



User Manual

Wireless AC750 Dual Band Cloud Router

DIR-810L

Preface

D-Link reserves the right to revise this publication and to make changes in the content hereof without obligation to notify any person or organization of such revisions or changes.

Manual Revisions

Revision	Date	Description
1.0	May 9, 2013	• Initial release for Revision A1

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Package Contents



DIR-810L Wireless AC750 Dual Band Cloud Router



Power Adapter



Ethernet Cable



Wi-Fi Configuration Card



Quick Install Guide

If any of the above items are missing, please contact your reseller.

Note: Using a power supply with a different voltage rating than the one included with the DIR-810L will cause damage and void the warranty for this product.

System Requirements

<p>Network Requirements</p>	<ul style="list-style-type: none"> • An Ethernet-based broadband modem
<p>Web-based Configuration Utility Requirements</p>	<p>Computer with the following:</p> <ul style="list-style-type: none"> • Windows®, Macintosh, or Linux-based operating system • An installed Ethernet adapter or wireless adapter <p>Supported Browsers:</p> <ul style="list-style-type: none"> • Internet Explorer 7 or higher • Firefox • Safari 4 or higher • Chrome <p>Windows® Users: Make sure you have the latest version of Java installed. Visit www.java.com to download the latest version.</p>
<p>mydlink Requirements</p>	<ul style="list-style-type: none"> • iPhone/iPad/iPod Touch (iOS 3.0 or higher) • Android device (1.6 or higher) • Computer with the following browser requirements: <ul style="list-style-type: none"> • Internet Explorer 7 or higher • Firefox • Safari 5 or higher • Chrome <p><small>iPhone, iPad, and iPod touch are registered trademarks of Apple Inc. Android is a trademark of Google, Inc.</small></p>

Introduction

The DIR-810L Wireless AC750 Dual Band Cloud Router provides revolutionary 802.11ac wireless speed - up to 750Mbps - for flawless HD video streaming to multiple devices.

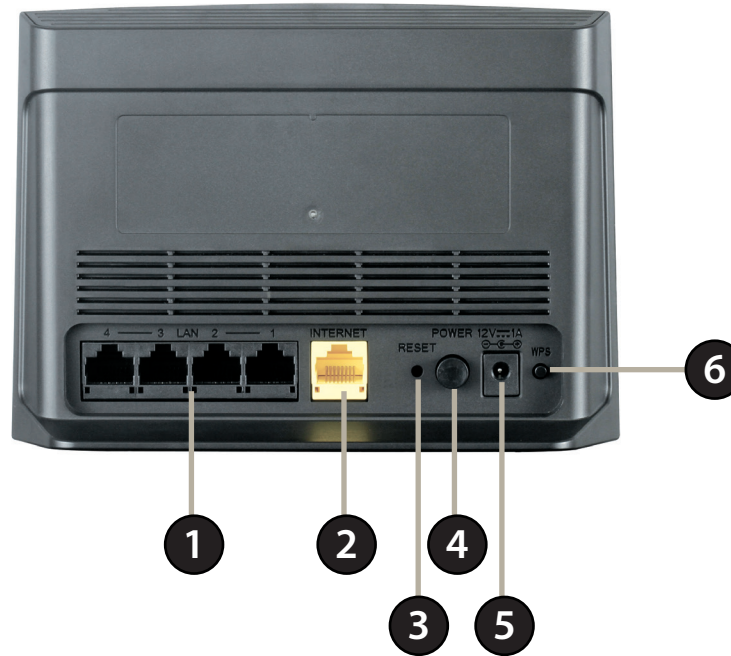
With ground-breaking mydlink Cloud Services, you can monitor your home network from anywhere on your iPhone, iPad, and Android device. See websites that are being visited, block unwanted devices and receive automatic e-mail alerts when unauthorized connections are attempted.

With SharePort Mobile, wirelessly access your media on your iPhone, iPad, or Android device from any connected USB drive. Best of all, the apps for network management and file access are free.

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

Hardware Overview

Connections



1	LAN Ports (1-4)	Connect Ethernet devices such as computers, media players, and game consoles.
2	Internet Port	Connect your broadband modem to this port using an Ethernet cable.
3	Reset Button	Press and hold the reset button with a paper clip for ten seconds to reset the router to the factory default settings.
4	Power Button	Press the power button to power on and off.
5	Power Port	Connect the supplied power adapter.
6	WPS Button	Press to start the WPS process. The Power LED will start to blink.

Hardware Overview

LEDs



1	Power LED	A solid green light indicates a proper connection to the power supply. The light will be solid orange during boot-up and will blink green during the WPS process.
2	Internet LED	A solid green light indicates a connection to the Internet port. If the LED is orange, the connection is good but the router cannot connect to the Internet. If this LED is blinking orange, this indicates that the “on demand” connection type is set and the Internet connection is idle.

Installation

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

Before you Begin

- Please configure the router with the computer that was last connected directly to your modem.
- **Users with DSL providers** - If you are using a PPPoE connection, you will need your PPPoE user name and password. If you do not have this information, contact your Internet provider. Do not proceed until you have this information.
- **Users with Cable providers** - Make sure you unplug the power to your modem. In some cases, you may need to turn it off for up to 5 minutes.
- **Advanced Users** - If your ISP provided you with a modem/router combo, you will need to set it to “bridge” mode so the DIR-810L router can work properly. Please contact your ISP or refer to the user manual for your modem/router device.

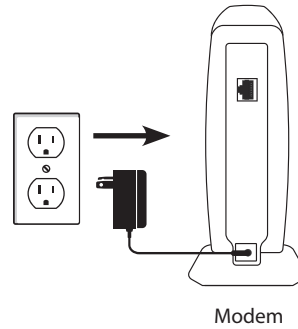
Wireless Installation Considerations

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

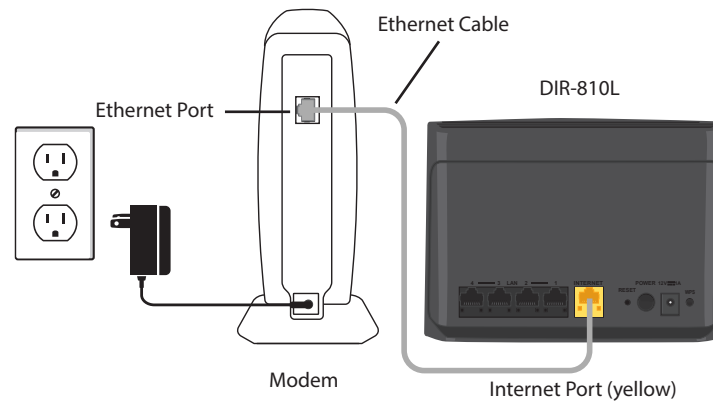
1. Keep the number of walls and ceilings between the D-Link router and other network devices to a minimum - each wall or ceiling can reduce your adapter's range from 3-90 feet (1-30 meters.) Position your devices so that the number of walls or ceilings is minimized.
2. Be aware of the direct line between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

Connect to your Network

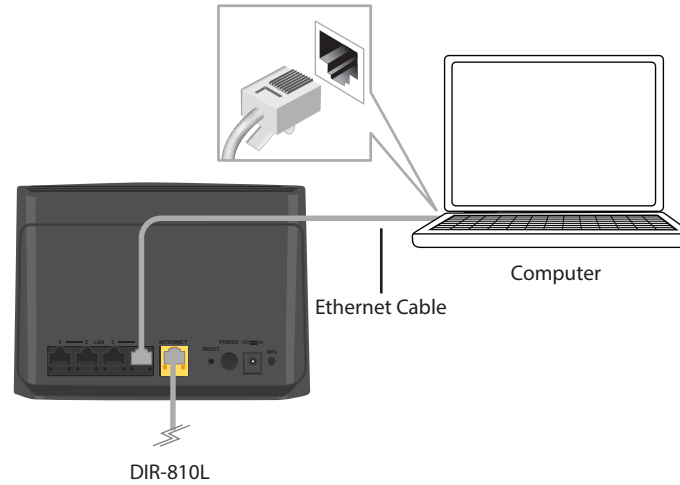
1. Turn off and unplug your DSL or Cable modem. This is required.



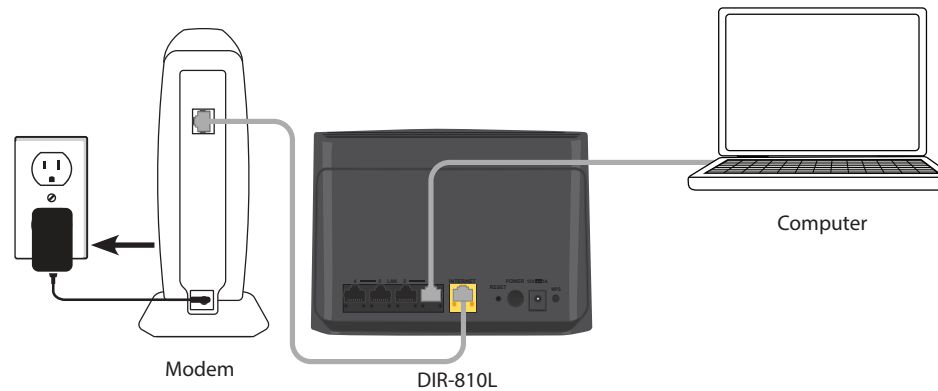
2. Connect an Ethernet cable from the Internet port of the router to the Ethernet port on your DSL or Cable modem.



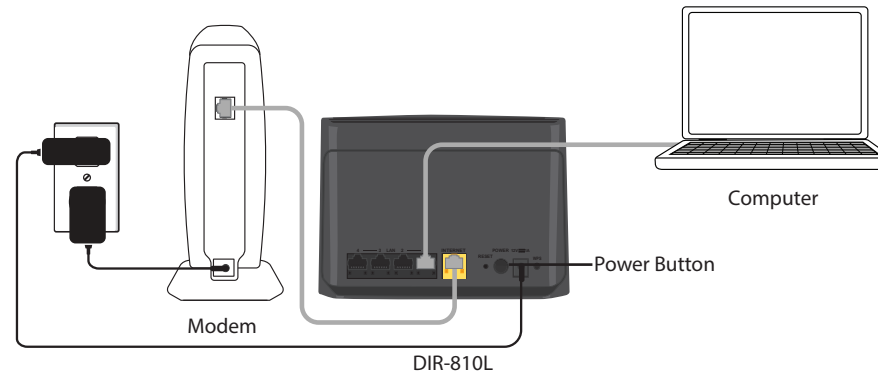
3. Connect another Ethernet cable from the Ethernet port on your computer to one of the LAN ports on the router.



4. Plug the power back into your DSL or Cable modem. Please wait about one minute before continuing.



5. Plug the power adapter into your router and connect to an available power outlet or surge protector. If the Power LED does not light up, press the Power button on the back of the router.



6. After the router has powered up, verify that the power (green) and Internet (orange or green) LEDs are both lit. Please skip to page 13 to configure your router and use the manual setup procedure to configure your network and wireless settings. If you did not connect to the Internet, use the D-Link Setup Wizard (refer to page 14).

Connect to an Existing Router

Note: *It is strongly recommended to replace your existing router with the DIR-810L instead of using both. If your modem is a combo router, you may want to contact your ISP or manufacturer's user guide to put the router into Bridge mode, which will 'turn off' the router (NAT) functions.*

If you are connecting the DIR-810L router to an existing router to use as a wireless access point and/or switch, you will have to do the following to the DIR-810L before connecting it to your network:

- Disable UPnP™
- Disable DHCP
- Change the LAN IP address to an available address on your network. The LAN ports on the router cannot accept a DHCP address from your other router.

To connect to another router, please follow the steps below:

1. Plug the power into the router. Connect one of your computers to the router (LAN port) using an Ethernet cable. Make sure your IP address on the computer is 192.168.0.xxx (where xxx is between 2 and 254). Please see the **Networking Basics** section for more information. If you need to change the settings, write down your existing settings before making any changes. In most cases, your computer should be set to receive an IP address automatically in which case you will not have to do anything to your computer.
2. Open a web browser, enter **http://192.168.0.1** (or **http://dlinkrouter.local./**) and press **Enter**. When the login window appears, set the user name to **Admin** and leave the password box empty. Click **Log In** to continue.
3. Click on **Advanced** and then click **Advanced Network**. Uncheck the **Enable UPnP** checkbox. Click **Save Settings** to continue.
4. Click **Setup** and then click **Network Settings**. Uncheck the **Enable DHCP Server** checkbox. Click **Save Settings** to continue.

5. Under Router Settings, enter an available IP address and the subnet mask of your network. Click **Save Settings** to save your settings. Use this new IP address to access the configuration utility of the router in the future. Close the browser and change your computer's IP settings back to the original values as in Step 1.
6. Disconnect the Ethernet cable from the router and reconnect your computer to your network.
7. Connect an Ethernet cable in one of the **LAN** ports of the router and connect it to your other router. Do not plug anything into the Internet (WAN) port of the D-Link router.
8. You may now use the other 3 LAN ports to connect other Ethernet devices and computers. To configure your wireless network, open a web browser and enter the IP address you assigned to the router. Refer to the **Configuration** and **Wireless Security** sections for more information on setting up your wireless network.

Configuration

There are several different ways you can configure your router to connect to the Internet and connect to your clients:

- **QRS Mobile App** - Use your iPhone, iPad, or Android device to configure your router. Refer to page 21
- **D-Link Setup Wizard** - This wizard will launch when you log into the router for the first time. Refer to page 14.
- **Manual Setup** - Log into the router and manually configure your router (advanced users only). Refer to page 23.

Quick Setup Wizard

If this is your first time installing the router, launch your web browser (e.g., Internet Explorer), and you will automatically be directed to the **Wizard Setup Screen**.

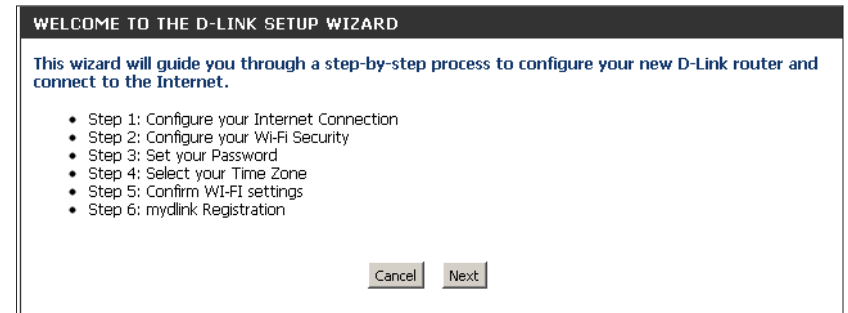
If you have already configured your settings and you would like to access the configuration utility, please refer to page 22.

If this is your first time logging into the router, this wizard will start automatically.

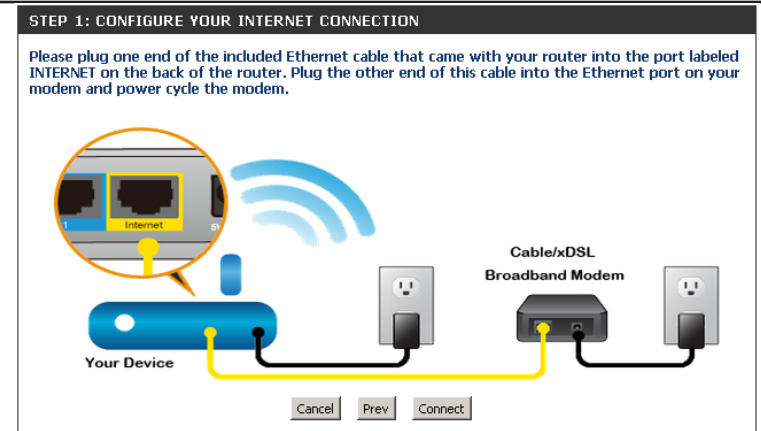
This wizard is designed to guide you through a step-by-step process to configure your new D-Link router and connect to the Internet.

Click **Next** to continue.

Please wait while your router detects your internet connection type. If the router detects your Internet connection, you may need to enter your ISP information such as username and password. (See instructions on page 16 for PPPoE, PPTP and L2TP).



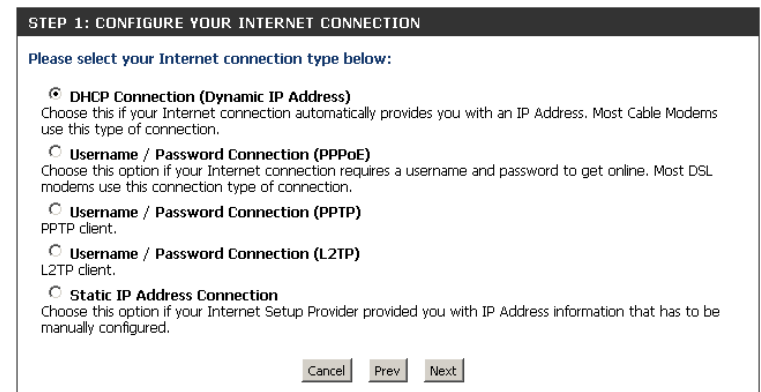
If the router does not detect a valid Ethernet connection from the Internet port, this screen will appear. Connect your broadband modem to the Internet port and then click **Connect**.



If the router detects an Ethernet connection but does not detect the type of Internet connection you have, this screen will appear. Click **Guide me through the Internet Connection Settings** to display a list of connection types to choose from.



Select your Internet connection type and click **Next** to continue. You can select **DHCP Connection (Dynamic IP Address)** if your Internet connection automatically provides you with an IP Address. This option is commonly used for cable modem services. Click **Next** to continue.



If the router detected or you selected **PPPoE**, enter your PPPoE username and password and click **Next** to continue.

Note: Make sure to remove your PPPoE software from your computer. The software is no longer needed and will not work through a router.

If the router detected or you selected **PPTP**, enter your PPTP username, password, and other information supplied by your ISP. Click **Next** to continue.

If the router detected or you selected **L2TP**, enter your L2TP username, password, and other information supplied by your ISP. Click **Next** to continue.

SET USERNAME AND PASSWORD CONNECTION (PPPoE)

To set up this connection you will need to have a Username and Password from your Internet Service Provider. If you do not have this information, please contact your ISP.

User Name :

Password :

Prev Next Cancel

SET USERNAME AND PASSWORD CONNECTION (PPTP)

To set up this connection you will need to have a Username and Password from your Internet Service Provider. You also need PPTP IP address. If you do not have this information, please contact your ISP.

Address Mode : Dynamic IP Static IP

PPTP IP Address :

PPTP Subnet Mask :

PPTP Gateway IP Address :

PPTP Server IP Address (may be same as gateway) :

User Name :

Password :

Verify Password :

DNS SETTINGS

Primary DNS Address :

Secondary DNS Address :

Cancel Prev Next

SET USERNAME AND PASSWORD CONNECTION (L2TP)

To set up this connection you will need to have a Username and Password from your Internet Service Provider. You also need L2TP IP address. If you do not have this information, please contact your ISP.

Address Mode : Dynamic IP Static IP

L2TP IP Address :

L2TP Subnet Mask :

L2TP Gateway IP Address :

L2TP Server IP Address (may be same as gateway) :

User Name :

Password :

Verify Password :

DNS SETTINGS

Primary DNS Address :

Secondary DNS Address :

Cancel Prev Next

If the router detected or you selected **Static**, enter the IP and DNS settings supplied by your ISP. Click **Next** to continue.

SET STATIC IP ADDRESS CONNECTION

To set up this connection you will need to have a complete list of IP information provided by your Internet Service Provider. If you have a Static IP connection and do not have this information, please contact your ISP.

IP Address :

Subnet Mask :

Gateway Address :

DNS SETTINGS

Primary DNS Address :

Secondary DNS Address :

For both the 2.4GHz and 5GHz segments, create a wireless network name (SSID) using up to 32 characters.

Create a wireless security passphrase or key (between 8-63 characters). Your wireless clients will need to have this passphrase or key entered to be able to connect to your wireless network.

Click **Next** to continue.

STEP 2: CONFIGURE YOUR WI-FI SECURITY

Give your Wi-Fi network a name and a password. (2.4GHz Band)

Wi-Fi Network Name (SSID) : (Using up to 32 characters)

Wi-Fi Password : (Between 8 and 63 characters)

Give your Wi-Fi network a name and a password. (5GHz Band)

Wi-Fi Network Name (SSID) : (Using up to 32 characters)

Wi-Fi Password : (Between 8 and 63 characters)

In order to secure your router, please enter a new password. Check the **Enable Graphical Authentication** box to enable CAPTCHA authentication for added security. Click **Next** to continue.

STEP 3: SET YOUR PASSWORD

By default, your new D-Link Router does not have a password configured for administrator access to the Web-based configuration pages. To secure your new networking device, please set and verify a password below, and enabling CAPTCHA Graphical Authentication provides added security protection to prevent unauthorized online users and hacker software from accessing your network settings.

Password:

Verify Password :

Enable Graphical Authentication :

Select your time zone from the drop-down menu and click **Next** to continue.

STEP 4: SELECT YOUR TIME ZONE

Select the appropriate time zone for your location. This information is required to configure the time-based options. Your router will be set to automatically update its internal clock from an NTP time server.

(GMT-08:00) Pacific Time (US/Canada), Tijuana

Cancel Prev Next

The *Confirm Wi-Fi Settings* window will display your wireless settings. Click **Next** to continue.

STEP 5: CONFIRM WI-FI SETTINGS

Below is a detailed summary of your Wi-Fi security settings. Please print this page out, or write the information on a piece of paper, so you can configure the correct settings on your Wi-Fi devices.

Wi-Fi Network Name (SSID) 2.4GHz Band: dlink-371C
Wi-Fi Password : rcdic16904

Wi-Fi Network Name (SSID) 5GHz Band: dlink-371C-media
Wi-Fi Password : rcdic16904

Cancel Prev Next

The *Saving Settings* window will appear.

SAVING SETTINGS

Your settings are being saved.
Please wait...

To use the free mydlink service (mydlink.com or the mydlink Lite app), you must have an account. Select if you do have a mydlink account or if you need to create one. Click **Next** to continue.

If you do not want to register at this time, click **Skip**.

If you clicked **Yes, I have a mydlink account** enter your mydlink account name (E-mail address) and password. Click **Login** to register your router.

If you clicked **No, I want to login with a new mydlink account** fill out the requested information and click **Sign up** to create your mydlink account. This is a free service. Refer to www.mydlink.com for more information.

STEP 6: MYDLINK REGISTRATION

This device is mydlink-enabled, which allows you to remotely monitor and manage your network through the mydlink.com website, or through the mydlink mobile app. You will be able to check your network speeds, see who is connected, view device browsing history, and receive notifications about new users or intrusion attempts.

You can register this device with your existing mydlink account. If you do not have one, you can create one now.

Do you have mydlink account?

Yes, I have a mydlink account.

No, I want to register and login with a new mydlink account.

STEP 6: MYDLINK REGISTRATION

E-mail Address (Account Name):

Password:

STEP 6: MYDLINK REGISTRATION

Please fulfill the options to complete the registration.

E-mail Address (Account Name):

Password:

Confirm Password:

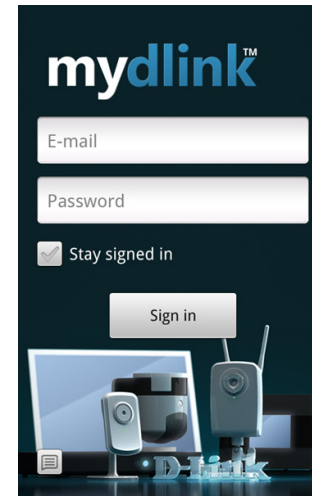
First Name:

Last name:

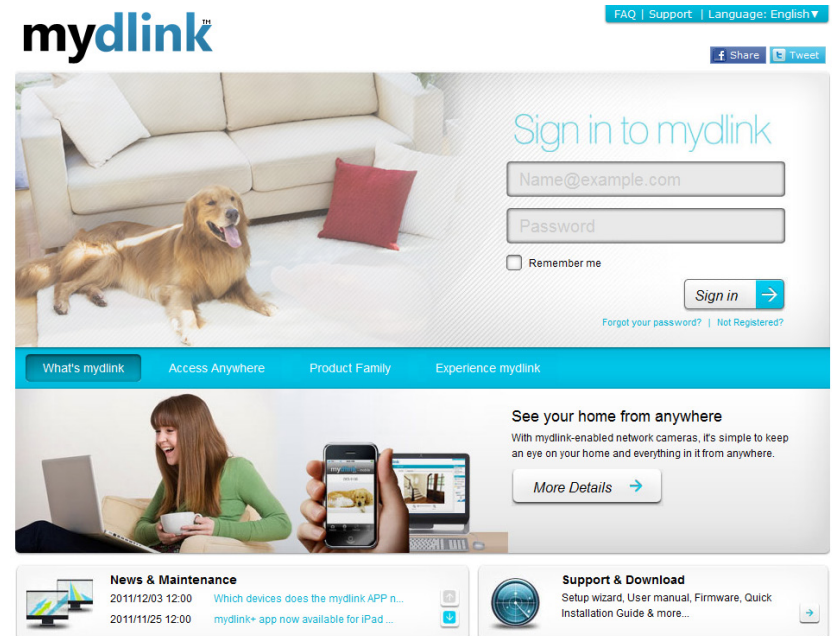
[I Accept the mydlink terms and conditions.](#)

The mydlink App will allow you to receive notices, browse network users, and configure your router from an iPhone/iPad/iPod Touch (iOS 3.0 or higher), or Android device (1.6 or higher).

To download the "mydlink lite" app, visit the Apple Store, Google Play, or <http://mydlink.com/Lite>.



PC and Mac users can use the mydlink portal at <http://mydlink.com>.



QRS Mobile App

D-Link offers an app for your iPad, iPhone (iOS 4.3 or higher), or Android device to install and configure your router.

Step 1

From your iPad, iPhone, or Android device, go to the iTunes Store and search for 'D-Link'. Select **QRS Mobile** and then download it.

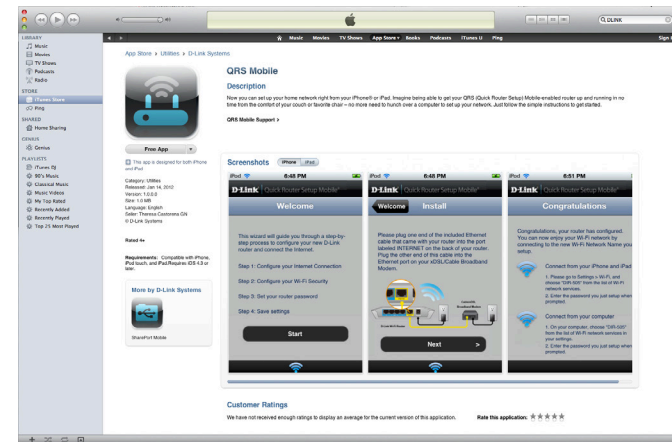
You may also scan this code to download.



iOS



Android



Step 2

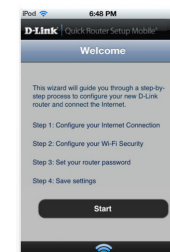
Once your app is installed, you may now configure your router. Connect to the router wirelessly by going to your wireless utility on your device. Scan for the wireless network name (SSID) as listed on the supplied info card. Select and then enter your security password (Wi-Fi Password).

D-Link Wi-Fi Configuration Card

Default Configuration	
Wi-Fi Name(SSID) 2.4Ghz: dlink-2c19	Wi-Fi Name(SSID) 5GHz *: dlink-2C1B-media
Wi-Fi Name(SSID) 5Ghz: dlink-2C1B-media	Wi-Fi Password *: Password:gccnu80856
To configure your router, go to: http://dlinkrouter.local Or http://192.168.0.1 Username: "Admin" Password: " " (leave the field blank)	
Wi-Fi Name(SSID) 2.4Ghz: [input type="text"]	Wi-Fi Password: [input type="password"]
Wi-Fi Name(SSID) 5GHz *: [input type="text"]	Wi-Fi Password *: [input type="password"]
Your configuration Username: "Admin" Password: [input type="password"]	
*For applicable models DCW810W/P010	

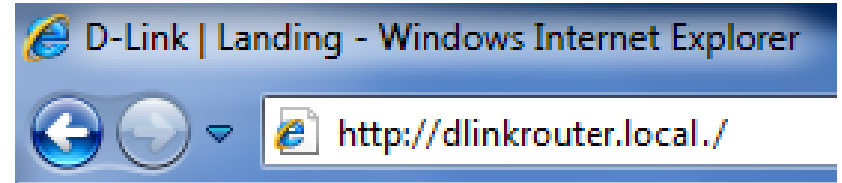
Step 3

Once you connect to the router, launch the QRS mobile app and it will guide you through the installation of your router.



Web-based Configuration Utility

Open a web browser (e.g., Internet Explorer, Chrome, Firefox, or Safari) and enter **http://dlinkrouter.local/** or **http://192.168.0.1**. Windows XP users may use **http://dlinkrouter**.



Enter your password and click **Login**.

Note: *If you did not create a password with the Setup Wizard, leave the password blank by default.*

A screenshot of the LOGIN page for the D-Link router configuration utility. The page has an orange header with the word "LOGIN" in white. Below the header, the text "Login to the router :" is displayed. There are two input fields: "User Name" with the value "Admin" and "Password" which is currently blank. A "Login" button is positioned to the right of the password field.

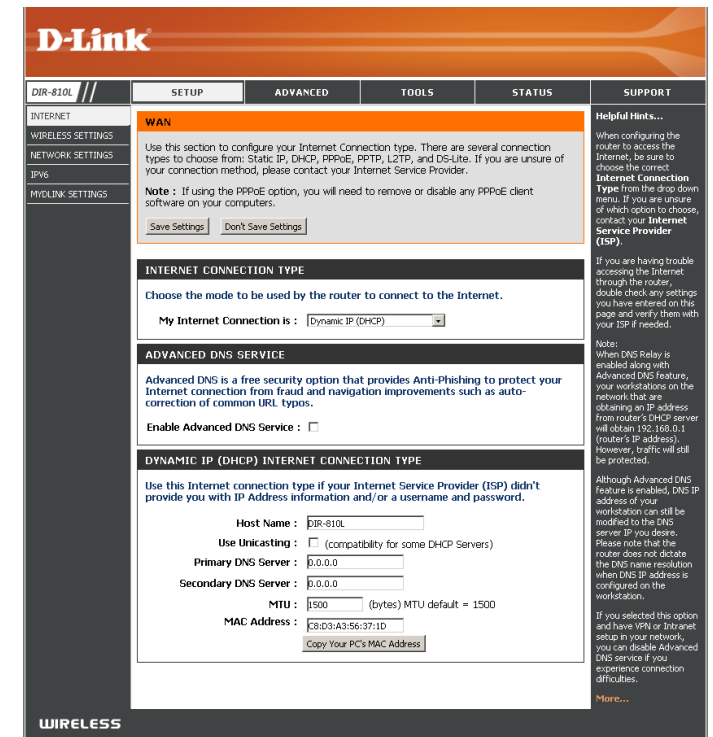
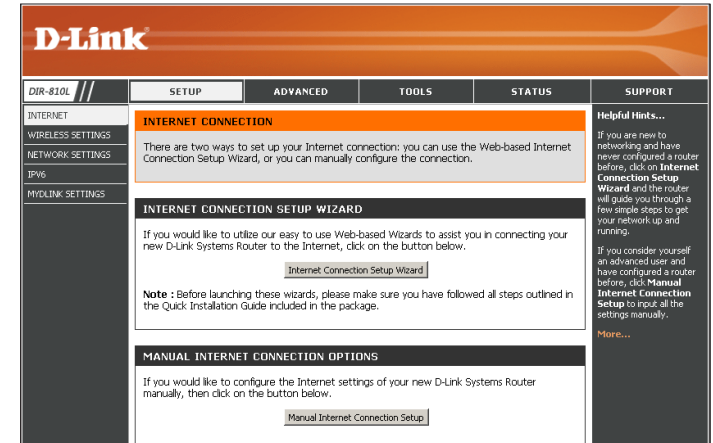
Internet Connection Setup

If you want to configure your router to connect to the Internet using the wizard, click **Internet Connection Setup Wizard**. Refer to page 32.

