/>
Destination Subnet Mask:	<input type="text"/>
UDP/TCP Destination Port (port or port:port):	<input type="text"/>

**SET-2**

802.1p Priority:	<input type="text"/>
------------------	----------------------

### ADSL Settings

The ADSL settings page contains a modulation and capability section to be specified by your ISP. Consult your ISP to select the correct settings for each. Then click on Apply if you are finished or click on Advanced Settings if you want to configure more

**ADSL SETTINGS**

- G.Dmt Enabled**
- G.lite Enabled**
- T1.413 Enabled**
- ADSL2 Enabled**
- AnnexL Enabled**
- ADSL2+ Enabled**
- AnnexM Enabled**

**Capability**

- Bitswap Enable**
- SRA Enable**

Advanced Settings   Apply   Cancel

### SNMP

Simple Network Management Protocol (SNMP) that provides a means to monitor status and performance as well as set configuration parameters. It enables a management station to configure, monitor and receive trap messages from network devices.

**SNMP -- CONFIGURATION**

**Enable SNMP Agent :**

**Read Community :**

**Set Community :**

**System Name :**

**System Location :**

**System Contact :**

**Trap Manager IP :**

### TR-069

TR-069 is a WAN management protocol which allows your ISP to perform monitoring, configuration and firmware upgrade on your router remotely.

**Inform:** Select to enable or disable TR-069 client functionality.

**Inform Interval:** Interval (seconds) between two **Inform** messages.

**ACS URL:** Enter the URL of your ISP's ACS

**ACS User Name:** Enter the authentication user name

**ACS Password:** Enter the authentication password

**Connection Request User Name:** Enter the authentication user name for the ACS to login

**Connection Request Password:** Enter the authentication password for the ACS to login

#### TR-069 CLIENT -- CONFIGURATION

Inform  Disable  Enable

Inform Interval:

ACS URL:

ACS User Name:

ACS Password:

Connection Request User Name:

Connection Request Password:

# ROUTING

**Static Route**, **Default Gateway**, and **RIP** type routing configurations can be performed here.

To access the **Routing** setting window, click on the **Routing** button under the **ADVANCED** tab.

## STATIC ROUTE

Allows you to manually configure special routes that your network might need.

## DEFAULT GATEWAY

Allows you to configure Default Gateway used by WAN Interface.

## RIP

Allows you to configure RIP (Routing Information Protocol).

DSL-2740B	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
Advanced Wireless	<b>ROUTING -- STATIC ROUTE</b>				
Port Forwarding	Allows you to manually configure special routes that your network might need.				
Port Triggering	<input type="button" value="Static Route"/>				
DMZ	<b>ROUTING -- DEFAULT GATEWAY</b>				
Parental Control	Allows you to configure Default Gateway used by WAN Interface.				
Filtering Options	<input type="button" value="Default Gateway"/>				
Firewall Settings	<b>ROUTING -- RIP</b>				
DNS	Allows you to configure RIP (Routing Information Protocol).				
Dynamic DNS	<input type="button" value="RIP"/>				
Network Tools					
<b>Routing</b>					
Schedules					
Logout					

### STATIC ROUTE

Enter the destination network address, subnet mask, gateway AND/OR available WAN interface then click "Apply" to add the entry to the routing table.

**ROUTING -- STATIC ROUTE**

Destination	Subnet Mask	Gateway	Interface

### DEFAULT GATEWAY

If Enable Automatic Assigned Default Gateway checkbox is selected, this router will accept the first received default gateway assignment from one of the PPPoA, PPPoE or MER/DHCP enabled PVC(s). If the checkbox is not selected, enter the static default gateway AND/OR a WAN interface. Click "Apply" button to save it.

**DEFAULT GATEWAY**

**Enable Automatic Assigned Default Gateway**

Use Default Gateway IP Address :

Use Interface : LAN/br0

### RIP

To activate RIP for the device, select the 'Enabled' radio button for Global RIP Mode. To configure an individual interface, select the desired RIP version and operation, followed by placing a check in the 'Enabled' checkbox for the interface. Click the 'Apply' button to save the configuration, and to start or stop RIP based on the Global RIP mode selected.

**ROUTING -- RIP CONFIGURATION**

**Global RIP Mode**  Disabled  Enabled

Interface	VPI/VCI	Version	Operation	Enabled
br0	(LAN)	2 <input type="button" value="v"/>	Active <input type="button" value="v"/>	<input type="checkbox"/>

# SCHEDULES

To access the **SCHEDULES** setting window, click on the **SCHEDULES** button in the **ADVANCED** directory.

**Schedule** allows you to create scheduling rules to be applied for your **Firewall** and **Parental Control**.

Click the **Add** button to create your own schedule.

The screenshot shows the router's configuration interface. At the top, there are tabs for 'DSL-2740B', 'SETUP', 'ADVANCED', 'MAINTENANCE', and 'STATUS'. The 'ADVANCED' tab is selected. On the left is a vertical menu with options: Advanced Wireless, Port Forwarding, Port Triggering, DMZ, Parental Control, Filtering Options, Firewall Settings, DNS, Dynamic DNS, Network Tools, Routing, and Schedules. The 'SCHEDULES' section is active, displaying a 'SCHEDULE' overview with the text: 'Schedule allows you to create scheduling rules to be applied for your firewall. Maximum of 20 entries'. Below this is a 'SCHEDULE RULE' table with columns: Rule Name, Sun, Mon, Tue, Wed, Thu, Fri, Sat, Start, and Stop. At the bottom of the SCHEDULE RULE section are three buttons: 'Add', 'Edit', and 'Delete'.

Enter the name of the schedule and select the day and time.

Click the **Apply** button to save and apply your settings.

