## USER MANUAL DSL-2740B

VERSION 2.0







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D-Link DSL-2740B User Manual

## **Package Contents**

- DSL-2740B Wireless ADSL Router
- 2 non-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 win7/vista/XP/2000
  - MAC OS
  - Internet Explorer v6 or later, FireFox v1.5
  - D-Link Click's 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.

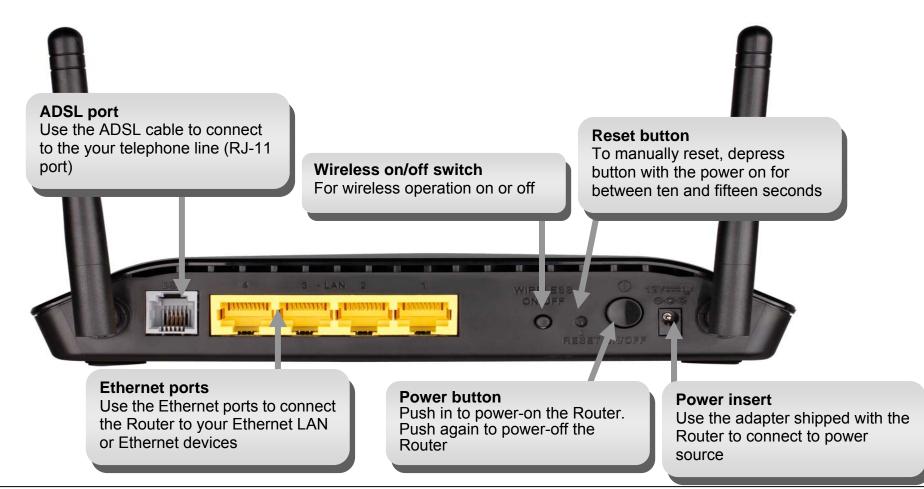
\*Maximum wireless signal rate derived from IEEE standard 802.11n specifications. Actual data throughput will vary. Network conditions and environmental factors, including volume of network traffic, building materials and construction, and network overhead, lower actual data throughput rate. Environmental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

## **Features**

- Faster Wireless Networking The DSL-2740B provides up to 300Mbps\* 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 Cardbus 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.

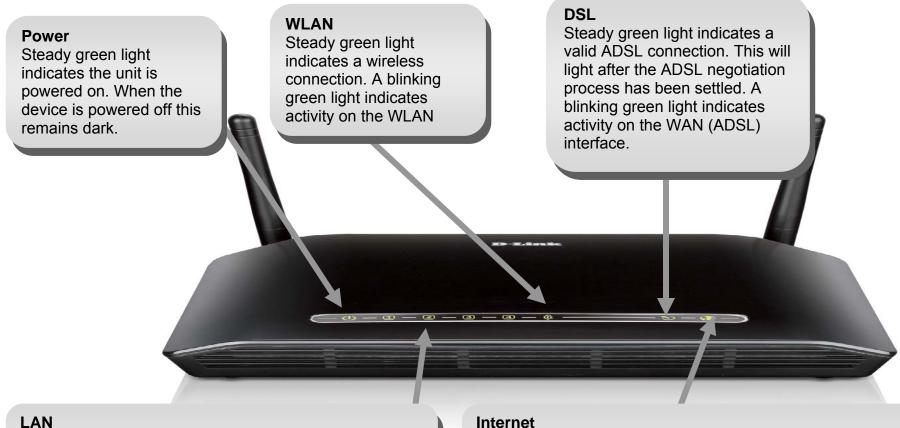
\*Maximum wireless signal rate derived from IEEE standard 802.11n specifications. Actual data throughput will vary. Network conditions and environmental factors, including volume of network traffic, building materials and construction, and network overhead, lower actual data throughput rate. Environmental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

## Hardware Overview Connections



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## **Hardware Overview** LEDs



A solid green light indicates a valid link on startup. These lights blink when there is activity currently passing through the Ethernet port.

Steady green light indicates a successful Internet connection. Steady red light indicates failed Internet connection. Dark if no WAN protocol is configured.

## 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, PPPoA LLC or PPPoA 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 your 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 in 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.

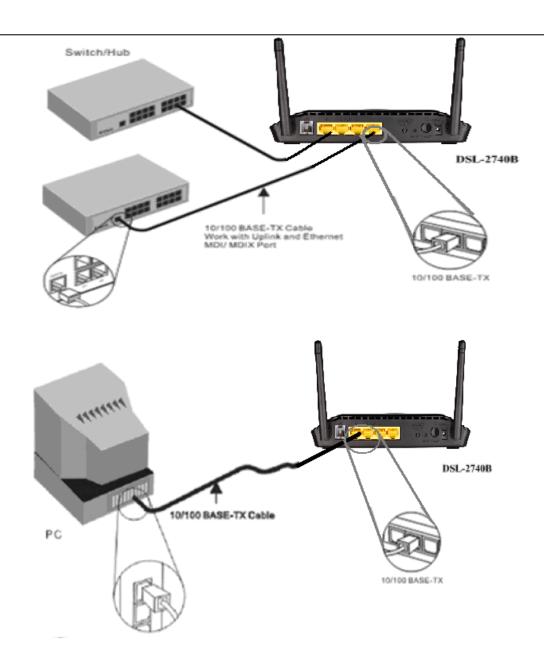
## **Connect Router to Ethernet**

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 connecting. 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.



Woduct: 0927406				Fittware Resign: BU_1.00
D-Lin	ĸ			
	LOGIN			
	Log in to the router	Over Name : Password :	adhin 	
BROADBAND				
		Capyright (\$ 25.35-20	12 D Link Systems, Inc.	

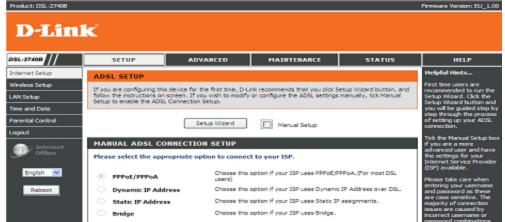
## SETUP

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 four steps to configuring your router. Click on the **Next** button to continue.

#### WELCOME TO D-LINK SETUP WIZARD

This wizard will guide you through a step-by-step process to configure your new D-Link router and connect to the Internet.

:	Step 1: Change your router password Step 2: Select Internet connection Step 3: Set Time and Date Step 4: Connect to Internet
	Next Cancel

## 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 YOUR PASSWORD

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: SELECT INTERNET CONNECTION TYPE**

Please select your **Country** and **ISP Provider**, **VPI/VCI**, **Connection Type**.

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.

Please enter the VPI/VCI numbers if provided by the ISP.

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

#### **STEP 2: SELECT INTERNET CONNECTION TYPE**

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 💌
VPI:	0
VCI:	33
Connection Type :	1483 Routed IP LLC
Back Next	Cancel

## **STEP 2: SELECT INTERNET CONNECTION TYPE**

Please Type **IP Address, Subnet Mask** and **Default Gateway** which are provided by your ISP.

Select to **Enable** or **Disable** in the **Obtain default gateway automatically** option.

If you choose Disable in the **Obtain default gateway automatically** option, please type **Primary DNS Server** and **Secondary DNS Server** which could also be provided by your ISP.

## STEP 2: SELECT INTERNET CONNECTION TYPE

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.

Auto PVC Scan :	
VPI:	0
VCI:	33
IP Address :	
Subnet Mask :	
Connection Type :	1483 Routed IP LLC 💌
Obtain default gateway automatically :	Disabled 💌
Default Gateway :	
DNS Relay Selection :	Use User Configured DNS Servers Only 🔽
Primary DNS Server :	
Secondary DNS Server :	
Back Next	Cancel

## Section 3 - Configuration STEP 3: SET TIME AND DATE

## TIME SETTING:

Please enable the **Automatically synchronize with Internet time servers** if you want to use time server.

You can use the default time server web site or type any web server name you want on the **First NTP time server** and the **Second NTP time server**.

Please select the time zone of your country on the **Time Zone** option.

If you need to use the daylight saving, just choose the **Enable Daylight Saving**. Daylight saving is a period from late Spring to early Fall.

Set how many hours to change the time for Daylight saving Offset.

## Configure Daylight Saving Dates,

Daylight Saving time starts in the most parts of the **United States** on the second Sunday of March. Each time zone in the United States starts Daylight Saving time at 2 A.M. Thus, in the United States you must use **March**, **Second**, **Sunday**, at **2:00 A.M.** 

Daylight Saving time starts in the **European Union** on the last Sunday of March. Thus, in European Union, you must select **March**, **Last**, **Sunday**. The time must depend on your country's time zone. For example, In Germany you must type 2 because Germany's time zone is 1 hour ahead of GMT or UTC (GMT+1). Thus, in Germany you must use **March**, **Last**, **Sunday**, at **1:00 A.M.** 

Daylight Saving time ends in the most parts of the United States on the First Sunday of November. Each time zone in the United States must use

## STEP 3: SET TIME AND DATE

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:	ntp.dink.com.tw	1
Second NTP time server:	ntp1.dink.com	1

### TIME CONFIGURATION

Current Router Time :	Thursday, January 1, 1970 01:52:17 AM					
Time Zone :	(GMT-08:00) Pacific Time, Tijuana					
Enable Daylight Saving :						
Daylight Saving Offset :	-2:00	$\mathbf{v}$				
Daylight Saving Dates	:	Month	Week	Day	Time	
	Start	Jan 🗸	1st 🗸	Sun 🗸	12 am 🗸	
	End	Jan 🗸	1st 🗸	Sun 🗸	12 am 🗸	

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Daylight Saving time at 2:00 A.M. Thus, in the United States you must set **November**, **First**, **Sunday**, at **2:00 A.M**.

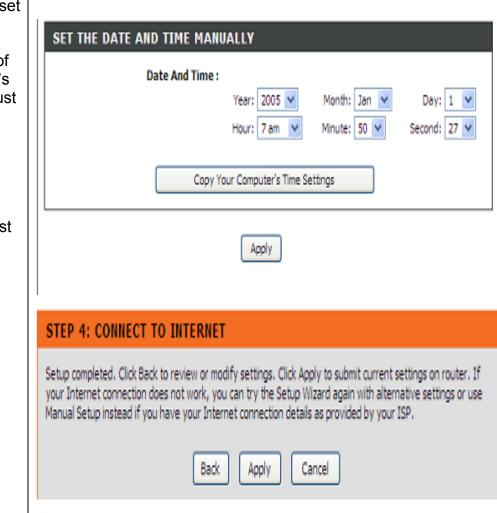
Daylight Saving time ends in the European Union on the Last Sunday of October. For instance, in Germany you must type 2 because Germany's time zone is 1 hour ahead of GMT (GMT+1). Thus, in Germany you must use **March**, **Last**, **Sunday**, at **1:00 A.M.** 

## SET THE DATE AND TIME MANAULLY

You can also use the **Copy Your Computer's Time Settings** to synchronize the Date and Time to your local PC. Or, you also can adjust **Year/Month/Day/Hour/Minute/Second** manually.

