



User Manual

AC750
Wi-Fi Router

DIR-813

Preface

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

Manual Revisions

Revision	Date	Description
2.00	September 17, 2015	• Initial release for Revision B1

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Package Contents

- D-Link DIR-813 AC750 Wi-Fi Router
- Power Adapter
- Quick Install Guide
- Ethernet Cable
- Wi-Fi Configuration Card

Note: Using a power supply with a different voltage rating than the one included with the DIR-813 will cause damage and void the warranty for this product.

System Requirements

Network Requirements	<ul style="list-style-type: none">• An Ethernet-based Cable or DSL modem
Web-based Configuration Utility Requirements	<p>Computer with the following:</p> <ul style="list-style-type: none">• Windows®, Macintosh, or Linux-based operating system• An installed Ethernet or Wi-Fi adapter <p>Browser Requirements:</p> <ul style="list-style-type: none">• Internet Explorer 11 or higher• Firefox 20 or higher• Safari 7 or higher• Chrome 20 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>

Introduction

The DIR-813 AC750 Wi-Fi Router is an affordable yet powerful wireless networking solution which combines the latest high-speed 802.11ac Wi-Fi specification with dual-band technology and fast Ethernet ports to deliver a seamless networking experience. The increased range and reliability of wireless AC technology reaches farther into your home, and the DIR-813's advanced security features keep your network and data safe from intruders.

Features:

More Antennas More Coverage

Unlike most of the AC750 routers that only have two antennas, the DIR-813 has three high gain antennas for optimal coverage. Smart technology will allow the DIR-813 to choose the best antennas so you will have the best wireless experience.

High-Speed Connectivity

- The latest 802.11ac wireless specification delivers fast wireless connectivity with increased range and reliability
- One Fast Ethernet WAN Port for fast internet access
- Four Fast Ethernet LAN Ports for high-speed wired connectivity

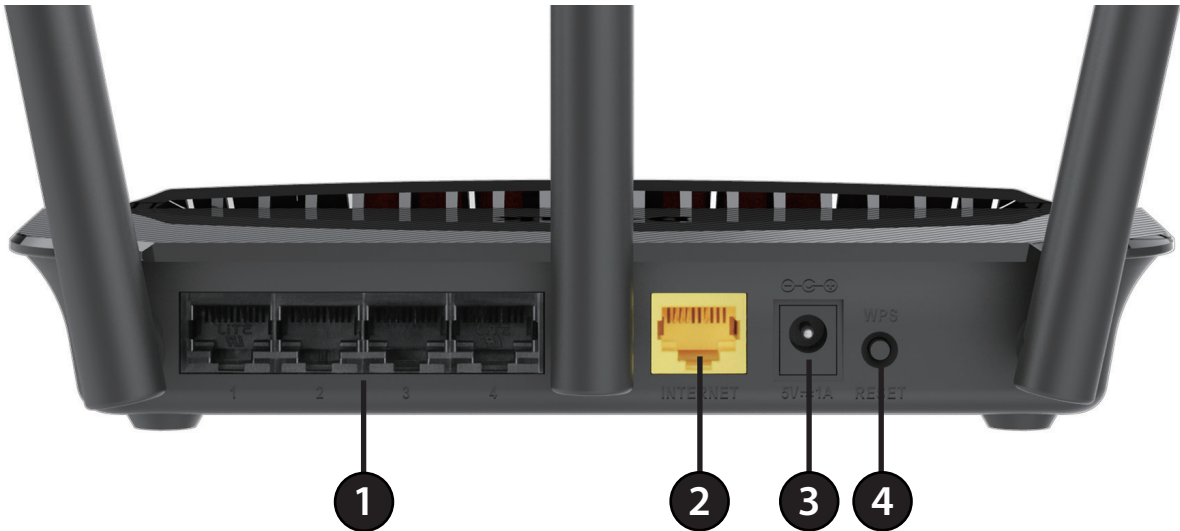
Dual Band Advantage

- Dual-band wireless for speeds of up to 750Mbps*

* Maximum wireless signal rate derived from IEEE Standard 802.11ac 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

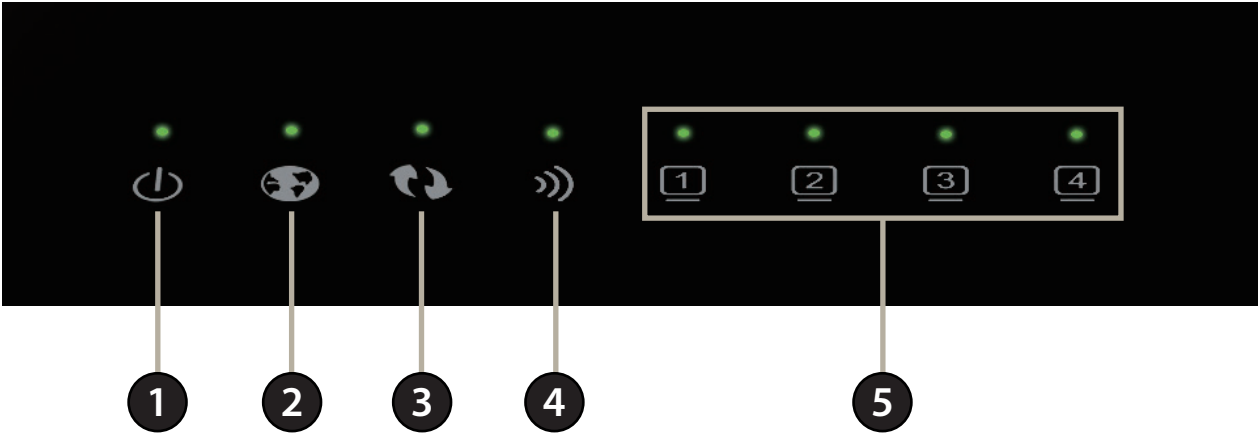
Connections



1	LAN Ports (1-4)	Connect 10/100 Ethernet devices such as computers, switches, cameras, and network storage devices (NAS).
2	Internet Port	Connect your broadband modem using an Ethernet cable.
3	Power Connector	Connect the supplied power adapter.
4	WPS/Reset Button	WPS - Press for one second 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 - Press and hold the reset button for eight 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 LEDs (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 Internet provider. Do not proceed until you have this information.
- **Users with Cable providers** - Make sure you unplug the power to your modem. In some cases, you may need to turn it off for up to 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-813 router can work properly. Please contact your ISP or refer to the user manual for your modem/router device.

Wireless Installation Considerations

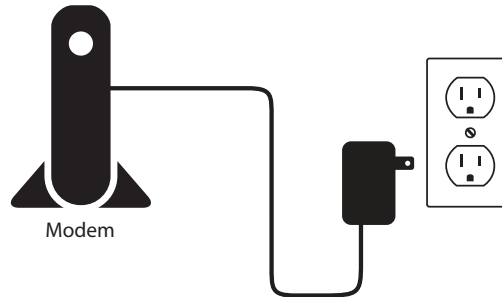
The D-Link wireless router allows you access your network using a wireless connection from virtually anywhere within the operating range of your wireless network. Keep in mind, however, that the number, thickness and location of walls, ceilings, or other objects that the wireless signals must pass through,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

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

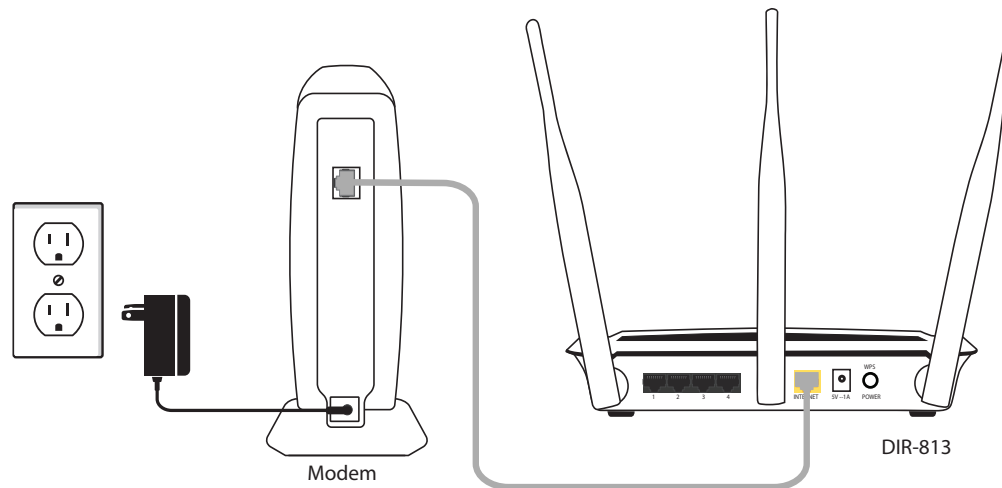
Manual Setup

For best results, place the router in an open area of your intended work area for better wireless coverage. Please use the computer that you are currently connecting to the Internet with.

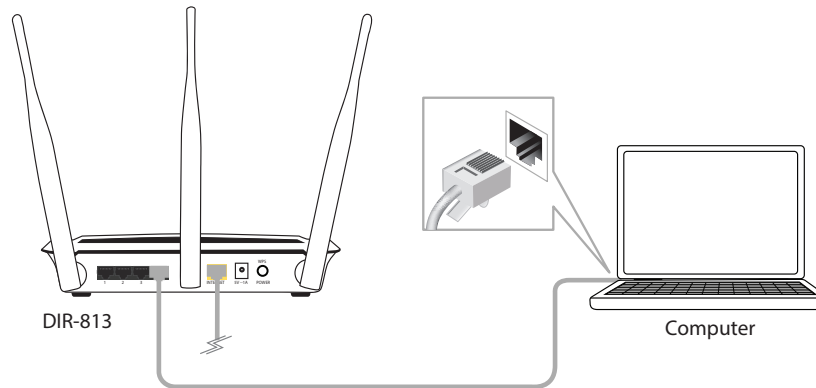
1. Unplug the power from your modem.



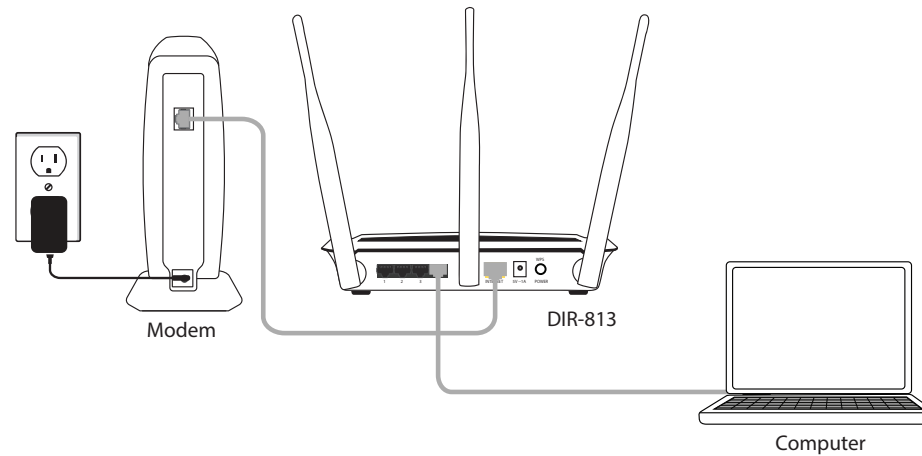
2. Connect an Ethernet cable from the Internet port of the router to the Ethernet port on your DSL or Cable modem.