The 'ADD SCHEDULE RULE' dialog box contains the following fields and options:
 

- Name :** A text input field.
- Day(s) :** Radio buttons for 'All Week' and 'Select Day(s)'. The 'Select Day(s)' option is selected.
- Below 'Day(s)', there are checkboxes for each day of the week: Sun, Mon, Tue, Wed, Thu, Fri, and Sat.
- All Day - 24 hrs :** A checkbox.
- Start Time :** Two input fields for hour and minute, followed by the text '(hour:minute, 24 hour time)'.
- End Time :** Two input fields for hour and minute, followed by the text '(hour:minute, 24 hour time)'.

 At the bottom of the dialog are two buttons: 'Apply' and 'Cancel'.

# MAINTENANCE

Click on the **MAINTENANCE** tab to reveal the window buttons for various functions located in this directory.

## SYSTEM

This section allows you to manage the router's configuration settings, reboot, back up, load previous saved settings and restore the router to the factory default settings. Restoring the unit to the factory default settings will erase all settings, including any rules that you've created.

To access the **SYSTEM** setting window, click on the **SYSTEM** button under the **MAINTENANCE** tab.

### REBOOT

Click the button below to reboot the router

### BACKUP SETTINGS

Backup DSL Router configurations. You may save your router configurations to a file on your PC.

Note: Please always save configuration file first before viewing it.

### UPDATE SETTINGS

Update DSL Router settings. You may update your router settings using your saved files.

### RESTORE DEFAULT SETTINGS

Restore DSL Router settings to the factory defaults

DSL-2740B	SETUP	ADVANCED	MAINTENANCE	STATUS
System	<b>SYSTEM -- REBOOT</b>			
Firmware Update	Click the button below to reboot the router.			
Access Controls	<input type="button" value="Reboot"/>			
Diagnostics	<b>SYSTEM -- BACKUP SETTINGS</b>			
System Log	Backup DSL Router configurations. You may save your router configurations to a file on your PC.			
Logout	<i>Note: Please always save configuration file first before viewing it.</i>			
	<input type="button" value="Backup Settings"/>			
	<b>SYSTEM -- UPDATE SETTINGS</b>			
	Update DSL Router settings. You may update your router settings using your saved files.			
	Settings File Name:	<input type="text"/>	<input type="button" value="Browse..."/>	
	<input type="button" value="Update Settings"/>			
	<b>SYSTEM -- RESTORE DEFAULT SETTINGS</b>			
	Restore DSL Router settings to the factory defaults.			
	<input type="button" value="Restore Default Settings"/>			

## Section 3 - Configuration

### DSL ROUTER REBOOT

Please ensure you do not turn the Router off while it is rebooting. After the Router has successfully rebooted, you can again configure the Router as desired. You can also test the WAN connection by accessing the Internet with your browser.

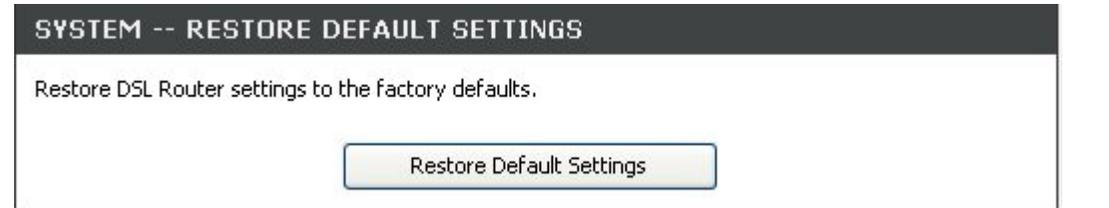
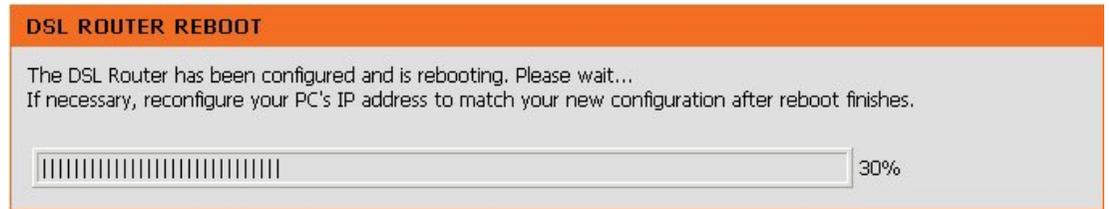
Close the DSL Router Configuration window and wait for 1 minute before reopening your web browser. If necessary, please reconfigure your computer's IP address to match your new configuration.

### SAVE/RESTORE CONFIGURATION

Click on the **Save** button to Save Settings to Local Hard Drive. You will be prompted to select a location on your computer to put the file. You may name the configuration file anything you like.

Click on the **Browse** button to browse to the configuration file in the PC and click on the **Update Settings** button to load settings from local hard drive. Confirm that you want to load the file when prompted and the process will complete automatically. The Router will reboot and begin operating with the configuration settings that have just been loaded.

To reset the Router to its factory default settings, click on the **Restore Device button**. You will be prompted to confirm your decision to reset the Router. The Router will reboot with the factory default settings including IP settings (192.168.1.1) and Administrator password (admin).



# FIRMWARE UPDATE

Use the **FIRMWARE UPGRADE** window to load the latest firmware for the device. Note that the device configuration settings may return to the factory default settings, so make sure you first save the configuration settings with the **SAVE/RESTORE SETTINGS** window described above.

To access the **FIRMWARE UPGRADE** setting window, click on the **Firmware Update** button under the **MAINTENANCE** tab.

## FIRMWARE UPGRADE

To upgrade firmware, click on the **Browse...** button to search for the file and then click on the **Upload** button to begin copying the file. The Router will load the file and restart automatically.