Please click the **Apply** button to save the configuration. **STEP 4: CONNECT TO INTERNET** 

Push the **APPLY** button to use the configuration.



## **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** 

If you want to type connection configuration for various types, please enable the Manual Setup.

### ADSL SETUP

If you are configuring this device for the first time, D-Link recommends that you click Setup Wizard button, and follow the instructions on screen. If you wish to modify or configure the ADSL settings manually, tick Manual Setup to enable the ADSL Connection Setup.



Manual Setup

## MANUAL ADSL CONNECTION SETUP

## PPPoE/PPPoA

Choose this option if your ISP uses PPPoE/PPPoA.(For most DSL users)

## **Dynamic IP Address**

Choose this option if your ISP uses Dynamic IP Address over DSL.

## Static IP Address

Choose this option if your ISP uses Static IP assignments.

## Bridge

Choose this option if your ISP uses Bridge.

## MANUAL ADSL CONNECTION SETUP

Please select the appropriate option to connect to your ISP.

۲	PPPoE/PPPoA	Choose this option if your ISP uses PPPoE/PPPoA. (For most DSL users)
$\circ$	Dynamic IP Address	Choose this option if your ISP uses Dynamic IP Address over DSL.
$\circ$	Static IP Address	Choose this option if your ISP uses Static IP assignments.
0	Bridge	Choose this option if your ISP uses Bridge.

## For PPPoE/PPPoA connection

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

Type service name which is from your ISP on the Servername option.

## Choose **PPPoE LLC/Snap-Bridging**, **PPPoE VC-mux**, **PPPoA LLC/encapsulation** and **PPPoA VC-mux**.

Set MTU value which you want but should be less than 1492 on the  $\ensuremath{\text{MTU}}$ 

Set the time which your data doesn't pass through the connection, it will be disconnected on the **Idle Time Out.** The default time is 0 and it means it is always on.

## **PPP IP Extension:**

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

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

PPPOE/PPPOA INTERNET CONNECTION	TYPE :			
Enter the information provided by your Internet Service Provider (ISP).				
Username :				
Password :				
Servername :				
Connection Type :	PPPoE LLC/Snap-Bridging 💙			
MTU :	1492			
Idle Time Out :	0 Minutes (0 = Always On)			
PPP IP Extension :				

## DNS AND DEFAULT GATEWAY

Select **Obtain DNS server address automatically** to get DNS from your ISP.

Or

Select **Use the following DNS server addresses** to type the DNS IPs in the **Preferred DNS server** and **Alternate DNS server**.

#### DNS AND DEFAULT GATEWAY:

0	Obtain DN5 server ad	dress automatically
	WAN Interface selected:	CurrentIface 🗸
۲	Use the following DNS	server addresses
	Preferred DNS server:	168.95.1.1
	Alternate DNS server:	168.95.192.1
De	fault Gateway interfac	e
s	elected Gateway Interface	e: CurrentIface 💌

Set PVC values which are from your ISP on VPI/VCI

Enable the **Enable NAT** when you want to have WAN and LAN.

Enable the **Enable Firewall** when you want to have the basic filter function, for example, ICMP ping to DSL-2740B.

Enable the **Enable IGMP Proxy** when you want to let IAD to play as a IGMP proxy which can help proxy server to send IGMP query packets to the IPTV clients.

Enable VLAN and type the VLAN ID (0-4095) which your ISP assigns.

Click on the **Apply** button.

0
33

## 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.

## Wireless Network Setting

Click on the **Wireless Connection Setup Wizard** button to setup the wireless connection in an easy way. It will use Web-based Wizard to assist you in connecting to your new D-Link Systems Wireless Router.

Note:Before launching the wizard, please make sure you have followed all steps outlined in the Quick Installation Guide included in the package.

Click on the **Add Wireless Device with WPS** button. This wizard is designed to assist you in connecting your wireless device to your router with WPS. It will guide you through step-by-step instructions on how to get your wireless device connected.

If you would like to configure the Internet settings of you new D-Link Router manually,then click on the **Manual Wireless Connection Setup** button.

DSL-2740B	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
Internet Setup	WIRELESS SETUP				Helpful Hints
Wireless Setup LAN Setup	The following Web-based w connection.	vizards are designed to assis	t yau in yaur wireless netwark	setup and wireless device	Changing your Wireless Network Name (SSID) is the first step in securing
Time and Date Parental Control	Before launching these wiz Guide included in the packa		have followed all steps outlined	d in the Quick Installation	your wireless network. Change it to a familiar name that does not contain any personal information.
Logout	WIRELESS CONNEC	TION SETUP WIZAR	D		Enable Auto Channel Scan
Internet Offline		ur easy way to use Web-ba o the Internet, click on the b	sed Wizard to assist you in con utton below.	necting your new D-Link	so that the router can select the best possible channel for your wireless network to operate on.
English 🔽		Wireless Connect	ion Setup Wizard		Choosing to hide your
Reboot	Note:Before launching the Installation Guide included		u have followed all steps outlin	ed in the Quick	wireless network also helps to secure your wireless network, it will mean that wireless clients
	ADD WIRELESS DE	VICE WITH WPS(W)	-FI PROTECTED SETU	P) WIZARD	will not see your network listed when they scan for available networks. To
			wireless device to your router levice connected.Click the butt		available networks. To connect your wireless devices to the router you will need to manually enter the Wireless
		Add wireless D	evice with WPS		Network Name (SSID) on each device. (Please take
	MANUAL WIRELES	S CONNECTION OPTI	ONS		a note of your SSID and keep it to hand).
	If you would like to config. below.	re the Internet settings of y	ou new D-Link Router manually	, then click on the button	If you have enabled wireless security, please make sure you take a
		Manual Wireless	Connection Setup		note of your encryption key. You wil need to enter this and the SSID on

## Welcome to the D-Link Wireless Security Setup Wizard

Enable Your Wireless Network Your wireless network is enabled by

default. You can simply uncheck the below checkbox to disable wireless

**Network Name (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.

In order to protect your network from hackers and unauthorized users, we adapt Auto (WPA or WPA2) for your wireless security mode. We

provide user a random pre-shared key by automatically. You can also

set it manually if you do not prefer the key we generate.

Type a string (8-63 characters, such as  $a \sim z$ ,  $A \sim Z$ , or  $0 \sim 9$ .) on the **Pre-Shared** key.

Click **Prev** to go back to previous page.

Click **Next** button to go to the next page.

Click **Cancel** button to return to the main menu of Wireless Setup page.

## WELCOME TO THE D-LINK WIRELESS SECURITY SETUP WIZARD

Your wireless network is enabled by default. You can simply uncheck the below checkbox to disable wireless.

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) :

D-Link DSL-2740B (1-32 characters)

In order to protect your network from hackers and unauthorized users, we adapt Auto(WPA or WPA2) for your wireless security mode.
Wireless Security
Auto (WPA or WPA2)

Mode : Ratio (Wr A of Wr A2)
Pre-Shared
Key : knpnumi02

(8-63 characters, such as a~z, A~Z, or 0~9.)

Note: We provide user a random pre-shared key by automatically. You can also set it manually if you do not prefer the key we generate.



## Add Wireless Device with WPS

The wizard shows the option to setup WPS by **Auto** or **Manual**. Auto -- Select this option if your wireless device supports WPS(Wi-Fi Protected Setup)

Manual -- Select this option to display the current wireless settings for you to configure the wireless device manually.

Click **Next** button to go to the next page.

Click **Cancel** button to return to the main menu of Wireless Setup page.

## ADD WIRELESS DEVICE WITH WPS(WI-FI PROTECTED SETUP) WIZARD

This wizard is designed to assist you in connecting your wireless device to your router. It will guide you through step-by-step instructions on how to get your wireless device connected. Click the button below to begin.

## ADD WIRELESS DEVICE WITH WPS(WI-FI PROTECTED SETUP)

Please select one of the following configuration methods and click next to continue.

- Auto -- Select this option if your wireless device supports WPS(Wi-Fi Protected Setup)
- Manual -- Select this option will display the current wireless settings for you to configure the wireless device manually

Next Cancel



Prev Connect

## Add Wireless Device with WPS (Automatically)

This page allows you to select PIN or PBC to use WPS method.

PIN- Enter the PIN code from your wireless device and click the below **Connect** button to start the handshaking.

PBC- Please press the **Connect** botton on your wireless device and presses the **Connect** button below within 120 seconds to start the handsharking.

Click **Prev** to go back to previous page.

## Add Wireless Device with WPS (WI-FI PROTECTED SETUP) WIZARD

This page will count down the timer and please start WPS on the wireless device you are adding in time.

## Add Wireless Device with WPS (Manually)

This screen shows the information for the SSID, Wireless Security Mode and the Network key and allow you to modify the current setting, if you select **Auto** in the previous page, you won't see this page and please refer to next column.

Please type network name on the Network Name SSID.

Please type network key on the Network Key

Click **OK** button to process the next page. **Add Wireless Device with WPS (WI-FI PROTECTED SETUP)** 

Finally it will show all the configurations. You can check if it is exact, please click the **Next** button.

### ADD WIRELESS DEVICE WITH WPS(WI-FI PROTECTED SETUP) WIZARD

This wizard is designed to assist you in connecting your wireless device to your router. It will guide you through step-by-step instructions on how to get your wireless device connected. Click the button below to begin.

#### VIRTUAL PUSH BUTTON

Please press down the Push Button (Physicall or virtual) on the wireless device you are adding to your wireless network within 79seconds ...

