

USER MANUAL

DSL-2640R

VERSION 1.0



FCC Notices

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

CAUTION: Change or modification not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

CAUTION: Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment.

RF exposure warning:

The equipment complies with FCC RF exposure limits set forth for an uncontrolled environment. The equipment must not be co-located or operating in conjunction with any other antenna or transmitter.

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Package Contents

- DSL-2640R Wireless ADSL Router
- Power Adapter
- CD-ROM with User Manual
- One twisted-pair telephone cable used for ADSL connection
- One straight-through Ethernet cable
- One Quick Installation Guide

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



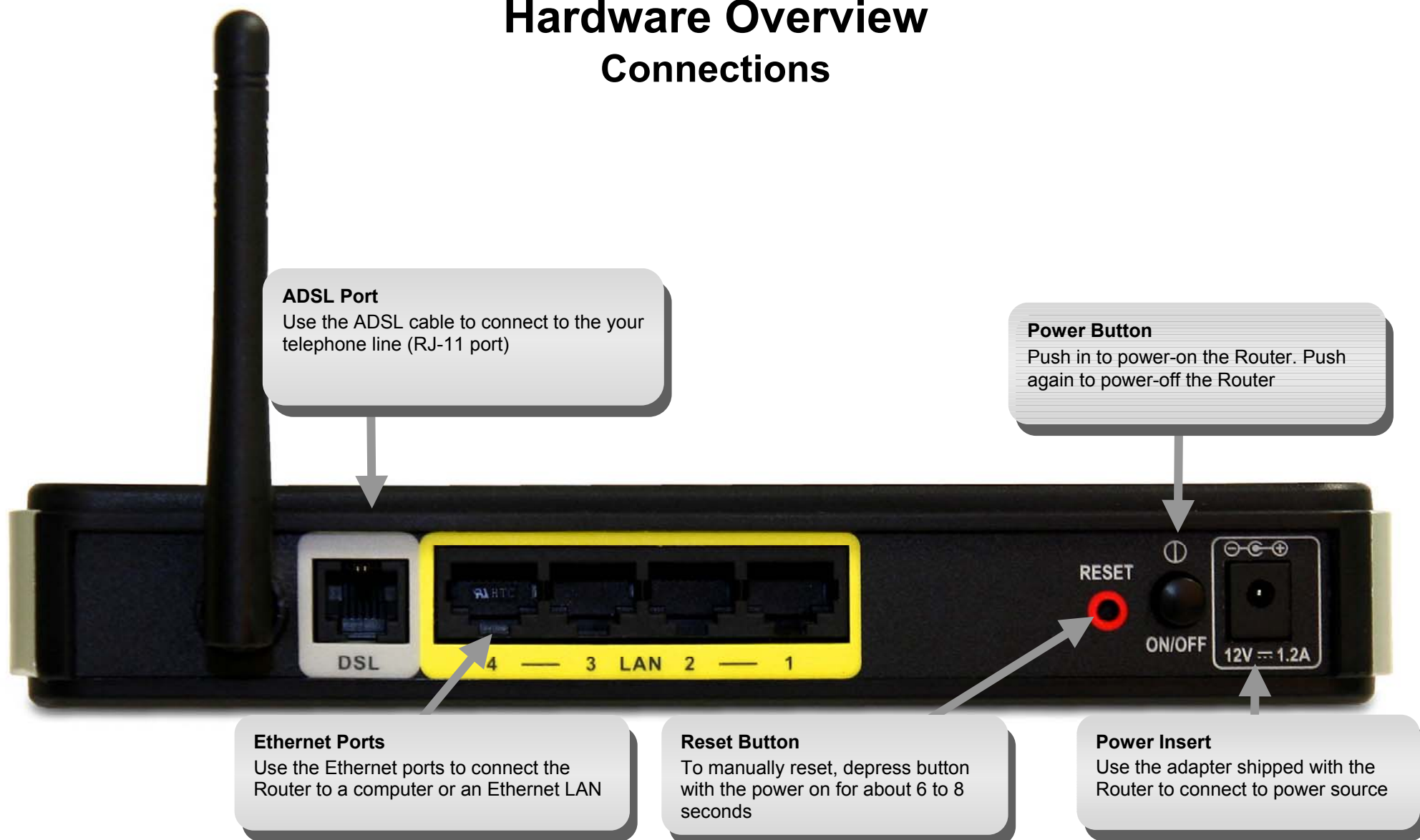
System Requirements

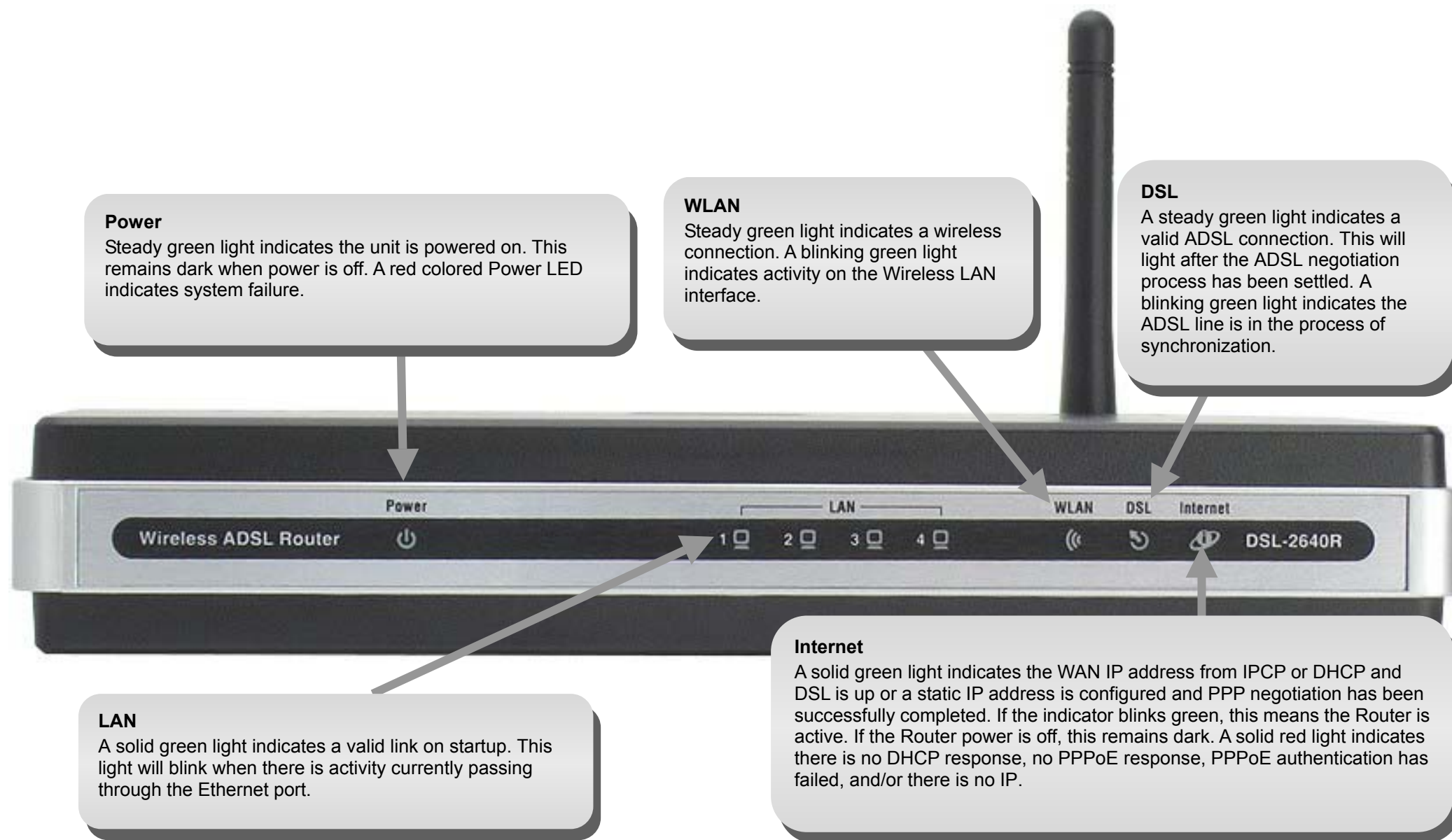
- ADSL Internet service
- Computer with:
 - 200MHz Processor
 - 64MB Memory
 - CD-ROM Drive
 - Ethernet Adapter with TCP/IP Protocol Installed
 - Internet Explorer v6 or later, FireFox v1.5
 - Computer with Windows 2000, Windows XP, or Windows Vista
- D-Link Click n' Connect Utility

Features

- **PPP (Point-to-Point Protocol) Security** – The DSL-2640R ADSL Router supports PAP (Password Authentication Protocol) and CHAP (Challenge Handshake Authentication Protocol) for PPP connections. The Router also supports MSCHAP.
- **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-2640R 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.
- **TCP/IP (Transfer Control Protocol/Internet Protocol)** – The DSL-2640R supports TCP/IP protocol, the language used for the Internet. It is compatible with access servers manufactured by major vendors.
- **RIP-1/RIP-2** – The DSL-2640R supports both RIP-1 and RIP-2 exchanges with other routers. Using both versions lets the Router to communicate with all RIP enabled devices.
- **Static Routing** – This allows you to select a data path to a particular network destination that will remain in the routing table and never “age out”. If you wish to define a specific route that will always be used for data traffic from your LAN to a specific destination within your LAN (for example to another router or a server) or outside your network (to an ISP defined default gateway for instance).
- **Default Routing** – This allows you to choose a default path for incoming data packets for which the destination address is unknown. This is particularly useful when/if the Router functions as the sole connection to the Internet.
- **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.
- **Full Network Management** – The DSL-2640R incorporates SNMP (Simple Network Management Protocol) support for web-based management and text-based network management.
- **Easy Installation** – The DSL-2640R 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.