If you consider yourself an advanced user, click **Manual Internet Connection Setup** to configure your connection manually. (Instructions for manual setup begin below.)

The next few pages will explain each of the ISP connection types. You can select the type from the **My Internet Connection** is drop-down menu.

Advanced DNS is a free security option that provides anti-phishing protection against fraud, plus it enables auto-correction of common URL typos. If you are using a VPN, do not check the box to enable this feature.



Manual Internet Setup

Static (assigned by ISP)

Select **Static IP** if all the IP information is provided to you by your ISP.

My Internet Connection is: Select **Static IP** to manually enter the IP settings supplied by your ISP.

Enable Advanced DNS Service: Click on the checkbox to enable anti-phishing protection against fraud and auto-correction of common URL typos.

IP Address: Enter the IP address assigned by your ISP.

Subnet Mask: Enter the Subnet Mask assigned by your ISP.

Default Gateway: Enter the Gateway assigned by your ISP.

DNS Servers: The DNS server information will be supplied by your ISP (Internet Service Provider.)

MTU: Maximum Transmission Unit - you may need to change the MTU for optimal performance with your specific ISP. 1500 is the default MTU.

MAC Address: The default MAC Address is set to the Internet port's physical interface MAC address on the Broadband Router. It is not recommended that you change the default MAC address unless required by your ISP. You can use the **Clone Your PC's MAC Address** button to replace the Internet port's MAC address with the MAC address of your Ethernet card.

The screenshot shows the D-Link DIR-810L web interface. The top navigation bar includes 'SETUP', 'ADVANCED', 'TOOLS', 'STATUS', and 'SUPPORT'. The left sidebar lists 'INTERNET', 'WIRELESS SETTINGS', 'NETWORK SETTINGS', 'IPv6', and 'MYLINK SETTINGS'. The main content area is titled 'WAN' and contains the following sections:

- WAN:** A message explaining the connection types (Static IP, DHCP, PPPoE, PPTP, L2TP, and DSL-ITE) and a note about PPPoE. It includes 'Save Settings' and 'Don't Save Settings' buttons.
- INTERNET CONNECTION TYPE:** A section with the instruction 'Choose the mode to be used by the router to connect to the Internet.' The 'My Internet Connection is' dropdown menu is set to 'Static IP'.
- ADVANCED DNS SERVICE:** A section explaining that Advanced DNS is a free security option for anti-phishing protection. It includes a checkbox for 'Enable Advanced DNS Service' which is currently unchecked.
- STATIC IP ADDRESS INTERNET CONNECTION TYPE:** A section for entering static IP information. It includes input fields for:
 - IP Address: 0.0.0.0
 - Subnet Mask: 0.0.0.0
 - Default Gateway: 0.0.0.0
 - Primary DNS Server: 0.0.0.0
 - Secondary DNS Server: 0.0.0.0
 - MTU: 1500 (bytes) (MTU default = 1500)
 - MAC Address: C8:D3:A3:56:37:1D
 A 'Copy Your PC's MAC Address' button is located below the MAC Address field.

On the right side of the interface, there are 'Helpful Hints ...' and 'More...' sections providing additional guidance.

Internet Setup

Dynamic (Cable)

My Internet Connection is: Select **Dynamic IP (DHCP)** to obtain IP Address information automatically from your ISP. This option is commonly used for cable modem services.

Enable Advanced DNS Service: Click on the checkbox to enable anti-phishing protection against fraud and auto-correction of common URL typos.

Host Name: The Host Name is optional but may be required by some ISPs. Leave blank if you are not sure.

Use Unicasting: Primary/Secondary Check the box if you are having problems obtaining an IP address from your ISP.

DNS Server: Enter the Primary and secondary DNS server IP addresses assigned by your ISP. These addresses are usually obtained automatically from your ISP. Leave blank if you did not specifically receive these from your ISP.

MTU: Maximum Transmission Unit - you may need to change the MTU for optimal performance with your specific ISP. 1500 is the default MTU.

MAC Address: The default MAC Address is set to the Internet port's physical interface MAC address on the Broadband Router. It is not recommended that you change the default MAC address unless required by your ISP. You can use the **Clone Your PC's MAC Address** button to replace the Internet port's MAC address with the MAC address of your Ethernet card.

The screenshot shows the D-Link DIR-810L Internet Setup page. The page is titled "D-Link" and "DIR-810L". The navigation tabs are "SETUP", "ADVANCED", "TOOLS", "STATUS", and "SUPPORT". The "SETUP" tab is selected, and the "INTERNET" section is active. The "WAN" section is highlighted, and the "My Internet Connection is" dropdown menu is set to "Dynamic IP (DHCP)". The "Advanced DNS Service" section is visible, with the "Enable Advanced DNS Service" checkbox unchecked. The "Dynamic IP (DHCP) Internet Connection Type" section is also visible, with the "Host Name" field set to "DIR-810L", "Use Unicasting" checkbox unchecked, "Primary DNS Server" field set to "0.0.0.0", "Secondary DNS Server" field set to "0.0.0.0", "MTU" field set to "1500", and "MAC Address" field set to "C8:D3:A3:56:37:1D". A "Copy Your PC's MAC Address" button is present. The "Helpful Hints..." section on the right provides additional information about configuring the router and DNS service.

Internet Setup

PPPoE (DSL)

Choose PPPoE (Point to Point Protocol over Ethernet) if your ISP uses a PPPoE connection. Your ISP will provide you with a username and password. This option is typically used for DSL services. Make sure to remove your PPPoE software from your computer. The software is no longer needed and will not work through a router.

My Internet Connection is: Select **PPPoE (Username/Password)** from the drop-down menu.

Enable Advanced DNS Service: Click on the checkbox to enable anti-phishing protection against fraud and auto-correction of common URL typos.

Address Mode: Select **Static IP** if your ISP assigned you the IP address, subnet mask, gateway, and DNS server addresses. In most cases, select **Dynamic IP**.

IP Address: Enter the IP address (Static PPPoE only).

Username: Enter your PPPoE user name.

Password: Enter your PPPoE password and retype the password in the next box.

Service Name: Enter the ISP Service Name (optional).

Reconnect Mode: Select either **Always-on**, **On-Demand**, or **Manual**.

Maximum Idle Time: Enter a maximum idle time during which the Internet connection is maintained during inactivity. Enable Auto-reconnect to disable this feature.

DNS Servers: Enter the Primary and Secondary DNS Server Addresses of your choice or supplied by your ISP (Internet Service Provider.)

MTU: Maximum Transmission Unit - you may need to change the MTU for optimal performance with your specific ISP. 1492 is the default MTU.

MAC Address: The default MAC Address is set to the Internet port's physical interface MAC address on the Broadband Router. It is not recommended that you change the default MAC address unless required by your ISP. You can use the **Clone Your PC's MAC Address** button to replace the Internet port's MAC address with the MAC address of your Ethernet card.

The screenshot shows the D-Link DIR-810L Internet Setup page. The page is titled "Internet Setup" and "PPPoE (DSL)". The "WAN" tab is selected, and the "My Internet Connection is" dropdown menu is set to "PPPoE (Username / Password)". The "Advanced DNS Service" checkbox is checked. The "PPPoE Internet Connection Type" section is expanded, showing fields for "Address Mode" (Dynamic IP selected), "IP Address" (0.0.0.0), "Username", "Password", "Verify Password", "Service Name" (optional), "Reconnect Mode" (On demand selected), "Maximum Idle Time" (5 minutes), "Primary DNS Server" (0.0.0.0 optional), "Secondary DNS Server" (0.0.0.0 optional), "MTU" (1492 bytes), and "MAC Address" (C8:D3:A3:56:37:1D). A "Copy Your PC's MAC Address" button is visible. The page also includes a "Helpful Hints" section on the right side.

Internet Setup

PPTP

Choose PPTP (Point-to-Point-Tunneling Protocol) if your ISP uses a PPTP connection. Your ISP will provide you with a username and password.

My Internet Connection is: Select **PPTP (Username/Password)** from the drop-down menu.

Enable Advanced DNS Service: Click on the checkbox to enable anti-phishing protection against fraud and auto-correction of common URL typos.

Address Mode: Select **Static IP** if your ISP assigned you the IP address, subnet mask, gateway, and DNS server addresses. In most cases, select **Dynamic IP**.

PPTP IP Address: Enter the IP address (Static PPTP only).

PPTP Subnet Mask: Enter the Primary and Secondary DNS Server Addresses (Static PPTP only).

PPTP Gateway IP Address: Enter the Gateway IP Address provided by your ISP.

PPTP Server IP Address: Enter the Server IP provided by your ISP (optional).

Username: Enter your PPTP username.

Password: Enter your PPTP password and then retype the password in the next box.

Reconnect Mode: Select either **Always-on**, **On-Demand**, or **Manual**.

Maximum Idle Time: Enter a maximum idle time during which the Internet connection is maintained during inactivity. To disable this feature, enable Auto-reconnect.

D-Link

DIR-810L // SETUP ADVANCED TOOLS STATUS SUPPORT

WAN

Use this section to configure your Internet Connection type. There are several connection types to choose from: Static IP, DHCP, PPPoE, PPTP, L2TP, and DS-Lite. If you are unsure of your connection method, please contact your Internet Service Provider.

Note : If using the PPPoE option, you will need to remove or disable any PPPoE client software on your computers.

Save Settings Don't Save Settings

INTERNET CONNECTION TYPE

Choose the mode to be used by the router to connect to the Internet.

My Internet Connection is : PPTP (Username / Password)

ADVANCED DNS SERVICE

Advanced DNS is a free security option that provides Anti-Phishing to protect your Internet connection from fraud and navigation improvements such as auto-correction of common URL typos.

Enable Advanced DNS Service :

PPTP INTERNET CONNECTION TYPE

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

Address Mode Dynamic IP Static IP

PPTP IP Address : 0.0.0.0

PPTP Subnet Mask : 0.0.0.0

PPTP Gateway IP Address : 0.0.0.0

PPTP Server IP Address :

Username :

Password :

Verify Password :

Reconnect Mode Always on On demand Manual

Maximum Idle Time : 5 (minutes, 0=infinite)

Primary DNS Server : 0.0.0.0

Secondary DNS Server : 0.0.0.0

MTU : 1400 (bytes) MTU default = 1400

MAC Address : C8:D3:A3:56:37:1D

Copy Your PC's MAC Address

Helpful Hints ...

When configuring the router to access the Internet, be sure to choose the correct **Internet Connection Type** from the drop down menu. If you are unsure of which option to choose, contact your **Internet Service Provider (ISP)**.

If you are having trouble accessing the Internet through the router, double check any settings you have entered on this page and verify them with your ISP if needed.

Note: When DNS Relay is enabled along with Advanced DNS feature, your workstation on the network that are obtaining an IP address from router's DHCP server will obtain 192.168.0.1 (router's IP address). However, traffic will still be protected.

Although Advanced DNS Feature is enabled, DNS IP address of your workstation can still be modified to the DNS server IP you desire. Please note that the router does not dictate the DNS name resolution when DNS IP address is configured on the workstation.

If you selected this option and have VPN or Intranet setup in your network, you can disable Advanced DNS service if you experience connection difficulties.

More...

WIRELESS

DNS Servers: The DNS server information will be supplied by your ISP (Internet Service Provider.)

MTU: Maximum Transmission Unit - you may need to change the MTU for optimal performance with your specific ISP. 1400 is the default MTU.

MAC Address: The default MAC Address is set to the Internet port's physical interface MAC address on the Broadband Router. It is not recommended that you change the default MAC address unless required by your ISP. You can use the **Clone Your PC's MAC Address** button to replace the Internet port's MAC address with the MAC address of your Ethernet card.

Internet Setup

L2TP

Choose L2TP (Layer 2 Tunneling Protocol) if your ISP uses a L2TP connection. Your ISP will provide you with a username and password.

My Internet Connection is: Select **L2TP (Username/Password)** from the drop-down menu.

Enable Advanced DNS Service: Click on the checkbox to enable anti-phishing protection against fraud and auto-correction of common URL typos.

Address Mode: Select **Static** if your ISP assigned you the IP address, subnet mask, gateway, and DNS server addresses. In most cases, select **Dynamic IP**.

L2TP IP Address: Enter the L2TP IP address supplied by your ISP (Static only).

L2TP Subnet Mask: Enter the Subnet Mask supplied by your ISP (Static only).

L2TP Gateway IP Address: Enter the Gateway IP Address provided by your ISP.

L2TP Server IP Address: Enter the Server IP provided by your ISP (optional).

Username: Enter your L2TP username.

Password: Enter your L2TP password and then retype the password in the next box.

Reconnect Mode: Select either **Always-on**, **On-Demand**, or **Manual**.

Maximum Idle Time: Enter a maximum idle time during which the Internet connection is maintained during inactivity. To disable this feature, enable Auto-reconnect.

D-Link

DIR-810L //

SETUP ADVANCED TOOLS STATUS SUPPORT

INTERNET

WIRELESS SETTINGS

NETWORK SETTINGS

IPv6

MYLINK SETTINGS

WAN

Use this section to configure your Internet Connection type. There are several connection types to choose from: Static IP, DHCP, PPPoE, PPTP, L2TP, and DS-Lite. If you are unsure of your connection method, please contact your Internet Service Provider.

Note : If using the PPPoE option, you will need to remove or disable any PPPoE client software on your computers.

Save Settings Don't Save Settings

Helpful Hints ...

When configuring the router to access the Internet, be sure to choose the correct **Internet Connection Type** from the drop down menu. If you are unsure of which option to choose, contact your **Internet Service Provider (ISP)**.

If you are having trouble accessing the Internet through the router, double check any settings you have entered on this page and verify them with your ISP if needed.

Note: When DNS Relay is enabled along with Advanced DNS feature, your workstations on the network that are obtaining an IP address from router's DHCP server will obtain 192.168.0.1 (router's IP address). However, traffic will still be protected.

Although Advanced DNS feature is enabled, DNS IP address of your workstation can still be modified to the DNS server IP you desire. Please note that the router does not dictate the DNS name resolution when DNS IP address is configured on the workstation.

If you selected this option and have WAN or Intranet setup in your network, you can disable Advanced DNS service if you experience connection difficulties.

[More...](#)

INTERNET CONNECTION TYPE

Choose the mode to be used by the router to connect to the Internet.

My Internet Connection is : L2TP (Username / Password)

ADVANCED DNS SERVICE

Advanced DNS is a free security option that provides Anti-Phishing to protect your Internet connection from fraud and navigation improvements such as auto-correction of common URL typos.

Enable Advanced DNS Service :

L2TP INTERNET CONNECTION TYPE

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

Address Mode Dynamic IP Static IP

L2TP IP Address : 0.0.0.0

L2TP Subnet Mask : 0.0.0.0

L2TP Gateway IP Address : 0.0.0.0

L2TP Server IP Address :

Username :

Password :

Verify Password :

Reconnect Mode : Always on On demand Manual

Maximum Idle Time : 5 (minutes, 0=infinite)

Primary DNS Server : 0.0.0.0

Secondary DNS Server : 0.0.0.0

MTU : 1400 (bytes) MTU default = 1400

MAC Address : C8:D3:A3:56:37:1D

Copy Your PC's MAC Address

WIRELESS

DNS Servers: Enter the Primary and Secondary DNS Server Addresses (Static L2TP only).

MTU: Maximum Transmission Unit - you may need to change the MTU for optimal performance with your specific ISP. 1400 is the default MTU.

MAC Address: The default MAC Address is set to the Internet port's physical interface MAC address on the Broadband Router. It is not recommended that you change the default MAC address unless required by your ISP. You can use the **Clone Your PC's MAC Address** button to replace the Internet port's MAC address with the MAC address of your Ethernet card.

Internet Setup

DS-Lite

DS-Lite is an IPv6 connection type. After selecting DS-Lite, the following parameters will be available for configuration:

My Internet Connection is: Select **DS-Lite** from the drop-down menu.

DS-Lite Configuration: Select the **DS-Lite DHCPv6 Option** to let the router allocate the AFTR IPv6 address automatically. Select the **Manual Configuration** option to enter the AFTR IPv6 address in manually.

AFTR IPv6 Address: After selecting the **Manual Configuration** option above, enter the AFTR IPv6 address used here.

B4 IPv4 Address: Enter the B4 IPv4 address value used here. (Optional.)

WAN IPv6 Address: Once connected, the WAN IPv6 address will be displayed here.

IPv6 WAN Default Gateway Once connected, the IPv6 WAN Default Gateway address will be displayed here.

The screenshot shows the D-Link web interface for the DIR-810L router. The main navigation tabs are SETUP, ADVANCED, TOOLS, STATUS, and SUPPORT. The left sidebar shows the configuration menu with options for INTERNET, WIRELESS SETTINGS, NETWORK SETTINGS, IPV6, and MYLINK SETTINGS. The main content area is titled 'IPV6' and contains the following configuration options:

- IPV6:** A section with a warning: "Use this section to configure your IPv6 Connection type. If you are unsure of your connection method, please contact your Internet Service Provider." It includes "Save Settings" and "Don't Save Settings" buttons.
- INTERNET CONNECTION TYPE:** A section with the instruction "Choose the mode to be used by the router to connect to the Internet." The "My Internet Connection is" dropdown menu is set to "DS-Lite".
- AFTR ADDRESS INTERNET CONNECTION TYPE:** A section with the instruction "Enter the AFTR address information provided by your Internet Service Provider(ISP)." It includes:
 - DS-Lite Configuration:** Two radio buttons: "DS-Lite DHCPv6 Option" (selected) and "Manual Configuration".
 - AFTR IPv6 Address:** An empty text input field.
 - B4 IPv4 Address:** A text input field containing "192.0.0." followed by an empty box and "(optional)".
 - WAN IPv6 Address:** An empty text input field.
 - IPv6 WAN Default Gateway:** An empty text input field.

On the right side of the interface, there is a "Helpful Hints..." section with text: "When configuring the router to access the IPv6 Internet, be sure to choose the correct IPv6 Connection Type from the drop down menu. If you are unsure of which option to choose, contact your Internet Service Provider (ISP). If you are having trouble accessing the IPv6 Internet through the router, double check any settings you have entered on this page and verify them with your ISP if needed." A "More..." link is also present.

Internet Connection Setup Wizard

If you did not initially choose to install your router with the *Quick Setup Wizard*, you can click on **Internet Connection Setup Wizard** from the **Setup > Internet** screen.

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

Click **Next** to continue.

INTERNET CONNECTION

There are two ways to set up your Internet connection: you can use the Web-based Internet Connection Setup Wizard, or you can manually configure the connection.

INTERNET CONNECTION SETUP WIZARD

If you would like to utilize our easy to use Web-based Wizards to assist you in connecting your new D-Link Systems Router to the Internet, click on the button below.

[Internet Connection Setup Wizard](#)

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

MANUAL INTERNET CONNECTION OPTIONS

If you would like to configure the Internet settings of your new D-Link Systems Router manually, then click on the button below.

[Manual Internet Connection Setup](#)

WELCOME TO THE D-LINK INTERNET CONNECTION SETUP WIZARD

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

- Step 1: Set your Password
- Step 2: Select your Time Zone
- Step 3: Configure your Internet Connection
- Step 4: Save Settings and Connect

[Prev](#) [Next](#) [Cancel](#) [Connect](#)

In order to secure your router, enter a new password. Click **Next** to continue.

Select your time zone from the drop-down menu and click **Next** to continue.

Select your Internet connection type. You can select **DHCP Connection (Dynamic IP Address)** if your Internet connection automatically provides you with an IP Address. This option is commonly used for cable modem services. Click **Next** to continue.

STEP 1: SET YOUR PASSWORD

By default, your new D-Link Router does not have a password configured for administrator access to the Web-based configuration pages. To secure your new networking device, please set and verify a password below, and enabling CAPTCHA Graphical Authentication provides added security protection to prevent unauthorized online users and hacker software from accessing your network settings.

Password :

Verify Password :

STEP 2: SELECT YOUR TIME ZONE

Select the appropriate time zone for your location. This information is required to configure the time-based options for the router.

(GMT-08:00) Pacific Time (US/Canada), Tijuana

STEP 3: CONFIGURE YOUR INTERNET CONNECTION

Your Internet Connection could not be detected, please select your Internet Service Provider (ISP) from the list below. If your ISP is not listed; select the "Not Listed or Don't Know" option to manually configure your connection.

Not Listed or Don't Know

If your Internet Service Provider was not listed or you don't know who it is, please select the Internet connection type below:

DHCP Connection (Dynamic IP Address)
Choose this if your Internet connection automatically provides you with an IP Address. Most Cable Modems use this type of connection.

Username / Password Connection (PPPoE)
Choose this option if your Internet connection requires a username and password to get online. Most DSL modems use this type of connection.

Username / Password Connection (PPTP)
PPTP client.

Username / Password Connection (L2TP)
L2TP client.

Static IP Address Connection
Choose this option if your Internet Setup Provider provided you with IP Address information that has to be manually configured.

If you selected **DHCP Connection (Dynamic IP Address)** you can click on **Clone Your PC's MAC Address** to copy your computer's MAC address to your router. Click **Next** to continue.

DHCP CONNECTION (DYNAMIC IP ADDRESS)

To set up this connection, please make sure that you are connected to the D-Link Router with the PC that was originally connected to your broadband connection. If you are, then click the Clone MAC button to copy your computer's MAC Address to the D-Link Router.

MAC Address : C8:D3:A3:56:37:1D (optional)

Host Name : DIR-810L

Note: You may also need to provide a Host Name. If you do not have or know this information, please contact your ISP.

If you selected **PPPoE**, enter your PPPoE username, password, and other information supplied by your ISP. Click **Next** to continue.

Note: Make sure to remove your PPPoE software from your computer. The software is no longer needed and will not work through a router.

SET USERNAME AND PASSWORD CONNECTION (PPPOE)

To set up this connection you will need to have a Username and Password from your Internet Service Provider. If you do not have this information, please contact your ISP.

Address Mode : Dynamic PPPoE Static IP

IP Address : 0.0.0.0

User Name :

Password :

Verify Password :

Service Name : (optional)

Note: You may also need to provide a Service Name. If you do not have or know this information, please contact your ISP.

If you selected **PPTP**, enter your PPTP username, password, and other information supplied by your ISP. Click **Next** to continue.

SET USERNAME AND PASSWORD CONNECTION (PPTP)

To set up this connection you will need to have a Username and Password from your Internet Service Provider. You also need PPTP IP address. If you do not have this information, please contact your ISP.

Address Mode : Dynamic IP Static IP

PPTP IP Address :

PPTP Subnet Mask :

PPTP Gateway IP Address :

PPTP Server IP Address (may be same as gateway) :

User Name :

Password :

Verify Password :

If you selected **L2TP**, enter your L2TP username, password, and other information supplied by your ISP. Click **Next** to continue.

SET USERNAME AND PASSWORD CONNECTION (L2TP)

To set up this connection you will need to have a Username and Password from your Internet Service Provider. You also need L2TP IP address. If you do not have this information, please contact your ISP.

Address Mode : Dynamic IP Static IP

L2TP IP Address :

L2TP Subnet Mask :

L2TP Gateway IP Address :

L2TP Server IP Address (may be same as gateway) :

User Name :

Password :

Verify Password :

If you selected **Static**, enter the IP and DNS settings supplied by your ISP. Click **Next** to continue.

SET STATIC IP ADDRESS CONNECTION

To set up this connection you will need to have a complete list of IP information provided by your Internet Service Provider. If you have a Static IP connection and do not have this information, please contact your ISP.

IP Address : 0.0.0.0

Subnet Mask : 0.0.0.0

Gateway Address : 0.0.0.0

Primary DNS Address : 0.0.0.0

Secondary DNS Address : 0.0.0.0

Prev Next Cancel Connect

When the setup process is completed, you will see this screen. Click on **Connect** to save your settings.

SETUP COMPLETE!

The Internet Connection Setup Wizard has completed. Click the save button to save your settings and reboot the router.

Prev Next Cancel Connect

Wireless Settings

If you want to configure the wireless settings on your router using the wizard, click **Wireless Network Setup Wizard** and refer to the next page.

Click **Add Wireless Device with WPS** if you want to add a wireless device using Wi-Fi Protected Setup (WPS). Refer to page 40.

Click **Manual Wireless Network Setup** if you want to manually configure the wireless settings on your router. Refer to page 42.

The screenshot shows the D-Link DIR-810L web interface. The top navigation bar includes the D-Link logo and tabs for SETUP, ADVANCED, TOOLS, STATUS, and SUPPORT. The left sidebar contains a menu with options: INTERNET, WIRELESS SETTINGS (highlighted), NETWORK SETTINGS, IPV6, and MYDLINK SETTINGS. The main content area is titled "WIRELESS SETTINGS" and contains the following sections:

- WIRELESS SETTINGS**: A general introduction stating that the following Web-based wizards are designed to assist in wireless network setup and device connection. It includes a note to read the Quick Installation Guide before launching the wizards.
- WIRELESS NETWORK SETUP WIZARD**: A section describing a step-by-step wizard for setting up the wireless network and making it secure. It features a button labeled "Wireless Network Setup Wizard".
- ADD WIRELESS DEVICE WITH WPS (WI-FI PROTECTED SETUP) WIZARD**: A section describing a wizard for connecting wireless devices to the router. It features a button labeled "Add Wireless Device With WPS".
- MANUAL WIRELESS NETWORK SETUP**: A section for manual configuration of the wireless network, warning that this will destroy any existing network. It features a button labeled "Manual Wireless Network Setup".

The right sidebar, titled "Helpful Hints ...", provides additional guidance for new users and advanced users, including a "More..." link.

Wireless Connection Setup Wizard

To run the security wizard, click on **Setup > Wireless Settings**. Click on the **Wireless Network Setup Wizard** button.

Enter a name for your wireless network (SSID). Click on the checkbox if you would also like to name the 5GHz frequency. Do not use personal information as your SSID since users with wireless devices within range of your router will be able to see this information.

Then select one of the following options:

Automatically: Select this option to automatically generate the router's network key and click **Next**.

Manually: Select this option to manually enter your network key and click **Next**.

WIRELESS SETTINGS

The following Web-based wizards are designed to assist you in your wireless network setup and wireless device connection.

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

WIRELESS NETWORK SETUP WIZARD

This wizard is designed to assist you in your wireless network setup. It will guide you through step-by-step instructions on how to set up your wireless network and how to make it secure.

Wireless Network Setup Wizard

Note : Some changes made using this Setup Wizard may require you to change some settings on your wireless client adapters so they can still connect to the D-Link Router.

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

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

Add Wireless Device With WPS

STEP 1: WELCOME TO THE D-LINK WIRELESS SECURITY SETUP WIZARD

Give your network a name, using up to 32 characters.

Network Name (SSID) 2.4GHz Band:

Manually set 5GHz band Network Name(SSID)

Network Name (SSID) 5GHz Band:

Automatically assign a network key for both 2.4GHz and 5GHz band (Recommended)

To prevent outsiders from accessing your network, the router will automatically assign a security (also called WEP or WPA key) to your network.

Manually assign a network key

Use this options if you prefer to create our own key.

Note: All D-Link wireless adapters currently support WPA.

Prev Next Cancel

If you selected **Automatically**, the summary window will display your settings. Write down the security key and enter this on your wireless clients. Click **Save** to save your settings.

SETUP COMPLETE!

Below is a detailed summary of your wireless security settings. Please print this page out, or write the information on a piece of paper, so you can configure the correct settings on your wireless client adapters.

2.4GHz Band Wireless Network Name (SSID) :	dlink-371C
Security Mode :	Auto (WPA or WPA2) - Personal
Cipher Type :	TKIP and AES
Pre-Shared Key :	67df99776a

5GHz Band Wireless Network Name (SSID) :	dlink-371C-media
Security Mode :	Auto (WPA or WPA2) - Personal
Cipher Type :	TKIP and AES
Pre-Shared Key :	b38d95671d

Prev Save Cancel

If you selected **Manually**, the following screen will appear.

Create a passphrase for your security password. Click **Next** to continue.

Note: The security password/passphrase must be between 8 and 63 characters and is case-sensitive. You will need to enter this passphrase on your wireless clients exactly or it will not connect.

STEP 2: SET YOUR WIRELESS SECURITY PASSWORD

You have selected your security level - you will need to set a wireless security password.

The WPA (Wi-Fi Protected Access) key must meet following guidelines

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

Use the same Wireless Security Password on both 2.4GHz and 5GHz band

Wireless Security Password :

Note: You will need to enter the same password as keys in this step into your wireless clients in order to enable proper wireless communication.

Prev Next Cancel

Add Wireless Device with WPS Wizard

From the **Setup > Wireless Settings** screen, click **Add Wireless Device with WPS**.

Select **Auto** to add a wireless client using WPS (Wi-Fi Protected Setup) and then click **Next**. Skip to the next page.

If you select **Manual**, a settings summary screen will appear. Write down the security key and enter this on your wireless clients. Click **OK** to finish. This will take you to the *Wireless Status* screen.

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

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

STEP 1: SELECT CONFIGURATION METHOD FOR YOUR WIRELESS NETWORK

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

Auto Select this option if your wireless device supports WPS (Wi-Fi Protected Setup)

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

STEP 2: CONNECT YOUR WIRELESS DEVICE

Below is a detailed summary of your wireless security settings. Please print this page out, or write the information on a piece of paper, so you can configure the correct settings on your wireless client adapters.

2.4GHz Band SSID: **dlink-371C**
Security Mode: **Auto (WPA or WPA2) - Personal**
Cipher Type : **TKIP/AES**
Pre-shared Key: **rcdic16904**

5GHz Band SSID: **dlink-371C-media**
Security Mode: **Auto (WPA or WPA2) - Personal**
Cipher Type : **TKIP/AES**
Pre-shared Key: **rcdic16904**

PIN: Select this option to use PIN method. In order to use this method you must know the wireless client's 8 digit PIN and click **Connect**.

PBC: Select this option to use PBC (Push Button) method to add a wireless client. Click **Connect**.

Once you click **Connect**, you will have a 120 second time limit to apply the settings to your wireless client(s) and successfully establish a connection.

Click **OK** to finish. This will take you to *Wireless Status* screen.

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

There are two ways to add wireless device to your wireless network:

- PIN (Personal Identification Number)
- PBC (Push Button Configuration)

PIN :

please enter the PIN from your wireless device and click the below 'Connect' Button

PBC

please press the push button on your wireless device and click the below 'Connect' Button within 120 seconds

ADD WIRELESS DEVICE WITH WPS

Please press down the Push Button (physical or virtual) on the wireless device you are adding to your wireless network within 1:18 seconds ...

ADD WIRELESS DEVICE WITH WPS

Adding wireless device:Succeeded

Manual Wireless Settings

802.11n/g (2.4GHz)

Enable Wireless: Check the box to enable the wireless function. If you do not want to use wireless, uncheck the box to disable all the wireless functions.

