



User Manual

Wireless AC1200 Dual Band Router with High-Gain Antennas

DIR-822-US

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
3.00	December 9, 2015	• Initial release for revision C1
3.01	June 30, 2017	• Minor fixes

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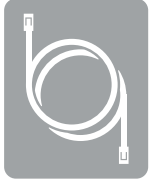
Package Contents



DIR-822 AC1200 Wi-Fi Router



Power Adapter



Ethernet Cable



Wi-Fi Configuration Card



Quick Install Guide

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

Note: Using a power supply with a different voltage rating than the one included with the DIR-822 will cause damage and void the warranty for this product.

Minimum Requirements

<p>Network Requirements</p>	<ul style="list-style-type: none"> • An Ethernet-based broadband modem (supports 10/100 Fast Ethernet) • IEEE 802.11 ac/n/g/b/a wireless clients • 10/100 Ethernet devices (LAN)
<p>Web-based Configuration Requirements</p>	<p>Computer with the following:</p> <ul style="list-style-type: none"> • Windows® or Mac OS®X operating system • An installed Ethernet adapter or wireless adapter <p>Browser Requirements:</p> <ul style="list-style-type: none"> • Internet Explorer® 11 • Mozilla® Firefox® • Google Chrome™ • Safari® 5.1 or higher <p>Windows® Users: Make sure you have the latest version of Java installed. Visit www.java.com to download the latest version.</p>
<p>QRS Mobile Requirements</p>	<p>For requirements refer to QRS Mobile page at:</p> <ul style="list-style-type: none"> • iTunes Store (App Store > Utilities > D-Link Systems) • Google Play (Click link to www.dlink.com/qrsmobileapp)

Introduction

Overview

The AC1200 Wi-Fi Router delivers high performance wireless speed and coverage through your home. It delivers up to 1,200 Mbps (300 Mbps in 2.4GHz + 867 Mbps in 5GHz) in combined Wi-Fi speed. It comes with Intelligent Quality of Service (QoS) with traffic prioritization, four high-performance external antennas for maximum range, a new user interface with an easy setup. The DIR-822 is the perfect combination of performance and ease of use. It is ideal for today's most demanding tasks such as HD streaming, gaming, and multiple device usage.

Dual Band Advantage

The AC1200 Wi-Fi Router delivers dual band performance for intelligent, versatile, interference-free bandwidth. Check your email and surf the internet on the 2.4GHz band; and game, make skype calls and stream HD movies on the cleaner, less interference 5GHz band. High-performance antennas The DIR-822 also comes with four high-performance antennas to deliver maximum range around your home.

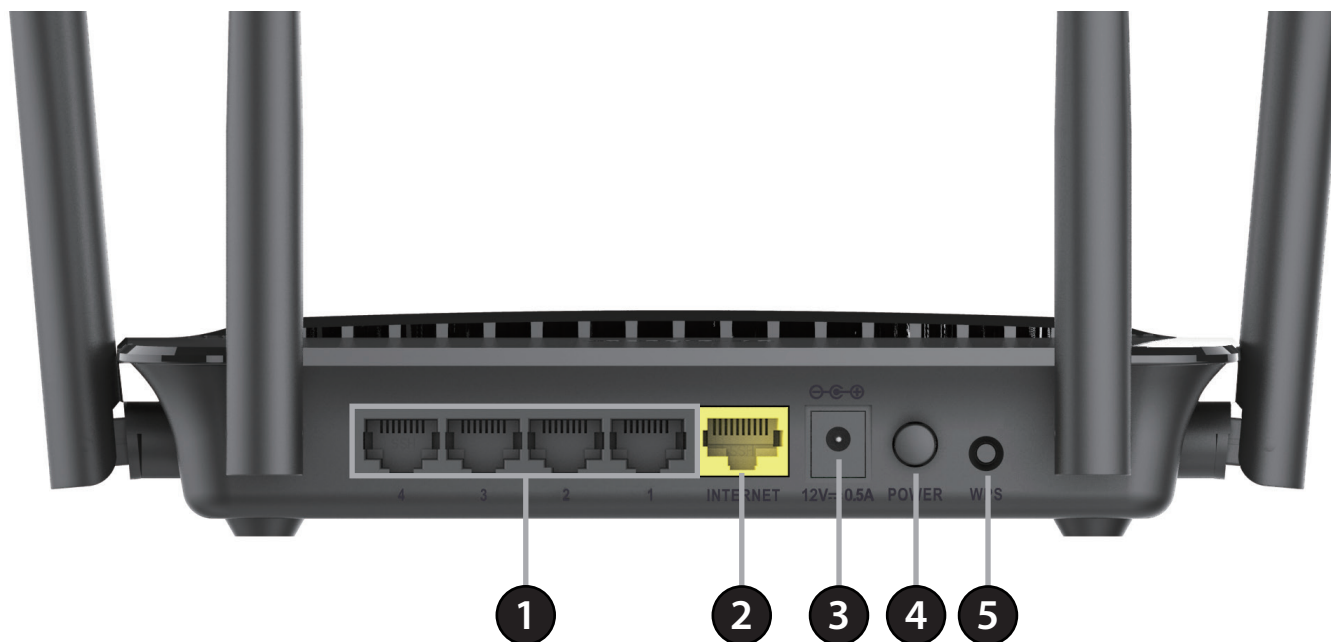
Backward compatibility

While the DIR-822 delivers AC performance to your home network, it is also backward compatible with all of the existing a/b/g/n devices.

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

Hardware Overview

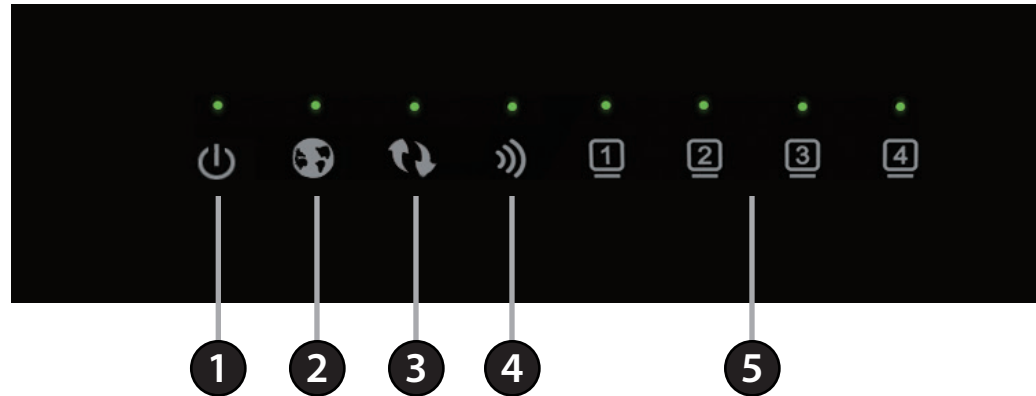
Connections



1	LAN Ports (1-4)	Connect Ethernet devices such as computers, switches, storage (NAS) devices, and video game consoles.
2	Internet Port	Connect your broadband modem to this port using an Ethernet cable.
3	Power Port	Connect the supplied power adapter to this port.
4	Power Button	Press the power button to power the router on and off.
5	WPS Button	Press to start the WPS process. The WPS LED will blink during the process. The light will turn solid green when successfully connecting to a device.
	Reset Button	Located on the bottom of the router. Using a paper clip, press and hold for 10 seconds to reset the router back to the factory default settings.

Hardware Overview

LEDs



1	Power LED	A solid green light indicates a proper connection to the power supply.
2	Internet LED	A solid green light indicates a connection to the Internet port.
3	WPS LED	A solid green light indicates a successful connection using WPS. The light will blink during the WPS process.
4	Wireless LED	A solid green light indicates the wireless function is working properly. This light will blink during data transmission.
5	LAN LED (1-4)	A solid green light indicates a connection to a device is working properly. The LED will blink during data transmission.

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

- **Users with DSL providers** - If you are using a PPPoE connection, you will need your PPPoE user name and password. If you do not have this information, contact your ISP (Internet Service Provider). Do not proceed until you have this information. Also, make sure you disable or uninstall any PPPoE software such as WinPoET, MacPoET, BroadJump, or EnterNet 300 from your computer or you will not be able to connect to the Internet.
- **Users with Cable providers** - Make sure you unplug the power to your modem. In some cases, you may need to turn it off for up to five minutes.
- **Advanced Users** - If your ISP provided you with a modem/router combo, you will need to set it to “bridge” mode so the DIR-822 can work properly. For details, contact your ISP or refer to the user manual for your modem/router device.

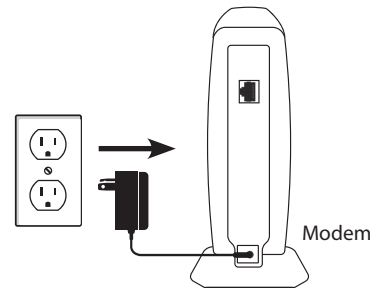
Wireless Installation Considerations

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

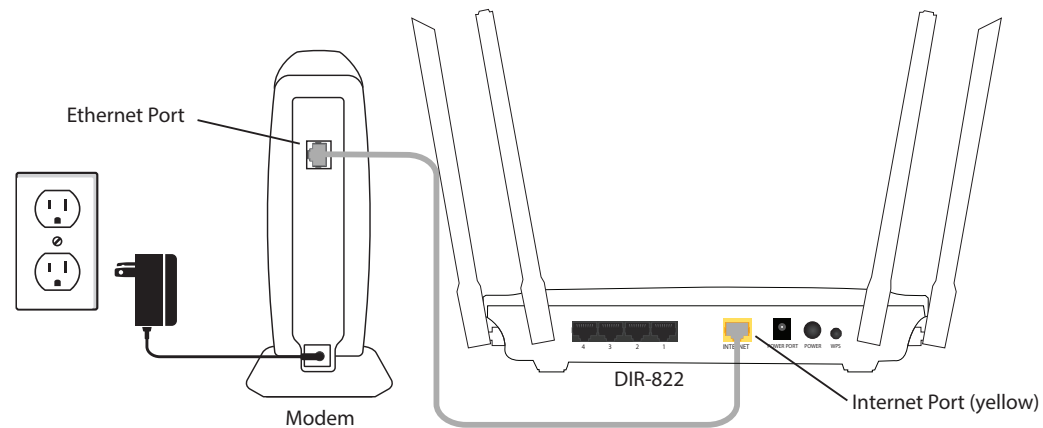
1. Keep the number of walls and ceilings between the D-Link router and other network devices to a minimum - each wall or ceiling can reduce your adapter's range from 3-90 feet (1-30 meters.) Position your devices so that the number of walls or ceilings is minimized.
2. Be aware of the direct line between network devices. A wall that is 1.5 feet thick (0.5 meters), at a 45-degree angle appears to be almost 3 feet (1 meter) thick. At a 2-degree angle it looks over 42 feet (14 meters) thick! Position devices so that the signal will travel straight through a wall or ceiling (instead of at an angle) for better reception.
3. Building materials make a difference. A solid metal door or aluminum studs may have a negative effect on range. Try to position access points, wireless routers, and computers so that the signal passes through drywall or open doorways. Materials and objects such as glass, steel, metal, walls with insulation, water (fish tanks), mirrors, file cabinets, brick, and concrete will degrade your wireless signal.
4. Keep your product away (at least 3-6 feet or 1-2 meters) from electrical devices or appliances that generate RF noise.
5. If you are using 2.4 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.

Manual Setup

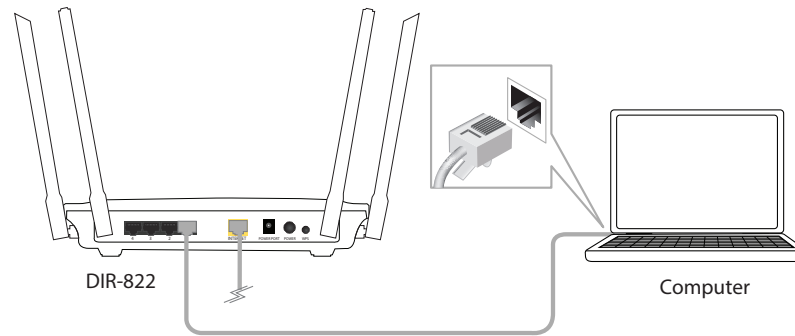
1. Turn off and unplug the power to your cable or DSL modem. This is required.



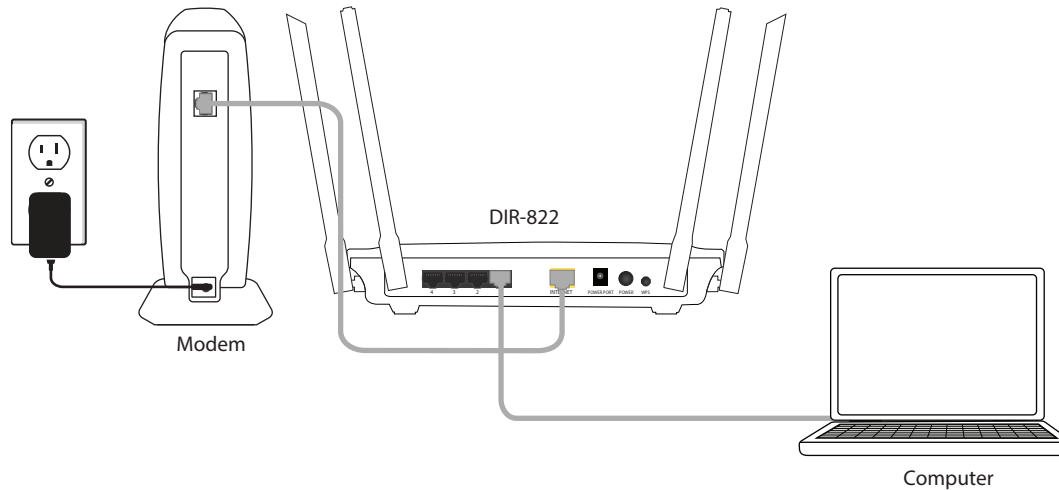
2. Connect an Ethernet cable from the Internet port of the router to the Ethernet port on your cable or DSL modem.



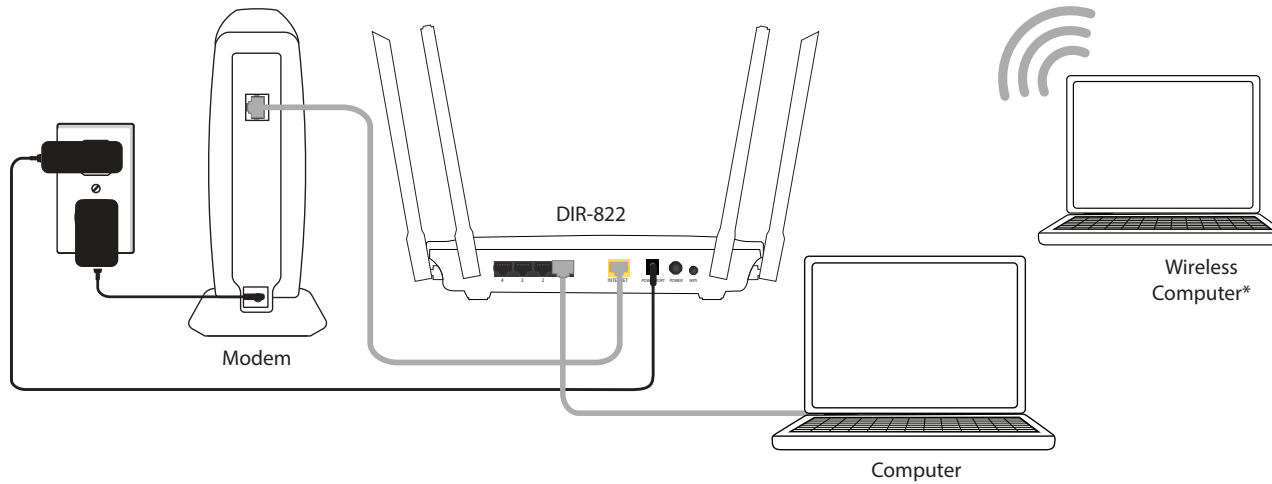
3. Connect another Ethernet cable from the Ethernet port on your computer to one of the LAN ports on the router. You can also connect wirelessly to the router with your computer. Use the supplied Wi-Fi Configuration Card for the Wi-Fi network name (SSID) and Wi-Fi password of the router. Complete steps 4 and 5 before attempting to connect.



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



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



* If you are connecting wirelessly, you may now connect to the router using the supplied Wi-Fi Configuration Card for the Wi-Fi network name (SSID) and Wi-Fi password.

6. After the router has powered up, verify that the Power and Internet LEDs are both lit. Proceed with router configuration.

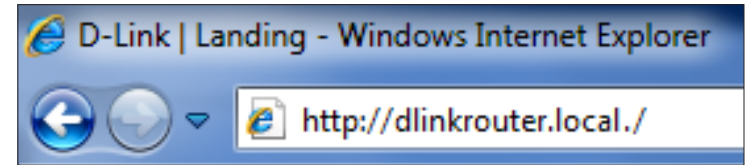
Configuration

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

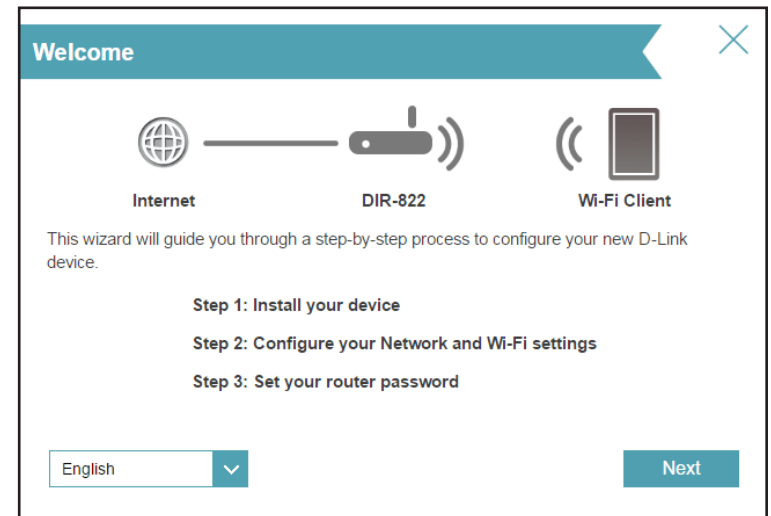
- **D-Link Setup Wizard** - This wizard will launch when you log into the router for the first time using your web browser. Refer to page 12.
- **QRS Mobile App** - Use your iPhone, iPad, iPod Touch, or Android device to configure your router. Refer to page 17.
- **Manual Setup** - Log into the router using a web browser and manually configure your router. Refer to page 21

Setup Wizard

If this is your first time configuring the router, open your web browser (e.g., Internet Explorer, Chrome, Firefox, or Safari). This will automatically launch the *Setup Wizard*. If the wizard does not start automatically, you can enter **http://dlinkrouter.local/** or the IP address of the router (**192.168.0.1**).



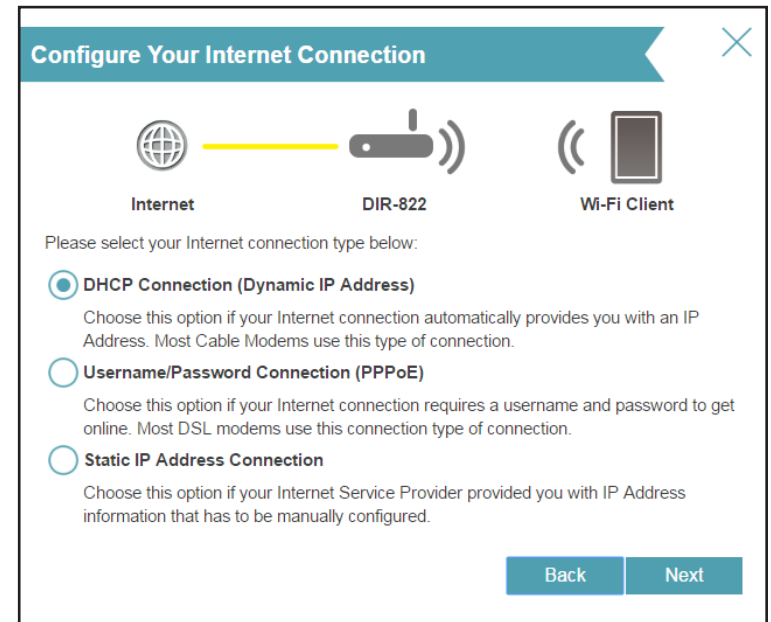
The wizard will guide you through a step-by-step process to configure your new D-Link router and connect to the Internet. When the welcome screen appears, click **Next** to continue. Wait a few moments while your router detects your Internet connection type.



If the router does not detect the type of Internet connection you have, you will see a list of connection types. Select your Internet connection type. This information can be obtained from your ISP (Internet Service Provider).

Select **DHCP Connection (Dynamic IP Address)** if your Internet connection automatically provides you with an IP address. This option is commonly used for cable modem services.