Hardware Overview Connections





Installation

This section will walk you through the installation process. Placement of the Wireless ADSL Router is very important. Do not place the Router in an enclosed area such as a closet, cabinet, or in the attic or garage. Place the Wireless ADSL Router in a location where it can be easily connected to Ethernet devices, the telephone line as well as to a power source.

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-2640R 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, Windows XP, and Windows Vista.

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.

Installation Overview

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.

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 as 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.

Wireless LAN

Computers using the Wireless network can access the Internet or use the embedded 802.11g wireless access point. Wireless workstations must have an 802.11g or 802.11b wireless network card installed to use the Wireless ADSL Router. In addition the workstations must be configured to operate on the same channel and SSID as the Wireless ADSL Router. If wireless security is used, the wireless workstations must be properly configured for the security settings used.

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. 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/PPPoA (PPPoE LLC, PPPoE VC-Mux, PPPoA LLC or PPPoA VC-Mux)
- Dynamic IP Address (1483 Bridged IP LLC, 1483 Bridged IP VC-Mux)
- Static IP Address (1483 Bridged IP LLC, 1483 Bridged IP VC-Mux, 1483 Routed IP LLC(IPoA) or 1483 Routed IP VC-Mux)
- Bridge Mode (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 (Auto Synch-Up) used for the Router automatically detects all types of ADSL, ADSL2, and ADSL2+ modulation.

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-2640R

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-2640R

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-2640R

This is the subnet mask used by the DSL-2640R, 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-2640R to this Ethernet port using an Ethernet cable. You can also use the Ethernet ports on the DSL-2640R to connect to other computer or Ethernet devices.

DHCP Client status

Your DSL-2640R 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-2640R will assign are from 192.168.1.5 to 192.168.1.32. Your computer (or computers) needs to be configured to obtain an IP address automatically (that is, they need to be configured as DHCP clients.)

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

Once you have the above information, you are ready to setup and configure your DSL-2640R ADSL Router.

Device Installation

The Wireless ADSL Router maintains three separate interfaces, an ADSL, an Ethernet, and a Wireless LAN interface. Place the Wireless ADSL Router in a location where it can be easily connected to Ethernet devices, the telephone line as well as to a power source.

The Router can be placed on a shelf or desktop, ideally 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. Connect the power adapter to the **Power Input** (12V AC 1.2A) on the back panel of the Wireless ADSL Router and plug the other end of the power adapter to a wall outlet or power strip.
2. Push the **Power Button** toggle the power on.
3. The **Power** LED on the front panel will shine bright green to indicate the device is powered on.
4. If the Ethernet port is connected to a working device, check the **LAN** LED indicator to make sure the connection is valid. The Wireless ADSL Router will attempt to establish the ADSL connection, if the ADSL line is connected and the Wireless ADSL Router is properly configured the **ADSL** LED will light up after several seconds. If this is the first time installing the device, some settings may need to be changed before the Wireless ADSL 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. With the router powered on (check the Power LED to make sure it lights steady green), press and hold down the reset button using a paper clip or similar object for about 6 to 8 seconds.
2. The router will restart. Watch the Power LED to verify that it is restarting.
3. When it is powered on again it is ready to be configured. The whole process takes about 30 seconds.
4. 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."

Note: A factory reset will erase the current configuration settings and reset them to the default settings. After it has restarted, log in to the router's web-based management interface and use the Setup Wizard to configure the basic settings.

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

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. 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.

Wireless Connection to Router

The Router's embedded 802.11g wireless access point should be configured to suit the local wireless network. All 802.11g or 802.11b devices that associate with the Router's wireless access point must have the same SSID and channel. If wireless security is used, the wireless clients must be configured with the correct security information to use the Router. More information on configuring the wireless settings is found later in this manual.

Setup

This section will show you how to set up and configure your new D-Link Router using the Web-based configuration utility.

Web-based Configuration Utility

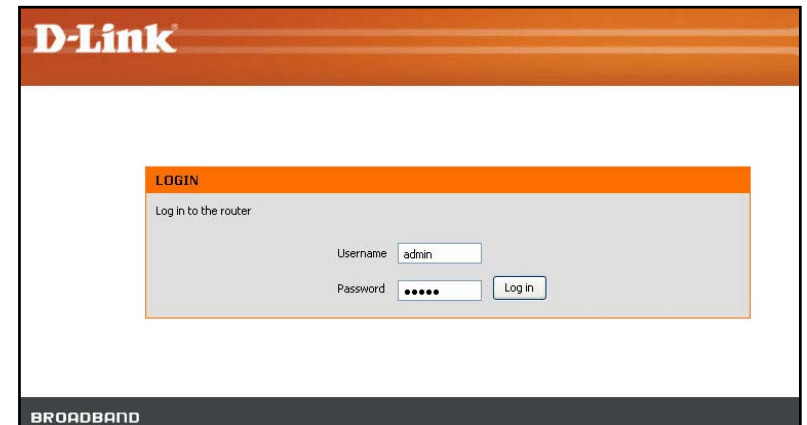
Connect to the Router

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.-



Configure the Router

When you successfully connect to the web manager, the main **ADSL Setup** menu is displayed. Use this menu to configure the WAN settings for Internet connection. All configuration and management of the Router is done using the web-based management interface pictured in the example.

The **Setup Wizard** allows you to configure the basic settings for the WAN (Internet) and Ethernet LAN (including DHCP) settings. To launch the Setup Wizard click on the Setup Wizard button.

DSL-2640R

Internet Offline

Reboot

ADSL Setup

Wireless Setup

LAN Setup

Time and Date

Logout

SETUP

ADVANCED

MAINTENANCE

STATUS

HELP

ADSL SETUP

If you are configuring this device for the first time, D-Link recommends that you click the 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.

Setup Wizard

☒ Manual Setup

WAN CONNECTION

The DSL WAN connection can be separated virtually into multiple channels by assigning different VPI/VCI in each Permanent Virtual Circuit (PVC). In each PVC you can also set the connection protocol to be PPP, Dynamic IP, Static IP or Bridge mode.

WAN Connection :

PVC0

MANUAL ADSL CONNECTION SETUP

Please select the appropriate option to connect to your ISP.

☒ 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 Mode

 Choose this option if your ISP uses Bridge Mode.

PPPoE/PPPoA INTERNET CONNECTION TYPE :

Enter the information provided by your Internet Service Provider (ISP).

Username :

username

Password :

••••••••

Service Name :

Connection Type :

PPPoA VC-Mux

MTU :

0

(0 means default value 1500bytes)

Idle Time Out :

0

Minutes (0 = Always On)

Authentication :

Auto

NAT :

Enable

IGMP :

Enable

Default Route :

Enable

Helpful Hints...

First time users are recommended to run the Setup Wizard. Click the Setup Wizard button and you will be guided step by step through the process of setting up your ADSL connection.

Click the Manual Setup box if you are a more advanced user and have the settings for your Internet Service Provider (ISP) available.

Please take care when entering your username and password as these are case sensitive. The majority of connection issues are caused by incorrect username or password combinations.

More...

ADSL Setup - Setup Wizard

The quickest way for most users to establish the Internet connection is to use the **Setup Wizard** accessed from the ADSL Setup menu. Alternatively the WAN connection can be configured manually by selecting the **Manual Setup** option and configuring the **ADSL Setup** menu as described in **ADSL Setup – Manual Configuration** below.

Go to the **Setup** directory to view the **ADSL Setup** menu.

To use the Setup Wizard, click the **Setup Wizard** button in the first browser menu and follow the instructions in the menus that appear.

The initial menu summarizes the setup process. Click the **Next** button to proceed. You may stop using the Setup Wizard at any time by clicking the **Cancel** button. If you exit the wizard you will return to the **ADSL Setup** menu without saving any of the settings changed during the process.

SETUP	ADVANCED	MAINTENANCE	STATUS
<div>ADSL SETUP</div> <p>If you are configuring this device for the first time, D-Link recommends that you click the 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.</p> <div> <input type="button" value="Setup Wizard"/> <input checked="" type="checkbox"/> Manual Setup </div>			

The first menu of the Setup Wizard lists the basic steps in the process. These steps are as follows:

1. Change the router password.
2. Configure the connection to the Internet.
3. Finish.

Click **Next** to continue.

SETUP	ADVANCED	MAINTENANCE	STATUS
<div>WELCOME TO D-LINK SETUP WIZARD</div> <p>This wizard will guide you through a step-by-step process to configure your new D-Link router and connect to the Internet.</p> <ul style="list-style-type: none"> • Step 1: Change your DSL-2640R router password • Step 2: Select Internet Connection • Step 3: Finish <div> <input type="button" value="Next"/> <input type="button" value="Cancel"/> </div>			

Setup Wizard Step 1 : Change Password

The password used for management access of the Router can be changed now if desired. If you prefer to keep the existing password, click on the **Skip** button to go to the next step without changing the password. Change the password and click **Next** to set the new password and continue or click **Skip** to keep the existing password.

The new menu that appears is used to select the Internet connection type. Choose your **Country** from the pull-down menu. If you see your country listed, follow the instructions beginning on the next page. If you do not see your country listed, choose *Others* and click **Next**, skip ahead to **Setup Wizard Step 2 : Internet Connection – Other Connection Types**.

