



**User Manual**

# Wireless AC1000 Dual Band Cloud Router

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# 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
2.0	March 27, 2014	• Initial release for Revision B1

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# Package Contents



DIR-820L Wireless AC1000 Dual Band Cloud Router



Ethernet Cable



Power Adapter



Wi-Fi Configuration Card

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-820L will cause damage and void the warranty for this product.

# System Requirements

<p><b>Network Requirements</b></p>	<ul style="list-style-type: none"> <li>• An Ethernet-based Cable or DSL modem</li> <li>• IEEE 802.11ac, 802.11a, 802.11n or 802.11g wireless clients</li> <li>• 10/100 Ethernet</li> </ul>
<p><b>Web-based Configuration Utility Requirements</b></p>	<p><b>Computer with the following:</b></p> <ul style="list-style-type: none"> <li>• Windows®, Macintosh, or Linux-based operating system</li> <li>• An installed Ethernet adapter</li> </ul> <p><b>Browser Requirements:</b></p> <ul style="list-style-type: none"> <li>• Internet Explorer 7 or higher</li> <li>• Firefox 3.5 or higher</li> <li>• Safari 4 or higher</li> <li>• Chrome 8 or higher</li> </ul> <p><b>Windows® Users:</b> Make sure you have the latest version of Java installed. Visit <a href="http://www.java.com">www.java.com</a> to download the latest version.</p>
<p><b>mydlink Requirements</b></p>	<ul style="list-style-type: none"> <li>• iPhone/iPad/iPod Touch (iOS 3.0 or higher)</li> <li>• Android device (1.6 or higher)</li> <li>• Computer with th following browser requirements:             <ul style="list-style-type: none"> <li>• Internet Explorer 7 or higher</li> <li>• Firefox 3 or higher</li> <li>• Safari 5 or higher</li> <li>• Chrome 5 or higher</li> </ul> </li> </ul> <p><small>iPhone, iPad, and iPod touch are registered trademarks of Apple Inc. Android is a trademark of Google, Inc.</small></p>

# Introduction

Now you can monitor and manage your home network right from your laptop, iPhone®, iPad®, or Android™ device. This cloud-enabled router can be configured to send an email to keep you informed anywhere, anytime when new devices are connecting to your network or unwanted access is detected. Monitor in real time websites that are being visited with recent browser history displayed on the mydlink™ Lite app – which is great for parents. The D-Link Cloud Service can detect and block unwelcome guests who try to access your wireless network, and suspicious activities will be displayed right on your mydlink™ Lite app or browser.

The D-Link DIR-820L is an IEEE 802.11ac compliant device that delivers speeds up to three times faster than 802.11n while staying backward compatible with 802.11a/g/b devices. Connect the DIR-820L to a Cable or DSL modem and provide high-speed Internet access to multiple computers, game consoles, and media players. Create a secure wireless network to share photos, files, music, videos, printers, and network storage. Powered by 802.11ac technology and equipped with four internal antennas, this router provides superior wireless coverage for larger homes and offices, or for users running bandwidth-intensive applications. The DIR-820L also includes a 4-port 10/100 Fast Ethernet switch that connects wired devices to enjoy lag-free Internet gaming and faster file transfers.

D-Link has created SharePort™ technology to bring more flexibility to your network. With SharePort™ technology, you can connect a USB printer and share it throughout your network. You can also share a USB storage device, providing network storage for everyone to share.

With some routers, all wired and wireless traffic, including VoIP, Video Streaming, Online Gaming, and Web browsing are mixed together into a single data stream. By handling data this way, bandwidth intensive applications like video streaming could pause or delay. With D-Link Intelligent QoS Technology, wired and wireless traffic are analyzed and separated into multiple data streams.

The DIR-820L supports the latest wireless security features to help prevent unauthorized access, be it over a wireless network or the Internet. Support for WPA™ and WPA2™ standards ensures that you will be able to use the best possible encryption regardless of your client devices. In addition, this router utilizes Dual Active Firewalls (SPI and NAT) to prevent potential attacks from across the Internet making it the ideal centerpiece for your wireless network in the home or office.

# Features

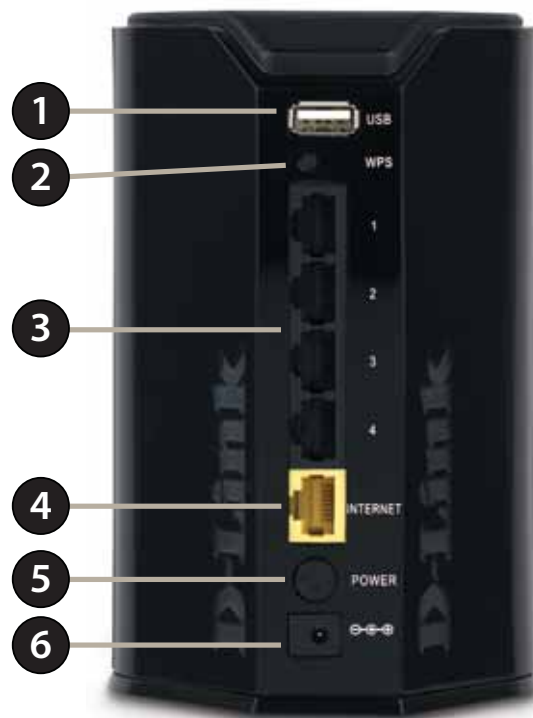
- **Ultimate Fast Wireless Networking** - The DIR-820L provides a wireless connection of up to 300Mbps in the 2.4GHz band, and 900Mbps in the 5GHz band with other 802.11ac and 802.11n wireless clients. This capability allows users to simultaneously engage in video streaming, online gaming, and real-time calling. The performance of this 802.11ac wireless router gives you the freedom of wireless networking at speeds three times faster than 802.11n.
- **Compatible with 802.11a/g/n Devices** - The DIR-820L is still fully compatible with the IEEE 802.11a/g/n standards, so it can connect with existing 802.11a, 802.11g, and 802.11n PCI, USB, and Cardbus adapters.
- **Advanced Firewall Features** - The Web-based user interface displays a number of advanced network management features including:
  - **Content Filtering** - Easily-applied content filtering based on MAC Address, URL, and/or Domain Name.
  - **Filter Scheduling** - These filters can be scheduled to be active on certain days or for a duration of hours or minutes.
  - **Secure Multiple/Concurrent Sessions** - The DIR-820L can pass through VPN sessions. It supports multiple and concurrent IPsec and PPTP sessions, so users behind the DIR-820L can securely access corporate networks.
- **User-friendly Setup Wizard** - Through its easy-to-use web-based user interface, the DIR-820L lets you control what information is accessible to those on the wireless network, whether from the Internet or from your company's server. Configure your router to your specific settings within minutes.

\* Maximum wireless signal rate derived from IEEE Standard 802.11a, 802.11g, 802.11n and 802.11ac 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	USB Port	Connect a USB flash drive to share content throughout your network.
2	WPS Button	Press to start the Wi-Fi Protected Setup process. The Internet LED will start to blink.
3	LAN Ports (1-4)	Connect Fast Ethernet devices such as computers, switches, storage (NAS) devices, and game consoles.
4	Internet Port	Using an Ethernet cable, connect your broadband modem to this port.
5	Power Button	Press the power button to power on and off.
6	Power Receptor	Receptor for the supplied power adapter.

# Hardware Overview

## LEDs



<b>1</b>	Power LED	A solid green light indicates a proper connection to the power supply. The light will blink green during the WPS process. The light will blink orange during boot up.
<b>2</b>	Internet LED	A solid green light indicates a connection to the Internet. If the LED is orange, a cable is connected but the router can not communicate with the Internet.

# 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.
- You can only use the Ethernet port on your modem. If you were using the USB connection before using the router, then you must turn off your modem, disconnect the USB cable and connect an Ethernet cable to the Internet port on the router, and then turn the modem back on. In some cases, you may need to call your ISP to change connection types (USB to Ethernet).
- If you have DSL and are connecting via PPPoE, make sure you disable or uninstall any PPPoE software such as WinPoet, Broadjump, or Enternet 300 from your computer or you will not be able to connect to the Internet.

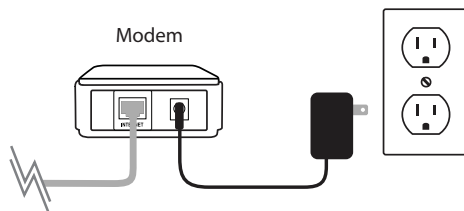
## Wireless Installation Considerations

This 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:

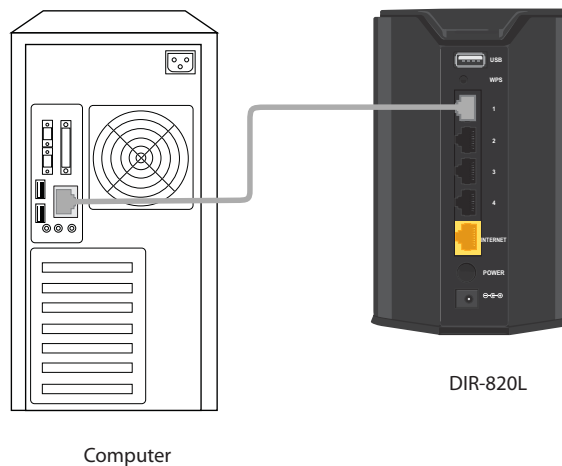
1. Keep the number of walls and ceilings between the D-Link router and other network devices to a minimum - each wall or ceiling can reduce your adapter's range from 1-30 meters (3-90 feet). Position your devices so that the number of walls or ceilings is minimized.
2. Be aware of the direct line between network devices. A wall that is 0.5 meters at a 45-degree angle appears to be almost 1 meter thick. At a 2-degree angle it looks over 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 2.4 GHz 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 2.4 GHz 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.

# Hardware Setup

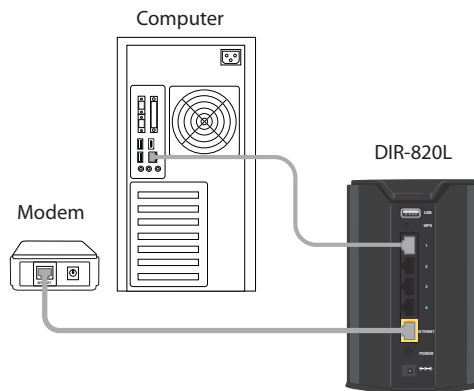
1. Turn off and unplug your cable or DSL broadband modem. This is required.



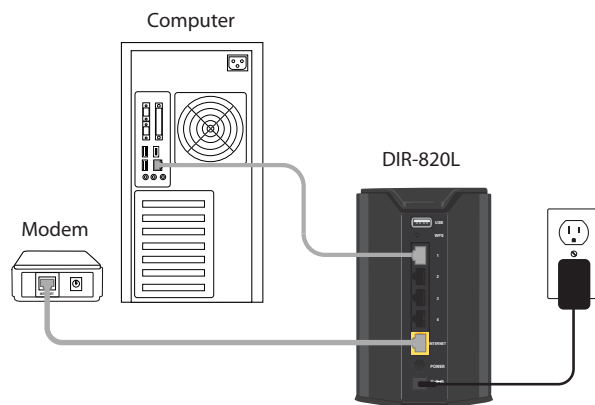
2. Position your router close to your modem and a computer. Place the router in an open area of your intended work area for better wireless coverage.
3. Unplug the Ethernet cable from your modem (or existing router if upgrading) that is connected to your computer. Plug it into the LAN port labeled **1** on the back of your router. The router is now connected to your computer.



4. Plug one end of the included blue Ethernet cable that came with your router into the yellow port labeled INTERNET on the back of the router. Plug the other end of this cable into the Ethernet port on your modem.



5. Reconnect the power adapter to your cable or DSL broadband modem and wait for two minutes.
6. Connect the supplied power adapter into the power port on the back of the router and then plug it into a power outlet or surge protector. Press the power button and verify that the power LED is lit. Allow 1 minute for the router to boot up.



7. If you are connecting to a Broadband service that uses a dynamic connection (not PPPoE), you may be online already. Try opening a web browser and enter a web site. A solid green light indicates connection on the Internet port and the router can connect to the Internet. If the LED is orange, the connection is good but the router cannot connect to the Internet. It may need to be configured. See next page.

# Configuration

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

- **D-Link Setup Wizard** - This wizard will launch when you log into the router for the first time. Refer to "Quick Setup Wizard" on page 12.
- **QRS Mobile App** - Use your iOS or Android device to configure your router. Refer to "QRS Mobile App" on page 19.
- **Manual Setup** - Log into the router and manually configure your router (advanced users only). Refer to "Internet" on page 25.

# Quick Setup Wizard

If this is your first time installing the router, open your web browser. You will automatically be directed to the **Wizard Setup Screen**. If not, enter "**http://dlinkrouter.local.**" then press Enter.