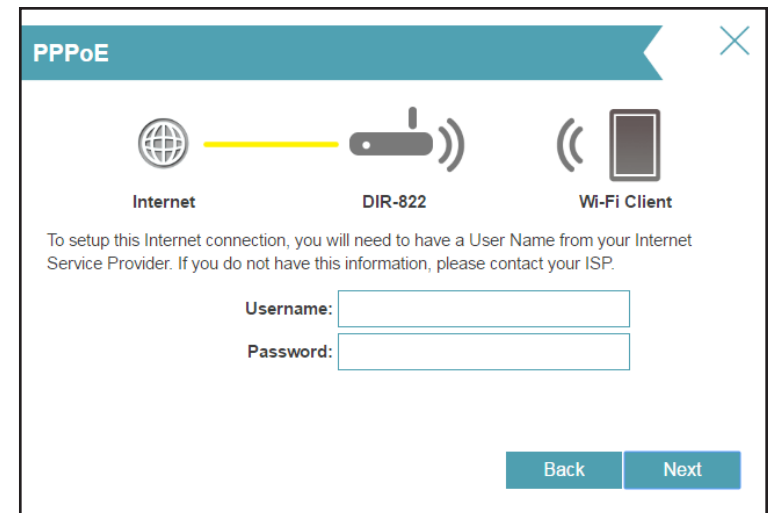
Click **Next** to continue.



If the router detected PPPoE or you selected **Username/Password Connection (PPPoE)**, enter your PPPoE username and password supplied by your ISP.

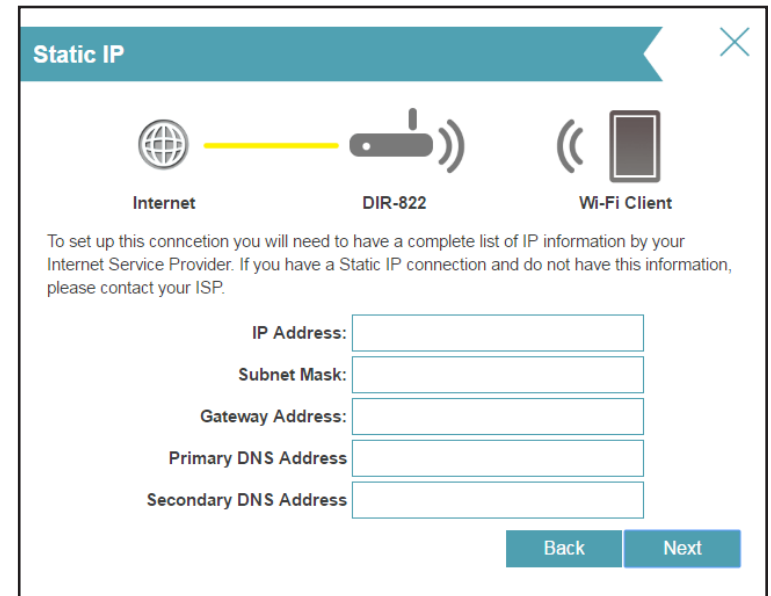
Click **Next** to continue.

Note: Make sure you 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 **Static IP Address Connection**, enter the IP information and DNS settings supplied by your ISP.

Click **Next** to continue.

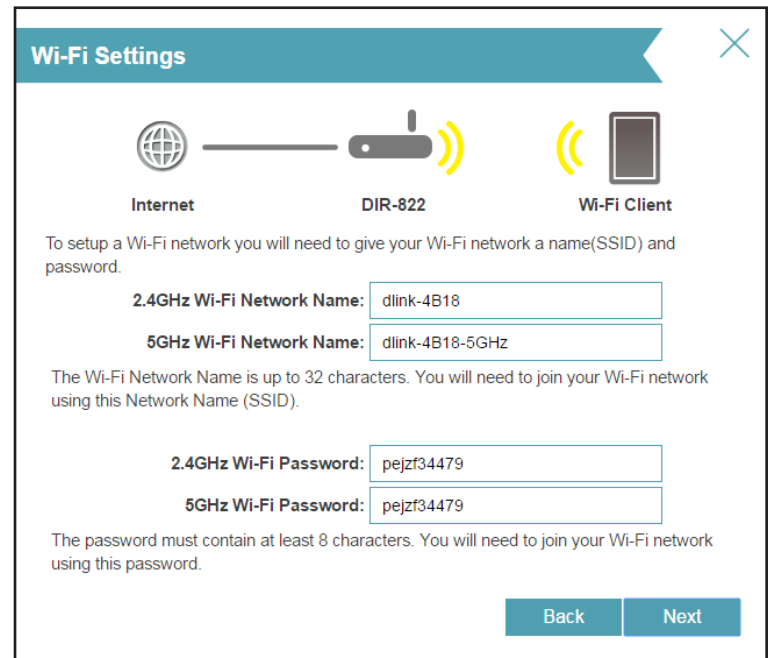


The screenshot shows the 'Static IP' configuration screen. At the top, there is a teal header with the text 'Static IP' and a close button (X). Below the header, there is a diagram showing 'Internet' (globe icon) connected to 'DIR-822' (router icon) which is connected to 'Wi-Fi Client' (phone icon). The text below the diagram reads: 'To set up this connection you will need to have a complete list of IP information by your Internet Service Provider. If you have a Static IP connection and do not have this information, please contact your ISP.' There are five input fields: 'IP Address:', 'Subnet Mask:', 'Gateway Address:', 'Primary DNS Address', and 'Secondary DNS Address'. At the bottom right, there are two buttons: 'Back' and 'Next'.

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

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

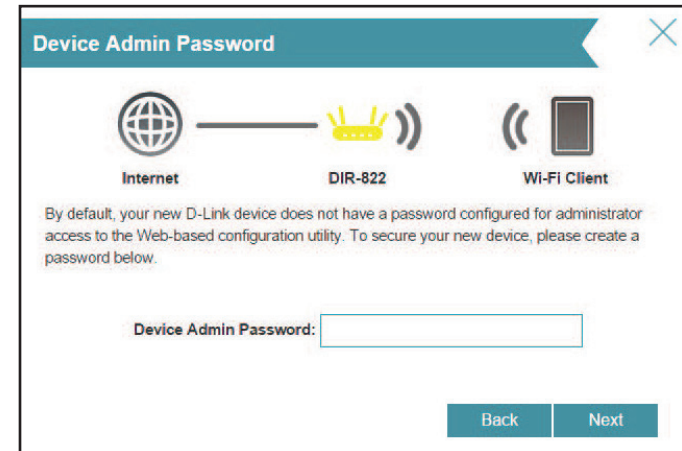
Click **Next** to continue.



The screenshot shows the 'Wi-Fi Settings' configuration screen. At the top, there is a teal header with the text 'Wi-Fi Settings' and a close button (X). Below the header, there is a diagram showing 'Internet' (globe icon) connected to 'DIR-822' (router icon) which is connected to 'Wi-Fi Client' (phone icon). The text below the diagram reads: 'To setup a Wi-Fi network you will need to give your Wi-Fi network a name(SSID) and password.' There are four input fields: '2.4GHz Wi-Fi Network Name:' with the value 'dlink-4B18', '5GHz Wi-Fi Network Name:' with the value 'dlink-4B18-5GHz', '2.4GHz Wi-Fi Password:' with the value 'pejzf34479', and '5GHz Wi-Fi Password:' with the value 'pejzf34479'. Below the input fields, there is a note: 'The Wi-Fi Network Name is up to 32 characters. You will need to join your Wi-Fi network using this Network Name (SSID).' and another note: 'The password must contain at least 8 characters. You will need to join your Wi-Fi network using this password.' At the bottom right, there are two buttons: 'Back' and 'Next'.

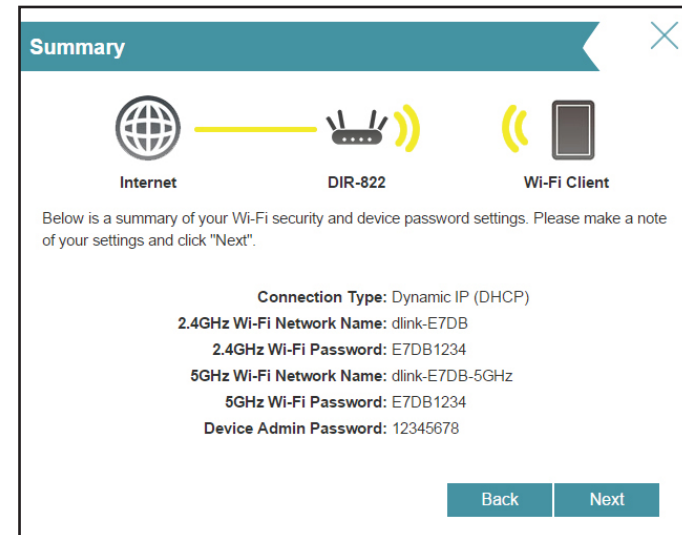
In order to secure your DIR-822, enter a new **Admin Password**. You will be prompted for this password every time you want to use the router's web configuration utility.

Click **Next** to continue.



The Summary window will display your settings. Click **Back** if you find it necessary to make changes. When the settings are correct, make a note of the of them so you can configure your Wi-Fi devices.




Click **Next** to continue.



At the end of the wizard, you will see a final summary of your settings. Click **Finish** to close the wizard.

Congratulations

Congratulations, your device has been configured. You can now connect to your Wi-Fi network by using the new Wi-Fi Network Name and Password you created.

-  **Connection Type:** Dynamic IP (DHCP)
-  **Device Admin Password:** dlink12345
- 
 - 2.4GHz Wi-Fi Network Name:** dlink-7E76
 - 2.4GHz Wi-Fi Password:** fyeme10620
 - 5GHz Wi-Fi Network Name:** dlink-7E76-5GHz
 - 5GHz Wi-Fi Password:** fyeme10620

[Finish](#)

QRS Mobile App

The QRS Mobile app allows you to install and configure your router from your mobile device.

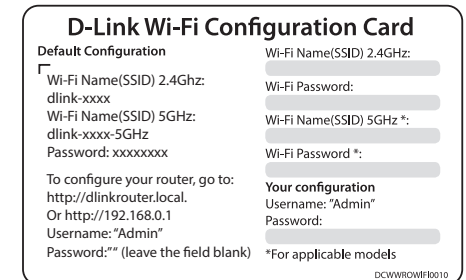
Step 1

Search for the free **QRS Mobile** app on the App Store or Google Play.



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.



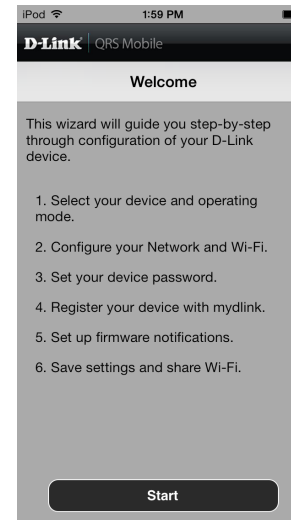
Step 3

Once you connect to the router, tap on the **QRS Mobile** icon to launch the QRS mobile app from your mobile device.



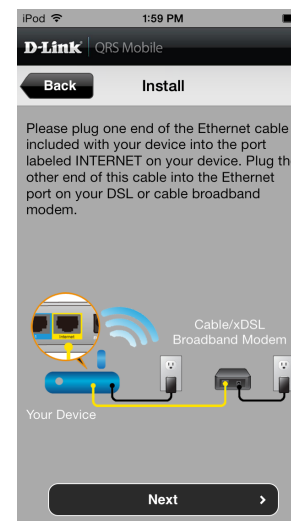
Step 4

You will see the *Welcome* screen. Tap **Start** to proceed. When the *Operation Mode* screen appears, tap **Next**.



Step 5

At this point, make sure that your router is connected to a modem. Plug one end of the provided Ethernet cable into your DSL or cable modem, and plug the other end into the port marked INTERNET on the DIR-822. Tap **Next** to automatically detect your Internet connection and proceed to the next step.

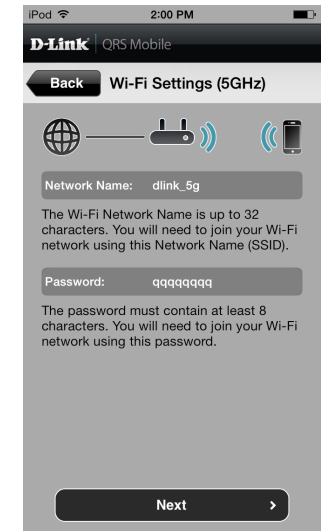


Step 6

You will be prompted to set up each wireless frequency band; the 2.4GHz band followed by the 5GHz band.

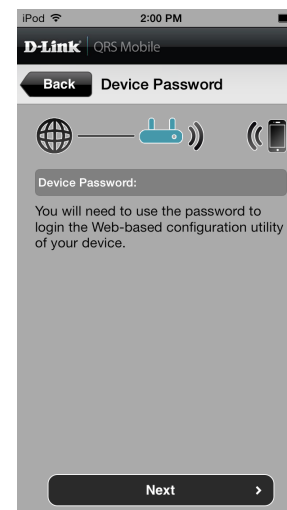
- A. Enter a **Network Name** (SSID) of your choice, or you may leave it unchanged to accept the default SSID. Each wireless band can be assigned its own SSID.
- B. Choose a *Wi-Fi Password* of at least eight characters. You will need to enter this **Password** the first time you connect any device to the router wirelessly.

Tap **Next** to proceed.



Step 7

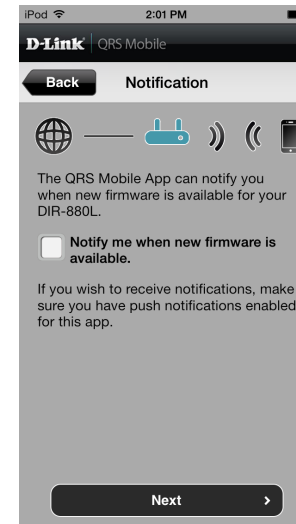
Enter the **Device Password** (*Admin Password*) of your choice. Unlike the Wi-Fi password, this password is only required when you need to configure the router. Refer to "[Web-based Configuration Utility](#)" on page 21 to learn how this password is used. Tap **Next** to proceed.



Step 8

If you would like to receive notification whenever a new firmware update is available, tap the **Notify me when new firmware is available** check box and tap **Next**.

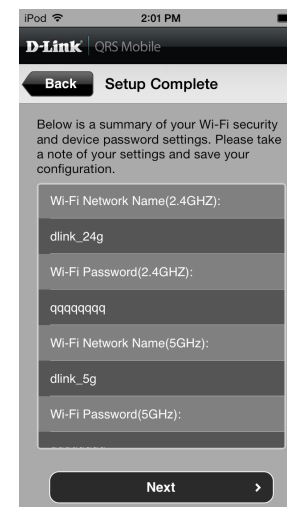
Otherwise, just tap **Next** to proceed.



Step 9

You will see a summary of your settings. If you need to make any changes, tap **Back** to step back through the previous pages.

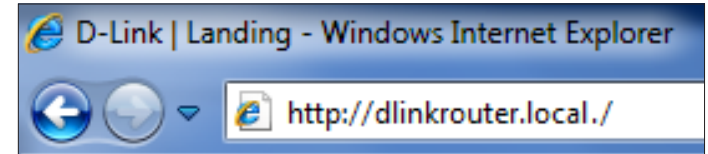
Otherwise, tap **Next** to complete the setup.



Congratulations, your device has been successfully configured! You may now exit the QRS Mobile app.

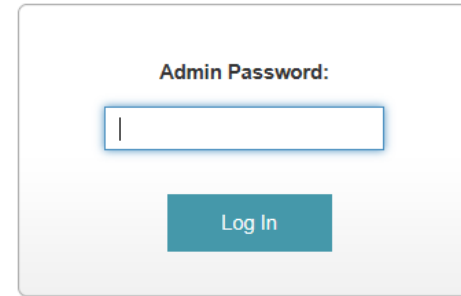
Web-based Configuration Utility

Open a web-browser (e.g., Internet Explorer, Chrome, Firefox, or Safari) and enter **http://dlinkrouter.local/** or the IP address of the router (**http://192.168.0.1**).



Enter your password. If you did not create a password with the *Setup Wizard*, leave the **Admin Password** field blank by default. Click **Log In** to proceed.

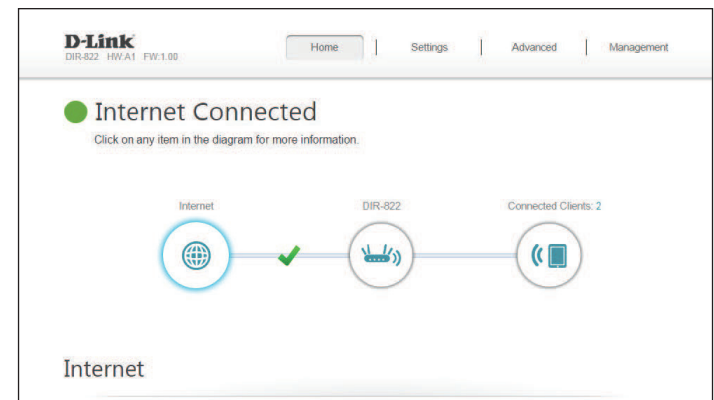
Note: *If you cannot remember your password and cannot log in, press the reset button (see page 4) to restore the router to its factory default settings.*



The router's *Home* page will open, displaying its current connection status.

The bar at the top of the page has quick access to *Settings*, *Advanced*, and *Management* functions. You may easily navigate back *Home* at any time.

Note: *The system will automatically time-out after a period of inactivity. (You will have to log back in as described above.)*

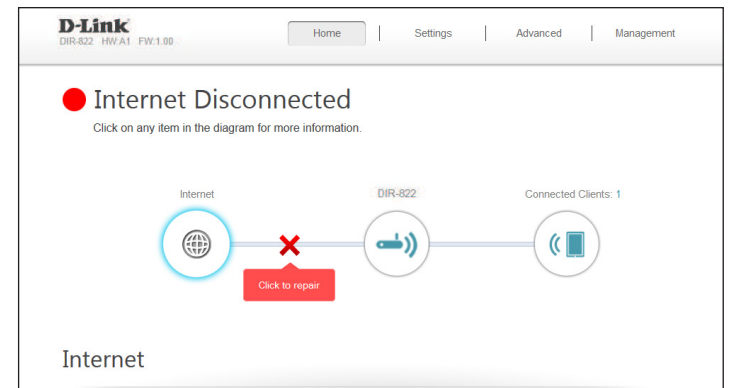


Home

The current status of the router is displayed on the *Home* page in the form of an interactive diagram. You can click on an icon to see information about the selected part of the network at the bottom of the screen.

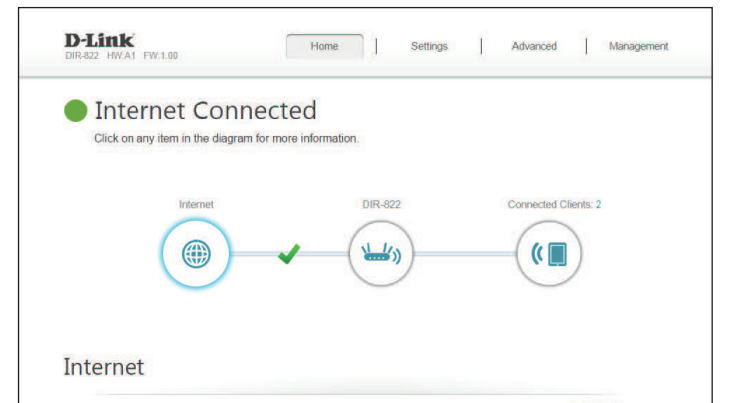
Internet

The Home page shows whether or not the router is currently connected to the Internet. If disconnected, click on **Click to repair** to launch the *Setup Wizard*. (Refer to "[Setup Wizard](#)" on page 12.)



To view details about your Internet connection, click on the **Internet** icon. Click **Release IP Address** to disconnect from the Internet. If you do this and wish to reconnect, click **Renew**.

To reconfigure the Internet settings, refer to "[Internet](#)" on page 25.



DIR-822

Click on the **DIR-822** icon to view details about the router and its wireless settings. Here you can see the router's current wireless settings, as well as its MAC address.

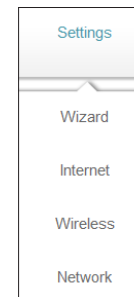
The screenshot displays the D-Link DIR-822 web interface. At the top, the D-Link logo and model information (DIR-822 HW:A1 FW:1.00) are shown. Navigation tabs include Home, Settings, Advanced, and Management. A green circle indicates 'Internet Connected', with a note to click on diagram items for more information. A network diagram shows 'Internet' connected to 'DIR-822' (with a green checkmark) and 'Connected Clients: 2'. Below the diagram, the 'DIR-822' section provides network details:

IPv4 Network		Wi-Fi 2.4GHz	
MAC Address:	18:17:25:34:E7:DB	Status:	Enabled
Router IP Address:	192.168.0.1	Wi-Fi Name (SSID):	DIR-822
Subnet Mask:	255.255.255.0	Password:	12345678
IPv6 Network		Wi-Fi 5GHz	
Link-Local Address:	FE80:0:0:1A17:25FF:FE34:E7DB:64	Status:	Enabled
Router IPv6 Address:	Not Available	Wi-Fi Name (SSID):	DIR-822
Assigned Prefix:	Not Available	Password:	12345678

Buttons for 'Go to settings' are located at the bottom of each settings section.

To reconfigure the router's network settings, either click **Go to settings** (at the bottom left side of the page), or click **Settings** (at the top of the page) and then **Network** from the drop-down menu that appears. Refer to page 50.