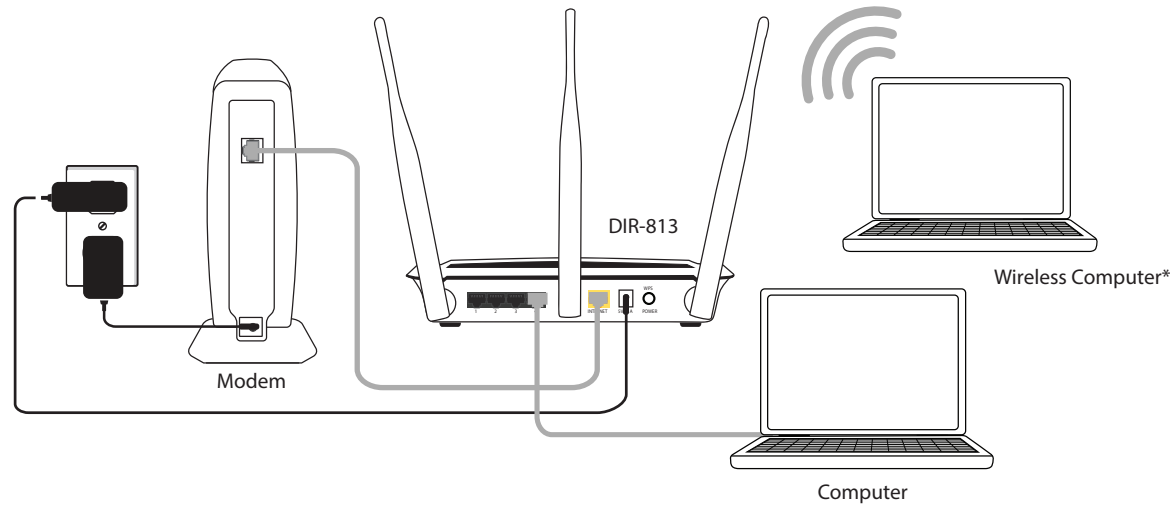
3. Connect another Ethernet cable from the Ethernet port on your computer to one of the LAN ports on the router. You can also connect wirelessly to the router with your computer. Use the supplied Wi-Fi Configuration Card for the Wi-Fi network name (SSID) and Wi-Fi password of the router. Complete steps 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, verify the power adapter is plugged in a working outlet or power strip.



* 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.

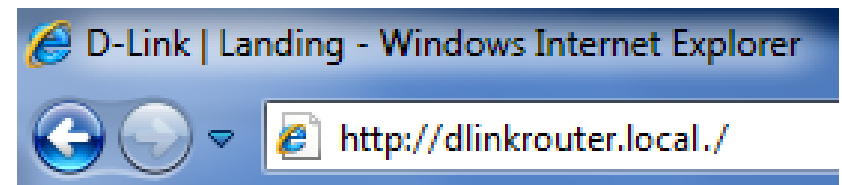
Configuration

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

- **D-Link Easy Setup Wizard** - This wizard will launch if you log into the router for the first time. See below.
- **Manual Setup** - Log into the router and manually configure your router (advanced users only). Refer to page 14.

Setup Wizard

1. 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**).



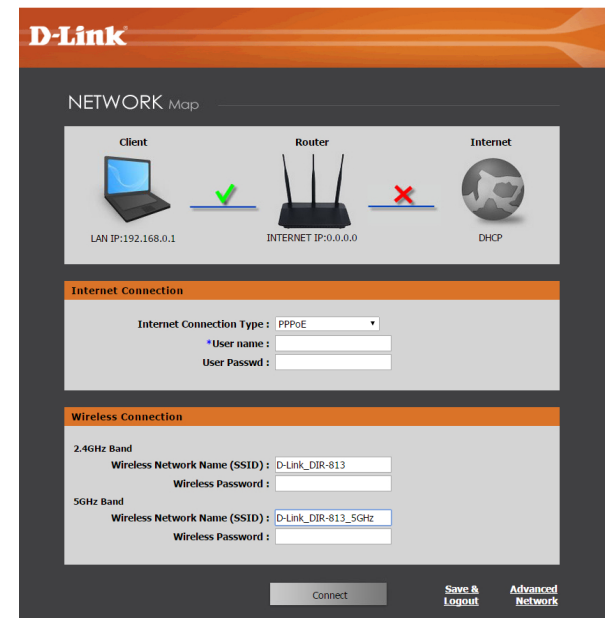
2. Enter your router password. If you have not created a password yet, leave the password blank and click **Login** to continue.

A screenshot of the D-Link router login page. The page has an orange header with the word "Login". Below the header, it says "Login to the router :". There are two input fields: "User Name : admin" and "Password :". Below the password field is a "Login" button.

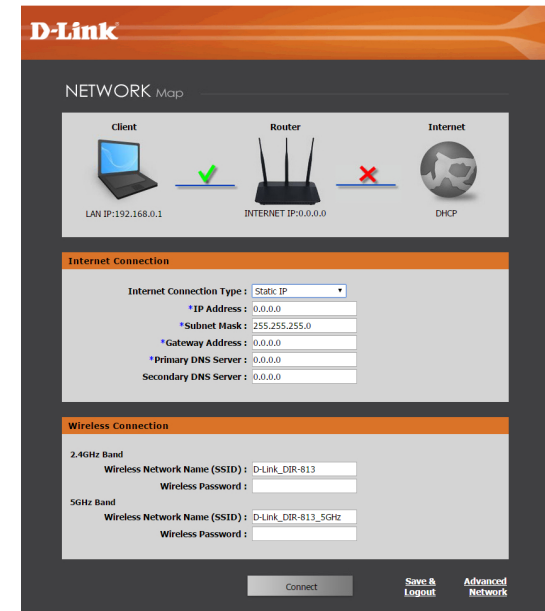
3. Select your Internet type from the drop-down menu: **DHCP** (dynamic) is most commonly used with cable Internet, **PPPoE** (common with DSL), or **Static**.



If you selected DSL (PPPoE), enter your PPPoE user name and password supplied by your ISP (Internet Service Provider).

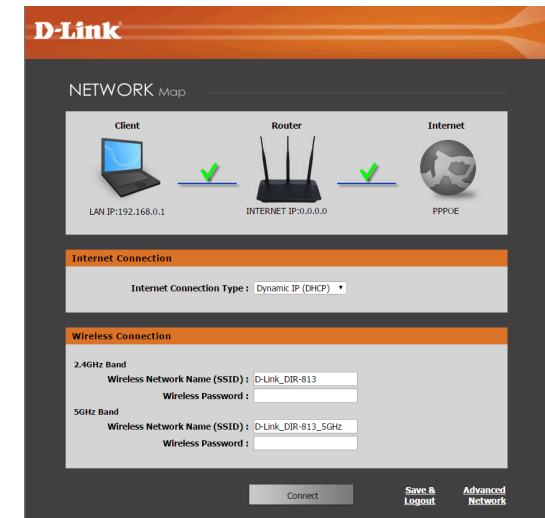


If you selected Static IP, enter the IP information and DNS settings supplied by your ISP.



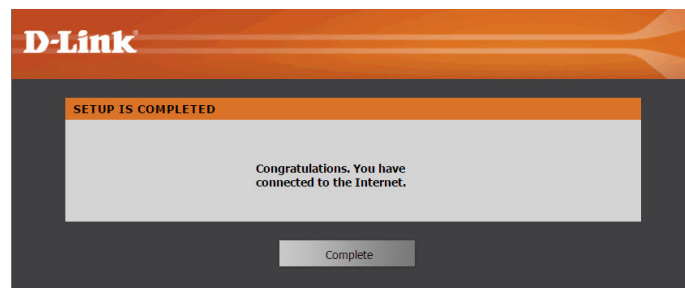
The screenshot shows the D-Link DIR-813 web interface. At the top, the 'NETWORK Map' shows a Client (laptop) connected to a Router (D-Link DIR-813) with a green checkmark, and the Router connected to the Internet (globe) with a red X. Below this, the 'Internet Connection' section is active, showing 'Internet Connection Type' set to 'Static IP'. The fields for 'IP Address', 'Subnet Mask', 'Gateway Address', 'Primary DNS Server', and 'Secondary DNS Server' are all set to '0.0.0.0'. The 'Wireless Connection' section shows the 2.4GHz Band with 'Wireless Network Name (SSID)' set to 'D-Link_DIR-813' and 'Wireless Password' set to 'D-Link_DIR-813_5GHz'. The 5GHz Band is also shown with the same SSID and password. At the bottom, there are buttons for 'Connect', 'Save & Logout', and 'Advanced Network'.

4. For both the 2.4GHz and 5GHz bands, create a name for your Wi-Fi Network and a password. Your wireless devices (i.e., tablets, smartphones, and laptops) will need to have this information entered to be able to connect to your wireless network. Click **Connect** at the bottom to continue.



The screenshot shows the D-Link DIR-813 web interface. At the top, the 'NETWORK Map' shows a Client (laptop) connected to a Router (D-Link DIR-813) with a green checkmark, and the Router connected to the Internet (globe) with a green checkmark. Below this, the 'Internet Connection' section is active, showing 'Internet Connection Type' set to 'Dynamic IP (DHCP)'. The 'Wireless Connection' section shows the 2.4GHz Band with 'Wireless Network Name (SSID)' set to 'D-Link_DIR-813' and 'Wireless Password' set to 'D-Link_DIR-813_5GHz'. The 5GHz Band is also shown with the same SSID and password. At the bottom, there are buttons for 'Connect', 'Save & Logout', and 'Advanced Network'.

5. Your router will now connect to the Internet. Please allow 1-2 minutes. Once the Setup is Completed message appears, click **Complete**.



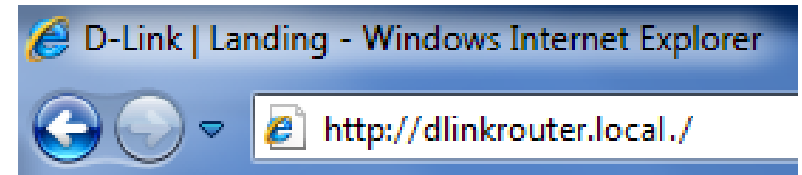
Web-based Configuration Utility

To access the configuration utility, open a web-browser such as Internet Explorer and enter the IP address of the router (**http://192.168.0.1**).

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

Next to *User Name* enter **Admin** and then enter your password (Leave the password blank by default). Click **Log In** to continue.

The **Setup > Internet** page will appear. You can now navigate to the settings you want to configure. If you want to run the setup wizard again, click **Easy Setup** on the left side.



Internet Setup

Static (assigned by ISP)

Select **Static IP** if all WAN IP information is provided to you by your ISP. You will need to enter in the IP address, subnet mask, gateway address, and DNS address(es) provided to you by your ISP.

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

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

Default Gateway: Enter the Gateway assigned by your ISP.

MAC Address: The default MAC Address is set to the WAN's physical interface MAC address on the Broadband Router.

Copy Your PC's MAC Address: You can click the **Copy Your PC's MAC Address** button to copy the MAC address of the Ethernet adapter installed in your computer to the router.

Primary DNS Address: Enter the Primary DNS server IP address assigned by your ISP.

Secondary DNS Address: Enter the Secondary DNS server IP address. This is optional.

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

The screenshot shows the D-Link DIR-813 web interface. The top navigation bar includes tabs for SETUP, ADVANCED, TOOLS, STATUS, and SUPPORT. The left sidebar lists menu items: EASY SETUP, INTERNET, WIRELESS SETTINGS, and NETWORK SETTINGS. The main content area is titled 'WAN' and contains instructions for configuring the Internet Connection type. It offers options for Static IP, DHCP, and PPPoE. A note specifies that PPPoE requires removing or disabling PPPoE client software. Below this, the 'INTERNET CONNECTION TYPE' section shows 'Static IP' selected in a dropdown menu. The 'STATIC IP ADDRESS INTERNET CONNECTION TYPE' section prompts the user to enter static address information. Fields include IP Address (0.0.0.0), Subnet Mask (255.255.255.0), Default Gateway (0.0.0.0), MAC Address (00-00-00-00-00-00) with a 'Copy Your PC's MAC Address' button, Primary DNS Server (0.0.0.0), Secondary DNS Server (0.0.0.0), and MTU (1500 bytes). 'Save Settings' and 'Don't Save Settings' buttons are at the bottom.