Station associated, processing WPS

#### ADD WIRELESS DEVICE WITH WPS(WI-FI PROTECTED SETUP)

The Auto(WPA or WPA2) key must meet one of the following guidelines:

Between 8 and 63 characters(A longer encryption key is more secure than a short one)
 Exactly 64 characters using 0-9 and A-F

#### Network Name (SSID) : D-Link5985

Network Key :

W

Prev Next

#### ADD WIRELESS DEVICE WITH WPS(WI-FI PROTECTED SETUP)

Please enter the following settings in the wireless device that you are adding to your wireless network and keep a note of it for future reference.

Network Name(SSID) :	D-Link5985
reless Security Mode :	Auto(WPA or WPA2
Network Key :	12345678

Prev Next

## Manual WIRELESS Connection Setup SETTINGS

Click on the **Enable Wireless** box to allow the router to operate in the wireless environment. You can use the **Add New** button to set the schedule.

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

**Mixed 802.11g and 802.11b** which means DSL-2740B will detect the clients to use 802.11g or 802.11b to synchronize.

**Mixed 802.11n, 802.11g and 802.11b** which means DSL-2740B will detect the clients to use 802.11n, 802.11g or 802.11b to synchronize.

Channel Width, 20MHz & Auto 20/40MHz.

**Transmission Rate**, suggest keeping the Best (automatic) selection. This is related to Receive Sensitivity as follows.

WIRELESS NETWORK SETTINGS				
Enable Wireless :	Always V Add New			
Wireless Network Name (SSID) :	D-Link DSL-2740B			
Wireless Channel :	Auto 🗸			
802.11 Mode :	Mixed 802.11n, 802.11g and 802.11b 💌			
Channel Width :	802.11g only Mixed 802.11g and 802.11b			
Transmission Rate :	802.11b only 802.11n only			
Visibility Status :				

WIRELESS NETWORK SETTINGS					
Enable Wireless :	Always V Add New				
Wireless Network Name (SSID) :	D-Link DSL-2740B				
Wireless Channel :	Auto 🗸				
802.11 Mode :	Mixed 802.11n, 802.11g and 802.11b				
Channel Width :	Auto 20/40 MHz 💌				
Transmission Rate :	20 MHz Auto 20/40 MHz (Mbit/s)				
Visibility Status :	⊙ Visible ○ Invisible				

	MANRATE	HT20/GI=0	HT40/GI=0	HT40/GI=1		
MCS 0	0x80	6.5Mbps	13.5Mbps	Х		
MCS 1	0x81	13Mbps	27Mbps	Х		
MCS 2	0x82	19.5Mbps	40.5Mbps	Х		
MCS 3	0x83	26Mbps	54Mbps	Х		
MCS 4	0x84	39Mbps	81Mbps	Х		
MCS 5	0x85	52Mbps	108Mbps	Х		
MCS 6	0X86	58.5Mbps	121.5Mbps	Х		
MCS 7	0x87	65Mbps	135Mbps	150Mbps		
MCS 8	0x88	13Mbps	27Mbps	Х		
MCS 9	0x89	26Mbps	54Mbps	Х		
MCS 10	0x8a	39Mbps	81Mbps	Х		
MCS 11	0x8b	52Mbps	108Mbps	Х		
MCS 12	0x8c	78Mbps	162Mbps	X		
MCS 13	0x8d	104Mbps	216Mbps	X		
MCS 14	0x8e	117Mbps	243Mbps	X		
MCS 15	0x8f	130Mbps	270Mbps	300Mbps		

If you want to use the max. rate 150Mbps or the max. rate 300Mbps on 40MHz, please choose the **Channel Width:** Auto 20/40MHz.

Choose Visible or Invisible to decide if you want to broadcast its SSID.

Product: DSL-2740B		Best (automatic	)		Firmware Version: EU_1.00
<b>D</b> -Lin	K	130 [270] 117 [243] 104 [216] 78 [162] 52 [108] 39 [81] 26 [54]			
DSL-2740B	SETUP	ADVA <mark>13 [27]</mark> 65 [135]	<b>1AINTENANCE</b>	STATUS	HELP
Internet Setup	WIRELESS	58.5 [121.5] 52 [108] 39 [81]			Helpful Hints
Wireless Setup LAN Setup	Use this section to configur this section will also need t	the wireless 26 [54]	ink router. Please note I nts and PC.	that changes made on	Changing your Wireless Network Name (SSID) is the first step in securing your wireless network.
Time and Date Parental Control	WIRELESS NETWOR	RK SETTIN <mark>54 [108]</mark> 48 [96]			Change it to a familiar name that does not contain any personal
Logout	Enable	36 [72] Wireless: 24 [48] 18 [36]	Add New		information.
Internet Offline	Wireless Network Nam Wireless	11 Channel: 9[18]			Enable Auto Channel Scan so that the router can select the best possible channel for your wireless
		11 Mode: 6 [12] 5,5	11g and 802.11b 🔽		network to operate on.
English 💟	Chann Transmiss	ion Rate : Best (automatic	c) 🔽 (Mbit/s)		Choosing to hide your wireless network also helps to secure your
Reboot	Visibilit	t <b>y Status : </b> Visible 🔘	) Invisible		wireless network, it will mean that wireless clients will not see your network

Product: DSL-2740B		Best (automatic) 🗸 300			Firmware Version: EU_1.00
<b>D</b> -Linl	K	130 [270] 117 [243] 104 [216] 78 [162] 52 [108] 39 [81] 26 [54]			
DSL-2740B	SETUP ADVA	13 [27] 150	<b>1AINTENANCE</b>	STATUS	HELP
Internet Setup	WIRELESS	65 [135] 58.5 [121.5] 52 [108]			Helpful Hints
Wireless Setup LAN Setup	Use this section to configure the wireles this section will also need to be duplicate	39 [81]	ink router. Please note t nts and PC.	that changes made on	Changing your Wireless Network Name (SSID) is the first step in securing your wireless network.
Time and Date	WIRELESS NETWORK SETTI	a miten mi			Change it to a familiar name that does not
Parental Control	Enable Wireless :	48 [96] 36 [72] 24 [48]	Add New		contain any personal information.
(A) Internet	Wireless Network Name (SSID) : Wireless Channel :	18 [36] 12 [24] 11			Enable Auto Channel Scan so that the router can select the best possible
Offline 🗸		9 [18] 6 [12]	11g and 802, 11b 💙		channel for your wireless network to operate on.
English 🔽	Channel Width :	5.5 2	/		Choosing to hide your wireless network also
Reboot	Transmission Rate : Visibility Status :		(Mbit/s) nvisible		helps to secure your wireless network, it will mean that wireless clients
					will not see your network

## WIRELESS SECURITY Mode

To protect your privacy you can configure wireless security features. This device supports three wireless security modes including: WEP, WPA-Personal, and WPA-Enterprise. WEP is the original wireless encryption standard. WPA provides a higher level of security. WPA-Personal does not require an authentication server. The WPA-Enterprise option requires an external RADIUS server.

## 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**)

Specify the encryption key from the **Current Network Key** drop-down menu.

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.

### WIRELESS SECURITY MODE

To protect your privacy you can configure wireless security features. This device supports three wireless security modes including: WEP, WPA-Personal, and WPA-Enterprise. WEP is the original wireless encryption standard. WPA provides a higher level of security. WPA-Personal does not require an authentication server. The WPA-Enterprise option requires an external RADIUS server.

Security Mode : WEP

### 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: 128 bit (26 hex digits) 💌 (length applies to all keys) WEP Key 1: WEP Key 2: WEP Key 3: WEP Key 4: Default WEP Key : WEP Key 1 🔽 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.

Apply Settings Cancel

### WIRELESS SECURITY MODE – WPA-Personal

Use WPA or WPA2 mode to achieve a balance of strong security and best compatibility. This mode uses WPA for legacy clients while maintaining higher security with stations that are WPA2 capable. Also the strongest cipher that the client supports will be used. For best security, use WPA2 Only mode. This mode uses AES (CCMP) cipher and legacy stations are not allowed access with WPA security. For maximum compatibility, use WPA Only. This mode uses TKIP cipher. Some gaming and legacy devices work only in this mode.

According to the WiFi Alliance 11N specification, Wi-Fi Protected Setup is not full supported under WPA Only mode. We will disable your Wi-Fi Protected Setup if you use WPA Only mode.

Choose Auto(WPA or WPA2) / WPA2 only / WPA only on the WPA Mode Type the value seconds on the Group Key Update Interval. The default value is 1800.

Type the string on the Pre-Shared Key

Click the **Apply Settings** button to save the configuration.

### 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.

# WPA Use WPA or WPA2 mode to achieve a balance of strong security and best compatibility. This mode uses WPA for legacy clents while maintaining higher security with stations that are WPA2 capable. Also the strongest cipher that the clent supports will be used. For best security, use WPA2 Only mode. This mode uses AES(CCMP) cipher and legacy stations are not allowed access with WPA security. For maximum compatibility, use WPA Only. This mode uses TKIP cipher. Some gaming and legacy devices work only in this mode. To achieve better wireless performance use WPA2 Only security mode (or in other words AES cipher). WPA Mode : Auto (WPA or WPA2) Group Key Update Interval : 0 (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.

Apply Settings Cancel

#### EAP (802.1X)

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

Authentication Timeout :	36000 (minutes)
RADIUS server IP Address :	0.0.0.0
RADIUS server Port :	1812
RADIUS server Shared Secret :	

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

Apply Settings Cancel

### 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.

### DHCP SERVER SETTINGS (OPTIONAL)

The **Enable DHCP Server** is selected by default for the Router's Ethernet LAN interface.

Set the **DHCP IP Address Range** and the default is from 192.168.1.2 to 192.168.1.254. The IP address pool can be up to 253 IP addresses.

Set the value hours on the DHCP Lease Time

If you don't want DSL-2740B to be the DHCP server, you can enable **DHCP relay** to pass the DHCP discover packets of the clients to another DHCP server.

Please set the DHCP server IP address on the DHCP Server IP Address.



#### **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 :	192.168.1.2 to 192.168.1.254
DHCP Lease Time :	(hours)
DHCP Relay :	
DHCP Server IP Address :	
Save Se	ttings

**ADD/EDIT DHCP RESERVATION (OPTIONAL)** Select the **Enable** to let you reserve the **IP Address** for the designated 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 to 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 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.