Schedule: Select the time frame that you would like your wireless network enabled. The schedule may be set to **Always**. Any schedule you create will be available in the drop-down menu. Click **Add New** to create a schedule.

Wireless Network Name: Service Set Identifier (SSID) is the name of your wireless network. Create a name for your wireless network using up to 32 characters. The SSID is case-sensitive.

802.11 Mode: Select one of the following:

802.11b Only - Select only if all of your wireless clients are 802.11b.

802.11g Only - Select only if all of your wireless clients are 802.11g.

802.11n Only - Select only if all of your wireless clients are 802.11n.

Mixed 802.11g and 802.11b - Select if you are using both 802.11g and 802.11b wireless clients.

Mixed 802.11n and 802.11g - Select if you are using both 802.11n and 802.11g wireless clients.

Mixed 802.11n, 11g, and 11b - Select if you are using a mix of 802.11n, 802.11g, and 802.11b wireless clients.

Enable Auto Channel Scan: The **Auto Channel Scan** setting can be selected to allow the DIR-810L to choose the channel with the least amount of interference.

Wireless Channel: Indicates the channel setting for the DIR-810L. The Channel can be changed to fit the channel setting for an existing wireless network or to customize the wireless network. If you check **Enable Auto Channel Scan**, this option will be greyed out.

Transmission Rate: Best (automatic) is selected by default, or you can select a channel from the drop-down menu.

Channel Width: Select the Channel Width:

Auto 20/40 - This is the default setting. Select if you are using both 802.11n and non-802.11n wireless devices.

20MHz - Select if you are not using any 802.11n wireless clients.

Visibility Status: Select **Invisible** if you do not want the SSID of your wireless network to be broadcasted by the DIR-810L. If Invisible is selected, the SSID of the DIR-810L will not be seen by Site Survey utilities so your wireless clients will have to know the SSID of your DIR-810L in order to connect to it.

Wireless Security: Refer to page 44 for more information regarding wireless security.

WIRELESS NETWORK SETTINGS

Wireless Band : 2.4GHz Band

Enable Wireless: Always

Wireless Network Name: (Also called the SSID)

802.11 Mode:

Enable Auto Channel Scan:

Wireless Channel:

Transmission Rate :

Channel Width:

Visibility Status: Visible Invisible

WIRELESS SECURITY MODE

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

Security Mode:

802.11ac/n/a (5GHz)

Enable Wireless: Check the box to enable the wireless function. If you do not want to use wireless, uncheck the box to disable all the wireless functions.

Schedule: Select the time frame that you would like your wireless network enabled. The schedule may be set to **Always**. Any schedule you create will be available in the drop-down menu. Click **Add New** to create a schedule.

Wireless Network Name: Service Set Identifier (SSID) is the name of your wireless network. Create a name for your wireless network using up to 32 characters. The SSID is case-sensitive.

802.11 Mode: Select one of the following:

- 802.11n Only** - Select only if all of your wireless clients are 802.11n.
- 802.11ac Only** - Select only if all of your wireless clients are 802.11ac.
- Mixed 802.11n and 802.11a** - Select if you are using both 802.11n and 802.11a wireless clients.
- Mixed 802.11ac and 802.11n** - Select if you are using both 802.11ac and 802.11n wireless clients.
- Mixed 802.11ac, 11n and 11a** - Select if you are using a mix of 802.11ac, 802.11n, and 802.11a wireless clients.

Enable Auto Channel Scan: The **Auto Channel Scan** setting can be selected to allow the DIR-810L to choose the channel with the least amount of interference.

Wireless Channel: Indicates the channel setting for the DIR-810L. The Channel can be changed to fit the channel setting for an existing wireless network or to customize the wireless network. If you check **Enable Auto Channel Scan**, this option will be greyed out.

Channel Width: Select the Channel Width:

- 20MHz** - Select if you are not using any 802.11n wireless clients.
- Auto 20/40MHz** - This is the default setting. Select if you are using both 802.11n and non-802.11n wireless devices.
- Auto 20/40/80MHz** - Select if you are using 802.11ac, 802.11n and non-802.11n wireless devices. This option is only available when the 802.11 Mode is set to Mixed 802.11ac.

Visibility Status: Select **Invisible** if you do not want the SSID of your wireless network to be broadcasted by the DIR-810L. If Invisible is selected, the SSID of the DIR-810L will not be seen by Site Survey utilities so your wireless clients will have to know the SSID of your DIR-810L in order to connect to it.

Wireless Security: Refer to page 44 for more information regarding wireless security.

WIRELESS NETWORK SETTINGS

Wireless Band : 5GHz Band

Enable Wireless : Always Add New

Wireless Network Name : (Also called the SSID)

802.11 Mode :

Enable Auto Channel Scan :

Wireless Channel :

Channel Width :

Visibility Status : Visible Invisible

WIRELESS SECURITY MODE

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

Security Mode :

Wireless Security

This section will show you the different levels of security you can use to protect your data from intruders. The DIR-810L offers the following types of security:

- WPA2 (Wi-Fi Protected Access 2)
- WPA (Wi-Fi Protected Access)
- WPA2-PSK (Pre-Shared Key)
- WPA-PSK (Pre-Shared Key)

What is WPA?

WPA (Wi-Fi Protected Access), is a Wi-Fi standard that was designed to improve the security features of WEP (Wired Equivalent Privacy).

The 2 major improvements over WEP:

- Improved data encryption through the Temporal Key Integrity Protocol (TKIP). TKIP scrambles the keys using a hashing algorithm and, by adding an integrity-checking feature, ensures that the keys haven't been tampered with. WPA2 is based on 802.11i and uses Advanced Encryption Standard (AES) instead of TKIP.
- User authentication, which is generally missing in WEP, through the extensible authentication protocol (EAP). WEP regulates access to a wireless network based on a computer's hardware-specific MAC address, which is relatively simple to be sniffed out and stolen. EAP is built on a more secure public-key encryption system to ensure that only authorized network users can access the network.

WPA-PSK/WPA2-PSK uses a passphrase or key to authenticate your wireless connection. The key is an alpha-numeric password between 8 and 63 characters long. The password can include symbols (!?*&_) and spaces. This key must be the exact same key entered on your wireless router or access point.

WPA/WPA2 incorporates user authentication through the Extensible Authentication Protocol (EAP). EAP is built on a more secure public key encryption system to ensure that only authorized network users can access the network.

WPA/WPA2-Personal (PSK)

It is recommended to enable wireless security on your wireless router before your wireless network adapters. Please establish wireless connectivity before enabling encryption.

1. Log into the web-based configuration by opening a web browser and entering the IP address of the router (192.168.0.1). Click on **Setup** and then click **Wireless Settings** on the left side.
2. Next to *Security Mode*, select **WPA-Personal**.
3. Next to *WPA Mode*, select **Auto (WPA or WPA2)**, **WPA2 Only**, or **WPA Only**. Use **Auto** if you have wireless clients using both WPA and WPA2.
4. Next to *Cypher Type*, select **TKIP and AES**, **TKIP**, or **AES**.
5. Next to *Group Key Update Interval*, enter the amount of time before the group key used for broadcast and multicast data is changed (3600 is default).
6. Next to *Pre-Shared Key*, enter a key (passphrase). The key is entered as a pass-phrase in ASCII format at both ends of the wireless connection. The pass-phrase must be between 8-63 characters.
7. Click **Save Settings** to save your settings. If you are configuring the router with a wireless adapter, you will lose connectivity until you enable WPA-PSK on your adapter and enter the same passphrase as you did on the router.

WIRELESS SECURITY MODE

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

Security Mode:

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:

Cipher Type:

Group Key Update Interval: (seconds)

PRE-SHARED KEY

Enter an 8- to 63-character alphanumeric pass-phrase. For good security it should be of ample length and should not be a commonly known phrase.

Pre-Shared Key:

Configure WPA/WPA2-Enterprise (RADIUS)

It is recommended to enable wireless security on your wireless router before your wireless network adapters. Please establish wireless connectivity before enabling encryption.

1. Log into the web-based configuration by opening a web browser and entering the IP address of the router (192.168.0.1). Click on **Setup** and then click **Wireless Settings** on the left side.
2. Next to *Security Mode*, select **WPA-Enterprise**.
3. Next to *WPA Mode*, select **Auto(WPA or WPA2), WPA2 Only, or WPA Only**. Use **Auto** if you have wireless clients using both WPA and WPA2.
4. Next to *Cypher Type*, select **TKIP and AES, TKIP, or AES**.
5. Next to *Group Key Update Interval*, enter the amount of time before the group key used for broadcast and multicast data is changed (3600 is default).
6. Next to *Authentication Timeout* enter a time in minutes.
7. Next to *RADIUS Server IP Address* enter the IP Address of your RADIUS server.

WIRELESS SECURITY MODE

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

Security Mode:

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:

Cipher Type:

Group Key Update Interval: (seconds)

EAP (802.1X)

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

Authentication Timeout: (minutes)

RADIUS server IP Address:

RADIUS server Port:

RADIUS server Shared Secret:

MAC Address Authentication:

8. Next to *RADIUS Server Port*, enter the port you are using with your RADIUS server. 1812 is the default port.
9. Next to *RADIUS Server Shared Secret*, enter the security key.
10. If the *MAC Address Authentication* box is checked, then the user will need to connect from the same computer whenever logging into the wireless network.
11. Click **Advanced** to enter settings for a secondary RADIUS Server.
11. Click **Save Settings** to save your settings.

EAP (802.1X)

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

Authentication Timeout: (minutes)

RADIUS server IP Address:

RADIUS server Port:

RADIUS server Shared Secret:

MAC Address Authentication:

<<Advanced

Optional backup RADIUS server:

Second RADIUS server IP Address:

Second RADIUS server Port:

Second RADIUS server Shared Secret:

Second MAC Address Authentication:

Network Settings

This section will allow you to change the local network settings of the router and to configure the DHCP settings.

Router Settings

Router IP Address: Enter the IP address of the router. The default IP address is 192.168.0.1.

If you change the IP address, once you click **Save Settings**, you will need to enter the new IP address in your browser to get back into the configuration utility.

Subnet Mask: Enter the Subnet Mask. The default subnet mask is 255.255.255.0.

Device Name: Enter a name for the router.

Local Domain Name: Enter the Domain name (Optional).

Enable DNS Relay: Uncheck the box to transfer the DNS server information from your ISP to your computers. If checked, your computers will use the router for a DNS server.

D-Link

DIR-810L //

SETUP ADVANCED TOOLS STATUS SUPPORT

INTERNET
WIRELESS SETTINGS
NETWORK SETTINGS
IPV6
MYDLINK SETTINGS

NETWORK SETTINGS

Use this section to configure the internal network settings of your router and also to configure the built-in DHCP Server to assign IP addresses to the computers on your network. 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.

Save Settings Don't Save Settings

ROUTER SETTINGS

Use this section to configure the internal 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: 192.168.0.1
Subnet Mask: 255.255.255.0
Device Name: dlinkrouter
Local Domain Name:
Enable DNS Relay:

Helpful Hints ...

If you already have a DHCP server on your network or are using static IP addresses on all the devices on your network, uncheck **Enable DHCP Server** to disable this feature.

If you have devices on your network that should always have fixed IP addresses, add a **DHCP Reservation** for each such device.

[More...](#)

DHCP Server Settings

DHCP stands for Dynamic Host Control Protocol. The DIR-810L has a built-in DHCP server. The DHCP Server will automatically assign an IP address to the computers on the LAN/private network. Be sure to set your computers to be DHCP clients by setting their TCP/IP settings to "Obtain an IP Address Automatically." When you turn your computers on, they will automatically load the proper TCP/IP settings provided by the DIR-810L. The DHCP Server will automatically allocate an unused IP address from the IP address pool to the requesting computer. You must specify the starting and ending address of the IP address pool.

Enable DHCP Server: Check this box to enable the DHCP server on your router.
Server: Uncheck to disable this function.

DHCP IP Address Range: Enter the starting and ending IP addresses for the DHCP server's IP assignment.

Note: If you statically (manually) assign IP addresses to your computers or devices, make sure the IP addresses are outside of this range or you may have an IP conflict.

DHCP Lease Time: The length of time for the IP address lease. Enter the Lease time in minutes.

Always Broadcast: Enable this feature to broadcast your networks DHCP server to LAN/WLAN clients.

NetBIOS Announcement: NetBIOS allows LAN hosts to discover all other computers within the network, enable this feature to allow the DHCP Server to offer NetBIOS configuration settings.

Learn NetBIOS from WAN: Enable this feature to allow WINS information to be learned from the WAN side, disable to allow manual configuration.

NetBIOS Scope: This feature allows the configuration of a NetBIOS 'domain' name under which network hosts operates. This setting has no effect if the 'Learn NetBIOS information from WAN' is activated.

DHCP SERVER SETTINGS

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: (minutes)

Always broadcast: (compatibility for some DHCP Clients)

NetBIOS announcement:

Learn NetBIOS from WAN:

NetBIOS Scope: (optional)

NetBIOS node type:

- Broadcast only (use when no WINS servers configured)
- Point-to-Point (no broadcast)
- Mixed-mode (Broadcast then Point-to-Point)
- Hybrid (Point-to-Point then Broadcast)

Primary WINS IP Address:

Secondary WINS IP Address:

NetBIOS Node Type: Select the different type of NetBIOS node; **Broadcast only, Point-to-Point, Mixed-mode,** and **Hybrid.**

WINS IP Address: Enter your WINS Server IP address(es).

DHCP Reservation

If you want a computer or device to always have the same IP address assigned, you can create a DHCP reservation. The router will assign the IP address only to that computer or device.

Note: This IP address must be within the DHCP IP Address Range.

Enable: Check this box to enable the reservation.

Computer Name: Enter the computer name or select from the drop-down menu and click <<.

IP Address: Enter the IP address you want to assign to the computer or device. This IP Address must be within the DHCP IP Address Range.

MAC Address: Enter the MAC address of the computer or device.

Clone Your PC's MAC Address: You can use the **Clone Your PC's MAC Address** button to replace the Internet port's MAC Address with the MAC address of your Ethernet card.

Save: Click **Save** to save your entry. You must click **Save Settings** at the top to activate your reservations.

DHCP Reservations List

DHCP Reservations List: Displays any reservation entries. Displays the host name (name of your computer or device), MAC Address, and IP address.

Enable: Check to enable the reservation.

Edit: Click the edit icon to make changes to the reservation entry.

Delete: Click the trash icon to remove the reservation from the list.

ADD DHCP RESERVATION

Enable :



Computer Name : <<

IP Address :

MAC Address :

DHCP RESERVATIONS LIST				
Enable	Host Name	MAC Address	IP Address	
<input checked="" type="checkbox"/>	GRAPHICTEST	00:15:E9:2E:26:3C	192.168.0.100	

NUMBER OF DYNAMIC DHCP CLIENTS 2					
Hardware Address	Assigned IP	Hostname	Expires		
00:15:E9:2E:26:3C	192.168.0.100	GRAPHICTEST	0 Day, 23:59:38	Revoke	Reserve
CC:B2:55:CC:8B:BA	192.168.0.102	dlinkap	0 Day, 23:17:35	Revoke	Reserve

DHCP RESERVATIONS LIST				
Enable	Host Name	MAC Address	IP Address	
<input checked="" type="checkbox"/>	GRAPHICTEST	00:15:E9:2E:26:3C	192.168.0.100	 

NUMBER OF DYNAMIC DHCP CLIENTS 2					
Hardware Address	Assigned IP	Hostname	Expires		
00:15:E9:2E:26:3C	192.168.0.100	GRAPHICTEST	0 Day, 23:59:38	Revoke	Reserve
CC:B2:55:CC:8B:BA	192.168.0.102	dlinkap	0 Day, 23:17:35	Revoke	Reserve

IPv6

On this page, the user can configure the IPv6 Connection type. There are three ways to set up the IPv6 Internet connection.

For the beginner user that has not configured a router before, click on the **IPv6 Internet Connection Setup Wizard** button and the router will guide you through a few simple steps to get your network up and running. (Refer to page 54.)

For the advanced user that has configured a router before, click on the **Manual IPv6 Internet Connection Setup** button to input all the settings manually. (Refer to page 59.)

If you would like to manually configure the IPv6 local connectivity settings of your router, click on **IPv6 Local Connectivity Settings**.

The screenshot displays the D-Link DIR-810L web interface. The top navigation bar includes the D-Link logo and tabs for SETUP, ADVANCED, TOOLS, STATUS, and SUPPORT. The left sidebar shows a menu with categories: INTERNET, WIRELESS SETTINGS, NETWORK SETTINGS, IPv6, and MYDLINK SETTINGS. The main content area is titled "IPv6 INTERNET CONNECTION" and contains three sections:

- IPv6 INTERNET CONNECTION SETUP WIZARD**: A section for users who prefer a guided setup. It includes a "Note" about following the Quick Installation Guide and a button labeled "IPv6 Internet Connection Setup Wizard".
- MANUAL IPv6 LOCAL CONNECTIVITY SETUP**: A section for manually configuring local connectivity. It includes a button labeled "IPv6 Local Connectivity Settings".
- MANUAL IPv6 INTERNET CONNECTION SETUP**: A section for manually configuring internet settings. It includes a button labeled "Manual IPv6 Internet Connection Setup".

On the right side of the interface, there is a "Helpful Hints ..." section with instructions on how to choose the correct IPv6 Connection Type and a "More..." link. The bottom left corner of the interface features the "WIRELESS" label.

Click on **Enable ULA**. You can check **Use default ULA prefix**, or you can leave the box unchecked and enter the prefix manually in the **ULA Prefix** text box.

IPv6 LOCAL CONNECTIVITY SETTINGS

Use this section to configure Unique Local IPv6 Unicast Addresses(ULA) settings for your router. ULA is intended for local communications and not expected to be routable on the global Internet.

IPv6 ULA Settings

Enable ULA :

Use default ULA prefix :

ULA Prefix : /64

Current IPv6 ULA Settings

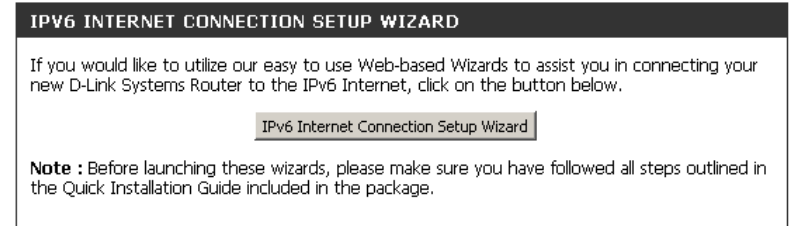
Current ULA Prefix :

LAN IPv6 ULA :

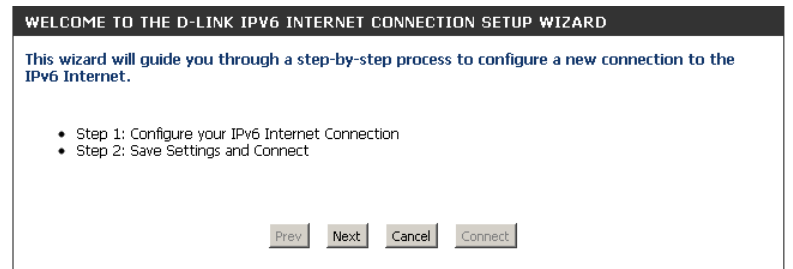
IPv6 Internet Connection Setup Wizard

On this page, the user can configure the IPv6 Connection type using the IPv6 Internet Connection Setup Wizard.

Click the **IPv6 Internet Connection Setup Wizard** button and the router will guide you through a few simple steps to get your network up and running.



Click **Next** to continue to the next page. Click **Cancel** to discard the changes made and return to the main page.



The router will try to detect whether its possible to obtain the IPv6 Internet connection type automatically. If this succeeds then the user will be guided through the input of the appropriate parameters for the connection type found.



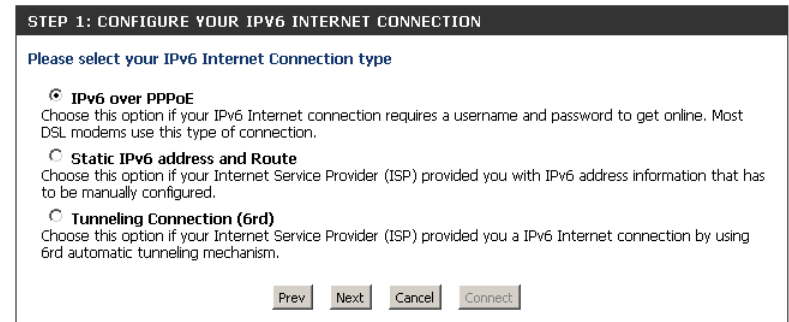
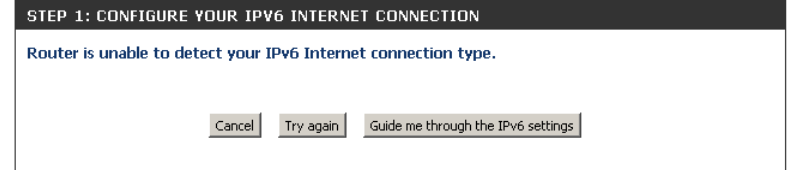
However, if the automatic detection fails, the user will be prompt to either **Try again** or to click on the **Guide me through the IPv6 settings** button to initiate the manual continual of the wizard.

There are several connection types to choose from. If you are unsure of your connection method, please contact your IPv6 Internet Service Provider.

Note: *If using the PPPoE option, you will need to ensure that any PPPoE client software on your computers has been removed or disabled.*

The three options available on this page are **IPv6 over PPPoE**, **Static IPv6 address and Route**, and **Tunneling Connection (6rd)**.

Choose the required IPv6 Internet Connection type and click on the **Next** button to continue. Click on the **Prev** button to return to the previous page. Click on the **Cancel** button to discard all the changes made and return to the main page.



IPv6 over PPPoE

After selecting the IPv6 over PPPoE option, the user will be able to configure the IPv6 Internet connection that requires a username and password to get online. Most DSL modems use this type of connection.

The following parameters will be available for configuration:

PPPoE Session: Select the PPPoE Session value used here. This option will state that this connection shares it's information with the already configured IPv6 PPPoE connection, or the user can create a new PPPoE connection here.

User Name: Enter the PPPoE username used here. If you do not know your user name, please contact your ISP.

Password: Enter the PPPoE password used here. If you do not know your password, please contact your ISP.

Verify Password: Re-enter the PPPoE password used here.

Service Name: Enter the service name for this connection here. This option is optional.

SET USERNAME AND PASSWORD CONNECTION (PPPOE)

To set up this connection you will need to have a Username and Password from your IPv6 Internet Service Provider. If you do not have this information, please contact your ISP.

PPPoE Session : Share with IPv4 Create a new session

Username :

Password :

Verify Password :

Service Name : (optional)

Note: You may also need to provide a Service Name. If you do not have or know this information, please contact your ISP.

Prev Next Cancel Connect

Static IPv6 Address Connection

This mode is used when your ISP provides you with a set IPv6 addresses that does not change. The IPv6 information is manually entered in your IPv6 configuration settings. You must enter the IPv6 address, Subnet Prefix Length, Default Gateway, Primary DNS Server, and Secondary DNS Server. Your ISP provides you with all this information.

Use Link-Local Address: The Link-local address is used by nodes and routers when communicating with neighboring nodes on the same link. This mode enables IPv6-capable devices to communicate with each other on the LAN side.

IPv6 Address: Enter the WAN IPv6 address for the router here.

Subnet Prefix Length: Enter the WAN subnet prefix length value used here.

Default Gateway: Enter the WAN default gateway IPv6 address used here.

Primary IPv6 DNS Server: Enter the WAN primary DNS Server address used here.

Secondary IPv6 DNS Server: Enter the WAN secondary DNS Server address used here.

LAN IPv6 Address: These are the settings of the LAN (Local Area Network) IPv6 interface for the router. The router's LAN IPv6 Address configuration is based on the IPv6 Address and Subnet assigned by your ISP. (A subnet with prefix /64 is supported in LAN.)

SET STATIC IPV6 ADDRESS CONNECTION

To set up this connection you will need to have a complete list of IPv6 information provided by your IPv6 Internet Service Provider. If you have a Static IPv6 connection and do not have this information, please contact your ISP.

Use Link-Local Address :

IPv6 Address :

Subnet Prefix Length :

Default Gateway :

Primary IPv6 DNS Server :

Secondary IPv6 DNS Server :

LAN IPv6 Address : /64

Tunneling Connection (6rd)

After selecting the Tunneling Connection (6rd) option, the user can configure the IPv6 6rd connection settings.

The following parameters will be available for configuration:

6rd IPv6 Prefix: Enter the 6rd IPv6 address and prefix value used here.

IPv4 Address: Enter the IPv4 address used here.

Mask Length: Enter the IPv4 mask length used here.

Assigned IPv6 Prefix: Displays the IPv6 assigned prefix value here.

6rd Border Relay IPv4 Address: Enter the 6rd border relay IPv4 address used here.

IPv6 DNS Server: Enter the primary DNS Server address used here.

SET UP 6RD TUNNELING CONNECTION

To set up this 6rd tunneling connection you will need to have the following information from your IPv6 Internet Service Provider. If you do not have this information, please contact your ISP.

6rd IPv6 Prefix : / 32

IPv4 Address : 10.10.10.106 Mask Length: 8

Assigned IPv6 Prefix : None

6rd Border Relay IPv4 Address : 0.0.0.0

IPv6 DNS Server :

Prev Next Cancel Connect

The IPv6 Internet Connection Setup Wizard is complete.

Click on the **Connect** button to continue. Click on the **Prev** button to return to the previous page. Click on the **Cancel** button to discard all the changes made and return to the main page.

SETUP COMPLETE!

The IPv6 Internet Connection Setup Wizard has completed. Click the Connect button to save your settings and reboot the router.

Prev Next Cancel Connect

IPv6 Manual Setup

There are several connection types to choose from: **Auto Detection**, **Static IPv6**, **Autoconfiguration (SLAAC/DHCPv6)**, **PPPoE**, **IPv6 in IPv4 Tunnel**, **6to4**, **6rd**, and **Local Connectivity Only**. If you are unsure of your connection method, please contact your IPv6 Internet Service Provider.

Note: If using the PPPoE option, you will need to ensure that any PPPoE client software on your computers has been removed or disabled.

Auto Detection

Select **Auto Detection** to have the router detect and automatically configure your IPv6 setting from your ISP.

Click **Save Settings**.

IPv6

Use this section to configure your IPv6 Connection type. If you are unsure of your connection method, please contact your Internet Service Provider.

IPv6 CONNECTION TYPE

Choose the mode to be used by the router to the IPv6 Internet.

My IPv6 Connection is :

IPv6 DNS SETTINGS

Obtain a DNS server address automatically or enter a specific DNS server address.

Obtain a DNS server address automatically
 Use the following IPv6 DNS servers

Primary IPv6 DNS Server :

Secondary IPv6 DNS Server :

LAN IPv6 ADDRESS SETTINGS

Use this section to configure the internal network settings of your router. If you change the LAN IPv6 Address here, you may need to adjust your PC network settings to access the network again.

Enable DHCP-PD :

LAN IPv6 Address : /64

LAN IPv6 Link-Local Address : FE80::CAD3:A3FF:FE56:371C/64

ADDRESS AUTOCONFIGURATION SETTINGS

Use this section to setup IPv6 Autoconfiguration to assign IPv6 addresses to the computers in your network. You can also enable DHCP-PD to delegate prefixes for router in your LAN.

Enable automatic IPv6 address assignment :

Enable Automatic DHCP-PD in LAN :

Autoconfiguration Type :

Router Advertisement Lifetime : (minutes)

Static IPv6

My IPv6 Connection is: Select **Static IPv6** from the drop-down menu.

WAN IPv6 Address Settings: Enter the address settings supplied by your Internet provider (ISP).

LAN IPv6 Address: Enter the LAN (local) IPv6 address for the router.

LAN IPv6 Link-Local Address: Displays the Router's LAN Link-Local Address.

Enable Automatic IPv6 address assignment: Check to enable the Autoconfiguration feature.

Autoconfiguration Type: Select **Stateful (DHCPv6)**, **SLAAC + RDNSS** or **SLAAC + Stateless DHCPv6**.

IPv6 Address Range Start: Enter the start IPv6 Address for the DHCPv6 range for your local computers.

IPv6 Address Range End: Enter the end IPv6 Address for the DHCPv6 range for your local computers.

Router Advertisement Lifetime: Enter the Router Advertisement Lifetime (in minutes).

Click **Save Settings**.

IPv6

Use this section to configure your IPv6 Connection type. If you are unsure of your connection method, please contact your Internet Service Provider.

IPv6 CONNECTION TYPE

Choose the mode to be used by the router to the IPv6 Internet.

My IPv6 Connection is :

WAN IPv6 ADDRESS SETTINGS

Enter the IPv6 address information provided by your Internet Service Provider (ISP).

Use Link-Local Address :

IPv6 Address :

Subnet Prefix Length :

IPv6 Default Gateway :

Primary IPv6 DNS Server :

Secondary IPv6 DNS Server :

LAN IPv6 ADDRESS SETTINGS

Use this section to configure the internal network settings of your router. If you change the LAN IPv6 Address here, you may need to adjust your PC network settings to access the network again.

LAN IPv6 Address : /64

LAN IPv6 Link-Local Address : FE80::CAD3:A3FF:FE56:371C/64

ADDRESS AUTOCONFIGURATION SETTINGS

Use this section to setup IPv6 Autoconfiguration to assign IPv6 addresses to the computers in your network.

Enable automatic IPv6 address assignment :

Autoconfiguration Type :

Router Advertisement Lifetime : (minutes)

Autoconfiguration

My IPv6 Connection is: Select **Autoconfiguration (SLAAC/DHCPv6)** from the drop-down menu.

IPv6 DNS Settings: Select either **Obtain DNS server address automatically** or **Use the following IPv6 DNS servers.**

Primary/Secondary IPv6 DNS Server: Enter the primary and secondary DNS server addresses.

Enable DHCP-PD: Check this box to enable DHCP prefix delegation.

LAN IPv6 Address: Enter the LAN (local) IPv6 address for the router.

LAN IPv6 Link-Local Address: Displays the Router's LAN Link-Local Address.

Enable automatic IPv6 address assignment: Check to enable the Autoconfiguration feature.

Autoconfiguration Type: Select **Stateful (DHCPv6)**, **SLAAC + RDNSS** or **SLAAC + Stateless DHCPv6.**

IPv6 Address Range Start: Enter the start IPv6 Address for the DHCPv6 range for your local computers.

IPv6 Address Range End: Enter the end IPv6 Address for the DHCPv6 range for your local computers.

Router Advertisement Lifetime: Enter the Router Advertisement Lifetime (in minutes).

Click **Save Settings.**

IPv6

Use this section to configure your IPv6 Connection type. If you are unsure of your connection method, please contact your Internet Service Provider.

IPv6 CONNECTION TYPE

Choose the mode to be used by the router to the IPv6 Internet.

My IPv6 Connection is :

IPv6 DNS SETTINGS

Obtain a DNS server address automatically or enter a specific DNS server address.

Obtain a DNS server address automatically
 Use the following IPv6 DNS servers

Primary IPv6 DNS Server :

Secondary IPv6 DNS Server :

LAN IPv6 ADDRESS SETTINGS

Use this section to configure the internal network settings of your router. If you change the LAN IPv6 Address here, you may need to adjust your PC network settings to access the network again.