DSL-2740B	SETUP	ADVANCED	MAINTENANCE	STATUS
System	<div style="background-color: #f4a460; padding: 5px;"><b>FIRMWARE</b></div> <p><b>Step 1:</b> Obtain an updated firmware image file from your ISP.</p> <p><b>Step 2:</b> Enter the path to the image file location in the box below or click the "Browse" button to locate the image file.</p> <p><b>Step 3:</b> Click the "Update Firmware" button once to upload the new image file.</p> <p>NOTE: The update process takes about 2 minutes to complete, and your DSL Router will reboot. Please DO NOT power off your router before the update is complete.</p> <div style="background-color: #333; color: white; padding: 5px;"><b>FIRMWARE UPDATE</b></div> <p>Board ID: 96358GW            Software Version: DI_DSL-2740B_3.06L.04V_2.06.A2p8022g.d20e            Bootloader (CFE) Version: 1.0.37-6.5            Wireless Driver Version: 4.80.53.0.cpe2.1</p> <p>Firmware File Name: <input type="text"/> <input type="button" value="Browse..."/></p> <p style="text-align: center;"><input type="button" value="Update Firmware"/></p>			
Firmware Update				
Access Controls				
Diagnostics				
System Log				
Logout				

# ACCESS CONTROL

To access the **ACCESS CONTROL** setting window, click on the **ACCESS CONTROL** button in the **MAINTENANCE** directory.

## ADMIN

Manage DSL Router user accounts

## SERVICES

A Service Control List ("SCL") enables or disables services from being used.

## IP ADDRESS

Permits access to local management services.

DSL-2740B	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
System	<b>ACCESS CONTROL -- ADMIN</b>				
Firmware Update	Manage DSL Router user accounts.				
Access Controls	<input type="button" value="Admin"/>				
Diagnostics	<b>ACCESS CONTROL -- SERVICES</b>				
System Log	A Service Control List ("SCL") enables or disables services from being used.				
Logout	<input type="button" value="Services"/>				
	<b>ACCESS CONTROL -- IP ADDRESS</b>				
	Permits access to local management services.				
	<input type="button" value="IP Address"/>				

### Admin

The Admin option is used to set a password for access to the Web-based management. By default there is no password configured. It is highly recommended that you create a password to keep your new router secure.

Access to your DSL Router is controlled through three user accounts: admin, support, and user.

#### Admin Password

Enter a password for the user "admin", who will have full access to the Web-based management interface.

#### Support Password

Allows an ISP technician to access your DSL Router for maintenance and to run diagnostics.

#### User Password

Allows to view configuration settings and statistics, as well as update the router's firmware.

**ADMINISTRATOR SETTINGS**

Username: (Click to Select) ▼

Old Password:

New Password:

Confirm Password:

Apply Cancel

### Services

Allows access to the router via FTP, HTTP, ICMP, SNMP, SSH, TELNET, and TFTP.

#### LAN

Accesses the DSL router from the local network (LAN) side.

#### WAN

Accesses the DSL router from the ISP side.

**ACCESS CONTROL -- SERVICES**

Service	LAN	WAN
FTP	<input checked="" type="checkbox"/> Enabled	<input type="checkbox"/> Enabled
HTTP	<input checked="" type="checkbox"/> Enabled	<input type="checkbox"/> Enabled
ICMP	<input checked="" type="checkbox"/> Enabled	<input type="checkbox"/> Enabled
SNMP	<input checked="" type="checkbox"/> Enabled	<input type="checkbox"/> Enabled
SSH	<input checked="" type="checkbox"/> Enabled	<input type="checkbox"/> Enabled
TELNET	<input checked="" type="checkbox"/> Enabled	<input type="checkbox"/> Enabled
TFTP	<input checked="" type="checkbox"/> Enabled	<input type="checkbox"/> Enabled

Apply Cancel

### IP Address

The IP Address Access Control mode, if enabled, permits access to local management services from IP addresses contained in the Access Control List. If the Access Control mode is disabled, the system will not validate IP addresses for incoming packets. The services are the system applications listed in the Service Control List.

ACCESS CONTROL -- IP ADDRESS

Access Control Mode  Disabled  Enabled

IP Address	Select
------------	--------

Add Edit Delete

# DIAGNOSTICS

This page shows the result of your router's self diagnostic and connection test results. The Internet connectivity status will only show **PASS** if you have correctly configured your Internet connection and your router is currently online.

To access the **DIAGNOSTICS** setting window, click on the **Diagnostics** button under the **MAINTENANCE** tab.

## INTERNET CONNECTIVITY CHECK

Click on the **Test** button to run the diagnostics again.

**Notice:** The **Diagnostic Test** window is used to test connectivity of the Router. A Ping test may be done through the local or external interface to test connectivity to known IP addresses. The diagnostics feature executes a series of test on your system software and hardware connections. Use this window when working with your ISP to troubleshoot problems.

DSL-2740B	SETUP	ADVANCED	MAINTENANCE	STATUS
System				
Firmware Update				
Access Controls				
<b>Diagnostics</b>				
System Log				
Logout				

**DLINK PVC DIAGNOSTICS**

**Diagnostics**

Your modem is capable of testing your DSL connection. The individual tests are listed below. If a test displays a fail status, click "Rerun Diagnostic Tests" at the bottom of this page to make sure the fail status is consistent. If the test continues to fail, click "Help" and follow the troubleshooting procedures.

Virtual Circuit :

**TEST THE CONNECTION TO YOUR LOCAL NETWORK**

Test your ENET(1-4) Connection:	<b>PASS</b>	
Test your Wireless Connection:	<b>PASS</b>	<a href="#">Help</a>
Test ADSL Synchronization:	<b>FAIL</b>	<a href="#">Help</a>

# SYSTEM LOG

The system log displays chronological event log data. The event log can be read from local host or sent to a System Log server. The available event severity levels are: **Emergency, Alert, Critical, Error, Warning, Notice, Informational and Debugging.**

To access the **SYSTEM LOG** setting window, click on the **System Log** button under the **MAINTENANCE** tab.

The System Log dialog allows you to view the System Log and configure the System Log options.