Dynamic

Select **Dynamic IP (DHCP)** to obtain IP Address information automatically from your ISP. Select this option if your ISP did not give you any IP settings to use. This option is most commonly used for cable modem services and some DSL services.

Host Name: The Host Name is optional but may be required by some ISPs. The default host name is the device name of the router and may be changed.

MAC Address: The default MAC Address is set to the WAN's physical interface MAC address on the Broadband Router.

Copy Your PC's MAC Address: You can click the **Copy Your PC's MAC Address** button to copy the MAC address of the Ethernet adapter installed in your computer to the router.

DNS Addresses: These addresses will be assigned automatically from your ISP. You can manually enter DNS servers if you do not want to use what is assigned to you.

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

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DIR-813 // SETUP ADVANCED TOOLS STATUS SUPPORT

EASY SETUP

INTERNET

WIRELESS SETTINGS

NETWORK SETTINGS

WAN

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

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

Save Settings Don't Save Settings

INTERNET CONNECTION TYPE

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

My Internet Connection is : Dynamic IP (DHCP)

DYNAMIC IP (DHCP) INTERNET CONNECTION TYPE

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

Host Name : DIR-813

MAC Address : 00 - 00 - 00 - 00 - 00 - 00 (optional)

Copy Your PC's MAC Address

Primary DNS Server : 0.0.0.0

Secondary DNS Server : 0.0.0.0 (optional)

MTU : 1500 bytes MTU default 1500

Save Settings Don't Save Settings

Helpful Hints...

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

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

PPPoE

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

PPPoE: Select **Dynamic** (most common) or **Static**. Select **Static** if your ISP assigned you the IP address, subnet mask, gateway, and DNS server addresses.

User Name: Enter your PPPoE user name.

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

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

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

MAC Address: The default MAC Address is set to the WAN's physical interface MAC address on the Broadband Router.

Copy Your PC's MAC Address: You can click the **Copy Your PC's MAC Address** button to copy the MAC address of the Ethernet adapter installed in your computer to the router.

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

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

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

The screenshot shows the D-Link DIR-813 router configuration interface. The 'WAN' tab is selected, and the 'INTERNET CONNECTION TYPE' is set to 'PPPoE'. The 'PPPoE' section is expanded, showing fields for 'User Name', 'Password', 'Confirm Password', 'Service Name', 'IP Address', 'MAC Address', 'Primary DNS Server', 'Secondary DNS Server', 'Maximum Idle Time', 'MTU', and 'Connection mode select'. The 'Dynamic IP (DHCP)' radio button is selected under 'Enter the information provided by your Internet Service Provider (ISP)'. The 'Connection mode select' is set to 'Always On'. The 'Save Settings' and 'Don't Save Settings' buttons are at the bottom.

Connection Mode Select: Select **Always** on for most ISPs or select **Manual** or **Connection on demand**.

PPTP

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

PPTP: Select **Dynamic** (most common) or **Static**. Select **Static** if your ISP assigned you the IP address, subnet mask, gateway, and DNS server addresses.

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

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

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

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

MAC Address: The default MAC Address is set to the WAN's physical interface MAC address on the Broadband Router.

Copy Your PC's MAC Address: You can click the **Copy Your PC's MAC Address** button to copy the MAC address of the Ethernet adapter installed in your computer to the router.

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

User Name: Enter your PPTP account name.

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

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

MTU: Maximum Transmission Unit - You may need to change the MTU for optimal performance.

Connection Mode Select: Select **Always** on for most ISPs or select **Manual** or **Connection on demand**.

The screenshot shows the D-Link DIR-813 router's web interface. The 'WAN' tab is selected under the 'EASY SETUP' section. The 'INTERNET CONNECTION TYPE' is set to 'PPTP (Username / Password)'. Below this, the 'PPTP INTERNET CONNECTION TYPE' section is expanded, showing fields for PPTP IP Address, Subnet Mask, Gateway IP Address, Primary DNS Server, MAC Address, PPTP Server IP Address, User Name, Password, Confirm Password, Maximum Idle Time, MTU, and Connection mode select. The 'Dynamic IP (DHCP)' radio button is selected for the connection type. The 'Copy Your PC's MAC Address' button is visible next to the MAC Address field.

L2TP

Choose L2TP (Layer 2 Tunneling Protocol) if your ISP uses a L2TP connection. Your ISP will provide you with a username and password. This option is typically used for DSL services.

L2TP: Select **Dynamic** (most common) or **Static**. Select **Static** if your ISP assigned you the IP address, subnet mask, gateway, and DNS server addresses.

L2TP IP Address: Enter the IP address (Static L2TP only).

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

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

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

MAC Address: The default MAC Address is set to the WAN's physical interface MAC address on the Broadband Router.

Copy Your PC's MAC Address: You can click the **Copy Your PC's MAC Address** button to copy the MAC address of the Ethernet adapter installed in your computer to the router.

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

User Name: Enter your L2TP account name.

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

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

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

Connection Mode Select: Select **Always** on for most ISPs or select **Manual** or **Connection on demand**.

The screenshot shows the D-Link DIR-813 router's web interface. The 'WAN' tab is selected under 'ADVANCED' settings. The 'INTERNET CONNECTION TYPE' section shows 'My Internet Connection is : L2TP(Username / Password)'. Below this, the 'L2TP INTERNET CONNECTION TYPE' section is active, showing fields for L2TP IP Address, Subnet Mask, Gateway IP Address, Primary DNS Server, MAC Address, L2TP Server IP Address, User Name, Password, Confirm Password, Maximum Idle Time, MTU, and Connection mode select. The 'Dynamic IP (DHCP)' radio button is selected for the connection mode.

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DIR-813 //

SETUP ADVANCED TOOLS STATUS SUPPORT

EASY SETUP

INTERNET

WIRELESS SETTINGS

NETWORK SETTINGS

WAN

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

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

Save Settings Don't Save Settings

INTERNET CONNECTION TYPE

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

My Internet Connection is : L2TP(Username / Password) ▼

L2TP INTERNET CONNECTION TYPE :

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

☒ Dynamic IP (DHCP) ☐ Static IP

L2TP IP Address : 0.0.0.0

L2TP Subnet Mask : 255.255.255.0

L2TP Gateway IP Address : 0.0.0.0

Primary DNS Server : 0.0.0.0 (optional)

MAC Address : 00 - 00 - 00 - 00 - 00 - 00 (optional)

Copy Your PC's MAC Address

L2TP Server IP Address : 0.0.0.0

User Name :

Password :

Confirm Password :

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

MTU : 1400 bytes

Connection mode select : ☒ Always On ☐ Manual ☐ Connection-on demand

Helpful Hints...

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

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

Wireless Settings

Wireless Mode: Select **Wireless Router** or **Repeater Mode**.

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

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

Enable Auto Channel: Check this box to allow the DIR-813 to select the channel with the least amount of interference automatically.

Wireless Channel: Indicates the wireless channel for the router. By default the channel is set to 6. The Channel can be changed to fit the channel setting to customize your wireless network. If you enabled Auto Channel Selection, this option will be greyed out.

Transmission Rate: Use the drop-down menu to select the appropriate Transmission Rate in Mbits per second. Many users will want to use the default setting, *Best (automatic)*.

WMM Enable: Enable Wi-Fi Multimedia to enjoy basic quality of service features. WMM prioritizes traffic according to four access categories: voice, video, best effort, and background.

Enable Hidden Wireless: Check this option if you would not like the SSID of your wireless network to be broadcasted by the DIR-813. If this option is checked, the SSID of the DIR-813 will not be seen by Site Survey utilities so your wireless clients will have to know the SSID of your DIR-813 in order to connect to it.

Refer to the next page for wireless security.

D-Link

DIR-813 // SETUP ADVANCED TOOLS STATUS SUPPORT

WIRELESS SETTINGS

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

Save Settings Don't Save Settings

ACCESS POINT MODE

Use this to disable NAT on the router and turn it into an Access Point.

Wireless Mode: Wireless Router

2.4G WIRELESS NETWORK SETTINGS

Enable Wireless: ☒

Wireless Network Name (SSID): D-Link_DIR-809 (Also called the SSID)

Enable Auto Channel Selection: ☐

Wireless Channel: 1

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

WMM Enable: ☒ (Wireless QoS)

Enable Hidden Wireless: ☐ (Also called the SSID Broadcast)

WIRELESS SECURITY MODE

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

WPA/WPA2

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

Cipher Type: AES

PSK: PSK

Network Key: dlink12345 (8~63 ASCII or 64 HEX)

5G WIRELESS NETWORK SETTINGS

Enable Wireless: ☒

Wireless Network Name (SSID): D-Link_DIR-809_5GHz (Also called the SSID)

Enable Auto Channel Selection: ☐

Wireless Channel: 36

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

WMM Enable: ☒ (Wireless QoS)

Enable Hidden Wireless: ☐ (Also called the SSID Broadcast)

WIRELESS SECURITY MODE

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

WPA/WPA2

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

Cipher Type: AES

PSK: PSK

Network Key: dlink12345 (8~63 ASCII or 64 HEX)

Save Settings Don't Save Settings

Helpful Hints...

Enable Auto Channel Scan so that the router can select the best possible channel for your wireless network to operate on.

Enabling Hidden Mode is another way to secure your network. With this option enabled, no wireless clients will be able to see your wireless network when they scan to see what's available. For your wireless devices to connect to your router, you will need to manually enter the Wireless Network Name on each device.

If you have enabled Wireless Security, make sure you write down the Key or Passphrase that you have configured. You will need to enter this information on any wireless device that you connect to your wireless network.

Wireless Security

This section will show you the different levels of security you can use to protect your data from intruders. The DIR-813 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, or Wi-Fi Protected Access, is a Wi-Fi standard that was designed to improve the security features of WEP (Wired Equivalent Privacy).

The two 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.

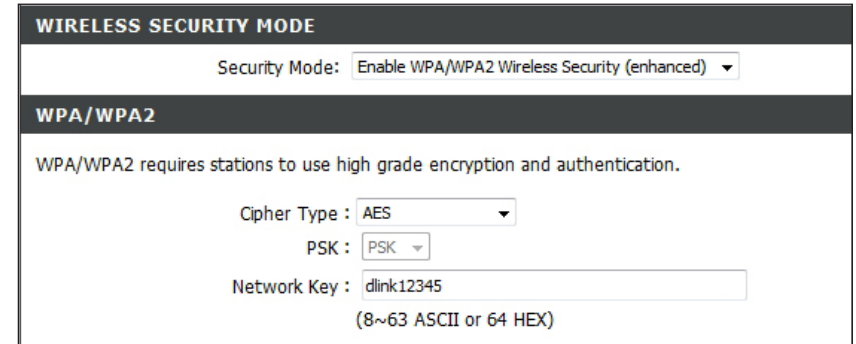
WPA-PSK/WPA2-PSK uses a passphrase or key to authenticate your wireless connection. The key is an alpha-numeric password between 8 and 63 characters long. The password can include symbols (!?*&_) and spaces. This key must be the exact same key entered on your wireless router or access point.

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.

Configure Wireless Security

It is recommended to enable encryption on your wireless router . Your wireless signal may degrade when enabling encryption due to the added overhead.

1. Log into the web-based configuration by opening a web browser and entering the IP address of the router (192.168.0.1). Click on **Wireless Setup** on the left side.
2. Next to **Security Mode**, select *Enable WPA/WPA2 Wireless Security (enhanced)*. This is the most common mode. You can also select WEP, WPA, or WPA2.
3. Next to **Cipher Mode**, select *TKIP*, *AES*, or *Both*. Both is recommended.
4. Next to **Network Key**, enter a Wi-Fi password. The key is an alpha-numeric password between 8 and 63 characters long. The password can include symbols (!?*&_) and spaces. Make sure you enter this key exactly the same on all other wireless clients.
5. Click **Save Settings** to save your settings. If you are configuring the router with a wireless adapter, you will lose connectivity until you enable WPA/WPA2-PSK on your adapter and enter the same Wi-Fi password as you did on the router.