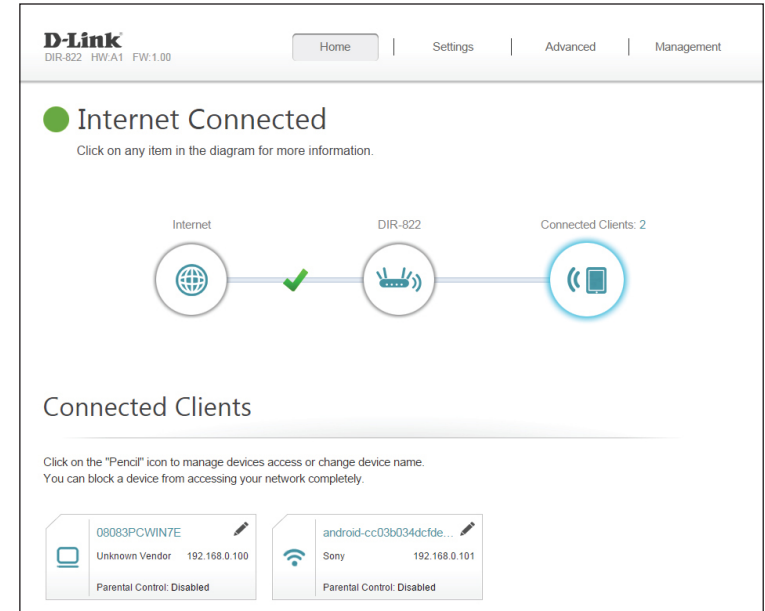
To reconfigure the router's wireless settings, either click **Go to settings** (at the bottom right side of the page), or click **Settings** (at the top of the page) and then **Wireless** from the drop-down menu that appears. Refer to page 47.



Connected Clients

Click on the **Connected Clients** icon to view details about all the clients currently connected to the router, and their corresponding IP addresses.

To edit a client's settings, click the **pencil** icon for the client you would like to edit.



Name: Enter a custom name for this client.

Vendor: Displays the vendor of the device.

IP Address: Enter a specific IP address for this client.

Reserve IP: Enable if you would like to reserve this IP address for this client. Every time this device joins the network, it will receive this IP address.

Access: Allow or Block access to your router.

Click **Save** when you are done.

Settings Wizard

From the **Settings** menu, you can click **Wizard** to open the *Setup Wizard* and connect to the Internet. This is the same wizard that you launched when you first installed the router.

Internet

From the **Settings** menu on the bar on the top of the page, click **Internet** to configure your Internet connection manually.

My Internet Connection is: Choose your **Internet Connection** type from the drop-down menu. Depending on the connection type that you select, you may also see additional fields below that require input. For example, when you select PPPoE, you will see fields for *Username* and *Password*.

Click **Advanced Settings...** to expand the list and see all fields for the selected option.

For **Dynamic IP (DHCP)** refer to page 26.

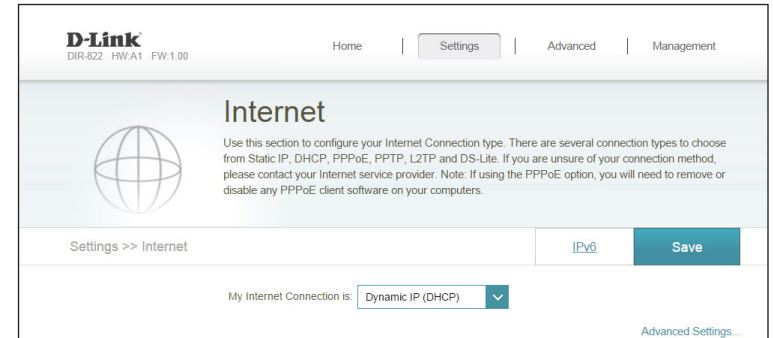
For **Static IP** refer to page 27.

For **PPPoE** refer to page 28.

For **PPTP** refer to page 29.

For **L2TP** refer to page 31.

For **DS-Lite** refer to page 33.



Dynamic IP (DHCP)

Select **Dynamic IP (DHCP)** to obtain IP address information automatically from your Internet Service Provider (ISP). Select this option if your ISP does not provide you with an IP address to use.

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

Primary DNS Server: Enter the **Primary DNS Server** IP address assigned by your ISP. This address is usually obtained automatically from your ISP.

Secondary DNS Server: Enter the **Secondary DNS Server** IP address assigned by your ISP. This address is usually obtained automatically from your ISP.

MTU: Maximum Transmission Unit - by default this field will be set to *Auto*. Select **Manual** if you need to change the MTU for optimal performance with your ISP.

MAC Address Clone: The default MAC address is set to the Internet port's physical interface MAC address on the router. You can use the drop-down menu to replace the Internet port's MAC address with the MAC address of a connected client.

Click **Save** when you are done.

The screenshot shows the D-Link web interface for the DIR-822 router. The page title is "Internet". Below the title, there is a globe icon and a paragraph of instructions. The main configuration area includes a breadcrumb "Settings >> Internet" and a "Save" button. The "My Internet Connection is:" dropdown is set to "Dynamic IP (DHCP)". Below this, there are several input fields: "Host Name" (DIR-822), "Primary DNS Server" (192.168.168.249), "Secondary DNS Server" (192.168.168.201), "MTU" (Auto), and "Mac Address Clone" (18:17:25:34:E7:DC). A dropdown menu next to the Mac Address Clone field is set to "<< MAC Address".

Static IP

Select **Static IP** if your IP information is provided by your Internet service provider (ISP). Each IPv4 address must be entered in the appropriate form, known as dot-decimal notation. This means four decimal numbers separated by dots (x.x.x.x).

IP Address: Enter the **IP Address** provided by your ISP.

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

Default Gateway: Enter the **Default Gateway** address provided by your ISP.

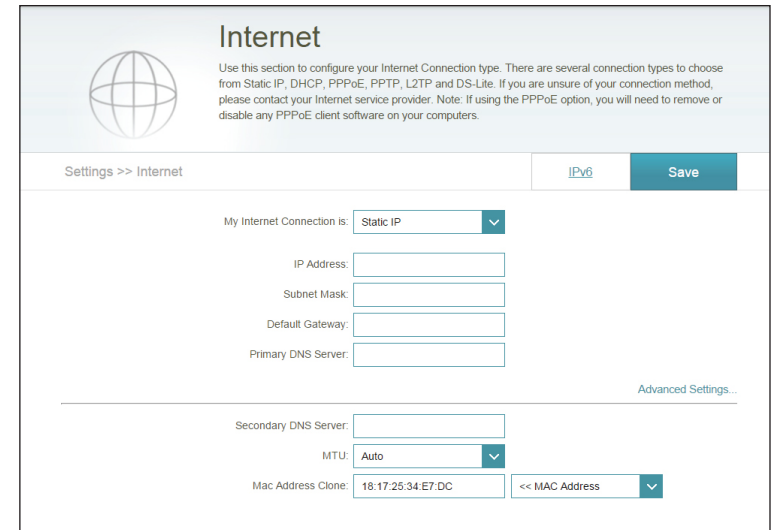
Primary DNS Server: Enter the **Primary DNS Server** IP address assigned by your ISP.

Secondary DNS Server: Enter the **Secondary DNS Server** IP address assigned by your ISP.

MTU: Maximum Transmission Unit - by default this field will be set to *Auto*. Select **Manual** if you need to change the MTU for optimal performance with your ISP.

MAC Address Clone: The default MAC address is set to the Internet port's physical interface MAC address on the router. You can use drop-down menu to replace the Internet port's MAC address with the MAC address of a connected client.

Click **Save** when you are done.



Internet

Use this section to configure your Internet Connection type. There are several connection types to choose from Static IP, DHCP, PPPoE, PPTP, L2TP and DS-Lite. If you are unsure of your connection method, please contact your Internet service provider. Note: If using the PPPoE option, you will need to remove or disable any PPPoE client software on your computers.

Settings >> Internet IPv6 Save

My Internet Connection is: Static IP

IP Address:

Subnet Mask:

Default Gateway:

Primary DNS Server:

[Advanced Settings...](#)

Secondary DNS Server:

MTU: Auto

Mac Address Clone: << MAC Address

PPPoE

Select **PPPoE** (Point to Point Protocol over Ethernet) if your Internet connection requires you to enter a username and password. This information can be provided by your Internet service provider (ISP). This option is typically used for DSL services.

Username: Enter the **Username** provided by your ISP.

Password: Enter the **Password** provided by your ISP.

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

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

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

IP Address: Enter the **IP Address** provided by your ISP (Static IP only).

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

Primary DNS Server: Enter the **Primary DNS Server** IP address assigned by your ISP.

Secondary DNS Server: Enter the **Secondary DNS Server** IP address assigned by your ISP.

MTU: Maximum Transmission Unit - by default this field will be set to *Auto*. Select **Manual** if you need to change the MTU for optimal performance.

Click **Save** when you are done.

PPTP

Choose **PPTP** (Point-to-Point-Tunneling Protocol) if your Internet Service Provider (ISP) uses a PPTP connection. Your Internet service provider (ISP) can provide you with a username and password.

PPTP Server IP Address: Enter the **PPTP Server IP Address** provided by your ISP.

Username: Enter the **Username** provided by your ISP.

Password: Enter the **Password** provided by your ISP.

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

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

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

PPTP IP Address: Enter the **PPTP IP Address** provided by your ISP (for Static IP only).

PPTP Subnet Mask: Enter the **PPTP Subnet Mask** provided by your ISP (for Static IP only).

PPTP Gateway IP Address: Enter the **PPTP Gateway IP Address** provided by your ISP (for Static IP only).

Primary DNS Server: Enter the **Primary DNS Server** IP address assigned by your ISP.

Secondary DNS Server: Enter the **Secondary DNS Server** IP address assigned by your ISP.

MTU: Maximum Transmission Unit - by default this field will be set to *Auto*. Select **Manual** if you need to change the MTU for optimal performance with your ISP.

Click **Save** when you are done.

The screenshot shows a configuration panel with the following fields and controls:

- Address Mode: A dropdown menu currently set to "Static IP".
- PPTP IP Address: An empty text input field.
- PPTP Subnet Mask: An empty text input field.
- PPTP Gateway IP Address: An empty text input field.
- Primary DNS Server: An empty text input field.
- Secondary DNS Server: An empty text input field.
- MTU: A dropdown menu currently set to "Auto".

L2TP

Choose **L2TP** (Layer 2 Tunneling Protocol) if your Internet Service Provider (ISP) uses a L2TP connection. Your ISP can provide you with a username and password.

L2TP Server IP Address: Enter the **L2TP Server IP Address** provided by your ISP.

Username: Enter the **Username** provided by your ISP.

Password: Enter the **Password** provided by your ISP.

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

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

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

L2TP IP Address: Enter the **L2TP IP Address** provided by your ISP (for Static IP only).

L2TP Subnet Mask: Enter the **L2TP Subnet Mask** provided by your ISP (for Static IP only).

L2TP Gateway IP Address: Enter the **L2TP Gateway IP Address** provided by your ISP (for Static IP only).

Primary DNS Server: Enter the **Primary DNS Server** IP address assigned by your ISP.

Secondary DNS Server: Enter the **Secondary DNS Server IP** address assigned by your ISP.

The screenshot shows the 'Internet' settings page. At the top, there is a globe icon and the title 'Internet'. Below the title is a brief instruction: 'Use this section to configure your Internet Connection type. There are several connection types to choose from Static IP, DHCP, PPPoE, PPTP, L2TP and DS-Lite. If you are unsure of your connection method, please contact your Internet service provider. Note: If using the PPPoE option, you will need to remove or disable any PPPoE client software on your computers.' Below this is a breadcrumb 'Settings >> Internet' and a 'Save' button. The main configuration area includes:

- 'My Internet Connection is:' dropdown menu set to 'L2TP'.
- 'L2TP Server IP Address:' text input field.
- 'Username:' text input field.
- 'Password:' text input field.
- 'Reconnect Mode:' dropdown menu set to 'On demand'.
- 'Maximum Idle Time:' text input field with '5' and 'minutes' label.
- 'Advanced Settings...' link.
- 'Address Mode:' dropdown menu set to 'Dynamic IP'.
- 'Primary DNS Server:' text input field.
- 'Secondary DNS Server:' text input field.
- 'MTU:' dropdown menu set to 'Auto'.

The screenshot shows the 'Advanced Settings' page for L2TP configuration. It includes:

- 'Address Mode:' dropdown menu set to 'Static IP'.
- 'L2TP IP Address:' text input field.
- 'L2TP Subnet Mask:' text input field.
- 'L2TP Gateway IP Address:' text input field.
- 'Primary DNS Server:' text input field.
- 'Secondary DNS Server:' text input field.
- 'MTU:' dropdown menu set to 'Auto'.

MTU: Maximum Transmission Unit - by default this field will be set to *Auto*. Select **Manual** if you need to change the MTU for optimal performance with your ISP.

Click **Save** when you are done.

The image shows a network configuration form with the following fields and options:

- Address Mode:
- L2TP IP Address:
- L2TP Subnet Mask:
- L2TP Gateway IP Address:
- Primary DNS Server:
- Secondary DNS Server:
- MTU:

DS-Lite

DS-Lite is an IPv6 (Internet Protocol version 6) connection type. DHCPv6 is the IPv6 equivalent of Dynamic Host Configuration Protocol for IPv4.

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

AFTR IPv6 Address: If you selected **Manual Configuration** above, enter the **AFTR IPv6 address** used here.

B4 IPv6 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 **Save** when you are done.

The screenshot shows the 'Internet' configuration page in a router's web interface. At the top, there is a globe icon and the title 'Internet'. Below the title is a brief instruction: 'Use this section to configure your Internet Connection type. There are several connection types to choose from: Static IP, DHCP, PPPoE, PPTP, L2TP and DS-Lite. If you are unsure of your connection method, please contact your Internet service provider. Note: If using the PPPoE option, you will need to remove or disable any PPPoE client software on your computers.' The page has a breadcrumb 'Settings >> Internet' and a 'Save' button. The main configuration area shows 'My Internet Connection is:' with a dropdown menu set to 'DS-Lite'. Below this is an 'Advanced Settings...' link. Under 'DS-Lite Configuration:', there is another dropdown menu set to 'DS-Lite DHCPv6 Option'. Below that, the 'B4 IPv4 Address' is shown as '192.0.0.' followed by an empty input field. The 'WAN IPv6 Address' and 'IPv6 WAN Default Gateway' are both listed as 'Not Available'. At the bottom, there is a copyright notice: 'COPYRIGHT © 2015 D-Link'.

IPv6

To configure an IPv6 connection, click the **IPv6** link.
To return to the IPv4 settings, click **IPv4**.



My Internet Connection Is: Choose your IPv6 **Internet Connection** type from the drop-down menu. For most of the connection types, after you make a selection you will see additional fields below that require input. The exception is for **Local Connectivity Only**. For this connection type you must click on **Advanced Settings...** to see the additional fields below.

Click **Advanced Settings...** to expand the list and see all fields for the selected option.

For **Auto Detection** refer to page 35.

For **Static IPv6** refer to page 36.

For **Auto Configuration (SLAAC/DHCPv6)** refer to page 38.

For **PPPoE** refer to page 39.

For **IPv6 in IPv4 Tunnel** refer to page 41.

For **6 to 4** refer to page 43.

For **6rd** refer to page 44.

For **Local Connectivity Only** refer to page 46.

Auto Detection

This is a connection method where the ISP assigns your IPv6 address when your router requests one from the ISP's server. Some ISPs require you to change some settings on your side before your router can connect to the IPv6 Internet.

DNS Type: Select **Obtain DNS server address** or **Use the following DNS**.

Primary DNS Server: If you selected **Use the following DNS**, enter the **Primary DNS Server** address.

Secondary DNS Server: If you selected **Use the following DNS**, enter the **Secondary DNS Server** address.

Enable DHCP-PD: Enable or disable prefix delegation services.

LAN IPv6 Address: If you disabled DHCP-PD, enter the LAN (local) IPv6 address for the router.

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

Enable Automatic IPv6 Address Assignment: Enable or disable the *Automatic IPv6 Address Assignment* feature.

Enable Automatic DHCP-PD in LAN: Enable or disable *Automatic DHCP-PD in LAN* services.

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

Router Advertisement Lifetime: Enter the IPv6 address lifetime (in minutes).

Click **Save** when you are done.

The screenshot shows the IPv6 configuration interface. At the top, it says "IPv6" and "All of your IPv6 Internet and network connection details are displayed on this page." Below this, there's a breadcrumb "Settings >> Internet >> IPv6" and a "Save" button. The "My Internet Connection is:" dropdown is set to "Auto Detection". Under "IPv6 DNS SETTINGS", the "DNS Type:" dropdown is set to "Obtain a DNS server address". Under "LAN IPv6 ADDRESS SETTINGS", "Enable DHCP-PD:" is set to "Enabled" and the "LAN IPv6 Link-Local Address:" is "fe80:0:0:1a17:25ff:fe34:e7db". Under "ADDRESS AUTOCONFIGURATION SETTINGS", "Enable Automatic IPv6 Address Assignment:" is "Enabled", "Enable Automatic DHCP-PD in LAN:" is "Enabled", "Autoconfiguration Type:" is "SLAAC+Stateless DHCP", and "Router Advertisement Lifetime:" is "1440" minutes. A "Save" button is at the bottom right. Copyright © 2015 D-Link is at the bottom.

This screenshot shows a partial view of the IPv6 configuration page, focusing on the "IPv6 DNS SETTINGS" section. The "DNS Type:" dropdown is set to "Obtain a DNS server address". The "Save" button is visible at the bottom right.

Static IPv6

Select **Static IP** if your IPv6 information is provided by your Internet service provider (ISP).

Use Link-Local Address: Enable or disable the *Link-Local Address*. (If you enable this option, you can skip the description of the next two fields.)

IPv6 Address: If you disabled **Use Link-Local Address**, enter the **IPv6 Address** supplied by your ISP.

Subnet Prefix Length: If you disabled **Use Link-Local Address**, enter the **Subnet Prefix Length** supplied by your ISP.

Default Gateway: Enter the **Default Gateway** for your IPv6 connection.

Primary DNS Server: Enter the **Primary DNS Server** address.

Secondary DNS Server: Enter the **Secondary DNS Server** address.

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

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

Enable Automatic IPv6 Address Assignment: Enable or disable the *Automatic IPv6 Address Assignment* feature.

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

The screenshot shows the IPv6 configuration interface. At the top, it says "IPv6" and "All of your IPv6 Internet and network connection details are displayed on this page." Below that, there's a breadcrumb "Settings >> Internet >> IPv6" and a "Save" button. The "My Internet Connection is:" dropdown is set to "Static IPv6". The "Use Link-Local Address:" checkbox is checked and labeled "Enabled". Below it are fields for "Default Gateway:", "Primary DNS Server:", and "Secondary DNS Server:". A section titled "LAN IPv6 ADDRESS SETTINGS" contains a "LAN IPv6 Address:" field with a "/64" suffix and a "LAN IPv6 Link-Local Address:" field with the value "Not Available". Below that is the "ADDRESS AUTOCONFIGURATION SETTINGS" section, where "Enable Automatic IPv6 Address Assignment:" is checked and labeled "Enabled", "Autoconfiguration Type:" is set to "SLAAC+Stateless DHCP", and "Router Advertisement Lifetime:" is set to "60" minutes. A copyright notice "COPYRIGHT © 2015 D-Link" is at the bottom.

This screenshot is similar to the one above but with the "Use Link-Local Address:" checkbox unchecked and labeled "Disabled". In this configuration, the "IPv6 Address:" field is empty, and the "Subnet Prefix Length:" field is also empty. The other settings, including "Static IPv6" connection type, DNS servers, and autoconfiguration settings, remain the same as in the previous screenshot.

Router Advertisement Lifetime: Enter the IPv6 address lifetime (in minutes).

Click **Save** when you are done.

ADDRESS AUTOCONFIGURATION SETTINGS

Enable Automatic IPv6 Address Assignment: Enabled

Autoconfiguration Type: SLAAC+Stateless DHCP

Router Advertisement Lifetime: minutes

Auto Configuration

Auto Configuration is a connection method where the ISP assigns your IPv6 address when your router requests one from the ISP's server. Some ISPs require you to change some settings on your side before your router can connect to the IPv6 Internet.

DNS Type: Select either **Obtain DNS server address** or **Use the following DNS**.

Primary DNS Server: If you selected **Use the following DNS address** above, enter the **Primary DNS Server** address.

Secondary DNS Server: If you selected **Use the following DNS address** above, enter the **Secondary DNS Server** address.

Enable DHCP-PD: Enable or disable prefix delegation services.

LAN IPv6 Address: If you disabled DHCP-PD, enter the LAN (local) IPv6 address for the router.

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

Enable Automatic IPv6 Address Assignment: Enable or disable the **Automatic IPv6 Address Assignment** feature.

Enable Automatic DHCP-PD in LAN: Enable or disable **Automatic DHCP-PD in LAN** services.

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

Router Advertisement Lifetime: Enter the IPv6 address lifetime (in minutes).

Click **Save** when you are done.