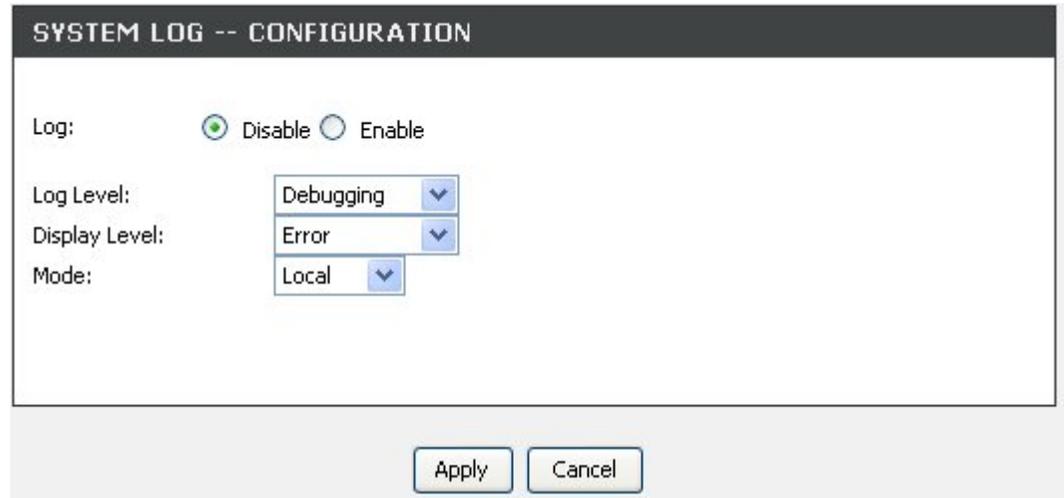
Click "**View System Log**" to view the System Log.

Click "**Configure System Log**" to configure the System Log options.



## CONFIGURE SYSTEM LOG

- Log Level:** All events above or equal to the selected level will be logged.
- Display Level:** All logged events above or equal to the selected level will be displayed.
- Mode:** Display mode of system log. Local: Display on local host only Remote: Send log file to remote system log server only
- Server IP Address:** IP address of the remote system log server
- Server UDP Port:** UDP port number of the remote system log server



**VIEW SYSTEM LOG**

The table lists the system log.

**SYSTEM LOG**

Date/Time	Facility	Severity	Message
Jan 1 00:52:41	user	notice	kernel: Ebtables v2.0 registered
Jan 1 00:52:41	user	warn	kernel: VFS: Mounted root (squashfs filesystem) readonly.
Jan 1 00:52:41	user	warn	kernel: Algorithmics/MIPS FPU Emulator v1.5
Jan 1 00:52:41	user	warn	kernel: atmapi: module license 'Proprietary' taints kernel.
Jan 1 00:52:41	user	warn	kernel: blaadd: blaa_detect entry
Jan 1 00:52:41	user	warn	kernel: adsl: adsl_init entry
Jan 1 00:52:41	user	warn	kernel: Broadcom BCM6358A1 Ethernet Network Device v0.3 Aug 9 2007 18:17:38
Jan 1 00:52:41	user	warn	kernel: Config Ethernet Switch Through MDIO Pseudo PHY Interface
Jan 1 00:52:41	user	warn	kernel: dgasp: kerSysRegisterDyingGaspHandler: eth0 registered
Jan 1 00:52:41	user	warn	kernel: eth0: MAC Address: 00:03:C9:A8:41:39
Jan 1 00:52:41	user	warn	kernel: PCI: Enabling device 0000:00:01.0 (0004 -> 0006)

# STATUS

Click on the **STATUS** tab to reveal the window buttons for various functions located in this directory. The **DEVICE STATUS** window is the first item in the **STATUS** directory. Use these windows to view system information and monitor performance.

## DEVICE STATUS

The **Device Info** page displays a summary overview of your router status, including: Device software version and summary of your Internet configuration (both wireless and Ethernet status).

To access the **DEVICE STATUS LOG** setting window, click on the **Device Info** button in the **STATUS** directory.

### GENERAL

This window displays current system time and the firmware version.

DSL-2740B //	SETUP	ADVANCED	MAINTENANCE	STATUS
Device Info	<b>DEVICE INFORMATION</b>			
Wireless Clients	This information reflects the current status of your DSL connection.			
DHCP Clients	<b>SYSTEM INFO</b>			
Logs	<b>Model Name:</b>		DSL-2740B	
Statistics	<b>Time and Date:</b>		1.01.2000,01:02:30 Sat	
Route Info	<b>Firmware Version:</b>		DI_DSL-2740B_3.06L.04V_2.06.A2p8022g.d20e	
Logout				

## Section 3 - Configuration

### INTERNET INFO

This window displays WAN information including IP address, Mask, Default Gateway, Primary/Secondary DNS Server.

#### INTERNET INFO

Internet Connection:  ▼

<b>Internet Connection Status:</b>	<b>CONNECTED</b>
<b>Internet Connection Up Time :</b>	0 days 0 hours 22 minutes 20 seconds
<b>Default Gateway:</b>	10.0.0.1
<b>Preferred DNS Server:</b>	168.95.1.1
<b>Alternate DNS Server:</b>	168.95.1.1
<b>Downstream Line Rate (Kbps):</b>	7680
<b>Upstream Line Rate (Kbps):</b>	800

VPI/VCI	Service Name	Protocol	IGMP	QoS	Status	IP Address
0/38	pppoe_0_38_1	PPPoE	Disable	Disable	Enable	10.0.0.110

### WIRELESS INFO

This window displays authenticated wireless stations and their status.

#### WIRELESS INFO

<b>MAC Address :</b>	00:1A:2B:00:18:17
<b>Status:</b>	Enabled
<b>Network Name (SSID):</b>	D-Link ADSL Router
<b>Visibility:</b>	Visible
<b>Security Mode:</b>	none

## Section 3 - Configuration

### LOCAL NETWORK INFO

This window displays LAN information including IP address, Mask, and DHCP Server.