WIRELESS SECURITY MODE	
Security Mode:	Enable WPA/WPA2 Wireless Security (enhanced) ▼
WPA/WPA2	
WPA/WPA2 requires stations to use high grade encryption and authentication.	
Cipher Type :	AES ▼
PSK :	PSK ▼
Network Key :	dlink12345
	(8~63 ASCII or 64 HEX)

Network Settings

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

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

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

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

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

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

Refer to the next page for DHCP information.

D-Link

DIR-813 // SETUP ADVANCED TOOLS STATUS SUPPORT

NETWORK SETTINGS

Use this section to configure the internal network settings of your router and also to configure the built-in DHCP Server to assign IP addresses to the computers on your network. The IP Address that is configured here is the IP Address that you use to access the Web-based management interface. If you change the IP Address here, you may need to adjust your PC's network settings to access the network again.

Please note that this section is optional and you do not need to change any of the settings here to get your network up and running.

Save Settings Don't Save Settings

ROUTER SETTINGS

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

Router IP Address: 192.168.0.1
Subnet Mask: 255.255.255.0
Local Domain Name: dlinkrouter
Enable DNS Relay: ☒

DHCP SERVER SETTINGS

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

Enable DHCP Server: ☒
DHCP IP Address Range: 100 to 199 (address within the LAN subnet)
DHCP Lease Time: 1440 (minutes)

DHCP CLIENT LIST

Host Name	IP Address	MAC Address	Expired Time
dlink-PC	192.168.0.196	a4:1f:72:5f:f9:fc	21 Hours 42 Minutes

DHCP CLIENT RESERVED LIST

Host Name	IP Address	MAC Address	Expired Time
-----------	------------	-------------	--------------

24--DHCP RESERVATION

Remaining number of clients that can be configured : 24

Computer Name	IP Address	MAC Address
<input type="checkbox"/>	<input type="text"/>	<input type="text"/>
<input type="checkbox"/>	<input type="text"/>	<input type="text"/>
<input type="checkbox"/>	<input type="text"/>	<input type="text"/>

<< Computer Name << << Computer Name << << Computer Name <<

DHCP Server Settings

DHCP stands for Dynamic Host Control Protocol. The DHCP Server (built-in to the router) will automatically assign an IP address to the computers and devices on your network. Be sure to set your computers to be DHCP clients by setting their TCP/IP settings to "Obtain an IP Address Automatically." When you turn your computers on, they will automatically load the proper TCP/IP settings provided by the DIR-813. The DHCP Server will automatically allocate an unused IP address from the IP address pool to the requesting computer. You must specify the starting and ending address of the IP address pool.

Enable DHCP Check the box to enable the DHCP server on your router.

Server: Uncheck to disable this function.

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

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

DHCP Lease Time: The length of time for the IP address lease. Enter the Lease time in minutes (default setting is 1440).

DHCP Client List: Displays the name, IP address, MAC Address, and lease time of devices currently assigned IP settings by the router.

DHCP SERVER SETTINGS

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

Enable DHCP Server : ☒

DHCP IP Address Range : to (address within the LAN subnet)

DHCP Lease Time : (minutes)

DHCP CLIENT LIST

Host Name	IP Address	MAC Address	Expired Time
dlink-PC	192.168.0.196	a4:1f:72:5f:f9:fc	21 Hours 42 Minutes

DHCP CLIENT RESERVED LIST

Host Name	IP Address	MAC Address	Expired Time
-----------	------------	-------------	--------------

24--DHCP RESERVATION

Remaining number of clients that can be configured : 24

	Computer Name	IP Address	MAC Address	
<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="button" value=" <<"/> Computer Name ▼
<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="button" value=" <<"/> Computer Name ▼
<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="button" value=" <<"/> Computer Name ▼

Refer to the next page to set up DHCP reservations.

DHCP Reservation

If you want a computer or device to always have the same IP address assigned, you can create a DHCP Reservation. The router will assign the IP address only to that computer or device. Note that this IP address must be within the DHCP IP Address Range.

DHCP Client Reservation List: Displays the current reservations.

Enable: Check this box to enable the reservation.

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

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

MAC Address: Enter the MAC address of the computer or device. If you want to assign an IP address to the computer you are currently on, click this button to populate the fields.

Save Settings: Click **Save Settings** to save your entry.

DHCP CLIENT RESERVED LIST				
Host Name	IP Address	MAC Address	Expired Time	
24--DHCP RESERVATION				
Remaining number of clients that can be configured : 24				
<input type="checkbox"/>	Computer Name	IP Address	MAC Address	<< Computer Name ▼
<input type="checkbox"/>				<< Computer Name ▼
<input type="checkbox"/>				<< Computer Name ▼

Virtual Server

The DIR-813 can be configured as a virtual server so that remote users accessing Web or FTP services for example via the public IP address can be automatically redirected to local servers in the LAN (Local Area Network).

The DIR-813 is also capable of port-redirection meaning incoming traffic to a particular port may be redirected to a different port on the server or device. Each virtual service that is created will be listed at the bottom of the screen in the Virtual Servers List. There are pre-defined virtual services already in the table. You may use them by enabling them and assigning the server IP to use that particular virtual service.

Enable: Check the box to enabled the rule.

Name: Enter a name for the rule.

Application You may select a pre-defined rule from the drop-down menu.

Name: Select a rule and then click << to populate the required fields.

IP Address: Enter the IP address of the computer on your local network that you want to allow the incoming service to.

Computer Select a computer or device on your network from the drop-

Name: down menu and then click << to populate the required fields.

Public/Private Enter the port that you want to open next to Private Port and

Port: Public Port. The private and public ports are usually the same. The public port is the port seen from the Internet side, and the private port is the port being used by the application/ server/device within your local network.

Traffic Type: Select **TCP**, **UDP**, or **Any**.

D-Link

DIR-813 // SETUP ADVANCED TOOLS STATUS SUPPORT

VIRTUAL SERVER

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

Save Settings Don't Save Settings

24--VIRTUAL SERVER RULES

Remaining number of rules that can be created : 24

	Name	IP Address	Application Name	Computer Name	Port	Traffic Type
<input type="checkbox"/>			<< Application Name	<< Computer Name	Public Port	TCP
<input type="checkbox"/>			<< Application Name	<< Computer Name	Public Port	TCP
<input type="checkbox"/>			<< Application Name	<< Computer Name	Public Port	TCP
<input type="checkbox"/>			<< Application Name	<< Computer Name	Public Port	TCP

Helpful Hints...

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

Port Forwarding

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

Enable: Check the box to enabled the rule.

Name: Enter a name for the rule.

Application You may select a pre-defined rule from the drop-down menu.

Name: Select a rule and then click << to populate the required fields.

IP Address: Enter the IP address of the computer on your local network that you want to allow the incoming service to.

Computer Select a computer or device on your network from the drop-

Name: down menu and then click << to populate the required fields.

Start Port/ Enter the port or range of ports that you want to open. If you

End Port: want to open one port, enter the same port in both boxes. In most cases the Public and Private ports will be exactly the same.

Traffic Type: Select **TCP**, **UDP**, or **Any**.

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DIR-813

SETUP ADVANCED TOOLS STATUS SUPPORT

PORT FORWARDING

The Advanced Port Forwarding option allows you to define port range on your router for redirection to an internal LAN IP Address and Private LAN port if required. This feature is useful for hosting online service such as FTP or Web Servers.

Save Settings Don't Save Settings

24--PORT FORWARDING

Remaining number of rules that can be created : 24

Name	IP Address	Application Name	Computer Name	Port	Traffic Type
<input type="checkbox"/>	<input type="text"/>	<< Application Name	<< Computer Name	Public Port ~	TCP
<input type="checkbox"/>	<input type="text"/>	<< Application Name	<< Computer Name	Private Port ~	TCP
<input type="checkbox"/>	<input type="text"/>	<< Application Name	<< Computer Name	Public Port ~	TCP
<input type="checkbox"/>	<input type="text"/>	<< Application Name	<< Computer Name	Private Port ~	TCP
<input type="checkbox"/>	<input type="text"/>	<< Application Name	<< Computer Name	Public Port ~	TCP
<input type="checkbox"/>	<input type="text"/>	<< Application Name	<< Computer Name	Private Port ~	TCP

Helpful Hints...

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

Application Rules

Some applications require multiple connections, such as Internet gaming, video conferencing, Internet telephony and others. These applications may have difficulties working through NAT (Network Address Translation). Special Applications makes some of these applications work with the DIR-813. If you need to run applications that require multiple connections, specify the port normally associated with an application in the "Trigger" field, select the protocol type as TCP or UDP, then enter the firewall (public) ports associated with the trigger port to open them for inbound traffic.

The DIR-813 provides some predefined applications in the table on the bottom of the web page. Select the application you want to use and enable it.

Enable: Check the box to enable the rule.

Name: Enter a name for the rule.

Application: You may select a pre-defined rule from the drop-down menu. Select and click << to populate the required fields.

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

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

Traffic Type: Select **TCP**, **UDP**, or **Any**.

D-Link

DIR-813 // SETUP ADVANCED TOOLS STATUS SUPPORT

APPLICATION RULES

The Application Rules option is used to open single or multiple ports in your firewall when the router sense data sent to the Internet on a outgoing 'Trigger' port or port range. Special Applications rules apply to all computers on your internal network.

Save Settings Don't Save Settings

24--APPLICATION RULES

Remaining number of rules that can be created : 24

	Name	Application	Trigger	Firewall	Traffic Type
<input type="checkbox"/>	Name	<< Application Name	Trigger	Firewall	TCP
<input type="checkbox"/>	Name	<< Application Name	Trigger	Firewall	TCP
<input type="checkbox"/>	Name	<< Application Name	Trigger	Firewall	TCP
<input type="checkbox"/>	Name	<< Application Name	Trigger	Firewall	TCP

Helpful Hints...

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

MAC Filtering

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

Configure MAC Filter: Select **Turn MAC Filtering OFF**, **Turn MAC Filtering ON and ALLOW** computers listed to access the network, or **Turn MAC Filtering ON and DENY** computers listed to access the network.

Enable: Check the box to the left of the filter to enable.

MAC Address: Enter the MAC address you would like to filter. To find the MAC address on a computer, please refer to the Networking Basics section in this manual.

DHCP Client List: Select a DHCP client from the drop-down menu and click the << button to populate the required fields.

D-Link

DIR-813 // SETUP ADVANCED TOOLS STATUS SUPPORT

MAC FILTER

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

Save Settings Don't Save Settings

24 -- MAC FILTERING RULES

Configure MAC Filtering below:
Turn MAC Filtering OFF

Remaining number of rules that can be created : 24

	MAC Address		DHCP Client List
<input type="checkbox"/>	<input type="text"/>	<<	Computer Name
<input type="checkbox"/>	<input type="text"/>	<<	Computer Name
<input type="checkbox"/>	<input type="text"/>	<<	Computer Name
<input type="checkbox"/>	<input type="text"/>	<<	Computer Name
<input type="checkbox"/>	<input type="text"/>	<<	Computer Name
<input type="checkbox"/>	<input type="text"/>	<<	Computer Name
<input type="checkbox"/>	<input type="text"/>	<<	Computer Name
<input type="checkbox"/>	<input type="text"/>	<<	Computer Name

Helpful Hints ...