SETUP	ADVANCED	MAINTENANCE	STATUS
STEP 1: CHANGE YOUR PASSWORD			
<p>The factory default password of this router is 'admin'. To help secure your network, D-Link recommends that you should choose a new password between 1 and 16 characters. If you do not wish to choose a new password now, just click Skip to continue. Click Next to proceed to next step.</p>			
<p>Current Password : <input type="text"/></p>			
<p>New Password : <input type="text"/></p>			
<p>Confirm Password : <input type="text"/></p>			
<p><input type="button" value="Back"/> <input type="button" value="Next"/> <input type="button" value="Skip"/> <input type="button" value="Cancel"/></p>			

SETUP	ADVANCED	MAINTENANCE	STATUS
STEP 2: SELECT INTERNET CONNECTION TYPE			
<p>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".</p>			
<p>Country : <input type="text" value="Click to select"/></p>			
<p>ISP Provider : <input type="text" value="Click to select"/></p>			
<p>VPI : <input type="text"/></p>			
<p>VCI : <input type="text"/></p>			
<p>Connection Type : <input type="text" value="PPPoE LLC"/></p>			
<p><input type="button" value="Back"/> <input type="button" value="Next"/> <input type="button" value="Cancel"/></p>			

Setup Wizard Step 2 : Internet Connection Type, Country and ISP

If your country appears listed in the **Country** menu options, select it and wait a few seconds for the menu display to adjust. When the menu options reappear, there will be options available to choose in the **ISP Provider** pull-down menu. Find your ISP in the list, again the menu will be inoperable for a few seconds while it adjusts. Some users will be required to select the **Connection Type** as well. If necessary, choose the Connection Type and click the **Next** button and continue to configure the connection as instructed by your ISP. If you are configuring a Bridged connection, the Wizard will go to the Finish menu.

Many users will use a form of PPP connection. PPP connections require a **Username** and **Password** to establish the Internet connection.

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 : Czech Republic ▾

ISP Provider : Telefonica O2 ▾

VPI : 8

VCI : 48

Connection Type : PPPoE LLC ▾

Back Next Cancel

STEP 2: SELECT INTERNET CONNECTION TYPE

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

Username : username

Password : ••••••••

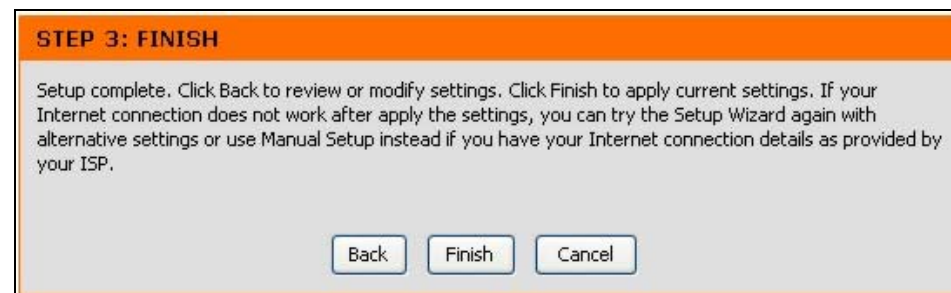
Confirm Password : ••••••••

Back Next Cancel

Setup Wizard Step 3 : Finish

After configuring the connection as instructed by your ISP, the Router will need to be restarted.

Click the **Finish** button to save the configuration and restart the Router.



Setup Wizard Step 2 : Internet Connection – Other Connection Types

For ADSL clients whose country is not listed as an option in the Country menu should choose *Others*, click the **Next** button and proceed to configure the Router as instructed by your ISP.

Choosing the Others options will disable the VPI/VCI and Connection Type menus. Click **Next** to choose the type of connection used for your account.

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 :

VCI :

Connection Type :

1483 Bridged IP LLC

Back

Next

Cancel

Select the connection type used by your ISP and click the **Next** button.

SETUP	ADVANCED	MAINTENANCE	STATUS
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STEP 2: SELECT INTERNET CONNECTION TYPE

Select the connection type to connect to your ISP. Click Next to continue

☒ 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 Mode

Choose this option if your ISP uses Bridge Mode.

Back

Next

Cancel

Setup Wizard Step 2 : Internet Connection Type - PPPoE/PPPoA

Type in the **User Name** and **Password** used to identify and verify your account to the ISP.

If you are instructed to change the **VPI** or **VCI** number, type in the correct setting in the available entry fields. Most users will not need to change these settings. The Internet connection cannot function if these values are incorrect.

Some users may have to adjust the **Connection Type** from the drop-down menu.

Click **Next** to go to the last Setup Wizard menu.

STEP 2: SELECT INTERNET CONNECTION TYPE

You have selected PPPoE/PPPoA Internet connection. Please enter the appropriate information below as provided by your ISP (Internet Service Provider).

Please enter the information exactly as shown taking note of upper and lower cases.

Click Next to continue.

Username :

Password :

VPI :

VCI :

Connection Type : ▼

Click the **Finish** button to save the configuration and restart the Router.

STEP 3: FINISH

Setup complete. Click Back to review or modify settings. Click Finish to apply current settings. If your Internet connection does not work after apply the settings, you can try the Setup Wizard again with alternative settings or use Manual Setup instead if you have your Internet connection details as provided by your ISP.

Setup Wizard Step 2 : Internet Connection Type – Dynamic IP Address

If you are instructed to change the **VPI** or **VCI** numbers, type in the correct setting in the available entry fields. Most users will not need to change these settings. The Internet connection cannot function if these values are incorrect.

Select the specific **Connection Type** from the drop-down menu.

You may want to copy the MAC address of your Ethernet adapter to the Router. Some ISPs record the unique MAC address of your computer's Ethernet adapter when you first access their network. This can prevent the Router (which has a different MAC address) from being allowed access to the ISP's network (and the Internet). To clone the MAC address of your computer's Ethernet adapter, type in the MAC address in the **Cloned MAC Address** field and click the **Clone MAC Address** button. This will copy the information to a file used by the Router to present to the ISP's server used for DHCP. Click **Next** to go to the last Setup Wizard menu.

Click the **Finish** button to save the configuration and restart the Router.

STEP 2: SELECT INTERNET CONNECTION TYPE

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

Some ISPs require that you clone your PC MAC address to the DSL router, simply Click on the button provided.

Click Next to continue.

VPI :	<input type="text" value="0"/>
VCI :	<input type="text" value="33"/>
Connection Type :	<input type="text" value="1483 Bridged IP LLC"/>
Cloned MAC Address :	<input type="text" value="00:00:00:00:00:00"/>

STEP 3: FINISH

Setup complete. Click Back to review or modify settings. Click Finish to apply current settings. If your Internet connection does not work after apply the settings, you can try the Setup Wizard again with alternative settings or use Manual Setup instead if you have your Internet connection details as provided by your ISP.

Setup Wizard Step 2 : Internet Connection Type – Static IP Address

Change the **IP Address**, **Subnet Mask**, **Default Gateway Address** as instructed by your ISP. Select the specific **Connection Type** from the drop-down menu.

If you are instructed to change the **VPI** or **VCI** numbers, type in the correct setting in the available entry fields. Most users will not need to change these settings. The Internet connection cannot function if these values are incorrect.

Click **Next** to go to the last Setup Wizard menu.

STEP 2: SELECT INTERNET CONNECTION TYPE

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

VPI :	<input type="text" value="0"/>
VCI :	<input type="text" value="33"/>
IP Address :	<input type="text" value="0.0.0.0"/>
Subnet Mask :	<input type="text" value="0.0.0.0"/>
Connection Type :	<input type="text" value="1483 Bridged IP LLC"/>
Default Gateway :	<input type="text" value="0.0.0.0"/>

Click the **Finish** button to save the configuration and restart the Router.

STEP 3: FINISH

Setup complete. Click Back to review or modify settings. Click Finish to apply current settings. If your Internet connection does not work after apply the settings, you can try the Setup Wizard again with alternative settings or use Manual Setup instead if you have your Internet connection details as provided by your ISP.

Setup Wizard Step 2 : Internet Connection Type – Bridge Mode

Select the specific **Connection Type** from the drop-down menu.

If you are instructed to change the **VPI** or **VCI** numbers, type in the correct setting in the available entry fields—in this example no changes are needed so this setting is grayed out. Most users will not need to change these settings. The Internet connection cannot function if these values are incorrect.

Click **Next** to go to the last Setup Wizard menu.

Click the **Finish** button to save the configuration and restart the Router.

STEP 2: SELECT INTERNET CONNECTION TYPE

Enter the bridge information provided to you by your ISP. Click Next to continue.

VPI :

VCI :

Connection Type : ▼

STEP 3: FINISH

Setup complete. Click Back to review or modify settings. Click Finish to apply current settings. If your Internet connection does not work after apply the settings, you can try the Setup Wizard again with alternative settings or use Manual Setup instead if you have your Internet connection details as provided by your ISP.

ADSL Setup – Manual Configuration

To configure the Router’s basic configuration settings without running the Setup Wizard, you can access the menus used to configure ADSL Setup, LAN Setup, Time and Date, and Parental Control settings directly from the **Setup** directory. To access the **ADSL Setup** menus for PPPoE/PPPoA, Dynamic IP Address and Static IP Address connections, click on the **ADSL Setup** link button on the left side of the first menu that appears when you successfully access the web manager.

WAN CONNECTION

The DSL WAN connection can be separated virtually into multiple channels by assigning different VPI/VCI in each Permanent Virtual Circuit (PVC). In each PVC you can also set the connection protocol to be PPP, Dynamic IP, Static IP or Bridge mode.