LOCAL NETWORK INFO	
MAC Address :	00:03:C9:A8:41:39
IP Address:	192.168.1.1
Subnet Mask:	255.255.255.0
DHCP Server:	Enabled

# WIRELESS CLIENTS

This page shows all the currently connected wireless computers or PCs.

To access the **CONNECTED WIRELESS CLIENTS** setting window, click on the **Connected Clients** button in the **STATUS** directory.

### CONNECTED WIRELESS CLIENTS

This window displays authenticated wireless stations and their status.

DSL-2740B	SETUP	ADVANCED	MAINTENANCE	STATUS			
Device Info	<b>WIRELESS STATION INFO</b>						
Wireless Clients	This page shows authenticated wireless stations and their status.						
DHCP Clients	<b>WIRELESS -- AUTHENTICATED STATIONS</b>						
Logs	<table border="1"><thead><tr><th>BSSID</th><th>Associated</th><th>Authorized</th></tr></thead></table>				BSSID	Associated	Authorized
BSSID	Associated	Authorized					
Statistics							
Route Info							
Logout							
	<input type="button" value="Refresh"/>						

# DHCP CLIENTS

This page shows all the currently connected LAN computers or PCs.

To access the **CONNECTED LAN CLIENTS** setting window, click on the **Connected Clients** button in the **STATUS** directory.

## CONNECTED LAN CLIENTS

This window displays all the client devices which have obtained IP addresses from the router.

DSL-2740B //	SETUP	ADVANCED	MAINTENANCE	STATUS												
Device Info	<b>DHCP CLIENTS</b>															
Wireless Clients	This information reflects the current DHCP client of your modem.															
DHCP Clients	<b>DHCP LEASES</b>															
Logs	<table border="1"> <thead> <tr> <th>Hostname</th> <th>MAC Address</th> <th>IP Address</th> <th>Expires In</th> </tr> </thead> <tbody> <tr> <td>hollings-dbf3ab</td> <td>00:50:BA:EA:25:B1</td> <td>192.168.1.4</td> <td>23 hours, 6 minutes, 56 seconds</td> </tr> <tr> <td>WWW-FB0FD3EEEC</td> <td>00:1A:92:EF:CE:D3</td> <td>192.168.1.5</td> <td>23 hours, 60 seconds</td> </tr> </tbody> </table>				Hostname	MAC Address	IP Address	Expires In	hollings-dbf3ab	00:50:BA:EA:25:B1	192.168.1.4	23 hours, 6 minutes, 56 seconds	WWW-FB0FD3EEEC	00:1A:92:EF:CE:D3	192.168.1.5	23 hours, 60 seconds
Hostname	MAC Address	IP Address	Expires In													
hollings-dbf3ab	00:50:BA:EA:25:B1	192.168.1.4	23 hours, 6 minutes, 56 seconds													
WWW-FB0FD3EEEC	00:1A:92:EF:CE:D3	192.168.1.5	23 hours, 60 seconds													
Statistics	Refresh															
Route Info																
Logout																

# LOG

The system log displays chronological event log data. The event log can be read from local host or sent to a System Log server. The available event severity levels are: **Emergency, Alert, Critical, Error, Warning, Notice, Informational and Debugging.**

To access the **SYSTEM LOG** setting window, click on the **System Log** button under the **STATUS** tab.

This page allows you to view system logs.

The screenshot shows the web interface for a DSL-2740B device. On the left is a navigation menu with options: Device Info, Wireless Clients, DHCP Clients, Logs (highlighted), Statistics, Route Info, and Logout. At the top right are tabs for SETUP, ADVANCED, MAINTENANCE, and STATUS. The main content area has an orange header labeled 'LOGS' with the text 'This page allows you to view system logs.' Below this is a 'SYSTEM LOG' section with a table header containing 'Date/Time', 'Facility', 'Severity', and 'Message'. A 'Refresh' button is located at the bottom right of the log area.

# STATISTICS

This page displays your router network and data transfer statistics and is helpful for D-Link technicians to assist you in identifying if your router is functioning properly. The information provided is primarily informative and does not affect the function of your router.

To access the **STATISTICS** setting window, click on the **Statistics** button in the **STATUS** directory.

## LAN STATUS

This window displays WAN information

<b>DSL-2740B</b> //	<b>SETUP</b>	<b>ADVANCED</b>	<b>MAINTENANCE</b>	<b>STATUS</b>																																			
Device Info	<b>STATISTICS</b>																																						
Wireless Clients	This information reflects the current status of your DSL connection.																																						
DHCP Clients	<b>LAN</b>																																						
Logs	<table border="1"> <thead> <tr> <th rowspan="2">Interface</th> <th colspan="4">Received</th> <th colspan="4">Transmitted</th> </tr> <tr> <th>Bytes</th> <th>Pkts</th> <th>Errs</th> <th>Drops</th> <th>Bytes</th> <th>Pkts</th> <th>Errs</th> <th>Drops</th> </tr> </thead> <tbody> <tr> <td>Ethernet</td> <td>37273</td> <td>328</td> <td>0</td> <td>0</td> <td>263997</td> <td>353</td> <td>0</td> <td>0</td> </tr> <tr> <td>Wireless</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>16772</td> <td>126</td> <td>218</td> <td>0</td> </tr> </tbody> </table>				Interface	Received				Transmitted				Bytes	Pkts	Errs	Drops	Bytes	Pkts	Errs	Drops	Ethernet	37273	328	0	0	263997	353	0	0	Wireless	0	0	0	0	16772	126	218	0
Interface	Received					Transmitted																																	
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Statistics																																							
Route Info																																							
Logout																																							

## WAN STATISTICS

This window displays LAN information.

<b>WAN STATISTICS</b>											
Service	VPI/VCI	Protocol	Interface	Received				Transmitted			
				Bytes	Pkts	Errs	Drops	Bytes	Pkts	Errs	Drops
PPPoE_8_32_1	8/32	PPPoE	ppp_8_32_1	9640	48	0	0	2974	48	0	0

## Section 3 - Configuration

### ADSL STATISTICS

This window displays ADSL information including Link Rate, SNR, and some Error Counters.