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

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

Configure Website Filtering:

URL:

D-Link

DIR-813 //	SETUP	ADVANCED	TOOLS	STATUS	SUPPORT
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VIRTUAL SERVER	PORT FORWARDING	APPLICATION RULES	MAC FILTER	WEBSITE FILTER	TRAFFIC CONTROL	FIREWALL SETTINGS	2.4G ADVANCED WIRELESS	5G ADVANCED WIRELESS	ADVANCED NETWORK	WI-FI PROTECTED SETUP																																				
				WEBSITE FILTER The website filter option allows you to quickly create a list of all web sites that you wish to allow or deny users from accessing. <input type="button" value="Save Settings"/> <input type="button" value="Don't Save Settings"/>																																										
24 -- WEBSITE FILTERING RULES Configure Website Filtering below: Turn Website Filtering OFF Remaining number of rules that can be created : 24																																														
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 30px;"><input type="checkbox"/></th> <th style="width: 200px;"></th> <th style="text-align: center;">URL</th> </tr> </thead> <tbody> <tr><td><input type="checkbox"/></td><td></td><td></td></tr> <tr><td><input type="checkbox"/></td><td></td><td></td></tr> <tr><td><input type="checkbox"/></td><td></td><td></td></tr> <tr><td><input type="checkbox"/></td><td></td><td></td></tr> <tr><td><input type="checkbox"/></td><td></td><td></td></tr> <tr><td><input type="checkbox"/></td><td></td><td></td></tr> <tr><td><input type="checkbox"/></td><td></td><td></td></tr> <tr><td><input type="checkbox"/></td><td></td><td></td></tr> <tr><td><input type="checkbox"/></td><td></td><td></td></tr> <tr><td><input type="checkbox"/></td><td></td><td></td></tr> <tr><td><input type="checkbox"/></td><td></td><td></td></tr> </tbody> </table>											<input type="checkbox"/>		URL	<input type="checkbox"/>			<input type="checkbox"/>			<input type="checkbox"/>			<input type="checkbox"/>			<input type="checkbox"/>			<input type="checkbox"/>			<input type="checkbox"/>			<input type="checkbox"/>			<input type="checkbox"/>			<input type="checkbox"/>			<input type="checkbox"/>		
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Helpful Hints ...

Create a list of Web Sites to which you would like to deny or allow through the network.

Traffic Control

Traffic control can be used to distribute download bandwidth automatically according to the requirements of the users, and the users also can setup manually.

Enable Traffic Control: Select this function to control the access bandwidth of computer in LAN.

Automatic Distribute Bandwidth: All the computers in LAN will be distributed bandwidth equally.

Key in download bandwidth manually: Manually enter the download bandwidth.

Key in upload bandwidth manually: Manually enter the upload bandwidth.

Traffic Control Rules: When the option Automatic Distribute Bandwidth is unchecked, you can control the access bandwidth of the specific device on your network.

The screenshot shows the D-Link DIR-813 web interface. The top navigation bar includes 'D-Link', 'DIR-813', and tabs for 'SETUP', 'ADVANCED', 'TOOLS', 'STATUS', and 'SUPPORT'. The left sidebar lists various configuration options: VIRTUAL SERVER, PORT FORWARDING, APPLICATION RULES, MAC FILTER, WEBSITE FILTER, TRAFFIC CONTROL (highlighted), FIREWALL SETTINGS, 2.4G ADVANCED WIRELESS, 5G ADVANCED WIRELESS, ADVANCED NETWORK, and WI-FI PROTECTED SETUP. The main content area is titled 'TRAFFIC CONTROL' and contains the following information:

TRAFFIC CONTROL
Traffic Control can distribute download bandwidth equally to the LAN/Wireless client. User also can setup the traffic control rules manually.
[Save Settings] [Don't Save Settings]

TRAFFIC CONTROL SETTING

Enable Traffic Control: ☐
Automatic Distribute Bandwidth: ☒
Key in download bandwidth manually: 512 kbps
Key in upload bandwidth manually: 0 kbps

32-TRAFFIC CONTROL RULES

IP Range	Mode	Bandwidth(kbps)
IP Address <input type="checkbox"/> ~ <input type="text"/>	Restricted maximum ▾	<input type="text"/>
IP Address <input type="checkbox"/> ~ <input type="text"/>	Restricted maximum ▾	<input type="text"/>
IP Address <input type="checkbox"/> ~ <input type="text"/>	Restricted maximum ▾	<input type="text"/>

Helpful Hints...

Firewall & DMZ

This section will allow you to set up a DMZ host and to set up firewall rules.

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

Enable DMZ Host: Check to enable DMZ. DMZ allows you to open all ports to one computer or device on your network.

DMZ IP Address: Enter the IP address of the computer you would like to open all ports to or select it from the drop-down menu and click <<.

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

Name: Enter a name for the firewall rule.

Action: Select to *Allow* or *Deny* transport of the data packets according to the criteria defined in the rule.

Source/Dest: The Source/Destination is the TCP/UDP port on either the LAN or WAN side.

IP Address: Enter a beginning and ending IP address.

Protocol: Select the transport protocol that will be used for the filter rule.

Port Range: Enter the desired port range for the filter rule.

The screenshot shows the D-Link DIR-813 web interface. The top navigation bar includes tabs for SETUP, ADVANCED, TOOLS, STATUS, and SUPPORT. The left sidebar lists various configuration options: VIRTUAL SERVER, PORT FORWARDING, APPLICATION RULES, MAC FILTER, WEBSITE FILTER, TRAFFIC CONTROL, FIREWALL SETTINGS (selected), 2.4G ADVANCED WIRELESS, 5G ADVANCED WIRELESS, ADVANCED NETWORK, and WI-FI PROTECTED SETUP.

The main content area is titled "FIREWALL & DMZ SETTINGS". It contains the following sections:

- FIREWALL SETTINGS:** Includes a checkbox for "SPI Enable".
- DMZ HOST:** Contains a description of the DMZ (Demilitarized Zone) option, a checkbox for "Enable DMZ", and a field for "DMZ IP Address" with a dropdown menu for "Computer Name".
- APPLICATION LEVEL GATEWAY (ALG) CONFIGURATION:** Includes a checkbox for "RTSP".
- 24 - FIREWALL RULES:** Shows a table for creating firewall rules. The table has columns for Name, Interface, IP Address, Protocol, and Port Range. It indicates that 24 rules can be created.

Helpful Hints... Enable the DMZ option only as a last resort. If you are having trouble using an application from a computer behind the router, first try opening ports associated with the application in the sections.

Advanced Wireless 2.4GHz

This section allows you to change the behavior of the 2.4GHz wireless radio from the standard settings. Please be aware that any changes to the factory default settings may adversely affect the behavior of your network.

Transmit Power: Set the transmit power of the antennas.

Wireless Mode: Select one of the following:
Mixed 802.11g and 802.11b - Select if you are using both 802.11b and 802.11g wireless clients.
802.11n Only - Select only if all of your wireless clients are 802.11n.
Mixed 802.11n, 802.11b, and 802.11g - Select if you are using a mix of 802.11n, 11g, and 11b wireless clients.

Band Width: Select the Band Width:
Auto 20/40 (Auto) - Select if you are using both 802.11n and non-802.11n wireless devices.
20MHz - Select if you are not using any 802.11n wireless clients. This is the default setting.

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

The screenshot shows the D-Link DIR-813 Advanced Wireless 2.4GHz configuration page. The page has a navigation bar with tabs: SETUP, ADVANCED, TOOLS, STATUS, and SUPPORT. The ADVANCED tab is selected. The page is divided into two main sections: 2.4G ADVANCED WIRELESS and 2.4G ADVANCED WIRELESS. The 2.4G ADVANCED WIRELESS section contains the following settings:

- Transmit Power: 100%
- Wireless Mode: 802.11Mixed(n/g/b)
- Band Width: 20/40MHz(Auto)
- 20/40MHz Coexist: ☒ Enable ☐ Disabled

There are also buttons for 'Save Settings' and 'Don't Save Settings'.

Advanced Wireless 5GHz

This section allows you to change the behavior of the 5GHz wireless radio from the standard settings. Please be aware that any changes to the factory default settings may adversely affect the behavior of your network.

Transmit Power: Set the transmit power of the antennas.

Wireless Mode: Select one of the following:

5G A - Select if all of your wireless clients are 802.11a.

5G N - Select if all of your wireless clients are 802.11n.

5G A + N - Select if you are using both 802.11n and 802.11a wireless clients.

5G AC - Select only if all of your wireless clients are 802.11ac.

5G N + AC - Select if you are using both 802.11n and 802.11ac wireless clients.

5G A + N + AC - Select if you are using 802.11ac, 802.11n, and 802.11a wireless clients (most common mode).

Band Width: Select the Band Width (also known as Channel Width):

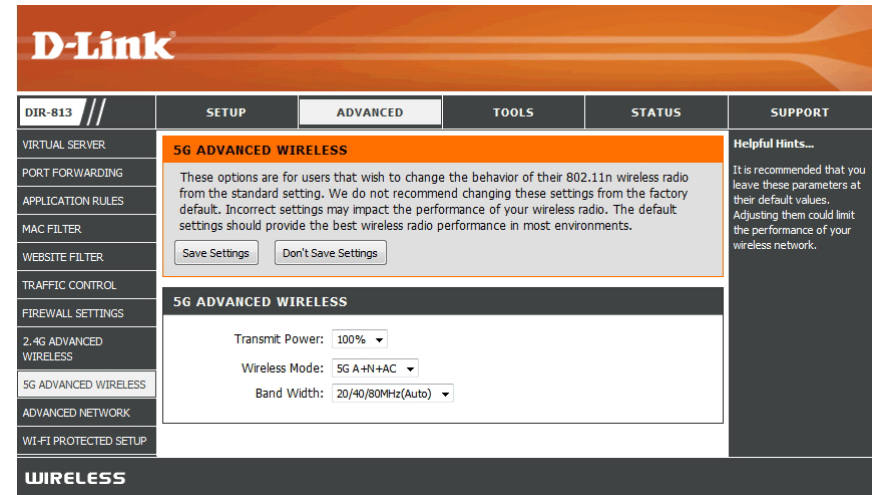
20MHz - Select if you are not using any 802.11n wireless clients.

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

20/40/80MHz (Auto) - Select if you are using 802.11ac, 802.11n, and non-802.11n wireless devices. This option is only available when the 802.11 Mode is set to Mixed 802.11ac.

20/40MHz Coexist: Enable this option to reduce interference from other wireless networks in your area. If the channel width is operating at 40MHz and there

is another wireless network's channel over-lapping and causing interference, the router will automatically change to 20MHz.



Advanced Network

This window allows you to change the LAN settings. Please be aware that any changes to the factory default settings may affect the behavior of your network.

Enable UPnP: Check this box to enable Universal Plug and Play (UPnP™). UPnP provides compatibility with networking equipment, software and peripherals.

Enable WAN Ping Respond: Check this box to allow the WAN port to be “Pinged”. Disabling ping responses may provide some extra security from hackers.

WAN Port Speed: You may set the port speed of the WAN port to *10Mbps*, *100Mbps*, or *10/100Mbps Auto*. Some older cable or DSL modems may require you to set the port speed to 10Mbps.

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

D-Link

DIR-813 // SETUP ADVANCED TOOLS STATUS SUPPORT

ADVANCED NETWORK

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

Save Settings Don't Save Settings

UPNP

Universal Plug and Play (UPnP) supports peer-to-peer Plug and Play functionality for network devices.

Enable UPnP : ☒

WAN PING

If you enable this feature, the WAN port of your router will respond to ping requests from the Internet that are sent to the WAN IP Address.

Enable WAN Ping Respond : ☐

WAN PORT SPEED

10/100Mbps Auto

MULTICAST STREAMS

Enable Multicast Streams : ☒

Save Settings Don't Save Settings

WIRELESS

Helpful Hints...

UPnP helps other UPnP LAN hosts interoperate with the router. Leave the UPnP option enabled as long as the LAN has other UPnP applications.

For added security, it is recommended that you disable the WAN Ping Respond option. Ping is often used by malicious Internet users to locate active networks or PCs.

The WAN speed is usually detected automatically. If you are having problems connecting to the WAN, try selecting the speed manually.

If you are having trouble receiving multicast streams from the Internet, make sure the Multicast Streams option is enabled.

WPS

Easily add wireless devices to your network using a PIN or pressing the WPS button.