The screenshot shows the IPv6 configuration interface. At the top, it says "IPv6" and "All of your IPv6 Internet and network connection details are displayed on this page." Below this, there's a breadcrumb "Settings >> Internet >> IPv6" and a "Save" button. The "My Internet Connection is:" dropdown is set to "Auto Configuration". Under "IPv6 DNS SETTINGS", the "DNS Type:" dropdown is set to "Obtain a DNS server address". Under "LAN IPv6 ADDRESS SETTINGS", "Enable DHCP-PD:" is set to "Enabled" and "LAN IPv6 Link-Local Address:" is "Not Available". Under "ADDRESS AUTOCONFIGURATION SETTINGS", "Enable Automatic IPv6 Address Assignment:" is "Enabled", "Enable Automatic DHCP-PD in LAN:" is "Enabled", "Autoconfiguration Type:" is set to "SLAAC+Stateless DHCP", and "Router Advertisement Lifetime:" is set to "minutes". There is a "Save" button at the top right and a "Save" button at the bottom right. A "Copyright © 2015 D-Link" notice is at the bottom.

This screenshot is identical to the one above, showing the IPv6 configuration page with the same settings: "Auto Configuration" for internet connection, "Obtain a DNS server address" for DNS type, "Enabled" for DHCP-PD, "Not Available" for link-local address, and "SLAAC+Stateless DHCP" for autoconfiguration type.

PPPoE

Select **PPPoE** (Point-to-Point-Tunneling Protocol) if your Internet connection requires you to enter a username and password. This information can be provided by your Internet service provider (ISP). Required fields will vary, depending on the options you have enabled.

PPPoE Session: Choose **Share with IPv4** to re-use your IPv4 PPPoE username and password, or **Create a new session**.

Username: If you selected **Create a new session** above, enter the PPPoE **Username** provided by your ISP.

Password: If you selected **Create a new session** above, enter the PPPoE **Password** provided by your ISP.

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

IP Address: Enter the **IP Address** provided by your ISP (for Static IP only).

Service Name: If you selected **Create a new session** above, enter the ISP **Service Name** (optional).

Reconnect Mode: If you selected **Create a new session** above, select either **Always on**, **On demand**, or **Manual**.

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

DNS Type: Select either **Obtain DNS server address** or **Use the following DNS**.

Primary DNS Server: If you selected **Use the following DNS**, enter the **Primary DNS Server** address.

Secondary DNS Server: If you selected **Use the following DNS**, enter the **Secondary DNS Server** address.

Enable DHCP-PD: Enable or disable prefix delegation services.

LAN IPv6 Address: Enter the LAN (local) IPv6 address for the router. (This field is only required when DHCP-PD is disabled.)

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

Enable Automatic IPv6 Address Assignment: Enable or disable the **Automatic IPv6 Address Assignment** feature.

Auto Configuration Type: Select **SLAAC + RDNSS**, **SLAAC + Stateless DHCP** or **Stateful DHCPv6**.

Router Advertisement Lifetime: Enter the IPv6 address lifetime (in minutes).

Click **Save** when you are done.

The screenshot shows two configuration sections. The first section, 'LAN IPv6 ADDRESS SETTINGS', includes a toggle for 'Enable DHCP-PD' set to 'Disabled', a text input for 'LAN IPv6 Address' with a '/64' suffix, and a label for 'LAN IPv6 Link-Local Address' set to 'Not Available'. A link for 'Advanced Settings...' is visible. The second section, 'ADDRESS AUTOCONFIGURATION SETTINGS', includes a toggle for 'Enable Automatic IPv6 Address Assignment' set to 'Enabled', a dropdown menu for 'Autoconfiguration Type' set to 'SLAAC+Stateless DHCP', and a text input for 'Router Advertisement Lifetime' set to 'minutes'.

IPv6 in IPv4 Tunnel

You can configure the IPv6 connection to run in IPv4 Tunnel mode. IPv6 over IPv4 tunneling encapsulates IPv6 packets in IPv4 packets so that IPv6 packets can be sent over an IPv4 infrastructure.

Remote IPv4 Address: Enter the **Remote IPv4** address you will use.

Remote IPv6 Address: Enter the **Remote IPv6** address you will use.

Local IPv4 Address: Displays the *Local IPv4* address.

Local IPv6 Address: Enter the **Local IPv6** address you will use.

Subnet Prefix Length: Enter the **Subnet Prefix Length** supplied by your ISP.

DNS Type: Select either **Obtain DNS server address** or **Use the following DNS**.

Primary DNS Server: If you selected **Use the following DNS** above, enter the **Primary DNS Server** address.

Secondary DNS Server: If you selected **Use the following DNS** above, enter the **Secondary DNS Server** address.

Enable DHCP-PD: Enable or disable prefix delegation services.

LAN IPv6 Address: If you disabled DHCP-PD, enter the LAN (local) IPv6 address for the router.

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

Enable Automatic IPv6 Address Assignment: Enable or disable the **Automatic IPv6 Address Assignment** feature.

Enable Automatic DHCP-PD in LAN: Enable or disable **Automatic DHCP-PD in LAN** services.

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

Router Advertisement Lifetime: Enter the IPv6 address lifetime (in minutes).

Click **Save** when you are done.

The screenshot shows the 'LAN IPv6 ADDRESS SETTINGS' configuration page. It includes a section for 'LAN IPv6 ADDRESS SETTINGS' with a toggle for 'Enable DHCP-PD' set to 'Enabled' and a status for 'LAN IPv6 Link-Local Address' as 'Not Available'. Below this is a section for 'ADDRESS AUTOCONFIGURATION SETTINGS' with a toggle for 'Enable Automatic IPv6 Address Assignment' set to 'Enabled', a toggle for 'Enable Automatic DHCP-PD in LAN' set to 'Enabled', a dropdown menu for 'Autoconfiguration Type' set to 'SLAAC+Stateless DHCP', and a text input for 'Router Advertisement Lifetime' set to '60' minutes. An 'Advanced Settings...' link is visible in the top right of the configuration area.

6 to 4

In this section, the user can configure the IPv6 6 to 4 connection settings. 6 to 4 is an IPv6 address assignment and automatic tunneling technology that is used to provide unicast IPv6 connectivity between IPv6 sites and hosts across the IPv4 Internet.

6to4 Address: Displays the *6to4 Address*.

6to4 Relay: Enter the **6to4 Relay** supplied by your ISP.

Primary DNS Server: Enter the **Primary DNS Server** address.

Secondary DNS Server: Enter the **Secondary DNS Server** address.

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

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

Enable Automatic IPv6 Address Assignment: Click to enable the **Automatic IPv6 Address Assignment** feature.

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

Router Advertisement Lifetime: Enter the IPv6 address lifetime (in minutes).

Click **Save** when you are done.

6rd

In this section, the user can configure the IPv6 6rd connection settings.

Assign IPv6 Prefix: Currently unsupported.

Primary DNS Server: Enter the **Primary DNS Server** address.

Secondary DNS Server: Enter the **Secondary DNS Server** address.

Enable Hub and Spoke Mode: Enable if you want to minimize the number of routes to the destination by using a hub and spoke method of networking.

6rd Configuration: Choose the **6rd DHCPv4 Option** to automatically populate the data values, or **Manual Configuration** to enter the settings manually.

6rd IPv6 Prefix: Enter the **6rd IPv6 Prefix** and mask length supplied by your ISP (for manual configuration only).

WAN IPv4 Address: Displays the *WAN IPv4 Address*. Enter the mask length (for manual configuration only).

6rd Border Relay IPv4 Address: Enter the **6rd border relay IPv4 Address** supplied by your ISP (for manual configuration only).

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

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

IPv6
All of your IPv6 Internet and network connection details are displayed on this page. [Click here for help.](#)

Settings >> Internet >> IPv6 IPv4 Save

My Internet Connection is: **6rd**

Assign IPv6 Prefix:

Primary DNS Server:

Secondary DNS Server:

6RD MANUAL CONFIGURATION

Enable Hub and Spoke Mode: Enabled

6rd Configuration: **Manual Configuration**

6rd IPv6 Prefix: /

WAN IPv4 Address: /

6rd Border Relay IPv4 Address:

LAN IPv6 ADDRESS SETTINGS

LAN IPv6 Address: Not Available

LAN IPv6 Link-Local Address: Not Available

[Advanced Settings...](#)

ADDRESS AUTOCONFIGURATION SETTINGS

Enable Automatic IPv6 Address Assignment: Enabled

Autoconfiguration Type: **SLAAC+Stateless DHCP**

Router Advertisement Lifetime: minutes

Enable Automatic IPv6 Address Assignment: Click to enable the **Automatic IPv6 Address Assignment** feature.

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

Router Advertisement Lifetime: Enter the IPv6 address lifetime (in minutes).

Click **Save** when you are done.

The screenshot shows the 'LAN IPv6 ADDRESS SETTINGS' configuration page. At the top, it displays 'LAN IPv6 Address: Not Available' and 'LAN IPv6 Link-Local Address: Not Available'. A link for 'Advanced Settings...' is visible on the right. Below this, the 'ADDRESS AUTOCONFIGURATION SETTINGS' section is shown. It includes a toggle for 'Enable Automatic IPv6 Address Assignment' which is currently set to 'Enabled'. The 'Autoconfiguration Type' is set to 'SLAAC+Stateless DHCP' via a dropdown menu. The 'Router Advertisement Lifetime' is set to an empty input field followed by the unit 'minutes'.

Local Connectivity Only

Local Connectivity Only allows you to set up an IPv6 connection that will not connect to the Internet. For this Internet Connection type, you must click on **Advanced Settings...** to see the required fields below.

Enable ULA: Click to enable Unique Local IPv6 Unicast Addresses settings.

Use Default ULA Prefix: When ULA is enabled, you may also enable automatic configuration of the ULA prefix.

Current ULA Prefix: Will display the *Current ULA Prefix*.

LAN IPv6 ULA: Will display the *LAN IPv6 ULA*.

Click **Save** when you are done.



The screenshot shows the IPv6 configuration page. At the top, there is a header with the IPv6 icon and the text "IPv6" and "All of your IPv6 Internet and network connection details are displayed on this page." Below the header, there is a breadcrumb trail "Settings >> Internet >> IPv6" and two buttons: "IPv4" and "Save". The main content area shows "My Internet Connection is:" with a dropdown menu set to "Local Connectivity Only" and a link for "Advanced Settings...". Under the heading "IPv6 ULA SETTINGS", there is a checkbox for "Enable ULA:" which is currently "Disabled". Below that, under "CURRENT IPv6 ULA SETTINGS", it shows "Current ULA Prefix: Not Available" and "LAN IPv6 ULA: Not Available". At the bottom, there is a copyright notice: "COPYRIGHT © 2015 D-Link".

Wireless

From the **Settings** menu, click **Wireless** to begin wireless configuration. You will see the *Wi-Fi Name (SSID)* and *Password* for both the 2.4GHz and 5GHz bands. Click **Advanced Settings...** to expand the list and allow you to view all fields corresponding with each frequency band.

The following options apply to both the 2.4GHz and the 5GHz wireless frequency bands:

Status: Enable or disable the wireless frequency band.

Wi-Fi Name (SSID): Create a **Wi-Fi Name** for your wireless network using up to 32 characters.

Password: Create a **Password** to use for wireless security. Wireless clients will need to enter this password to successfully connect to the network.

Security Mode: Select **None**, **WEP**, or **WPA/WPA2-Personal** (recommended).

802.11 Mode: Select the preferred wireless networking standard for each band. The available options will depend on the wireless frequency band, as well as the currently selected security mode.

Wi-Fi Channel: Select the desired channel. The default is **Auto** (recommended).

Transmission Power: Select the desired wireless transmission power (**High**, **Medium** or **Low**).

Channel Width: For the 2.4GHz band:
Select **Auto 20/40 MHz** if you are using both 802.11n and non-802.11n wireless devices, or select **20 MHz** if you are not using any 802.11n wireless clients.
For the 5GHz band:
Select **Auto 20/40/80 MHz** if you are using 802.11ac, 802.11n, and non-802.11n wireless devices, or select **Auto 20/40 MHz** if you are using both 802.11n and non-802.11n wireless devices.

The screenshot displays the D-Link DIR-822 Wireless configuration interface. At the top, there are navigation tabs for Home, Settings, Advanced, and Management. The main heading is "Wireless" with a sub-note: "Use this section to configure the wireless settings for your D-Link Router. Please make sure that any changes made in this section will need to be updated on your wireless device." Below this, there are buttons for "Guest Zone" and "Save".

The configuration is divided into two sections: 2.4GHz and 5GHz. Each section has a "Status" dropdown set to "Enabled". The "Wi-Fi Name (SSID)" is "DIR-822" and the "Password" is "12345678". An "Advanced Settings..." link is provided for each band.

For the 2.4GHz band, the settings are: Security Mode: WPA-Personal; 802.11 Mode: Mixed 802.11b/g/n; Wi-Fi Channel: Auto; Transmission Power: High; Channel Width: Auto 20/40 MHz; coexistence: Enabled; Visibility Status: Visible; Schedule: Always Enable.

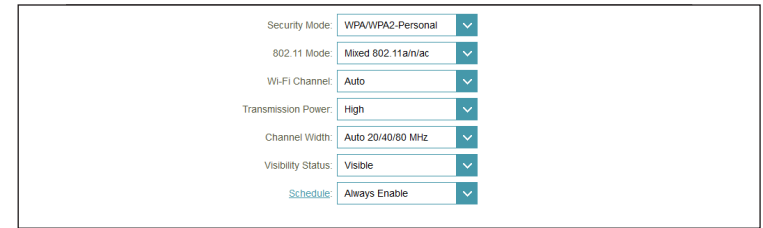
For the 5GHz band, the settings are: Security Mode: WPA-Personal; 802.11 Mode: Mixed 802.11a/n/ac; Wi-Fi Channel: Auto; Transmission Power: High; Channel Width: Auto 20/40/80 MHz; Visibility Status: Visible; Schedule: Always Enable.

At the bottom, there is a "WI-FI PROTECTED SETUP" section with "PBC" and "PIN" options both set to "Enabled". The footer indicates "COPYRIGHT © 2015 D-Link".

Visibility Status: The default setting is **Visible**. Select **Invisible** if you do not want to broadcast the SSID of your wireless network.

Schedule: Use the drop-down menu to select a schedule for enabling the rule. The schedule may be set to **Always Enable**, or you can create your own schedules in the **Schedules** section (refer to page 64).

Click **Save** when you are done.



A screenshot of a configuration interface showing several settings with drop-down menus. The settings are: Security Mode (WPA/WPA2-Personal), 802.11 Mode (Mixed 802.11a/n/ac), Wi-Fi Channel (Auto), Transmission Power (High), Channel Width (Auto 20/40/80 MHz), Visibility Status (Visible), and Schedule (Always Enable).

Security Mode:	WPA/WPA2-Personal	▼
802.11 Mode:	Mixed 802.11a/n/ac	▼
Wi-Fi Channel:	Auto	▼
Transmission Power:	High	▼
Channel Width:	Auto 20/40/80 MHz	▼
Visibility Status:	Visible	▼
Schedule:	Always Enable	▼

Guest Zone

A Guest Zone is a temporary zone that can be used by guests to access the Internet. Guest Zones are separate from your main wireless network.

To configure a Guest Zone, click on the **Guest Zone** link. You may configure different zones for the 2.4 GHz and 5 GHz wireless bands.

The following options apply to both the 2.4GHz and the 5GHz wireless frequency bands:

Status: Enable or disable the Guest Zone for each wireless frequency band.

Wi-Fi Name (SSID): Enter a wireless network name (SSID) that is different from your main wireless network.

Password: Create a **Password** to use for wireless security. Wireless clients will need to enter this password to successfully connect to the guest zone.

Internet Access Only: Enabling this option will limit connectivity to the Internet. Guests will not be allowed to access other local network devices.

Click **Save** when you are done.

The screenshot shows the D-Link DIR-822 Guest Zone configuration page. The page title is "Guest Zone" and it includes a navigation menu with "Home", "Settings", "Advanced", and "Management". The main heading is "Guest Zone" with a sub-heading: "This page lets you enable and configure a Wi-Fi Guest Zone. Users connected to a Guest Zone cannot communicate or detect devices on your home network unless Internet Access Only is disabled under Home Network Access." Below this, there are two sections for configuring the 2.4GHz and 5GHz wireless bands. Each section has a "Status" dropdown menu (set to "Disabled"), a "Wi-Fi Name (SSID)" text input field, and a "Password" text input field. The 2.4GHz section has "dlink_guest" in the SSID field, and the 5GHz section has "dlink_media_guest" in the SSID field. At the bottom, there is a "Home Network Access" section with an "Internet Access Only" checkbox (checked) and a "Save" button. The footer contains "COPYRIGHT © 2015 D-Link".

Network

This section allows you to change the local network settings of the router and to configure the DHCP (Dynamic Host Control Protocol) settings. You can enable the use of the DIR-822 as a DNS server. From the **Settings** menu, click **Network**.

Click **Advanced Settings...** to expand the list and see all of the available options.

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

If you change the IP address, once you click **Save**, 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** of the router. The default subnet mask is **255.255.255.0**.

Management Link: The default address to access the router's configuration utility is **http://dlinkrouter.local/**. You may replace **dlinkrouter** with a name of your choice by entering it into this field.

Local Domain Name: Enter the **Local Domain Name** (optional).

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

Status: Enable or disable the DHCP server.

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

Network

Use this section to configure the network settings for your device. You can enter a name for your device in the management link field, and use the link to access web UI in a web browser. We recommend you change the management link if there are more than one D-Link devices within the network.

Settings >> Network Save

Network Settings

LAN IP Address:

Subnet Mask:

Management Link: local/

Local Domain Name:

Enable DNS Relay: Enabled Advanced Settings...

DHCP Server

Status: Enabled

DHCP IP Address Range: to

DHCP Lease Time: minutes

Always Broadcast: Disabled
(compatibility for some DHCP Clients)

Advanced Settings

WAN Port Speed: ▼

UPnP: Enabled

IPv4 Multicast Streams: Disabled

IPv6 Multicast Streams: Enabled

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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: Enter the length of time for the IP address lease in minutes.

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

WAN Port Speed: You may set the port speed of the Internet port to 10 Mbps, 100 Mbps, 1000 Mbps, or **Auto** (recommended).

UPnP: Enable or disable Universal Plug and Play (UPnP). UPnP provides compatibility with networking equipment, software and peripherals.

IPv4 Multicast Streams: Enable to allow IPv4 multicast traffic to pass through the router from the Internet.

IPv6 Multicast Streams: Enable to allow IPv6 multicast traffic to pass through the router from the Internet.

Click **Save** when you are done.

Features

QoS Engine

Quality of Service (QoS) improves data flow. It allows you to prioritize clients, so that high-priority clients receive higher bandwidth. For example, if one client is streaming a movie and another is downloading a non-urgent file, you might wish to assign the former client a higher priority, so that the movie streaming is not disrupted by the traffic of the other devices on the network.

From the **Features** menu on the bar on the top of the page, click **QoS Engine**.

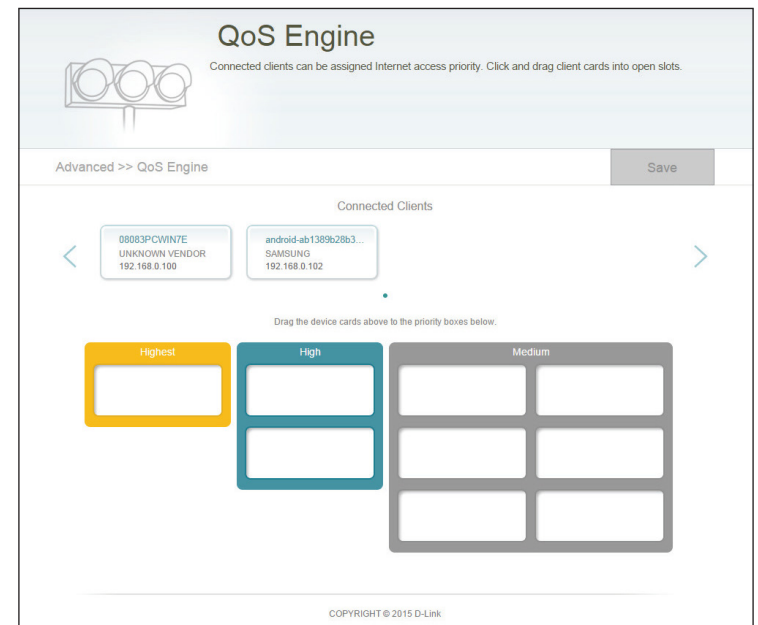
Under *Connected Clients*, you will see client cards representing each device. If some client cards are off-screen, you can use the < and > buttons to scroll left and right.

A maximum of **one** device can be assigned **Highest** priority.

A maximum of **two** devices can be assigned **High** priority.

A maximum of **eight** devices can be assigned **Medium** priority.

If connected clients are not assigned a priority, all devices will be treated with equal priority. If some devices are assigned a priority and others are not, the unassigned devices will be treated with the lowest priority.



To assign a priority level to a device, drag the device card from the *Connected Clients* list over an empty slot and release the mouse button. The card will remain in the slot. If you want to remove a priority assignment from a device and return it to the *Connected Clients* list, click the cross icon in the top right corner of the device card.

Click **Save** when you are done.

Firewall Settings

A firewall protects your network from malicious attacks over the Internet. The DIR-822 offers a high-performance firewall features like SPI (Stateful Packet Inspection).

From the **Features** menu, click **Firewall**.

Enable DMZ: Enable or disable Demilitarized Zone (DMZ). Enabling this feature creates a subnetwork that can be used to expose a single computer to the Internet for applications that do not run well behind the router. This may expose the computer to a variety of security risks and is not recommended.