Enable DHCP-PD :
 LAN IPv6 Address : /64
 LAN IPv6 Link-Local Address : FE80::CAD3:A3FF:FE56:371C/64

ADDRESS AUTOCONFIGURATION SETTINGS

Use this section to setup IPv6 Autoconfiguration to assign IPv6 addresses to the computers in your network. You can also enable DHCP-PD to delegate prefixes for router in your LAN.

Enable automatic IPv6 address assignment :
 Enable Automatic DHCP-PD in LAN :
 Autoconfiguration Type :
 Router Advertisement Lifetime : (minutes)

PPPoE

My IPv6 Connection is: Select **PPPoE** from the drop-down menu.

PPPoE: Enter the PPPoE account settings supplied by your Internet provider (ISP).

PPPoE Session: Select **Create a new session** if you have IPv6.

Address Mode: Select **Static IP** if your ISP assigned you the IP address, subnet mask, gateway, and DNS server addresses. In most cases, select **Dynamic IP**.

IP Address: Enter the IP address (Static PPPoE only).

User Name: Enter your PPPoE username.

Password: Enter your PPPoE password and then retype the password in the next box.

Service Name: Enter the ISP Service Name (optional).

Reconnect Mode: Select either **Always-on**, **On-Demand**, or **Manual**.

Maximum Idle Time: Enter a maximum idle time during which the Internet connection is maintained during inactivity. To disable this feature, enable Auto-reconnect.

MTU: Maximum Transmission Unit - you may need to change the MTU for optimal performance with your specific ISP. 1492 is the default MTU.

IPv6 DNS Settings: Select either **Obtain IPv6 DNS servers automatically** or **Use the following IPv6 DNS servers**

Primary/Secondary IPv6 DNS Servers: Enter the primary and secondary DNS server addresses.

IPv6

Use this section to configure your IPv6 Connection type. If you are unsure of your connection method, please contact your Internet Service Provider.

IPv6 CONNECTION TYPE

Choose the mode to be used by the router to the IPv6 Internet.

My IPv6 Connection is :

PPPOE

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

PPPoE Session : Share with IPv4 Create a new session
Address Mode : Dynamic IP Static IP
IP Address :
User Name :
Password :
Verify Password :
Service Name : (optional)
Reconnect Mode : Always on On demand Manual
Maximum Idle Time : (minutes, 0=infinite)
MTU : (bytes) MTU default = 1492

IPv6 DNS SETTINGS

Enter a specific DNS server address

Obtain IPv6 DNS server address automatically
 Use the following IPv6 DNS servers
Primary IPv6 DNS Server :
Secondary IPv6 DNS Server :

LAN IPv6 ADDRESS SETTINGS

Use this section to configure the internal network settings of your router. If you change the LAN IPv6 Address here, you may need to adjust your PC network settings to access the network again.

Enable DHCP-PD :
LAN IPv6 Address : /64
LAN IPv6 Link-Local Address : FE80::CAD3:A3FF:FE56:371C/64

ADDRESS AUTOCONFIGURATION SETTINGS

Use this section to setup IPv6 Autoconfiguration to assign IPv6 addresses to the computers in your network. You can also enable DHCP-PD to delegate prefixes for router in your LAN.

Enable automatic IPv6 address assignment :
Enable Automatic DHCP-PD in LAN :
Autoconfiguration Type :
Router Advertisement Lifetime : (minutes)

Enable DHCP-PD: Check this box to enable DHCP prefix delegation.

LAN IPv6 Address: Enter the LAN (local) IPv6 address for the router.

LAN IPv6 Link-Local Address: Displays the Router's LAN Link-Local Address.

Enable Automatic IPv6 address assignment: Check to enable the IPv6 Autoconfiguration.

Enable Automatic DHCP-PD in LAN: Check to enable delegation of prefixes for router addresses.

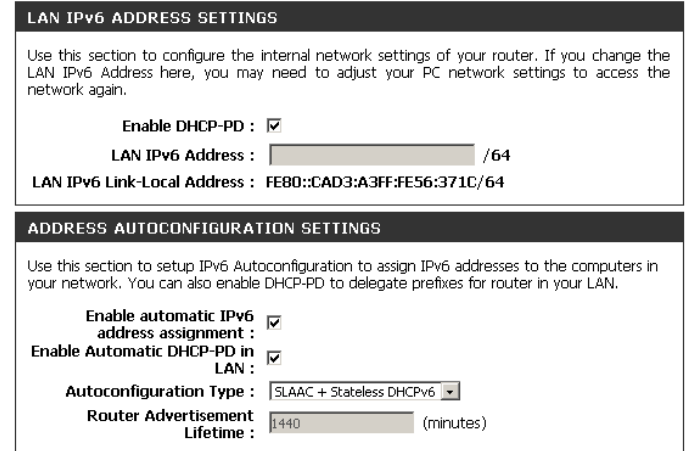
Autoconfiguration Type: Select **Stateful (DHCPv6)**, **SLAAC + RDNSS** or **SLAAC + Stateless DHCPv6**.

IPv6 Address Range Start: Enter the start IPv6 Address for the DHCPv6 range for your local computers.

IPv6 Address Range End: Enter the end IPv6 Address for the DHCPv6 range for your local computers.

Router Advertisement Lifetime: Enter the Router Advertisement Lifetime (in minutes).

Click **Save Settings**.



LAN IPv6 ADDRESS SETTINGS

Use this section to configure the internal network settings of your router. If you change the LAN IPv6 Address here, you may need to adjust your PC network settings to access the network again.

Enable DHCP-PD :

LAN IPv6 Address : /64

LAN IPv6 Link-Local Address : FE80::CAD3:A3FF:FE56:371C/64

ADDRESS AUTOCONFIGURATION SETTINGS

Use this section to setup IPv6 Autoconfiguration to assign IPv6 addresses to the computers in your network. You can also enable DHCP-PD to delegate prefixes for router in your LAN.

Enable automatic IPv6 address assignment :

Enable Automatic DHCP-PD in LAN :

Autoconfiguration Type : SLAAC + Stateless DHCPv6

Router Advertisement Lifetime : 1440 (minutes)

IPv6 in IPv4 Tunneling

My IPv6 Connection is: Select **IPv6 in IPv4 Tunnel** from the drop-down menu.

IPv6 in IPv4 Tunnel Settings: Enter the settings supplied by your Internet provider (ISP).

IPv6 DNS Settings: Select either **Obtain IPv6 DNS server address automatically** or **Use the following IPv6 DNS servers**

Primary/Secondary IPv6 DNS Servers: Enter the primary and secondary DNS server addresses.

Enable DHCP-PD: Check this box to enable DHCP prefix delegation.

LAN IPv6 Address: Enter the LAN (local) IPv6 address for the router.

LAN IPv6 Link-Local Address: Displays the Router's LAN Link-Local Address.

Enable Automatic IPv6 Address Assignment: Check to enable the Autoconfiguration feature.

Enable Automatic DHCP-PD in LAN: Check to enable delegation of prefixes for router addresses.

Autoconfiguration Type: Select **Stateful (DHCPv6)**, **SLAAC + RDNSS** or **SLAAC + Stateless DHCPv6**.

IPv6 Address Range Start: Enter the start IPv6 Address for the DHCPv6 range for your local computers.

IPv6 Address Range End: Enter the end IPv6 Address for the DHCPv6 range for your local computers.

Router Advertisement Lifetime: Enter the Router Advertisement Lifetime (in minutes).

Click **Save Settings**.

IPv6

Use this section to configure your IPv6 Connection type. If you are unsure of your connection method, please contact your Internet Service Provider.

Save Settings
Don't Save Settings

IPv6 CONNECTION TYPE

Choose the mode to be used by the router to the IPv6 Internet.

My IPv6 Connection is : IPv6 in IPv4 Tunnel

IPv6 in IPv4 TUNNEL SETTINGS

Enter the IPv6 in IPv4 Tunnel information provided by your Tunnel Broker.

Remote IPv4 Address : 0.0.0.0

Remote IPv6 Address :

Local IPv4 Address : 10.10.10.106

Local IPv6 Address :

IPv6 DNS SETTINGS

Obtain a DNS server address automatically or enter a specific DNS server address.

Obtain a DNS server address automatically
 Use the following IPv6 DNS servers

Primary IPv6 DNS Server :

Secondary IPv6 DNS Server :

LAN IPv6 ADDRESS SETTINGS

Use this section to configure the internal network settings of your router. If you change the LAN IPv6 Address here, you may need to adjust your PC network settings to access the network again.

Enable DHCP-PD :

LAN IPv6 Address : /64

LAN IPv6 Link-Local Address : FE80::CAD3:A3FF:FE56:371C/64

ADDRESS AUTOCONFIGURATION SETTINGS

Use this section to setup IPv6 Autoconfiguration to assign IPv6 addresses to the computers in your network. You can also enable DHCP-PD to delegate prefixes for router in your LAN.

Enable automatic IPv6 address assignment :

Enable Automatic DHCP-PD in LAN :

Autoconfiguration Type : SLAAC + Stateless DHCPv6

Router Advertisement Lifetime : 1440 (minutes)

6 to 4 Tunneling

My IPv6 Connection is: Select **6 to 4** from the drop-down menu.

6to4 Settings: Enter the IPv6 settings supplied by your Internet provider (ISP).

Primary/Secondary IPv6 DNS Servers: Enter the primary and secondary IPv6 DNS server addresses.

LAN IPv6 Address: Enter the LAN (local) IPv6 address for the router.

LAN IPv6 Link-Local Address: Displays the Router's LAN Link-Local Address.

Enable Automatic IPv6 Address Assignment: Check to enable the Autoconfiguration feature.

Autoconfiguration Type: Select **Stateful (DHCPv6)**, **SLAAC + RDNSS** or **SLAAC + Stateless DHCPv6**.

IPv6 Address Range Start: Enter the start IPv6 Address for the DHCPv6 range for your local computers.

IPv6 Address Range End: Enter the end IPv6 Address for the DHCPv6 range for your local computers.

Router Advertisement Lifetime: Enter the Router Advertisement Lifetime (in minutes).

Click **Save Settings**.

IPv6

Use this section to configure your IPv6 Connection type. If you are unsure of your connection method, please contact your Internet Service Provider.

Save Settings Don't Save Settings

IPv6 CONNECTION TYPE

Choose the mode to be used by the router to the IPv6 Internet.

My IPv6 Connection is : 6to4

6to4 SETTINGS

Enter the IPv6 address information provided by your Internet Service Provider (ISP).

6to4 Address : 2002:0A0A:0A6A::0A0A:0A6A

6to4 Relay : 192.88.99.1

Primary IPv6 DNS Server :

Secondary IPv6 DNS Server :

LAN IPv6 ADDRESS SETTINGS

Use this section to configure the internal network settings of your router. If you change the LAN IPv6 Address here, you may need to adjust your PC network settings to access the network again.

LAN IPv6 Address : 2002:0A0A:0A6A: 1 ::1/64

LAN IPv6 Link-Local Address : FE80::CAD3:A3FF:FE56:371C/64

ADDRESS AUTOCONFIGURATION SETTINGS

Use this section to setup IPv6 Autoconfiguration to assign IPv6 addresses to the computers in your network.

Enable automatic IPv6 address assignment :

Autoconfiguration Type : SLAAC + Stateless DHCPv6

Router Advertisement Lifetime : 1440 (minutes)

6rd

My IPv6 Connection is: Select **6rd** from the drop-down menu.

6rd Settings: Enter the address settings supplied by your Internet Service provider (ISP).

Primary/Secondary IPv6 DNS Servers: Enter the primary and secondary IPv6 DNS server addresses.

LAN IPv6 Address: Enter the LAN (local) IPv6 address for the router.

LAN IPv6 Link-Local Address: Displays the Router's LAN Link-Local Address.

Enable Automatic IPv6 address assignment: Check to enable the Autoconfiguration feature.

Autoconfiguration Type: Select **Stateful (DHCPv6)**, **SLAAC+RDNSS** or **SLAAC + Stateless DHCPv6**.

Router Advertisement Lifetime: Enter the Router Advertisement Lifetime (in minutes).

Click **Save Settings**.

IPv6

Use this section to configure your IPv6 Connection type. If you are unsure of your connection method, please contact your Internet Service Provider.

IPv6 CONNECTION TYPE

Choose the mode to be used by the router to the IPv6 Internet.

My IPv6 Connection is :

6RD SETTINGS

Enter the IPv6 address information provided by your Internet Service Provider (ISP).

Enable Hub and Spoke Mode :

6rd Configuration : 6rd DHCPv4 Option Manual Configuration

6rd IPv6 Prefix : /

IPv4 Address: 10.10.10.106 Mask Length:

Assigned IPv6 Prefix : None

6rd Border Relay IPv4 Address :

Primary IPv6 DNS Server :

Secondary IPv6 DNS Server :

LAN IPv6 ADDRESS SETTINGS

Use this section to configure the internal network settings of your router. If you change the LAN IPv6 Address here, you may need to adjust your PC network settings to access the network again.

LAN IPv6 Address : None

LAN IPv6 Link-Local Address : FE80::CAD3:A3FF:FE56:371C/64

ADDRESS AUTOCONFIGURATION SETTINGS

Use this section to setup IPv6 Autoconfiguration to assign IPv6 addresses to the computers in your network. You can also enable DHCP-PD to delegate prefixes for router in your LAN.

Enable automatic IPv6 address assignment :

Autoconfiguration Type :

Router Advertisement Lifetime : (minutes)

Local Connectivity

My IPv6 Connection is: Select **Local Connectivity Only** from the drop-down menu.

LAN IPv6 Link-Local Address: Displays the IPv6 address of the router.

Click **Save Settings**.

The screenshot displays the IPv6 configuration page. At the top, there is an orange header with the text "IPv6". Below this, a grey box contains the instruction: "Use this section to configure your IPv6 Connection type. If you are unsure of your connection method, please contact your Internet Service Provider." Below the instruction are two buttons: "Save Settings" and "Don't Save Settings".

The next section is titled "IPv6 CONNECTION TYPE" in a dark grey header. It contains the instruction: "Choose the mode to be used by the router to the IPv6 Internet." Below this, the text "My IPv6 Connection is :" is followed by a dropdown menu currently set to "Local Connectivity Only".

The final section is titled "LAN IPv6 ADDRESS SETTINGS" in a dark grey header. It contains the text: "LAN IPv6 address for local IPv6 communications." Below this, the text "LAN IPv6 Link-Local Address :" is followed by the value "FE80::CAD3:A3FF:FE56:371C/64".

mydlink Settings

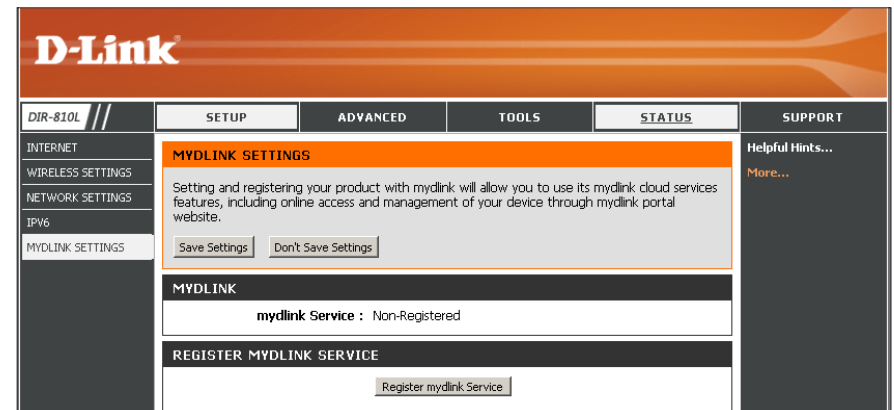
The DIR-810L features a cloud service that pushes information such as firmware upgrade notifications, user activity, and intrusion alerts to the mydlink™ app on Android and Apple mobile devices. To insure that your router is up-to-date with the latest features, mydlink™ will notify you when an update is available for your router. You can also monitor a user's online activity with real-time website browsing history, maintaining a safe and secure environment, especially for children at home.

On this page the user can configure the mydlink™ settings for this router. This feature will allow us to use the mydlink cloud services that includes online access and management of this router through the mydlink portal website or portable device applications like iOS apps and Android applications.

In the mydlink section, we can view the registration status of the mydlink account service. The mydlink Service field will either display Registered or Non-Registered. In the Register mydlink Service section, we can register or modify a mydlink account. Click on the **Register mydlink Service** button to initiate this procedure.

mydlink Service: Displays whether your device is registered with a mydlink account or not. If you are registered, your mydlink e-mail address will be displayed.

Register mydlink Service: Click to go to the mydlink website to register or edit your settings. Please refer to page 19 for the registration steps.



Advanced Virtual Server

This will allow you to open a single port. If you would like to open a range of ports, refer to the next page.

Name: Enter a name for the rule or select an application from the drop-down menu. Select an application and click << to populate the fields.

IP Address: Enter the IP address of the computer on your local network that you want to allow the incoming service to. If your computer is receiving an IP address automatically from the router (DHCP), you computer will be listed in the "Computer Name" drop-down menu. Select your computer and click <<.

Private Port/ Public Port: Enter the port that you want to open next to Private Port and Public Port. The private and public ports are usually the same. The public port is the port seen from the Internet side, and the private port is the port being used by the application on the computer within your local network.

Protocol Type: Select **TCP**, **UDP**, or **Both** from the drop-down menu.

Schedule: The schedule of time when the Virtual Server Rule will be enabled. The schedule may be set to Always, which will allow the particular service to always be enabled. You can create your own times in the **Tools** > **Schedules** section.

Inbound Filter: Select **Allow All** (most common) or a created Inbound filter. You may create your own inbound filters in the **Advanced** > **Inbound Filter** page.

D-Link

DIR-810L // SETUP ADVANCED TOOLS STATUS SUPPORT

VIRTUAL SERVER

The Virtual Server option allows you to define a single public port on your router for redirection to an internal LAN IP Address and Private LAN port if required. This feature is useful for hosting online services such as FTP or Web Servers.

Save Settings Don't Save Settings

24 -- VIRTUAL SERVERS LIST

	Name	IP Address	Port	Traffic Type	Schedule
<input type="checkbox"/>	<< Application Name	<< Computer Name	Public Port 0	Protocol TCP	Schedule Always
<input type="checkbox"/>	<< Application Name	<< Computer Name	Private Port 0	Protocol TCP	Inbound Filter Allow All
<input type="checkbox"/>	<< Application Name	<< Computer Name	Public Port 0	Protocol TCP	Schedule Always
<input type="checkbox"/>	<< Application Name	<< Computer Name	Private Port 0	Protocol TCP	Inbound Filter Allow All

Helpful Hints ...

Check the **Application Name** drop down menu for a list of predefined server types. If you select one of the predefined server types, click the arrow button next to the drop down menu to fill out the corresponding field.

You can select a computer from the list of DHCP clients in the **Computer Name** drop down menu, or you can manually enter the IP address of the computer at which you would like to open the specified port.

Select a schedule for when the virtual server will be enabled. If you do not see the schedule you need in the list of schedules, go to the **Tools** → **Schedules** screen and create a new schedule.

Select a filter that restricts the Internet hosts that can access this virtual server to hosts that you trust. If you do

Port Forwarding

This will allow you to open a single port or a range of ports.

Name: Enter a name for the rule or select an application from the drop-down menu. Select an application and click << to populate the fields.

IP Address: Enter the IP address of the computer on your local network that you want to allow the incoming service to. If your computer is receiving an IP address automatically from the router (DHCP), your computer will be listed in the “Computer Name” drop-down menu. Select your computer and click <<.

Ports to Open TCP/UDP: Enter the TCP and/or UDP port or ports that you want to open. You can enter a single port or a range of ports. Separate ports with a comma.

Example: 24,1009,3000-4000

Schedule: The schedule of time when the Virtual Server Rule will be enabled. The schedule may be set to **Always**, which will allow the particular service to always be enabled. You can create your own times in the **Tools > Schedules** section.

Inbound Filter: Select **Allow All** (most common) or a created Inbound filter. You may create your own inbound filters in the **Advanced > Inbound Filter** page.

D-Link

DIR-810L // SETUP ADVANCED TOOLS STATUS SUPPORT

PORT FORWARDING

This option is used to open multiple ports or a range of ports in your router and redirect data through those ports to a single PC on your network. This feature allows you to enter ports in various formats including, Port Ranges (100-150), Individual Ports (80, 68, 888), or Mixed (1020-5000, 689).

Save Settings Don't Save Settings

24--PORT FORWARDING RULES

	Name	IP Address	Ports to Open	Schedule	Inbound Filter
<input type="checkbox"/>	<< Application Name	<< Computer Name	TCP 0	Always	Allow All
<input type="checkbox"/>	<< Application Name	<< Computer Name	UDP 0	Always	Allow All
<input type="checkbox"/>	<< Application Name	<< Computer Name	TCP 0	Always	Allow All
<input type="checkbox"/>	<< Application Name	<< Computer Name	UDP 0	Always	Allow All

Helpful Hints ...

Check the **Application Name** drop down menu for a list of predefined applications. If you select one of the predefined applications, click the arrow button next to the drop down menu to fill out the corresponding field.

You can select a computer from the list of DHCP clients in the **Computer Name** drop down menu, or you can manually enter the IP address of the LAN computer to which you would like to open the specified port.

Select a schedule for when the rule will be enabled. If you do not see the schedule you need in the list of schedules, go to the **Tools → Schedules** screen and create a new schedule.

You can enter ports in various formats:
Range (50-100) Individual (80, 68, 888) Mixed (1020-5000, 689)

Application Rules

Some applications require multiple connections, such as Internet gaming, video conferencing, Internet telephony and others. These applications have difficulties working through NAT (Network Address Translation). Special Applications makes some of these applications work with the DIR-810L. If you need to run applications that require multiple connections, specify the port normally associated with an application in the "Trigger Port" field, select the protocol type as TCP or UDP, then enter the firewall (public) ports associated with the trigger port to open them for inbound traffic.

The DIR-810L provides some predefined applications in the table on the bottom of the web page. Select the application you want to use and enable it.

Name: Enter a name for the rule. You may select a pre-defined application from the drop-down menu and click <<.

Trigger: This is the port used to trigger the application. It can be either a single port or a range of ports.

Traffic Type: Select the protocol of the trigger port (TCP, UDP, or Both).

Firewall: This is the port number on the Internet side that will be used to access the application. You may define a single port or a range of ports. You can use a comma to add multiple ports or port ranges.

Traffic Type: Select the protocol of the firewall port (TCP, UDP, or Both).

Schedule: The schedule of time when the Application Rule will be enabled. The schedule may be set to **Always**, which will allow the particular service to always be enabled. You can create your own times in the **Tools > Schedules** section.

QoS Engine

The QoS Engine option helps improve your network gaming performance by prioritizing applications. By default the QoS Engine settings are disabled and application priority is not automatically classified.

Enable QoS: This option is disabled by default. Check the box to enable this option for providing better performance with online games and other interactive applications, such as VoIP.

Automatic Uplink Speed: Automatic Uplink speed, which is determined by your ISP, is the data transfer rate from the router to your ISP. This option is enabled by default when the *Enable QoS Engine* option is checked. If you wish to limit your uplink speed, uncheck the *Automatic Uplink Speed* checkbox. This will allow you to enter the uplink speed manually where it says *Manual Uplink Speed*, or select a rate from the drop-down menu that says *Select Transmission Rate*.

Measured Uplink Speed: This field displays the detected uplink speed.

QoS Engine Rules: A QoS Engine Rule identifies a specific message flow and assigns a priority to that flow. For most applications, automatic classification will be adequate, and specific QoS Engine Rules will not be required.

The screenshot shows the D-Link configuration interface for the QoS Engine. The 'QoS Engine' section is active, displaying the following settings:

- Enable QoS Engine:**
- Automatic Uplink Speed:**
- Measured Uplink Speed:** Not Estimated
- Manual Uplink Speed:** 128 kbps (with a dropdown for 'Select Transmission Rate')

Below the setup section, there are two 'QoS Engine Rules' listed:

Name	Priority	Protocol
[Empty]	1 (1..255)	TCP
Local IP Range		Local Port Range
0.0.0.0 to 255.255.255.255		0 to 65535
Remote IP Range		Remote Port Range
0.0.0.0 to 255.255.255.255		0 to 65535
Name	Priority	Protocol
[Empty]	1 (1..255)	TCP
Local IP Range		Local Port Range
0.0.0.0 to 255.255.255.255		0 to 65535
Remote IP Range		Remote Port Range
0.0.0.0 to 255.255.255.255		0 to 65535

The QoS Engine supports overlaps between rules, where more than one rule can match for a specific message flow. If more than one rule is found to match, the rule with the highest priority will be used.

Name: Create a name that is meaningful to you for the rule.

Priority: The priority of the message flow is entered here -- 1 receives the highest priority (most urgent) and 255 receives the lowest priority (least urgent).

Protocol: The protocol used by the messages.

Local IP Range: The rule applies to a flow of messages whose LAN-side IP address falls within the range set here.

Local Port Range: The rule applies to a flow of messages whose LAN-side port number is within the range set here.

Remote IP Range: The rule applies to a flow of messages whose WAN-side IP address falls within the range set here.

Remote Port Range: The rule applies to a flow of messages whose WAN-side port number is within the range set here.

Click on the **Save Settings** button to accept the changes made, or click on **Don't Save Settings** to discard the changes.

Network (MAC) Filters

Use MAC (Media Access Control) Filters to allow or deny LAN (Local Area Network) computers by their MAC addresses from accessing the network. You can either manually add a MAC address or select the MAC address from the list of clients that are currently connected to the Broadband Router.

Configure MAC Filtering: Select **Turn MAC Filtering Off, Allow MAC addresses listed below**, or **Deny MAC addresses listed below** from the drop-down menu.

MAC Address: Enter the MAC address you would like to filter.

To find the MAC address on a computer, please refer to the *Networking Basics* section in this manual.

DHCP Client List: Select a DHCP client from the drop-down menu and click << to copy that MAC Address.

Click **Clear** to remove a MAC Address from the MAC filtering list. Click **Save Settings** to accept the changes made, or click **Don't Save Settings** to discard the changes.

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DIR-810L // SETUP ADVANCED TOOLS STATUS SUPPORT

MAC ADDRESS FILTER

The MAC (Media Access Controller) Address filter option is used to control network access based on the MAC Address of the network adapter. A MAC address is a unique ID assigned by the manufacturer of the network adapter. This feature can be configured to ALLOW or DENY network/Internet access.

Save Settings Don't Save Settings

24 -- MAC FILTERING RULES

Configure MAC Filtering below:
Turn MAC Filtering OFF

MAC Address		DHCP Client List	
00:00:00:00:00:00	<<	Computer Name	Clear
00:00:00:00:00:00	<<	Computer Name	Clear
00:00:00:00:00:00	<<	Computer Name	Clear
00:00:00:00:00:00	<<	Computer Name	Clear
00:00:00:00:00:00	<<	Computer Name	Clear

Helpful Hints...

Create a list of MAC addresses that you would either like to allow or deny access to your network.

Computers that have obtained an IP address from the router's DHCP server will be in the DHCP Client List. Select a device from the drop down menu, then click the arrow to add that device's MAC address to the list.

Click the **Clear** button to remove the MAC address from the MAC Filtering list.

[More...](#)

Access Control

The Access Control section allows you to control access in and out of your network. Use this feature as Parental Controls to only grant access to approved sites, limit web access based on time or dates, and/or block access from applications like P2P utilities or games.

Enable Access Control: Check the **Enable Access Control** box, and then click on **Add Policy** to start the Wizard.

The screenshot shows the D-Link DIR-810L web interface. The top navigation bar includes 'SETUP', 'ADVANCED', 'TOOLS', 'STATUS', and 'SUPPORT'. The left sidebar lists various configuration options, with 'ACCESS CONTROL' selected. The main content area is titled 'ACCESS CONTROL' and contains the following text: 'The Access Control option allows you to control access in and out of your network. Use this feature as Access Controls to only grant access to approved sites, limit web access based on time or dates, and/or block internet access for applications like P2P utilities or games.' Below this text are 'Save Settings' and 'Don't Save Settings' buttons. The 'Enable Access Control' checkbox is checked, and an 'Add Policy' button is located below it. A 'POLICY TABLE' section is visible at the bottom, showing a table with columns for 'Enable Policy', 'Machine', 'Filtering', 'Logged', and 'Schedule'. On the right side, there is a 'Helpful Hints...' section with instructions on how to use the 'Add Policy' and 'Delete' buttons.

Access Control Wizard

Click **Next** to continue with the wizard.

The screenshot shows the 'ADD NEW POLICY' wizard screen. The title is 'ADD NEW POLICY'. The main text reads: 'This wizard will guide you through the following steps to add a new policy for Access Control.' Below this, there is a list of six steps:

- Step 1 - Choose a unique name for your policy
- Step 2 - Select a schedule
- Step 3 - Select the machine to which this policy applies
- Step 4 - Select filtering method
- Step 5 - Select filters
- Step 6 - Configure Web Access Logging

 At the bottom of the screen, there are four buttons: 'Prev', 'Next', 'Save', and 'Cancel'. The 'Next' button is highlighted, indicating it is the next step in the wizard.

Enter a name for the policy and then click **Next** to continue.

STEP 1: CHOOSE POLICY NAME

Choose a unique name for your policy.

Policy Name:

Prev Next Save Cancel

Select a schedule (i.e., **Always**) from the drop-down menu and then click **Next** to continue.

STEP 2: SELECT SCHEDULE

Choose a schedule to apply to this policy.

Always

Details: Always

Prev Next Save Cancel

Enter the following information and then click **Next** to continue.

- **Address Type** - Select **IP**, **MAC**, or **Other Machines**.
- **IP Address** - Enter the IP address of the computer you want to apply the rule to, or select **Computer Name**.
- **Machine Address** - Enter the PC MAC address or click on **Clone Your PC's MAC Address**.

STEP 3: SELECT MACHINE

Select the machine to which this policy applies.

Specify a machine with its IP or MAC address, or select "Other Machines" for machines that do not have a policy.

Address Type: IP MAC Other Machines

IP Address: << Computer Name

Machine Address: << Computer Name

Copy Your PC's MAC Address

OK Cancel

Machine

Prev Next Save Cancel

Click **OK**, and click **Next** to continue.

Select the filtering method.

STEP 4: SELECT FILTERING METHOD

Select the method for filtering.

Method: Log Web Access Only Block All Access Block Some Access

Apply Web Filter:

Apply Advanced Port Filters:

Prev Next Save Cancel

If you choose to *Block Some Access*, check **Apply Web Filter** and/or **Apply Advanced Port Filters**.

STEP 4: SELECT FILTERING METHOD

Select the method for filtering.

Method: Log Web Access Only Block All Access Block Some Access

Apply Web Filter:

Apply Advanced Port Filters:

Prev Next Save Cancel

Click **Next** to continue.

Add Port Filter Rules:

Enable - Check to enable the rule.

Name - Enter a name for your rule.

Dest IP Start - Enter the starting IP address.

Dest IP End - Enter the ending IP address.

Protocol - Select the protocol.

Dest Port Start - Enter the starting port number.

Dest Port End - Enter the ending port number.

Click **Next**.

To enable **Web Access Logging**, click **Enabled**.

Click **Save** to save the access control rule.

Your newly created policy will now show up under *Policy Table*.

STEP 5: PORT FILTER

Add Port Filters Rules.
Specify rules to prohibit access to specific IP addresses and ports.