ADSL STATISTICS		
<b>Mode :</b>	G.lite	
<b>Type:</b>	Fast	
<b>Line Coding :</b>	Trellis Off	
<b>Status :</b>	Link Up	
	<b>Downstream</b>	<b>Upstream</b>
<b>Rate (Kbps) :</b>	3808	800
<b>SNR Margin (dB) :</b>	5.1	11.0
<b>Attenuation (dB) :</b>	0.0	2.0
<b>Output Power (dBm) :</b>	4.0	12.5
<b>K (number of bytes in DMT frame) :</b>	120	26
<b>R (number of check bytes in RS code word) :</b>	8	2
<b>S (RS code word size in DMT frame) :</b>	1	1
<b>D (interleaver depth) :</b>	0	0
<b>Delay (msec) :</b>	0	0
<b>Super Frames :</b>	1536654	1536652
<b>Super Frame Errors :</b>	45571	2542
<b>RS Words :</b>	104492534	104492336
<b>RS Correctable Errors :</b>	887723	3060
<b>RS Uncorrectable Errors :</b>	151473	N/A
<b>HEC Errors :</b>	34637	0
<b>OCD Errors :</b>	0	0
<b>LCD Errors :</b>	0	0
<b>Total Cells :</b>	234516484	0
<b>Data Cells :</b>	247877	0
<b>Bit Errors :</b>	0	0
<b>Total ES :</b>	18159	0
<b>Total SES :</b>	0	0
<b>Total UAS :</b>	17	0

# ROUTE INFO

To access the **ROUTE INFO** setting window, click on the **ROUTE INFO** button under the **STATUS** tab.

The Route Info section displays route information showing the IP addresses of the destination, gateway, and subnet mask as well as other route information

DSL-2740B	SETUP	ADVANCED	MAINTENANCE	STATUS
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Device Info

Wireless Clients

DHCP Clients

Logs

Statistics

**Route Info**

Logout

**ROUTING**

Flags: U - up, I - reject, G - gateway, H - host, R - reinstate D - dynamic (redirect), M - modified (redirect).

**DEVICE INFO -- ROUTE**

Destination	Gateway	Subnet Mask	Flag	Metric	Service	Interface
192.168.1.0	0.0.0.0	255.255.255.0	U	0		br0

# Troubleshooting

This chapter provides solutions to problems that can occur during the installation and operation of the DSL-2740B. Read the following descriptions if you are having problems. (The examples below are illustrated in Windows® XP. If you have a different operating system, the screenshots on your computer will look similar to the following examples.)

## 1. Why can't I access the web-based configuration utility?

When entering the IP address of the D-Link router (192.168.1.1 for example), you are not connecting to a website on the Internet or have to be connected to the Internet. The device has the utility built-in to a ROM chip in the device itself.

Your computer must be on the same IP subnet to connect to the web-based utility.

- Make sure you have an updated Java-enabled web browser. We recommend the following:
  - Internet Explorer 6.0 or higher
  - Firefox 1.5 or higher
- Verify physical connectivity by checking for solid link lights on the device. If you do not get a solid link light, try using a different cable or connect to a different port on the device if possible. If the computer is turned off, the link light may not be on.
- Disable any internet security software running on the computer. Software firewalls such as Zone Alarm, Black Ice, Sygate, Norton Personal Firewall, and Windows® XP firewall may block access to the configuration pages. Check the help files included with your firewall software for more information on disabling or configuring it.

## Section 4 - Troubleshooting

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- Configure your Internet settings:
  - Go to **Start > Settings > Control Panel**. Double-click on the **Internet Options** icon. From the **Security** tab, click on the button to restore the settings to their defaults.
  - Click on the **Connection** tab and set the dial-up option to Never Dial a Connection. Click on the LAN Settings button. Make sure nothing is checked. Click on the **OK**.
  - Go to the **Advanced** tab and click on the button to restore these settings to their defaults. Click on the **OK** button three times.
  - Close your web browser (if open) and open it.
- Access the web management. Open your web browser and enter the IP address of your D-Link router in the address bar. This should open the login page for the web management.
- If you still cannot access the configuration, unplug the power to the router for 10 seconds and plug back in. Wait about 30 seconds and try accessing the configuration. If you have multiple computers, try connecting using a different computer.

### 2. What can I do if I forgot my password?

If you forgot your password, you must reset your router. Unfortunately this process will change all your settings back to the factory defaults.

To reset the router, locate the reset button (hole) on the rear panel of the unit. With the router powered on, use a paperclip to hold the button down for 10 seconds. Release the button and the router will go through its reboot process.

Wait about 30 seconds to access the router. The default IP address is 192.168.1.1. When logging in, type in the default User Name “admin,” and the default Password “admin” then click on the OK button to access the web-based manager.

# Wireless Basics

D-Link wireless products are based on industry standards to provide easy-to-use and compatible high-speed wireless connectivity within your home, business or public access wireless networks. Strictly adhering to the IEEE standard, the D-Link wireless family of products will allow you to securely access the data you want, when and where you want it. You will be able to enjoy the freedom that wireless networking delivers.

A wireless local area network (WLAN) is a cellular computer network that transmits and receives data with radio signals instead of wires. Wireless LANs are used increasingly in both home and office environments, and public areas such as airports, coffee shops and universities. Innovative ways to utilize WLAN technology are helping people to work and communicate more efficiently. Increased mobility and the absence of cabling and other fixed infrastructure have proven to be beneficial for many users.

Wireless users can use the same applications they use on a wired network. Wireless adapter cards used on laptop and desktop systems support the same protocols as Ethernet adapter cards.

Under many circumstances, it may be desirable for mobile network devices to link to a conventional Ethernet LAN in order to use servers, printers or an Internet connection supplied through the wired LAN. A Wireless Router is a device used to provide this link.