DMZ IP Address: If you enabled DMZ, enter the **IP Address** of the client you wish to expose, or select a **Computer Name** from the drop-down menu.

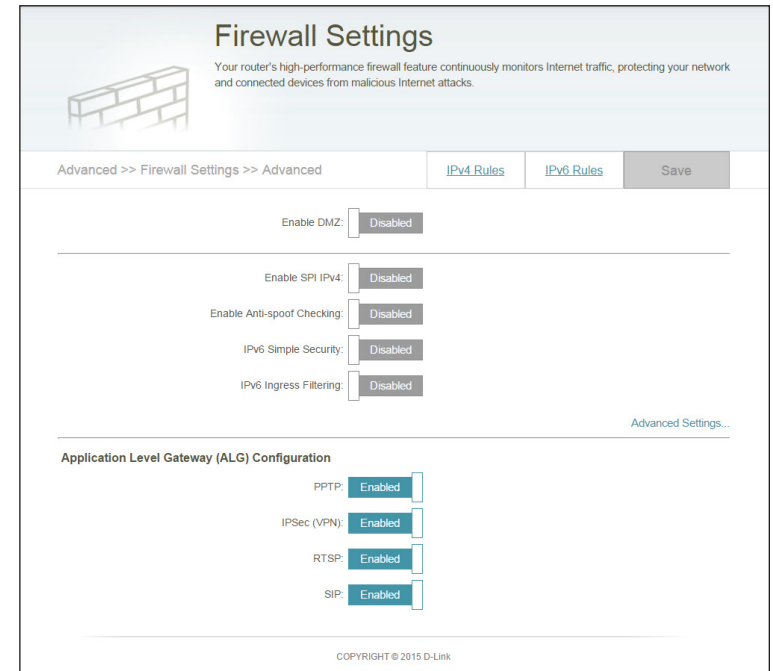
Enable SPI IPv4: Click to enable Stateful Packet Inspection (SPI) to help prevent cyber attacks. This technique validates that the traffic passing through the session conforms to the protocol.

Enable Anti-Spoof Checking: Click to enable **Anti-Spoof Checking**, which will protect your network from certain kinds of “spoofing” attacks.

IPv6 Simple Security: Click to enable **IPv6 Simple Security**, which will provide simple security capabilities for a local-area IPv6 network.

IPv6 Ingress Filtering: Click to enable **IPv6 Ingress Filtering**, which is a technique used to make sure incoming packets originate from the networks they claim to be from (prevents source address spoofing).

Click **Advanced Settings...** to expand the list and view more options.



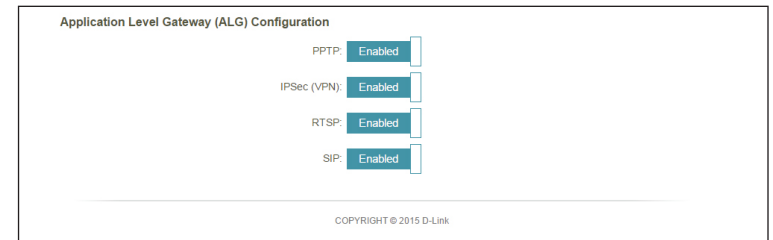
PPTP: Click to enable **PPTP**, which will allow multiple machines on the LAN to connect to their corporate network using the PPTP protocol.

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

RTSP: Enable to allow applications that use Real Time Streaming Protocol (RTSP) to receive streaming media from the Internet.

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

Click **Save** when you are done.



IPv4/IPv6 Rules

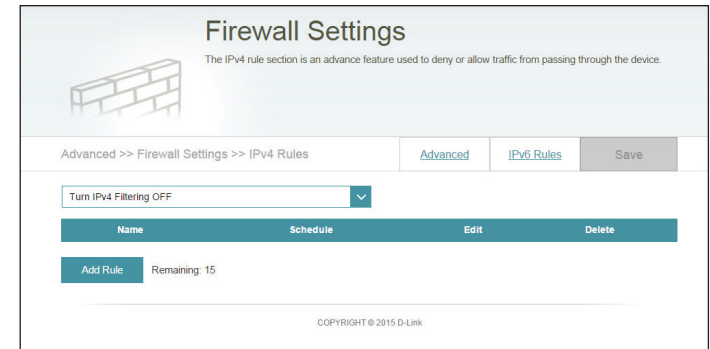
The IPv4/IPv6 Rules section allows you to specify the kind of traffic that is allowed to pass through the network.

For IPv4 rules, from the *Firewall Settings* page click **IPv4 Rules**.
For IPv6 rules, from the *Firewall Settings* page click **IPv6 Rules**.



Use the drop-down menu to select whether you want to **Turn IPv4 Filtering ON** and **ALLOW** or **DENY** the rules you create. Or you may choose to **Turn IPv4 Filtering OFF**.

If you wish to remove a rule, click on its **trash** can icon in the *Delete* column. If you wish to edit a rule, click on its **pencil** icon in the *Edit* column. If you wish to create a new rule, click **Add Rule**. Click **Save** when you are done.



When you click on **Add Rule**, the *Create New Rule* window will open. Enter the required information into the fields described below:

Name: Enter a **Name** for the new rule.

Source IP Address Range: Enter the **Source IP Address Range** that the rule applies to. Using the drop-down menu, specify whether it is a **WAN** or **LAN** IP address.

Destination IP Address Range: Enter the **Destination IP Address Range** that the rule applies to. Using the drop-down menu, specify whether it is a **WAN** or **LAN** IP address.

Port Range: Select the protocol of the traffic to allow or deny (**Any**, **TCP**, or **UDP**) and then enter the range of ports that the rule will apply to.

Schedule: Use the drop-down menu to select a **Schedule** when the rule will be enabled. The schedule may be set to **Always Enable**, or you can create a schedule from the **Schedules** section (refer to page 64).

Click **Apply** when you are done.

Port Forwarding

Port forwarding allows you to specify a single port or a range of ports to open for specific devices on the network. It allows traffic requests from a specific application to be directed to a specific client.

From the **Features** menu, click **Port Forwarding**.

If you wish to remove a rule, click on its **trash** can icon in the *Delete* column. If you wish to edit a rule, click on its **pencil** icon in the *Edit* column. If you wish to create a new rule, click **Add Rule**. Click **Save** when you are done.

When you click on **Add Rule**, the *Create New Rule* window will open. Enter the required information into the fields described below:

Name: Enter a **Name** for the new rule.

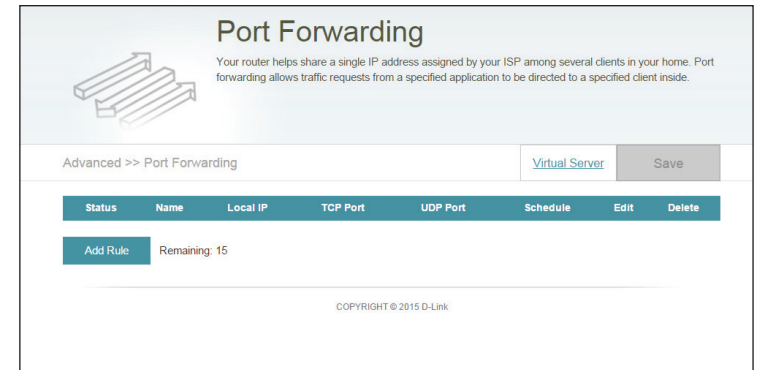
Local IP: Enter the IP address of the computer on your local network that you want to allow the incoming service to. Or, select the **Computer Name** from the drop-down menu.

TCP Port: Enter a **TCP Port** (or a range of TCP ports) you want to open. Separate ports with a comma (for example: 24,1009,3000-4000).

UDP Port: Enter a **UDP Port** (or a range of UDP ports) you want to open. Separate ports with a comma (for example: 24,1009,3000-4000).

Schedule: Use the drop-down menu to select a **Schedule** when the rule will be enabled. The schedule may be set to **Always Enable**, or you can create a schedules from the **Schedules** section (refer to page 64).

Click **Apply** when you are done.



Virtual Server

The Virtual Server allows you to specify a single public port for redirection to an internal LAN IP Address and Private LAN port.

From the *Port Forwarding* page click **Virtual Server**.



The DIR-822 can store a maximum of 15 rules. If you wish to remove a rule, click on its **trash** icon in the *Delete* column. If you wish to edit a rule, click on its **pencil** icon in the *Edit* column. If you wish to create a new rule, click the **Add Rule** button. Click **Save** when you are done.

When you click on **Add Rule**, the *Create New Rule* window will open. Enter the required information into the fields described below:

Name: Enter a **Name** for the new rule.

Local IP: Enter the IP address of the computer on your local network that you want to allow the incoming service to. Or, select the **Computer Name** from the drop-down menu.

Protocol: Select the protocol of the traffic to allow or deny (**TCP**, **UDP**, **Both**, or **Other**).

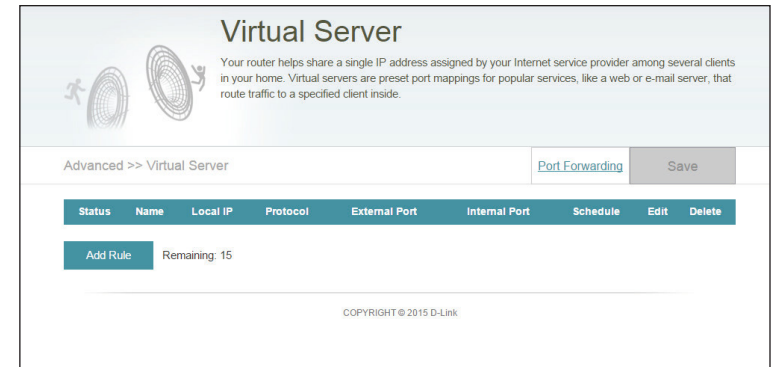
Protocol Number: If you selected **Other**, enter the **Protocol Number**.

External Port: Enter the public port you want to open.

Internal Port: Enter the private port you want to open.

Schedule: Use the drop-down menu to select a schedule when the rule will be enabled. The schedule may be set to **Always Enable**, or create your own schedule from the **Schedules** section (refer to page 64).

Click **Apply** when you are done.



Website Filter

The Website Filter page allows you to create a list of websites that may be viewed by specified users or blocked from those users.

From the **Features** menu, click **Website Filter**.

If you want to create a list of sites to block, select **DENY clients access to ONLY these sites** from the drop-down menu. All other sites will be accessible. If you want to specify a list of sites to allow, select **ALLOW clients access to ONLY these sites** from the drop-down menu. All other sites will be blocked.

You may specify a maximum of 15 websites. To add a new website to the list, click **Add Rule**.

Next, under *Website URL/Domain* enter the **URL** or **Domain**. If you wish to remove a rule, click on its **trash** icon in the *Delete* column. To edit a rule, simply replace the **URL** or **Domain**.

Click **Save** when you are done.

Website Filter

The website filters feature allows rules to be set that restrict access to a specified web address (URL) or blocks specified keywords in the URL. You can use Website Filter to restrict access to potentially harmful and inappropriate websites.

Advanced >> Website Filter Save

DENY clients access to ONLY these sites

Website URL/Domain	Delete
--------------------	--------

Add Rule Remaining: 15

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Static Routes

The Static Routes section allows you to define custom routes allowing traffic to be directed to a specific client or location.

From the **Features** menu, click **Static Route**.

To configure IPv6 rules, click **IPv6** and refer to page 60. To return to the main IPv4 static routes page, click **IPv4**.

If you wish to remove a route, click on its **trash** icon in the *Delete* column. If you wish to edit a route, click on its **pencil** icon in the *Edit* column. If you wish to create a new route, click the **Add Route** button. Click **Save** when you are done.

When you click on **Add Route**, the *Create New Route* window will open. Enter the required information into the fields described below:

Name: Enter a **Name** for the new rule.

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

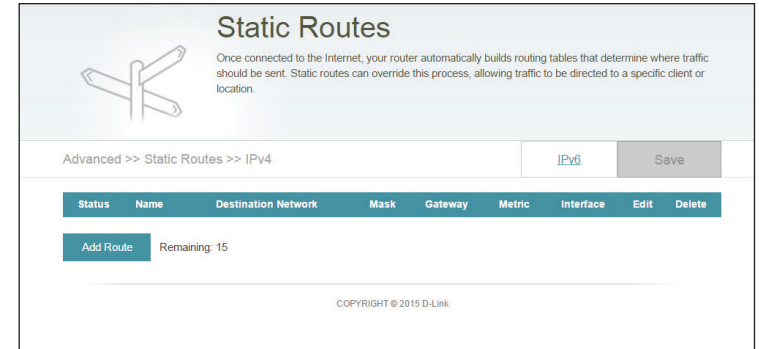
Mask: Enter the netmask of the route.

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

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

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

Click **Apply** when you are done.

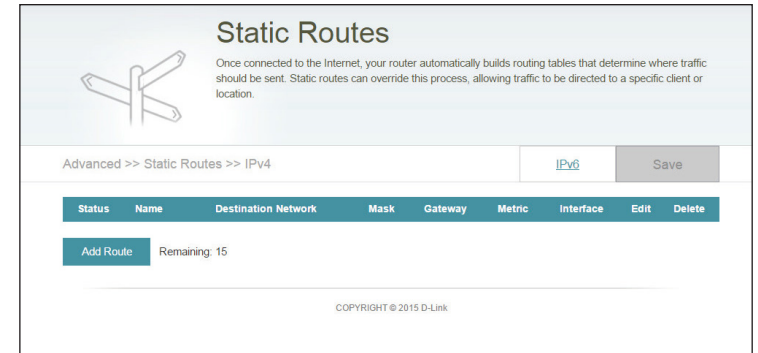


IPv6

To configure IPv6 rules, from the Static Routes page click **IPv6**. To return to the main IPv4 static routes page, click **IPv4**.

If you wish to remove a route, click on its **trash** can icon in the *Delete* column. If you wish to edit a route click on its **pencil** icon in the *Edit* column. If you wish to create a new route, click the **Add Route** button. Click **Save** when you are done.

When you click on **Add Route**, the *Create New Route* window will open. Enter the required information into the fields described below:



Name: Enter a **Name** for the new rule.

DestNetwork: This is the IP address of the router used to reach the specified destination.

PrefixLen: Enter the IPv6 address prefix length of the packets that will take this route.

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

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

Click **Apply** when you are done.

Dynamic DNS

Most Internet Service Providers (ISPs) assign dynamic (changing) IP addresses. Using a Dynamic DNS (DDNS) service provider, people can enter your domain name in their web browser to connect to your server, no matter what your current IP address assignment.

From the **Features** menu, click **Dynamic DNS**.

Enable Dynamic DNS: Enabling DDNS will reveal additional configuration options.

Status: Displays the current dynamic DNS connection *Status*.

Server Address: Enter the address of your dynamic DNS server, or select one from the drop-down menu.

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

User Name: Enter your dynamic DNS **User Name**.

Password: Enter your dynamic DNS **Password**.

Time Out: Enter a **Time Out** (in hours).

Click **Save** when you are done.

Dynamic DNS
Dynamic Domain Name Service allows your router to associate an easy-to-remember domain name such as [YourDomainName].com with the regularly changing IP address assigned by your Internet Service provider. This feature is helpful when running a virtual server.

Advanced >> Dynamic DNS Save

Enable Dynamic DNS: Enabled
 Status: Disconnected
 Server Address: dyndns.com dyndns.com
 Host Name:
 User Name:
 Password:
 Time Out: 576 hours

Status	Host Name	IPv6 Address	Edit	Delete
Add Record Remaining: 10				

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At the bottom of the page are the IPv6 host settings. To configure an IPv6 dynamic DNS host, refer to page 62.

IPv6 Host

The IPv6 host settings are found at the bottom of the Dynamic DNS page.

If you wish to remove a rule, click on its **trash** can icon in the *Delete* column. If you wish to edit a rule, click on its **pencil** icon in the *Edit* column. If you wish to create a new rule, click the **Add Record** button. Click **Save** when you are done.

When you click on **Add Record**, the *Create New Record* window will open. Enter the required information into the fields described below:

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

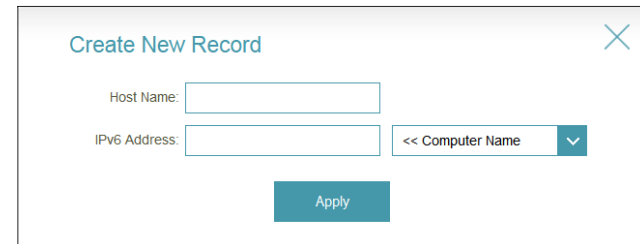
IPv6 Address: Enter the **IPv6 Address** of the dynamic DNS server. Or, select the **Computer Name** from the drop-down menu.

Click **Apply** when you are done.



Status	Host Name	IPv6 Address	Edit	Delete
Add Record	Remaining: 10			

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Create New Record

Host Name:

IPv6 Address: << Computer Name

Apply

Management

Time & Schedule

Time

The Time page allows you to configure, update, and maintain the correct time on the DIR-822's internal system clock. The router's internal clock is used for data logging and schedules.

From the **Management** menu, click **Time & Schedule**.

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

Time: Displays the current *Date* and *Time*.

Enable Daylight Saving: Enable or disable daylight saving time.

Update Time Using an NTP Server: Enable to allow an NTP (Network Time Protocol) server on the Internet to synchronize the time and date with your router. If you enable this option, select an NTP server from the drop-down menu. Or, you can select Manual from the drop-down menu and manually enter the NTP Server.

Note: To configure the router's time and date manually, disable the Update Time Using NTP Server option and use the drop-down menus that appear to input the time and date.

Click **Save** when you are done.

D-Link
DIR-822 HW:V1 FW:1.00

Home | Settings | Advanced | Management

Time

Your router's internal clock is used for data logging and schedules for features. The date and time can be synchronized with a public time server on the Internet, or set manually.

Management >> System Time Schedule Save

Time Configuration

Time Zone: (GMT+08:00) Taipei

Time: 2015/06/23 06:56:59 PM

Enable Daylight Saving: Disabled

Automatic Time Configuration

Update Time Using an NTP Server: Enabled

NTP Server: D-Link NTP Server

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Automatic Time Configuration

Update Time Using an NTP Server: Enabled

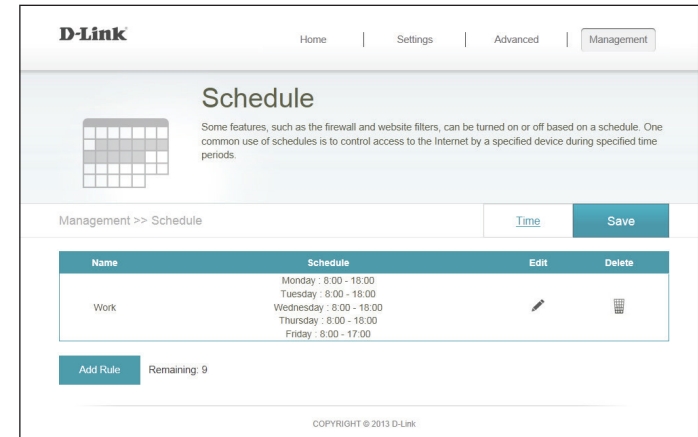
NTP Server: Manual

To configure and manage your schedules, click **Schedule** and refer to page 64.

Schedule

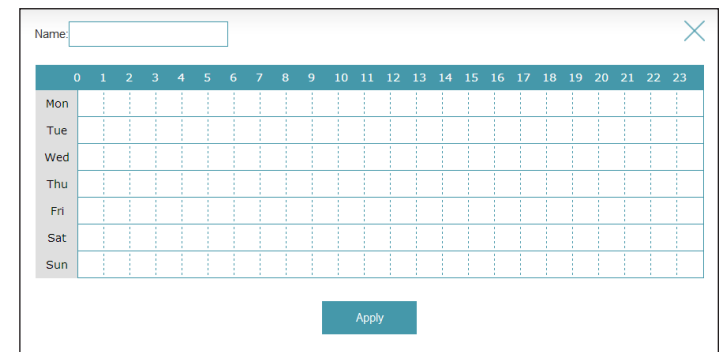
Create schedules for use with enforcing rules. To create, edit, or delete schedules, from the *Time* page click **Schedule**.

If you wish to remove a rule, click on its **trash** icon in the *Delete* column. If you wish to edit a rule, click on its **pencil** icon in the *Edit* column. If you wish to create a new rule, click the **Add Rule** button. Click **Save** when you are done.



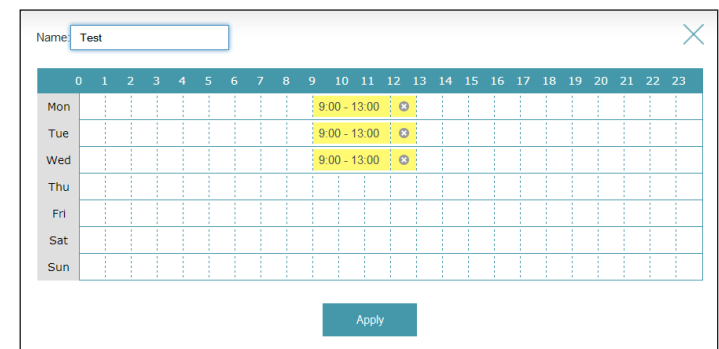
When you click on **Add Rule**, the following screen will appear: First, enter the **Name** of your schedule.