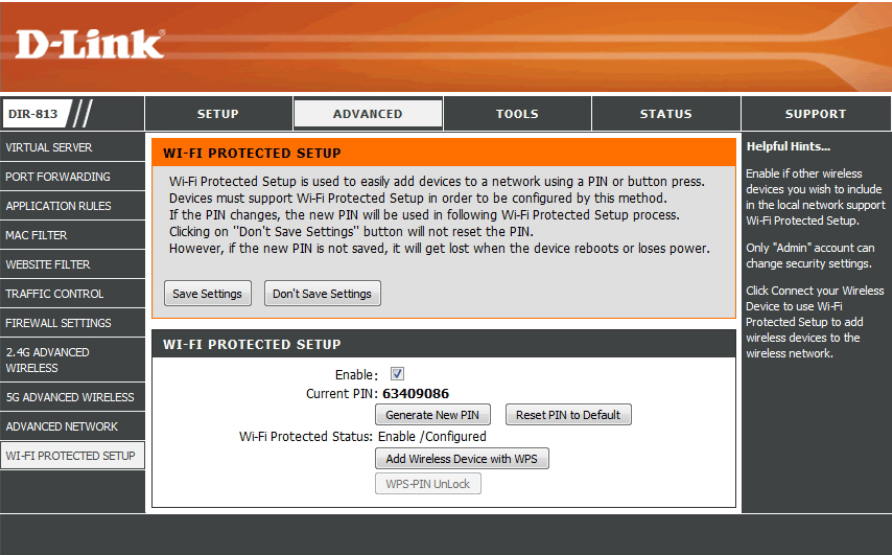
Enable: Check this box to enable WPS.

Current PIN: Displays the current PIN. Enter this PIN on your wireless client to connect to your network.

Click **Generate New PIN** to have the router create a new PIN. Click **Reset PIN to Default** to change the PIN to the factory default PIN. Make sure to click **Save Settings** to save the new or default PIN.

Wi-Fi Protected Status: Displays the current WPS status on the router.

Add Wireless Device with WPS: Click to start the Add a Wireless Device with WPS wizard.



Device Administration

This window will allow you to change the Administrator password. You can also enable Remote Management.

Administrator Password: Enter a new password for the Administrator Login Name and then retype the new password in the Confirm Password box. The administrator can make changes to the settings.

Enable Remote Management: Remote management allows the DIR-813 to be configured from the Internet by a web browser. A username and password is still required to access the Web-Management interface. In general, only a member of your network can browse the built-in web pages to perform Administrator tasks. This feature enables you to perform Administrator tasks from the remote (Internet) host.

IP Allowed to Access: The Internet IP address of the computer that has access to the Broadband Router. If you input an asterisk (*) into this field, then any computer will be able to access the Router. Putting an asterisk (*) into this field would present a security risk and is not recommended.

Port: The port number used to access the DIR-813. For example: http://x.x.x.x:8080 whereas x.x.x.x is the WAN IP address of the DIR-813 and 8080 is the port used for the Web-Management interface.

The screenshot shows the D-Link DIR-813 web management interface. The top navigation bar includes tabs for SETUP, ADVANCED, TOOLS, STATUS, and SUPPORT. The left sidebar lists various configuration options: ADMIN, SYSTEM, TIME, FIRMWARE, DYNAMIC DNS, and SYSTEM CHECK. The main content area is titled 'ADMINISTRATOR SETTINGS' and contains the following sections:

- ADMINISTRATOR SETTINGS:** A message states: 'The default login name of this router is 'admin'. There is no password for it by default. To help secure your network, we recommend that you should choose a new password.' Below this are two buttons: 'Save Settings' and 'Don't Save Settings'.
- ADMINISTRATOR:** Fields for 'Password' and 'Confirm Password'.
- REMOTE MANAGEMENT:**
 - 'Enable Remote Management' checkbox (unchecked).
 - 'IP Allowed to Access' field with the value '0.0.0.0'.
 - 'Port' dropdown menu set to '80'.

On the right side, under 'Helpful Hints...', there is a note: 'For security reasons, it is recommended that you change the password for the Admin and User accounts. Be sure to write down the login name and new passwords to avoid having to reset the router in case they are forgotten.' Below this, another note states: 'When enabling Remote Management, you can specify the IP address of the computer on the Internet that you want to have access to your router, or leave it blank to allow access to any computer on the Internet.'

Save and Restore

This window allows you to save your configuration file to a hard drive, load configuration settings from a hard drive, and restore the router's factory default settings.

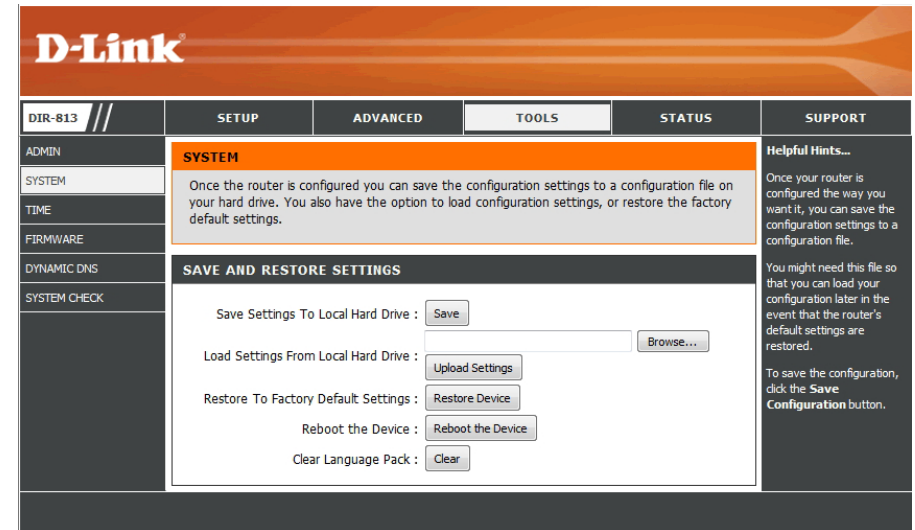
Save Settings to Local Hard Drive: Use this option to save the current router configuration settings to a file on the hard disk of the computer you are using. First, click the **Save** button. You will then see a file dialog, where you can select a location and file name for the settings.

Load Settings from Local Hard Drive: Use this option to load previously saved router configuration settings. First, click the **Browse** button to find a previously save file of configuration settings. Then, click the **Upload Settings** button to transfer those settings to the Router.

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

Reboot the Device: Click to reboot the router.

Clear Language Pack: Click to remove all non-default language packs from the router.



Time and Date

This section will allow you to configure, update, and maintain the correct time on the internal system clock.

Time: Displays the current time and date.

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

Enable Daylight Saving: Checking this checkbox enables Daylight Saving time.

Sync. your computer's time settings: Click **Sync. your computer's time settings** to copy your PC's time settings to the router.

NTP Server Used: Click the **Automatically synchronize with D-Link's Internet time server** checkbox and then use the drop-down menu to select an NTP Server. NTP is short for Network Time Protocol. NTP synchronizes computer clock times in a network of computers.

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

The screenshot shows the D-Link DIR-813 web interface. The top navigation bar includes links for ADMIN, SYSTEM, FIRMWARE, DYNAMIC DNS, and SYSTEM CHECK. The main content area is titled "TIME" and contains the following sections:

- TIME AND DATE CONFIGURATION:** Displays the current time (2015/6/04 11:37:55) and the selected time zone ((GMT-08:00) Pacific Time (US/Canada), Tijuana). It includes a checkbox for "Enable Daylight Saving" and a button labeled "Sync. your computer's time settings".
- AUTOMATIC TIME AND DATE CONFIGURATION:** Includes a checkbox for "Automatically synchronize with D-Link's Internet time server". Below this, it shows the "NTP Server Used" as "ntp.dlink.com.tw" with an "Update Now" button.
- SET THE DATE AND TIME MANUALLY:** Provides fields for Year (2015), Month (Jun), Day (04), Hour (11), Minute (37), and Second (25). It also includes "Save Settings" and "Don't Save Settings" buttons.

On the right side of the interface, there is a "Helpful Hints..." section with text about the importance of accurate logs and scheduled firewall rules.

Firmware Update

You can upgrade the firmware of the Router here. Make sure the firmware you want to use is on the local hard drive of the computer. Click on **Browse** to locate the firmware file to be used for the update. Please check the D-Link support site for firmware updates at <http://support.dlink.com>. You can download firmware upgrades to your hard drive from the D-Link support site.

Firmware Upgrade: Click the **Check Now** button (or the link at the top of the window) to find out if there is an updated firmware; if so, download the new firmware to your hard drive.

Browse: After you have downloaded the new firmware, click **Browse** in this window to locate the firmware update on your hard drive. Click **Upload** to begin the firmware upgrade.

Language Pack

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

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

The screenshot shows the D-Link DIR-813 web interface. The top navigation bar includes links for ADMIN, SYSTEM, TIME, FIRMWARE, DYNAMIC DNS, and SYSTEM CHECK. The main content area is divided into several sections:

- FIRMWARE**: Contains information about firmware updates, including a link to check for updates and instructions on how to upgrade.
- FIRMWARE INFORMATION**: Displays the current firmware version (1.05) and date (Thu, 04 Jun, 2015). It includes a "Check Online Now for Latest Firmware Version" button.
- FIRMWARE UPGRADE**: Contains a note about resetting configuration options to factory defaults before upgrading. It includes an "Upload" button and a "Browse..." button.
- LANGUAGE PACK UPGRADE**: Contains instructions on how to upgrade the language pack. It includes an "Upload" button and a "Browse..." button.

The right sidebar contains a "Helpful Hints..." section with additional information about firmware updates.

Dynamic DNS (DDNS)

The router supports DDNS (Dynamic Domain Name Service). The Dynamic DNS service allows a dynamic public IP address to be associated with a static host name in any of the many domains, allowing access to a specified host from various locations on the Internet. This is enabled to allow remote access to a host by clicking a hyperlinked URL in the form “hostname.dyndns.org”. Many ISPs assign public IP addresses using DHCP, this can make it difficult to locate a specific host on the LAN using standard DNS. If for example you are running a public web server or VPN server on your LAN, this ensures that the host can be located from the Internet if the public IP address changes. DDNS requires that an account be setup with one of the supported DDNS providers.

Enable DDNS: Check the **Enable DDNS** checkbox to enable support for DDNS.

Server Address: Select one of the DDNS registration organizations from those listed in the drop-down menu. Available servers include *dlinkddns.com (Free)*, *DynDns.org (Custom)*, *Dyn.Dns.org (free)*, and *Dyn.Dns.org (Static)*.

Host Name: Enter the host name of the DDNS server.

Username or Key: Enter the username given to you by your DDNS server.

Password or Key: Enter the password or key given to you by your DDNS server.

Timeout: Enter a timeout time (in hours).

Status: Displays the connection status of your DDNS account.

The screenshot shows the D-Link DIR-813 web interface. The top navigation bar includes 'D-Link' and tabs for 'SETUP', 'ADVANCED', 'TOOLS', 'STATUS', and 'SUPPORT'. The left sidebar lists 'ADMIN', 'SYSTEM', 'TIME', 'FIRMWARE', 'DYNAMIC DNS', and 'SYSTEM CHECK'. The main content area is titled 'DYNAMIC DNS' and contains the following text: 'The Dynamic DNS feature allows you to host a server (Web, FTP, Game Server, etc...) using a domain name that you have purchased (www.whateveryournameis.com) with your dynamically assigned IP address. Most broadband Internet Service Providers assign dynamic (changing) IP addresses. Using a DDNS service provider, your friends can enter your host name to connect to your game server no matter what your IP address is.' Below this text are 'Save Settings' and 'Don't Save Settings' buttons. The 'DYNAMIC DNS SETTINGS' section includes: 'Enable DDNS : ☒', 'Server Address : dlinkddns.com' (with a dropdown arrow), 'Host Name : host.dyndns.org', 'Username or Key :', 'Password or Key :', 'Timeout : 576 (hours)', and 'STATUS :'. A 'Helpful Hints...' sidebar on the right states: 'To use this feature, you must first have a Dynamic DNS account from one of the providers in the drop down menu.'