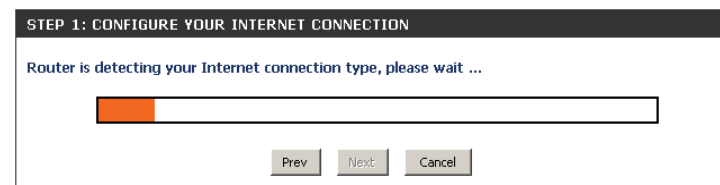
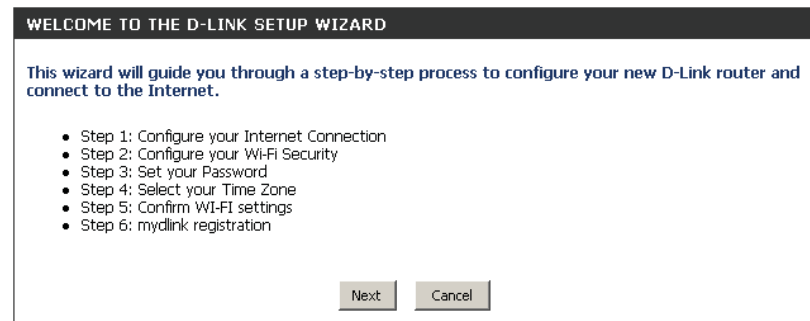
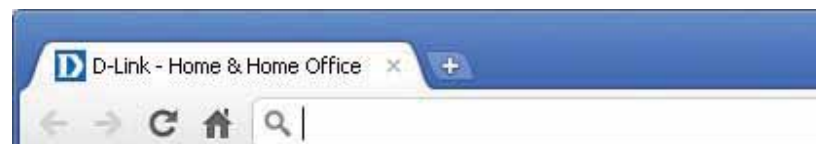
If you have already configured your settings and you would like to access the configuration utility, please refer to "Web-based Configuration Utility" on page 24.

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.

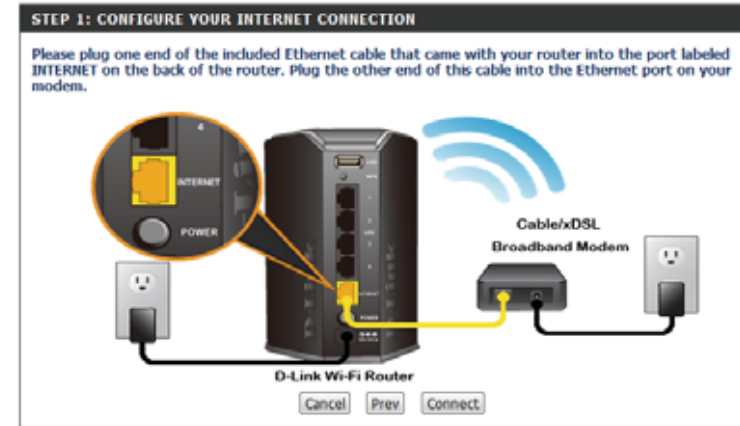
Click **Next** to continue.

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.

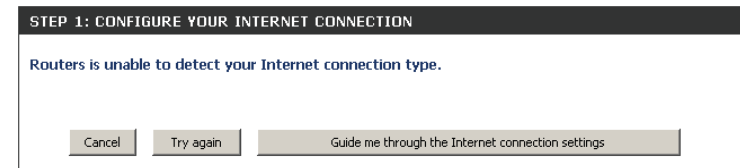




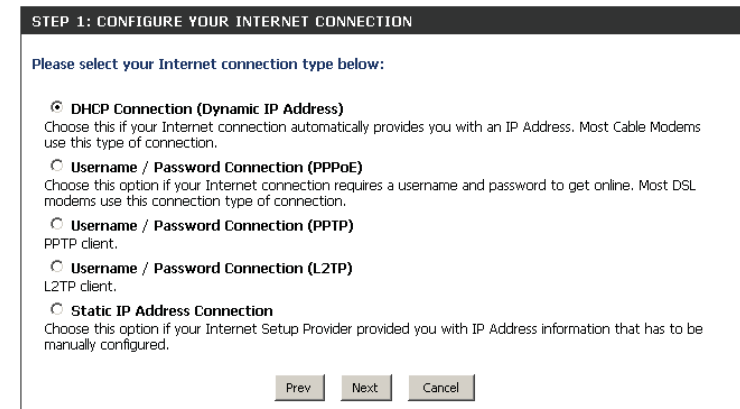
If the router does not detect a valid Ethernet connection from the Internet port, this screen will appear. Connect your broadband modem to the Internet port and then click **Try Again**.



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.



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 :

Prev Next Cancel

**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 :

Prev Next Cancel

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 2.4 GHz and 5 GHz segments, create a Wi-Fi network name (SSID) using up to 32 characters.

Create a Wi-Fi password (between 8-63 characters). Your wireless clients will need to have this passphrase 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**

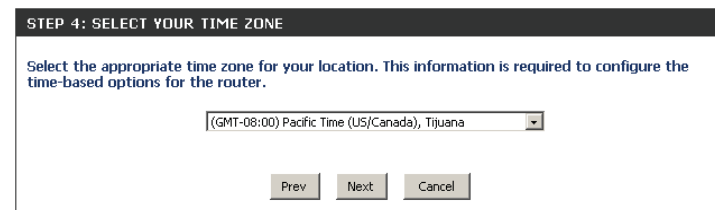
By default, your new D-Link Router does not have a password configured for administrator access to the Web-based configuration pages. To secure your new networking device, please set and verify a password below, and enabling CAPTCHA Graphical Authentication provides added security protection to prevent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

Password:

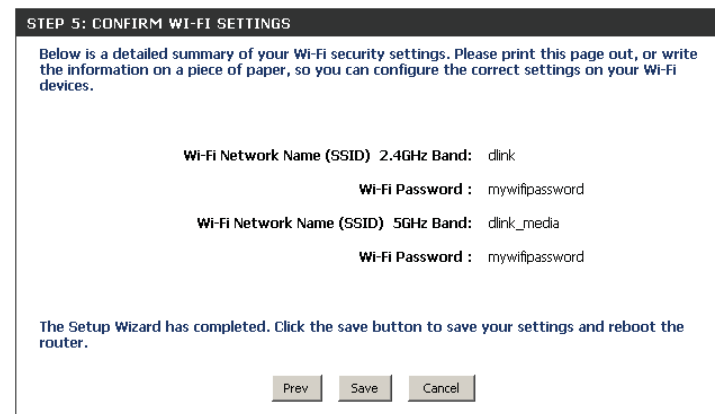
Verify Password :

Enable Graphical Authentication :

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



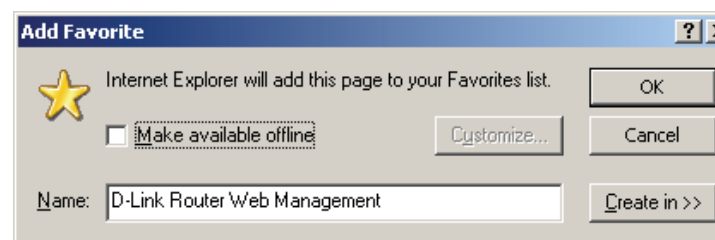
The Setup Complete window will display your Wi-Fi settings. Click **Save and Connect** to continue.



If you want to create a bookmark to the router, click **OK**. Click **Cancel** if you do not want to create a bookmark.



If you clicked **Yes**, a window may appear (depending on what web browser you are using) to create a bookmark.



To use the 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 **Cancel**.

If you clicked **Yes**, enter your mydlink account name (email address) and password. Click **Login** to register your router.

If you clicked **No**, fill out the requested information and click **Sign Up** to create your mydlink account.

**MYDLINK REGISTRATION**

To use the features of [mydlink.com](#) and the mydlink Lite app, you will need an account with [mydlink.com](#). If you already have an account, select Yes, I have a mydlink account and click Next to register the router with [mydlink.com](#). If you do not have an account, select No, I want to register and login with a new mydlink account and click Next to create an account. If you do not wish to sign up for the mydlink service, please click Cancel.

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), Android device (1.6 or higher).

To download the "mydlink lite" app, visit the Apple Store, Android Market 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 iOS/Android device to install and configure your router.

## Step 1

From your iPad, Touch, or iPhone, 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.



## 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 Wi-Fi name (SSID) as listed on the supplied info card. Select and then enter your Wi-Fi password.



## Step 3

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



# SharePort Mobile App

The SharePort Mobile app will allow you to access files from a USB thumb drive that is plugged into your router. You must enable file sharing from the **Setup > Storage** page (refer to page 68) for this app to work properly.

1. Insert your USB flash drive into DIR-820L.

2. Scan the QR code to download the **SharePort Mobile** app to your iOS or Android device.



3. From your iOS mobile device, click **Settings**.



Settings



4. Click **Wi-Fi**, select the Wi-Fi Network Name (SSID) that you created in the setup and then enter your Wi-Fi password.



5. Once connected, click on the **SharePort Mobile** icon.



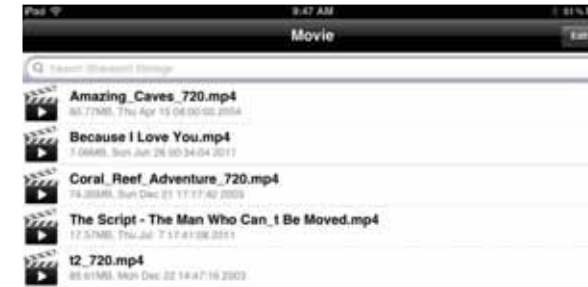
6. The following screen will appear.



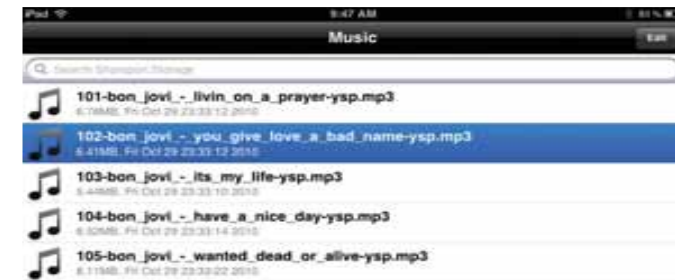
7. Click on **Settings** icon located on the right top corner of the screen. Click **Edit** to enter your User Name and Password. Once you finish, click **Done** to continue.



8. For the Movie section, click the movie icon to play your movie from your USB flash drive. Supported video formats are mp4, mov, and m4v.



9. For the Music section, click the music icon to play your music from your USB flash drive. Supported audio formats are mp3, wav, and m4a



10. For the Photo section, click the Photo icon to view your photos from your USB flash drive. Supported image formats are bmp, jpg, and png.



11. For the Files section, click on the Files icon to view your files from your USB flash drive. Supported formats for iOS are Microsoft Office and Adobe Acrobat. Supported formats for Android vary by device.



12. To upload a file from your mobile device to your USB drive, go to the **Folder** section, select **Upload** from the menu, (Android users may need to press a "..." button to create the menu.) and then select the "+" at the top-right corner. This will give you a direct view of your device's files and folders. Browse for the file you want to upload, and select it. Your file will then be copied from your mobile device to your USB drive.

In **Folder** you may also explore the various folders on the USB drive without separating the content by type of file.



13. To permanently download a file to your mobile device, select the "Star" icon next to it while browsing the categories (listed below). This will save it as a **Favorite** and make the file available to you even when not connected to the USB drive. If a file is not added as a favorite, then it will not be saved to your mobile device.



14. You can access files on a USB drive from a web browser:  
**http://shareport.local.**

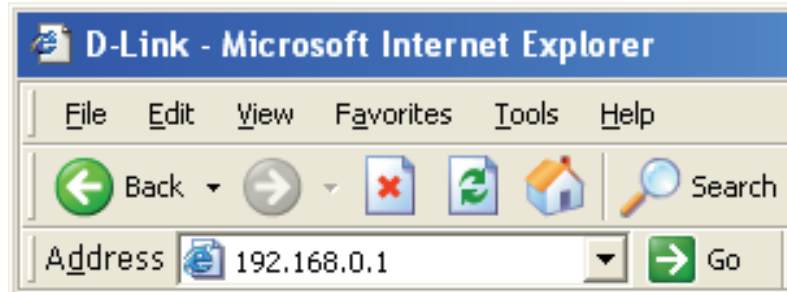
**Note:** If you change your device/admin password, you will need to use the new password in the SharePort Mobile app.



# Web-based Configuration Utility

To access the configuration utility, open a web-browser such as Internet Explorer and enter address of the router (**http://dlinkrouter.local.**).

You may also connect by typing **http://192.168.0.1** in the address bar.



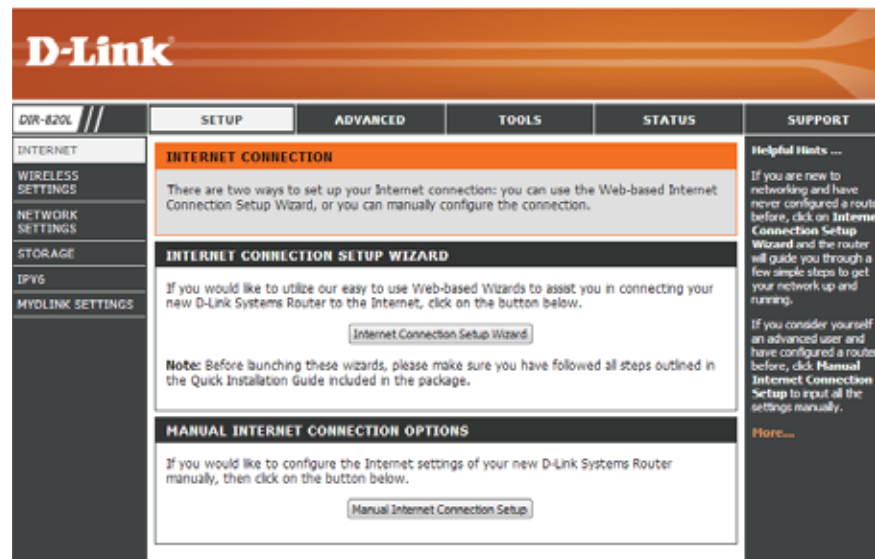
Leave the password blank by default.