#### ADD/EDIT DHCP RESERVATION (OPTIONAL)

Enable :	<b>v</b>
Computer Name :	
IP Address :	0.0.0.0
MAC Address :	00:00:00:00:00:00
	Copy Your PC's MAC Address

	E	Constant Norma		c	TO Address
	Enable	Computer Name	MA	C Address	IP Address
Enable Father				:88:8F:5A:F4	192.168.1.5
				_	
UMBE	R OF DYN		NTS : 1	_	
	R OF DYN Jter Name	AMIC DHCP CLIEN	NTS : 1 IP Address	Ехр	ire Time

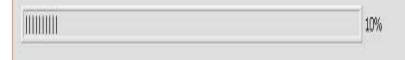
### LAN SETUP

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.

### **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.



### 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. Or, you can type the specific NTP server name.

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

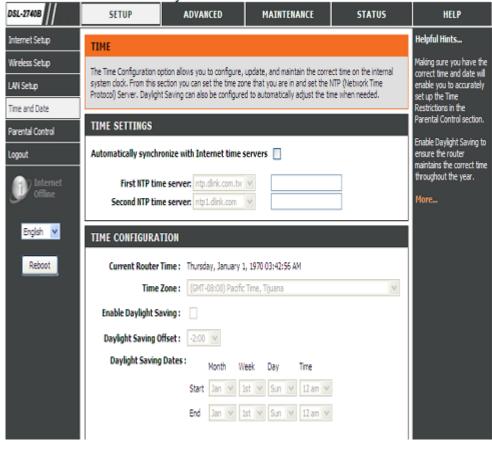
If you need to use the daylight saving, just choose the **Enable Daylight Saving**. Daylight saving is a period from late Spring to early Fall.

Set how many hours to change the time for Daylight saving Offset.

#### Configure Daylight Saving Dates,

Daylight Saving time starts in the most parts of the **United States** on the second Sunday of March. Each time zone in the United States starts Daylight Saving time at 2 A.M. Thus, in the United States you must use **March**, **Second**, **Sunday**, at **2:00 A.M.** 

Daylight Saving time starts in the **European Union** on the last Sunday of March. Thus, in European Union, you must select **March**, **Last**, **Sunday**. The time must depend on your country's time zone. For



example, In Germany you must type 2 because Germany's time zone is 1 hour ahead of GMT or UTC (GMT+1). Thus, in Germany you must use **March**, **Last**, **Sunday**, at **1:00 A.M.** 

Daylight Saving time ends in the most parts of the United States on the First Sunday of November. Each time zone in the United States must use Daylight Saving time at 2:00 A.M. Thus, in the United States you must set

November, First, Sunday, at 2:00 A.M.

Daylight Saving time ends in the European Union on the Last Sunday of October. For instance, in Germany you must type 2 because Germany's time zone is 1 hour ahead of GMT (GMT+1). Thus, in Germany you must use **March**, **Last**, **Sunday**, at **1:00 A.M.** 

#### SET THE DATE AND TIME MANAULLY

You can also use the **Copy Your Computer's Time Settings** to synchronize the Date and Time to your local PC. Or, you also can adjust **Year/Month/Day/Hour/Minute/Second** manually.

Please click the **Apply** button to save the configuration.

#### SET THE DATE AND TIME MANUALLY

Date And Time :				
	Year: 2005 💌	Month: Jan 🔽	Day: 1 💌	
	Hour: 3 am 💌	Minute: 42 🗸	Second: 56 💌	
	Copy You	r Computer's Time S	ettings	

Apply

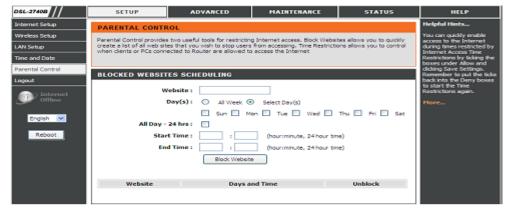
### PARENTAL CONTROL

Parental 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

### **BLOCKED WEBSITES SCHEDULING**

Please type the website name which you want to block on the Website

Please set the day and time. After finish, please click on the **Block Website** button and then it will show in list.



### INTERNET ACCESS TIME RESTRICTIONS

You can have the schedule plan to decide the internet access time restrictions.

INTERNET ACCESS TIME RESTRICTIONS										
Time	Mon	Tue	Wed	Thu	Fri	Sat	Sun	All Days	Allow	Deny
Start 🗸 - End 🔽										
Start 🗸 - End 🔽										
Start 🔽 - End 💌										
	Save Settings									

### LOGOUT

The LOGOUT page enables you to logout of your router configuration and closes 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 includes 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.

### **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

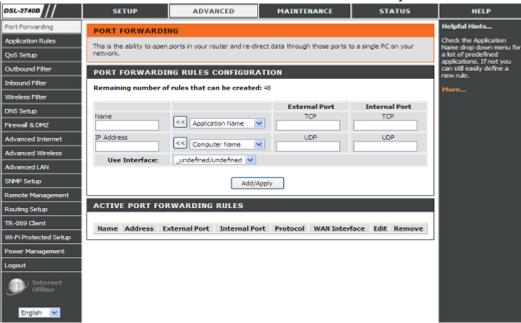
PORT FORWARDING RULES CONFIGURATION

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.



### **APPLICATION RULES**

This option is used to pre-configure single or multiple trigger ports on your router that will automatically activate when the router senses data sent to the Internet from one of these applications.

### APPLICATION RULES 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.

It will appear the Trigger and Firewall ports after you choose the application name by the drop-down menu.

Choose the Use Interface and click the **Add/Apply** button to save the configuration, and then it will be added in the list.



### **QOS SETUP**

Quality of Service Setup can be used to improve data flow for different applications by prioritizing the network traffic based on selected criteria.

#### QOS SETUP

You have to define the service ports. For example,

```
VoIP(RTP) is from 700(Start Port) to 900(End Port)
```

H.323 is 1720

FTP is from 20(Start Port) to 21(End Port)

MSN massager is from 1863(Start Port) to 1864(End Port)

### WIRELESS QOS SETUP

You can choose **Enable** or **Disable** to decide if the data has the WMM on the **WMM(Wi-Fi Multimedia)** 

WMM No Acknowledge means that the receiver doesn't have to send back the Acknowledge packet.

DSL-2740B	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
Port Forwarding	QOS SETUP				Helpful Hints
Application Rules	Quality of Service Setup	ran ha wad to improve data f	low for different applications by	aniaritizina the network	QoS or Quality of service
QoS Setup	traffic based on selected		on or uncert approaches of	pronosny are neuronik	allows your Router to help prioritise the data packet flow in your router and
Outbound Filter	QOS SETUP				network. This is very important for time
Inbound Filter		_			sensitive program as VoIP
Wireless Filter		VOIP(RTP) : 🗌 Sta	rt Port End Port		as it may result in dropped call. Large amounts of
DNS Setup		H.323 : 📃 Sta	rt Port End Port		non-critical data can be scaled to not effect these
Firewall & DMZ		FTP : Sta	rt Port End Port		sensitive real-time programs. D-Link has
Advanced Internet	MS	N messenger : 📃 Sta	rt Port End Port		setup some often used rules for the QoS. VoIP
Advanced Wireless	IPSEC(	VPN Passthru) : 📃			and H.323. are often used for Internet calls.
Advanced LAN	RTSP(Vide	eo Streaming) : 📃			More
SNMP Setup		MHS : 🗌			
Remote Management		Save S	attinor		
Routing Setup		Save S	etariya		
TR-069 Client	WIRELESS QOS S	ETUP			
Wi-Fi Protected Setup		M(Wi-Fi Multimedia):	Enabled	u.	
Power Management		M No Adviowledgement:	Enabled		
Logout		n no Abulomeoyenenti	chabled		
Internet Offline		Apply WM	E Settings		

### ADVANCED QOS SETUP

Click the Wireless QoS button to set wireless data priority.

Click the LAN QoS button to set Ethernet data priority.

ADVANCED QOS SETUP			
	Wireless QoS	LAN QoS	

### WIRELESS QOS RULES CONFIGURATION

Type the policy name on the Name

Set the priority value on the Priority

Select the **Protocol**, ANY, ICMP, TCP and UDP.

Set the **Source IP Range** and the **Destination IP Range**. Set the **Source Port Range** and the **Destination Port Range**.

Click the Add/Apply button to add the policy to the list.

#### WIRELESS QOS RULES CONFIGURATION Remaining number of rules that can be created: 16

Name	Priority	Protocol
	(125	5) << Select Protocol 💌
Source IP Range t	10	Source Port Range to
Destination IP Range		Destination Port Range to
	Ad	id/Apply
ACTIVE WIRELES	S QOS RULES	

### LAN QOS RULES CONFIGURATION

Type the policy name on the **Name** 

Set the priority value on the Priority

Select the **Protocol**, ANY, ICMP, TCP and UDP.

Set the **Source IP Range** and the **Destination IP Range**. Set the **Source Port Range** and the **Destination Port Range**.

Click the Add/Apply button to add the policy to the list.

Name	Priority	(17)	Protocol << Select Protocol 🗸
Source IP Range	to		Source Port Range to
Destination IP Rang	e to		Destination Port Range to
		Add/Apply	]

### **OUTBOUND FILTER**

By default, all outgoing IP traffic from the LAN is allowed. The Outbound Filter allows you to create a filter rule to block outgoing IP traffic by specifying a filter name and at least one condition below. All of the specified conditions in this filter rule must be satisfied for the rule to take effect.

ADD OUTBOUND IP FILTER

Type the filter name on the Filter Name.

Choose ICMP, TCP/UDP, TCP or UDP on the **Protocol**.

Type Source IP address, Source Subnet Mask and Source Port(port or port::port means from which port to which port)

Type Destination IP address, Destination Subnet Mask and Destination Port(port or port::port means from which port to which port)

Set the policy schedule on the Schedule, Always or never, or View Available Schedules

Please click **Add/Apply** button to add the policy in the list.