WAN Connection :

PVC0

MANUAL ADSL CONNECTION SETUP

Please select the appropriate option to connect to your ISP.

☒ 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 Mode

Choose this option if your ISP uses Bridge Mode.

PPPOE/PPPOA INTERNET CONNECTION TYPE :

Enter the information provided by your Internet Service Provider (ISP).

Username :

username

Password :

••••••••

Service Name :

Connection Type :

PPPoE LLC

MTU :

0

Idle Time Out :

0

Minutes (0 = Always On)

Authentication :

Auto

NAT :

Enable

IGMP :

Enable

Default Route :

Enable

VPI :

8

VCI :

35

Virtual Circuit :

Enable

Service Category :

UBR

PCR :

0

cells/second

SCR :

0

cells/second

MBS :

0

cells

Manual ADSL Setup – PPPoE/PPPoA

Follow the instructions below to configure the Router to use a PPPoE or PPPoA for the Internet connection.

Most users will only need to change some or all of the settings listed under **WAN Connection Setting** and **PPPoE/PPPoA**.

To configure a PPPoE or PPPoA type WAN connection, follow these steps:

1. Under the **PPPoE/PPPoA** heading, type the **User Name** and **Password** used for your ADSL account. A typical User Name will be in the form user1234@isp.co.uk. The Password may be assigned to you by your ISP or you may have selected it when you set up the account with your ISP.
2. Choose the **Connection Type** from the pull-down menu located under the User Name and Password entry fields. This defines both the connection protocol and encapsulation method used for your ADSL service. The available options are *PPPoA VC-Mux*, *PPPoA LLC*, *PPPoE VC-Mux* and *PPPoE LLC*. If you have not been provided specific information for the Connection Type setting, leave the default setting.
3. Leave the **MTU** value at the default setting (default = 1500) unless you have specific reasons to change this (see table below for more information).
4. For time-based accounts, type an **Idle Time Out** in minutes. Accounts that are not time-based will want to choose the default connection setting 0=Always ON.
5. **NAT** should remain *Enable*. If you disable NAT, you will not be able to use more than one computer for Internet connections. NAT is enabled and disabled system-wide, therefore if you are using multiple virtual connections, NAT will be disabled on all connections.
6. Leave the **Default Route** enabled if you want to use the Router as the default route to the Internet for your LAN. Whenever a computer on the LAN attempts to access the Internet, the Router becomes the Internet gateway to the computer. If you have an alternative route for Internet traffic you may disable this without effecting the Router's connection.

PPPOE/PPPOA INTERNET CONNECTION TYPE :

Enter the information provided by your Internet Service Provider (ISP).

Username :	<input type="text" value="guest"/>
Password :	<input type="password" value="....."/>
Service Name :	<input type="text"/>
Connection Type :	PPPoE LLC <input type="button" value="v"/>
MTU :	<input type="text" value="0"/>
Idle Time Out :	<input type="text" value="0"/> Minutes (0 = Always On)
Authentication :	Auto <input type="button" value="v"/>
NAT :	Enable <input type="button" value="v"/>
IGMP :	Enable <input type="button" value="v"/>
Default Route :	Enable <input type="button" value="v"/>

Manual ADSL Setup – Dynamic IP Address

Follow the instructions below to configure the Router to use a Dynamic IP Address for the Internet connection.

To configure a Dynamic IP Address connection for the WAN, follow these steps:

1. Choose the **Connection Type** from the pull-down menu. This defines both the connection type and encapsulation method used for your ADSL service. The available options are *1483 Bridged IP LLC* and *1483 Bridged IP VC-Mux*. If you have not been provided specific information for the Connection Type setting, leave the default setting.
2. Some ISPs record the unique MAC address of your computer's Ethernet adapter when you first access their network. This can prevent the Router (which has a different MAC address) from being allowed access to the ISPs network (and the Internet). To clone the MAC address of your computer's Ethernet adapter, type in the MAC address in the **MAC Address** field and click the **Clone MAC Address** button.
3. **NAT** should remain *Enabled*. If you disable NAT, you will not be able to use more than one computer for Internet connections. If you are using multiple virtual connections, NAT functions system-wide, therefore if it is disabled, NAT will be disabled on all connections.
4. Leave the **Default Route** enabled if you want to use the Router as the default route to the Internet for your LAN. Whenever a computer on the LAN attempts to access the Internet, the Router becomes the Internet gateway to the computer. If you have an alternative route for Internet traffic you may disable this without effecting the Router's connection.

DYNAMIC IP ADDRESS INTERNET CONNECTION TYPE :

Use this Internet connection type if your Internet Service Provider (ISP) didn't provide you with IP Address information and/or a username and password.

Connection Type : 1483 Bridged IP LLC ▼

MAC Address : 00 : 00 : 00 : 00 : 00 : 00

Clone MAC Address

NAT : Enable ▼

IGMP : Enable ▼

Default Route : Enable ▼

Manual ADSL Setup – Static IP Address

Follow the instructions below to configure the Router to use a Static IP Address for the Internet connection.

To configure a Static IP type connection for the WAN, follow these steps:

1. Choose the **Connection Type** from the pull-down menu. This defines both the connection type and encapsulation method used for your ADSL service. The available options are *1483 Bridged IP LLC*, *1483 Bridged IP VC-Mux*, *1483 Routed IP LLC*, *1483 Routed IP VC-Mux* or *IpoA*. If you have not been provided specific information for the Connection Type setting, leave the default setting.
2. Change the **IP Address**, **Subnet Mask**, and **Default Gateway** address as instructed by your ISP. These are the global IP settings for the WAN interface. This is the “visible” IP address of your account.
3. **NAT** should remain *Enable*. If you disable NAT, you will not be able to use more than one computer for Internet connections. NAT is enabled and disabled system-wide, therefore if you are using multiple virtual connections, NAT will be disabled on all connections.
4. Leave the **Default Route** enabled if you want to use the Router as the default route to the Internet for your LAN. Whenever a computer on the LAN attempts to access the Internet, the Router becomes the Internet gateway to the computer. If you have an alternative route for Internet traffic you may disable this without effecting the Router’s connection.

STATIC IP ADDRESS INTERNET CONNECTION TYPE :
Enter the static address information provided by your Internet Service Provider (ISP).

IP Address :	<input type="text" value="0.0.0.0"/>
Subnet Mask :	<input type="text" value="0.0.0.0"/>
Connection Type :	<input type="text" value="1483 Bridged IP LLC"/>
NAT :	<input type="text" value="Enable"/>
IGMP :	<input type="text" value="Enable"/>
Default Route :	<input type="text" value="Enable"/>
Default Gateway :	<input type="text" value="0.0.0.0"/>

(The Default Gateway will apply to all WAN connections.)

Manual ADSL Setup – Bridge Mode

Follow the instructions below to configure the Router to use Bridge Mode for the Internet connection.

BRIDGE MODE :

Use this Internet connection type if your use your Modem as a bridge.

Connection Type :

1483 Bridged IP LLC

1483 Bridged IP LLC

1483 Bridged IP VC-Mux

Wireless Setup

The Router's basic wireless and wireless network security settings are configured in the **Wireless** configuration menu. To access this menu, click on the **Wireless Setup** link in the left panel of the **Setup** menu directory, the first page that appears when you successfully access the web manager. Choose the **Wireless Security Mode** from the pull-down menu to select the type of security used on your wireless network. The security settings to be configured depend on the method used. Read the descriptions below for the type of wireless security used.

For **basic wireless access point** configuration with no security settings, follow the steps:

1. Click the **Enable Wireless** box to allow the router to operate in the wireless environment. The Router's embedded access point is enabled by default.
2. The **Wireless Network Name** or **SSID** identifies members of the Service Set. Type the name of the SSID used for your wireless network. Wireless devices that use the Router must have this SSID. The DSL-2640R also supports use of one additional SSID. For information on using and configuring a second SSID or Guest SSID, please see the Advanced Wireless section.
3. Use the drop-down menu to select the **Channel** used for your 802.11g wireless LAN. What channels are available for use by the access point depends on the local regulatory environment. Remember that all devices communicating with the device must use the same channel (and use the same SSID).
4. Click **Apply Settings**.

Additional Wireless Options

Enable Auto Channel Scan – Enable this to allow the access point to automatically detect the channel used for local 802.11 wireless operation.

802.11 Mode – The default setting allow 802.11g and 802.11b operation. The access point can be forced to operate as an *802.11b only* or *802.11g only* access point.

Transmission Rate – The default setting lets the access point determine the optimal transmission rate for the circumstances and environment in which it operates. Use this option to set a minimum acceptable transmission rate below which

802.11 Mode – The default setting allow 802.11g and 802.11b operation. The access point can be forced to operate as an 802.11b only or 802.11g only access point using this pull-down menu.

Hide Wireless Network – When enabled, this stops broadcasts from the access point of the SSID (Wireless Network Name) for roaming wireless stations. This is disabled by default.

WIRELESS

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

WIRELESS NETWORK SETTINGS

Enable Wireless :
☒

Wireless Network Name (SSID) :

Enable Auto Channel Scan :
☐

Wireless Channel :

802.11 Mode :

Transmission Rate :
 (Mbit/s)

Hide Wireless 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 Auto. WEP is the original wireless encryption standard. WPA provides a higher level of security. WPA-Personal does not require an authentication server.

Security Mode :

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

Wireless Setup – WEP

WEP (Wireless Encryption Protocol) encryption can be enabled for basic 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-bit, or 128-bit encryption with four keys available.