A screenshot of the router's web-based configuration utility login page. 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 : Admin" and "Password :". A "Login" button is located to the right of the password field.

# Setup Internet

Click **Manual Internet Connection Setup** to configure your connection manually and continue to the next page.

If you want to configure your router to connect to the Internet using the wizard, click **Internet Connection Setup Wizard**. You will be directed to the Quick Setup Wizard.



The screenshot displays the D-Link web interface for the DIR-820L router. 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: INTERNET, WIRELESS SETTINGS, NETWORK SETTINGS, STORAGE, IPV6, and MYLINK SETTINGS. The main content area is titled "INTERNET CONNECTION" and provides instructions on how to set up the Internet connection. It offers two options: using the "Internet Connection Setup Wizard" for a guided setup or "Manual Internet Connection Options" for manual configuration. A note advises users to follow the Quick Installation Guide before launching the wizards. A "Helpful Hints" sidebar on the right provides additional guidance for new and advanced users.

DIR-820L	SETUP	ADVANCED	TOOLS	STATUS	SUPPORT
INTERNET	<b>INTERNET CONNECTION</b> 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.				<b>Helpful Hints ...</b> If you are new to networking and have never configured a router before, click on <b>Internet Connection Setup Wizard</b> and the router will guide you through a few simple steps to get your network up and running.  If you consider yourself an advanced user and have configured a router before, click <b>Manual Internet Connection Setup</b> to input all the settings manually.  <a href="#">More...</a>
WIRELESS SETTINGS	<b>INTERNET CONNECTION SETUP WIZARD</b> 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.  <a href="#">Internet Connection Setup Wizard</a>  <b>Note:</b> Before launching these wizards, please make sure you have followed all steps outlined in the Quick Installation Guide included in the package.				
NETWORK SETTINGS	<b>MANUAL INTERNET CONNECTION OPTIONS</b> If you would like to configure the Internet settings of your new D-Link Systems Router manually, then click on the button below.  <a href="#">Manual Internet Connection Setup</a>				
STORAGE					
IPV6					
MYLINK SETTINGS					

# Internet Connection Setup Wizard

When configuring the router for the first time, we recommend that you click use the **Internet Connection Setup Wizard**, and follow the instructions on the screen. This wizard is designed to assist user with a quick and easy method to configure the Internet connectivity of this router.

Anytime during the Internet Connection Setup Wizard, the user can click on the **Cancel** button to discard any changes made and return to the main Internet page. Also the user can click on the **Prev** button, to return to the previous window for re-configuration.

## **Welcome:**

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

## **Step 1: Set Your Password**

By default, the 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 enter and verify a password in the spaces provided. The two passwords must match.

Click **Next** to continue.

**INTERNET CONNECTION**

If you are configuring the device for the first time, we recommend that you click on the Internet Connection Setup Wizard, and follow the instructions on the screen. If you wish to modify or configure the device settings manually, click the Manual Internet Connection Setup.

**INTERNET CONNECTION SETUP WIZARD**

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

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

**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

**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:

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.

Click **Next** to continue.

## Step 3: Internet Connection

Here the user will be able to configure the Internet connectivity used by this device. If your Internet Service Provider (ISP) connection is listed in the drop-down menu select it and click **Next**. If your ISP connection is not listed then you can proceed to select any of the other manual Internet connection methods listed below.

The following parameters will be available for configuration:

**Dynamic IP Address:** Choose this if your Internet connection automatically provides you with an IP Address. Most Cable Modems use this type of connection.

**PPPoE:** Choose this option if your Internet connection requires a PPPoE username and password to get online. Most DSL modems use this type of connection.

**PPTP:** Choose this option if your Internet connection requires a PPTP username and password to get online.

**L2TP:** Choose this option if your Internet connection requires an L2TP username and password to get online.

**Static IP Address:** Choose this option if your ISP provided you with IP Address information that has to be manually configured.

The screenshot shows a configuration window titled "STEP 2: SELECT YOUR TIME ZONE". Below the title, there is a text instruction: "Select the appropriate time zone for your location. This information is required to configure the time-based options for the router." A dropdown menu is labeled "Time Zone" and currently displays "(GMT+08:00) Taipei". At the bottom of the window, there are four buttons: "Prev", "Next", "Cancel", and "Connect".

The screenshot shows a configuration window titled "STEP 3: CONFIGURE YOUR INTERNET CONNECTION". Below the title, there is a text instruction: "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." A dropdown menu is labeled "Not Listed or Don't Know". Below this, there is a text instruction: "If your Internet Service Provider was not listed or you don't know who it is, please select the Internet connection type below:". There are five radio button options, each with a description: "DHCP Connection (Dynamic IP Address)", "Username / Password Connection (PPPoE)", "Username / Password Connection (PPTP)", "Username / Password Connection (L2TP)", and "Static IP Address Connection". At the bottom of the window, there are four buttons: "Prev", "Next", "Cancel", and "Connect".



### Step 3: Internet Connection (Dynamic IP Address)

After selecting the Dynamic IP Address Internet connection method, the following page will appear.

The following parameters will be available for configuration:

**MAC Address:** Enter the MAC address of the Internet gateway (plugged into the Internet port of this device) here.

**Clone Button:** If the configuration PC also acts as the Internet gateway, then click on the **Copy Your PC's MAC Address** button to copy the PC's MAC address into the space provided. If you're not sure, leave the MAC Address field blank.

**Host Name:** Enter the host name used here. You may also need to provide a Host Name. If you do not have or know this information, please contact your ISP.

**Primary DNS Address:** Enter the Primary DNS IP address used here.

**Secondary DNS Address:** Enter the Secondary DNS IP address used here. This field is normally optional. Only one DNS address is required for a functional Internet connection, but using a second DNS address provides more stability.

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 :  (optional)

Host Name :

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

**DNS SETTINGS**

Primary DNS Address :

Secondary DNS Address :  (optional)

### Step 3: Internet Connection (PPPoE)

After selecting the PPPoE Internet connection method, the following page will appear:

The following parameters will be available for configuration:

**User Name:** Enter the PPPoE account user name used here. This information is given by the ISP.

**Password:** Enter the PPPoE account password used here. This information is given by the 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 :



### **Step 3: Internet Connection (PPTP)**

After selecting the PPTP Internet connection method, the following page will appear:

The following parameters will be available for configuration:

**Address Mode:** Here the user can specify whether this Internet connection requires the use of a Dynamic or Static IP address. PPTP usually requires a Dynamic IP configuration.

**PPTP IP Address:** Enter the PPTP IP address used here. This option is only available if Static IP is selected.

**PPTP Subnet Mask:** Enter the PPTP Subnet Mask used here.

**PPTP Gateway IP Address:** Enter the PPTP Gateway IP address used here.

**PPTP Server IP Address:** Enter the PPTP Server IP address used here. This is normally the same as the PPTP Gateway IP address.

**User Name:** Enter the PPTP username used here.

**Password:** Enter the PPTP password used here.

**Verify Password:** Re-enter the PPTP password used here.

**Primary DNS Address:** Enter the Primary DNS IP address used here.

**Secondary DNS Address:** Enter the Secondary DNS IP address used here. This field is normally optional. Only one DNS address is required for a functional Internet connection, but using a second DNS address provides more stability.

**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 :  (optional)

Prev Next Cancel Connect

Click **Next** to continue.

### **Step 3: Internet Connection (L2TP)**

After selecting the L2TP Internet connection method, the following page will appear:

The following parameters will be available for configuration:

**Address Mode:** Here the user can specify whether this Internet connection requires the use of a Dynamic or Static IP address. L2TP usually requires a Dynamic IP configuration.

**L2TP IP Address:** Enter the L2TP IP address used here. This option is only available if Static IP is selected.

**L2TP Subnet Mask:** Enter the L2TP Subnet Mask used here.

**L2TP Gateway IP Address:** Enter the L2TP Gateway IP address used here.

**L2TP Server IP Address:** Enter the L2TP Server IP address used here. This is normally the same as the L2TP Gateway IP address.

**User Name:** Enter the L2TP username used here.

**Password:** Enter the L2TP password used here.

**Verify Password:** Re-enter the L2TP password used here.

**Primary DNS Address:** Enter the Primary DNS IP address used here.

**Secondary DNS Address:** Enter the Secondary DNS IP address used here. This field is normally optional. Only one DNS address is required for a functional Internet connection, but using a second DNS address provides more stability.

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 :

**DNS SETTINGS**

Primary DNS Address :

Secondary DNS Address :  (optional)

Prev Next Cancel Connect

### **Step 3: Internet Connection (Static IP Address)**

After selecting the Static IP Address Internet connection method, the following page will appear:

The following parameters will be available for configuration:

**IP Address:** Enter the Static IP address provided by the ISP here.

**Subnet Mask:** Enter the Subnet Mask provided by the ISP here.

**Gateway Address:** Enter the Gateway IP address provided by the ISP here.

**Primary DNS Address:** Enter the Primary DNS IP address used here.

**Secondary DNS Address:** Enter the Secondary DNS IP address used here. This field is normally optional. Only one DNS address is required for a functional Internet connection, but using a second DNS address provides more stability.

Click **Next** to continue.

### **Setup Complete!**

This is the last page of the Internet Connection Setup Wizard.

Click the **Connect** button to save your settings.

The screenshot shows a web interface titled "SET STATIC IP ADDRESS CONNECTION". Below the title is a warning message: "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." There are three input fields: "IP Address" with "0.0.0.0", "Subnet Mask" with "0.0.0.0", and "Gateway Address" with "0.0.0.0". Below these is a section titled "DNS SETTINGS" with two input fields: "Primary DNS Address" with "0.0.0.0" and "Secondary DNS Address" with "0.0.0.0" and "(optional)" to its right. At the bottom are four buttons: "Prev", "Next", "Cancel", and "Connect".

The screenshot shows a web interface titled "SETUP COMPLETE!". Below the title is a message: "The Internet Connection Setup Wizard has completed. Click the Connect button to save your settings." At the bottom are four buttons: "Prev", "Next", "Cancel", and "Connect".

---

## Internet (Manual)

On this page the user can configure the Internet connection settings manually. To access the Manual Internet Connection Setup page, click on the **Manual Internet Connection Setup** button. On this page there are multiple parameters that can be configured regarding the Internet connection setup.

At any given point the user can save the configuration on this page by clicking on the **Save Settings** button. If you choose to discard the changes made, click on the **Don't Save Settings** button.

**MANUAL INTERNET CONNECTION OPTION**

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

[Manual Internet Connection Setup](#)

**WAN**

Use this section to configure your Internet Connection type. There are several connection types to choose from: Static IP, DHCP, PPPoE, PPTP, and L2TP. 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

In this section, the user can select from a list of Internet connection types that can be configured and used on this router. Options to choose from are **Static IP, Dynamic IP, PPPoE, PPTP, L2TP, and DS-Lite**.

After selecting a specific Internet connection type, this page will automatically refresh and provide unique fields to configure related to the specified Internet connection type.

### My Internet Connection is: Dynamic IP (DHCP)

The default WAN configuration for this router is Dynamic IP (DHCP). This option allows the router to obtain an IP address automatically from the device that is connected to the Internet port.

**Note:** If you're not sure about the type of Internet connection you have, please contact your Internet Service Provider (ISP) for assistance.

After selecting Dynamic IP, the following parameters will be available for configuration:

- Host Name:** The Host Name is optional but may be required by some ISPs. Leave blank if you are not sure.
- Use Unicasting:** Tick this option if your ISP uses the unicast method to provide IP addresses.
- Primary DNS:** Enter the Primary DNS IP address used here.
- Secondary DNS:** Enter the Secondary DNS IP address used here. This field is normally optional. Only one DNS address is required for a functional Internet connection, but using a second DNS address provides more stability.
- MTU:** Maximum Transmission Unit - you may need to change the MTU for optimal performance with your specific ISP.
- 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 **Copy 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 a web interface titled "INTERNET CONNECTION TYPE". Below the title, it says "Choose the mode to be used by the router to connect to the Internet." There is a dropdown menu labeled "My Internet Connection Is:" with "Dynamic IP (DHCP)" selected.

The screenshot shows a web interface titled "DYNAMIC IP (DHCP) INTERNET CONNECTION TYPE:". Below the title, it says "Use this Internet connection type if your Internet Service Provider (ISP) didn't provide you with IP Address information and/or a username and password." The configuration fields are: "Host Name:" with the value "dlinkrouter"; "Use Unicasting:" with an unchecked checkbox and the text "(compatibility for some DHCP Servers)"; "Primary DNS Server:" with an empty text box; "Secondary DNS Server:" with an empty text box and the text "(optional)"; "MTU:" with the value "1500"; and "MAC Address:" with an empty text box. At the bottom, there is a button labeled "Clone Your PC's MAC Address".