## **What is Wireless?**

Wireless or Wi-Fi technology is another way of connecting your computer to the network without using wires. Wi-Fi uses radio frequency to connect wirelessly, so you have the freedom to connect computers anywhere in your home or office network.

## **Why D-Link Wireless?**

D-Link is the worldwide leader and award winning designer, developer, and manufacturer of networking products. D-Link delivers the performance you need at a price you can afford. D-Link has all the products you need to build your network.

## **How does wireless work?**

Wireless works similar to how cordless phone work, through radio signals to transmit data from one point A to point B. But wireless technology has restrictions as to how you can access the network. You must be within the wireless network range area to be able to connect your computer. There are two different types of wireless networks Wireless Local Area Network (WLAN), and Wireless Personal Area Network (WPAN).

### **Wireless Local Area Network (WLAN)**

In a wireless local area network, a device called an Access Point (AP) connects computers to the network. The access point has a small antenna attached to it, which allows it to transmit data back and forth over radio signals. With an indoor access point as seen in the picture, the signal can travel up to 300 feet. With an outdoor access point the signal can reach out up to 30 miles to serve places like manufacturing plants, industrial locations, college and high school campuses, airports, golf courses, and many other outdoor venues.

### **Wireless Personal Area Network (WPAN)**

Bluetooth is the industry standard wireless technology used for WPAN. Bluetooth devices in WPAN operate in a range up to 30 feet away. Compared to WLAN the speed and wireless operation range are both less than WLAN, but in return it doesn't use nearly as much power which makes it ideal for personal devices, such as mobile phones, PDAs, headphones, laptops, speakers, and other devices that operate on batteries.

### **Who uses wireless?**

Wireless technology has become so popular in recent years that almost everyone is using it, whether it's for home, office, business, D-Link has a wireless solution for it.

### **Home**

- Gives everyone at home broadband access
- Surf the web, check email, instant message, download multimedia files.
- Gets rid of the cables around the house
- Simple and easy to use

### **Small Office and Home Office**

- Stay on top of everything at home as you would at the office
- Remotely access your office network from home
- Share the Internet connection and printer with multiple computers
- No need to dedicate office space

### **Where is wireless used?**

Wireless technology is expanding everywhere not just at home or office. People like the freedom of mobility and it's becoming so popular that more and more public facilities now provide wireless access to attract people. The wireless connection in public places is usually called "hotspots".

Using a D-Link Cardbus Adapter with your laptop, you can access the hotspot to connect to Internet from remote locations like: Airports, Hotels, Coffee Shops, Libraries, Restaurants, and Convention Centers.

Wireless network is easy to setup, but if you're installing it for the first time it could be quite a task not knowing where to start. That's why we've put together a few setup steps and tips to help you through the process of setting up a wireless network.

### **Tips**

Here are a few things to keep in mind, when you install a wireless network.

#### **Centralize your router or Access Point**

Make sure you place the router/access point in a centralized location within your network for the best performance. Try to place the router/access point as high as possible in the room, so the signal gets dispersed throughout your home. If you have a two-story home, you may need a repeater to boost the signal to extend the range.

#### **Eliminate Interference**

Place home appliances such as cordless telephones, microwaves, and televisions as far away as possible from the router/access point. This would significantly reduce any interference that the appliances might cause since they operate on same frequency.

#### **Security**

Don't let you next-door neighbors or intruders connect to your wireless network. Secure your wireless network by turning on the WPA security feature on the router. Refer to product manual for detail information on how to set it up.

#### **Wireless Modes**

There are basically two modes of networking:

- **Infrastructure** – All wireless clients will connect to an access point or wireless router.
- **Ad-Hoc** – Directly connecting to another computer, for peer-to-peer communication, using wireless network adapters on each computer, such as two or more D-Link wireless network adapters.

An Infrastructure network contains an Access Point or wireless router. All the wireless devices, or clients, will connect to the wireless router or access point.

An Ad-Hoc network contains only clients, such as laptops with wireless cardbus adapters. All the adapters must be in Ad-Hoc mode to communicate.

# Networking Basics

## Check your IP address

After you install your new D-Link adapter, by default, the TCP/IP settings should be set to obtain an IP address from a DHCP server (i.e. wireless router) automatically. To verify your IP address, please follow the steps below.

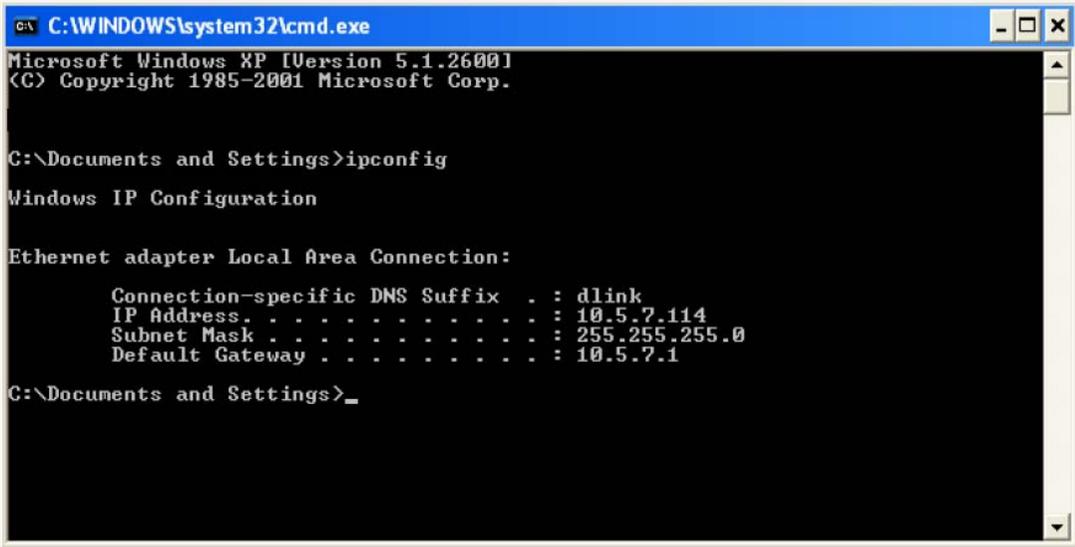
Click on **Start > Run**. In the run box type **cmd** and click on the **OK**.