To configure WEP settings:

1. Select a **WEP Key Length** encryption level from the drop-down menu, and enter the proper-length hexadecimal key in the available entry fields. Up to 4 keys can be configured for use.
2. Choose the **Default WEP Key** of from those just entered, used as the active key.
3. Select an **Authentication** type, from the drop-down menu: *Open* or *Shared Key*.
4. Click **Apply Settings** to use the new WEP settings and restart the access point.

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 Auto. WEP is the original wireless encryption standard. WPA provides a higher level of security. WPA-Personal does not require an authentication server.

Security Mode : WEP

WEP

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 or 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

Wireless Setup - WPA

Wi-Fi Protected Access was designed to provide improved data encryption, perceived as weak in WEP, and to provide user authentication, largely nonexistent in WEP. There are two versions of WPA, both are supported by the access point. WPA-Personal encryption uses a pre-shared key for authentication and requires periodic re-authentication from associating wireless stations.

To configure WPA settings:

1. Use the default **WEP Mode** to use WPA or WPA2 as needed, or choose *WPA Only* or *WPA2 Only* operation.
2. Choose the **Default WEP Key** of from those just entered, used as the active key.
3. Type a **Group Key Update Interval** to configure the interval time between re-authorization in seconds.
4. Click **Apply Settings** to use the new WPA security settings and restart the access point.

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 Auto. WEP is the original wireless encryption standard. WPA provides a higher level of security. WPA-Personal does not require an authentication server.

Security Mode :

WPA

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.

To achieve better wireless performance use **WPA2 Only** security mode (or in other words AES cipher).

WPA Mode :

Group Key Update Interval : (seconds)

PRE-SHARED KEY

Pre-Shared Key :

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

LAN Setup

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. See the next section for information on DHCP setup.

To access the **LAN Setup** menu, click the **LAN Setup** button in the **Setup** directory.

To change the LAN **IP Address** or **Subnet Mask**, type in the desired values and click the **Save Settings** button. Your web browser should automatically be redirected to the new IP address. You will asked to login again to the Router's web manager.

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

There are two options for DHCP service:

- You can use the Router as a DHCP server for your LAN.
- You can disable DHCP service and manually configure IP settings for workstations.

LAN SETUP

This section allows you to configure the local network settings of your router. Please note that this section is optional and you should not need to change any of the settings here to get your network up and running.

ROUTER SETTINGS

Use this section to configure the local network settings of your router. The IP Address that is configured here is the IP Address that you use to access the Web-based management interface. If you change the IP Address here, you may need to adjust your PC's network settings to access the network again.

Router IP Address : 192.168.1.1

Subnet Mask : 255.255.255.0

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 : 259200 (seconds)

DHCP TABLE

Host Name	IP Address	MAC Address	Status
	192.168.1.2	<input type="text"/> Manual Config	Static

Save Settings

DHCP Server Configuration

Follow the instructions below according to which of the above DHCP options you want to use. When you have configured the DHCP Server Settings as you want them, click the **Save Settings** button to commit the new settings.

Use the Router for DHCP

To use the built-in DHCP server, click to select the **Enable DHCP Server** option if it is not already selected. The IP address pool settings can be adjusted beginning with the first address in the **DHCP IP Address Range**.

The second IP address entered is the highest IP address number in the pool. Type in the **DHCP Lease Time** in the entry field provided. This is the amount of time in seconds that a workstation is allowed to reserve an IP address in the pool if the workstation is disconnected from the network or powered off.

If you opt to disable DHCP service, all IP devices connected to the Router will require manual IP settings configuration or another DHCP server.

Static IP Address Assignment

The router supports static IP address assignment for the LAN. This means that an IP address is manually configured for a specified MAC address that does not age out. Static IP addresses may be assigned to hosts on the LAN that have already received IP settings and are listed in the **DHCP Table**. Alternatively the administrator can manually enter a MAC address in the entry field provided. Type the MAC address using the standard format 00:00:00:00:00:00 and selecting an IP address within the subnet from the **IP Address** pull-down menu. Click the **Save Settings** button to create the static IP assignment.

DHCP SERVER SETTINGS (OPTIONAL)

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

Enable DHCP Server : ☒

DHCP IP Address Range : to

DHCP Lease Time : (seconds)

DHCP TABLE

Host Name	IP Address	MAC Address	Status
	<input type="text" value="192.168.1.2"/> ▼	<input type="text"/> Manual Config ▼	Static ▼
	192.168.1.50	00-AA-22-01-02-03	Static
	192.168.1.100	00-BB-33-02-03-04	Static

Time Setup

The Router provides a number of options to maintain current date and time including NTP time server automatic time configuration.

The options for time and date configuration allow the administrator to maintain system time synchronized automatically with D-Link's online time server (or an alternative NTP NTP server), use your computer's system clock or set the time and date manually. If you opt to use an alternative NTP server, enter the SNTP server URL or IP address and click the **Save Settings** button to set the system time.

To obtain time settings from your computer, deselect the **Automatically Synchronize with Internet Time Server** option and click the **Copy Your Computer's Time Settings** button. Alternatively time can be set manually with the Date and Time pull-down menus. Click the **Save Settings** button to set the system time.

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.

TIME CONFIGURATION

Current Router Time : Jan 01, 2000 00:02:39

Time Zone : (GMT) Greenwich Mean Time : Dublin, Edinburgh, Lisbon, London

Enable Daylight Saving : ☐

MonthDay

DST StartJan1

Daylight Saving Dates :

DST EndJan1

AUTOMATIC TIME CONFIGURATION

Automatically Synchronise with Internet Time Servers : ☒

NTP Time Server : ntp1.dlink.com

(0.0.0.0: Default Value)

SET THE DATE AND TIME MANUALLY

Date: Year: 2007Month: 1Day: 1

Time: Hour: 12amMinute: 2Second: 39

Copy Your Computer's Time Settings

Save Settings

Advanced Setup

The **Advanced** directory tab offers the following configuration menus: **Port Forwarding**, **QoS Setup**, **Outbound Filter**, **Inbound Filter**, **DNS Setup**, **VLAN**, **Firewall & DMZ**, **Advanced ADSL**, **Advanced Wireless**, **Advanced LAN**, and **Remote Management**. Click the corresponding link in the left panel of the window. **Port Forwarding** is the first menu listed and the first to appear when accessing the **Advanced** directory.

D-Link

DSL-2640R

SETUP

ADVANCED

MAINTENANCE

STATUS

HELP

Port Forwarding

QoS Setup

Outbound Filter

Inbound Filter

DNS Setup

VLAN

Firewall & DMZ

Advanced ADSL

Advanced Wireless

Wireless Mac Filter

Advanced LAN

Remote Management

Logout

Internet Offline

Reboot

PORT FORWARDING

This is the ability to open ports in your router and re-direct data through those ports to a single PC on your network.

Maximum number of entries which can be configured: 12

ACTIVE PORT FORWARDING

Private IP

Protocol Type

Public Start Port

Public End Port

Connection

Add

Helpful Hints...

Use this feature if you are trying to execute one of the listed network applications and it is not communicating as expected.

Check the Application Name drop down menu for a list of predefined applications. If you do see your application listed you can still define a new rule.

More...

Port Forwarding

The Port Forwarding menu allows configuration for remote users access to various services outside of their LAN through a public IP address, such as FTP (File Transfer Protocol) or HTTPS (Secure Web). After configuring the Router for these features, the Router will redirect these external services to an appropriate server on the users LAN.

Enter an IP address in the Private IP field, select a Protocol Type from the drop-down menu, enter a range of ports in the Public Start Port and Public End Port fields, and then click the **Add/Apply Settings** button. Finally, click the **Reboot** button on the left panel to let your changes take effect.

PORT FORWARDING

This is the ability to open ports in your router and re-direct data through those ports to a single PC on your network.

ADD PORT FORWARDING

Private IP :

Protocol Type :

All

Public Start Port :

Public End Port :

Connection :

PVCO

Add/Apply

Cancel

ACTIVE PORT FORWARDING

Address	Protocol Type	Public Start Port	Public End Port	Connection	Edit	Remove
---------	---------------	-------------------	-----------------	------------	------	--------

QoS Setup

QoS or Quality of Service allows your Router to help prioritize the data packet flow in your Router and network. This is very important for time sensitive applications such as VoIP where it may help prevent dropped calls. Large amounts of non-critical data can be scaled so as not to affect these prioritized sensitive real-time programs. The basic QoS Setup menu includes some commonly used network services for which QoS can be enabled.

QoS settings can be customized for wireless or Ethernet applications and services that are not included in those listed in the basic QoS menu. To view the QoS settings menu for Wireless LAN, click the Wireless QoS button under Advanced QoS, see the description below. Likewise to configure QoS settings for the Ethernet LAN, click the LAN QoS button to view the settings menu.

Basic QoS settings can be configured by checking any of the listed network applications and entering the ports (Start Port/End Port) used for the application. Click **Save Settings** to apply the QoS settings.

QOS SETUP

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

QOS SETUP

VOIP(SIP):	<input type="checkbox"/>	Start Port: <input type="text"/>	End Port: <input type="text"/>
H.323:	<input type="checkbox"/>	Start Port: <input type="text"/>	End Port: <input type="text"/>
FTP:	<input checked="" type="checkbox"/>	Start Port: <input type="text" value="20"/>	End Port: <input type="text" value="21"/>
MSN Messenger:	<input checked="" type="checkbox"/>	Start Port: <input type="text" value="1863"/>	End Port: <input type="text" value="1864"/>

[Save Settings](#)

ADVANCED QOS SETUP

[Wireless QoS](#) [LAN QoS](#)

Advanced LAN QoS Setup

Use the LAN QoS Rules Configuration menu to create up to 6 rules to set priority level (low, medium or high) to specified UDP/TCP port or port range; or set priority on specified IP addresses or subnets for ICMP packets.