System Check

This tool is used to verify the physical connectivity on both the LAN and the WAN interfaces. The Ping Test can be used to test the status of the Internet.

VCT (Virtual Cable Tester) VCT is an advanced feature that integrates a LAN cable tester on every Ethernet port on the router. Through the graphical user interface (GUI), VCT can be used to remotely diagnose and report cable faults such as opens, shorts, swaps, and impedance mismatch. This feature significantly reduces service calls and returns by allowing users to easily troubleshoot their cable connections.

Ping Test: The Ping Test is used to send ping packets to test if a computer is on the Internet. Enter the IP Address that you wish to test and click **Ping**.

Ping Result: Displays the ping results.

D-Link

DIR-813 //

SETUP ADVANCED **TOOLS** STATUS SUPPORT

SYSTEM CHECK

The System Check tool can be used to verify the physical connectivity on both the LAN and Internet interfaces. The Ping Test tool can be used to verify the status of the Internet.

VCT INFO

Port	Link Status	Work Status	Detail Info
Internet		100Mbps FULL Duplex	More Info
LAN1		Disconnected	More Info
LAN2		100Mbps FULL Duplex	More Info
LAN3		Disconnected	More Info
LAN4		Disconnected	More Info

PING TEST

Ping Test is used to send 'Ping' packets to test if a computer is on the Internet.

Host Name or IP Address :

PING RESULT

Helpful Hints...

'Ping' checks whether a computer on the Internet is running and responding. Enter either the IP address of the target computer or enter its fully qualified domain name.

Device Info

This window displays the current information for the DIR-813. It will display the LAN, Internet, and Wireless information.

If your Internet connection is set up for a Dynamic IP address then a **DHCP Release** button and a **DHCP Renew** button will be displayed. Use **DHCP Release** to disconnect from your ISP and use **DHCP Renew** to re-connect to your ISP.

If your WAN connection is set up for PPPoE, a **Connect** button and a **Disconnect** button will be displayed. Use **Disconnect** to drop the PPPoE connection and use **Connect** to establish the PPPoE connection.

LAN: Displays the MAC address and the private (local) IP settings for the router.

Internet: Displays the MAC address and the Internet/ISP IP settings for the router.

Wireless 2.4GHz: Displays your wireless settings such as SSID, Channel, and Encryption status for the 2.4GHz segment.

Wireless 5GHz: Displays your wireless settings such as SSID, Channel, and Encryption status for the 5GHz segment.

The screenshot shows the D-Link DIR-813 web interface. The top navigation bar includes tabs for SETUP, ADVANCED, TOOLS, STATUS, and SUPPORT. The left sidebar lists various system information sections. The main content area is titled 'DEVICE INFORMATION' and contains the following details:

- Device Information:** A summary box stating that all Internet and network connection details are displayed on this page, along with the firmware version: **Firmware Version : 1.05, Thu,04,Jun,2015**.
- LAN:** Displays the MAC Address (54:B8:0A:A6:90:D4), IP Address (192.168.0.1), Subnet Mask (255.255.255.0), and DHCP Server (Enabled).
- INTERNET:** Displays the MAC Address (54:B8:0A:A6:90:D7), DHCP Client Connected status, Connection type (DHCP Client), IP Address (192.168.1.136), Subnet Mask (255.255.255.0), Default Gateway (192.168.1.1), and DNS (8.8.8.8, 8.8.4.4). It also includes buttons for 'DHCP Renew' and 'DHCP Release'.
- WIRELESS 2.4G:** Displays the SSID (D-Link_DIR-809), Channel (1), and Encryption (WPA/WPA2).
- WIRELESS 5G:** Displays the SSID (D-Link_DIR-809_5GHz), Channel (36), and Encryption (WPA/WPA2).

Log

This window allows you to view a log of activities on the Router. This is especially helpful detecting unauthorized network usage.

Log Type: Select the type of information to view.

First Page: View the first page of the log.

Last Page: View the last page of the log.

Previous: View the previous page.

Next Page: View the next page.

Clear: Clear the log.

D-Link

DIR-813 // SETUP ADVANCED TOOLS STATUS SUPPORT

DEVICE INFO LOGS STATISTICS INTERNET SESSIONS WIRELESS

LOGS
View Log displays the activities occurring on the DIR-813.

LOG SETTINGS
Save Settings Don't Save Settings

LOG TYPE
☒ System All ☐ Firewall & Security ☐ Wireless

VIEW LOG
First Page Last Page Previous Next Page Clear

Page 1 of 1

Time and Date	Message
Jun 04 11:42:02	DHCPD send NAK packet!
Jun 04 11:42:30	Ethernet port1 link down
Jun 04 11:42:32	Ethernet port1 link up
Jun 04 11:42:33	DHCPD receive REQUEST packet!
Jun 04 11:42:33	DHCPD send ACK packet!

Helpful Hints...
Check the log frequently to detect unauthorized network usage.
You can also have the log mailed to you periodically. Refer to

Statistics

The window below displays the traffic statistics on your router.

DIR-813

///

DEVICE INFO

LOGS

STATISTICS

INTERNET SESSIONS

WIRELESS

SETUP

ADVANCED

TOOLS

STATUS

SUPPORT

TRAFFIC STATISTICS

Traffic Statistics display Receive and Transmit packets passing through your router.

Refresh

Reset

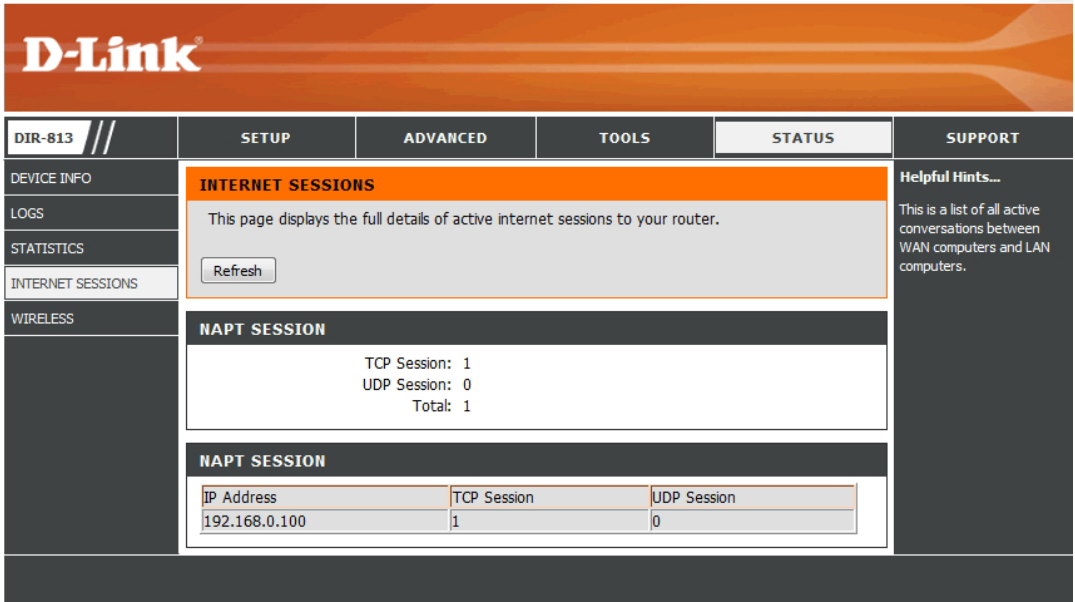
	Received	Transmit
Internet	22384	1824
LAN	5125	14888
WIRELESS 5G	784011	2618
WIRELESS 2.4G	427420	14098

Helpful Hints...

This is a summary of the number of packets that have passed between the WAN and the LAN since the router was last initialized.

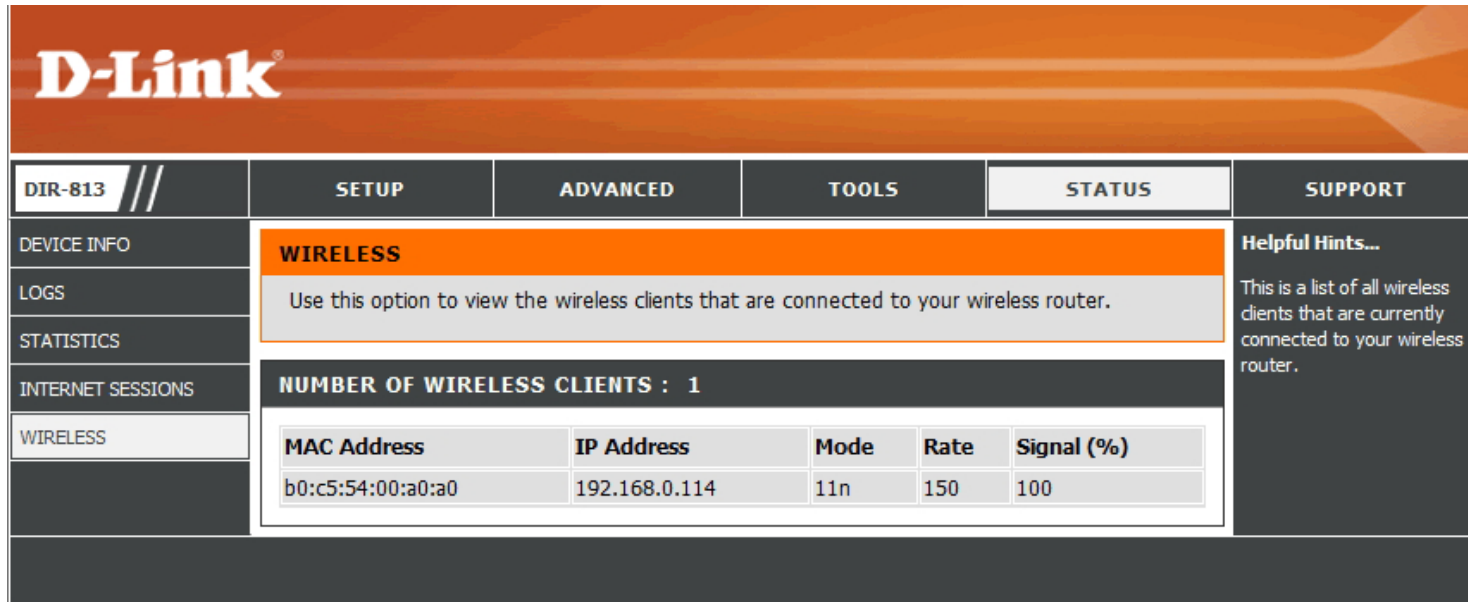
Internet Sessions

The Internet Sessions page displays full details of active Internet sessions through your router. An Internet session is a conversation between a program or application on a LAN-side computer and a program or application on a WAN-side computer.



Wireless

The wireless client table displays a list of current connected wireless clients. This table also displays the connection rate and MAC address of the connected wireless clients.



The screenshot shows the D-Link DIR-813 web interface. The top navigation bar includes links for DIR-813, SETUP, ADVANCED, TOOLS, STATUS, and SUPPORT. The left sidebar contains links for DEVICE INFO, LOGS, STATISTICS, INTERNET SESSIONS, and WIRELESS. The main content area is titled 'WIRELESS' and contains a message: 'Use this option to view the wireless clients that are connected to your wireless router.' Below this, it states 'NUMBER OF WIRELESS CLIENTS : 1'. A table lists the connected client's details:

MAC Address	IP Address	Mode	Rate	Signal (%)
b0:c5:54:00:a0:a0	192.168.0.114	11n	150	100

On the right side of the main content area, there is a 'Helpful Hints...' section with the text: 'This is a list of all wireless clients that are currently connected to your wireless router.'

Support

Click the desired hyperlink to get more information about how to use the Router.