## Manual Internet Setup

### Static (assigned by ISP)

Select **Static IP Address** if all the Internet port's IP information is provided to you by your ISP. You will need to enter in the IP address, subnet mask, gateway address, and DNS address(es) provided to you by your ISP. Each IP address entered in the fields must be in the appropriate IP form, which are four octets separated by a dot (x.x.x.x). The router will not accept the IP address if it is not in this format.

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

**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.

**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 **Copy Your PC's MAC Address** button to replace the Internet port's MAC address with the MAC address of your Ethernet card.

**INTERNET CONNECTION TYPE**

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

My Internet Connection is :

**STATIC IP ADDRESS INTERNET CONNECTION TYPE**

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

IP Address :

Subnet Mask :

Default Gateway :

Primary DNS Server :

Secondary DNS Server :

MTU :  (bytes) MTU default = 1500

MAC Address :

## 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 any PPPoE software from your computer. This software is no longer needed and will not work through a router.

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

**Address Mode:** Here the user can specify whether this Internet connection requires the use of a **Dynamic** or **Static IP** address. PPPoE usually requires a Dynamic IP configuration.

**IP Address:** Enter the PPPoE IP address used here. This option is only available if Static IP is selected.

**Username:** Enter the PPPoE account user name used here. This information is given by the ISP.

**Password:** Enter the PPPoE account password used here. This information is given by the ISP.

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

**Service Name:** This optional field enables the user to enter a service name to identify this Internet connection here.

**Reconnect Mode:** Use the radio buttons to specify the reconnect mode. The user can specify a custom schedule or specify the **On Demand**, or **Manual** option. To specify a custom schedule, use the drop-down menu to select one of the schedules that has been defined in the Schedules page.

**INTERNET CONNECTION TYPE**

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

My Internet Connection is :

---

**PPPOE INTERNET CONNECTION TYPE :**

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

**Address Mode :**  Dynamic IP  Static IP

**IP Address :**

**Username :**

**Password :**

**Verify Password :**

**Service Name :**  (optional)

**Reconnect Mode :**

On demand  Manual

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

**DNS Mode :**  Receive DNS from ISP  Enter DNS Manually

**Primary DNS Server :**

**Secondary DNS Server :**  (optional)

**MTU :**

**MAC Address :**

To create a new schedule, click the **New Schedule** button to open the Schedules page. Schedules will be discussed later.

**Maximum Idle Time:** Enter a maximum idle time during which the Internet connection is maintained during inactivity.

**DNS Mode:** This option allows the router to obtain the DNS IP addresses from the ISP, when **Receive DNS from ISP** is selected, or allows the user to enter DNS IP address manually when **Enter DNS Manually** is selected.

**Primary DNS Server:** Enter the Primary DNS IP address used here.

**Secondary DNS Server:** Enter the Secondary DNS IP address used here. This field is normally optional. Only one DNS address is required for a functional Internet connection, but using a second DNS address provides more stability.

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

**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 **Copy Your PC's MAC Address** button to replace the Internet port's MAC address with the MAC address of your Ethernet card.



## 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. This option is typically used for DSL services.

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

**Address Mode:** Here the user can specify whether this Internet connection requires the use of a **Dynamic** or **Static IP** address. PPTP usually requires a Dynamic IP configuration.

**PPTP IP Address:** Enter the PPTP IP address used here. This option is only available if Static IP is selected.

**PPTP Subnet Mask:** Enter the PPTP Subnet Mask used here.

**PPTP Gateway IP Address:** Enter the PPTP Gateway IP address used here.

**PPTP Server IP Address:** Enter the PPTP Server IP address used here. This is normally the same as the PPTP Gateway IP address.

**Username:** Enter the PPTP username used here.

**Password:** Enter the PPTP password used here.

**Verify Password:** Re-enter the PPTP password used here.

**Reconnect Mode:** Use the radio buttons to specify the reconnect mode. The user can specify a custom schedule or specify the **On Demand**, or **Manual** option. To specify a custom schedule, use the drop-down menu to select one of the schedules that has been defined in the Schedules page. To create a new schedule, click the New Schedule button to open the Schedules page. Schedules will be discussed later.

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

**INTERNET CONNECTION TYPE**

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

**My Internet Connection is :** PPTP (Username / Password) ▼

---

**PPTP INTERNET CONNECTION TYPE :**

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

**Address Mode :**  Dynamic IP  Static IP

**PPTP IP Address :**

**PPTP Subnet Mask :**

**PPTP Gateway IP Address :**

**PPTP Server IP Address :**

**Username :**

**Password :**

**Verify Password :**

**Reconnect Mode :**  Always on  On demand  Manual

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

**Primary DNS Server :**

**Secondary DNS Server :**  (optional)

**MTU :**

**MAC Address :**

**Primary DNS Server:** Enter the Primary DNS IP address used here.

**Secondary DNS Server:** Enter the Secondary DNS IP address used here. This field is normally optional. Only one DNS address is required for a functional Internet connection, but using a second DNS address provides more stability.

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

**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 **Copy 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 an L2TP connection. Your ISP will provide you with a username and password. This option is typically used for DSL services.

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

**Address Mode:** Here the user can specify whether this Internet connection requires the use of a Dynamic or Static IP address. L2TP usually requires a Dynamic IP configuration.

**L2TP IP Address:** Enter the L2TP IP address used here. This option is only available if Static IP is selected.

**L2TP Subnet Mask:** Enter the L2TP Subnet Mask used here.

**L2TP Gateway IP Address:** Enter the L2TP Gateway IP address used here.

**L2TP Server IP Address:** Enter the L2TP Server IP address used here. This is normally the same as the L2TP Gateway IP address.

**Username:** Enter the L2TP username used here.

**Password:** Enter the L2TP password used here.

**Verify Password:** Re-enter the L2TP password used here.

**Reconnect Mode:** Use the radio buttons to specify the reconnect mode. The user can specify a custom schedule or specify the **On Demand**, or **Manual** option. To specify a custom schedule, use the drop-down menu to select one of the schedules that has been defined in the Schedules page. To create a new schedule, click the New Schedule button to open the Schedules page. Schedules will be discussed later.

**INTERNET CONNECTION TYPE**

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

My Internet Connection IS :  ▼

**L2TP INTERNET CONNECTION TYPE :**

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

Address Mode :  Dynamic IP  Static IP

L2TP IP Address :

L2TP Subnet Mask :

L2TP Gateway IP Address :

L2TP Server IP Address :

Username :

Password :

Verify Password :

Reconnect Mode :  Always on  New Schedule  On demand  Manual

Maximum Idle Time :  (minutes, 0=infinite)

Primary DNS Server :

Secondary DNS Server :  (optional)

MTU :

MAC Address :

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

**Primary DNS Server:** Enter the Primary DNS IP address used here.

**Secondary DNS Server:** Enter the Secondary DNS IP address used here. This field is normally optional. Only one DNS address is required for a functional Internet connection, but using a second DNS address provides more stability.

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

**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 **Copy 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

Another Internet connection type is DS-Lite.

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

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

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

**B4 IPv4 Address:** Enter the B4 IPv4 address value used here.

**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.

Click on the **Save Settings** button to accept the changes made.

Click on the **Don't Save Settings** button to discard the changes made.

**INTERNET CONNECTION TYPE**

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

**My Internet Connection is :**

**AFTR ADDRESS INTERNET CONNECTION TYPE :**

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

**DS-Lite Configuration :**  DS-Lite DHCPv6 Option  Manual Configuration

**AFTR IPv6 Address :**

**B4 IPv4 Address :** 192.0.0.  (optional)

**WAN IPv6 Address :**

**IPv6 WAN Default Gateway :**

# Wireless Settings

## Wireless Connection Setup wizard

On this page the user can configure the Wireless settings for this device. There are 3 ways to configure Wireless using this router. Firstly, the user can choose to make use for the quick and easy **Wireless Connection Setup Wizard**. Secondly, the user can choose to make use of Wi-Fi Protected Setup. Lastly, the user can configure the Wireless settings manually.

### Wireless Settings: Wireless Connection Setup Wizard

The Wireless Connection Setup Wizard is specially designed to assist basic network users with a simple, step-by-step set of instructions to configure the wireless settings of this router. It is highly recommended to customize the wireless network settings to fit your environment and to add higher security.

To initiate the **Wireless Connection Setup Wizard**, click on the Wireless Connection Setup Wizard button.

**Step 1:** In this step, the user must enter a custom Wireless Network Name (also called SSID). Enter the new **Network Name (SSID)** in the appropriate space provided.

There are separate spaces provided for a **2.4 GHz** Network Name and a **5 GHz** Network Name.

Secondly, the user can choose between two wireless security wizard configurations. The user can select '**Automatically assign a network key**', by which the router will automatically generate a WPA/WPA2 pre-shared key using the TKIP and AES encryption methods; or the user can select '**Manually assign a network key**', by which the user will be prompted to manually enter a WPA/WPA2 pre-shared key using the TKIP and AES encryption methods.

Click on the **Prev** button to return to the previous page. Click on the **Next** button to continue to the next page. Click on the **Cancel** button to discard the changes made and return to the main wireless page.

The screenshot displays the 'WIRELESS SETTINGS' section of a router's web interface. It features an orange header with the title 'WIRELESS SETTINGS'. Below the header, there is a grey box containing introductory text: '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.' Below this is a black header for the 'WIRELESS NETWORK SETUP WIZARD'. The main content area is white and contains the text: '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.' A button labeled 'Wireless Connection Setup Wizard' is centered below the text. A 'Note' follows, stating: '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.' Below the note is another black header: 'STEP 1: WELCOME TO THE D-LINK WIRELESS SECURITY SETUP WIZARD'. The main content area is white and contains the instruction: 'Give your network a name, using up to 32 characters.' There are two input fields: 'Network Name (SSID) 2.4GHz : dlink-ecb8' and 'Network Name (SSID) 5GHz : dlink-media-ecba'. Below the input fields are two radio button options: 'Automatically assign a network key (Recommended)' (which is selected) and 'Manually assign a network key'. The 'Automatically assign a network key' option has a sub-note: 'To prevent outsiders from accessing your network, the router will automatically assign a security (also called WEP or WPA key) to your network.' The 'Manually assign a network key' option has a sub-note: 'Use this options if you prefer to create our own key.' A 'Note' at the bottom states: 'All D-Link wireless adapters currently support WPA.' At the very bottom of the form are four buttons: 'Prev', 'Next', 'Cancel', and 'Save'.

**Step 2:** This step will only be available if the user selected 'Manually assign a network key' in the previous step. Here the user can manually enter the WPA/WPA2 pre-shared key in the **Wireless Security Password** space provided. The key entered must be between 8 and 63 characters long. Remember, this key will be used when other wireless devices want to connect to this router.

If you want to use the same Wireless Security Password for both 2.4 GHz and 5 GHz bands, tick the option provided. If not selected, you need to input two separate **Wireless Security Passwords** (network key) for each individual wireless band.

Click on the **Prev** button to return to the previous page. Click on the **Next** button to continue to the next page. Click on the **Cancel** button to discard the changes made and return to the main wireless page.

**Setup Complete:** On this page the user can view the configuration made and verify whether they are correct.

Click on the **Prev** button to return to the previous page. Click on the **Cancel** button to discard the changes made and return to the main wireless page. Click on the **Save** button to accept the changes made.

**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 one of 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

2.4Ghz Wireless Security Password :

5Ghz 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.

**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.

<b>Wireless Band</b> : 2.4GHz Band
<b>Wireless Network Name (SSID)</b> : dlink-ecb8
<b>Security Mode</b> : Auto (WPA or WPA2) - Personal
<b>Cipher Type</b> : TKIP and AES
<b>Pre-Shared Key</b> : 2c2dbdbe54

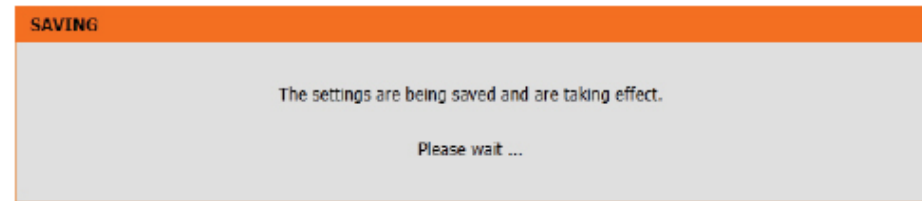
  

<b>Wireless Band</b> : 5GHz Band
<b>Wireless Network Name (SSID)</b> : dlink-media-ecba
<b>Security Mode</b> : Auto (WPA or WPA2) - Personal
<b>Cipher Type</b> : TKIP and AES
<b>Pre-Shared Key</b> : 2c2dbdbe54

---

After clicking the **Save** button the device will save the settings made and return to the main wireless page.

**End of Wizard.**





# Wi-Fi Protected Setup (WPS) Wizard

## Wireless Settings: Wi-Fi Protected Setup Wizard

If your Wireless Clients support the WPS connection method, this Wi-Fi Protected Setup Wizard can be used to initiate a wireless connection between this device and Wireless clients with a simple click of the WPS button. The Wi-Fi Protected Setup Wizard is specially designed to assist basic network users with a simple, step-by-step set of instructions to connect wireless clients to this router using the WPS method.