Each row represents a day, and each box represents one hour, with the time at the top of each column. To add a time period to the schedule, simply click on the start hour and drag to the end hour. You can add multiple days to the schedule, but only one period per day.



To remove a time period from the schedule, click on the cross icon at the end of the row.

Click **Apply** when you are done.



System Log

The router keeps a running log of events. The logs can be sent to a Syslog server, and delivered to your email address.

From the **Management** menu, click **System Log**.

Enable Logging to Syslog Server: Enable to send the router logs to a SysLog Server. If this is disabled, there will be no other options on this page.

Syslog Server IP Address: Enter the IP address for the Syslog server. If the Syslog server is connected to the router, you can select it from the drop-down menu to automatically populate the field.

Enable E-mail Notification: Enable this option if you want the logs to be automatically sent to an e-mail address. Then enter the settings for your e-mail account. These can be obtained from your e-mail service provider.

Send When Log Full: If e-mail notification is enabled, you may also enable this option. When the log is full, the router will send it by e-mail.

Send on Schedule: Enable to send an e-mail according to a specified schedule.

Schedule: If you enable **Send on Schedule**, use the drop-down menu to select the schedule that the rule will be enabled on. The schedule may be set to **Always Enable**, or you can create your own schedule from the **Schedules** section (refer to page 64).

Click **Save** when you are done.

D-Link Home | Settings | Advanced | Management

System Log

On-board diagnostics run continually in the background to monitor the health of your router. The results are recorded in the system log if it is enabled. This info can be used to diagnose common problems or help Customer Support resolve issues more quickly. [Click here for help.](#)

Management >> System Log Save

SysLog Settings

Enable Logging to Syslog Server: Enabled

SysLog Server IP Address: << Computer Name

E-mail Settings

Enable E-mail Notification: Enabled

From E-mail Address:

To E-mail Address:

SMTP Server Address:

SMTP Server Port:

Enable Authentication: Enabled

Account Name:

Password:

E-mail Log When Full or On Schedule

Send When Log Full: Disabled

Send on Schedule: Disabled

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Admin

This page allows you to change the administrator (Admin) settings, like reset the Admin password and enable remote management.

From the **Management** menu, click **System Admin**.

Password: Enter a new **Password** for the administrator account. You will need to enter this password whenever you configure the router using a web browser.

Enable Graphical Authentication (CAPTCHA): Enables a challenge-response test designed to prevent online hackers and unauthorized users from gaining access to your router's network settings.

Enable HTTPS Server: Check to enable HTTPS to connect to the router securely. This means to connect to the router, you must enter **https://192.168.0.1** instead of **http://192.168.0.1**.

Enable Remote Management: Remote management allows the DIR-822 to be configured from the Internet by a web browser. A password is still required to access the web management interface.

Remote Admin Port: The port number used to access the DIR-822 is used in the URL. Example: **Port: http://x.x.x.x:8080** where x.x.x.x is the Internet IP address of the DIR-822 and 8080 is the port used for the web management interface. If you enable **HTTPS Server**, you must enter **https://** as part of the URL to access the router remotely.

Click **Save** when you are done.

To load, save, or reset the settings, or to reboot the router, click **System** and refer to page 67.

The screenshot shows the D-Link Admin interface. At the top, there is a navigation bar with 'D-Link' logo and links for 'Home', 'Settings', 'Advanced', and 'Management'. The main heading is 'Admin', accompanied by a key icon and a warning: 'The admin account can change all router settings. To keep your router secure, you should give the admin account a strong password. [Click here for help.](#)'

Below the heading, there is a breadcrumb 'Management >> Admin' and two buttons: 'System' and 'Save'. The 'Admin Password' section contains a 'Password' input field with masked characters, an 'Enable Graphical Authentication (CAPTCHA)' toggle set to 'Disabled', and a link for 'Advanced Settings...'. The 'Administration' section includes three settings: 'Enable HTTPS Server' (toggle set to 'Enabled'), 'Enable Remote Management' (toggle set to 'Disabled'), and 'Remote Admin Port' (input field) with a 'Use HTTPS' toggle set to 'Disabled'. At the bottom, a copyright notice reads 'COPYRIGHT © 2013 D-Link'.

System

This page allows you to save the DIR-822's current configuration, load a previously saved configuration, and reset the router to the factory default settings.

From the **Admin** page click **System**.



Save Settings To Local Hard Drive: Click **Save** to save the current router configuration settings to a file on your computer's hard drive.

Load Settings From Local Hard Drive: Click **Select File** to locate and load previously saved router configuration file. This will overwrite the router's current configuration.

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

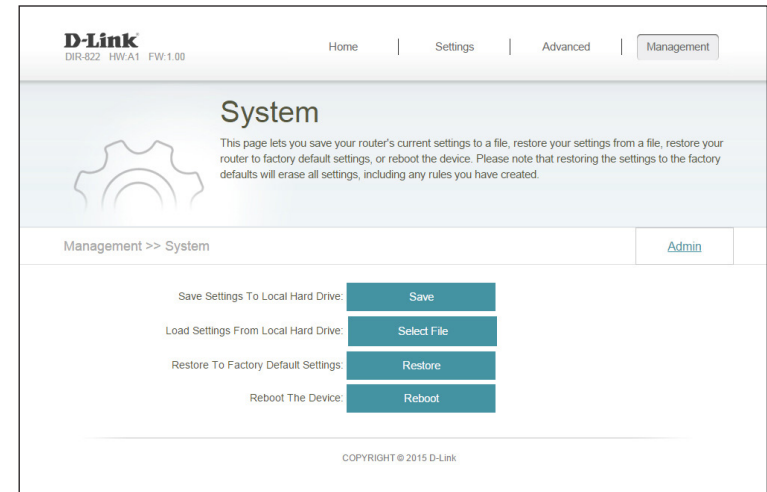
Reboot The Device: Click **Reboot** to reboot the router.

Auto Reboot: You may select Never, Daily, or Weekly.

Day of the Week: Choose the day of the week to automatically reboot the router.

Time: Choose the time of day to automatically reboot the router.

Click Save when you are done.



Upgrade

This page will allow you to upgrade the router's firmware, either automatically or manually. To manually upgrade the firmware or language pack, you must first download the file from <http://support.dlink.com>.

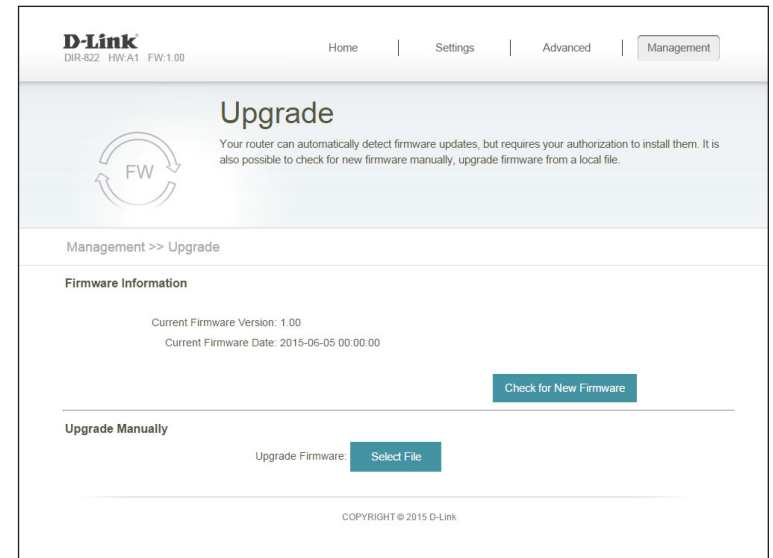
From the **Management** menu, click **Upgrade**.

Firmware Information: Displays the *Current Firmware Version* and *Current Firmware Date*.

Check for New Firmware: Click **Check for New Firmware** to prompt the router to check for a new firmware version. If a newer version is found, you will be prompted to install it*.

Upgrade Firmware: If you prefer to upgrade manually, first download the firmware file to your computer that you wish to upgrade to. Next, click the **Select File** button and browse to locate the file and install the new firmware.

***Note:** When you click **Check for New Firmware** you will see a message that says, "Checking". If what you have currently installed is the latest version, you will see a message that says, "This firmware is the latest version".



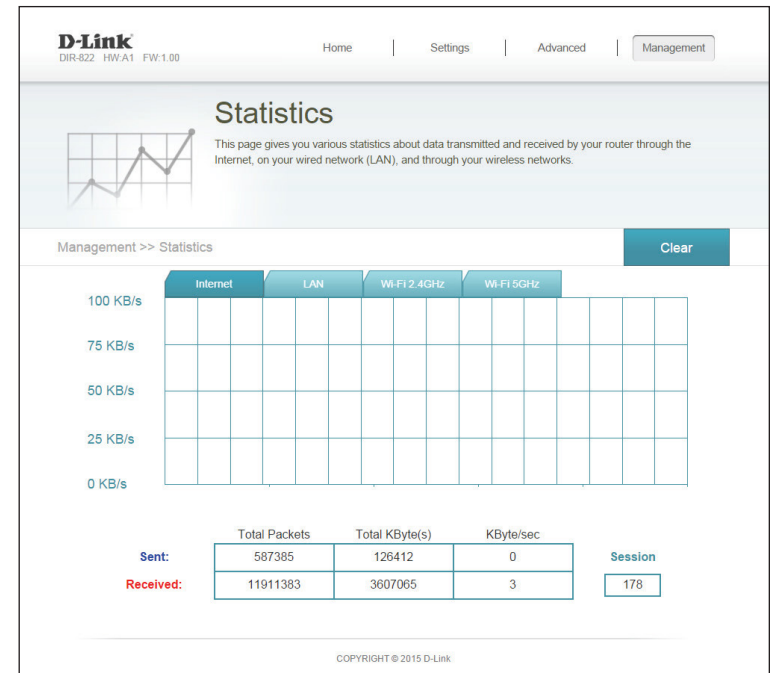
Statistics

On the Statistics page you can view the number of packets that pass through the router on the WAN, LAN, and wireless segments.

From the **Management** menu, click **Statistics**.

You can view the **Internet**, **LAN**, **Wi-Fi 2.4GHz**, or **Wi-Fi 5GHz** statistics by clicking on the respective tabs at the top. The graph will update in real time. To clear the information on the graph, click **Clear**.

The traffic counter will reset if the device is rebooted.



Connect a Wireless Client to your Router

WPS Button

The easiest and most secure way to connect your wireless devices to the router is with WPS (Wi-Fi Protected Setup). Most wireless devices such as wireless adapters, media players, Blu-ray DVD players, wireless printers and cameras will have a WPS button (or a software utility with WPS) that you can press to connect to the DIR-822 router. Refer to your user manual for the wireless device you want to connect to make sure you understand how to enable WPS. Once you know, follow the steps below:

Step 1 - Press the WPS button on the DIR-822 for about one second. The Power LED on the front will start to blink.



Step 2 - Within two minutes, press the WPS button on your wireless client (or launch the software utility and start the WPS process).

Step 3 - Allow up to one minute for your connection to be configured. Once the Power LED stops blinking, you will be connected and your wireless connection will be secure with WPA2.

Windows® 10

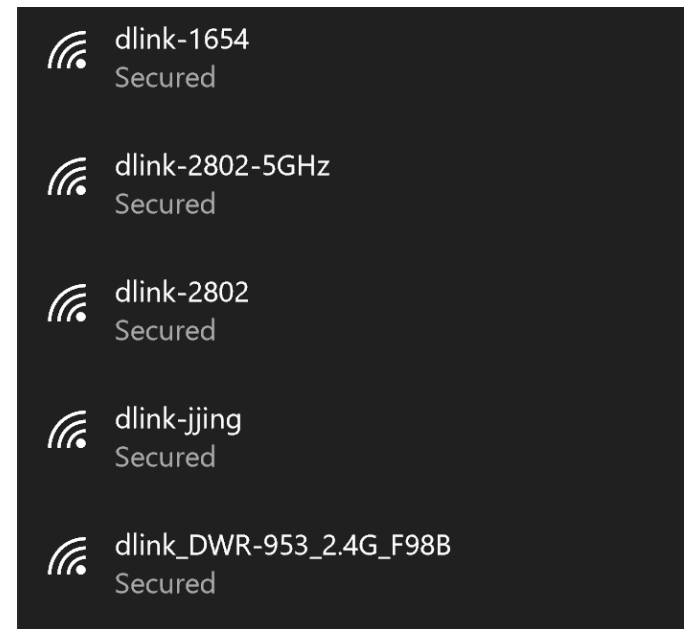
When connecting to the DIR-822 wirelessly for the first time, you will need to input the wireless network name (SSID) and Wi-Fi password (security key) of the device you are connecting to. If your product has a Wi-Fi configuration card, you can find the default network name and Wi-Fi password here. Otherwise refer to the product label for the default Wi-Fi network SSID and password, or enter the Wi-Fi credentials set during the product configuration.

To join an existing network, click the wireless network icon in the taskbar, next to the time display.



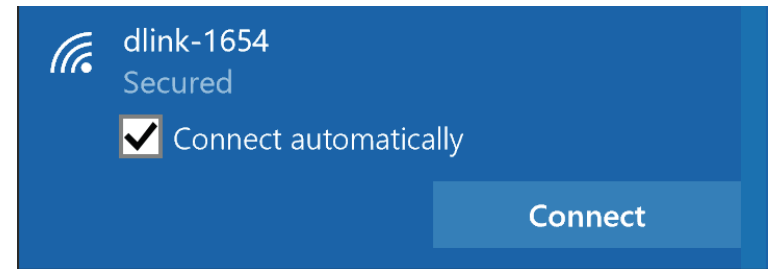
Wireless Icon

A list of wireless networks which are within range of your computer will appear. Select the desired network by clicking on the SSID.



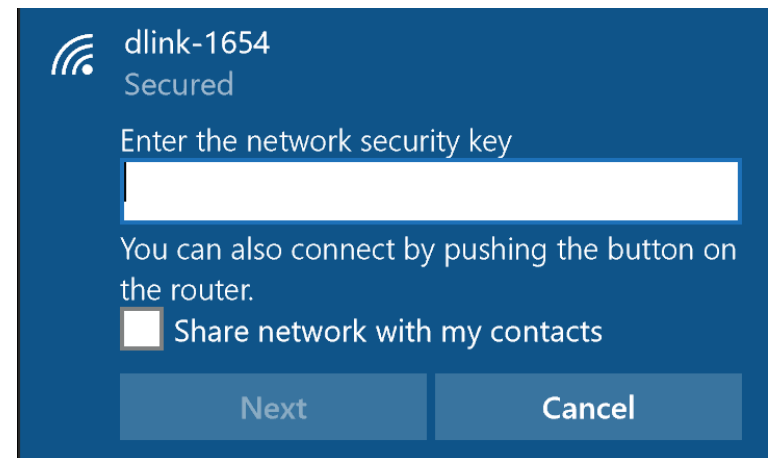
To connect to the SSID, click **Connect**.

To automatically connect with the router when your device next detects the SSID, click the **Connect Automatically** check box.



You will then be prompted to enter the Wi-Fi password (network security key) for the wireless network. Enter the password into the box and click **Next** to connect to the network. Your computer will now automatically connect to this wireless network when it is detected.

You can also use Wi-Fi Protected Setup (WPS) to connect to the router. Press the WPS button on your D-Link device and you will be automatically connected.



Windows® 8

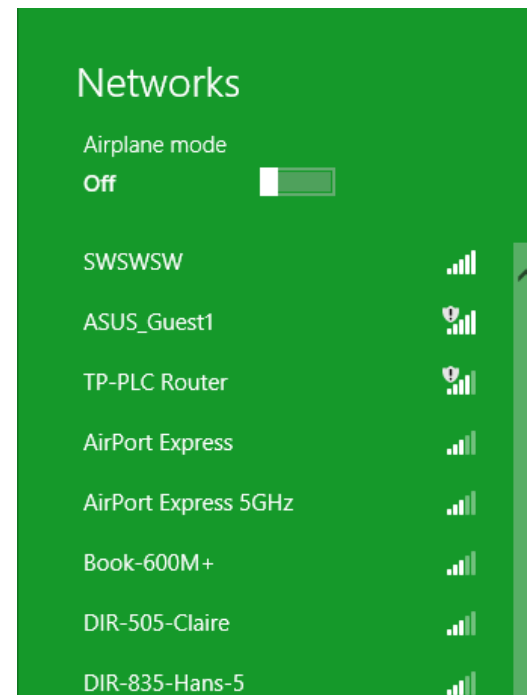
WPA/WPA2

It is recommended that you enable wireless security (WPA/WPA2) on your wireless router or access point before configuring your wireless adapter. If you are joining an existing network, you will need to know the security key (Wi-Fi password) being used.

To join an existing network, locate the wireless network icon in the taskbar next to the time display.

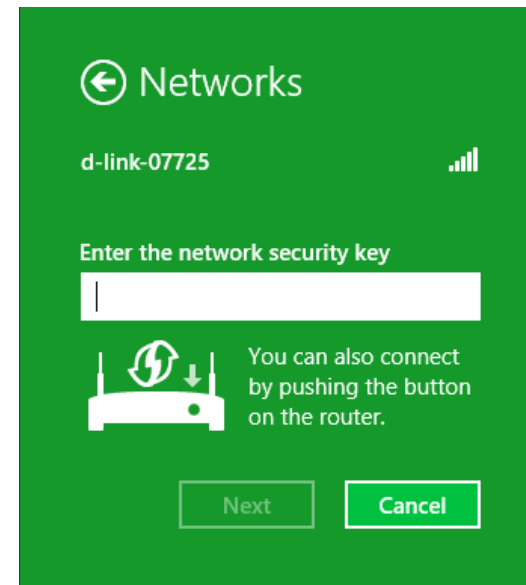


Clicking on this icon will display a list of wireless networks that are within connecting proximity of your computer. Select the desired network by clicking on the network name.

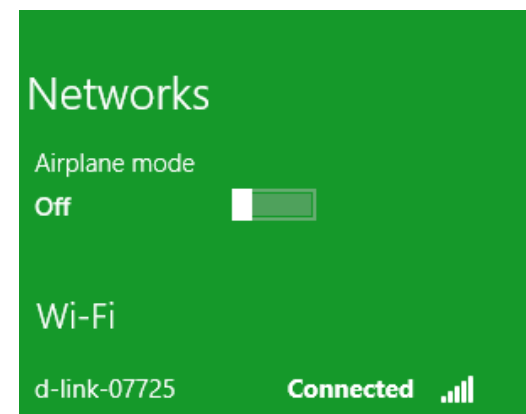


You will then be prompted to enter the network security key (Wi-Fi password) for the wireless network. Enter the password into the box and click **Next**.

If you wish to use Wi-Fi Protected Setup (WPS) to connect to the router, you can also press the WPS button on your router during this step to enable the WPS function.



When you have established a successful connection to a wireless network, the word **Connected** will appear next to the name of the network to which you are connected to.

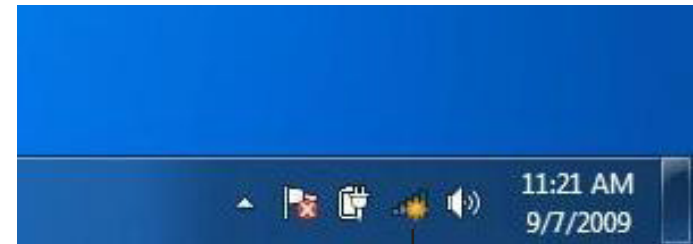


Windows® 7

WPA/WPA2

It is recommended that you enable wireless security (WPA/WPA2) on your wireless router or access point before configuring your wireless adapter. If you are joining an existing network, you will need to know the security key or passphrase being used.

1. Click on the wireless icon in your system tray (lower-right corner).



Wireless Icon

2. The utility will display any available wireless networks in your area.

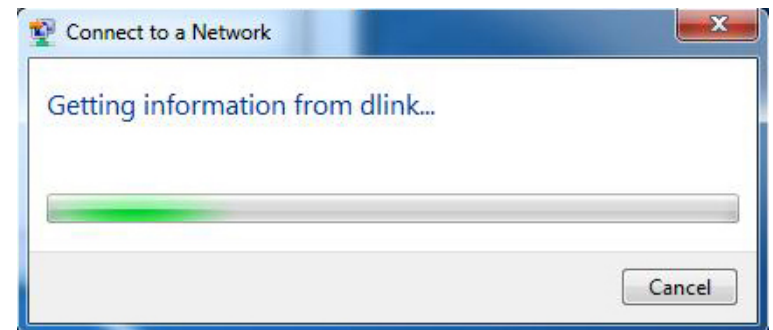


3. Highlight the wireless connection with Wi-Fi name (SSID) you would like to connect to and click the **Connect** button.

If you get a good signal but cannot access the Internet, check your TCP/IP settings for your wireless adapter. Refer to the Networking Basics section in this manual for more information.