To create custom QoS rules for the Ethernet LAN, type a **Name** for the rule, choose the **Priority** level from the drop down menu, choose the **Protocol** from the drop-down menu and click the << key to place a corresponding index number in the box; or type an index number in the box.

Type the source port or range and the destination port or range in the spaces provided. Where appropriate (for example ICMP), type a source and destination IP address or subnet. Click **Add/Apply** to create the rule.

LAN QoS

LAN QoS RULES CONFIGURATION

Remaining number of rules that can be created:6

Name <input type="text"/>	Priority Select Priority ▼	Protocol(1..255) <input type="text"/> << Select Protocol ▼
Source IP Range <input type="text"/> Mask <input type="text"/>		Source Port Range <input type="text"/> to <input type="text"/>
Destination IP Range <input type="text"/> Mask <input type="text"/>		Destination Port Range <input type="text"/> to <input type="text"/>

Add/Apply

ACTIVE LAN QoS RULES

Name	Priority	Protocol	Src. IP Range	Src. Port	Dest. IP Range	Dest. Port	Remove
------	----------	----------	---------------	-----------	----------------	------------	--------

Advanced Wireless QoS Setup

Use the Wireless QoS Classes menu to create rules to set wireless transmission priority level (low, medium or high) to specified UDP/TCP port or port range; or set priority on specified IP addresses or subnets for ICMP packets.

To create custom QoS rules for the Ethernet LAN, type a **Traffic Class Name** for the rule, choose the **Wireless Transmit Priority** level from the drop down menu, choose the **Protocol** from the drop-down menu. Type the source port or range and the destination port or range in the spaces provided. Where appropriate (for example ICMP), type a source and destination IP address or subnet. Click **Add/Apply** to create the rule.

WIRELESS QOS

ADD WIRELESS QOS CLASSES

Traffic Class Name :

Wireless Transmit Priority :

Wireless Transmit Priority :

Source IP Address :

Source Subnet Mask :

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

Destination IP Address :

Destination Subnet Mask :

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

ACTIVE WIRELESS QOS RULES

Name	Priority	Protocol	Src. IP Range	Src. Port	Dest. IP Range	Dest. Port	Remove
------	----------	----------	---------------	-----------	----------------	------------	--------

Outbound Filter

Use the **Outbound IP Filter** menu to create **LAN to WAN** outgoing traffic filtering rules that will block traffic as specified.

Type a **Filter Name** used for the rule, select the **Protocol** and type the **Source IP Address** and **Subnet Mask**, and **Source Port** if necessary. The **Destination IP Address**, **Subnet Mask** and **Port** can also be specified if required. Click the **Add/Apply** button to create and activate the new filtering rule.

The new rule appears listed in the **Active Outbound IP Filter** list. A rule can be deleted by selecting the **Remove** option for the rule and clicking the **Remove Selected** button.

OUTBOUND IP 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

Filter Name :

Protocol :

Source IP address :

Source Subnet Mask :

Source Port :

Destination IP address :

Destination Subnet Mask :

Destination Port :

ACTIVE OUTBOUND IP FILTER

Name	Protocol	Src. Addr./Mask	Src. Port	Dest. Addr./Mask	Dest. Port	Remove
------	----------	-----------------	-----------	------------------	------------	--------

Inbound Filter

Use the **Inbound IP Filter** menu to create **WAN to LAN** incoming traffic filtering rules that will block traffic as specified. **Note that the default IP Filter setting blocks all incoming IP traffic when the firewall is enabled.** Use the Inbound Filter menu to specify the traffic that will be allowed.

Type a **Filter Name** used for the rule, select the **Protocol** and type the **Source IP Address** and **Subnet Mask**, and **Source Port** if necessary. The **Destination IP Address**, **Subnet Mask** and **Port** can also be specified if required. Click the **Add/Apply** button to create and activate the new filtering rule.

The new rule appears listed in the **Active Inbound IP Filter** list. A rule can be deleted by selecting the **Remove** option for the rule and clicking the **Remove Selected** button.

INBOUND IP FILTER

Note: This section only applies when the Firewall is enabled.

By default, all incoming IP traffic from the Internet is blocked when the firewall is enabled.

The Inbound Filter allows you to create a filter rule to allow 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.

ADD INBOUND IP FILTER

Filter Name :

Protocol :

Source IP address :

Source Subnet Mask :

Source Port :

Destination IP address :

Destination Subnet Mask :

Destination Port :

Add/Apply

ACTIVE INBOUND FILTER

Name	Protocol	Src. Addr./Mask	Src. Port	Dest. Addr./Mask	Dest. Port	Remove
------	----------	-----------------	-----------	------------------	------------	--------

DNS Setup

Use the DNS Setup menu to configure standard DNS server IP settings or to configure and enable DDNS for the Router.

DNS Server

Choose to “Obtain DNS server address automatically” from the ISP or enter DNS IP address information manually. The **Preferred DNS Server** address is required, the **Alternate DNS Server** address is used for a back up DNS server.

DDNS

Dynamic DNS allows a dynamic public IP address to be associated with a static host name in any of the many domains, allowing access to a specific host from various locations on the Internet. With this function enabled, remote access to a host will be allowed by clicking a URL hyperlink in the following form: *dlinkddns.com*. Because many ISPs assign public IP addresses using DHCP, it can be difficult to locate a specific host on the LAN using the standard DNS. For example, if you are running a public web server or VPN server on your LAN, DDNS ensures that the host can be located from the Internet if the public IP address changes. DDNS requires that an account be set up with one of the supported DDNS servers.

To implement Dynamic DNS, first select the **Enable Dynamic DNS** option and choose the **Server Address** from the list in the pull-down menu. Enter the **Host Name** of the LAN to be accessed, and the **Username** and **Password** for the DDNS account. Click the **Apply Settings** button to save changes made.

DNS SETUP

Domain Name Server (DNS) is a server that translates URL/domain names to the corresponding IP address. Most users will not need to change the DNS servers from default unless instructed by your ISP.

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

DNS SERVER CONFIGURATION

☒ **Obtain DNS server address automatically**

☐ **Use the following DNS server addresses**

Preferred DNS Server:

Alternate DNS Server:

DDNS CONFIGURATION

Enable Dynamic DNS: ☐

Server Address: <<

Host Name: (e.g.: myhost.mydomain.net)

Username:

Password:

Verify Password:

VLAN Setup

Use the VLAN Setup menu to create VLAN groups for the Wireless and Ethernet LANs. For ADSL accounts using multiple ATM VCs, VLANs can be created and customized for each separate VC.

VLAN Group Setting

Use the VLAN Index menu to choose a number for the VLAN group. To make sure additional VLAN groups use unique index numbers, the menu will automatically select a new index number for configuration after applying the VLAN group settings.

Click to select the member ports of each VLAN group for **Ethernet** ports and **WLAN** interface and the **ATM VCs** ports for each VLAN. Any port may be specified as **Tagged**.

Packets that are tagged (are carrying the 802.1Q VID information) can be transmitted from one 802.1Q compliant network device to another with the VLAN information intact. This allows 802.1Q VLANs to span network devices (and indeed, the entire network, if all network devices are 802.1Q compliant).

Select the **Tagged** option to enable tagging for the port. Ports with tagging enabled will put the VID number, priority and other VLAN information into the header of all packets that flow into and out of it. If a packet has previously been tagged, the port will not alter the packet, thus keeping the VLAN information intact. Other 802.1Q compliant devices on the network to make packet-forwarding decisions can then use the VLAN information in the tag.

VLAN Group is enabled by default. VLAN Groups can be disabled without changing the previously configured VLAN arrangement. To disabled VLAN Groups click the **Enable VLAN Group** box to remove the check mark.

Click the **ADD/Apply** to apply the settings.

VLAN

Note: This is VLAN page.

The Virtual LAN (VLAN) allows you to configure a group of devices on one or more LANs so that they can communicate as if they were attached to the same wire, when in fact they are located on a number of different LAN segments.

VLAN GROUP SETTING

VLAN Index : 1

Enable VLAN Group : ☒

VLAN ID : 1

Tagged

ATM VCs

Ethernet

USB

WLAN

Add/Apply

VLAN GROUP SUMMARY

Group	ID	VLAN Group Ports	VLAN Tagged Ports	Remove
1	1	e1,e2,e3,e4,w0,p0,p1,p2,p3,p4,p5,p6,p7		<input type="checkbox"/>

Remove Selected

DMZ and Firewall Setup

Use the Firewall and DMZ menu to enable or disable basic firewall protection from Denial of Service and other attacks from the WAN.

Firewall Settings

Enable the Firewall to block Denial of Service attacks, flood pings, port scans and other common exploitative attacks that might come from the Internet. This is enabled by default. To disable it, click the Enable Firewall box to remove the check mark and click the **Apply Settings** button.

DMZ Settings

Firewalls may conflict with certain interactive applications such as video conferencing or playing Internet video games. For these applications, a firewall bypass can be set up using a DMZ IP address. The DMZ IP address is a “visible” address and does not benefit from the full protection of the firewall function. Therefore it is advisable that other security precautions be enabled to protect the other computers and devices on the LAN. It may be wise to use isolate the device with the DMZ IP address from the rest of the LAN.