DSL-2740B	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
Port Forwarding	OUTBOUND IP FIL	TER			Helpful Hints
Application Rules		P traffic from the LAN is allowe	d.		Give each rule a Name that is meaningful to you.
QoS Setup					Each rule can Deny
Outbound Filter			block outgoing IP traffic by spo ons in this filter rule must be sa		outgoing traffic from the LAN.
Inbound Filter	take effect.				The Source IP addresses
Wireless Filter	ADD OUTBOUND I	P FILTER			are LAN-side address and the Destination IP address
DNS Setup					are WAN-side address.
Firewall & DMZ		Filter Name:			Click the Save button to store a finished rule in the
Advanced Internet		Protocol:	~		Rules List.
Advanced Wireless		ce IP address:			Click the Remove checkbox in the Rules List
Advanced LAN	Source Source Port (por	Subnet Mask:			then click on the Remove button to permanently
SNMP Setup		on IP address:			remove a rule.
Remote Management	Destination	Subnet Mask:			More
Routing Setup	Destination Port (por				
TR-069 Client		Schedule: Always ⊻	View Available Schedules		
WI-FI Protected Setup		Add/A	oply		
Power Management					
Logout	ACTIVE OUTBOUN	D IP FILTER			
Internet Offline	Name Protocol Src.	Addr./Mask Src. Port De	est. Addr./Mask Dest. Por	t Schedule Remove	

### **INBOUND FILTER**

By default, all incoming IP traffic from the internet network is allowed. The Inbound Filter allows you to create a filter rule to filter incoming IP traffic by specifying a filter name and at least one condition below. All of the specified conditions in this filter rule must be satisfied for the rule to take effect.

#### DSL-2740B ADVANCED MAINTENANCE SETUP ADD OUTBOUND IP FILTER Port Forwarding **OUTBOUND IP FILTER** Type the filter name on the **Filter Name**. Application Rules By default, all outgoing IP traffic from the LAN is allowed. QoS Setup The Outbound Filter allows you to create a filter rule to block outgoing IP traffic by specifying a filter name and Outbound Filter at least one condition below. All of the specified conditions in this filter rule must be satisfied for the rule to take effect. Choose ICMP, TCP/UDP, TCP or UDP on the Protocol. Inbound Filter ADD OUTBOUND IP FILTER Wireless Filter Type Source IP address, Source Subnet Mask and Source Port(port or **DNS Setup** Filter Name: port::port means from which port to which port) Firewall & DMZ Advanced Internet Protocol: Type Destination IP address. Destination Subnet Mask and Source IP address: Advanced Wireless Source Subnet Mask: Advanced LAN **Destination Port(port or port::port** means from which port to which port) Source Port (port or port:port): SNMP Setup Destination IP address: lenote Management Destination Subnet Mask: Destination Port (port or port:port): Routing Setup Set the policy schedule on the Schedule, Always or never, or View Schedule: Always 💌 View Available Schedules TR-069 Client **Available Schedules** Wi-Fi Protected Setup Add/Apply Power Management ACTIVE OUTBOUND IP FILTER locout Please click Add/Apply button to add the policy in the list. Name Protocol Src. Addr./Hask Src. Port Dest. Addr./Hask Dest. Port Schedule Remove

STATUS

HELP

Helpful Hints...

Give each rule a Name

that is meaningful to you

outgoing traffic from the

he Source IP addresse

are LAN-side address and

the Destination IP addres

are WAN-side address.

Click the Save button to store a finished rule in the

checkbox in the Rules List

then dick on the Removi

button to permanently

Rules List.

Click the Remove

enove a rule

tore\_

Each rule can Deny

### **WIRELESS FILTER**

This feature can let you add a policy to deny or allow WLAN devices connected to the router

### WIRELESS FILTER POLICY

You can choose the Disable/ Allow All/ Deny All of Wireless Filter Policy.

Disable: You don't want to launch the feature.

Allow All: Support Wlan devices make connection, except the mac address which is added in the filter table.

Deny All: Support deny all Wlan devices make connection, except the mac address which is added in the filter table.

### WIRELESS FILTER

Type filter name on the **FILTER NAME** 

Type wireless mac address on the Wireless MAC Address

WIRELESS FILTER - MAXIMUM 32 ENTRIES CAN BE ADDED.

Please click the Add/Apply button to add the policy in the list.

DSL-27408	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
Port Forwarding	WIRELESS FILTER				Helpful Hints
Application Rules	This page adds a Mac add	ress filter to deny or allow so	ecial WLAN devices connected	to the router.	Create a list of MAC addresses that you would
QoS Setup					either like to allow or deny users access to the
Outbound Filter	WIRELESS FILTER	POLICY			wireless router. Click on
Inbound Filter	You can change the globa	l Wireless Filter Policy here.			Remove if you want to take out a MAC address from the MAC filter list.
Wireless Filter	Wireless Filt	er Policy : 💿 Disabled			More
DNS Setup		O Allow All	Support Wian devices make co address which is added in the f	nnection, except the mac liter table.	
Firewall & DMZ		A	Support deny all Wan devices the mac address which is adde	make connection, except	
Advanced Internet					
Advanced Wireless	WIRELESS FILTER				
Advanced LAN	Fil	ter Name :			
SNMP Setup	Wireless MAC	Address :			
Remote Management					
Routing Setup			_		
TR-069 Client		Add/Ac	oply		
WI-FI Protected Setup	WIRFLESS FILTER	- MAYIMIM 32 ENTI	RIES COULD BE ADDE	n	
Power Management	WIRELESS HETER	HAAINON 32 LIIN		v.	
Logout	Name	MAC	Edit	Remove	
Internet Offine					

The DNS is used to resolve the DNS name to IPs. You can type or get automatically.

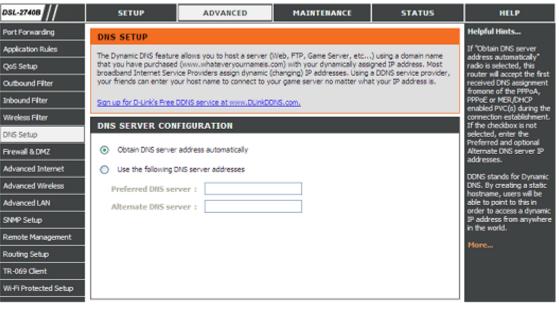
The Dynamic DNS feature allows you to host a server (Web, FTP, Game Server, etc...) using a domain name that you have purchased (for example: www.whateveryournameis.com) with your dynamically assigned IP address. Most broadband Internet Service Providers assign dynamic (changing) IP addresses. Using a DDNS service provider, your friends can enter your host name to connect to your game server and your friends don't mind what your IP address is, and then just type the DDNS name to reach. You can use the D\_Link DDNS server, https://www.dlinkddns.com to have a free DDNS.

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**.



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

Please enable the **Enable Dynamic DNS** if you want to use DDNS.

Choose which DDNS web site to use on the Server Address.

Type which Host name which you registered with your DDNS service provider. on the **Host Name**.

Please choose which interface name to use on the Interface.

Type the username/password on the **username/password** for your DDNS account.

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

DDNS CONFIGURATION	
Enable Dynamic DNS :	
Server Address :	dlinkddns.com(Free) 🗸
Host Name :	
Interface :	_undefined/undefined 💌
Username :	
Password :	

Apply Settings		Cancel
----------------	--	--------

### FIREWALL & DMZ

The router already provides a simple firewall by virtue of the way NAT works. By default NAT does not respond to unsolicited incoming requests on any port, thereby making your WAN invisible to Internet cyber attackers.

DMZ means 'Demilitarised Zone'. DMZ allows computers behind the router firewall to be accessible to Internet traffic. Typically, your DMZ would contain Web servers, FTP servers, and others.

### FIREWALL SETTING

Enable the SPI on the Enable SPI

Enable the DOS and Portscan on the **Enable DOS and Portscan Protection** 

Choose the SYN attack, FIN/URG/PSH attack, Ping attack, Xmas Tree attack, TCP reset attack, Null scanning attack, Ping of Death attack and SYN/RST SYN/FIN attack.

DSL-27408	SETUP	ADVANC	ED	MAINTENANCE	STATUS	HELP
Port Forwarding	FIREWALL & DM2					Helpful Hints
Application Rules	The router already provi	des a simple firewal	by virtue o	if the way NAT works. By defa	ult NAT does not respond	Enable the DMZ option only as a last resort. If
QoS Setup				aking your LAN invisible to Inte		you are having trouble using an application from
Outbound Filter				behind the router frewall to be	accessible to Internet	a computer behind the router. As you placed
Inbound Filter	traffic. Typically, your D	MZ would contain W	eb servers,	FTP servers, and others.		outside the protect of the Firewall. The IP address
Wreless Filter	FIREWALL SETTI	IGS				entered. While by default have all port request
DNS Setup		Enable SPI :				fowrarded to it. It should only be used as a
Firewall & DMZ	Enable D0	S and Portscan	_			troubleshooting tool. For short periods of time.
Advanced Internet		Protection :				
Advanced Wireless		S11N attack :				More
Advanced LAN	FDN	URG/PSH attack :				
SNMP Setup		Ping attack :				
Remote Management	) ×	imas Tree attack :				
Routing Setup		TCP reset attack :				
TR-069 Client	Nul	scanning attack :				
WI-FI Protected Setup	Ping	of Death attack :				
Power Management	SYN/RST	SYN/FIN attack :				

#### DMZ SETTING

Please enable the **Enable DMZ** and type the DMZ client IP on the **DMZ IP Address**. Or you also can choose the DMZ host by the up-down menu.

#### DMZ SETTING

The DMZ (Demilitarized Zone) option lets you set a single computer on your network outside of the router. If you have a computer that cannot run Internet applications successfully from behind the router, then you can place the computer into the DMZ for unrestricted Internet access.

Note: Putting a computer in the DMZ may expose that computer to a variety of security risks. Use of this option is only recommended as a last resort.

Enable DMZ :
DMZ IP Address :
Computer Name

APPLICATION LEVEL GATEWAY (ALG)	
CONFIGURATION	

Please choose the PPTP, IPSec(VPN Passthrough),

RTSP(Online Video Streaming), Windows/MSN Messager, FTP,

H.323(Video Conferencing), SIP, Wake-On-LAN and MMS.

APPLICATION LEVEL GATEWAY	(ALG) CONFIGURATION
PPTP :	
IPSec (VPN Passthrough) :	
RTSP (Online Video Streaming) :	
Windows/MSN Messenger :	
FTP:	
H.323 (Video Conferencing) :	
SIP :	
Wake-On-LAN :	
MMS :	

Cancel

Apply Settings

### **ADVANCED INTERNET**

The Multiple PVC Settings allow you to Add, Delete or Edit multiple PVCs connection for advanced ADSL service. The Advanced ADSL settings allow you to choose which ADSL modulation settings your modem router will support.

D-Link do not recommend that you change these settings unless directed to do so by your ISP.