Enable	Name	Dest IP Start	Dest IP End	Protocol	Dest Port Start	Dest Port End
<input type="checkbox"/>		0.0.0.0	255.255.255.255	ANY	0	65535
<input type="checkbox"/>		0.0.0.0	255.255.255.255	ANY	0	65535
<input type="checkbox"/>		0.0.0.0	255.255.255.255	ANY	0	65535
<input type="checkbox"/>		0.0.0.0	255.255.255.255	ANY	0	65535
<input type="checkbox"/>		0.0.0.0	255.255.255.255	ANY	0	65535
<input type="checkbox"/>		0.0.0.0	255.255.255.255	ANY	0	65535
<input type="checkbox"/>		0.0.0.0	255.255.255.255	ANY	0	65535
<input type="checkbox"/>		0.0.0.0	255.255.255.255	ANY	0	65535

Prev Next Save Cancel

STEP 6: CONFIGURE WEB ACCESS LOGGING

Web Access Logging: Disabled
 Enabled

Prev Next Save Cancel

ACCESS CONTROL

The Access Control option allows you to control access in and out of your network. Use this feature as Access Controls to only grant access to approved sites, limit web access based on time or dates, and/or block internet access for applications like P2P utilities or games.

Save Settings Don't Save Settings

ACCESS CONTROL

Enable Access Control:

Add Policy

POLICY TABLE

Enable Policy	Machine	Filtering	Logged	Schedule		
<input checked="" type="checkbox"/>	test	Block Some Access	Yes	Always		

Website Filters

Website Filters are used to allow you to set up a list of Web sites that can be viewed by multiple users through the network. To use this feature select to **Allow** or **Deny**, enter the domain or website, and click **Save Settings**. You must also select **Apply Web Filter** under the *Access Control* section (pages 75 - 77).

Configure Select either **DENY computers access to Website Filter: ONLY these sites** or **ALLOW computers access to ONLY these sites**.

Website URL/ Domain: Enter the keywords or URLs that you want to allow or block. Click **Save Settings**.

The screenshot shows the D-Link DIR-810L web interface. The top navigation bar includes the D-Link logo and tabs for SETUP, ADVANCED, TOOLS, STATUS, and SUPPORT. The left sidebar lists various configuration sections: VIRTUAL SERVER, PORT FORWARDING, APPLICATION RULES, QOS ENGINE, NETWORK FILTER, ACCESS CONTROL, WEBSITE FILTER, INBOUND FILTER, FIREWALL SETTINGS, ROUTING, ADVANCED WIRELESS, WI-FI PROTECTED SETUP, ADVANCED NETWORK, GUEST ZONE, IPV6 FIREWALL, and IPV6 ROUTING. The main content area is titled 'WEBSITE FILTER' and contains the following elements:

- A description: "The Website Filter option allows you to set up a list of Web sites you would like to allow or deny through your network. To use this feature, you must also select the 'Apply Web Filter' checkbox in the Access Control section." Below this are 'Save Settings' and 'Don't Save Settings' buttons.
- A section titled '40 - WEBSITE FILTERING RULES' with the instruction 'Configure Website Filter below'.
- A dropdown menu set to 'DENY computers access to ONLY these sites'.
- A 'Clear the list below...' button.
- A table with the header 'Website URL/Domain' and two columns of input fields for entering website URLs or domains.

On the right side of the interface, there is a 'Helpful Hints...' section with text: "Create a list of Web Sites to which you would like to deny or allow through the network. Use with **Access Control**." and a 'More...' link.

Inbound Filters

The Inbound Filter option is an advanced method of controlling data received from the Internet. With this feature you can configure inbound data filtering rules that control data based on an IP address range. Inbound Filters can be used with Virtual Server, Port Forwarding, or Remote Administration features.

Name: Enter a name for the inbound filter rule.

Action: Select **Allow** or **Deny**.

Remote IP Check to enable rule.

Range: Enable:

Remote IP Start: Enter the starting IP address.

Remote IP End: Enter the ending IP address.

Add: Click the **Add** button to apply your settings.

Inbound Filter This section will list any rules that are created.

Rules List: You may click the **Edit** icon to change the settings or enable/disable the rule, or click the **Delete** icon to remove the rule.

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DIR-810L // SETUP ADVANCED TOOLS STATUS SUPPORT

INBOUND FILTER

The Inbound Filter option is an advanced method of controlling data received from the Internet. With this feature you can configure inbound data filtering rules that control data based on an IP address range.

Inbound Filters can be used for limiting access to a server on your network to a system or group of systems. Filter rules can be used with Virtual Server, Port Forwarding, or Remote Administration features.

Helpful Hints ...
Give each rule a **Name** that is meaningful to you.
Each rule can either **Allow** or **Deny** access from the WAN.
Up to eight ranges of WAN IP addresses can be controlled by each rule. The checkbox by each IP range can be used to disable ranges already defined.
The starting and ending IP addresses are WAN-side address.
Click the **Add** or **Update** button to store a finished rule in the Rules List below.
Click the **Edit** icon in the Rules List to change a rule.
Click the **Delete** icon in the Rules List to permanently remove a rule.
More...

ADD INBOUND FILTER RULE

Name :

Action : **Allow**

Remote IP Range	Enable	Remote IP Start	Remote IP End
<input type="checkbox"/>	<input type="checkbox"/>	0.0.0.0	255.255.255.255
<input type="checkbox"/>	<input type="checkbox"/>	0.0.0.0	255.255.255.255
<input type="checkbox"/>	<input type="checkbox"/>	0.0.0.0	255.255.255.255
<input type="checkbox"/>	<input type="checkbox"/>	0.0.0.0	255.255.255.255
<input type="checkbox"/>	<input type="checkbox"/>	0.0.0.0	255.255.255.255
<input type="checkbox"/>	<input type="checkbox"/>	0.0.0.0	255.255.255.255
<input type="checkbox"/>	<input type="checkbox"/>	0.0.0.0	255.255.255.255
<input type="checkbox"/>	<input type="checkbox"/>	0.0.0.0	255.255.255.255

Add Clear

INBOUND FILTER RULES LIST

Name	Action	Remote IP Range
------	--------	-----------------

WIRELESS

Firewall Settings

A firewall protects your network from the outside world. The DIR-810L offers a firewall type functionality. The SPI feature helps prevent cyber attacks. Sometimes you may want a computer exposed to the outside world for certain types of applications. If you choose to expose a computer, you can enable DMZ. This option will expose the chosen computer completely to the outside world.

Enable SPI: SPI (Stateful Packet Inspection, also known as dynamic packet filtering) helps to prevent cyber attacks by tracking more state per session. It validates that the traffic passing through the session conforms to the protocol.

Anti-Spoof Checking: Enable this feature to protect your network from certain kinds of “spoofing” attacks.

Enable DMZ: If an application has trouble working from behind the router, you can expose one computer to the Internet and run the application on that computer.

Note: *Placing 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.*

DMZ IP Address: Specify the IP address of the computer on the LAN that you want to have unrestricted Internet communication. If this computer obtains its IP address automatically using DHCP, be sure to make a static reservation on the **Setup > Network Settings** page so that the IP address of the DMZ machine does not change.

PPTP: Allows multiple machines on the LAN to connect to their corporate network using PPTP protocol.

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DIR-810L // SETUP **ADVANCED** TOOLS STATUS SUPPORT

FIREWALL SETTINGS

The Firewall Settings allows you to set a single computer on your network outside of the router.

Save Settings Don't Save Settings

ENABLE SPI

Enable SPI:

ANTI-SPOOF CHECKING

Enable anti-spoof checking:

DMZ HOST

DMZ means "Demilitarized Zone." If an application has trouble working from behind the router, you can expose one computer to the Internet and run the application on that computer.

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: 0.0.0.0 << Computer Name >>

APPLICATION LEVEL GATEWAY (ALG) CONFIGURATION

PPTP:

IPSec (VPN):

RTSP:

SIP:

WIRELESS

Helpful Hints...

Enable the DMZ option only as a last resort. If you are having trouble using an application from a computer behind the router, first try opening ports associated with the application in the [Virtual Server](#) or [Port Forwarding](#) sections.

[More...](#)

IPSec (VPN): Allows multiple VPN clients to connect to their corporate network using IPSec. Some VPN clients support traversal of IPSec through NAT. This ALG may interfere with the operation of such VPN clients. If you are having trouble connecting with your corporate network, try turning this ALG off. Please check with the system administrator of your corporate network whether your VPN client supports NAT traversal.

RTSP: Allows application that uses Real Time Streaming Protocol to receive streaming media from the Internet. QuickTime and Real Player are some of the common applications using this protocol.

SIP: Allows devices and applications using VoIP (Voice over IP) to communicate across NAT. Some VoIP applications and devices have the ability to discover NAT devices and work around them. This function may interfere with the operation of such devices. If you are having trouble making VoIP calls, try turning this option off.

Routing

The Routing option is an advanced method of customizing specific routes of data through your network.

Name: Enter a name for your route.

Destination IP: Enter the IP address of packets that will take this route.

Netmask: Enter the netmask of the route, please note that the octets must match your destination IP address.

Gateway: Enter your next hop gateway to be taken if this route is used.

Metric: The route metric is a value from 1 to 16 that indicates the cost of using this route. A value 1 is the lowest cost and 15 is the highest cost.

Interface: Select the interface that the IP packet must use to transit out of the router when this route is used.

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DIR-810L //

SETUP ADVANCED TOOLS STATUS SUPPORT

ROUTING

This Routing page allows you to specify custom routes that determine how data is moved around your network.

Save Settings Don't Save Settings

32 -- ROUTE LIST

	Name	Destination IP	Metric	Interface
<input type="checkbox"/>	<input type="text"/>	<input type="text" value="0.0.0.0"/>	<input type="text" value="1"/>	<input type="text" value="WAN"/>
	Netmask	Gateway		
	<input type="text" value="0.0.0.0"/>	<input type="text" value="0.0.0.0"/>		
<input type="checkbox"/>	<input type="text"/>	<input type="text" value="0.0.0.0"/>	<input type="text" value="1"/>	<input type="text" value="WAN"/>
	Netmask	Gateway		
	<input type="text" value="0.0.0.0"/>	<input type="text" value="0.0.0.0"/>		
<input type="checkbox"/>	<input type="text"/>	<input type="text" value="0.0.0.0"/>	<input type="text" value="1"/>	<input type="text" value="WAN"/>
	Netmask	Gateway		
	<input type="text" value="0.0.0.0"/>	<input type="text" value="0.0.0.0"/>		

Helpful Hints...

Each route has a check box next to it; check this box if you want the route to be enabled.

The name field allows you to specify a name for identification of this route, e.g. "Network 2"

The destination IP address is the address of the host or network you wish to reach.

The netmask field identifies the portion of the destination IP in use.

The gateway IP address is the IP address of the router, if any, used to reach the specified destination.

[More...](#)

Advanced Wireless

Transmit Power: Set the transmit power of the antennas.

WLAN Partition: This enables 802.11d operation. 802.11d is a wireless specification developed to allow implementation of wireless networks in countries that cannot use the 802.11 standard. This feature should only be enabled if you are in a country that requires it.

WMM Enable: WMM is QoS for your wireless network. This will improve the quality of video and voice applications for your wireless clients.

HT 20/40MHz Coexistence: Enable this option to reduce interference from other wireless networks in your area. If the channel width is operating at 40MHz and there is another wireless network's channel over-lapping and causing interference, the router will automatically change to 20MHz.

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ADVANCED WIRELESS

If you are not familiar with these Advanced Wireless settings, please read the help section before attempting to modify these settings.

Save Settings Don't Save Settings

ADVANCED WIRELESS SETTINGS

Wireless Band : 2.4GHz
 Transmit Power : High
 WLAN Partition :
 WMM Enable :
 HT 20/40 MHz Coexistence : Enable Disable

ADVANCED WIRELESS SETTINGS

Wireless Band : 5GHz
 Transmit Power : High
 WLAN Partition :
 WMM Enable :

Helpful Hints ...

It is recommended that you leave these parameters at their default values. Adjusting them could limit the performance of your wireless network.

Enabling WMM can help control latency and jitter when transmitting multimedia content over a wireless connection.

More...

Wi-Fi Protected Setup (WPS)

Wi-Fi Protected Setup (WPS) System is a simplified method for securing your wireless network during the “Initial setup” as well as the “Add New Device” processes. The Wi-Fi Alliance (WFA) has certified it across different products as well as manufactures. The process is just as easy as pressing a button for the Push-Button Method or correctly entering the 8-digit code for the Pin Code Method. The time reduction in setup and ease of use are quite beneficial, while the highest wireless Security setting of WPA2 is automatically used.

Enable: Enable the Wi-Fi Protected Setup feature.

Note: if this option is unchecked, the WPS button on the side of the router will be disabled.

Lock WPS-PIN Setup: Locking the WPS-PIN Method prevents the settings from being changed by any external registrar using its PIN. Devices can still be added to the wireless network using the Wi-Fi Protected Setup Push Button Configuration (WPS-PBC). It is still possible to change wireless networks settings with Manual Wireless Network Setup or Wireless Network Setup Wizard.

PIN Settings: A PIN is a unique number that can be used to add the router to an existing network or to create a new network. Only the Administrator (“admin” account) can change or reset the PIN.

PIN: Shows the current PIN.

Generate New PIN: Create a random number that is a valid PIN. This becomes the router’s PIN. You can then copy this PIN to the user interface of the wireless client.

Reset PIN to Default: Click to restore the default PIN of the router.

The screenshot shows the D-Link router's web interface for the Wi-Fi Protected Setup (WPS) configuration. The interface is organized into several sections:

- Header:** D-Link logo and navigation tabs for SETUP, ADVANCED, TOOLS, STATUS, and SUPPORT.
- Left Sidebar:** A list of configuration categories including VIRTUAL SERVER, PORT FORWARDING, APPLICATION RULES, QOS ENGINE, NETWORK FILTER, ACCESS CONTROL, WEBSITE FILTER, INBOUND FILTER, FIREWALL SETTINGS, ROUTING, ADVANCED WIRELESS, WI-FI PROTECTED SETUP (selected), ADVANCED NETWORK, GUEST ZONE, IPV6 FIREWALL, and IPV6 ROUTING.
- Main Content Area:**
 - WI-FI PROTECTED SETUP:** A section with an orange header. It contains a descriptive paragraph: "Wi-Fi Protected Setup is used to easily add devices to a network using a PIN or button press. Devices must support Wi-Fi Protected Setup in order to be configured by this method." Below this are two buttons: "Save Settings" and "Don't Save Settings".
 - WI-FI PROTECTED SETUP:** A section with a black header. It contains two settings: "Enable : " and "Lock WPS-PIN Setup : ".
 - PIN SETTINGS:** A section with a black header. It displays "Current PIN : 91150806" and two buttons: "Generate New PIN" and "Reset PIN to Default".
 - ADD WIRELESS STATION:** A section with a black header. It contains a single button: "Add Wireless Device With WPS".
- Right Sidebar:** A section titled "Helpful Hints..." containing text: "Enable if other wireless devices you wish to include in the local network support Wi-Fi Protected Setup. Only 'Admin' account can change security settings. Click Add Wireless Device Wizard to use Wi-Fi Protected Setup to add wireless devices to the wireless network. More..."

Add Wireless Station: This Wizard helps you add wireless devices to the wireless network.

The wizard will either display the wireless network settings to guide you through manual configuration, prompt you to enter the PIN for the device, or ask you to press the configuration button on the device. If the device supports Wi-Fi Protected Setup and has a configuration button, you can add it to the network by pressing the configuration button on the device and then the on the router within 60 seconds. The status LED on the router will flash three times if the device has been successfully added to the network.

There are several ways to add a wireless device to your network. A “registrar” controls access to the wireless network. A registrar only allows devices onto the wireless network if you have entered the PIN, or pressed a special Wi-Fi Protected Setup button on the device. The router acts as a registrar for the network, although other devices may act as a registrar as well.

Add Wireless Device with WPS: Click to start the wizard and skip to page 44.

WPS Button

You can also simply press the WPS button on the back of the router, and then press the WPS button on your wireless client to automatically connect without logging into the router.

Refer to page 109 for more information.



Advanced Network Settings

Enable UPnP: To use the Universal Plug and Play (UPnP™) feature check the **Enable UPnp** box. UPnP provides compatibility with networking equipment, software and peripherals.

Enable WAN Ping Respond: Checking this box will allow the DIR-810L to respond to pings. Unchecking the box may provide some extra security from hackers.

WAN Ping Inbound Filter: **Allow All** is the default selection from the drop-down menu when you check *Enable WAN Ping Respond*, allowing you to apply the inbound Filter to the WAN Ping. (Refer to page 79 for more information about inbound filters.)

WAN Port Speed: You may set the port speed of the Internet port to **10Mbps**, **100Mbps**, or **Auto 10/100Mbps** (recommended).

Enable IPV4 Multicast Streams: Check the box to allow multicast traffic to pass through the router from the Internet (IPv4).

Enable IPV6 Multicast Streams: Check the box to allow multicast traffic to pass through the router from the Internet (IPv6).

The screenshot displays the 'Advanced Network' settings page for a D-Link DIR-810L router. The interface includes a navigation menu on the left with options like 'VIRTUAL SERVER', 'PORT FORWARDING', 'APPLICATION RULES', 'QOS ENGINE', 'NETWORK FILTER', 'ACCESS CONTROL', 'WEBSITE FILTER', 'INBOUND FILTER', 'FIREWALL SETTINGS', 'ROUTING', 'ADVANCED WIRELESS', 'WIFI PROTECTED SETUP', 'ADVANCED NETWORK', 'GUEST ZONE', 'IPV6 FIREWALL', and 'IPV6 ROUTING'. The 'ADVANCED NETWORK' section is active, showing a 'Save Settings' button and a 'Don't Save Settings' button. Below this, the 'UPNP' section has 'Enable UPnP' checked. The 'WAN PING' section has 'Enable WAN Ping Respond' unchecked, 'WAN Ping Inbound Filter' set to 'Allow All', and 'Details' set to 'Allow All'. The 'WAN PORT SPEED' section has 'WAN Port Speed' set to 'Auto 10/100Mbps'. The 'IPV4 MULTICAST STREAMS' section has 'Enable IPV4 Multicast Streams' unchecked. The 'IPV6 MULTICAST STREAMS' section has 'Enable IPV6 Multicast Streams' checked. A 'Helpful Hints...' section on the right provides additional information about UPnP and WAN speed.

Guest Zone

The Guest Zone feature will allow you to create temporary zones that can be used by guests to access the Internet. These zones will be separate from your main wireless network. You may configure different zones for the 2.4GHz and 5GHz wireless bands.

Enable Guest Zone: Check the box to enable the Guest Zone feature.

Schedule: The schedule of time when the Guest Zone will be active. The schedule may be set to **Always**, which will allow the particular service to always be enabled. You can create your own times in the **Tools > Schedules** section or click **Add New**.

Wireless Network Name: Enter a wireless network name (SSID) that is different from your main wireless network.

Enable Routing Between Zones: Check to allow network connectivity between the different zones created.

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DIR-810L // SETUP ADVANCED TOOLS STATUS SUPPORT

GUEST ZONE

Use this section to configure the guest zone settings of your router. The guest zone provide a separate network zone for guest to access Internet.

Save Settings Don't Save Settings

GUEST ZONE SELECTION

Enable Guest Zone : Always Add New

Wireless Band : 2.4GHz Band

Wireless Network Name : dlink_guest (Also called the SSID)

Enable Routing Between Zones :

GUEST ZONE SELECTION

Enable Guest Zone : Always Add New

Wireless Band : 5GHz Band

Wireless Network Name : dlink_media_guest (Also called the SSID)

Enable Routing Between Zones :

Helpful Hints... Use this section to configure the guest zone settings of your router. The guest zone provide a separate network zone for guest to access Internet. More...

IPv6 Firewall

The DIR-810L's IPv6 Firewall feature allows you to configure which kind of IPv6 traffic is allowed to pass through the device. The IPv6 Firewall functions in a similar way to the IP Filters feature.

Enable IPv6 Ingress Security: Check the box to enable the IPv6 ingress security, which initiates ingress filtering.

Enable IPv6 Simple Security: Check the box to enable the IPv6 firewall simple security.

Configure IPv6 Firewall below: Select an action from the drop-down menu.

Name: Enter a name to identify the IPv6 firewall rule.

Schedule: Use the drop-down menu to select the time schedule that the IPv6 Firewall Rule will be enabled on. The schedule may be set to **Always**, which will allow this service to always be enabled. You can create your own times in the **Tools > Schedules** section.

Source: Use the **Interface** drop-down menu to specify the interface that connects to the source IPv6 addresses of the firewall rule.

IP Address Range: Enter the source IPv6 address range in the adjacent **IP Address Range** field.

Dest: Use the **Interface** drop-down menu to specify the interface that connects to the destination IP addresses of the firewall rule.

Protocol: Select the protocol of the firewall port (**All**, **TCP**, **UDP**, or **ICMP**).

Port Range: Enter the first port of the range that will be used for the firewall rule in the first box and enter the last port in the field in the second box.

The screenshot shows the D-Link DIR-810L web interface. The top navigation bar includes 'DIR-810L //', 'SETUP', 'ADVANCED', 'TOOLS', 'STATUS', and 'SUPPORT'. The 'ADVANCED' tab is selected, and the 'IPv6 FIREWALL' section is highlighted in orange. Below this, there is a 'Helpful Hints ...' section with text about application name drop-down menus and DHCP clients. The main configuration area is titled 'IPv6 SIMPLE SECURITY' and includes the following options:

- Enable IPv6 Ingress Filtering:**
- Enable IPv6 Simple Security:**

Below these options is the 'IPv6 FIREWALL' section, which includes a dropdown menu to 'Configure IPv6 Firewall below:' with the option 'Turn IPv6 Firewall OFF'. A table indicates the 'Remaining number of firewall rules that can be configured:'.

Name	Schedule	Source	Interface	IP Address Range	Protocol	Port Range
	Always				TCP	1 ~ 65535

IPv6 Routing

This page allows you to specify custom routes that determine how data is moved around your network.

Route List: Check the box next to the route you wish to enable.

Name: Enter a specific name to identify this route.

Destination IPv6/Prefix Length: This is the IP address of the router used to reach the specified destination or enter the IPv6 address prefix length of the packets that will take this route.

Metric: Enter the metric value for this rule here.

Interface: Use the drop-down menu to specify if the IP packet must use the WAN or LAN interface to transit out of the Router.

Gateway: Enter the next hop that will be taken if this route is used.

D-Link

DIR-810L //

SETUP **ADVANCED** TOOLS STATUS SUPPORT

ROUTING

This Routing page allows you to specify custom routes that determine how data is moved around your network.

Save Settings Don't Save Settings

10 -- ROUTE LIST

<input type="checkbox"/>	Name	Destination IPv6/Prefix Length
		/64
<input type="checkbox"/>	Metric	Interface
	1	NULL
		Gateway
<input type="checkbox"/>	Name	Destination IPv6/Prefix Length
		/64
<input type="checkbox"/>	Metric	Interface
	1	NULL
		Gateway
<input type="checkbox"/>	Name	Destination IPv6/Prefix Length
		/64
<input type="checkbox"/>	Metric	Interface
	1	NULL
		Gateway

Helpful Hints ...

Check the **Application Name** drop down menu for a list of predefined server types. If you select one of the predefined server types, click the arrow button next to the drop down menu to fill out the corresponding field.

You can select a computer from the list of DHCP clients in the **Computer Name** drop down menu, or you can manually enter the IP address of the computer at which you would like to open the specified port.

Select a schedule for when the virtual server will be enabled. If you do not see the schedule you need in the list of schedules, go to the **Tools -- Schedules** screen and create a new schedule.

Tools

Admin

This page will allow you to change the Administrator password and also enable Remote Management.

- Admin Password:** Enter a new password for the Administrator login name. Enter again to verify the password.
- Gateway Name:** Enter a name for your router.
- Enable Graphical Authentication:** Enables a challenge-response test to require users to type letters or numbers from a distorted image displayed on the screen to prevent online hackers and unauthorized users from gaining access to your router's network settings.
- Enable HTTPS Server:** Check to enable HTTPS to connect to the router securely. This means to connect to the router, you must enter **https://192.168.0.1** (for example) instead of **http://192.168.0.1**.
- Enable Remote Management:** Remote management allows the DIR-810L to be configured from the Internet by a web browser. A username/password is still required to access the Web Management interface.
- Remote Admin Port:** The port number used to access the DIR-810L is used in the URL. Example: **http://x.x.x.x:8080** whereas x.x.x.x is the Internet IP address of the DIR-810L and 8080 is the port used for the Web Management interface.
- If you have enabled **HTTPS Server**, you must enter **https://** as part of the URL to access the router remotely.
- Remote Admin Inbound Filter:** Select **Allow All** or **Deny All** from the drop-down menu.
- Details:** This field will display the current remote admin filter.

The screenshot shows the D-Link DIR-810L Web Management interface. The top navigation bar includes 'DIR-810L //', 'SETUP', 'ADVANCED', 'TOOLS' (selected), 'STATUS', and 'SUPPORT'. The left sidebar lists various configuration categories: ADMIN, TIME, SYSLOG, EMAIL SETTINGS, SYSTEM, FIRMWARE, DYNAMIC DNS, SYSTEM CHECK, and SCHEDULES.

The main content area is titled 'ADMINISTRATOR SETTINGS' and contains the following sections:

- ADMINISTRATOR SETTINGS:** A text box explaining that the 'admin' account can access the management interface and can change passwords. Below this are 'Save Settings' and 'Don't Save Settings' buttons.
- ADMIN PASSWORD:** A section with the instruction 'Please enter the same password into both boxes, for confirmation.' It features two password input fields labeled 'Password' and 'Verify Password'.
- SYSTEM NAME:** A section with a 'Gateway Name' input field containing 'DIR-810L'.
- ADMINISTRATION:** A section with several checkboxes:
 - Enable Graphical Authentication:
 - Enable HTTPS Server:
 - Enable Remote Management:
 - Remote Admin Port: 8080 (input field) with a 'Use HTTPS' checkbox.
 - Remote Admin Inbound Filter: Allow All (dropdown menu)
 - Details: Allow All (input field)

On the right side of the interface, there is a 'Helpful hints...' section with the following text:

For security reasons, it is recommended that you change the password for the Admin account. Be sure to write down the new and passwords to avoid having to reset the router in case they are forgotten.

Enabling Remote Management, allows you or others to change the router configuration from a computer on the Internet.

Choose a port to open for remote management.

Select a filter that controls access as needed for this admin port. If you do not see the filter you need in the list of filters, go to the **Advanced** → **Inbound Filter** screen and create a new filter.

[More ...](#)

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 Time Server. You have the option of using NTP, which is short for Network Time Protocol. An NTP server will sync the time and date with your router. Daylight Saving can also be configured to automatically adjust the time when needed.

Current Router Time: Displays the current date and time of the router.

Time Zone: Select your Time Zone from the drop-down menu.

Enable Daylight Saving: Check to enable manual entry of daylight saving time.

Daylight Saving Dates: Enter a start date, an end date, including day of the week, and time for daylight saving time.

Enable NTP Server: This option is strongly recommended. Check the box to have the router connect to an NTP server on the Internet (not a local server).

NTP Server Used: Select an NTP server from the drop-down menu.

Date and Time: To manually input the time, enter the values in these fields for the *Year*, *Month*, *Day*, *Hour*, *Minute*, and *Second* and then click **Save Settings**.

You can also click **Copy Your Computer's Time Settings** to synch the date and time with the computer you are currently on.

D-Link

DIR-810L // SETUP ADVANCED **TOOLS** STATUS SUPPORT

ADMIN
TIME
SYSLOG
EMAIL SETTINGS
SYSTEM
FIRMWARE
DYNAMIC DNS
SYSTEM CHECK
SCHEDULES

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.

Save Settings Don't Save Settings

TIME CONFIGURATION

Current Router Time : Thu Jan, 1, 1970 12:15:56

Time Zone : ((GMT-08:00) Pacific Time (US/Canada), Tijuana

Enable Daylight Saving :

Daylight Saving Dates : DST Start Month Week Day of Week TIME
 DST End Month Week Day of Week TIME

AUTOMATIC TIME CONFIGURATION

Enable NTP Server :

NTP Server Used : ntp1.dlink.com << Select NTP Server

SET THE DATE AND TIME MANUALLY

Date And Time : Year 2013 Month Apr Day 23
 Hour 01 Minute 07 Second 15 PM

Copy Your Computer's Time Settings

WIRELESS

Helpful Hints ...
 Good timekeeping is important for accurate logs and scheduled firewall rules.
 More...

SysLog

The DIR-810L keeps a running log of events and activities occurring on the Router. You may send these logs to a SysLog server on your network.

Enable Logging to SysLog Server: Check this box to send the router logs to a SysLog Server.

SysLog Server IP Address: The address of the SysLog server that will be used to send the logs. You may also select your computer from the drop-down menu (only if receiving an IP address from the router via DHCP).

D-Link	
DIR-810L //	SETUP ADVANCED TOOLS STATUS SUPPORT
ADMIN	SYSLOG The SysLog options allow you to send log information to a SysLog Server. <input type="button" value="Save Settings"/> <input type="button" value="Don't Save Settings"/>
TIME	SYSLOG SETTINGS Enable Logging To Syslog Server: <input checked="" type="checkbox"/> Syslog Server IP Address: <input type="text" value="0.0.0.0"/> << <input type="text" value="Computer Name"/>
SYSLOG	Helpful Hints ... A System Logger (syslog) is a server that collects in one place the logs from different sources. If the LAN includes a syslog server, you can use this option to send the router's logs to that server. More...
EMAIL SETTINGS	
SYSTEM	
FIRMWARE	
DYNAMIC DNS	
SYSTEM CHECK	
SCHEDULES	

Email Settings

The Email feature can be used to send the system log files, router alert messages, and firmware update notification to your email address.

Enable Email Notification: When this option is enabled, router activity logs are emailed to a designated email address.

From Email Address: This email address will appear as the sender when you receive a log file or firmware upgrade notification via email.

To Email Address: Enter the email address where you want the email sent.

SMTP Server Address: Enter the SMTP server address for sending email.

SMTP Server Port: Enter the SMTP port used on the server.

Enable Authentication: Check this box if your SMTP server requires authentication.

Account Name: Enter your account for sending email.

Password: Enter the password associated with the account. Re-type the password associated with the account.

On Log Full: When this option is selected, logs will be sent via email to your account when the log is full.

On Schedule: Selecting this option will send the logs via email according to schedule.

Schedule: This option is enabled when **On Schedule** is selected. You can select a schedule from the list of defined schedules. To create a schedule, go to **Tools > Schedules**.

Details: Detail will display selected schedule.

D-Link

DIR-810L //

SETUP ADVANCED **TOOLS** STATUS SUPPORT

ADMIN
TIME
SYSLOG
EMAIL SETTINGS
SYSTEM
FIRMWARE
DYNAMIC DNS
SYSTEM CHECK
SCHEDULES

EMAIL SETTINGS

The Email feature can be used to send the system log files, router alert messages, and firmware update notification to your email address.

Save Settings Don't Save Settings

ENABLE

Enable Email Notification:

EMAIL SETTINGS

From Email Address :

To Email Address :

SMTP Server Address :

SMTP server port :

Enable Authentication :

Account Name :

Password :

Verify Password :

EMAIL LOG WHEN FULL OR ON SCHEDULE

On Log Full :

On Schedule :

Schedule :

Details :

Helpful Hints ...
You may want to make the email settings similar to those of your email client program.
[More...](#)

WIRELESS

System

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

Save Settings to Local Hard Drive: Use this option to save the current router configuration settings to a file on the hard disk of the computer you are using. First, click the **Save Configuration** button. A file dialog will appear, allowing you to select a location and file name for the settings.