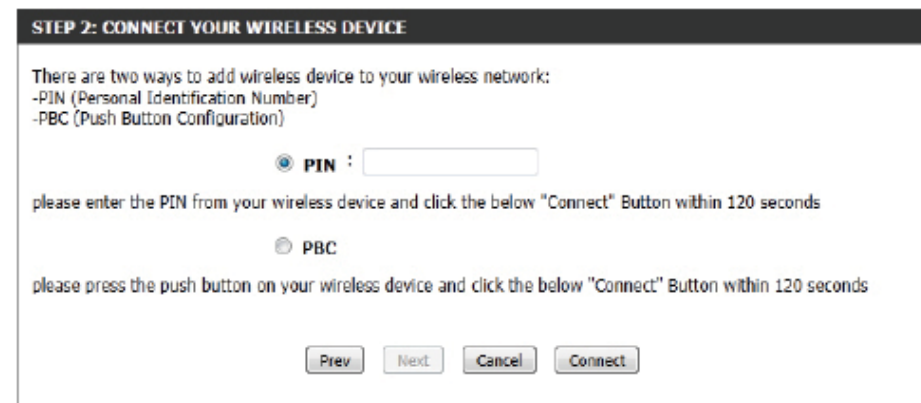
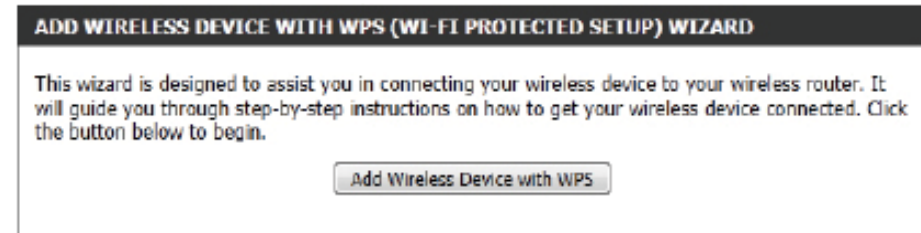
To initiate the Wi-Fi Protected Setup Wizard click on the **Add Wireless Device with WPS** button.

**Step 1:** In this step the user has two options to choose from. Choose **Auto** if the wireless client supports WPS, or **Manual** if the wireless client does not support WPS.

Click on the **Prev** button to return to the previous page. Click on the **Next** button to continue to the next page. Click on the **Cancel** button to discard the changes made and return to the main wireless page.

**Step 2:** After selecting **Auto**, the following page will appear. There are two ways to add a wireless device that supports WPS. Firstly, there is the Personal Identification Number (PIN) method. Using this method will prompt the user to enter a PIN code. This PIN code should be identical on the wireless client. Secondly, there is the Push Button Configuration (PBC) method. Using this method will allow the wireless client to connect to this device by similarly pressing the PBC button on both the router and the client.

Click on the **Prev** button to return to the previous page. Click on the **Next** button to continue to the next page. Click on the **Cancel** button to discard the changes made and return to the main wireless page.



**Step 2 (continued):** After selecting **Manual**, the following page will appear. On this page the user can view the wireless configuration of this router. The wireless clients should configure their wireless settings to be identical to the settings displayed on this page for a successful connection. This option is for wireless clients that can't use the WPS method to connect to this device.

Click on the **Prev** button to return to the previous page. Click on the **Next** button to continue to the next page. Click on the **Cancel** button to discard the changes made and return to the main wireless page. Click on the **Wireless Status** button to navigate to the Status > Wireless page to view what wireless clients are connected to this device.

### End of Wizard.

**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.

**2.4 Ghz Frequency**  
SSID: dlink-ecb8  
Security Mode: Auto (WPA or WPA2) - Personal  
Cipher Type: TKIP and AES  
Pre-shared Key: 24key24key

**5 Ghz Frequency**  
SSID: dlink-media-ecba  
Security Mode: Auto (WPA or WPA2) - Personal  
Cipher Type: TKIP and AES  
Pre-shared Key: 50key50key

Prev Next Cancel Wireless Status

## Manual Wireless Network Setup

### Wireless Settings: Manual Wireless Network Setup

The manual wireless network setup option allows users to configure the wireless settings of this device manually. This option is for the more advanced user and includes all parameters that can be configured for wireless connectivity.

To initiate the Manual Wireless Setup page, click on the **Manual Wireless Connection Setup** button.

On this page the user can configure all the parameters related to the wireless connectivity of this router.

**MANUAL WIRELESS NETWORK SETUP**

If your wireless network is already set up with Wi-Fi Protected Setup, manual configuration of the wireless network will destroy the existing wireless network. If you would like to configure the wireless settings of your new D-Link Systems Router manually, then click on the Manual Wireless Network Setup button below.

Manual Wireless Connection Setup

**WIRELESS NETWORK**

Use this section to configure the wireless settings for your D-Link router. Please note that changes made in this section may also need to be duplicated on your wireless client.

To protect your privacy you can configure wireless security features. This device supports three wireless security modes including: WEP, WPA and WPA2.

Save Settings Don't Save Settings

The following parameters will be available for configuration:

**Wireless Band:** Displays the wireless band being configured. In this option we find that the following parameters will be regarding the 2.4 GHz band.

**Enable Wireless:** Check the box to enable the wireless function. If you do not want to use wireless, uncheck the box to disable all wireless functions. 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 **New Schedule** to create a new schedule.

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

**802.11 Mode:** Here the user can manually select the preferred frequency band to use for this wireless network.

**Enable Auto Channel Scan:** The auto channel selection setting can be selected to allow this device to choose the channel with the least amount of interference.

**Wireless Channel:** By default the channel is set to 1. The channel can be changed to fit the channel setting for an existing wireless network or to customize the wireless network. If you enable **Auto Channel Selection**, this option will be greyed out.

**Transmission Rate:** Select the transmit rate. It is strongly suggested to select **Best (Automatic)** for best performance.

**Channel Width:** When using the 802.11n frequency band, the user has an option to choose between a 20MHz or 20/40MHz bandwidth.

**Visibility Status:** The Invisible option allows you to hide your wireless network. When this option is set to **Visible**, your wireless network name is broadcasted to anyone within the range of your signal. If you are not using encryption then they could connect to your network. When **Invisible** mode is enabled, you must enter the Wireless Network Name (SSID) on the client manually to connect to the network.

**WIRELESS NETWORK SETTINGS**

**Wireless Band :** 2.4GHz Band

**Enable Wireless :**  Always

**Wireless Network Name :** dlink-ecb8 (Also called the SSID)

**802.11 Mode :** Mixed 802.11n, 802.11g and 802.11b

**Enable Auto Channel Scan :**

**Wireless Channel :** 2.412 GHz - CH 1

**Transmission Rate :** Best (automatic) (Mbit/s)

**Channel Width :** 20/40 MHz(Auto)

**Visibility Status :**  Visible  Invisible

By default the wireless security of this router will be disabled. In this next option the user can enable or disable wireless security for the 2.4 GHz frequency band. There are two types of encryption that can be used: WEP or WPA/WPA2.

### Wireless Security Mode: WEP

Wired Equivalent Privacy (WEP) is the most basic form of encryption that can be used for wireless networks. Even though it is known as a 'weak' security method, it is better than no security at all. Older wireless adapters may only support WEP encryption and thus we still find this encryption method used today.

The following parameters will be available for configuration:

**WEP Key Length:** Here the user can specify to either use a 64-bit or a 128-bit encrypted key.

**Authentication:** Authentication is a process by which the router verifies the identity of a network device that is attempting to join the wireless network. There are two types of authentication for this device when using WEP. **Open System** allows all wireless devices to communicate with the router before they are required to provide the encryption key needed to gain access to the network. **Shared Key** requires any wireless device attempting to communicate with the router to provide the encryption key needed to access the network before they are allowed to communicate with the router.

**WEP Key 1:** Enter the WEP key used here. For 64-bit keys you must enter 10 hex digits into each key box. For 128-bit keys you must enter 26 hex digits into each key box. A hex digit is either a number from 0 to 9 or a letter from A to F. You may also enter any text string into a WEP key box, in which case it will be converted into a hexadecimal key using the ASCII values of the characters. A maximum of 5 text characters can be entered for 64-bit keys, and a maximum of 13 characters for 128-bit keys.



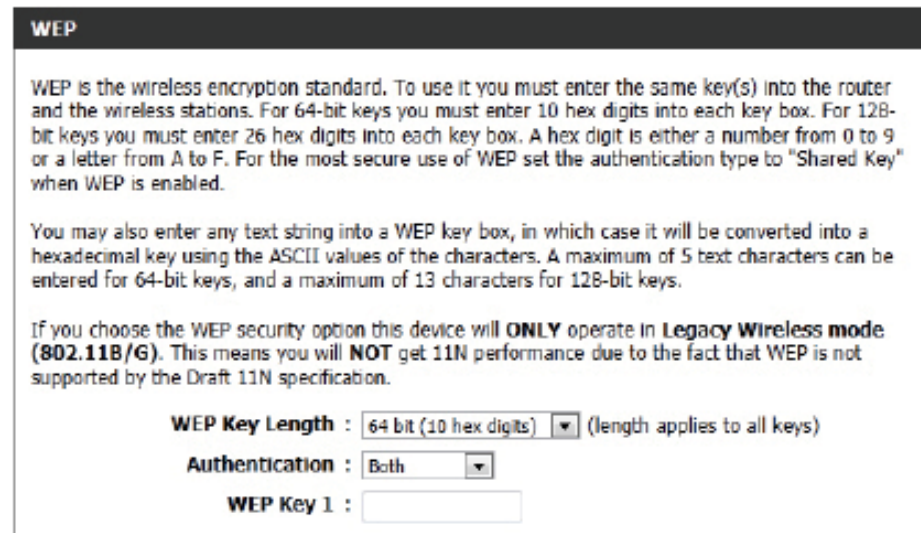
WIRELESS SECURITY MODE

Security Mode :



WIRELESS SECURITY MODE

Security Mode :



WEP

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

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

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

WEP Key Length :  (length applies to all keys)

Authentication :

WEP Key 1 :

### Wireless Security Mode: WPA-Personal

Wi-Fi Protected Access (WPA) is the most advanced and up to date wireless encryption method used today. This is the recommended wireless security option. WPA supports two authentication frameworks. Personal (PSK) and Enterprise (EAP). Personal requires only the use of a pass-phrase (Shared Secret) for security.

The following parameters will be available for configuration:

**WPA Mode:** WPA is the older standard; select this option if the clients that will be used with the router only support the older standard. WPA2 is the newer implementation of the stronger IEEE 802.11i security standard. With the **WPA2** option, the router tries WPA2 first, but falls back to WPA if the client only supports WPA. With the **WPA2 Only** option, the router associates only with clients that also support WPA2 security.

**Cipher Type:** Select the appropriate cipher type to use here. Options to choose from are Temporal Key Integrity Protocol (TKIP), Advanced Encryption Standard (AES), and Both (TKIP and AES).

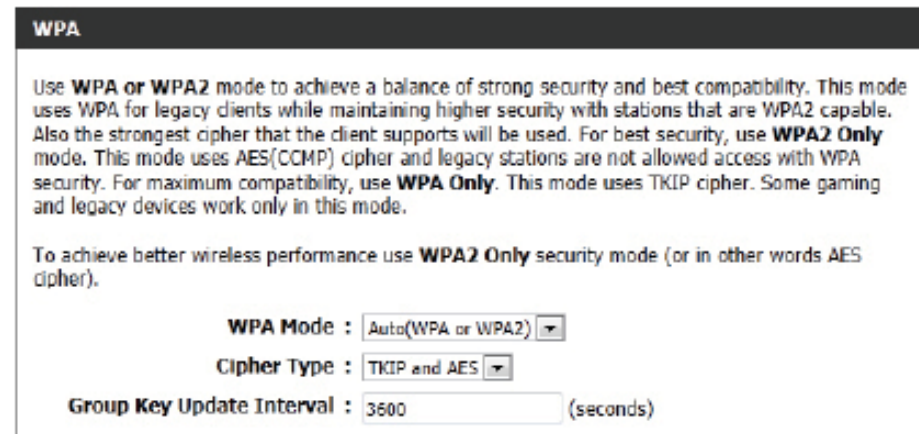
**Group Key Update Interval:** Enter the amount of time before the group key used for broadcast and multicast data is changed.

**Pre-Shared Key:** Enter the shared secret used here. This secret phrase needs to be the same on all of the wireless clients for them to be able to connect to the wireless network successfully.



**WIRELESS SECURITY MODE**

Security Mode :



**WPA**

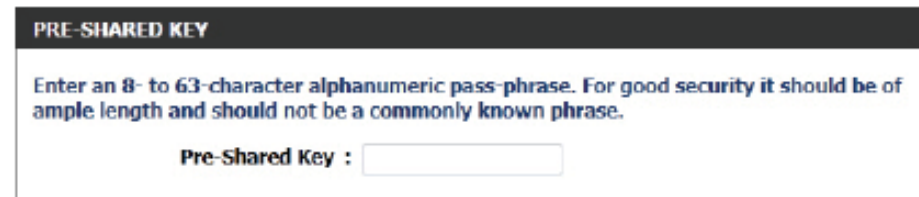
Use **WPA** or **WPA2** mode to achieve a balance of strong security and best compatibility. This mode uses WPA for legacy clients while maintaining higher security with stations that are WPA2 capable. Also the strongest cipher that the client supports will be used. For best security, use **WPA2 Only** 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 :



## Wireless Security Mode: WPA-Personal

Wi-Fi Protected Access (WPA) is the most advanced and up to date wireless encryption method used today. This is the recommended wireless security option. WPA supports two authentication frameworks. Personal (PSK) and Enterprise (EAP). Personal requires only the use of a pass-phrase (Shared Secret) for security.