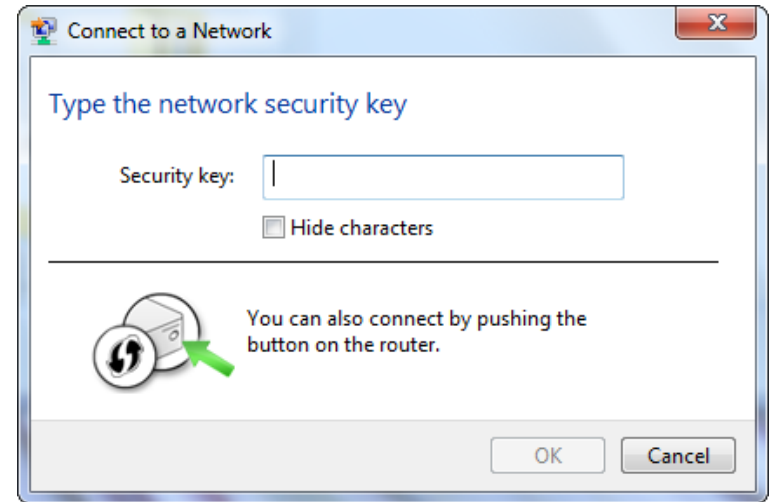


4. The following window appears while your computer tries to connect to the router.



5. Enter the same security key or passphrase (Wi-Fi password) that is on your router and click **Connect**. You can also connect by pushing the WPS button on the router.

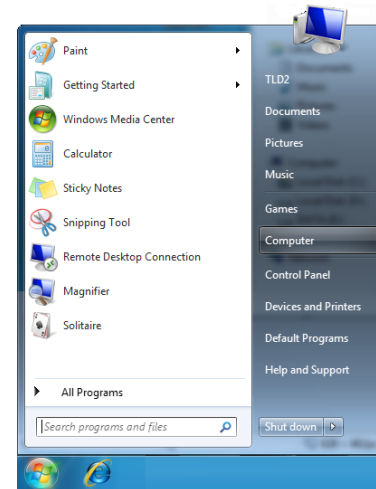
It may take 20-30 seconds to connect to the wireless network. If the connection fails, please verify that the security settings are correct. The key or passphrase must be exactly the same as the one on the wireless router.



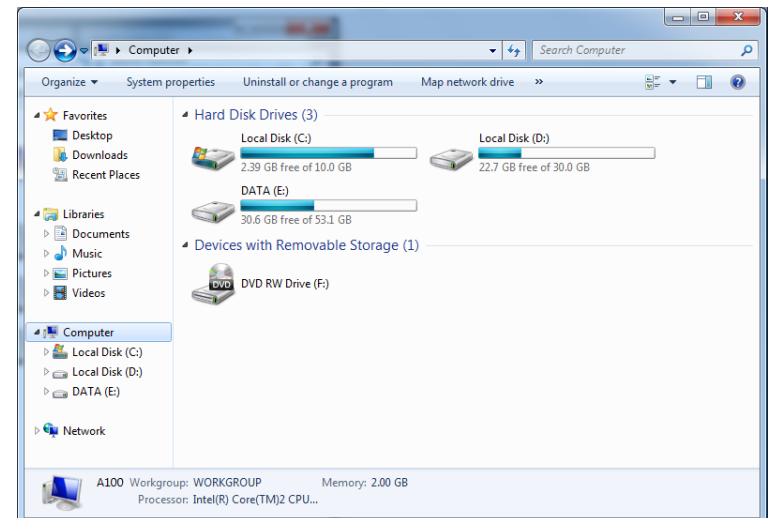
WPS

The WPS feature of the DIR-822 can be configured using Windows® 7. Carry out the following steps to use Windows® 7 to configure the WPS feature:

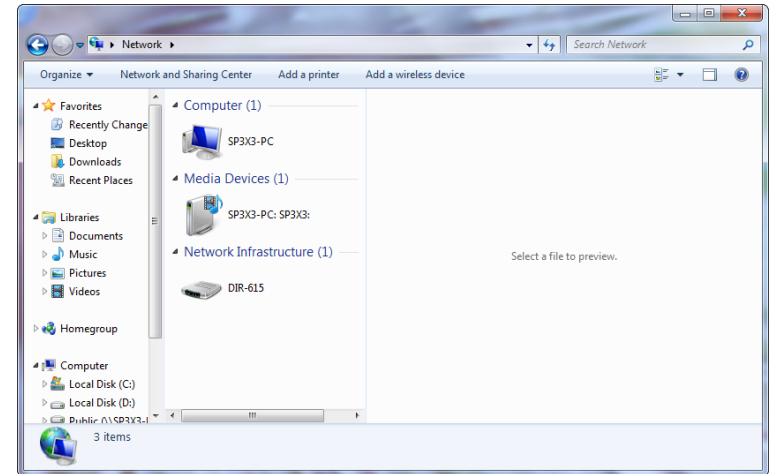
1. Click the **Start** button and select **Computer** from the Start menu.



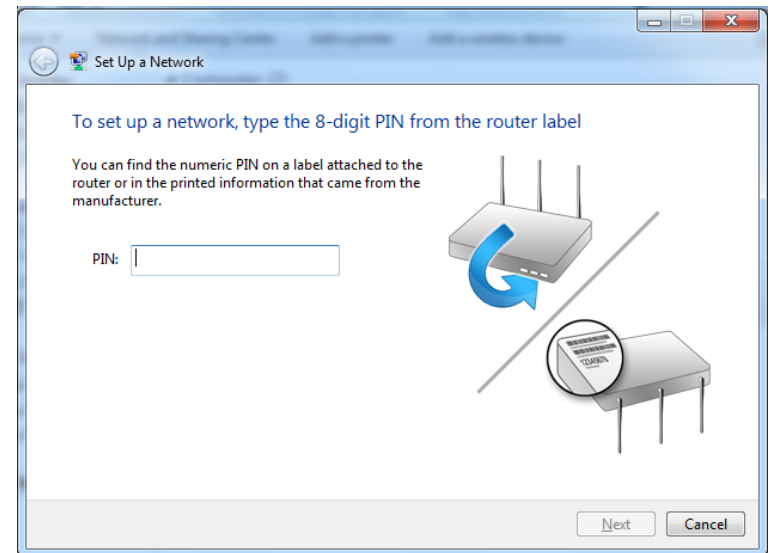
2. Click **Network** on the left side.



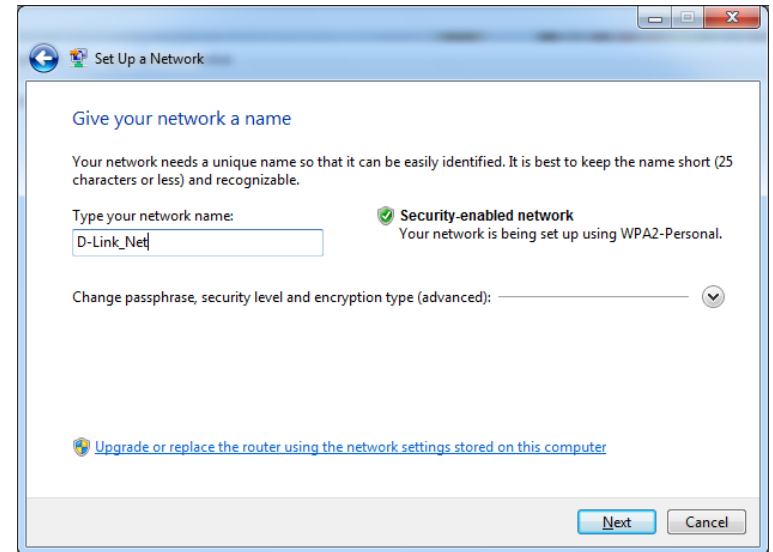
3. Double-click the DIR-822.



4. Input the WPS PIN number (on the router label) in the **Setup > Wireless Setup** menu in the Router's Web UI) and click **Next**.

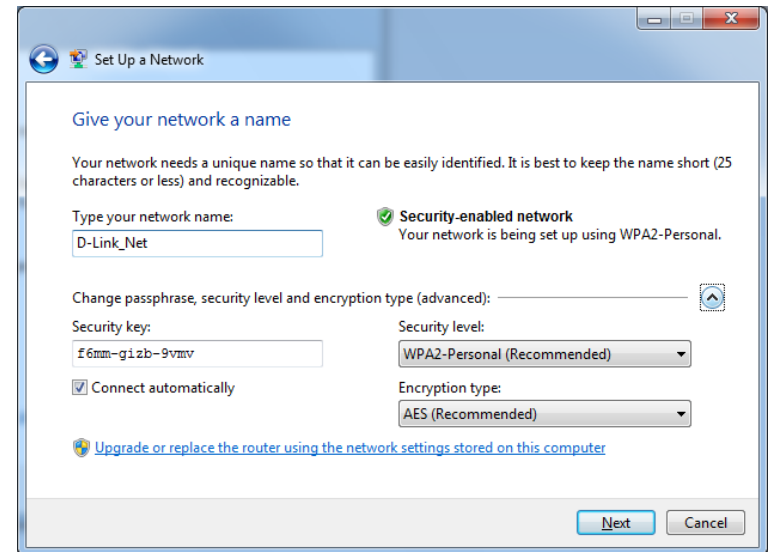


5. Type a name to identify the network.



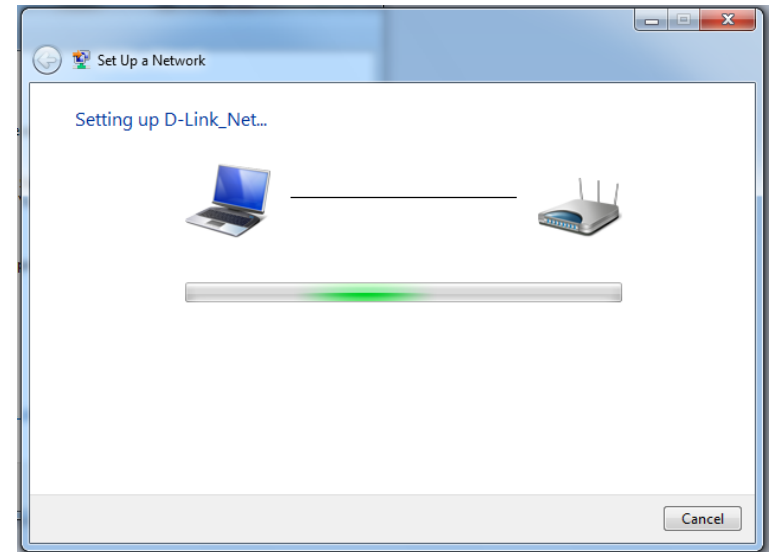
6. To configure advanced settings, click the  icon.

Click **Next** to continue.



7. The following window appears while the Router is being configured.

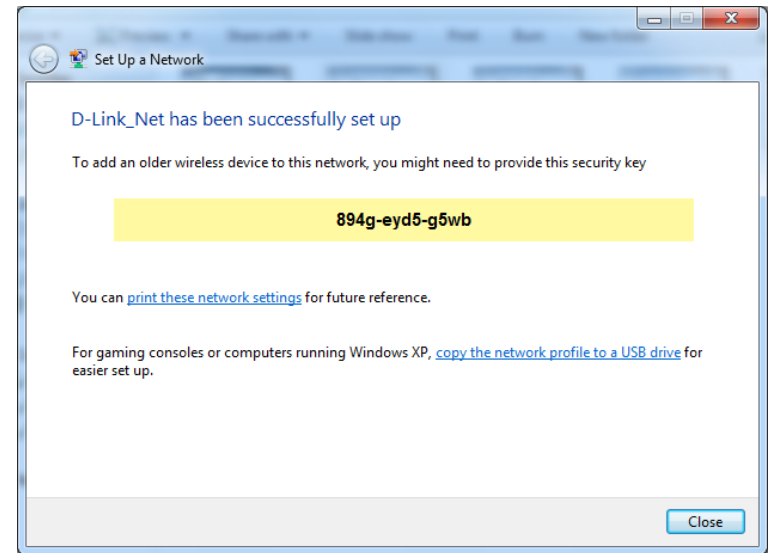
Wait for the configuration to complete.



8. The following window informs you that WPS on the router has been set up successfully.

Make a note of the security key as you may need to provide this security key if adding an older wireless device to the network in the future.

9. Click **Close** to complete WPS setup.



Windows Vista®

Windows Vista® users may use the built-in wireless utility. If you are using another company's wireless utility, please refer to the user manual of your wireless adapter for help connecting to a wireless network. Most wireless utilities will have a "site survey" option similar to the Windows Vista® utility as seen below.

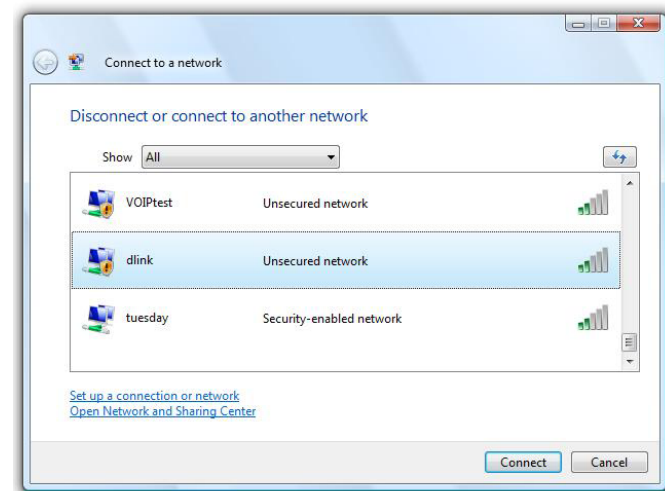
If you receive the **Wireless Networks Detected** bubble, click on the center of the bubble to access the utility.

or

Right-click on the wireless computer icon in your system tray (lower-right corner next to the time). Select **Connect to a network**.

The utility will display any available wireless networks in your area. Click on a network (displayed using the SSID) and click the **Connect** button.

If you get a good signal but cannot access the Internet, check you TCP/IP settings for your wireless adapter. Refer to the **Networking Basics** section in this manual for more information.



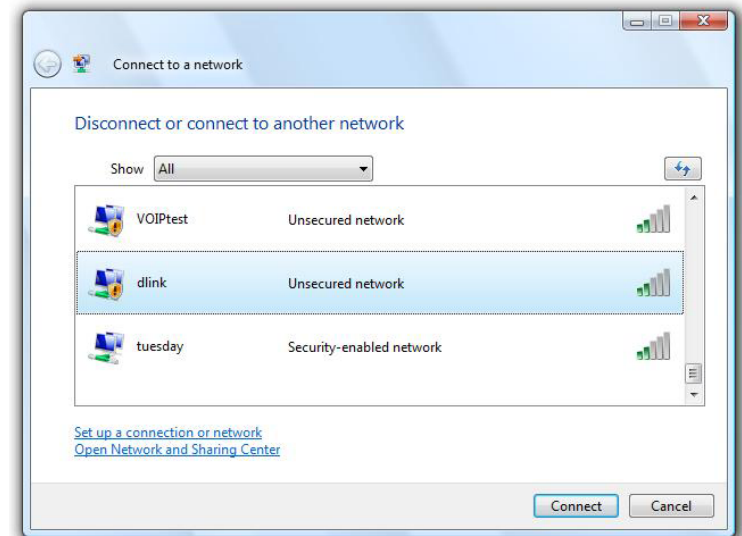
WPA/WPA2

It is recommended that you enable wireless security (WPA/WPA2) on your wireless router or access point before configuring your wireless adapter. If you are joining an existing network, you will need to know the security key or passphrase being used.

1. Open the Windows Vista® Wireless Utility by right-clicking on the wireless computer icon in your system tray (lower right corner of screen). Select **Connect to a network**.

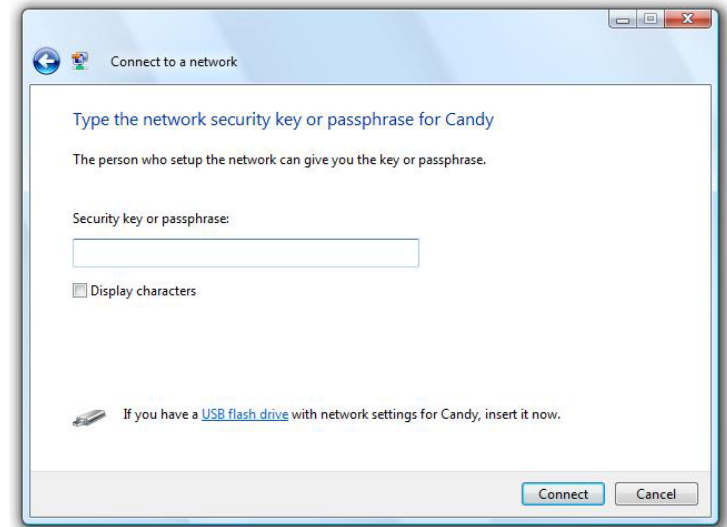


2. Highlight the Wi-Fi name (SSID) you would like to connect to and click **Connect**.



3. Enter the same security key or passphrase (Wi-Fi password) that is on your router and click **Connect**.

It may take 20-30 seconds to connect to the wireless network. If the connection fails, please verify that the security settings are correct. The key or passphrase must be exactly the same as the one on the wireless router.



Troubleshooting

This chapter provides solutions to problems that may occur during the installation and operation of the DIR-822.

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

When entering the IP address of the D-Link router (**192.168.0.1** for example), you are not connecting to a website, nor do you have to be connected to the Internet. The device has the utility built-in to a ROM chip in the device itself. Your computer must be on the same IP subnet to connect to the web-based utility.

- Make sure you have an updated Java-enabled web browser. We recommend the following:
 - Explorer® 8 or higher
 - Firefox®
 - Chrome™
 - Safari® 5 or higher
- Verify physical connectivity by checking for solid link lights on the device. If you do not get a solid link light, try using a different cable or connecting to a different port on the device. If the computer is turned off, the link light may not be on.
- Disable any Internet security software running on the computer. Software firewalls such as Zone Alarm, Black Ice, Sygate, and Norton Personal Firewall may block access to the configuration pages. Check the help files included with your firewall software for more information on disabling or configuring it.
- Configure your Internet settings:
 - Go to **Start > Settings > Control Panel**. Double-click the **Internet Options** icon. From the **Security** tab, click the button to restore the settings to their defaults.
 - Click the **Connection** tab and set the dial-up option to *Never Dial a Connection*. Click the **LAN Settings** button. Make sure nothing is checked. Click **OK**.
 - Go to the **Advanced** tab and click the button to restore these settings to their defaults. Click **OK** three times.
 - Close your web browser (if open) and open it.

- Access the web management. Open your web browser and enter the IP address of your D-Link router in the address bar. This should open the login page for your web management.
- If you still cannot access the configuration, unplug the power to the router for 10 seconds and plug back in. Wait about 30 seconds and try accessing the configuration. If you have multiple computers, try connecting using a different computer.

2. How do I connect my wireless devices to the DIR-822 router?

1. Open your wireless network utility that displays available wireless networks.
2. Select the Wi-Fi Network name you assigned during the Setup Wizard and connect.

Note: *If you did not run the Setup Wizard or you reset the router to its default settings, refer to the Wi-Fi Configuration Card included for the default Wi-Fi Network Name and Wi-Fi Password.*

You can also connect wireless devices to the DIR-822 router using WPS:

1. Press the WPS button on the DIR-822 for a minimum of three seconds, or until the Power LED starts to blink green.
2. Within one minute press the WPS button on your wireless device.
3. Allow up to two minutes to connect.

Note: *Some devices may require you to log in to a utility to start the WPS process. Refer to the user manual for the device you want to connect to the router if you do not know how to start the WPS process.*

3. What can I do if I forget my password?

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

To reset the router, locate the reset button (hole) on the bottom of the unit. With the router powered on, use an unfolded paper clip to press and hold the button down for about 10 seconds. Release the button and the router will go through its reboot process. Wait about 30 seconds to access the router.

4. Can I connect the DIR-822 to an existing router?

We recommend that you replace your existing router with the DIR-822 instead of using both. If your modem is a combo router, you may want to contact your ISP or review the manufacturer's user guide so you can put the combo router into *Bridge* mode, which will turn off the device's NAT functions.

5. Why can't I connect to certain sites or send and receive e-mails when connecting through my router?

If you are having a problem sending or receiving e-mail, or connecting to secure sites such as eBay and banking sites, we suggest lowering the MTU in increments of ten (e.g., 1492, 1482, 1472, etc).

To find the proper MTU Size, you'll have to do a special ping of the destination you're trying to go to. A destination could be another computer, or a URL.

- Click on **Start** and then click **Run**.
- Windows® 8, 7, and Vista® users type in **cmd** and press **Enter** (or click **OK**).
- Once the window opens, you'll need to do a special ping. Use the following syntax:

ping [url] [-f] [-l] [MTU value]

Example: **ping yahoo.com -f -l 1472**

```
C:\>ping yahoo.com -f -l 1482
Pinging yahoo.com [66.94.234.13] with 1482 bytes of data:
Packet needs to be fragmented but DF set.
Packet needs to be fragmented but DF set.
Packet needs to be fragmented but DF set.
Packet needs to be fragmented but DF set.
Ping statistics for 66.94.234.13:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms
C:\>ping yahoo.com -f -l 1472
Pinging yahoo.com [66.94.234.13] with 1472 bytes of data:
Reply from 66.94.234.13: bytes=1472 time=93ms TTL=52
Reply from 66.94.234.13: bytes=1472 time=109ms TTL=52
Reply from 66.94.234.13: bytes=1472 time=125ms TTL=52
Reply from 66.94.234.13: bytes=1472 time=203ms TTL=52
Ping statistics for 66.94.234.13:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 93ms, Maximum = 203ms, Average = 132ms
C:\>
```

You should start at 1472 and work your way down by 10 each time. Once you get a reply, go up by 2 until you get a fragmented packet. Take that value and add 28 to the value to account for the various TCP/IP headers. For example, let's say that 1452 was the proper value, the actual MTU size would be 1480, which is the optimum for the network we're working with ($1452+28=1480$).