### MULTIPLE PVC SETTINGS

Please click the Add button to add the multiple PVC

DSL-2740B	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
PortForwarding	ADVANCED ADSL				Helpful Hints
Application Rules	The Multiple PVC Settings	alow you to Add, Delete or	Edit multiple PVCs connection	for advanced ADSL	Do not change these settings unless directed
QoS Setup	service.				by your ISP. By default the D-Link router will
Outbound Filter		ngs allow you to choose which	n ADSL modulation settings you	r modem router will	determine your best
Inbound Filter	support.				connection. You do not need to change any
Wreless Filter	D-Link do not recommend	that you change these setting	gs unless directed to do so by	your ISP.	settings unless instructed by D-Link Technical
DNS Setup	MULTIPLE PVC SE	TTINGS			Support.
Firewall & DMZ					More
Advanced Internet	VPI/VCI S	ervice Protocol	IGMP Nat State	Edit Action	
Advanced Wireless Advanced LAN		Add	Delete		

### ADVANCED ADSL SETTINGS

Please select following ADSL profile to link.

G.Dmt,	G.lite	, <b>T1.413</b> ,	ADSL2,	AnnexL,	ADSL2+,	Annex M
--------	--------	-------------------	--------	---------	---------	---------

Please choose the Inner pair or Outer pair on the Select the phone line pair below.

Please select to enable Bitswap and SRA on the Capability.

<ul> <li>G.Dmt Enabled</li> <li>G.lite Enabled</li> <li>T1.413 Enabled</li> <li>ADSL2 Enabled</li> <li>AnnexL Enabled</li> <li>ADSL2+ Enabled</li> <li>AnnexM Enabled</li> </ul> Select the phone line pair below: <ul> <li>Inner pair</li> </ul>
Outer pair
Capability :
Bitswap Enable
SRA Enable

Apply Settings		Cancel
----------------	--	--------

### **ADVANCED WIRELESS**

SETUP

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.

DSL-2740B

### ADVANCED WIRELESS SETTINGS

If you need to change the default behavior,

Please type the value on the Fragmentation Threshold

Please type the value on the RTS Threshold

Please type the value on the DTIM Interval

Please type the value on the **Beacom Interval** 

Please choose 20%, 40%, 60%, 80% and 100% on the **Transmit Power**.

Helpful Hints... Port Forwarding ADVANCE WIRELESS Application Rules By default these options These options are for users that wish to change the behaviour of their 802, 11g wireless radio from the need not to be changed standard setting. D Link does not recommend changing these settings from the factory default. Incorrect QoS Setup for this router to operate settings may impair the performance of your wireless radio. The default settings should provide the best with Wireless.For the wireless radio performance in most environments. Outbound Filter ootion Transmit Power is the radio signal strength. Inbound Filter You will need to decrease ADVANCE WIRELESS SETTINGS the power if you add a Wireless Filter new high gain antenna, as Wireless Band: 2.4GHz Band this will exceed operating limits. DNS Setup Fragmentation Threshold: 2346 (256...2346) More... Firewall & DMZ RTS Threshold: 2347 (0...2347)Advanced Internet DTIM Interval: 1 (1..255)Advanced Wireless Beacon Interval: 100 (20..1000)Advanced LAN Transmit Power: 100% V SNMP Setup **GUEST WIRELESS SETTINGS** Remote Management Enable Wireless Guest Network : 📃 Routing Setup Wireless Network Name (SSID): ath1 Guest1 TR-069 Client Visibility Status: 💿 Visible 🔘 Invisible Wi-Fi Protected Setup AP Isolation : Off 🗸 Power Management

ADVANCED

MAINTENANCE

STATUS

HELP

### **GUEST WIRELESS SETTING**

### Please enable the Enable Wireless Guest Network

Type SSID on the Wireless Network Name

Please choose Visible or Invisible on the Visibility Status

Please select Off/On on the AP Isolation.

### **ADVANCED LAN**

These options are for users that wish to change the LAN settings. D-Link does not recommend changing these settings from factory default. Changing these settings may affect the behavior of your network.

### UPNP

Please select the Enable UPnP when you want to have Universal Plug and Play (UPnP) supports peer-to-peer Plug and Play functionality for network devices.

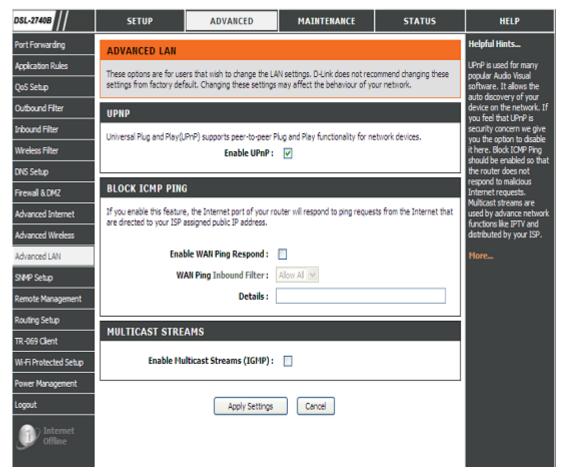
### **BLOCK ICMP PING**

Enable the WAN Ping Respond on the **Enable WAN Ping Respond**.

Please select Allow All or Deny All on the WAN Ping Inbound Filter and you can also type a string on the Details to describe the action.

### MULTICAST STREAMS

Please enable the **Enable Multicast Streams (IGMP)** to let IGMP stream can pass through DSL-2740B.



### **SNMP SETUP**

Simple Network Management Protocol (SNMP) allows a management application to retrieve statistics and status from the SNMP agent in this device.

Select the desired values and click "Apply" to configure the SNMP options.

### SNMP CONFIGURATION

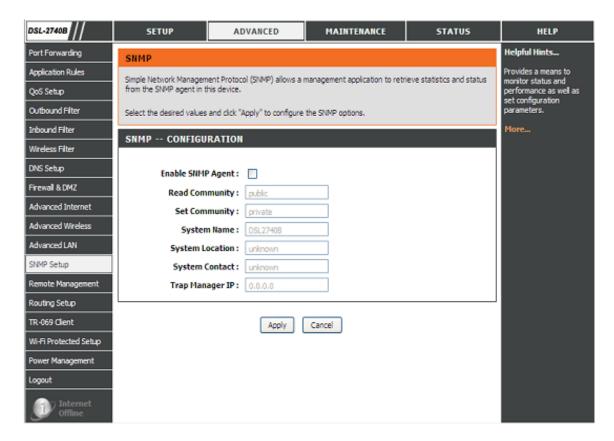
Please enable the SNMP Agent

Please type the **Read Community**, **Set Community** to match to the SNMP requirier.

Please type **System Name**, **System Location** and **System Contact** to describe the DSL-2740B's related information.

Please type the trap IP on the Trap Manager IP

Please click the **Apply** button to save the configurations.



### **REMOTE MANAGEMENT**

This section allows you to enable/disable remote access to the router from the Internet. Advanced access control allows you to configure access via specific services. Most users will not need to change any of these settings.

### **REMOTE MANAGEMENT SETTINGS**

Please enable the ENABLE Remote Management

Please type the port number which you want to replace the original port.

Please select Allow All or Deny All on the Remote Admin Inbound Filter

Please type a string to describe the action on the Details.

DSL-2740B	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
Port Forwarding	REMOTE MANAGE	MENT			Helpful Hints
Application Rules	This section allows you to	enable/disable remote access	to the router from the Interne	t. Advanced access	Remote Management by default should be
QoS Setup			ces. Most users will not need to		disabled. However if you wish to login and manage
Outbound Filter					your Router from another
Inbound Filter	REMOTE MANAGE	MENT SETTINGS			Internet device than you can enable the router to
Wireless Filter	Enable	Remote Management :			accept such commands from the Internet port. This option may be useful
DNS Setup		Remote Admin Port :			if your network administrator is not onsite
Firewal & DMZ	Remote	Admin Inbound Filter :	Allow All \vee		or Technical Support request such access.
Advanced Internet		Details :			More
Advanced Wireless					TRAC

### **REMOTE ACCESS CONTROL**

Please select the Service to enable on LAN or WAN.

Please click the **Apply Settings** button to save the configuration.

REMOTE ACCESS CONTROL			
Service	LAN	WAN	
FTP	Enabled	Enabled	
HTTP	Enabled	Enabled	
ICMP	Enabled	Enabled	
SNMP	Enabled	Enabled	
SSH	Enabled	Enabled	
TELNET	Enabled	Enabled	
TFTP	Enabled	Enabled	

Apply Settings Cancel

### **ROUTING SETUP**

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

A maximum 32 entries can be configured Allows you to configure RIP (Routing Information Protocol). 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.

SETUP

DSL-2740B

**ROUTING -- STATIC ROUTE** 

Please click the **Add** or **Edit** button to set a static routing policy in the list.

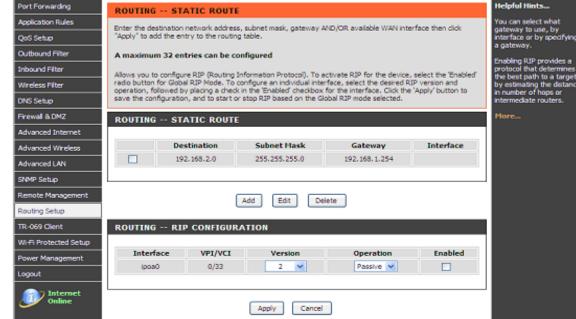
Please type the **Destination Network Address** and **Subnet** Mask.

Please select to type the **Gateway IP** or the **interface** to be the routing interface.

Click the Apply the button to save the configuration.

### **ROUTING -- RIP CONFIGURATION**

Please choose the **Version** and **Operation**, and then decide to **Enable** or not.



ADVANCED

MAINTENANCE

STATUS

HELP

### TR-069

The WAN management protocol **TR-069** allows anAuto-Configuration Server (ACS) to perform auto-configuration, provision, collection, and diagnostics to this device.

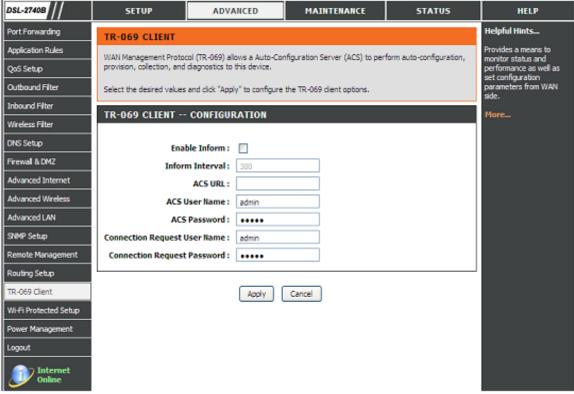
To access the TR-069 Configuration window, click on the TR-069 button under the ADVANCED tab.