The following parameters will be available for configuration:

**WPA Mode:** WPA is the older standard; select this option if the clients that will be used with the router only support the older standard. WPA2 is the newer implementation of the stronger IEEE 802.11i security standard. With the **WPA2** option, the router tries WPA2 first, but falls back to WPA if the client only supports WPA. With the **WPA2 Only** option, the router associates only with clients that also support WPA2 security.

**Cipher Type:** Select the appropriate cipher type to use here. Options to choose from are Temporal Key Integrity Protocol (TKIP), Advanced Encryption Standard (AES), and Both (TKIP and AES).

**Group Key Update Interval:** Enter the amount of time before the group key used for broadcast and multicast data is changed.

**RADIUS Server IP Address:** When the user chooses to use the EAP authentication framework, the RADIUS server's IP address can be entered here.

**RADIUS Server Port:** When the user chooses to use the EAP authentication framework, the RADIUS server's port number can be entered here.

**RADIUS Server Shared Secret:** Enter the shared secret used here. This secret phrase needs to be the same on all of the wireless clients for them to be able to connect to the wireless network successfully.

The screenshot shows the 'WIRELESS SECURITY MODE' configuration page. At the top, 'Security Mode' is set to 'WPA-Enterprise'. Below this, the 'WPA' section contains explanatory text and configuration options: 'WPA Mode' is set to 'Auto(WPA or WPA2)', 'Cipher Type' is set to 'TKIP and AES', and 'Group Key Update Interval' is set to '3600 (seconds)'. The 'EAP (802.1X)' section is also visible, with fields for 'RADIUS server IP Address', 'RADIUS server Port' (set to 1812), and 'RADIUS server Shared Secret'. An 'Advanced >>' button is located at the bottom of the EAP section.

The following parameters will be available for configuration:

**Wireless Band:** Displays the wireless band being configured. In this option we find that the following parameters will be regarding the 5 GHz band.

**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. 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 **New Schedule** to create a new schedule.

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

**802.11 Mode:** Here the user can manually select the preferred frequency band to use for this wireless network.

**Enable Auto Channel Scan:** The auto channel selection setting can be selected to allow this device to choose the channel with the least amount of interference.

**Wireless Channel:** By default the channel is set to 36. The channel can be changed to fit the channel setting for an existing wireless network or to customize the wireless network. If you enable **Auto Channel Selection**, this option will be disabled.

**Transmission Rate:** Select the transmit rate. It is strongly suggested to select **Best (Automatic)** for best performance.

**Channel Width:** When using the 802.11n frequency band, the user has an option to choose between a 20 MHz, 20/40 MHz, or 20/40/80 MHz bandwidth.

**Visibility Status:** The **Invisible** option allows you to hide your wireless network. When this option is set to **Visible**, your wireless network name is broadcasted to anyone within the range of your signal. If you are not using encryption then they could connect to your network. When Invisible mode is enabled, you must enter the Wireless Network Name (SSID) on the client manually to connect to the network.

**WIRELESS NETWORK SETTINGS**

**Wireless Band :** 5GHz Band

**Enable Wireless :**  Always  New Schedule

**Wireless Network Name :** dlink-media-ecba (Also called the SSID)

**802.11 Mode :** Mixed 802.11ac

**Enable Auto Channel Scan :**

**Wireless Channel :** 5.180 GHz - CH 36

**Transmission Rate :** Best (automatic) (Mbit/s)

**Channel Width :** 20/40/80 MHz (Auto)

**Visibility Status :**  Visible  Invisible

By default the wireless security of this router will be disabled. In this next option the user can enable or disable wireless security for the 5 GHz frequency band. There are two types of encryption that can be used. WEP or WPA/WPA2.

### **Wireless Security Mode: WEP**

Wired Equivalent Privacy (WEP) is the most basic form of encryption that can be used for wireless networks. Even though it is known as a 'weak' security method, it is better than no security at all. Older wireless adapters may only support WEP encryption and thus we still find this encryption method used today.

The following parameters will be available for configuration:

**WEP Key Length:** Here the user can specify to either use a 64-bit or a 128-bit encrypted key.

**Authentication:** Authentication is a process by which the router verifies the identity of a network device that is attempting to join the wireless network. There are two types of authentication for this device when using WEP. **Open System** allows all wireless devices to communicate with the router before they are required to provide the encryption key needed to gain access to the network. **Shared Key** requires any wireless device attempting to communicate with the router to provide the encryption key needed to access the network before they are allowed to communicate with the router.

**WEP Key 1:** Enter the WEP key used here. For 64-bit keys you must enter 10 hex digits into each key box. For 128-bit keys you must enter 26 hex digits into each key box. A hex digit is either a number from 0 to 9 or a letter from A to F. You may also enter any text string into a WEP key box, in which case it will be converted into a hexadecimal key using the ASCII values of the characters. A maximum of 5 text characters can be entered for 64-bit keys, and a maximum of 13 characters for 128-bit keys.



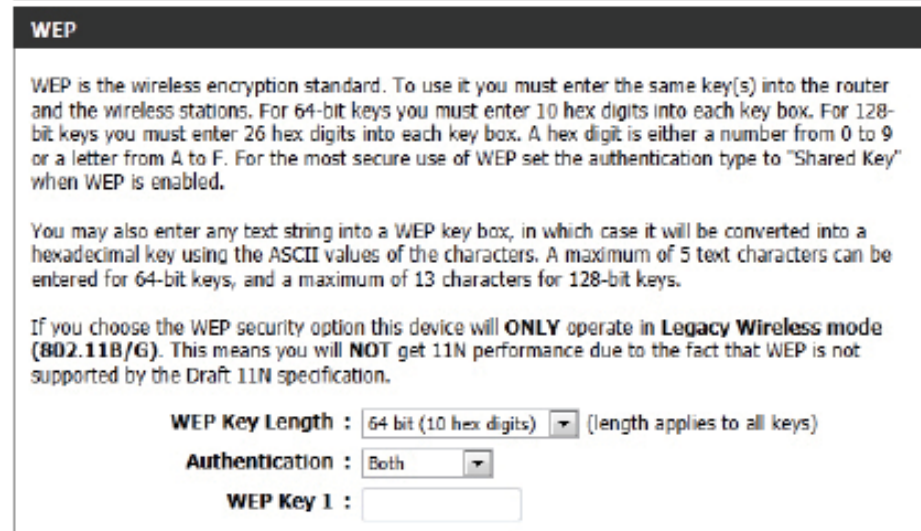
WIRELESS SECURITY MODE

Security Mode : None



WIRELESS SECURITY MODE

Security Mode : WEP



WEP

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

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

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

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

Authentication : Both

WEP Key 1 :



## Wireless Security Mode: WPA-Personal

Wi-Fi Protected Access (WPA) is the most advanced and up to date wireless encryption method used today. This is the recommended wireless security option. WPA supports two authentication frameworks. Personal (PSK) and Enterprise (EAP).

The following parameters will be available for configuration:

**WPA Mode:** WPA is the older standard; select this option if the clients that will be used with the router only support the older standard. WPA2 is the newer implementation of the stronger IEEE 802.11i security standard. With the **WPA2** option, the router tries WPA2 first, but falls back to WPA if the client only supports WPA. With the **WPA2 Only** option, the router associates only with clients that also support WPA2 security.

**Cipher Type:** Select the appropriate cipher type to use here. Options to choose from are Temporal Key Integrity Protocol (TKIP), Advanced Encryption Standard (AES), and Both (TKIP and AES).

**Group Key Update Interval:** Enter the amount of time before the group key used for broadcast and multicast data is changed.

**Pre-Shared Key:** Enter the shared secret used here. This secret phrase needs to be the same on all of the wireless clients for them to be able to connect to the wireless network successfully.

The screenshot shows the 'WIRELESS SECURITY MODE' configuration page. At the top, 'Security Mode' is set to 'WPA-Personal'. Below this, the 'WPA' section contains explanatory text and configuration options: 'WPA Mode' is set to 'Auto(WPA or WPA2)', 'Cipher Type' is set to 'TKIP and AES', and 'Group Key Update Interval' is set to '3600 (seconds)'. The 'PRE-SHARED KEY' section at the bottom has a text input field for the key, with instructions to use an 8- to 63-character alphanumeric pass-phrase.

## Wireless Security Mode: WPA-Enterprise

Wi-Fi Protected Access (WPA) is the most advanced and up to date wireless encryption method used today. This is the recommended wireless security option. WPA supports two authentication frameworks. Personal (PSK) and Enterprise (EAP).

The following parameters will be available for configuration:

**WPA Mode:** WPA is the older standard; select this option if the clients that will be used with the router only support the older standard. WPA2 is the newer implementation of the stronger IEEE 802.11i security standard. With the **WPA2** option, the router tries WPA2 first, but falls back to WPA if the client only supports WPA. With the **WPA2 Only** option, the router associates only with clients that also support WPA2 security.

**Cipher Type:** Select the appropriate cipher type to use here. Options to choose from are Temporal Key Integrity Protocol (TKIP), Advanced Encryption Standard (AES), and Both (TKIP and AES).

**Group Key Update Interval:** Enter the amount of time before the group key used for broadcast and multicast data is changed.

**RADIUS Server IP Address:** When the user chooses to use the EAP authentication framework, the RADIUS server's IP address can be entered here.

**RADIUS Server Port:** When the user chooses to use the EAP authentication framework, the RADIUS server's port number can be entered here.

**RADIUS Server Shared Secret:** Enter the shared secret used here. This secret phrase needs to be the same on all of the wireless clients for them to be able to connect to the wireless network successfully.

The screenshot shows the 'WIRELESS SECURITY MODE' configuration page. At the top, 'Security Mode' is set to 'WPA-Enterprise'. Below this, the 'WPA' section contains explanatory text about WPA and WPA2 modes, and a note about using WPA2 Only for better performance. Configuration options include 'WPA Mode' set to 'Auto(WPA or WPA2)', 'Cipher Type' set to 'TKIP and AES', and 'Group Key Update Interval' set to '3600 (seconds)'. The 'EAP (802.1X)' section is partially visible, showing fields for 'RADIUS server IP Address', 'RADIUS server Port' (set to 1812), and 'RADIUS server Shared Secret'. An 'Advanced >>' button is located at the bottom of the EAP section.

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### **Wireless Security Mode: Enable WEP Wireless Security (basic)**

Wired Equivalent Privacy (WEP) is the most basic form of encryption that can be used for wireless networks. Even though it is known as a 'weak' security method, it is better than no security at all. Older wireless adapter sometimes only supports WEP encryption and thus we still find this encryption method used today.

The following parameters will be available for configuration:

**Authentication:** Authentication is a process by which the router verifies the identity of a network device that is attempting to join the wireless network. There are two types authentication for this device when using WEP. **Open System** allows all wireless devices to communicate with the router before they are required to provide the encryption key needed to gain access to the network. **Shared Key** requires any wireless device attempting to communicate with the router to provide the encryption key needed to access the network before they are allowed to communicate with the router.

**WEP Encryption:** Here the user can specify to either use a 64-bit or a 128-bit encrypted key.

**Default WEP Key:** Select the default WEP key number that will be used for the encryption.

**WEP Key:** Enter the WEP key used here. For 64-bit keys you must enter 10 hex digits into each key box. For 128-bit keys you must enter 26 hex digits into each key box. A hex digit is either a number from 0 to 9 or a letter from A to F. You may also enter any text string into a WEP key box, in which case it will be converted into a hexadecimal key using the ASCII values of the characters. A maximum of 5 text characters can be entered for 64-bit keys, and a maximum of 13 characters for 128-bit keys.

**WIRELESS SECURITY MODE**

**Security Mode :** Enable WEP Wireless Security (basic) ▼

---

**WEP**

WEP is the wireless encryption standard. To use it you must enter the same key(s) into the AP and the wireless stations. For 64-bit keys you must enter 10 hex digits into each key box. For 128-bit keys you must enter 26 hex digits into each key box. A hex digit is either a number from 0 to 9 or a letter from A to F.

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

**Authentication :** Open ▼

**WEP Encryption :** 64Bit ▼

**Default WEP Key :** WEP Key 1 ▼

**WEP Key :**  (5 ASCII or 10 HEX)

---

### **Wireless Security Mode: Enable WPA/WPA2 Wireless Security (enhanced)**

Wi-Fi Protected Access (WPA) is a more advanced and up to date wireless encryption method used today. This is the recommended wireless security option.

The following parameters will be available for configuration:

**Cipher Type:** Select the appropriate cipher type to use here. Options to choose from are Temporal Key Integrity Protocol (TKIP), Advanced Encryption Standard (AES), and Both (**Auto TKIP and AES**).