Once you find your MTU, you can now configure your router with the proper MTU size.

To change the MTU rate on your router follow the steps below:

- Open your browser, enter the IP address of your router (**192.168.0.1**) and click **OK**.
- Enter your username (**admin**) and password (blank by default). Click **OK** to enter the web configuration page for the device.
- Click on **Setup** and then click **Manual Configure**.
- To change the MTU, enter the number in the MTU field and click **Save Settings** to save your settings.
- Test your e-mail. If changing the MTU does not resolve the problem, continue changing the MTU in increments of ten.

Wireless Basics

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

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

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

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

What is Wireless?

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

Why D-Link Wireless?

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

How does wireless work?

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

Wireless Local Area Network (WLAN)

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

Wireless Personal Area Network (WPAN)

Bluetooth is the industry standard wireless technology used for WPAN. Bluetooth devices in WPAN operate in a range up to 30 feet away.

Compared to WLAN the speed and wireless operation range are both less than WLAN, but in return it doesn't use nearly as much power. This makes it ideal for personal devices, such as mobile phones, PDAs, headphones, laptops, speakers, and other devices that operate on batteries.

Who uses wireless?

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

Home Uses/Benefits

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

Small Office and Home Office Uses/Benefits

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

Where is wireless used?

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

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

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

Tips

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

Centralize your router or Access Point

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

Eliminate Interference

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

Security

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

Wireless Modes

There are basically two modes of networking:

- **Infrastructure** – All wireless clients will connect to an access point or wireless router.
- **Ad-Hoc** – Directly connecting to another computer for peer-to-peer communication using wireless network adapters on each computer, such as two or more DIR-842 wireless network Cardbus adapters.

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

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

Networking Basics

Check your IP address

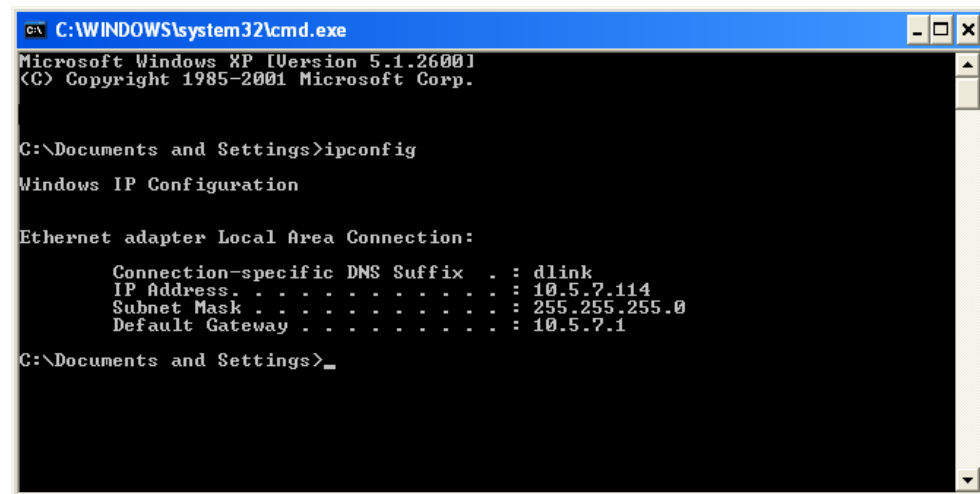
After you install your new D-Link adapter, by default, the TCP/IP settings should be set to obtain an IP address from a DHCP server (i.e., wireless router) automatically. To verify your IP address, please follow the steps below.

Click on **Start** button in the lower left corner of the screen, or press the **Windows** button on your keyboard. In the *Search* field, type **cmd** and press **Enter**.

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

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

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



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

C:\Documents and Settings>ipconfig

Windows IP Configuration

Ethernet adapter Local Area Connection:

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

C:\Documents and Settings>_
```

Statically Assign an IP address

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

Step 1

Windows® 8 - Press the Windows key and then type **IP**. Click **Settings** on the right side and then click **View Network Connections**.

Windows® 7 - Click on **Start > Control Panel > Network and Internet > Network and Sharing Center**.

Windows Vista® - Click on **Start > Control Panel > Network and Internet > Network and Sharing Center > Manage Network Connections**.

Step 2

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

Step 3

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

Step 4

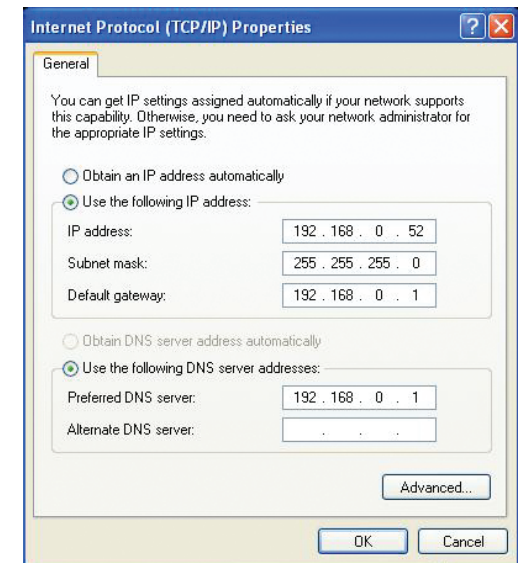
Click **Use the following IP address** and enter an IP address that is on the same subnet as your network or the LAN IP address on your router.

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

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

Step 5

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



Wireless Security

This section will show you the different levels of security you can use to protect your data from intruders. The DIR-842 offers the following types of security:

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

What is WPA?

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

The 2 major improvements over WEP:

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

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

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

Technical Specifications

Physical Interfaces

- Four 10/100Mbps Ethernet ports (LAN)
- One 10/100 Mbps Fast Ethernet port (INTERNET)
- WPS (Wi-Fi Protected Setup) Push Button
- Reset Button

Standards

- IEEE 802.11ac
- IEEE 802.11n
- IEEE 802.11g
- IEEE 802.11a
- IEEE 802.3ab
- IEEE 802.3u

Security

- Wi-Fi Protected Access (WPA/WPA2)
- WPS (Wi-Fi Protected Setup)

LEDs

- Power/WPS
- Internet

Power

- DC 12 V/0.5A

Operating Temperature

- 32 to 104°F (0 to 40°C)

Operating Humidity

- 10% to 90% (non-condensing)

Certifications

- FCC
- CE
- CCC
- RoHS

Dimensions

- 7.50 x 5.50 x 1 inches

Warranty

- 1-Year Limited Warranty

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

2 Frequency Range varies depending on country's regulation.

Contacting Technical Support

U.S. and Canadian customers can contact D-Link technical support through our web site or by phone.

Before you contact technical support, please have the following ready:

- Model number of the product (e.g., DIR-822)
- Hardware Revision (located on the label on the bottom of the router [e.g., rev C1])
- Serial Number (s/n number located on the label on the bottom of the router).

You can find software updates and user documentation on the D-Link website as well as frequently asked questions and answers to technical issues.

For customers within the United States:

Phone Support:

(877) 453-5465

Internet Support:

<http://support.dlink.com>

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(800) 361-5265

Internet Support:

<http://support.dlink.ca>

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Please direct all inquiries to:
Email: GPLCODE@DLink.com
Snail Mail:
Attn: GPLSOURCE REQUEST
D-Link Systems, Inc.
17595 Mt. Herrmann Street
Fountain Valley, CA 92708

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17. Interpretation of Sections 15 and 16.

If the disclaimer of warranty and limitation of liability provided above cannot be given local legal effect according to their terms, reviewing courts shall apply local law that most closely approximates an absolute waiver of all civil liability in connection with the Program, unless a warranty or assumption of liability accompanies a copy of the Program in return for a fee.

Warranty

Subject to the terms and conditions set forth herein, D-Link Systems, Inc. (“D-Link”) provides this Limited Warranty:

- Only to the person or entity that originally purchased the product from D-Link or its authorized reseller or distributor, and
- Only for products purchased and delivered within the fifty states of the United States, the District of Columbia, U.S. Possessions or Protectorates, U.S. Military Installations, or addresses with an APO or FPO.

Limited Warranty:

D-Link warrants that the hardware portion of the D-Link product described below (“Hardware”) will be free from material defects in workmanship and materials under normal use from the date of original retail purchase of the product, for the period set forth below (“Warranty Period”), except as otherwise stated herein.

- Hardware (excluding power supplies and fans): One (1) year
- Power supplies and fans: One (1) year
- Spare parts and spare kits: Ninety (90) days

The customer’s sole and exclusive remedy and the entire liability of D-Link and its suppliers under this Limited Warranty will be, at D-Link’s option, to repair or replace the defective Hardware during the Warranty Period at no charge to the original owner or to refund the actual purchase price paid. Any repair or replacement will be rendered by D-Link at an Authorized D-Link Service Office. The replacement hardware need not be new or have an identical make, model or part. D-Link may, at its option, replace the defective Hardware or any part thereof with any reconditioned product that D-Link reasonably determines is substantially equivalent (or superior) in all material respects to the defective Hardware. Repaired or replacement hardware will be warranted for the remainder of the original Warranty Period or ninety (90) days, whichever is longer, and is subject to the same limitations and exclusions. If a material defect is incapable of correction, or if D-Link determines that it is not practical to repair or replace the defective Hardware, the actual price paid by the original purchaser for the defective Hardware will be refunded by D-Link upon return to D-Link of the defective Hardware. All Hardware or part thereof that is replaced by D-Link, or for which the purchase price is refunded, shall become the property of D-Link upon replacement or refund.

Limited Software Warranty:

D-Link warrants that the software portion of the product (“Software”) will substantially conform to D-Link’s then current functional specifications for the Software, as set forth in the applicable documentation, from the date of original retail purchase of the Software for a period of ninety (90) days (“Software Warranty Period”), provided that the Software is properly installed on approved hardware and operated as contemplated in its documentation. D-Link further warrants that, during the Software Warranty Period, the magnetic media on which D-Link delivers the Software will be free of physical defects. The customer’s sole and exclusive remedy and the entire liability of D-Link and its suppliers under this Limited Warranty will be, at D-Link’s option, to replace the non-conforming Software (or defective media) with software that substantially conforms to D-Link’s functional specifications for the Software or to refund the portion of the actual purchase price paid that is attributable to the Software. Except as otherwise agreed by D-Link in writing, the replacement Software is provided only to the original licensee, and is subject to the terms and conditions of the license granted by D-Link for the Software. Replacement Software will be warranted for the remainder of the original Warranty Period and is subject to the same limitations and exclusions. If a material non-conformance is incapable of correction, or if D-Link determines in its sole discretion that it is not practical to replace the non-conforming Software, the price paid by the original licensee for the non-conforming Software will be refunded by D-Link; provided that the non-conforming Software (and all copies thereof) is first returned to D-Link. The license granted respecting any Software for which a refund is given automatically terminates.

Non-Applicability of Warranty:

The Limited Warranty provided hereunder for Hardware and Software portions of D-Link’s products will not be applied to and does not cover any refurbished product and any product purchased through the inventory clearance or liquidation sale or other sales in which D-Link, the sellers, or the liquidators expressly disclaim their warranty obligation pertaining to the product and in that case, the product is being sold “As-Is” without any warranty whatsoever including, without limitation, the Limited Warranty as described herein, notwithstanding anything stated herein to the contrary.

Submitting A Claim (USA):

The customer shall return the product to the original purchase point based on its return policy. In case the return policy period has expired and the product is within warranty, the customer shall submit a claim to D-Link as outlined below:

- The customer must submit with the product as part of the claim a written description of the Hardware defect or Software nonconformance in sufficient detail to allow D-Link to confirm the same, along with proof of purchase of the product (such as a copy of the dated purchase invoice for the product) if the product is not registered.
- The customer must obtain a Case ID Number from D-Link Technical Support at <https://support.dlink.com>, who will attempt to assist the customer in resolving any suspected defects with the product. If the product is considered defective, the customer must obtain a Return Material Authorization (“RMA”) number by completing the RMA form and entering the assigned Case ID Number at <https://rma.dlink.com/>.

- After an RMA number is issued, the defective product must be packaged securely in the original or other suitable shipping package to ensure that it will not be damaged in transit, and the RMA number must be prominently marked on the outside of the package. Please refer to shipping and packaging instructions located online at <http://rma.dlink.com/>.
- The customer is responsible for all in-bound shipping charges to D-Link. No Cash on Delivery (“COD”) is allowed. Products sent COD will either be rejected by D-Link or become the property of D-Link. Products shall be fully insured by the customer and shipped to D-Link Systems, Inc., 17595 Mt. Herrmann, Fountain Valley, CA 92708. D-Link will not be held responsible for any packages that are lost in transit to D-Link. The repaired or replaced packages will be shipped to the customer via UPS Ground or any common carrier selected by D-Link. Return shipping charges shall be prepaid by D-Link if you use an address in the United States, otherwise we will ship the product to you freight collect. Expedited shipping is available upon request and provided shipping charges are prepaid by the customer. D-Link may reject or return any product that is not packaged and shipped in strict compliance with the foregoing requirements, or for which an RMA number is not visible from the outside of the package. The product owner agrees to pay D-Link’s reasonable handling and return shipping charges for any product that is not packaged and shipped in accordance with the foregoing requirements, or that is determined by D-Link not to be defective or non-conforming.

Submitting A Claim (Canada):

The customer shall return the product to the original purchase point based on its return policy. In case the return policy period has expired and the product is within warranty, the customer shall submit a claim to D-Link as outlined below:

- Customers need to provide their receipt (proof of purchase) even if the product is registered. Without a receipt, no warranty service will be done. The registration is not considered a proof of purchase.
- The customer must submit with the product as part of the claim a written description of the Hardware defect or Software nonconformance in sufficient detail to allow D-Link to confirm the same, along with proof of purchase of the product (such as a copy of the dated purchase invoice for the product) if the product is not registered.
- The customer must obtain a Case ID Number from D-Link Technical Support at 1-800-361-5265, who will attempt to assist the customer in resolving any suspected defects with the product. If the product is considered defective, the customer must obtain a Return Material Authorization (“RMA”) number by completing the RMA form and entering the assigned Case ID Number at <https://rma.dlink.ca/>.
- After an RMA number is issued, the defective product must be packaged securely in the original or other suitable shipping package to ensure that it will not be damaged in transit, and the RMA number must be prominently marked on the outside of the package. Do not include any manuals or accessories in the shipping package. D-Link will only replace the defective portion of the product and will not ship back any accessories.

- The customer is responsible for all in-bound shipping charges to D-Link. No Cash on Delivery (“COD”) is allowed. Products sent COD will be rejected by D-Link. Products shall be fully insured by the customer and shipped to D-Link Networks, Inc., 2525 Meadowvale Boulevard Mississauga, Ontario, L5N 5S2 Canada. D-Link will not be held responsible for any packages that are lost in transit to D-Link. The repaired or replaced packages will be shipped to the customer via Purolator Canada or any common carrier selected by D-Link. Return shipping charges shall be prepaid by D-Link if you use an address in Canada, otherwise we will ship the product to you freight collect. Expedited shipping is available upon request and provided shipping charges are prepaid by the customer. D-Link may reject or return any product that is not packaged and shipped in strict compliance with the foregoing requirements, or for which an RMA number is not visible from the outside of the package. The product owner agrees to pay D-Link’s reasonable handling and return shipping charges for any product that is not packaged and shipped in accordance with the foregoing requirements, or that is determined by D-Link not to be defective or non-conforming.
- RMA phone number: 1-800-361-5265 Hours of Operation: Monday-Friday, 9:00AM – 9:00PM EST

What Is Not Covered:

The Limited Warranty provided herein by D-Link does not cover:

Products that, in D-Link’s judgment, have been subjected to abuse, accident, alteration, modification, tampering, negligence, misuse, faulty installation, lack of reasonable care, repair or service in any way that is not contemplated in the documentation for the product, or if the model or serial number has been altered, tampered with, defaced or removed; Initial installation, installation and removal of the product for repair, and shipping costs; Operational adjustments covered in the operating manual for the product, and normal maintenance; Damage that occurs in shipment, due to act of God, failures due to power surge, and cosmetic damage; Any hardware, software, firmware or other products or services provided by anyone other than D-Link; and Products that have been purchased from inventory clearance or liquidation sales or other sales in which D-Link, the sellers, or the liquidators expressly disclaim their warranty obligation pertaining to the product.

While necessary maintenance or repairs on your Product can be performed by any company, we recommend that you use only an Authorized D-Link Service Office. Improper or incorrectly performed maintenance or repair voids this Limited Warranty.

Disclaimer of Other Warranties:

EXCEPT FOR THE LIMITED WARRANTY SPECIFIED HEREIN, THE PRODUCT IS PROVIDED “AS-IS” WITHOUT ANY WARRANTY OF ANY KIND WHATSOEVER INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT.

IF ANY IMPLIED WARRANTY CANNOT BE DISCLAIMED IN ANY TERRITORY WHERE A PRODUCT IS SOLD, THE DURATION OF SUCH IMPLIED WARRANTY SHALL BE LIMITED TO THE DURATION OF THE APPLICABLE WARRANTY PERIOD SET FORTH ABOVE. EXCEPT AS EXPRESSLY COVERED UNDER THE LIMITED WARRANTY PROVIDED HEREIN, THE ENTIRE RISK AS TO THE QUALITY, SELECTION AND PERFORMANCE OF THE PRODUCT IS WITH THE PURCHASER OF THE PRODUCT.

Limitation of Liability:

TO THE MAXIMUM EXTENT PERMITTED BY LAW, D-LINK IS NOT LIABLE UNDER ANY CONTRACT, NEGLIGENCE, STRICT LIABILITY OR OTHER LEGAL OR EQUITABLE THEORY FOR ANY LOSS OF USE OF THE PRODUCT, INCONVENIENCE OR DAMAGES OF ANY CHARACTER, WHETHER DIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL (INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF GOODWILL, LOSS OF REVENUE OR PROFIT, WORK STOPPAGE, COMPUTER FAILURE OR MALFUNCTION, FAILURE OF OTHER EQUIPMENT OR COMPUTER PROGRAMS TO WHICH D-LINK'S PRODUCT IS CONNECTED WITH, LOSS OF INFORMATION OR DATA CONTAINED IN, STORED ON, OR INTEGRATED WITH ANY PRODUCT RETURNED TO D-LINK FOR WARRANTY SERVICE) RESULTING FROM THE USE OF THE PRODUCT, RELATING TO WARRANTY SERVICE, OR ARISING OUT OF ANY BREACH OF THIS LIMITED WARRANTY, EVEN IF D-LINK HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. THE SOLE REMEDY FOR A BREACH OF THE FOREGOING LIMITED WARRANTY IS REPAIR, REPLACEMENT OR REFUND OF THE DEFECTIVE OR NONCONFORMING PRODUCT. THE MAXIMUM LIABILITY OF D-LINK UNDER THIS WARRANTY IS LIMITED TO THE PURCHASE PRICE OF THE PRODUCT COVERED BY THE WARRANTY. THE FOREGOING EXPRESS WRITTEN WARRANTIES AND REMEDIES ARE EXCLUSIVE AND ARE IN LIEU OF ANY OTHER WARRANTIES OR REMEDIES, EXPRESS, IMPLIED OR STATUTORY.

Governing Law:

This Limited Warranty shall be governed by the laws of the State of California. Some states do not allow exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the foregoing limitations and exclusions may not apply. This Limited Warranty provides specific legal rights and you may also have other rights which vary from state to state.

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CE Mark Warning:

This is a Class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

FCC Statement:

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

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

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

FCC Caution:

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Operations in the 5.15-5.25GHz / 5.470 ~ 5.725GHz band are restricted to indoor usage only.

IMPORTANT NOTICE:**FCC Radiation Exposure Statement:**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body. To maintain compliance with FCC RF exposure compliance requirements, please avoid direct contact to the transmitting antenna during transmitting.

If this device is going to be operated in 5.15 ~ 5.25GHz frequency range, then it is restricted in indoor environment only. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

The availability of some specific channels and/or operational frequency bands are country dependent and are firmware programmed at the factory to match the intended destination. The firmware setting is not accessible by the end user.

ICC Notice:

Operation is subject to the following two conditions:

- 1) This device may not cause interference and
- 2) This device must accept any interference, including interference that may cause undesired operation of the device.

IMPORTANT NOTE:

IC Radiation Exposure Statement:

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

- (i) The device for the band 5150-5250 MHz is only for indoor usage to reduce potential for harmful interference to co-channel mobile satellite systems;
- (ii) The maximum antenna gain (2dBi) permitted (for devices in the band 5725-5825 MHz) to comply with the e.i.r.p. limits specified for point-to-point and non point-to-point operation as appropriate, as stated in section A9.2(3).

In addition, users should also be cautioned to take note that high-power radars are allocated as primary users (meaning they have priority) of the bands 5250-5350 MHz and 5650-5850 MHz and these radars could cause interference and/or damage to LE-LAN devices.

Règlement d'Industry Canada

Les conditions de fonctionnement sont sujettes à deux conditions:

- (1) Ce périphérique ne doit pas causer d'interférence et.
- (2) Ce périphérique doit accepter toute interférence, y compris les interférences pouvant perturber le bon fonctionnement de ce périphérique.

Registration

Register your product online at registration.dlink.com



Product registration is entirely voluntary and failure to complete or return this form will not diminish your warranty rights.

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