For example, if you want to use video conferencing and still use a firewall, you can place the server in the DMZ. The IP address of this server will then be the DMZ IP address.

You can designate the server's IP address as the DMZ by typing in the IP address in the **DMZ IP Address** space provided and then enabling its status by selecting the **Enable DMZ** option. Click the **Apply Settings** button at the top of the window when you are finished.

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 LAN invisible to Internet cyberattackers.

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 SETTINGS

Enable Firewall : ☒

DMZ SETTINGS

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 : << >>

Advanced ADSL

ADSL modulation is configured in the Advanced ADSL menu. The default setting automatically detects the appropriate modulation for the connection, therefore it should not be necessary to change this setting for the Router to function.

Modulation types supported by the Router include: ADSL2, ADSL2+, G.dmt, T1.143 and G.lite. If the **Modulation Mode** is changed from the default Auto Sync-Up, the mode used must be supported by the ISP in order for the ADSL signal to function. Likewise for changing the ANNEX type, if the **Type** used is not supported by the ISP in your region, the ADSL signal will not function.

The **Bitswap** and **SRA** (Seamless Rate Adaptation) features can be enabled here. If your ADSL modulation is ADSL2 or ADSL2+, these features will only be useful if supported by the ISP. If you opt to use either of these, some experimentation might be advisable to test ADSL synchronization and signal performance for improvement or degradation.

ADVANCED ADSL

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.

ADVANCED ADSL SETTINGS

Modulation Mode : Auto Sync-Up ▼
Type : ANNEX A ▼
Capability
☐ **Bitswap Enable**
☐ **SRA Enable**

Apply Settings

Cancel

Advanced Wireless

Advanced Wireless settings are used to tweak various wireless transmission parameters and to enable an additional SSID or Guest SSID.

Transmit Powers

Allows the user to adjust the transmit power of the router. A high transmit power allows a greater area range of accessibility to the router. When multiple overlapping access points are present, it may be desirable to reduce transmission power.

Beacon Interval

Beacons are emitted from the router in order to synchronize the wireless network. You may set the Beacon Interval range between 20-100 microseconds per beacon sent. The default is 100.

RTS Threshold

The RTS (Request to Send) Threshold controls the size of data packets issued to a RTS packet. A lower level will send packets more frequently which may consume a great amount of the available bandwidth. A high threshold will allow the router to recover from interference or collisions which is more prevalent in a network with high traffic or high electromagnetic interference. The default setting is 2347.

Fragmentation Threshold

The fragmentation threshold will determine if packets are to be fragmented. Packets over the 2346 byte limit will be fragmented before transmission. 2346 is the default setting.

DTIM Interval

DTIM (Delivery Traffic Indication Message) Interval is a countdown informing clients of the next menu for listening to broadcast and multicast messages. The default setting is 1.

Guest Wireless Network

A second SSID can be enabled and used for the wireless LAN. The additional **Guest SSID** can be **Visible** or **Invisible** to roaming wireless nodes. By default, **User Isolation** is *On* (enabled), **Disable WMM Advertise** is *On* (i.e. SSID advertising is disabled) and a maximum number of clients allowed (**Max Clients**) is 16. When User Isolation is *On*, Guest SSID member clients will be unable to transmit to other wireless clients, however they will have access to network resources through the Ethernet or Internet.

Click on the **Apply Settings** button to save and apply the advanced wireless configuration.

ADVANCED WIRELESS

These options are for users that wish to change the behaviour 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.

ADVANCED WIRELESS SETTINGS

Transmit Power :

Low

Beacon Period :

100

(20..1000)

RTS Threshold :

2347

(0..2347)

Fragmentation Threshold :

2346

(256..2346)

DTIM Interval :

1

(1..255)

GUEST WIRELESS NETWORK

Enable Wireless Guest Network :

☐

Guest SSID :

Visibility Status :

☒ Visible ☐ Invisible

User Isolation :

On

Disable WMM Advertise :

On

Max Clients :

16

Apply Settings

Cancel

Wireless MAC Filter

Use the Wireless MAC Filter to designate MAC addresses that are denied access or allowed access to the wireless LAN through the device.

Up to 8 MAC addresses can be listed with the MAC Filter. It is important to understand that when the MAC filter is activated there are two options for the rule or action used for the listed MAC addresses. When the Status is Activated the administrator must choose one of the following:

- Allow Association to the listed MAC addresses (and deny all other MAC addresses to associate).
- Deny Association to the listed MAC addresses (and allow association to others not on the list).

To use Wireless MAC Filters,

1. Select the **Activated** option for **Status**.
2. Choose the Action to either Allow Association or Deny Association of the listed MAC addresses.
3. Type the MAC addresses effected by the chosen Action in the standard MAC address format.
4. Click on the **Apply Settings** button.

When activated the filter rule becomes effective immediately. The MAC filter rule can be deactivated by selecting the **Deactivated** option for Status. Deactivating MAC filters will not change any MAC addresses entered on the list.

WIRELESS MAC FILTER

You can allow or deny a list of MAC addresses associated with the wireless stations access to the ADSL Router.

WIRELESS MAC FILTER

Status: ☐ Activated ☒ Deactivated

Action: Allow Association the follow Wireless LAN station(s) association.

MAC Address #1

MAC Address #2

MAC Address #3

MAC Address #4

MAC Address #5

MAC Address #6

MAC Address #7

MAC Address #8

Advanced LAN

Use the Advanced LAN menu to enable or disable UPnP and multicast streaming.

UPnP or Universal Plug and Play is disabled by default. This network protocol is used to simplify networking and is supported on many types of networking devices. Devices that support UPnP advertise their services and capabilities to other UPnP enabled devices to facilitate network applications such as streaming audio or video. To use UPnP click the **Enable UPnP** option to check the box.

Multicast streaming support is enabled by default to allow streaming of audio and video and other multicast applications to pass through the Router. To disable multicast streams click the **Enable Multicast Streams** box to remove the check mark. Keep in mind that Internet radio and similar multicast services will not function if the Enable Multicast Streams option is not checked.

Click on the **Apply Settings** button to save and apply the advanced LAN configuration.

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 behaviour of your network.
UPNP
Universal Plug and Play(UPnP) supports peer-to-peer Plug and Play functionality for network devices.
Enable UPnP : <input type="checkbox"/>
MULTICAST STREAMS
Enable Multicast Streams : <input checked="" type="checkbox"/>
<div>Apply Settings Cancel</div>

Remote Management

Use the Remote Management menu to enable and configure remote management of the Router through the WAN interface. In addition, management access from either the LAN or WAN side can be restricted to the Router by specifying services allowed for management.

When remote management is enabled, the options available are to either *Allow All* or *Deny All* with the **Remote Admin Inbound Filter** pull-down menu. Choose the services allowed from the LAN or WAN by checking the **Enabled** box for the service in the **Remote Access Control** list. Click the **Apply Settings** button to make the change.

REMOTE MANAGEMENT

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

REMOTE MANAGEMENT SETTINGS

Enable Remote Management : ☐

Remote Admin Port :

Remote Admin Inbound Filter :

Details :

REMOTE ACCESS CONTROL

Service	LAN	WAN
FTP	<input checked="" type="checkbox"/> Enabled	<input checked="" type="checkbox"/> Enabled
HTTP	<input checked="" type="checkbox"/> Enabled	<input type="checkbox"/> Enabled
ICMP (Ping)	<input checked="" type="checkbox"/> Enabled	<input checked="" type="checkbox"/> Enabled
TELNET	<input checked="" type="checkbox"/> Enabled	<input checked="" type="checkbox"/> Enabled
TFTP	<input checked="" type="checkbox"/> Enabled	<input checked="" type="checkbox"/> Enabled

Apply Settings

Cancel

Maintenance

Use the menus in the Maintenance directory to perform routine maintenance functions such as save configuration settings to hard disk and upgrading device firmware, view system log and perform device diagnostic tests.

DSL-2640R

Internet
Offline

Reboot

Password

Save/Restore Settings

Firmware Update

Diagnostics

System Log

Logout

SETUP

ADVANCED

MAINTENANCE

STATUS

HELP

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 between 1 and 15 characters.

SET PASSWORD (OPTIONAL)

To change the router password, please type in the current password, then the new password twice.

Current Password:

New Password:

Confirm Password:

Apply Settings

Cancel

Helpful Hints...

This page allows you to modify your router password needed to access this Web management interface. For security reasons, it is recommended that you change your device password from the factory default. The password you choose should be between 1 and 15 characters in length. Please make sure to choose a password you can remember or write it down and keep in a safe and separate location for future reference. If you forget your device password, the only solution is to reset your router to factory default settings and you will lose all your device configuration settings.

More...

Password

Typically on first things the administrator is likely to change is the device password used to access the management software. The administrator's user name of the Router, admin, cannot be changed. The default password can be changed with the Password menu.

Change the password and click the **Apply Settings** button to establish the new password.

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 between 1 and 15 characters.

SET PASSWORD (OPTIONAL)

To change the router password, please type in the current password, then the new password twice.

Current Password:

New Password:

Confirm Password:

Apply Settings

Cancel

Save/Restore Settings

It is a good idea to store a back up copy of the configuration settings file on the hard drive of the system used to administer the Router. Use this menu to save a settings file, load a settings file or restore the device to factory default settings.

To save the current configuration settings to your computer, click the **Save/Restore Settings** button in the **Maintenance** directory to display the **System Settings** menu. Click the **Save** button to Save Settings to Local Hard Drive. You will be prompted to select a location on your computer to put the file.