**Network Key:** Enter the shared secret used here. This secret phrase needs to be the same on all of the wireless clients for them to be able to connect to the wireless network successfully.

**WIRELESS SECURITY MODE**

Security Mode :

---

**WPA/WPA2**

WPA/WPA2 requires stations to use high grade encryption and authentication.

Cipher Type :

Network Key :

(8~63 ASCII or 64 HEX)

Click on the **Save Settings** button to accept the changes made.

Click on the **Don't Save Settings** button to discard the changes made.

## Wireless Security

This section will show you the different levels of security you can use to protect your data from intruders. The DIR-820L 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 EAP. EAP is built on a more secure public key encryption system to ensure that only authorized network users can access the network.

# 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:** 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.

**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 :**

**Subnet Mask :**

**Device Name :**

**Local Domain Name :**

**Enable DNS Relay :**



## DHCP Server Settings

DHCP stands for Dynamic Host Control Protocol. The DIR-820L 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-820L. 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** 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:** If all the computers on the LAN successfully obtain their IP addresses from the router's DHCP server as expected, this option can remain disabled. However, if one of the computers on the LAN fails to obtain an IP address from the router's DHCP server, it may have an old DHCP client that incorrectly turns off the broadcast flag of DHCP packets. Enabling this option will cause the router to always broadcast its responses to all clients, thereby working around the problem, at the cost of increased broadcast traffic on the LAN.

**NetBIOS Announcement:** Check this box to allow the DHCP Server to offer NetBIOS configuration settings to the LAN hosts. NetBIOS allow LAN hosts to discover all other computers within the network, e.g. within Network Neighborhood.

**Learn NetBIOS from WAN:** If NetBIOS announcement is switched on, it will cause WINS information to be learned from the WAN side, if available. Turn this setting off to configure manually.

**DHCP SERVER SETTINGS**

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

**Enable DHCP Server :**

**DHCP IP Address Range :** 100 to 199 (addresses within the LAN subnet)

**DHCP Lease Time :** 10080 (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 Scope:** This is an advanced setting and is normally left blank. This allows the configuration of a NetBIOS 'domain' name under which network hosts operate. This setting has no effect if the 'Learn NetBIOS information from WAN' is activated.

**NetBIOS Node:** This field indicates how network hosts are to perform NetBIOS name registration and discovery. H-Node indicates a Hybrid-State of operation. First WINS servers are tried, if any, followed by local network broadcast. This is generally the preferred mode if you have configured WINS servers. M-Node (default) indicates a Mixed-Mode of operation. First a broadcast operation is performed to register hosts and discover other hosts, if broadcast operation fails, WINS servers are tried, if any. This mode favours broadcast operations which may be preferred if WINS servers are reachable by a slow network link and the majority of network services such as servers and printers are local to the LAN. P-Node indicates to use WINS servers ONLY. This setting is useful to force all NetBIOS operation to the configured WINS servers. You must have configured at least the primary WINS server IP to point to a working WINS server. B-Node indicates to use local network broadcast ONLY. This setting is useful where there are no WINS servers available, however, it is preferred you try M-Node operation first. This setting has no effect if the 'Learn NetBIOS information from WAN' is activated.

**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.

**Copy Your PC's MAC Address:** If you want to assign an IP address to the computer you are currently on, click this button to populate the fields.

**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 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"/>	PM_test01	00:04:23:2c:51:a3	192.168.0.112	<input type="button" value="Edit"/> <input type="button" value="Delete"/>

**NUMBER OF DYNAMIC DHCP CLIENTS : 1**

Hardware Address	Assigned IP	Hostname	Expires	
00:04:23:2c:51:a3	192.168.0.112	PM_test01	Thu Sep 1 19:49:06 2011	<a href="#">Revoke</a> <a href="#">Reserve</a>

**DHCP RESERVATIONS LIST**

Enable	Host Name	MAC Address	IP Address	
<input checked="" type="checkbox"/>	PM_test01	00:04:23:2c:51:a3	192.168.0.112	<input type="button" value="Edit"/> <input type="button" value="Delete"/>

**NUMBER OF DYNAMIC DHCP CLIENTS : 1**

Hardware Address	Assigned IP	Hostname	Expires	
00:04:23:2c:51:a3	192.168.0.112	PM_test01	Thu Sep 1 19:49:06 2011	<a href="#">Revoke</a> <a href="#">Reserve</a>

# Storage

This page allows the user to use a web browser to remotely access files stored on USB storage drive plugged into the router.

You can access the storage device at **http://shareport.local**. when you enable SharePort Web Access

The following parameters will be available for configuration:

**Enable SharePort Web** Tick this option to enable the share port  
**Access:** web access feature.

**HTTP Access Port:** Enter the HTTP Access Port number used here. By default, this value is 8181.

**HTTPS Access Port:** Enter the HTTPS Access Port number used here. By default, this value is 4433.

**Allow Remote Access:** Tick this option the allow remote access to this router.

In the **User Creation** section, the user can create and modify usernames and passwords.

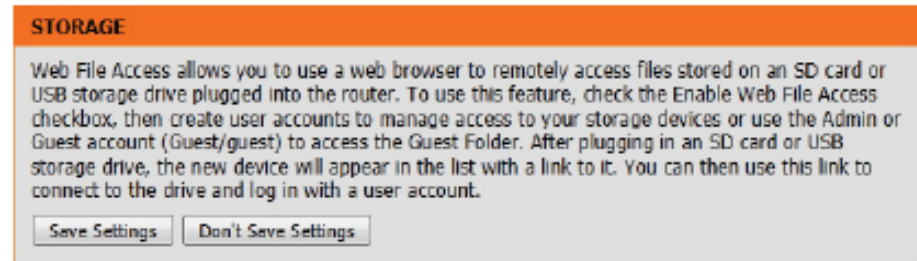
The following parameters will be available for configuration:

**User Name:** In the **User Name** field we can enter the new username that will be created. Alternatively, if we want to modify an existing user account, select a username from the **drop-down** menu. It will automatically be added to the User Name field for modification.

**Password:** In the **Password** field, the user can enter the password that will be associated with the user account.

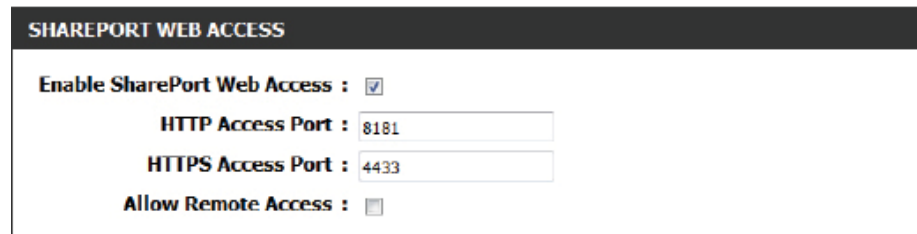
**Verify Password:** In the **Verify Password** field, the user can re-enter the password that will be associated with the user account.

Click the **Add/Edit** button the add a new user account or modify an existing account.



**STORAGE**

Web File Access allows you to use a web browser to remotely access files stored on an SD card or USB storage drive plugged into the router. To use this feature, check the Enable Web File Access checkbox, then create user accounts to manage access to your storage devices or use the Admin or Guest account (Guest/guest) to access the Guest Folder. After plugging in an SD card or USB storage drive, the new device will appear in the list with a link to it. You can then use this link to connect to the drive and log in with a user account.



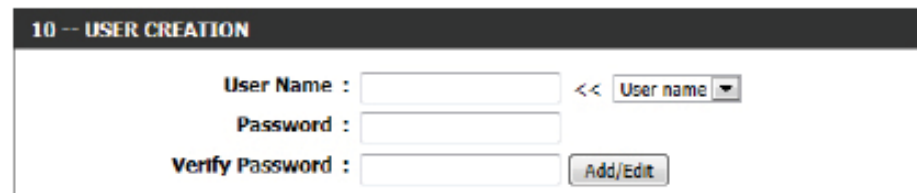
**SHAREPORT WEB ACCESS**

**Enable SharePort Web Access :**

**HTTP Access Port :**

**HTTPS Access Port :**

**Allow Remote Access :**



**10 -- USER CREATION**

**User Name :**  <<

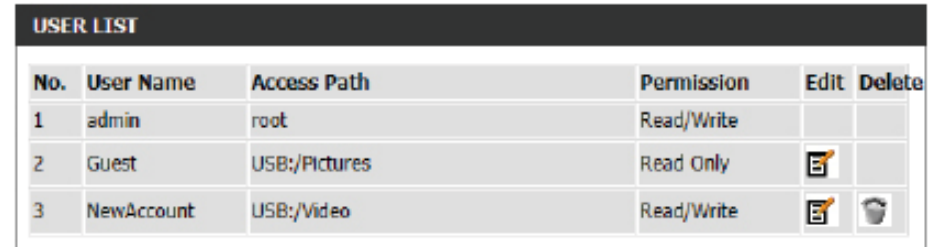
**Password :**




**Verify Password :**

In the **User List** section, the user can modify or delete different user settings for each account.

The following parameters will be available in the display.

- No.** Displays the number of the entry in the user list.
- User Name:** Displays the user name of the entry in the list.
- Access Path:** Displays the access path of the entry in the list.
- Permission:** Displays the permission settings of the entry in the list.



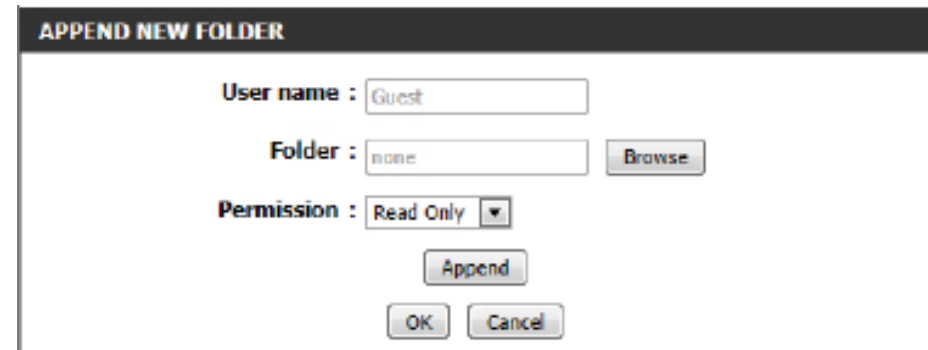
No.	User Name	Access Path	Permission	Edit	Delete
1	admin	root	Read/Write		
2	Guest	USB:/Pictures	Read Only		
3	NewAccount	USB:/Video	Read/Write		

Click the **Edit** icon to edit the access path and permission, for each user.  
Click the **Delete** icon to delete an account from the list.

After clicking on the **Edit** button, this window will appear.

The following parameters will be available for configuration:

- User Name:** This field will display the current user name that will be modified.
- Folder:** This field will display the access path that this user will have access to, after logging in. Click the **Browse** button to navigate to a folder located on the USB storage device.
- Permission:** Here the user can select the appropriate permission setting for this user account. Permissions available for selection, from the drop-down menu are **Read Only** and **Read/Write**.



**APPEND NEW FOLDER**

User name :

Folder :

Permission :

**Read Only** permission will only allow this account to read data stored on the USB storage device within the constraints of the access path specified. **Read/Write** permission will allow this account to read and write data to and from the USB storage device within the constraints of the access path specified.

Click the **Append** button to add a blank account with the access path and permission specified.  
Click the **OK** button to accept the changes made for the existing account.  
Click the **Cancel** button to discard the changes made.

---

In the **Number Devices** section, the user can view information about the external USB storage devices inserted into the USB port of this router.

The following parameters will be available in the display

**Number of Devices:** This field will display the number of USB storage devices that are attached to the USB port of the router.

**Device:** This field will display the USB storage device's name.

NUMBER DEVICES:1		
Device	Total Space	Free Space
USB	2 GB	1.9 GB

**Total Space:** This field will display the total space that is available on the USB storage device attached.

**Free Space:** This field will display the free space that is available on the USB storage device attached.

In the **HTTP Storage Link** section, the user can use this link to connect to the drive remotely after logging in with a user account.

Notice the path of the link(s) provided will point to the external interface of this router. If no DDNS account is specified on the Dynamic DNS page, the WAN IP address will be used. If, however, a DDNS account is specified, then the domain name will be used.

Click on the **Save Settings** button to accept the changes made.

Click on the **Don't Save Settings** button to discard the changes made.

HTTP STORAGE LINK
You can then use this link to connect to the drive and log in with a user account.
<a href="#">Web File Access Http Link</a>
<a href="#">Web File Access Https Link</a>
<input type="button" value="Save Settings"/> <input type="button" value="Don't Save Settings"/>

# IPv6

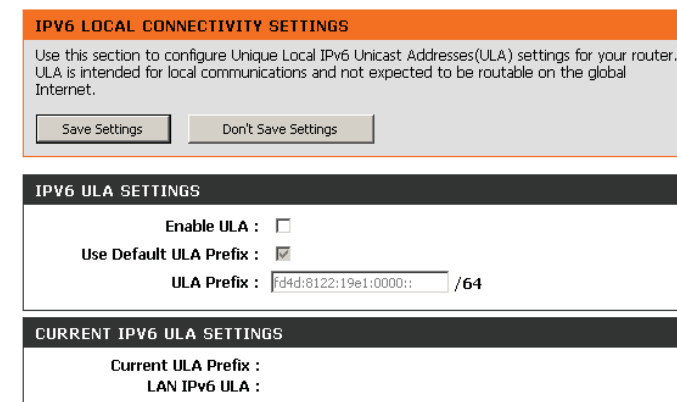
On this page, the user can configure the IPv6 Connection type. There are two ways to set up the IPv6 Internet connection. You can use the Web-based IPv6 Internet Connection Setup Wizard, or you can manually configure the connection.