#### TR-069

Re

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 (seconds) between two Inform
Interval:	messages.
ACS URL:	Enter the URL of your ISP's ACS
ACS User	Enter the authentication user name
Name:	
ACS	Enter the authentication password
Password:	
Connection	Enter the authentication user name for the
Request User	ACS to login
Name:	
Connection	Enter the authentication password for the
	ACS to login
Password:	



### WIFI PROTECTED SETUP

Wi-Fi Protected Setup is used to easily add devices to a network using a PIN or button press.

Devices must support Wi-Fi Protected Setup in order to be configured by this method.

### WI-FI PROTECTED SETUP

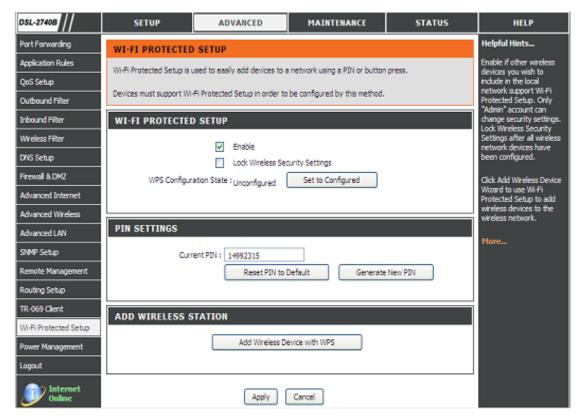
Please select to **Enable** or **Lock Wireless Security Settings** You also can click the **Set to Configured** button to set configured

### **PIN SETTINGS**

Choose to click the **Reset PIN to Default** button or **Generate New PIN** button to show the PIN on the **Current PIN**.

### ADD WIRELESS STATION

Please click the **Add Wireless Device** with WPS button to set the WPS.



### **POWER MANAGEMENT**

This feature allows you to control of Hardware modules to evaluate power consumption. Use the control buttons to select the desired option, click Apply and check the status response.

### MIPS CPU CLOCK

You can choose Auto, 1/8 of full speed ASYNC, 1/4 of full speed ASYNC, 1/2 of full speed ASYNC, Full speed ASYNC, Full speed SYNC and it will show on the Status.

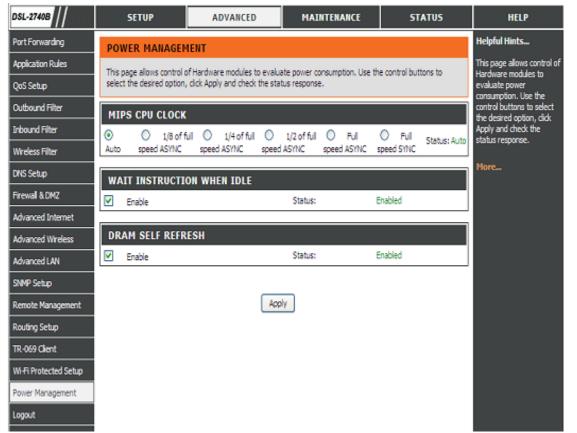
### WAIT INSTRUCTION WHEN IDLE

Please Enable the feature if necessary.

### DRAM SELF REFRESH

Please Enable the feature if necessary.

Please click the Apply button to save the settings.



### MAINTENANCE

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

### PASSWORD

The factory default password of this router is 'admin'. To help secure your network, D-Link recommends that you should choose a new password.

### SET PASSWORD (OPTIONAL)

Please type the Current Password, New Password, Confirm Password and the Idle Time Out.

Please click the Apply Settings button to save the settings.

### **GRAPHIC LOG-IN AUTHENTICATION (CAPTCHA)**

To enhance your router login security, you can enable CAPTCHA.

Please click the Apply Settings button to save the configuration.

DSL-27408	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
Password	PASSWORD				Helpful Hints
Save/Restore Settings	The factory default pass	ord of this router is 'admin'. 1	To help secure your network, D	-Link recommends that	This page allows you to modify your router
Firmware Update	you should choose a new	password needed to access this Web			
Diagnostics	SET PASSWORD (	OPTIONAL)			management interface. For security reasons, it is
System Log	To change the router pas	sword, please type in the cur	rent password, then the new p	assword twice.	recommended that you change your device
Schedules					password from the factory default. Please
Logout	Current Password				make sure to choose a password you can
Really Internet	New Password				remember or write it down and keep in a safe and
Online 🗸	Confirm Password				separate location for future reference. If you
English 🔽	Idle Time Out	10			forget your device password, the only
Reboot		Apply Settings	Cancel		solution is to reset your router to factory default settings and you will loose all your device configuration settings.
	GRAPHIC LOG-IN	AUTHENTICATION (C	АРТСНА)		More
	To enhance your router k	ogin security, you can enable	САРТСНА.		
		Enable CAPTCHA:			
		Apply Settings	Cancel		

### SAVE/RESTORE SETTINGS

Once the router is configured and you can save the configuration settings to a configuration file on your hard drive. You also have the option to load configuration settings, or restore the factory default settings.

### SAVE/RESTORE CONFIGURATION

Please click the Save button on the Save Settings to Local Hard Drive.

Please click **Browse** button to choose the configurations file and then click the **Update Settings** button to upload.

If necessary, please click the **Restore Device** button to have the default settings.

DSL-2740B	SETUP	ADVANCED	MAINTENANCE	STATUS
Password	SAVE/RESTORE S	ETTINGS		
Save/Restore Settings	Once the router is config	ured you can save the configu	ration settings to a configurati	on file on your hard
Firmware Update	drive. You also have the	option to load configuration se	ettings, or restore the factory of	default settings.
Diagnostics	SAVE/RESTORE C	ONFIGURATION		
System Log	Save Setti	ings to Local Hard Drive :	Save	
Schedules	Load S	ettings From Local Hard	Brown	se
Logout		Drive :	Update Settings	
Internet Online	Restore To F	actory Default Settings :	Restore Device	
English 🔽				
Reboot				

### **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 INFORMATION

It shows **Board ID**, **Software Version**, **Bootloader(CEF) Version** and **Wireless Driver Version** 

#### FIRMWARE UPGRADE

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

DSL-2740B	SETUP	ADVANCED	MAINTENANCE	STATUS
Password	FIRMWARE UPDA	TE		
Save/Restore Settings	Note: Please do not upda	te the firmware on this router	unless instructed to do so by D	Hink technical support
Firmware Update	Note: Please do not update the firmware on this router unless instructed to do so by D-Link technical support or your ISP.			
Diagnostics	FIRMWARE INFORMATION			
System Log	Board	ID: AW4339U		
Schedules	Software Vers			
Logout	Bootloader (CFE) Vers	ion: 1.0.37-105.5		
English Reboot	FIRMWARE UPGRA Note: Some firmware upg upgrade, be sure to save	ADE rades reset the configuration the current configuration from , your PC must have a wired of the Upload button.	options to factory defaults. Be In the Maintenance -> Save/Re onnection to the router. Enter ( Browse.)	store Settings screen.

### DIAGNOSTICS

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

### SYSTEM CHECK

There are Test your eth0/eth1/eth2/eth3 Connection, Test your Wireless Connection and Test ADSL Synchronization and they will show PASS or FAIL

### INTERNET CONNECTIVITY CHECK

There are **Ping ISP Default Gateway/ Primary DNS server** and they will show **PASS** or **FAIL** 

Please click the Test button to Diagnostic the above test items.

DSL-2740B	SETUP	ADVANCED	MAINTENANCE	STATUS
assword	DIAGNOSTICS			
ave/Restore Settings	Your router is canable of	testing your DSL connection. 1	The individual tests are listed by	alow. If a test displays a
rmware Update	fail status, click "Return D	Diagnostics Tests" at the botto click "Help" and follow the troo	m of this page to make sure fai	
iagnostics	the test continues to rail,		ableshooding procedures.	
ystem Log	SYSTEM CHECK			
hedules	Test your eth0 Conn	action		FAIL Help
ogout	Test your eth1 Conn			PASS Help
	Test your eth2 Connection:			FAIL Help
Internet Online	Test your eth3 Connection:			FAIL Help
	Test your Wireless Connection:			PASS Help
English V Test ADSL Synchronization:				PASS <u>Help</u>
Reboot	INTERNET CONNEC	СТІVІТҮ СНЕСК		
	Ping ISP Default Gate	eway:		FAIL
	Ping Primary DNS set	rver:		FAIL
	Test			

# SYSTEM LOG

The system Log allows you to configure local, remote and email logging, and to view the logs that have been created.

### **REMOTE LOG SETTING**

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

#### ENABLE EMAIL NOTIFICATION

Please enable. If any logs occur, the system will send mail to the mail address you set.

DSL-2740B	SETUP	ADVANCED	MAINTENANCE	STATUS
Password	SYSTEM LOG			
Save/Restore Settings	The system Log allows vo	u to configure local, remote a	nd email logging, and to view th	e loos that have been
Firmware Update	created.	,		
Diagnostics	REMOTE LOG SET	TING		
System Log		Log Enable:		
Schedules		Log Level:	Debugging 🕑	
Logout		Display Level:	Error	
Internet		Mode:	Local	
Online		Server IP Address:		
		Server UDP Port:		
English 💌	ENABLE EMAIL NO	DTIFICATION		
Reboot	E	nable EMAIL Notification:		

#### Section 3 - Configuration

### EMAIL SETTINGS

Please type the From MAIL Address, To MAIL Address and SMTP Server Address.

Please Enable the **Enable Authentication** and then set the **Account Name**, **Account Password** and **Verity Password**.

#### EMAIL LOG WHEN FULL

Please Enable the On Log Full. When the log file is full, the system will send mail to the mail address you set.

### VIEW SYSTEM LOG

The system will show logs in the list by **Date/Time**, **Facility**, **Severity** and **Message**.

Please click the **Apply Settings** button to save the configuration.

EMAIL SETTINGS	
From MAIL Address:	
To MAIL Address:	
SMTP Server Address:	
Enable Authentication:	
Account Name:	
Account Password:	
Verify Password:	
EMAIL LOG WHEN FULL	
On Log Full:	
VIEW SYSTEM LOG	
Date/Time Facility	Severity Message

Apply Settings

Cancel

# SCHEDULE

Schedule allows you to create scheduling rules to be applied for your firewall.