To load a previously saved configuration file, click the **Browse** button and locate the file on your computer. Click the **Upload Settings** button to **Load Settings From Local Hard Drive**. Confirm that you want to load the file when prompted and the process is completed automatically. The Router will reboot and begin operating with the configuration settings that have just been loaded.

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

SAVE/RESTORE SETTINGS

Once the router is configured 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

Save Settings to Local Hard Drive :

Save

Load Settings From Local Hard Drive :

Browse...

Update Settings

Restore To Factory Default Settings :

Restore Device

Firmware Upgrade

Use this menu 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 save the configuration settings with the **Save/Restore Settings** menu described above or click the Backup Now button to go through the same procedure.

To upgrade firmware, type in the name and path of the file or click on the **Browse** button to search for the file. Click the **Upgrade Firmware** button to begin copying the file. The file will load and restart the Router automatically.

UPDATE

Note: Please do not update the firmware on this router unless instructed to do so by D-Link technical support or your ISP.

FIRMWARE INFORMATION

Current Firmware Version : 2.11.33.0(RE0.C29)3.9.4.143
Current Firmware Date :

FIRMWARE UPDATE

Note: Some firmware updates reset the configuration options to factory defaults. Before performing an update, be sure to save the current configuration from the [Maintenance -> Save/Restore Settings](#) screen.

Backup Now

To update the firmware, your PC must have a **wired** connection to the router. Enter the name of the firmware update file, and click on the Upload button.

Upload:

Diagnostics

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

Click the **Re_run Diagnostics Tests** button to view the connectivity status of the WAN connection.

DIAGNOSTICS

Your router is capable of testing your DSL connection. The individual tests are listed below. If a test displays a fail status, click "Re-run Diagnostics Tests" at the bottom of this page to make sure fail status is consistent.

SYSTEM CHECK

Test your Ethernet(1-4) Connection:	PASS
Test ADSL Synchronization:	PASS

INTERNET CONNECTIVITY CHECK

Test the assigned IP address:	PASS
Ping ISP Default Gateway:	PASS
Ping Preferred DNS server:	PASS

Re_run Diagnostics Tests

System Log

Use the System Log to view a log of events that occur on the Router.

SYSTEM LOG	
The system Log allows you to view the logs that have been created.	
SYSTEM LOG	
Date/Time	Message
01/01/2000 00:16:37	Exception occurred, EPC=800366a4 ,RA 8003232c
01/01/2000 00:16:38	MPOA Link Down
01/01/2000 00:16:38	LAN promiscuous mode <1>
01/01/2000 00:16:39	Last errorlog repeat 1 Times
01/01/2000 00:16:39	SNMP TRAP 3: link up
01/01/2000 00:16:39	Last errorlog repeat 1 Times
01/01/2000 00:16:39	SNMP TRAP 1: warm start
01/01/2000 00:16:39	main: init completed
01/01/2000 00:16:39	adptime task pause 1 day
01/01/2000 00:17:35	Exception occurred, EPC=800366a4 ,RA 8003232c
01/01/2000 00:17:36	MPOA Link Down
01/01/2000 00:17:36	LAN promiscuous mode <1>
01/01/2000 00:17:37	Last errorlog repeat 1 Times
01/01/2000 00:17:37	SNMP TRAP 3: link up
01/01/2000 00:17:37	Last errorlog repeat 1 Times
01/01/2000 00:17:37	SNMP TRAP 1: warm start
01/01/2000 00:17:37	main: init completed
01/01/2000 00:17:37	adptime task pause 1 day
01/01/2000 00:17:40	Exception occurred, EPC=800366a4 ,RA 8003232c
01/01/2000 00:17:41	MPOA Link Down
01/01/2000 00:17:41	LAN promiscuous mode <1>
01/01/2000 00:17:42	Last errorlog repeat 1 Times
01/01/2000 00:17:42	SNMP TRAP 3: link up
01/01/2000 00:17:42	Last errorlog repeat 1 Times
01/01/2000 00:17:42	SNMP TRAP 0: cold start
01/01/2000 00:17:42	main: init completed
01/01/2000 00:17:42	adptime task pause 1 day

Status

Use these read-only menus to view system information and monitor performance.

DSL-2640R

Device Info

Connected Clients

Statistics

Logout

Internet Offline

Reboot

D-Link

SETUPADVANCEDMAINTENANCESTATUSHELP

DEVICE INFO

The Device Status page allows you to check the status of your Internet connection, Wireless LAN and LAN.

GENERAL

Time06.24.2008, 16:16:38, Sun

Firmware Version2.11.33.0(RE0.C29)3.9.4.143

INTERNET STATUS

ADSL Modulation : Multi-Mode

Cable Status : ADSL Link Down

Virtual Circuit :

Connection Type : PPPoE/PPPoA

Network Status : Not Connected

Connection Up Time : N/A

Downstream Line Rate : 0 kbps

Upstream Line Rate : 0 kbps

DHCP RenewDHCP Release

MAC Address : N/A

IP Address : N/A

Subnet Mask : N/A

Default Gateway : N/A

Perferred DNS Server : N/A

Alternate DNS Server : N/A

WIRELESS LAN

Wireless Radio : ON

MAC Address : 00:19:5b:1b:01:32

Network Name (SSID) : dlink

Channel : Channel-6

Security Type : None

LAN

MAC Address : 00:19:5b:1b:01:32

IP Address : 192.168.1.1

Subnet Mask : 255.255.255.0

DHCP Server : ON

Helpful Hints...

This page shows displays a summary overview of your router status, including device software version, summary of your Internet configuration including wireless and Ethernet status.

More...

Device Info

Use this menu to quickly view basic current information about the LAN and WAN interfaces and device information including Firmware Version and MAC address.

DEVICE INFO

The Device Status page allows you to check the status of your Internet connection, Wireless LAN and LAN.

GENERAL

Time

06.24.2008, 16:16:38, Sun

Firmware Version

2.11.33.0(REO.C29)3.9.4.143

INTERNET STATUS

ADSL Modulation

Multi-Mode

Cable Status

ADSL Link Down

Virtual Circuit

Connection Type

PPPoE/PPPoA

Network Status

Not Connected

Connection Up Time

N/A

Downstream Line Rate

0 kbps

Upstream Line Rate

0 kbps

DHCP Renew

DHCP Release

MAC Address

N/A

IP Address

N/A

Subnet Mask

N/A

Default Gateway

N/A

Perferred DNS Server

N/A

Alternate DNS Server

N/A

WIRELESS LAN

Wireless Radio

ON

MAC Address

00:19:5b:1b:01:32

Network Name (SSID)

dlink

Channel

Channel-6

Security Type

None

LAN

MAC Address

00:19:5b:1b:01:32

IP Address

192.168.1.1

Subnet Mask

255.255.255.0

DHCP Server

ON

Connected Clients

The Connected LAN Clients list displays active DHCP clients when the router is acting as a DHCP server and wireless clients.

CONNECTED CLIENTS

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

CONNECTED WIRELESS CLIENTS

BSSID	Associated	Authorized
RT2561_1	0	open
RT2561_2	Disable	open

CONNECTED DHCP LAN CLIENTS

Hostname	MAC Address	IP Address	Expires In
	5F-44-48-43-50-5F	192.168.1.5	00 hours, 00 minutes, 19 seconds

Statistics

Use this menu to monitor traffic on the Ethernet LAN, Wireless LAN or ADSL interface. This menu also displays information on the ADSL signal status.

STATISTICS

This information reflects the current status of your router.

WAN STATISTICS

Service	VPI/VCI	Protocol	Received			Transmitted		
			Pkts	Errs	Drops	Pkts	Errs	Drops
-	0/33	PPPoE	0	0	0	0	0	0

LAN STATISTICS

Interface	Received				Transmitted			
	Bytes	Pkts	Errs	Drops	Bytes	Pkts	Errs	Drops
Ethernet	2919875	1963	0	0	597258	575	0	0
Wireless	13862245	123354	42537	42669	6947840	13611	83	83

ADSL STATISTICS

Mode:	Multi-Mode	
Type:	ANNEX_A	
Status:	Down	
	Downstream	Upstream
Rate (Kbps):	0 kbps	0 kbps
SNR Margin (dB):	N/A	N/A
Attenuation (dB):	N/A	N/A
Output Power (dBm):	N/A	N/A
Super Frames:	0	0
RS Correctable Errors:	0	0
RS Uncorrectable Errors:	0	0
HEC Errors:	0	0
Total Cells:	0	0
Data Cells:	0	0
Bit Errors:	0	0

Technical Specifications

ADSL Standards

- Full-rate ANSI T1.413 Issue 2
- ITU G.992.1 (G.dmt)
- ITU G.992.2 (G.lite)
- ITU G.994.1 (G.hs)

ADSL2 Standards

- ITU G.992.3 (G.dmt.bis)

ADSL2+ Standards

- ITU G.992.5 (G.dmt.bisplus)

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

DC Power

- Input: 100-120V 0.4A, 50-60 Hz
- Output: 12V 1.2A

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 1 Mbps
- ADSL2+ full rate downstream: up to 24 Mbps / upstream: up to 1 Mbps

Wireless Transfer Rates

- IEEE 802.11b: 11, 5.5, 2, and 1Mbps
- IEEE 802.11g: 6, 9, 12, 18, 24, 36, 48, 54 Mbps

Media Interface

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

Default Settings

IP Settings: IP Address 192.168.1.1 Netmask 255.255.255.0

User Name: admin **Password:** admin

DHCP Server: Enabled