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.

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.



To configure the IPv6 local settings, click on the **IPv6 Local Connectivity Setup** button.



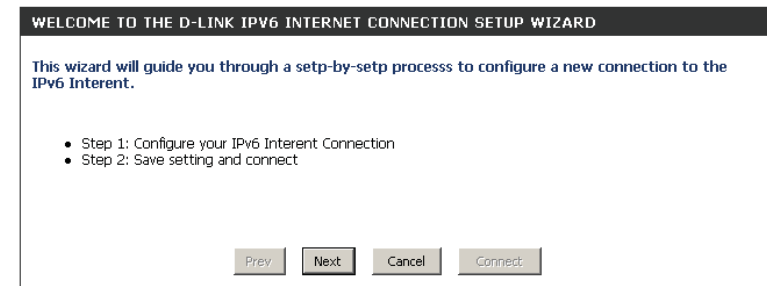
## IPv6 Internet Connection Setup Wizard

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

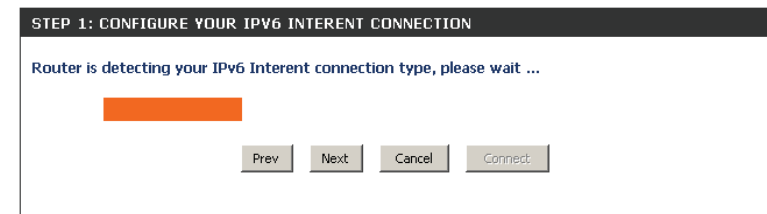
Click the **IPv6 Internet Connection Setup Wizard** button and the router will guide you through a few simple steps to get your network up and running.



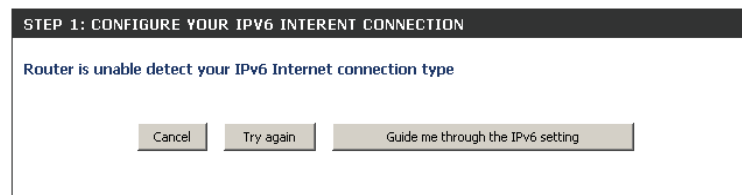
Click **Next** to continue to the next page. Click **Cancel** to discard the changes made and return to the main page.



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.



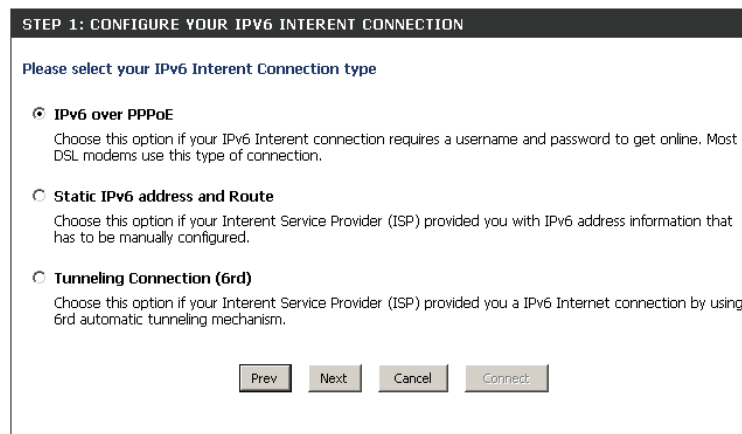
However, if the automatic detection fails, the user will be prompted to either **Try again** or to click on the **Guide me through the IPv6 settings** button to initiate the manual continual of the wizard.



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 3 options available on this page are **IPv6 over PPPoE**, **Static IPv6 address and Route**, and **Tunneling Connection**.

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.



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 an 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 its 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.



## 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 Address:** Enter the WAN primary DNS Server address used here.

**Secondary IPv6 DNS Address:** 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 DNS Address :

Secondary DNS Address :

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 : 192.168.1.2 Mask Length : 0

Assign IPv6 Prefix : None

Tunnel Link-Local Address : FE80::COA8:0102/64

6rd Border Relay IPv4 Address :

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 Link-local. 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 computer has been removed or disabled.

### Auto Detection

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

IPv6 CONNECTION TYPE
Choose the mode to be used by the router to the IPv6 Internet.
My IPv6 Connection is : <input type="text" value="Auto Detection"/>
IPv6 DNS SETTINGS
Obtain a DNS server address automatically or enter a specific DNS server address.
<input checked="" type="radio"/> Obtain a DNS server address automatically
<input type="radio"/> Use the following DNS address
Primary DNS Server : <input type="text"/>
Secondary DNS Server : <input type="text"/>
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 : <input checked="" type="checkbox"/>
LAN IPv6 Address : <input type="text"/> /64
LAN IPv6 Link-Local Address : FE80::218:E7FF:FE95:689E/64
ADDRESS AUTOCONFIGURATION SETTINGS
Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network. You can also enable DHCP-PD to delegate prefixes for router in your LAN.
Enable automatic IPv6 address assignment : <input checked="" type="checkbox"/>
Enable Automatic DHCP-PD in LAN : <input checked="" type="checkbox"/>
Autoconfiguration Type : <input type="text" value="SLAAC + Stateless DHCPv6"/>
Router Advertisement Lifetime : <input type="text" value="1440"/> (minutes)

## Static IPv6

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

**Enable Autoconfiguration:** 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.

**IPv6 Address Lifetime:** Enter the IPv6 Address Lifetime (in minutes).

**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 :

Default Gateway :

Primary DNS Server :

Secondary 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::218:E7FF:FE95:689E/64

---

**ADDRESS AUTOCONFIGURATION SETTINGS**

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

Enable automatic IPv6 address assignment :

Autoconfiguration Type :

Router Advertisement Lifetime:  (minutes)

## Autoconfiguration

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

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

**Primary/Secondary DNS Address:** Enter the primary and secondary DNS server addresses.

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

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

**Enable Autoconfiguration:** 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.

**IPv6 Address Lifetime:** Enter the IPv6 Address Lifetime (in minutes).

IPv6 CONNECTION TYPE	
Choose the mode to be used by the router to the IPv6 Internet.	
My IPv6 Connection is :	Autoconfiguration (SLAAC/DHCPv6) ▾
IPv6 DNS SETTINGS	
Obtain a DNS server address automatically or enter a specific DNS server address.	
<input checked="" type="radio"/> Obtain a DNS server address automatically <input type="radio"/> Use the following DNS address	
Primary DNS Server :	<input type="text"/>
Secondary DNS Server :	<input type="text"/>
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 :	<input checked="" type="checkbox"/>
LAN IPv6 Address :	<input type="text"/> /64
LAN IPv6 Link-Local Address :	FE80::218:E7FF:FE95:689E/64
ADDRESS AUTOCONFIGURATION SETTINGS	
Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network. You can also enable DHCP-PD to delegate prefixes for router in your LAN.	
Enable automatic IPv6 address assignment :	<input checked="" type="checkbox"/>
Enable Automatic DHCP-PD in LAN :	<input checked="" type="checkbox"/>
Autoconfiguration Type :	SLAAC + Stateless DHCPv6 ▾
Router Advertisement Lifetime:	1440 (minutes)

## PPPoE

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

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

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

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

**User Name:** Enter your PPPoE user name.

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

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

**Reconnection 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.

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

**Primary/Secondary DNS Address:** Enter the primary and secondary DNS server addresses.

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

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

**Enable Autoconfiguration:** Check to enable the Autoconfiguration feature.

IPv6 CONNECTION TYPE	
Choose the mode to be used by the router to the IPv6 Internet.	
My IPv6 Connection is :	PPPoE
PPPOE	
Enter the information provided by your Internet Service Provider (ISP).	
PPPoE Session:	<input checked="" type="radio"/> Share with IPv4 <input type="radio"/> Create a new session
Address Mode :	<input checked="" type="radio"/> Dynamic IP <input type="radio"/> Static IP
IP Address :	<input type="text"/>
Username :	<input type="text"/>
Password :	<input type="text"/>
Verify Password :	<input type="text"/>
Service Name :	<input type="text"/> (Optional)
Reconnect Mode :	<input checked="" type="radio"/> Always on <input type="radio"/> On demand <input type="radio"/> Manual
Maximum Idle Time :	5 (minutes, 0=infinite)
MTU :	1492 (bytes)MTU default = 1492
IPv6 DNS SETTINGS	
Obtain a DNS server address automatically or enter a specific DNS server address.	
	<input checked="" type="radio"/> Obtain a DNS server address automatically
	<input type="radio"/> Use the following DNS address
Primary DNS Server :	<input type="text"/>
Secondary DNS Server :	<input type="text"/>
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 :	<input checked="" type="checkbox"/>
LAN IPv6 Address :	<input type="text"/> /64
LAN IPv6 Link-Local Address :	FE80::218:E7FF:FE95:689E/64
ADDRESS AUTOCONFIGURATION SETTINGS	
Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network. You can also enable DHCP-PD to delegate prefixes for router in your LAN.	
Enable automatic IPv6 address assignment :	<input checked="" type="checkbox"/>
Enable Automatic DHCP-PD in LAN :	<input checked="" type="checkbox"/>
Autoconfiguration Type :	SLAAC + Stateless DHCPv6
Router Advertisement Lifetime:	1440 (minutes)

**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.

**IPv6 Address Lifetime:** Enter the IPv6 Address Lifetime (in minutes).

## IPv6 in IPv4 Tunneling

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

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

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

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

**Enable Autoconfiguration:** 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.

**Pv6 Address Lifetime:** Enter the Router Advertisement Lifetime (in minutes).

IPv6 CONNECTION TYPE	
Choose the mode to be used by the router to the IPv6 Internet.	
My IPv6 Connection is :	<input type="text" value="IPv6 in IPv4 Tunnel"/>
IPv6 in IPv4 TUNNEL SETTINGS	
Enter the IPv6 in IPv4 Tunnel information provided by your Tunnel Broker.	
Remote IPv4 Address :	<input type="text"/>
Remote IPv6 Address :	<input type="text"/>
Local IPv4 Address :	192.168.1.2
Local IPv6 Address :	<input type="text"/>
IPv6 DNS SETTINGS	
Obtain a DNS server address automatically or enter a specific DNS server address.	
<input checked="" type="radio"/> Obtain a DNS server address automatically <input type="radio"/> Use the following DNS address	
Primary DNS Server :	<input type="text"/>
Secondary DNS Server :	<input type="text"/>
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 :	<input checked="" type="checkbox"/>
LAN IPv6 Address :	<input type="text"/> /64
LAN IPv6 Link-Local Address :	FE80::218:E7FF:FE95:689E/64
ADDRESS AUTOCONFIGURATION SETTINGS	
Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network. You can also enable DHCP-PD to delegate prefixes for router in your LAN.	
Enable automatic IPv6 address assignment :	<input checked="" type="checkbox"/>
Enable Automatic DHCP-PD in LAN :	<input checked="" type="checkbox"/>
Autoconfiguration Type :	<input type="text" value="SLAAC + Stateless DHCPv6"/>
Router Advertisement Lifetime :	<input type="text" value="1440"/> (minutes)



## 6 to 4 Tunneling

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

**6 to 4 Settings:** Enter the IPv6 settings supplied by your Internet provider (ISP).

**Primary/Secondary DNS Address:** Enter the primary and secondary DNS server addresses.

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

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

**Enable Autoconfiguration:** 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.

**IPv6 Address Lifetime:** Enter the IPv6 Address Lifetime (in minutes).

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:C0A8:0102::C0A8:0102
6to4 Relay :	192.88.99.1
Primary DNS Server :	
Secondary 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:C0A8:0102::0001 ::1/64
LAN IPv6 Link-Local Address :	FE80::218:E7FF:FE95:689E/64
ADDRESS AUTOCONFIGURATION SETTINGS	
Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network.	
Enable automatic IPv6 address assignment :	<input checked="" type="checkbox"/>
Autoconfiguration Type :	SLAAC + Stateless DHCPv6
Router Advertisement Lifetime :	60 (minutes)

## 6rd

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

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

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

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

**Enable Autoconfiguration:** 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).

**IPv6 CONNECTION TYPE**

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

My IPv6 Connection is :

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**6RD SETTINGS**

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

6rd Configuration :  6rd DHCPv4 Option  Manual Configuration

6rd IPv6 Prefix :  /

IPv4 Address : 192.168.1.2 Mask Length :

Assign IPv6 Prefix : None

Tunnel Link-Local Address : FE80::C0A8:0102/64

6rd Border Relay IPv4 Address :

Primary DNS Server :

Secondary DNS Server :

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**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::218:E7FF:FE95:689E/64

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**ADDRESS AUTOCONFIGURATION SETTINGS**

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

Enable automatic IPv6 address assignment :

Autoconfiguration Type :

Router Advertisement Lifetime :  (minutes)