Maximum of 16 entries

# SCHEDULE RULE

Please click the **Add** or **Edit** button to configure the schedule policy.

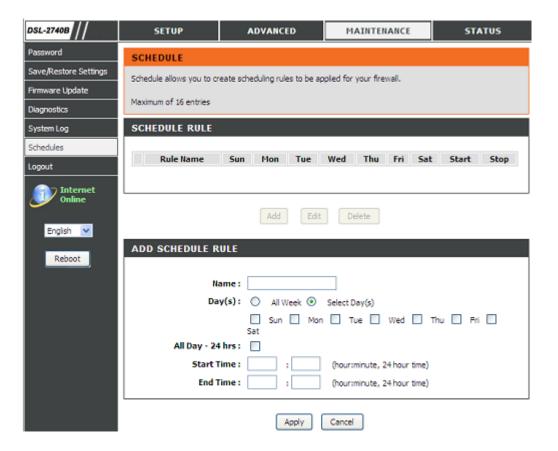
# ADD SCHEDULE RULE

Please type the Name

Please choose all week or Sun, Mon, Tue, Wed, Thu, Fri or Sat.

Please set the Start Time and End Time.

Please type the Apply button to save the configuration.



# 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 INFO**

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, the firmware version and the Released Date.



Section 3 - Configuration

### **INTERNET INFO**

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

Internet Co	nnection: pppoe_0	_38_1 💙				
Internet Co	CONNECTED					
Internet Co	nnection Up Time :		0 days 0	hours 22 mi	nutes 20 sec	conds
Default Gateway:			10.0.0.1			
Preferred DNS Server:			168.95.1.1			
Alternate D	NS Server:		168.95.1.1			
Downstream	n Line Rate (Kbps)	6	7680			
Upstream L	ine Rate (Kbps):		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 LAN

This window displays authenticated wireless stations and their status.

# WIRELESS LAN

Wireless Radio : ON MAC Address : 00:1A:2B:27:40:01 Network NAME(SSID) : D-Link DSL-2740B Channel : 1 Security Type : None

Section 3 - Configuration LOCAL NETWORK INFO This window displays LAN information including MAC, IP address, Mask, and DHCP Server.	LAN	
	MAC Address: 00:1a:2b:27:40:00	
	IP Address: 192.168.1.1	
	Subnet Mask: 255.255.255.0	
	DHCP Server: ON	

# **CONNECTED CLIENTS**

Del 17/00

This feature shows all the currently connected wireless and LAN computers or PCs.

# CONNECTED WIRELESS CLIENTS

This window displays authenticated wireless stations and their status.

# CONNECTED LAN CLIENTS

This window displays all the entities which link to the LAN interface successfully.

You can choose to block which entities and click the **Block** button

036-27408	SCIUP	ADVANCE		PIAINTENANCE	STAT	05
Device Info	CONNECTED CL	IENTS				
Connected Clients	This page shows all th	he currently connected i	vireless and LAN	computers or PCs.		
Statistics	ins page anona dra	ie carrently connected		competers of thes.		
Routing Info	CONNECTED W	IRELESS CLIENTS	3			
Logout						
Internet	BSSID	Associate	ed	Authorized		SSID
Online	CONNECTED LA	N CLIENTS				
English 🔽						
engish 🔛	Host Name	MAC Address	IP Address	Expires I	In	Block
Reboot	RQ-JACKY-N	00:22:64:55:f3:7a	192.168.1.2	22 hours, 26 minutes	s, 34 seconds	
	rdqa-9e9c4d6e2d	00:03:7f:be:ef:f8	192, 168, 1, 3	15 minutes, 41	seconds	
			Block			
BLOCKED MAC	ADDRESS					
Host Nar	me	MAC A	ddress		Unblock	
		Unblock	1			
		Charloter				

# **BLOCKED MAC ADDRESS**

Click the Unblock button to unblock the blocked entities.

# **STATISTICS**

This information reflects the current status of your router.

#### WAN STATISTICS

This window displays all the **Receiver** and **Transmitted** packet status on the WAN interface.

### LAN STATISTICS

This window displays all the **Receiver** and **Transmitted** packet status on the LAN interface.

//	SETUP		ADV	ANCED	M	AINTENAN	ICE	1	STATUS
	STATISTICS	s							
ents	This information	reflects the	current sta	atus of you	r router				
	The monocon	reneed the	corrent sta	nuo or you	- reater				
	WAN STATI	STICS							
	Interface V		rotocol (	Sandra	Per	eived		Transn	aittad
				service	Neu	civeu		Transn	nuueu
rnet ne	LAN STATIS				Bytes Pkts	Errs Dro	ps Bytes	Pkts	Errs Drops
	LAN STATIS	STICS			Bytes Pkts	Errs Drop			Errs Drops
ne		STICS	Re	eceived			Trans	mitted	
ne Y	LAN STATIS	STICS			Bytes Pkts Drops	Errs Drop Bytes			Errs Drops Drops
ne Y	LAN STATIS	STICS Bytes	Ro Pkts	eceived Errs	Drops	Bytes	Trans Pkts	mitted Errs	Drops
ne Y	LAN STATIS	STICS Bytes 0	R( Pkts 0	eceived Errs 0	Drops 0	Bytes 0	Trans Pkts 0	mitted Errs 0	0
ne Y	LAN STATIS Interface eth0 eth1	<b>STICS</b> Bytes 0 69434	Ro Pkts 0 605	eceived Errs 0 0	Drops 0 0	<b>Bytes</b> 0 572645	Trans Pkts 0 660	mitted Errs 0	Drops 0 0

# Section 3 - Configuration ADSL STATISTICS

# This window displays all the ADSL status

#### ADSL STATISTICS

Mode:	ADSL_2plus			
Traffic Type:	ATM			
Status:		Up		
Link Power State:		LO		
	Downstream	Upstream		
Line Coding(Trellis):	On	On		
SNR Margin (0.1 dB):	306	215		
Attenuation (0.1 dB):	5	6		
Output Power (0.1 dBm):	54	93		
Attainable Rate (Kbps):	28520	1331		
	Path 0		Path 1	
	Downstream	Upstream	Downstream	Upstream
Rate (Kbps):	9085	508	0	0
MSGc (# of bytes in overhead channel message):	91	28	0	0
	91 18	28 30	0	0 0
B (# of bytes in Mux Data Frame):			1	1
B (# of bytes in Mux Data Frame): M (# of Mux Data Frames in FEC Data Frame):	18	30	0	0
B (# of bytes in Mux Data Frame): M (# of Mux Data Frames in FEC Data Frame): T (Mux Data Frames over sync bytes):	18 1	30 1	0	0
B (# of bytes in Mux Data Frame): M (# of Mux Data Frames in FEC Data Frame): T (Mux Data Frames over sync bytes): R (# of check bytes in FEC Data Frame):	18 1 10	30 1 1	0 0 0	0
B (# of bytes in Mux Data Frame): M (# of Mux Data Frames in FEC Data Frame): T (Mux Data Frames over sync bytes): R (# of check bytes in FEC Data Frame): S (ratio of FEC over PMD Data Frame length):	18 1 10 14	30 1 1 16	0 0 0 0	0 0 0 0
B (# of bytes in Mux Data Frame): M (# of Mux Data Frames in FEC Data Frame): T (Mux Data Frames over sync bytes): R (# of check bytes in FEC Data Frame): S (ratio of FEC over PMD Data Frame length): L (# of bits in PMD Data Frame):	18 1 10 14 0.665	30 1 1 16 1.8894	0 0 0 0 0.0	0 0 0 0 0.0
MSGc (# of bytes in overhead channel message): B (# of bytes in Mux Data Frame): M (# of Mux Data Frames in FEC Data Frame): T (Mux Data Frames over sync bytes): R (# of check bytes in FEC Data Frame): S (ratio of FEC over PMD Data Frame length): L (# of bits in PMD Data Frame): D (interleaver depth): Delay (msec):	18 1 10 14 0.665 3966	30 1 1 16 1.8894 199	0 0 0 0 0.0 0	0 0 0 0 0.0 0

#### Section 3 - Configuration

You can click the **ADSL BER Test** button to test the ADSL connection.

You can click the Reset Statistics button to set all statistics to recount.

Super Frames:	40822	40825	0	0
Super Frame Errors:	0	0	0	0
RS Words:	39595973	1395577	0	0
RS Correctable Errors:	0	0	0	0
RS Uncorrectable Errors:	0	0	0	0
HEC Errors:	o	0	0	0
OCD Errors:	0	0	0	0
LCD Errors:	0	0	0	0
Total Cells:	14120759	786103	0	0
Data Cells:	5731	0	0	0
Bit Errors:	0	0	0	0
Total ES:	0	0		
Total SES:	0	0		
Total UAS:	19	19		

ADSL BER Test

Reset Statistics

# **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
Device Info	ROUTING TABLE L	IST		
Connected Clients				
Statistics	ROUTING STAT			
Routing Info	Destination	n Su	bnet Mask	Gateway
Logout				
Internet Offline				
English 🔽				
Reboot				

# 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

- 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 as 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".

#### Appendix A - Wireless Basics

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.

D-Link DSL-2740B User Manual

# **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 wil	l dis	play t	he I	P addi	ress,	subne	et mask,	and	the	defau	lt
gatewa	y of	your	adap	oter.							

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.

::\Docu	ments and Settings>ipconfig	
lindows	IP Configuration	
	t adapter Local Area Connection: Connection-specific DNS Suffix .: dlink IP Address	
::\Docu	ments and Settings>	

Appendix B - Networking Basics

# 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.

	automatically if your network supports ed to ask your network administrator for
Obtain an IP address autom	atically
Ose the following IP address	5.
IP address:	192.168.0.52
Subnet mask:	255 . 255 . 255 . 0
Default gateway:	192.168.0.1
) Obtain DNS server address	automatically
Use the following DNS serv	er addresses:
Preferred DNS server:	192.168.0.1
Alternate DNS server:	a a (a)
	Advanced.

# **Technical Specifications**

# ADSL Standards

- ANSI T1.413 Issue 2
- ITU G.992.1 (G.dmt) AnnexA
- 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 300Mbps (802.11n)
- Frequency range: 2.4 GHz to 2.484G Hz
- Antennas: 2 non-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.

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