At the prompt, type **ipconfig** and press **Enter**.

This will display the IP address, subnet mask, and the default gateway of your adapter.

If the address is 0.0.0.0, check your adapter installation, security settings, and the settings on your router. Some firewall software programs may block a DHCP request on newly installed adapters.

If you are connecting to a wireless network at a hotspot (e.g. hotel, coffee shop, airport), please contact an employee or administrator to verify their wireless network settings.



```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings>ipconfig

Windows IP Configuration

Ethernet adapter Local Area Connection:

    Connection-specific DNS Suffix  . : dlink
    IP Address. . . . .               : 10.5.7.114
    Subnet Mask . . . . .             : 255.255.255.0
    Default Gateway . . . . .         : 10.5.7.1

C:\Documents and Settings>_
```

## Statically Assign an IP address

If you are not using a DHCP capable gateway/router, or you need to assign a static IP address, please follow the steps below:

### Step 1

Windows® XP - Click on **Start > Control Panel > Network Connections**.

Windows® 2000 - From the desktop, right-click on the **My Network Places > Properties**.

### Step 2

Right-click on the **Local Area Connection** which represents your D-Link network adapter and select **Properties**.

### Step 3

Highlight **Internet Protocol (TCP/IP)** and click on the **Properties**.

### Step 4

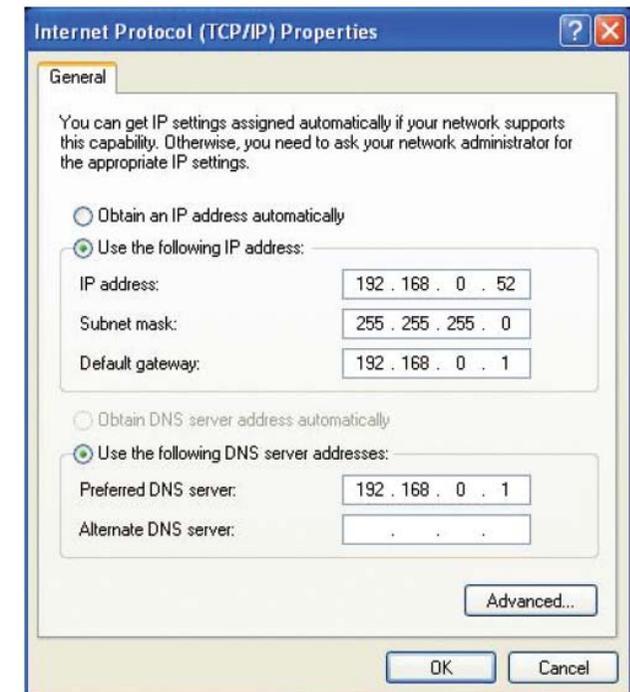
Click on the **Use the following IP address** and enter an IP address that is on the same subnet as your network or the LAN IP address on your router.

Example: If the router's LAN IP address is 192.168.0.1, make your IP address 192.168.0.X where X is a number between 2 and 99. Make sure that the number you choose is not in use on the network. Set Default Gateway the same as the LAN IP address of your router (192.168.0.1).

Set Primary DNS the same as the LAN IP address of your router (192.168.0.1). The Secondary DNS is not needed or you may enter a DNS server from your ISP.

### Step 5

Click on the **OK** twice to save your settings.



# Technical Specifications

## ADSL Standards

- ANSI T1.413 Issue 2
- ITU G.992.1 (G.dmt) Annex A
- ITU G.992.2 (G.lite) Annex A
- ITU G.994.1 (G.hs)
- ITU G.992.5 Annex A

## ADSL2 Standards

- ITU G.992.3 (G.dmt.bis) Annex A
- ITU G.992.4 (G.lite.bis) Annex A

## Protocols

- IEEE 802.1d Spanning Tree
- TCP/UDP
- ARP
- RARP
- ICMP
- RFC1058 RIP v1
- RFC1213 SNMP v1 & v2c
- RFC1334 PAP
- RFC1389 RIP v2
- RFC1577 Classical IP over ATM
- RFC1483/2684 Multiprotocol Encapsulation over ATM Adaptation Layer 5 (AAL5)
- RFC1661 Point to Point Protocol
- RFC1994 CHAP
- RFC2131 DHCP Client / DHCP Server
- RFC2364 PPP over ATM
- RFC2516 PPP over Ethernet

## Data Transfer Rate

- G.dmt full rate downstream: up to 8 Mbps / upstream: up to 1 Mbps
- G.lite: ADSL downstream up to 1.5 Mbps / upstream up to 512 Kbps
- G.dmt.bis full rate downstream: up to 12 Mbps / upstream: up to 12 Mbps
- ADSL full rate downstream: up to 24 Mbps / upstream: up to 1 Mbps

## Media Interface

- ADSL interface: RJ-11 connector for connection to 24/26 AWG twisted pair telephone line
- LAN interface: RJ-45 port for 10/100BASE-T Ethernet connection

## WIRELESS LAN

- 802.11b/g/n standards
- Wireless speed: up to 270Mbps (802.11n)
- Frequency range: 2.4 GHz to 2.484G Hz
- Antennas: 3 detachable dipole antennas.
- WEP data encryption
- WPA/WPA2 (Wi-Fi Protected Access) security
- Multiple SSID
- 802.11e Wireless QoS (WMM/WME)
- MAC address-based access control

\* Maximum wireless signal rate derived from IEEE Standard 802.11n specifications. Actual data throughput will vary. Network conditions and environmental factors, including volume of network traffic, building materials and construction, and network overhead, lower actual data throughput rate. Environmental factors will adversely affect wireless signal range.