Load Settings from Local Hard Drive: Use this option to load previously saved router configuration settings. First, use the **Choose File** option to find a previously saved file of configuration settings. Then, click the **Restore Configuration from File** button to transfer those settings to the router.

Restore to Factory Default Settings: This option will restore all configuration settings back to the settings that were in effect at the time the router was shipped from the factory. Any settings that have not been saved will be lost, including any rules that you have created. If you want to save the current router configuration settings, use the **Save Configuration** button above.

Reboot the Device: Click to reboot the router.

The screenshot shows the D-Link DIR-810L web interface. The top navigation bar includes 'DIR-810L //', 'SETUP', 'ADVANCED', 'TOOLS', 'STATUS', and 'SUPPORT'. The left sidebar lists menu items: ADMIN, TIME, SYSLOG, EMAIL SETTINGS, SYSTEM, FIRMWARE, DYNAMIC DNS, SYSTEM CHECK, and SCHEDULES. The main content area is titled 'SYSTEM SETTINGS' and contains the following text and buttons:

SYSTEM SETTINGS

The System Settings section allows you to reboot the device, or restore the router to the factory default settings. Restoring the unit to the factory default settings will erase all settings, including any rules that you have created.

The current system settings can be saved as a file onto the local hard drive. The saved file or any other saved setting file created by device can be uploaded into the unit.

Save Settings To Local Hard Drive:

Load Settings From Local Hard Drive: No file chosen

Restore To Factory Default Settings:
 Restore all Settings to the Factory Defaults

Reboot The Device:

The right sidebar contains 'Helpful Hints ...' with text: 'Once your router is configured the way you want it, you can save the configuration settings to a configuration file. You might need this file so that you can load your configuration later in the event that the router's default settings are restored. To save the configuration, click the **Save Configuration** button. More...'

Firmware

You can upgrade the firmware of the router here. Make sure the firmware you want to use is on the local hard drive of the computer.

Firmware Upgrade

Choose File: After you have downloaded the new firmware, click **Choose File** to locate the firmware update on your hard drive. Click **Upload** to complete the firmware upgrade.

Upload: Once you have a firmware update on your computer, use this option to browse for the file and then upload the information into the access point.

Language Pack Upgrade

You can change the language of the web UI by uploading available language packs.

Choose File: After you have downloaded the new language pack, click **Choose File** to locate the language pack file on your hard drive. Click **Upload** to complete the language pack upgrade.

Upload: Once you have a language pack update on your computer, use this option to browse for the file and then upload the information into the access point.

The screenshot shows the D-Link DIR-810L web interface. The top navigation bar includes 'DIR-810L', 'SETUP', 'ADVANCED', 'TOOLS', 'STATUS', and 'SUPPORT'. The left sidebar lists menu items: ADMIN, TIME, SYSLOG, EMAIL SETTINGS, SYSTEM, FIRMWARE, DYNAMIC DNS, SYSTEM CHECK, and SCHEDULES. The main content area is titled 'FIRMWARE UPDATE' and contains the following text:

There may be new firmware for your DIR-810L to improve functionality and performance. [Click here to check for an upgrade on our support site.](#)

To upgrade the firmware, locate the upgrade file on the local hard drive with the Browse button. Once you have found the file to be used, click the Upload button below to start the firmware upgrade.

The language pack allows you to change the language of the user interface on the DIR-810L. We suggest that you upgrade your current language pack if you upgrade the firmware. This ensures that any changes in the firmware are displayed correctly.

To upgrade the language pack, locate the upgrade file on the local hard drive with Browse button. Once you have found the file to be used, click the Upload button to start the language pack upgrade.

FIRMWARE AND LANGUAGE PACK INFORMATION

Current Firmware Version: 1.00 Date: 2013/02/08
 Current Language Pack Version : There is no language pack.
 Check Online Now for Latest Firmware and Language pack Version:

FIRMWARE UPGRADE

Note: Some firmware upgrades reset the configuration options to the factory defaults. Before performing an upgrade, be sure to save the current configuration.

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

Upload: No file chosen

LANGUAGE PACK UPGRADE

Upload: No file chosen

The bottom of the page features the 'WIRELESS' logo.

Dynamic DNS

The Dynamic DNS (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 in your domain name to connect to your server no matter what your IP address is.

Enable Dynamic Domain Name System is a method of **Dynamic DNS:** keeping a domain name linked to a changing IP Address. Check the box to enable DDNS.

Server Address: Select your DDNS provider from the drop-down menu or enter the DDNS server address.

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

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

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

Timeout: Enter a timeout time (in hours).

Status: Displays the current connection status.

D-Link

DIR-810L // SETUP ADVANCED TOOLS STATUS SUPPORT

DYNAMIC DNS

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 in your host name to connect to your game server no matter what your IP address is.

Sign up for D-Link's Free DDNS service at www.DLinkDDNS.com

Save Settings Don't Save Settings

DYNAMIC DNS

Enable Dynamic DNS :

Server Address : dlinkddns.com(Free) <<< Select Dynamic DNS Server

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

Username or Key :

Password or Key :

Verify Password or Key :

Timeout : 576 (hours)

Status : Disconnect

DYNAMIC DNS FOR IPV6 HOSTS

Enable :

IPv6 Address : <<< Computer Name

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

Save Clear

IPV6 DYNAMIC DNS LIST

Enable	Host Name	IPv6 Address

WIRELESS

Helpful Hints...

To use this feature, you must first have a Dynamic DNS account from one of the providers in the drop down menu.

More...

DDNS for IPv6 Hosts

Enable: Check the box to enable DDNS for IPv6 Hosts.

IPv6 Address: Enter the IPv6 address of your computer/server in your local network. You can click the << button and select a computer/server from the drop-down list.

Host Name: Enter the IPv6 Host Name that you registered with your DDNS service provider. Click **Save**.

IPv6 DDNS List: Once you save your entry, the IPv6 DDNS host information will be displayed here.

Enable: Check to enable the entry.

Host Name: Displays the name of your IPv6 DDNS host.

IPv6 Address: Displays the IPv6 address of your computer/server associated with the IPv6 DDNS host.

Edit/Delete: Click the edit icon to make changes to the entry or click the delete icon to remove the entry.

DYNAMIC DNS FOR IPV6 HOSTS

Enable :

IPv6 Address : << Computer Name ▾

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

IPV6 DYNAMIC DNS LIST

Enable	Host Name	IPv6 Address		

System Check

Host Name or IP Address: The Ping Test is used to send Ping packets to test if a computer is on the Internet. Enter the IP address that you wish to Ping and click **Ping**.

Host Name or IPv6 Address: Enter the IPv6 address that you wish to Ping and click **Ping**.

Ping Results: The results of your ping attempts will be displayed here.

The screenshot shows the D-Link DIR-810L web interface. The navigation menu includes tabs for SETUP, ADVANCED, TOOLS, STATUS, and SUPPORT. The TOOLS tab is selected, displaying the PING TEST section. The PING TEST section contains a description: "Ping Test sends 'ping' packets to test a computer on the Internet." Below this is a form with a text input field labeled "Host Name or IP Address" and a "Ping" button. There is also an IPV6 PING TEST section with a text input field labeled "Host Name or IPv6 Address" and a "Ping" button. At the bottom, there is a PING RESULT section with a text input field and a "Ping" button. On the right side, there is a "Helpful Hints ..." section with text: "Ping checks whether a computer on the Internet is running and responding. Enter either the IP address of the target computer or enter its fully qualified domain name." and a "More..." link.

Schedules

Schedules can be created for use with enforcing rules. For example, if you want to restrict web access to Mon-Fri from 3pm to 8pm, you could create a schedule selecting Mon, Tue, Wed, Thu, and Fri and enter a Start Time of 3pm and End Time of 8pm.

Name: Enter a name for your new schedule.

Days: Select a day, a range of days, or **All Week** to include every day of the week.

Time: Check **All Day - 24 hrs** or select a **Time format** and enter a start and end time for your schedule below.

Schedule Rules The list of schedules will be listed here. Click the **List:** **Edit** icon to make changes or click the **Delete** icon to remove the schedule.

D-Link

DIR-810L // SETUP ADVANCED TOOLS STATUS SUPPORT

SCHEDULES

The Schedule configuration option is used to manage schedule rules for various firewall and parental control features.

Save Settings Don't Save Settings

10 - ADD SCHEDULE RULE

Name :

Day(s) : All Week Select Day(s)

Sun Mon Tue Wed Thu Fri Sat

All Day - 24 hrs :

Time format : 12-hour

Start Time : : : PM (hour:minute, 12 hour time)

End Time : : : PM (hour:minute, 12 hour time)

SCHEDULE RULES LIST

Name :	Day(s) :	Time Frame :
--------	----------	--------------

Helpful Hints ...

Schedules are used with a number of other features to define when those features are in effect.

Give each schedule a name that is meaningful to you. For example, a schedule for Monday through Friday from 3:00pm to 9:00pm, might be called "After School".

Click **Save** to add a completed schedule to the list below.

Click the **Edit** icon to change an existing schedule.

Click the **Delete** icon to permanently delete a schedule.

[More...](#)

Status

Device Info

This page displays the current information for the DIR-810L. It will display the LAN, WAN (Internet), and Wireless information. If your Internet connection is set up for a Dynamic IP address then a **Release** button and a **Renew** button will be displayed. Use **Release** to disconnect from your ISP and use **Renew** to connect to your ISP.

If your Internet connection is set up for PPPoE, a **Connect** button and a **Disconnect** button will be displayed. Use **Disconnect** to drop the PPPoE connection and use **Connect** to establish the PPPoE connection.

General: Displays the router's time and firmware version.

WAN: Displays the MAC address and the public IP settings.

LAN: Displays the MAC address and the private (local) IP settings for the router.

Wireless LAN: Displays the 2.4GHz wireless MAC address and your wireless settings such as SSID and Channel.

Wireless LAN2: Displays the 5GHz wireless MAC address and your wireless settings such as SSID and Channel.

LAN Computers: Displays computers and devices that are connected to the router via Ethernet and that are receiving an IP address assigned by the router (DHCP).

IGMP Multicast Memberships: Displays IPv4 and IPv6 multicast group addresses.

The screenshot shows the D-Link DIR-810L web interface. The top navigation bar includes 'DIR-810L', 'SETUP', 'ADVANCED', 'TOOLS', 'STATUS', and 'SUPPORT'. The 'STATUS' tab is selected, and the 'DEVICE INFO' sub-tab is active. The main content area is divided into several sections:

- DEVICE INFORMATION:** A note states: "All of your Internet and network connection details are displayed on this page. The firmware version is also displayed here." Below this is a 'GENERAL' section showing:
 - TIME: Sat Jan. 1, 2011 23:16:14
 - Firmware Version: 1.00, 08, Feb, 2013
 - mydlink Service: Non-Registered
- WAN:** Shows connection details for a Dynamic IP (DHCP) connection.
 - Connection Type: Dynamic IP (DHCP)
 - Cable Status: Connected
 - Network Status: Connected (with 'Renew' and 'Release' buttons)
 - Connection Up Time: 0 Day, 23:15:46
 - MAC Address: C8:D3:A3:56:37:1D
 - IP Address: 10.10.10.106
 - Subnet Mask: 255.255.255.0
 - Default Gateway: 10.10.10.1
 - Primary DNS Server: 10.10.10.1
 - Secondary DNS Server: 0.0.0.0
 - Advanced DNS: Disabled
- LAN:** Shows local network settings.
 - MAC Address: C8:D3:A3:56:37:1C
 - IP Address: 192.168.0.1
 - Subnet Mask: 255.255.255.0
 - DHCP Server: Enabled
- WIRELESS LAN:** Shows 2.4GHz wireless settings.
 - Wireless Band: 2.4GHz Band
 - Wireless Radio: Enable
 - 802.11 Mode: Mixed 802.11n, 802.11g and 802.11b
 - Channel Width: 20/40 MHz
 - Channel: 3
 - Wi-Fi Protected Setup: Enabled/Configured
 - SSID List:

Network Name (SSID)	Guest	MAC Address	Security Mode
dirk-371C	No	C8:D3:A3:56:37:1C	Auto (WPA or WPA2) - PSK
- WIRELESS LAN2:** Shows 5GHz wireless settings.
 - Wireless Band: 5GHz Band
 - Wireless Radio: Enable
 - 802.11 Mode: Mixed 802.11n, 802.11n and 802.11a
 - Channel Width: 20/40/80 MHz
 - Channel: 48
 - Wi-Fi Protected Setup: Enabled/Configured
 - SSID List:

Network Name (SSID)	Guest	MAC Address	Security Mode
dirk-371C-media	No	C8:D3:A3:56:37:1E	Auto (WPA or WPA2) - PSK
- LAN COMPUTERS:** A table showing connected devices.

IP Address	Name (if any)	MAC
192.168.0.100	GRAPH-TEST	00:15:09:2E:26:3C
192.168.0.101		02:18:E7:95:79:B4
- IGMP MULTICAST MEMBERSHIPS:** A section for displaying multicast group addresses.

Logs

The router automatically logs (records) events of possible interest in its internal memory. If there isn't enough internal memory for all events, logs of older events are deleted but logs of the latest events are retained. The Logs option allows you to view the router logs. You can define what types of events you want to view and the level of the events to view. This router also has external Syslog Server support so you can send the log files to a computer on your network that is running a Syslog utility.

Log Options: You can select the types of messages that you want to display from the log. **System Activity, Debug Information, Attacks, Dropped Packets, and Notice** messages can be selected. Click **Apply Log Settings Now** to activate your settings.

First Page: Click to go to the first page.

Last Page: Click to go to the last page.

Previous: Click to go back one page.

Next: Click to go to the next page.

Refresh: Click to refresh page.

Clear: Clears all of the log contents.

Email Now: This option will send copy of the router log to your email address configured in the **Tools > Email Settings** page.

Save Log: This option will save the router log to a local hard drive.

D-Link

DIR-810L // SETUP ADVANCED TOOLS STATUS SUPPORT

DEVICE INFO

LOGS

STATISTICS

INTERNET SESSIONS

ROUTING

WIRELESS

IPV6

IPV6 ROUTING

LOGS

Use this option to view the router logs. You can define what types of events you want to view and the event levels to view. This router also has internal syslog server support so you can send the log files to a computer on your network that is running a syslog utility.

LOG OPTIONS

Log Options : System Activity
 Debug Information
 Attacks
 Dropped Packets
 Notice

LOG DETAILS

First Page Last Page Previous Next
 Refresh Clear Email Now Save Log

1/10

TIME	Message
Jan 1 12:30:56	user.notice: ncc[148]: [!tNotice]cc:b2:55:cc:8b:ba(192.168.0.102) join Lan Network
Jan 1 12:30:46	user.notice: ncc[148]: [!tNotice]cc:b2:55:cc:8b:ba(192.168.0.102) join Lan Network
Jan 1 12:30:36	user.notice: ncc[148]: [!tNotice]cc:b2:55:cc:8b:ba(192.168.0.102) join Lan Network
Jan 1 12:30:16	user.notice: ncc[148]: [!tNotice]cc:b2:55:cc:8b:ba(192.168.0.102) join Lan Network
Jan 1 12:30:06	user.notice: ncc[148]: [!tNotice]cc:b2:55:cc:8b:ba(192.168.0.102) join Lan Network
Jan 1 12:29:56	user.notice: ncc[148]: [!tNotice]cc:b2:55:cc:8b:ba(192.168.0.102) join Lan Network
Jan 1 12:29:46	user.notice: ncc[148]: [!tNotice]cc:b2:55:cc:8b:ba(192.168.0.102) join Lan Network
Jan 1 12:29:36	user.notice: ncc[148]: [!tNotice]cc:b2:55:cc:8b:ba(192.168.0.102) join Lan Network
Jan 1 12:29:36	user.notice: ncc[148]: [!tNotice]cc:b2:55:cc:8b:ba(192.168.0.102) join Lan Network
Jan 1 12:29:26	user.notice: ncc[148]: [!tNotice]cc:b2:55:cc:8b:ba(192.168.0.102) join Lan Network

Helpful Hints...
 Check the log frequently to detect unauthorized network usage.
 You can also have the log mailed to you periodically. Refer to **Tools → EMail**.
 More...

WIRELESS

Statistics

The screen below displays the **Traffic Statistics**. Here you can view the amount of packets that pass through the DIR-810L on both the WAN, LAN ports and the Wi-Fi® segments. The traffic counter will reset if the device is rebooted.

D-Link

DIR-810L // SETUP ADVANCED TOOLS STATUS SUPPORT

DEVELOPER INFO
LOGS
STATISTICS
INTERNET SESSIONS
ROUTING
WIRELESS
IPV6
IPV6 ROUTING

TRAFFIC STATISTICS
Traffic Statistics display Receive and Transmit packets passing through your router.
Refresh Statistics Clear Statistics

LAN STATISTICS

Sent : 290904	Received : 340389
TX Packets : 0	RX Packets : 0
Dropped : 0	Dropped : 0
Collisions : 0	Errors : 0

WAN STATISTICS

Sent : 261099	Received : 162362
TX Packets : 0	RX Packets : 0
Dropped : 0	Dropped : 0
Collisions : 0	Errors : 0

WI-FI STATISTICS 2.4GHZ

Sent : 8138	Received : 260742
TX Packets : 0	RX Packets : 0
Dropped : 0	Dropped : 0
	Errors : 0

WI-FI STATISTICS 5GHZ

Sent : 0	Received : 0
TX Packets : 0	RX Packets : 0
Dropped : 0	Dropped : 0
	Errors : 0

Helpful Hints...
This is a summary of the number of packets that have passed between the WAN and the LAN since the router was last initialized.
More...

WIRELESS

Internet Sessions

The Internet Sessions page displays full details of active Internet sessions through your router. An Internet session is a conversation between a program or application on a LAN-side computer and a program or application on a WAN-side computer.

D-Link

DIR-810L //

SETUP ADVANCED TOOLS STATUS SUPPORT

DEVICE INFO
LOGS
STATISTICS
INTERNET SESSIONS
ROUTING
WIRELESS
IPv6
IPv6 ROUTING

INTERNET SESSIONS

This page displays the full details of active sessions to your router.

Helpful Hints...
This is a list of all active conversations between WAN computers and LAN computers.
[More...](#)

Local	NAT	Internet	Protocol	State	Dir	Time Out
192.168.0.101:4091	4092	10.5.9.14:161	udp	-	OUT	70
192.168.0.101:4137	4138	10.5.9.14:161	udp	-	OUT	70
192.168.0.101:4079	4080	10.5.9.14:161	udp	-	OUT	70
192.168.0.101:4041	4042	10.5.9.14:161	udp	-	OUT	69
192.168.0.101:4105	4106	10.5.9.14:161	udp	-	OUT	70
192.168.0.101:4095	4096	10.5.9.14:161	udp	-	OUT	70
192.168.0.101:4025	4026	10.5.9.14:161	udp	-	OUT	69
192.168.0.101:4075	4076	10.5.9.14:161	udp	-	OUT	70

Wireless

The wireless client table displays a list of current connected wireless clients. This table also displays the connection rate and MAC address of the connected wireless clients.

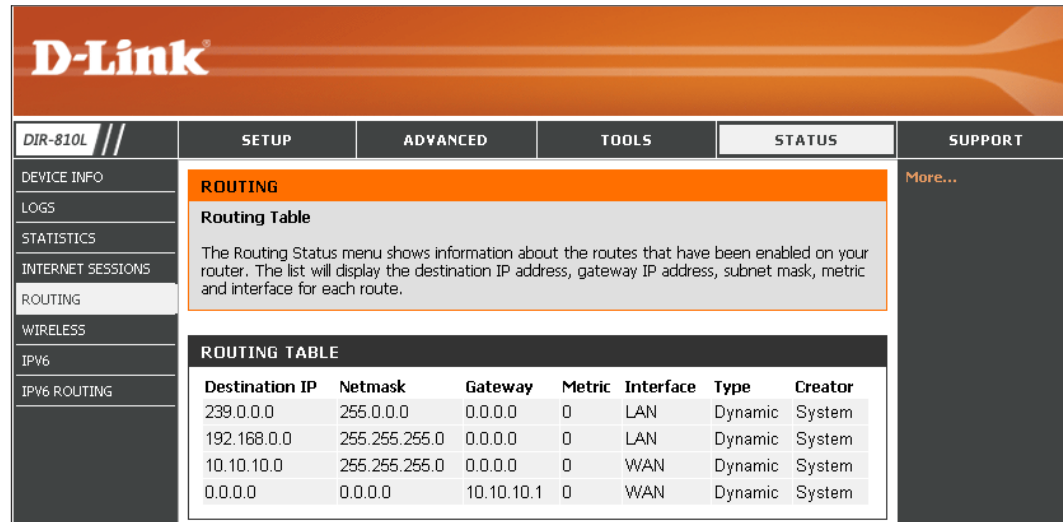


The screenshot shows the D-Link DIR-810L web interface. The top navigation bar includes tabs for SETUP, ADVANCED, TOOLS, STATUS, and SUPPORT. The left sidebar lists various configuration options, with WIRELESS selected. The main content area displays the WIRELESS section, which includes a description, the number of wireless clients for the 2.4GHz band (1), and a table of connected clients. The table has columns for MAC Address, IP Address, Mode, Rate, and Signal(%). One client is listed with MAC address CC:B2:55:CC:8B:BA, IP address 192.168.0.101, Mode 802.11n, Rate 130M, and Signal 100%. Below this, it shows 0 wireless clients for the 5GHz band and an empty table structure.

D-Link						
DIR-810L	SETUP	ADVANCED	TOOLS	STATUS	SUPPORT	
DEVICE INFO	WIRELESS				Helpful Hints... This is a list of all wireless clients that are currently connected to your wireless router. More...	
LOGS	Use this option to view the wireless clients that are connected to your wireless router.					
STATISTICS	NUMBER OF WIRELESS CLIENTS - 2.4GHZ BAND: 1					
INTERNET SESSIONS	MAC Address	IP Address	Mode	Rate		Signal(%)
ROUTING	CC:B2:55:CC:8B:BA	192.168.0.101	802.11n	130M		100%
WIRELESS	NUMBER OF WIRELESS CLIENTS - 5GHZ BAND: 0					
IPV6	MAC Address	IP Address	Mode	Rate		Signal(%)
IPV6 ROUTING						

Routing

This page will display your current routing table.



The screenshot shows the D-Link web interface for the DIR-810L router. The top navigation bar includes the D-Link logo and tabs for SETUP, ADVANCED, TOOLS, STATUS, and SUPPORT. The left sidebar contains a menu with options: DEVICE INFO, LOGS, STATISTICS, INTERNET SESSIONS, ROUTING (selected), WIRELESS, IPV6, and IPV6 ROUTING. The main content area is titled "ROUTING" and "Routing Table". It contains a descriptive paragraph and a table of routing entries.

ROUTING

Routing Table

The Routing Status menu shows information about the routes that have been enabled on your router. The list will display the destination IP address, gateway IP address, subnet mask, metric and interface for each route.

Destination IP	Netmask	Gateway	Metric	Interface	Type	Creator
239.0.0.0	255.0.0.0	0.0.0.0	0	LAN	Dynamic	System
192.168.0.0	255.255.255.0	0.0.0.0	0	LAN	Dynamic	System
10.10.10.0	255.255.255.0	0.0.0.0	0	WAN	Dynamic	System
0.0.0.0	0.0.0.0	10.10.10.1	0	WAN	Dynamic	System

IPv6

The IPv6 page displays a summary of the Router's IPv6 settings and lists the IPv6 address and host name of any IPv6 clients.

D-Link					
DIR-810L //	STATUS				
DEVICE INFO LOGS STATISTICS INTERNET SESSIONS ROUTING WIRELESS IPv6 IPv6 ROUTING	<div style="background-color: #f4a460; padding: 5px;">IPv6 Network Information</div> <p>All of your IPv6 Internet and network connection details are displayed on this page.</p> <div style="background-color: #333; color: white; padding: 5px;">IPv6 Connection Information</div> <p> IPv6 Connection Type : Auto Detection Network Status : Disconnected WAN IPv6 Address : IPv6 Default Gateway : LAN IPv6 Address : LAN IPv6 Link-Local Address : fe80::cad3:a3ff:fe56:371c/64 Primary DNS Address : Secondary DNS Address : DHCP-PD : Enabled IPv6 Network assigned by DHCP-PD : </p> <div style="background-color: #333; color: white; padding: 5px;">LAN IPv6 Computers</div> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">IPv6 Address</th> <th style="width: 50%;">Name (if any)</th> </tr> </thead> <tbody> <tr> <td style="height: 20px;"></td> <td></td> </tr> </tbody> </table>	IPv6 Address	Name (if any)		
IPv6 Address	Name (if any)				

IPV6 Routing

This page displays the IPV6 routing details configured for your router.

The screenshot shows the D-Link web interface for a DIR-810L router. The top navigation bar includes tabs for SETUP, ADVANCED, TOOLS, STATUS, and SUPPORT. The left sidebar contains a menu with options like DEVICE INFO, LOGS, STATISTICS, INTERNET SESSIONS, ROUTING, WIRELESS, IPV6, and IPv6 Routing. The main content area is titled "IPV6 ROUTING" and contains the following text:

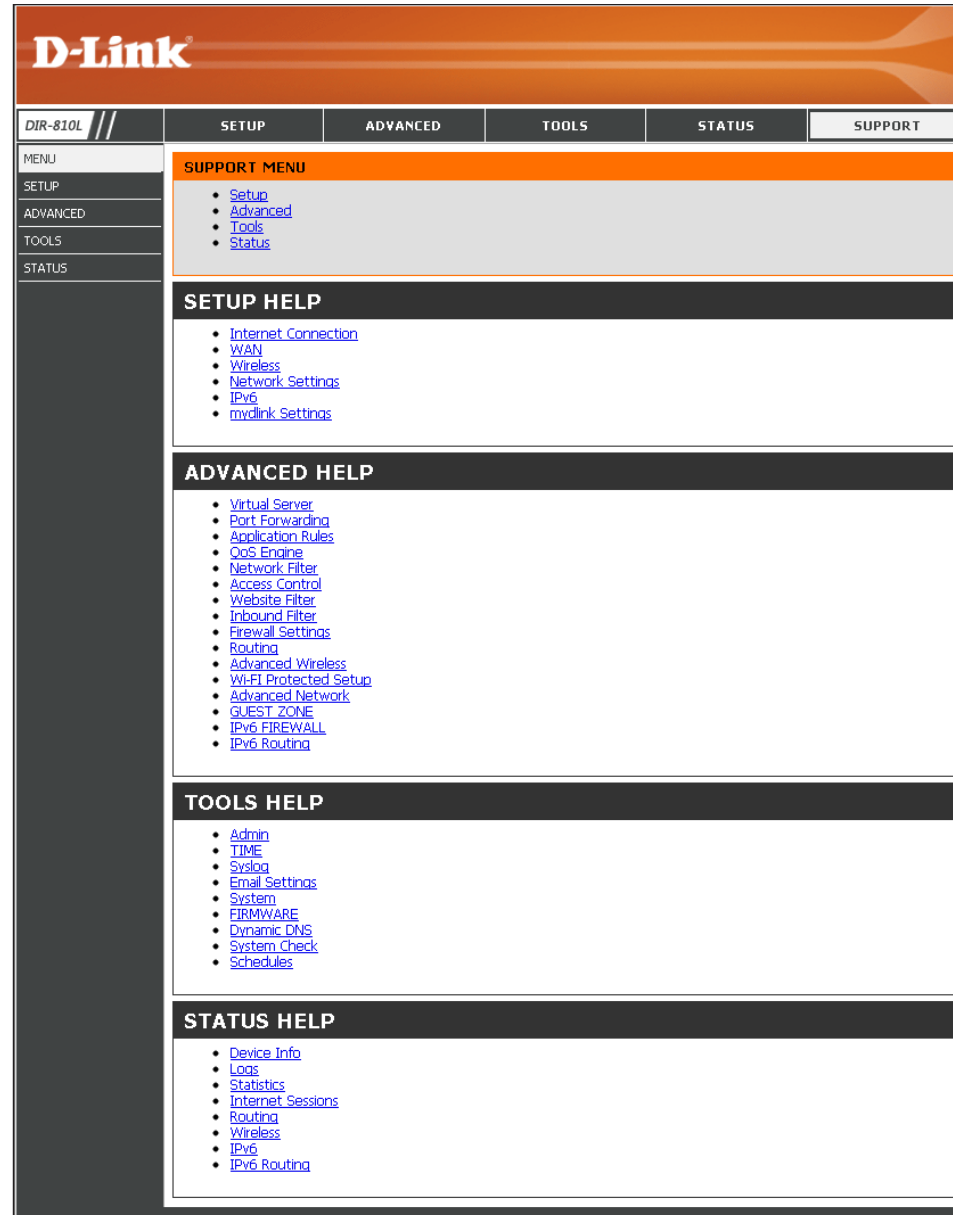
IPv6 Routing Table

The Routing Status menu shows information about the routes that have been enabled on your router. The list will display the destination IP address, gateway IP address, subnet mask, metric and interface for each route.

IPV6 ROUTING TABLE

Destination IP	Gateway	Metric	Interface
----------------	---------	--------	-----------

Support



D-Link

DIR-810L //

SETUP ADVANCED TOOLS STATUS **SUPPORT**

MENU

SETUP

ADVANCED

TOOLS

STATUS

SUPPORT MENU

- [Setup](#)
- [Advanced](#)
- [Tools](#)
- [Status](#)

SETUP HELP

- [Internet Connection](#)
- [WAN](#)
- [Wireless](#)
- [Network Settings](#)
- [IPv6](#)
- [mydlink Settings](#)

ADVANCED HELP

- [Virtual Server](#)
- [Port Forwarding](#)
- [Application Rules](#)
- [QoS Engine](#)
- [Network Filter](#)
- [Access Control](#)
- [Website Filter](#)
- [Inbound Filter](#)
- [Firewall Settings](#)
- [Routing](#)
- [Advanced Wireless](#)
- [Wi-Fi Protected Setup](#)
- [Advanced Network](#)
- [GUEST ZONE](#)
- [IPv6 FIREWALL](#)
- [IPv6 Routing](#)

TOOLS HELP

- [Admin](#)
- [TIME](#)
- [Syslog](#)
- [Email Settings](#)
- [System](#)
- [FIRMWARE](#)
- [Dynamic DNS](#)
- [System Check](#)
- [Schedules](#)

STATUS HELP

- [Device Info](#)
- [Logs](#)
- [Statistics](#)
- [Internet Sessions](#)
- [Routing](#)
- [Wireless](#)
- [IPv6](#)
- [IPv6 Routing](#)

Connect a Wireless Client to your Router

WPS Button

The easiest and most secure way to connect your wireless devices to the router is WPS (Wi-Fi Protected Setup). Most wireless devices such as wireless adapters, media players, Blu-ray DVD players, wireless printers and cameras will have a WPS button (or a software utility with WPS) that you can press to connect to the DIR-810L router. Please refer to your user manual for the wireless device you want to connect to make sure you understand how to enable WPS. Once you know, follow the steps below:

Step 1 - Press the WPS button on the DIR-810L for about one second. The Internet LED on the front will start to blink.



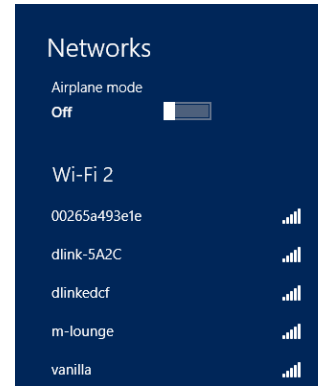
Step 2 - Within two minutes, press the WPS button on your wireless client (or launch the software utility and start the WPS process).

Step 3 - Allow up to one minute to configure. Once the Internet light stops blinking, you will be connected and your wireless connection will be secure with WPA2.

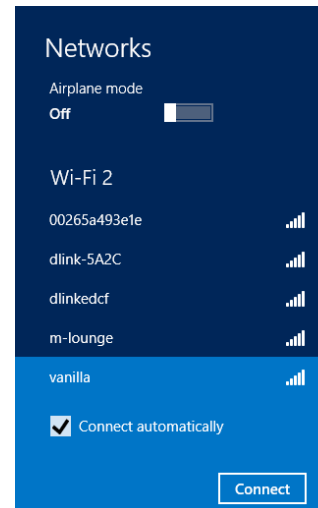
Windows® 8

1. Click on the wireless computer icon in your system tray (lower-right corner next to the time).

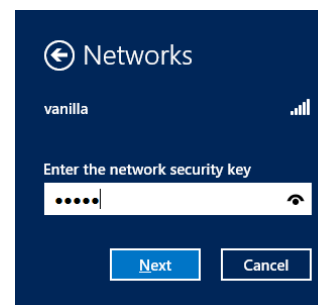
2. A list of available wireless networks will appear.



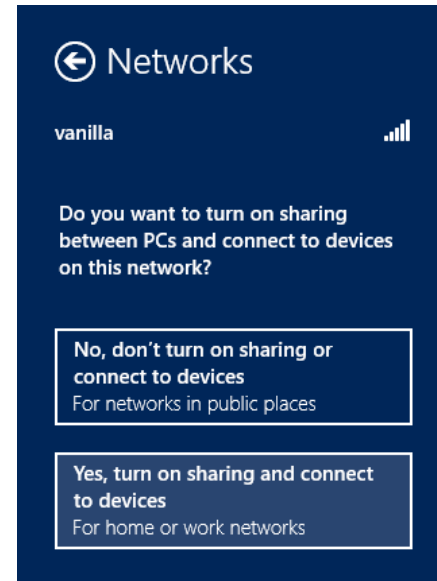
3. Click the wireless network (SSID) you want to connect to and then click **Connect**.



4. If the network is secure/encrypted, enter the Wi-Fi password (security key) and click **Next**.



5. Click either to enable or disable file sharing.
6. You will now be connected to your wireless network.



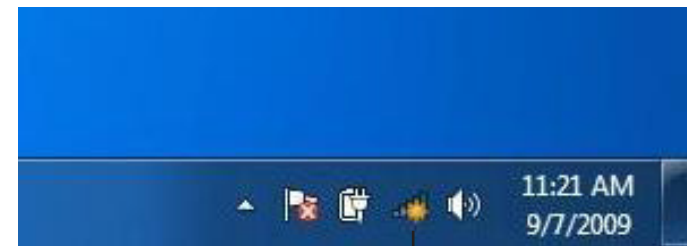
If you get a good signal but cannot access the Internet, confirm the encryption by reviewing the profile or check the TCP/IP settings for your wireless adapter. Refer to the *Networking Basics* section in this manual for more information.

Windows® 7

WPA/WPA2

It is recommended to enable wireless security (WPA/WPA2) on your wireless router or access point before configuring your wireless adapter. If you are joining an existing network, you will need to know the security key or passphrase being used.

1. Click on the wireless icon in your system tray (lower-right corner).



Wireless Icon

2. The utility will display any available wireless networks in your area.

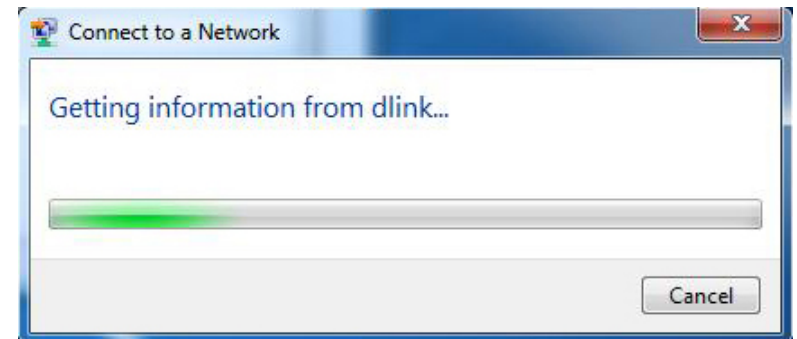


3. Highlight the wireless network (SSID) you would like to connect to and click the **Connect** button.

If you get a good signal but cannot access the Internet, check your TCP/IP settings for your wireless adapter. Refer to the Networking Basics section in this manual for more information.

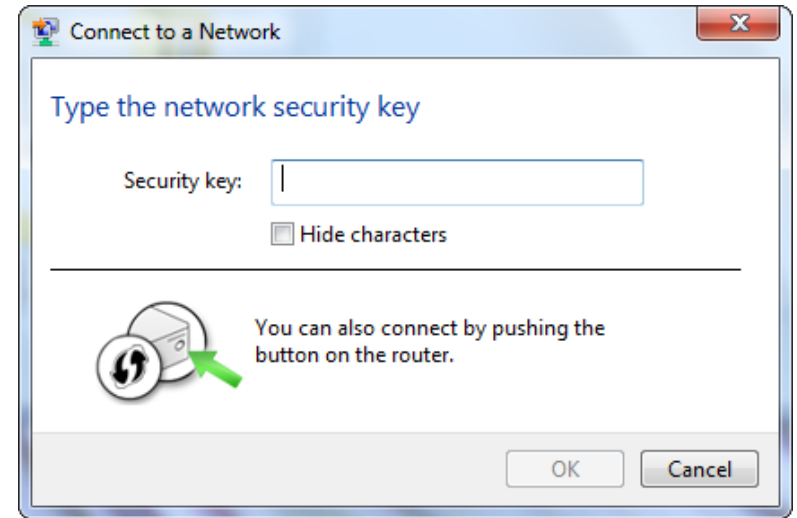


4. The following window appears while your computer tries to connect to the router.



5. Enter the same security key or passphrase that is on your router and click **Connect**. You can also connect by pushing the WPS button on the router.

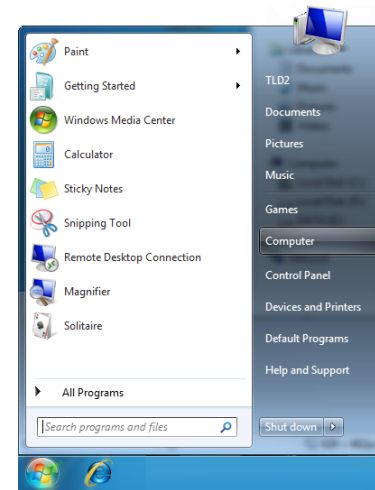
It may take 20-30 seconds to connect to the wireless network. If the connection fails, please verify that the security settings are correct. The key or passphrase must be exactly the same as on the wireless router.



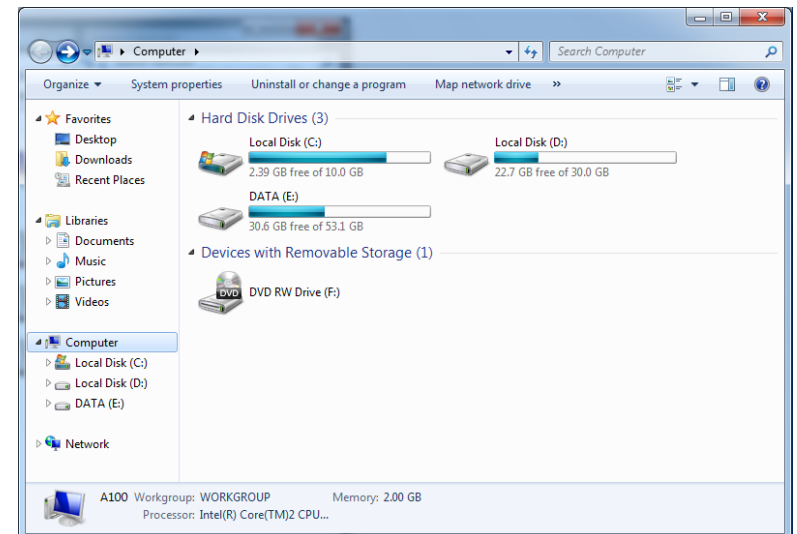
WPS

The WPS feature of the DIR-810L can be configured using Windows® 7. Carry out the following steps to use Windows® 7 to configure the WPS feature:

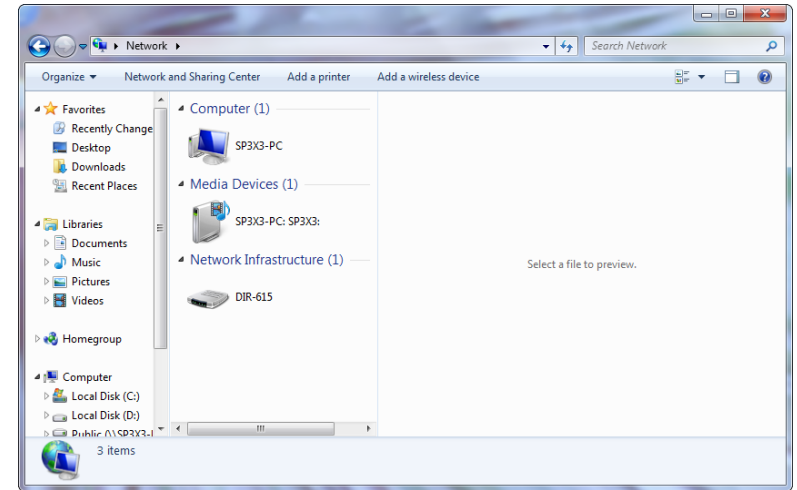
1. Click the **Start** button and select **Computer** from the Start menu.



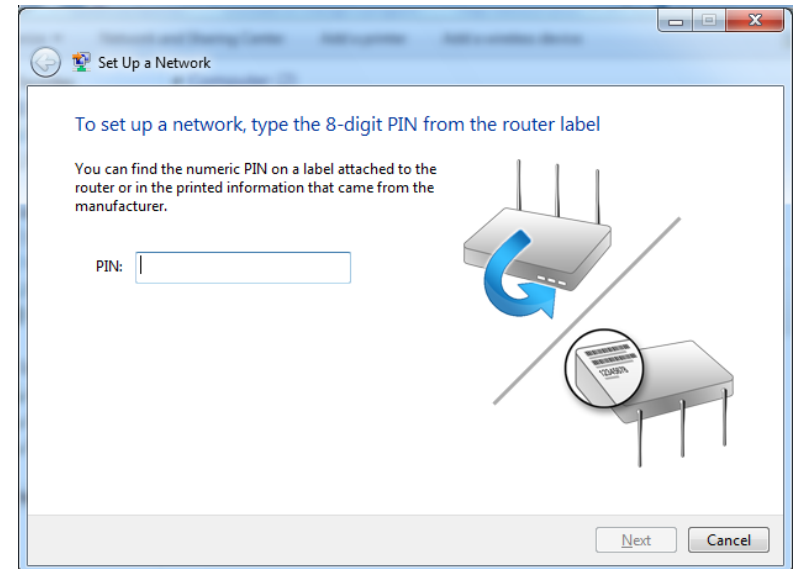
2. Click **Network** on the left side.



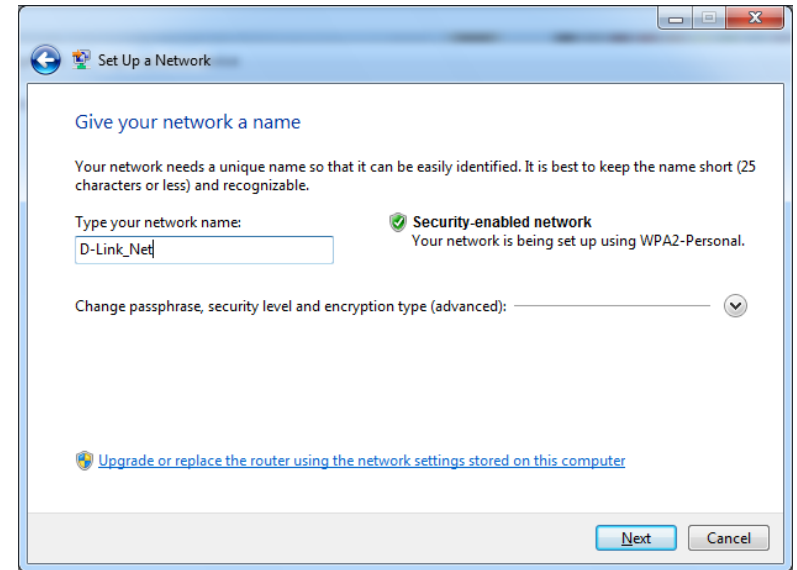
3. Double-click the DIR-810L.



4. Input the WPS PIN number (displayed in the WPS window on the Router's LCD screen or in the **Setup** > **Wireless Setup** menu in the Router's Web UI) and click **Next**.

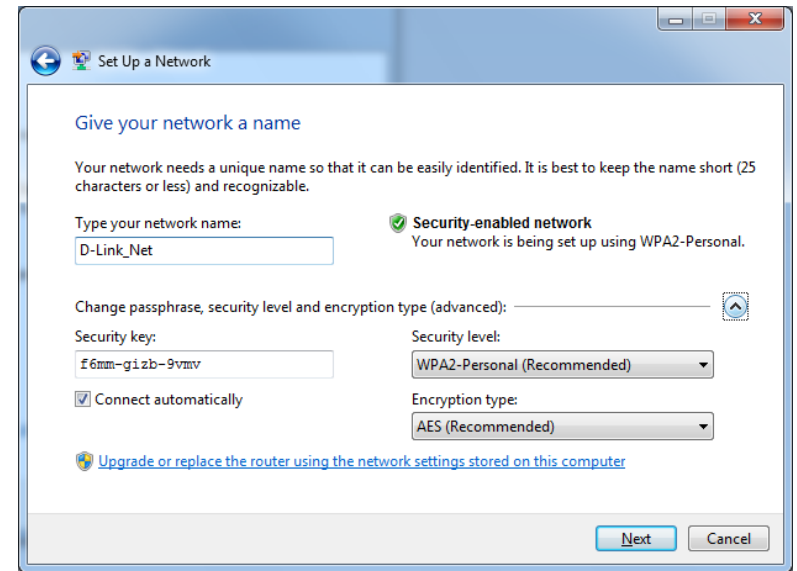


5. Type a name to identify the network.



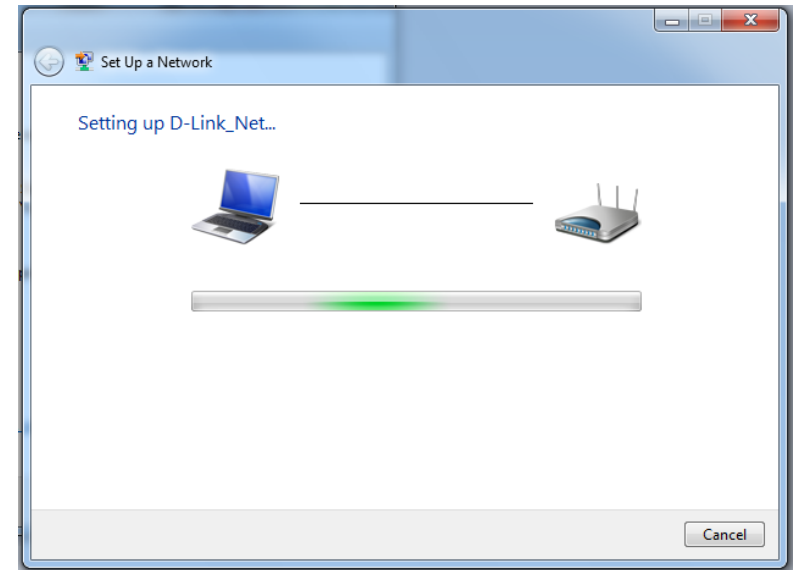
6. To configure advanced settings, click the  icon.

Click **Next** to continue.



7. The following window appears while the Router is being configured.

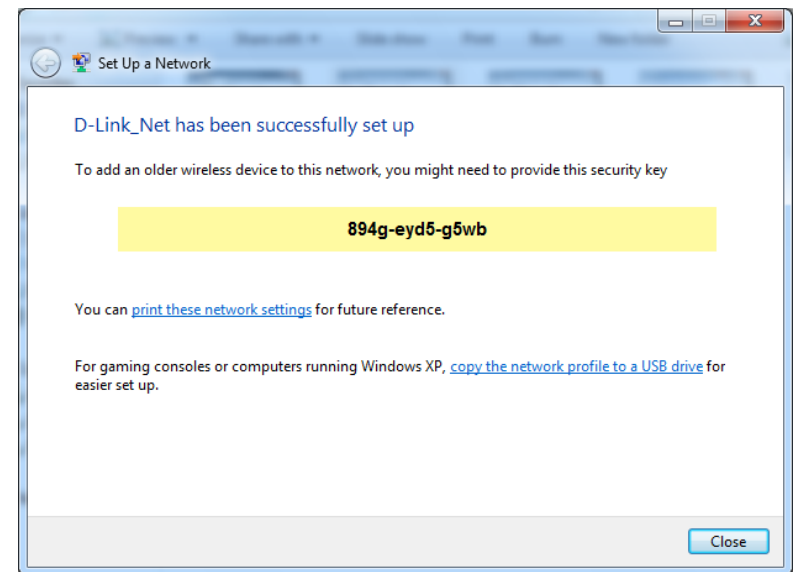
Wait for the configuration to complete.



8. The following window informs you that WPS on the router has been setup successfully.

Make a note of the security key as you may need to provide this security key if adding an older wireless device to the network in the future.

9. Click **Close** to complete WPS setup.



Windows Vista®

Windows Vista® users may use the built-in wireless utility. If you are using another company's utility, please refer to the user manual of your wireless adapter for help with connecting to a wireless network. Most utilities will have a "site survey" option similar to the Windows Vista® utility as seen below.

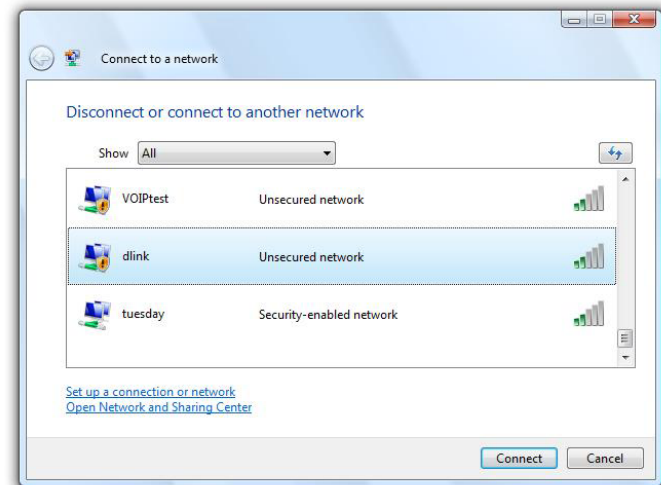
If you receive the **Wireless Networks Detected** bubble, click on the center of the bubble to access the utility.

or

Right-click on the wireless computer icon in your system tray (lower-right corner next to the time). Select **Connect to a network**.

The utility will display any available wireless networks in your area. Click on a network (displayed using the SSID) and click the **Connect** button.

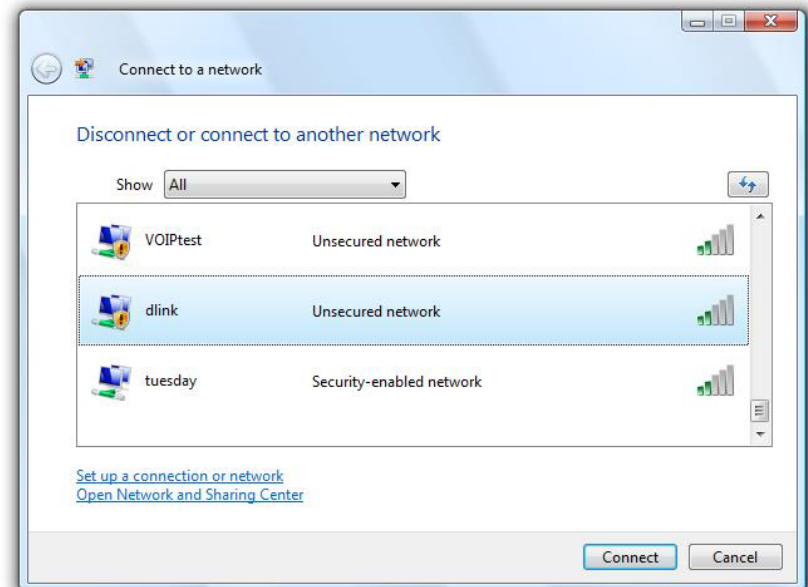
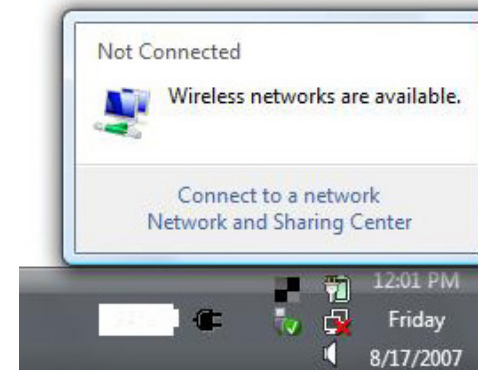
If you get a good signal but cannot access the Internet, check you TCP/IP settings for your wireless adapter. Refer to the **Networking Basics** section in this manual for more information.



WPA/WPA2

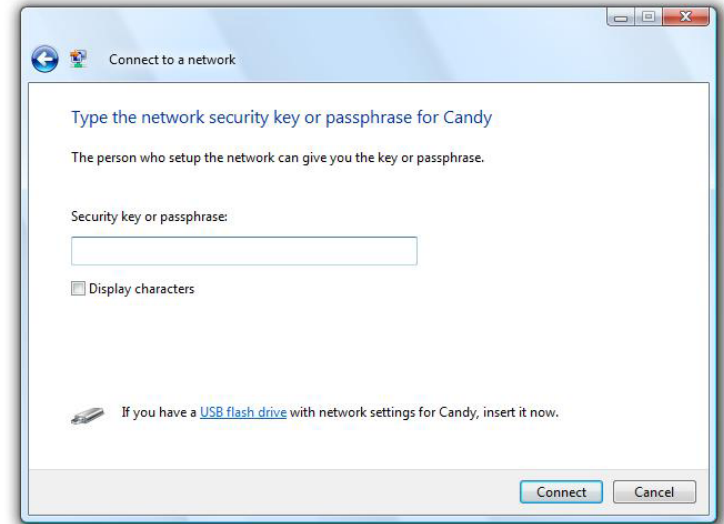
It is recommended to enable wireless security (WPA/WPA2) on your wireless router or access point before configuring your wireless adapter. If you are joining an existing network, you will need to know the security key or passphrase being used.

1. Open the Windows Vista® Wireless Utility by right-clicking on the wireless computer icon in your system tray (lower right corner of screen). Select **Connect to a network**.
2. Highlight the wireless network (SSID) you would like to connect to and click **Connect**.



3. Enter the same security key or passphrase that is on your router and click **Connect**.

It may take 20-30 seconds to connect to the wireless network. If the connection fails, please verify that the security settings are correct. The key or passphrase must be exactly the same as on the wireless router.



WPS/WCN 2.0

The router supports Wi-Fi protection, referred to as WCN 2.0 in Windows Vista®. The following instructions for setting this up depends on whether you are using Windows Vista® to configure the router or third party software.

When you first set up the router, Wi-Fi protection is disabled and unconfigured. To enjoy the benefits of Wi-Fi protection, the router must be both enabled and configured. There are three basic methods to accomplish this: use Windows Vista's built-in support for WCN 2.0, use software provided by a third party, or manually configure.

If you are running Windows Vista®, log into the router and click the **Enable** checkbox in the **Basic > Wireless** section. Use the Current PIN that is displayed on the **Advanced > Wi-Fi Protected Setup** section or choose to click the **Generate New PIN** button or **Reset PIN to Default** button.



If you are using third party software to set up Wi-Fi Protection, carefully follow the directions. When you are finished, proceed to the next section to set up the newly-configured router.

Windows® XP

Windows® XP users may use the built-in wireless utility (Zero Configuration Utility). If you are using another company's utility, please refer to the user manual of your wireless adapter for help with connecting to a wireless network. Most utilities will have a "site survey" option similar to the Windows® XP utility as seen below.

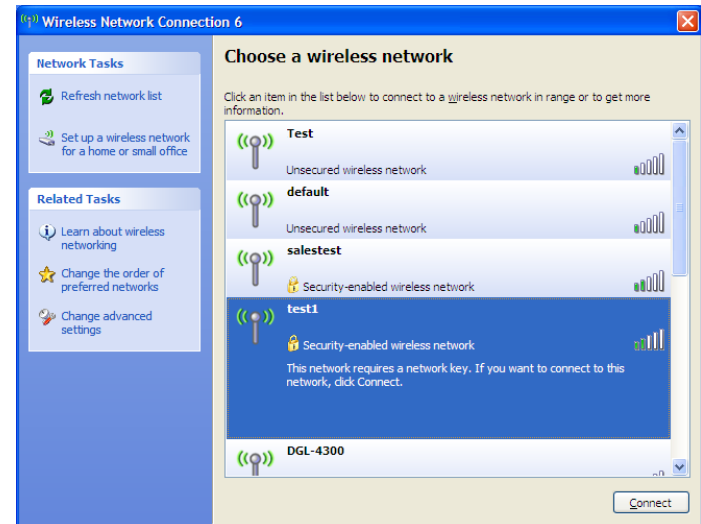
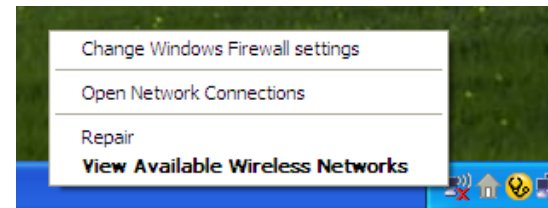
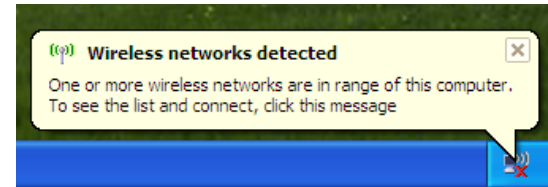
If you receive the **Wireless Networks Detected** bubble, click on the center of the bubble to access the utility.

or

Right-click on the wireless computer icon in your system tray (lower-right corner next to the time). Select **View Available Wireless Networks**.

The utility will display any available wireless networks in your area. Click on a network (displayed using the SSID) and click the **Connect** button.

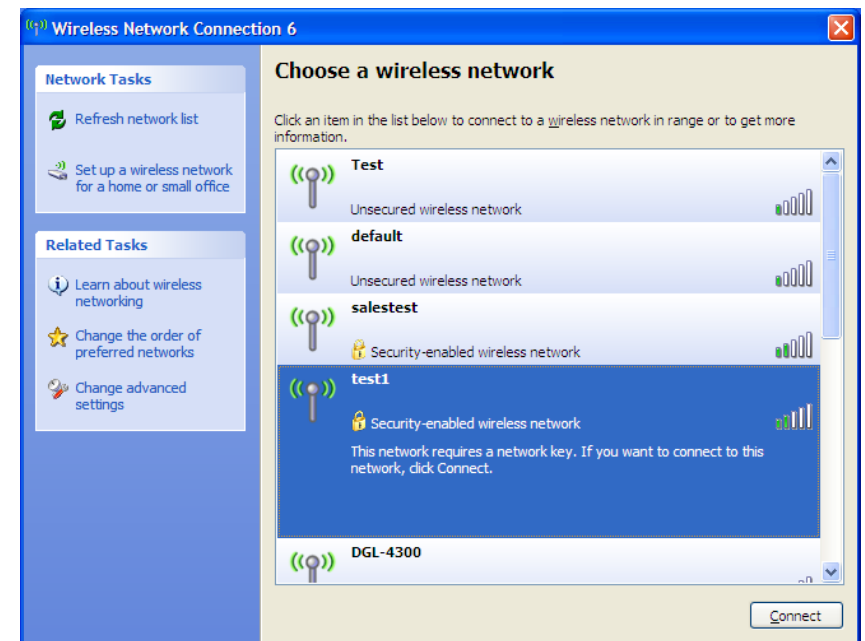
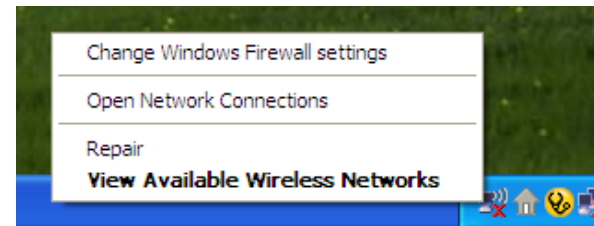
If you get a good signal but cannot access the Internet, check you TCP/IP settings for your wireless adapter. Refer to the **Networking Basics** section in this manual for more information.



WPA/WPA2

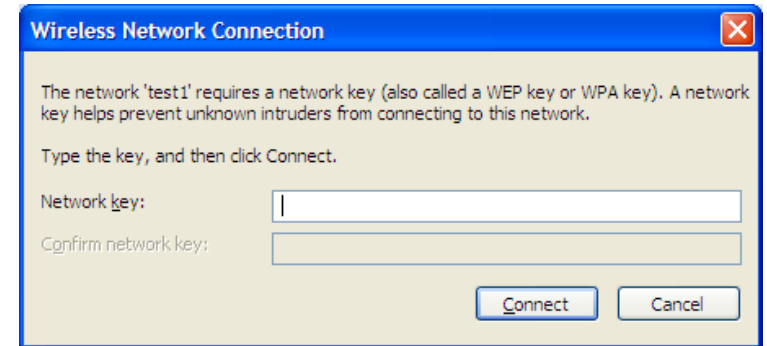
It is recommended to enable WPA on your wireless router or access point before configuring your wireless adapter. If you are joining an existing network, you will need to know the WPA key being used.

1. Open the Windows® XP Wireless Utility by right-clicking on the wireless computer icon in your system tray (lower-right corner of screen). Select **View Available Wireless Networks**.
2. Highlight the wireless network (SSID) you would like to connect to and click **Connect**.



3. The **Wireless Network Connection** box will appear. Enter the WPA-PSK passphrase and click **Connect**.

It may take 20-30 seconds to connect to the wireless network. If the connection fails, please verify that the WPA-PSK settings are correct. The WPA-PSK passphrase must be exactly the same as on the wireless router.



Troubleshooting

This chapter provides solutions to problems that can occur during the installation and operation of the DIR-810L. Read the following descriptions if you are having problems. The examples below are illustrated in Windows® XP. If you have a different operating system, the screenshots on your computer will look similar to the following examples.

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

When entering the IP address of the D-Link router (192.168.0.1 for example), you are not connecting to a website nor do you have to be connected to the Internet. The device has the utility built-in to a ROM chip in the device itself. Your computer must be on the same IP subnet to connect to the web-based utility.

- Make sure you have an updated Java-enabled web browser. We recommend the following:
 - Microsoft Internet Explorer® 7 and higher
 - Mozilla Firefox 3.5 and higher
 - Google™ Chrome 8 and higher
 - Apple Safari 4 and higher
- Verify physical connectivity by checking for solid link lights on the device. If you do not get a solid link light, try using a different cable or connect to a different port on the device if possible. If the computer is turned off, the link light may not be on.
- Disable any Internet security software running on the computer. Software firewalls such as Zone Alarm, Black Ice, Sygate, Norton Personal Firewall, and Windows® XP firewall may block access to the configuration pages. Check the help files included with your firewall software for more information on disabling or configuring it.

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

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

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

To reset the router, locate the reset button (hole) on the back of the unit. With the router powered on, use a paperclip to hold the button down for 10 seconds. Release the button and the router will go through its reboot process. Wait about 30 seconds to access the router. To re-configure the router, refer to page 13.



3. Why can't I connect to certain sites or send and receive e-mails when connecting through my router?

If you are having a problem sending or receiving e-mail, or connecting to secure sites such as eBay, banking sites, and Hotmail, we suggest lowering the MTU in increments of ten (Ex. 1492, 1482, 1472, etc).

To find the proper MTU Size, you'll have to do a special ping of the destination you're trying to go to. A destination could be another computer, or a URL.

- Click on **Start** and then click **Run**.
- Windows® 95, 98, and Me users type in **command** (Windows® NT, 2000, XP, Vista®, and 7 users type in **cmd**) and press **Enter** (or click **OK**).
- Once the window opens, you'll need to do a special ping. Use the following syntax:

ping [url] [-f] [-l] [MTU value]

Example: **ping yahoo.com -f -l 1472**

```
C:\>ping yahoo.com -f -l 1482
Pinging yahoo.com [66.94.234.13] with 1482 bytes of data:
Packet needs to be fragmented but DF set.
Packet needs to be fragmented but DF set.
Packet needs to be fragmented but DF set.
Packet needs to be fragmented but DF set.
Ping statistics for 66.94.234.13:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms
C:\>ping yahoo.com -f -l 1472
Pinging yahoo.com [66.94.234.13] with 1472 bytes of data:
Reply from 66.94.234.13: bytes=1472 time=93ms TTL=52
Reply from 66.94.234.13: bytes=1472 time=109ms TTL=52
Reply from 66.94.234.13: bytes=1472 time=125ms TTL=52
Reply from 66.94.234.13: bytes=1472 time=203ms TTL=52
Ping statistics for 66.94.234.13:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 93ms, Maximum = 203ms, Average = 132ms
C:\>
```

You should start at 1472 and work your way down by 10 each time. Once you get a reply, go up by 2 until you get a fragmented packet. Take that value and add 28 to the value to account for the various TCP/IP headers. For example, let's say that 1452 was the proper value, the actual MTU size would be 1480, which is the optimum for the network we're working with ($1452+28=1480$).

Once you find your MTU, you can now configure your router with the proper MTU size.

To change the MTU rate on your router follow the steps below:

- Open your browser, enter the IP address of your router (192.168.0.1) and click **OK**.
- Enter your username (admin) and password (blank by default). Click **OK** to enter the web configuration page for the device.
- Click on **Setup** and then click **Manual Configure**.
- To change the MTU enter the number in the MTU field and click **Save Settings** to save your settings.
- Test your e-mail. If changing the MTU does not resolve the problem, continue changing the MTU in increments of ten.

Wireless Basics

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

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

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

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

What is Wireless?

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

Why D-Link Wireless?

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

How does wireless work?

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

Wireless Local Area Network (WLAN)

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

Wireless Personal Area Network (WPAN)

Bluetooth is the industry standard wireless technology used for WPAN. Bluetooth devices in WPAN operate in a range up to 30 feet away.

Compared to WLAN the speed and wireless operation range are both less than WLAN, but in return it doesn't use nearly as much power which makes it ideal for personal devices, such as mobile phones, PDAs, headphones, laptops, speakers, and other devices that operate on batteries.

Who uses wireless?

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

Home

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

Small Office and Home Office

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

Where is wireless used?

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

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

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

Tips

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

Centralize your router or Access Point

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

Eliminate Interference

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

Security

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

Wireless Modes

There are basically two modes of networking:

- **Infrastructure** – All wireless clients will connect to an access point or wireless router.
- **Ad-Hoc** – Directly connecting to another computer, for peer-to-peer communication, using wireless network adapters on each computer, such as two or more DIR-810L wireless network Cardbus adapters.

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

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

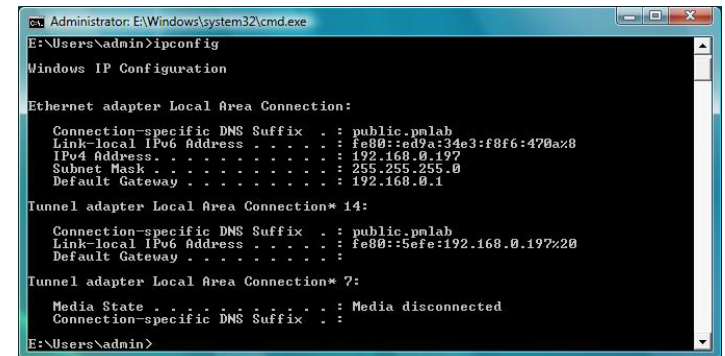
Networking Basics

Check your IP address

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

Windows® 8 Users

- Press the **Windows key** and **R** together. Type **cmd** in the box and click **OK**.
- At the prompt, type **ipconfig** and press **Enter**.
- This will display the IP address, subnet mask, and default gateway of your adapter.



```
Administrator: E:\Windows\system32\cmd.exe
E:\Users\Admin>ipconfig

Windows IP Configuration

Ethernet adapter Local Area Connection:

    Connection-specific DNS Suffix  . : public.pmlab
    Link-local IPv6 Address . . . . . : fe80::ed9a:34e3:f8f6:470a%8
    IPv4 Address. . . . . : 192.168.0.197
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 192.168.0.1

Tunnel adapter Local Area Connection* 14:

    Connection-specific DNS Suffix  . : public.pmlab
    Link-local IPv6 Address . . . . . : fe80::5efe:192.168.0.197%20
    Default Gateway . . . . . :

Tunnel adapter Local Area Connection* 7:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix  . :

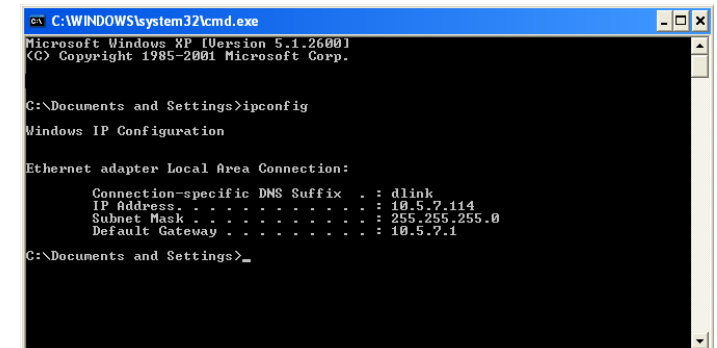
E:\Users\Admin>
```

Windows® 7/Vista® Users

- Click **Start**, type **cmd** in the search box and then click **OK**.
- At the prompt, type **ipconfig** and press **Enter**.
- This will display the IP address, subnet mask, and default gateway of your adapter.

Windows® XP Users

- Click on **Start > Run**. In the run box type **cmd** and click **OK**.
- At the prompt, type **ipconfig** and press **Enter**.
- This will display the IP address, subnet mask, and the default gateway of your adapter.



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

C:\Documents and Settings>ipconfig

Windows IP Configuration

Ethernet adapter Local Area Connection:

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

C:\Documents and Settings>
```

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

Statically Assign an IP Address

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

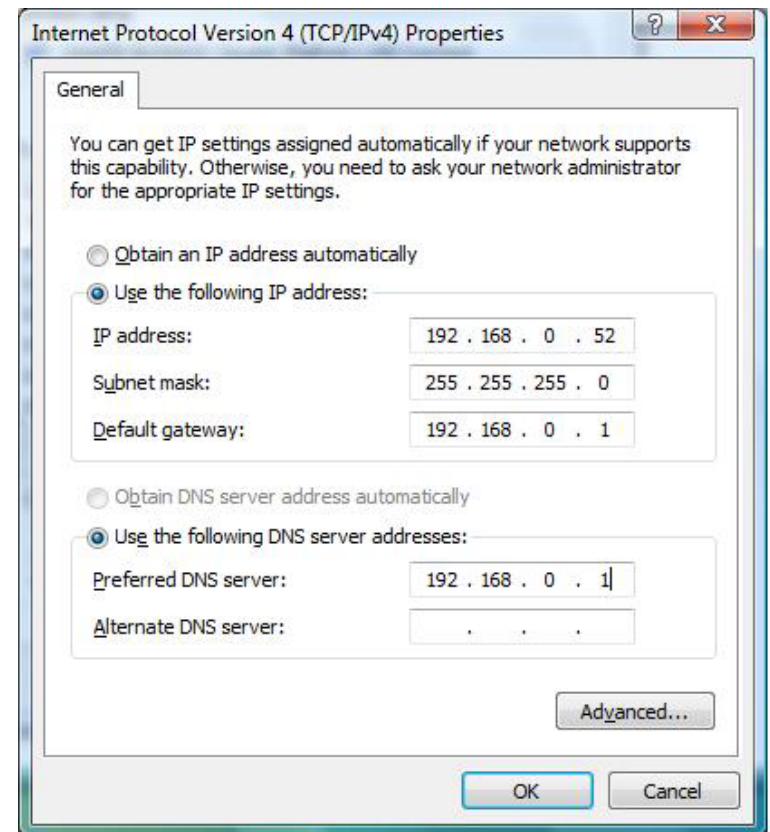
Windows® 8 Users

- Press the **Windows** key and then type **IP**. Click **Settings** on the right side and then click **View Network Connections**.
- Right-click on the adapter which represents your D-Link wireless network adapter.
- Highlight **Internet Protocol Version 4 (TCP /IPv4)** and click **Properties**.

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

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

- Set **Default Gateway** the same as the LAN IP address of your router or gateway.
- Set **Primary DNS** the same as the LAN IP address of your router or gateway.
- The **Secondary DNS** is optional (you may enter a DNS server from your ISP).
- Click **OK** to save your settings.



Windows® 7/ Vista® Users

- Click on **Start > Control Panel** (make sure you are in Classic View). Double-click on the **Network and Sharing Center** icon. If you are using Windows Vista, click on **Manage network connections** along the left panel in the window. For Windows® 7, click on **Change adapter settings**.

- Right-click on the **Local Area Connection** which represents your D-Link wireless network adapter which will be connected to your network.

- Highlight **Internet Protocol Version 4 (TCP /IPv4)** and click **Properties**.

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

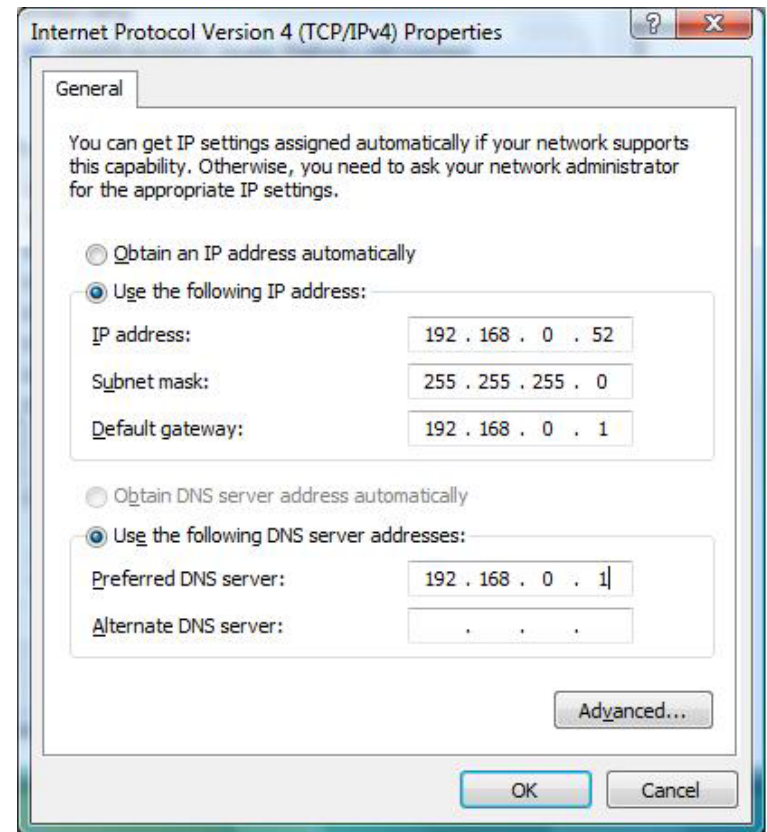
Example: If the router's LAN IP address is 192.168.0.1, make your IP address 192.168.0.X where X is a number between 2 and 99. Make sure that the number you choose is not in use on the network.

- Set **Default Gateway** the same as the LAN IP address of your router or gateway.

- Set **Primary DNS** the same as the LAN IP address of your router or gateway.

- The **Secondary DNS** is optional (you may enter a DNS server from your ISP).

- Click **OK** to save your settings.

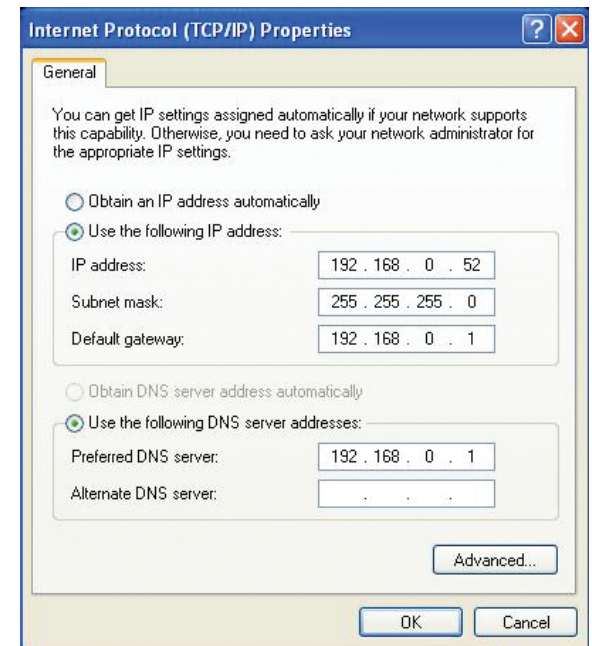


Windows® XP Users

- Click on **Start > Control Panel**. Make sure you are in Classic View. Double-click on the Network Connections icon.
- Right-click on the **Local Area Connection** which represents your D-Link wireless network adapter (or other adapter) which will be connected to your router.
- Highlight **Internet Protocol (TCP/IP)** and click **Properties**.
- Click **Use the following IP address** and enter an IP address that is on the same subnet as your network or LAN IP address on your router.

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

- Set **Default Gateway** the same as the LAN IP address of your router or gateway.
- Set **Primary DNS** as the LAN IP address of your router or gateway.
- The **Secondary DNS** is optional (you may enter a DNS server from your ISP).
- Click **OK** to save your settings.



Technical Specifications

Standards

- IEEE 802.11ac (draft)
- IEEE 802.11n
- IEEE 802.11g
- IEEE 802.11a

Physical Interface

- Four 10/100 Fast Ethernet LAN Ports
- 10/100 Fast Ethernet WAN Port
- 1 WPS Push Button
- Reset Button

Security

- Wi-Fi Protected Access (WPA/WPA2)
- WPS™

LEDs

- Power/WPS
- Internet

Power

- DC 12V/1.0A

Operating Temperature

- 32° to 104° F (0° to 40° C)

Operating Humidity

- 10% to 90% non-condensing

Certifications

- CE
- FCC
- IC
- C-Tick
- CSA international

Dimensions

- 6.16" x 4.46" x 2.11" (156.5mm x 113.2mm x 53.6mm)

Weight

- 0.41 lb (184.7g)

Warranty

- 1-Year Limited Warranty

¹ Maximum wireless signal rate derived from IEEE Standard 802.11ac (draft), 802.11a, 802.11g, and 802.11n specifications. Actual data throughput will vary. Network conditions and environmental factors, including volume of network traffic, building materials and construction, and network overhead, lower actual data throughput rate. Environmental factors will adversely affect wireless signal range.

² Frequency Range varies depending on country's regulation

Contacting Technical Support

U.S. and Canadian customers can contact D-Link technical support through our web site or by phone.

Before you contact technical support, please have the following ready:

- Model number of the product (e.g. DIR-810L)
- Hardware Revision (located on the label on the bottom of the router (e.g. rev A1))
- Serial Number (s/n number located on the label on the bottom of the router).

You can find software updates and user documentation on the D-Link website as well as frequently asked questions and answers to technical issues.

For customers within the United States:

Phone Support:

(877) 453-5465

Internet Support:

<http://support.dlink.com>

For customers within Canada:

Phone Support:

(800) 361-5265

Internet Support:

<http://support.dlink.ca>

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<http://tsd.dlink.com.tw/GPL.asp>

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Please direct all inquiries to:
Email: GPLCODE@DLink.com
Snail Mail:
Attn: GPLSOURCE REQUEST
D-Link Systems, Inc.
17595 Mt. Herrmann Street
Fountain Valley, CA 92708

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The precise terms and conditions for copying, distribution and modification follow.

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An interactive user interface displays “Appropriate Legal Notices” to the extent that it includes a convenient and prominently visible feature that (1) displays an appropriate copyright notice, and (2) tells the user that there is no warranty for the work (except to the extent that warranties are provided), that licensees may convey the work under this License, and how to view a copy of this License. If the interface presents a list of user commands or options, such as a menu, a prominent item in the list meets this criterion.

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The “Corresponding Source” for a work in object code form means all the source code needed to generate, install, and (for an executable work) run the object code and to modify the work, including scripts to control those activities. However, it does not include the work’s System Libraries, or general-purpose tools or generally available free programs which are used unmodified in performing those activities but which are not part of the work. For example, Corresponding Source includes interface definition files associated with source files for the work, and the source code for shared libraries and dynamically linked subprograms that the work is specifically designed to require, such as by intimate data communication or control flow between those subprograms and other parts of the work.

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You may convey a work based on the Program, or the modifications to produce it from the Program, in the form of source code under the terms of section 4, provided that you also meet all of these conditions:

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You may convey a covered work in object code form under the terms of sections 4 and 5, provided that you also convey the machine-readable Corresponding Source under the terms of this License, in one of these ways:

- a) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by the Corresponding Source fixed on a durable physical medium customarily used for software interchange.
- b) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by a written offer, valid for at least three years and valid for as long as you offer spare parts or customer support for that product model, to give anyone who possesses the object code either (1) a copy of the Corresponding Source for all the software in the product that is covered by this License, on a durable physical medium customarily used for software interchange, for a price no more than your reasonable cost of physically performing this conveying of source, or (2) access to copy the Corresponding Source from a network server at no charge.
- c) Convey individual copies of the object code with a copy of the written offer to provide the Corresponding Source. This alternative is allowed only occasionally and noncommercially, and only if you received the object code with such an offer, in accord with subsection 6b.
- d) Convey the object code by offering access from a designated place (gratis or for a charge), and offer equivalent access to the Corresponding Source in the same way through the same place at no further charge. You need not require recipients to copy the Corresponding Source along with the object code. If the place to copy the object code is a network server, the Corresponding Source may be on a different server (operated by you or a third party) that supports equivalent copying facilities, provided you maintain clear directions next to the object code saying where to find the Corresponding Source. Regardless of what server hosts the Corresponding Source, you remain obligated to ensure that it is available for as long as needed to satisfy these requirements.
- e) Convey the object code using peer-to-peer transmission, provided you inform other peers where the object code and Corresponding Source of the work are being offered to the general public at no charge under subsection 6d.

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The requirement to provide Installation Information does not include a requirement to continue to provide support service, warranty, or updates for a work that has been modified or installed by the recipient, or for the User Product in which it has been modified or installed. Access to a network may be denied when the modification itself materially and adversely affects the operation of the network or violates the rules and protocols for communication across the network.

Corresponding Source conveyed, and Installation Information provided, in accord with this section must be in a format that is publicly documented (and with an implementation available to the public in source code form), and must require no special password or key for unpacking, reading or copying.

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If the disclaimer of warranty and limitation of liability provided above cannot be given local legal effect according to their terms, reviewing courts shall apply local law that most closely approximates an absolute waiver of all civil liability in connection with the Program, unless a warranty or assumption of liability accompanies a copy of the Program in return for a fee.

Warranty

Subject to the terms and conditions set forth herein, D-Link Systems, Inc. (“D-Link”) provides this Limited Warranty:

- Only to the person or entity that originally purchased the product from D-Link or its authorized reseller or distributor, and
- Only for products purchased and delivered within the fifty states of the United States, the District of Columbia, U.S. Possessions or Protectorates, U.S. Military Installations, or addresses with an APO or FPO.

Limited Warranty:

D-Link warrants that the hardware portion of the D-Link product described below (“Hardware”) will be free from material defects in workmanship and materials under normal use from the date of original retail purchase of the product, for the period set forth below (“Warranty Period”), except as otherwise stated herein.

- Hardware (excluding power supplies and fans): One (1) year
- Power supplies and fans: One (1) year
- Spare parts and spare kits: Ninety (90) days

The customer’s sole and exclusive remedy and the entire liability of D-Link and its suppliers under this Limited Warranty will be, at D-Link’s option, to repair or replace the defective Hardware during the Warranty Period at no charge to the original owner or to refund the actual purchase price paid. Any repair or replacement will be rendered by D-Link at an Authorized D-Link Service Office. The replacement hardware need not be new or have an identical make, model or part. D-Link may, at its option, replace the defective Hardware or any part thereof with any reconditioned product that D-Link reasonably determines is substantially equivalent (or superior) in all material respects to the defective Hardware. Repaired or replacement hardware will be warranted for the remainder of the original Warranty Period or ninety (90) days, whichever is longer, and is subject to the same limitations and exclusions. If a material defect is incapable of correction, or if D-Link determines that it is not practical to repair or replace the defective Hardware, the actual price paid by the original purchaser for the defective Hardware will be refunded by D-Link upon return to D-Link of the defective Hardware. All Hardware or part thereof that is replaced by D-Link, or for which the purchase price is refunded, shall become the property of D-Link upon replacement or refund.

Limited Software Warranty:

D-Link warrants that the software portion of the product (“Software”) will substantially conform to D-Link’s then current functional specifications for the Software, as set forth in the applicable documentation, from the date of original retail purchase of the Software for a period of ninety (90) days (“Software Warranty Period”), provided that the Software is properly installed on approved hardware and operated as contemplated in its documentation. D-Link further warrants that, during the Software Warranty Period, the magnetic media on which D-Link delivers the Software will be free of physical defects. The customer’s sole and exclusive remedy and the entire liability of D-Link and its suppliers under this Limited Warranty will be, at D-Link’s option, to replace the non-conforming Software (or defective media) with software that substantially conforms to D-Link’s functional specifications for the Software or to refund the portion of the actual purchase price paid that is attributable to the Software. Except as otherwise agreed by D-Link in writing, the replacement Software is provided only to the original licensee, and is subject to the terms and conditions of the license granted by D-Link for the Software. Replacement Software will be warranted for the remainder of the original Warranty Period and is subject to the same limitations and exclusions. If a material non-conformance is incapable of correction, or if D-Link determines in its sole discretion that it is not practical to replace the non-conforming Software, the price paid by the original licensee for the non-conforming Software will be refunded by D-Link; provided that the non-conforming Software (and all copies thereof) is first returned to D-Link. The license granted respecting any Software for which a refund is given automatically terminates.

Non-Applicability of Warranty:

The Limited Warranty provided hereunder for Hardware and Software portions of D-Link’s products will not be applied to and does not cover any refurbished product and any product purchased through the inventory clearance or liquidation sale or other sales in which D-Link, the sellers, or the liquidators expressly disclaim their warranty obligation pertaining to the product and in that case, the product is being sold “As-Is” without any warranty whatsoever including, without limitation, the Limited Warranty as described herein, notwithstanding anything stated herein to the contrary.

Submitting A Claim (USA):

The customer shall return the product to the original purchase point based on its return policy. In case the return policy period has expired and the product is within warranty, the customer shall submit a claim to D-Link as outlined below:

- The customer must submit with the product as part of the claim a written description of the Hardware defect or Software nonconformance in sufficient detail to allow DLink to confirm the same, along with proof of purchase of the product (such as a copy of the dated purchase invoice for the product) if the product is not registered.
- The customer must obtain a Case ID Number from D-Link Technical Support at 1-877-453-5465, who will attempt to assist the customer in resolving any suspected defects with the product. If the product is considered defective, the customer must obtain a Return Material Authorization (“RMA”) number by completing the RMA form and entering the assigned Case ID Number at <https://rma.dlink.com/>.

- After an RMA number is issued, the defective product must be packaged securely in the original or other suitable shipping package to ensure that it will not be damaged in transit, and the RMA number must be prominently marked on the outside of the package. Do not include any manuals or accessories in the shipping package. D-Link will only replace the defective portion of the product and will not ship back any accessories.
- The customer is responsible for all in-bound shipping charges to D-Link. No Cash on Delivery (“COD”) is allowed. Products sent COD will either be rejected by D-Link or become the property of D-Link. Products shall be fully insured by the customer and shipped to D-Link Systems, Inc., 17595 Mt. Herrmann, Fountain Valley, CA 92708. D-Link will not be held responsible for any packages that are lost in transit to D-Link. The repaired or replaced packages will be shipped to the customer via UPS Ground or any common carrier selected by D-Link. Return shipping charges shall be prepaid by D-Link if you use an address in the United States, otherwise we will ship the product to you freight collect. Expedited shipping is available upon request and provided shipping charges are prepaid by the customer. D-Link may reject or return any product that is not packaged and shipped in strict compliance with the foregoing requirements, or for which an RMA number is not visible from the outside of the package. The product owner agrees to pay D-Link’s reasonable handling and return shipping charges for any product that is not packaged and shipped in accordance with the foregoing requirements, or that is determined by D-Link not to be defective or non-conforming.

Submitting A Claim (Canada):

The customer shall return the product to the original purchase point based on its return policy. In case the return policy period has expired and the product is within warranty, the customer shall submit a claim to D-Link as outlined below:

- Customers need to provide their receipt (proof of purchase) even if the product is registered. Without a receipt, no warranty service will be done. The registration is not considered a proof of purchase.
- The customer must submit with the product as part of the claim a written description of the Hardware defect or Software nonconformance in sufficient detail to allow D-Link to confirm the same, along with proof of purchase of the product (such as a copy of the dated purchase invoice for the product) if the product is not registered.
- The customer must obtain a Case ID Number from D-Link Technical Support at 1-800-361-5265, who will attempt to assist the customer in resolving any suspected defects with the product. If the product is considered defective, the customer must obtain a Return Material Authorization (“RMA”) number by completing the RMA form and entering the assigned Case ID Number at <https://rma.dlink.ca/>.
- After an RMA number is issued, the defective product must be packaged securely in the original or other suitable shipping package to ensure that it will not be damaged in transit, and the RMA number must be prominently marked on the outside of the package. Do not include any manuals or accessories in the shipping package. D-Link will only replace the defective portion of the product and will not ship back any accessories.

- The customer is responsible for all in-bound shipping charges to D-Link. No Cash on Delivery (“COD”) is allowed. Products sent COD will be rejected by D-Link. Products shall be fully insured by the customer and shipped to D-Link Networks, Inc., 2525 Meadowvale Boulevard Mississauga, Ontario, L5N 5S2 Canada. D-Link will not be held responsible for any packages that are lost in transit to D-Link. The repaired or replaced packages will be shipped to the customer via Purolator Canada or any common carrier selected by D-Link. Return shipping charges shall be prepaid by D-Link if you use an address in Canada, otherwise we will ship the product to you freight collect. Expedited shipping is available upon request and provided shipping charges are prepaid by the customer. D-Link may reject or return any product that is not packaged and shipped in strict compliance with the foregoing requirements, or for which an RMA number is not visible from the outside of the package. The product owner agrees to pay D-Link’s reasonable handling and return shipping charges for any product that is not packaged and shipped in accordance with the foregoing requirements, or that is determined by D-Link not to be defective or non-conforming.
- RMA phone number: 1-800-361-5265 Hours of Operation: Monday-Friday, 9:00AM – 9:00PM EST

What Is Not Covered:

The Limited Warranty provided herein by D-Link does not cover:

Products that, in D-Link’s judgment, have been subjected to abuse, accident, alteration, modification, tampering, negligence, misuse, faulty installation, lack of reasonable care, repair or service in any way that is not contemplated in the documentation for the product, or if the model or serial number has been altered, tampered with, defaced or removed; Initial installation, installation and removal of the product for repair, and shipping costs; Operational adjustments covered in the operating manual for the product, and normal maintenance; Damage that occurs in shipment, due to act of God, failures due to power surge, and cosmetic damage; Any hardware, software, firmware or other products or services provided by anyone other than D-Link; and Products that have been purchased from inventory clearance or liquidation sales or other sales in which D-Link, the sellers, or the liquidators expressly disclaim their warranty obligation pertaining to the product.

While necessary maintenance or repairs on your Product can be performed by any company, we recommend that you use only an Authorized D-Link Service Office. Improper or incorrectly performed maintenance or repair voids this Limited Warranty.

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CE Mark Warning:

This is a Class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

FCC Statement:

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 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.

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.

FCC Caution:

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Operations in the 5.15-5.25GHz / 5.470 ~ 5.725GHz band are restricted to indoor usage only.

IMPORTANT NOTICE:**FCC Radiation Exposure Statement:**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body. To maintain compliance with FCC RF exposure compliance requirements, please avoid direct contact to the transmitting antenna during transmitting.

If this device is going to be operated in 5.15 ~ 5.25GHz frequency range, then it is restricted in indoor environment only. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

The availability of some specific channels and/or operational frequency bands are country dependent and are firmware programmed at the factory to match the intended destination. The firmware setting is not accessible by the end user.

ICC Notice:

Operation is subject to the following two conditions:

- 1) This device may not cause interference and
- 2) This device must accept any interference, including interference that may cause undesired operation of the device.

IMPORTANT NOTE:

IC Radiation Exposure Statement:

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

- (i) The device for the band 5150-5250 MHz is only for indoor usage to reduce potential for harmful interference to co-channel mobile satellite systems;
- (ii) The maximum antenna gain (2dBi) permitted (for devices in the band 5725-5825 MHz) to comply with the e.i.r.p. limits specified for point-to-point and non point-to-point operation as appropriate, as stated in section A9.2(3).

In addition, users should also be cautioned to take note that high-power radars are allocated as primary users (meaning they have priority) of the bands 5250-5350 MHz and 5650-5850 MHz and these radars could cause interference and/or damage to LE-LAN devices.

Règlement d'Industry Canada

Les conditions de fonctionnement sont sujettes à deux conditions:

- (1) Ce périphérique ne doit pas causer d'interférence et.
- (2) Ce périphérique doit accepter toute interférence, y compris les interférences pouvant perturber le bon fonctionnement de ce périphérique.

Registration

Register your product online at registration.dlink.com



Product registration is entirely voluntary and failure to complete or return this form will not diminish your warranty rights.

Version 1.0
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