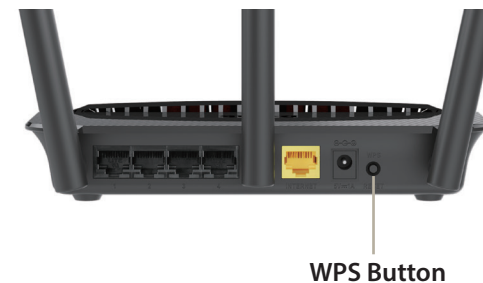


Connect a Wireless Client to your Router

WPS Button

The easiest and most secure way to connect your wireless devices to the router is WPS (Wi-Fi Protected Setup). Most wireless devices such as wireless adapters, media players, Blu-ray DVD players, wireless printers and cameras will have a WPS button (or a software utility with WPS) that you can press to connect to the DIR-813 router. Please refer to your user manual for the wireless device you want to connect to make sure you understand how to enable WPS. Once you know, follow the steps below:

Step 1 - Press for one second to start the WPS process. The WPS LED will blink during the process.



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

Step 3 - Allow up to 1 minute to configure. Once the WPS light stops blinking, you will be connected and your wireless connection will be secure with WPA2.

Windows® 8

WPA/WPA2

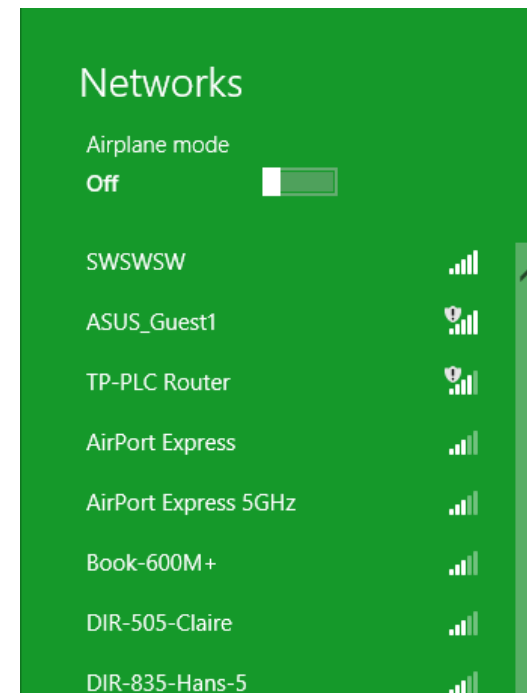
It is recommended that you enable wireless security (WPA/WPA2) on your wireless router or access point before configuring your wireless adapter. If you are joining an existing network, you will need to know the security key (Wi-Fi password) being used.

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



Wireless Icon

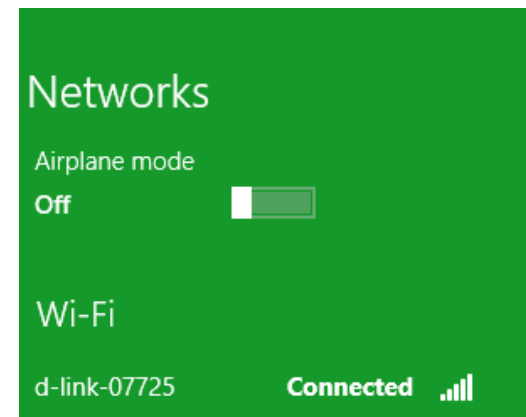
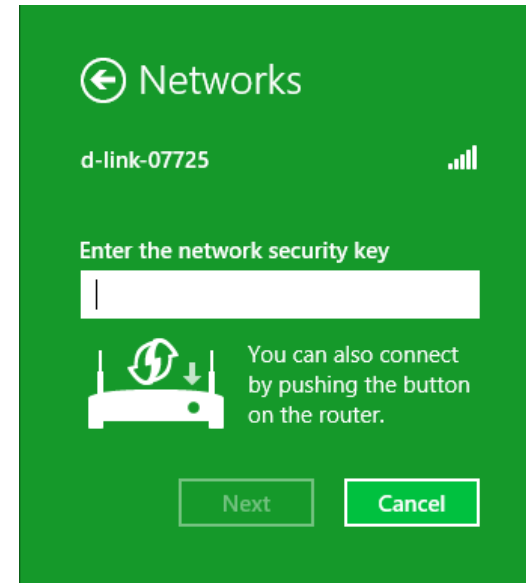
Clicking on this icon will display a list of wireless networks that are within connecting proximity of your computer. Select the desired network by clicking on the network name.



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

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



Wireless Icon

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

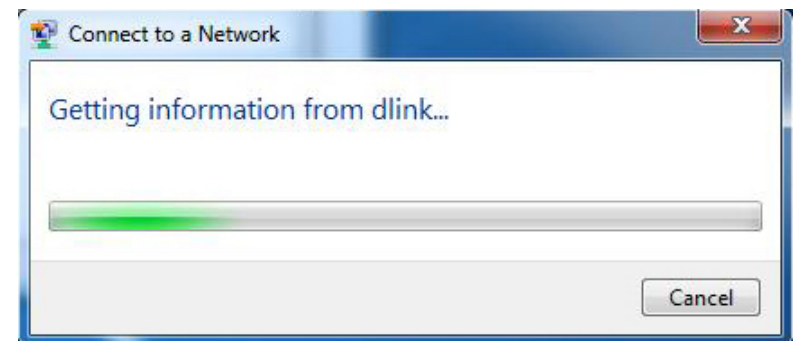


3. Highlight the wireless network (SSID) you would like to connect to and click the **Connect** button.

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

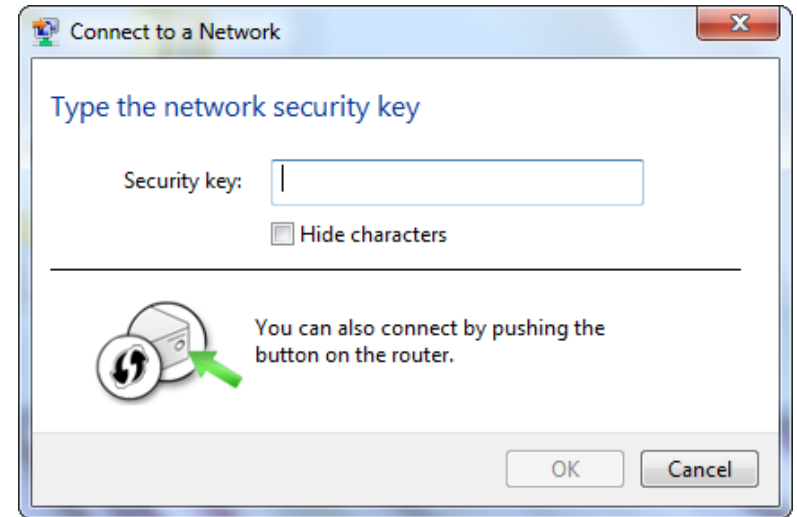


4. The following window appears while your computer tries to connect to the router.



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

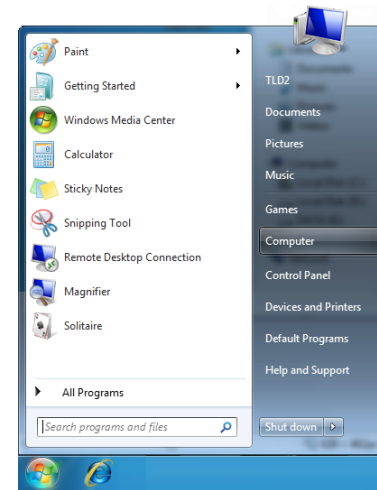
It may take 20-30 seconds to connect to the wireless network. If the connection fails, please verify that the security settings are correct. The key or passphrase must be exactly the same as on the wireless router.



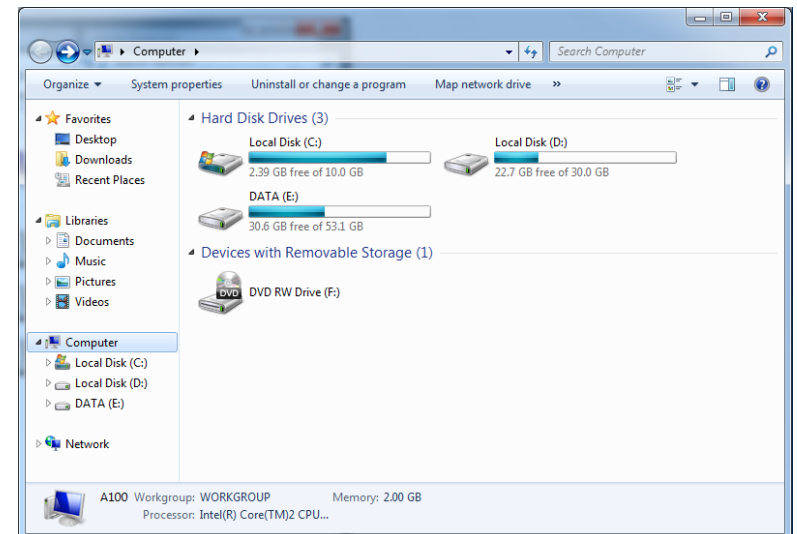
WPS

The WPS feature of the DIR-813 can be configured using Windows® 7. Carry out the following steps to use Windows® 7 to configure the WPS feature:

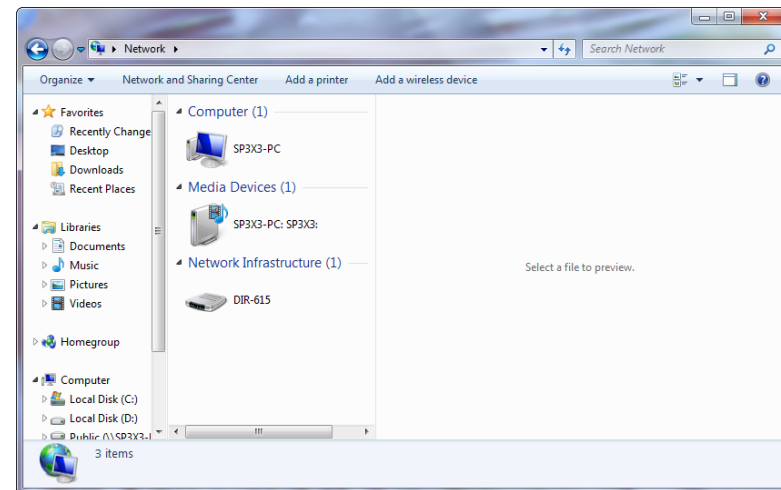
1. Click the **Start** button and select **Computer** from the Start menu.



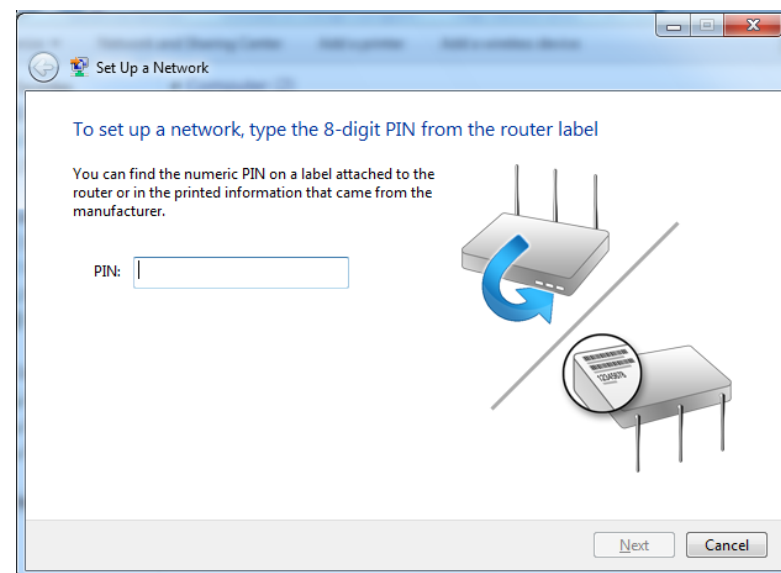
2. Click **Network** on the left side.



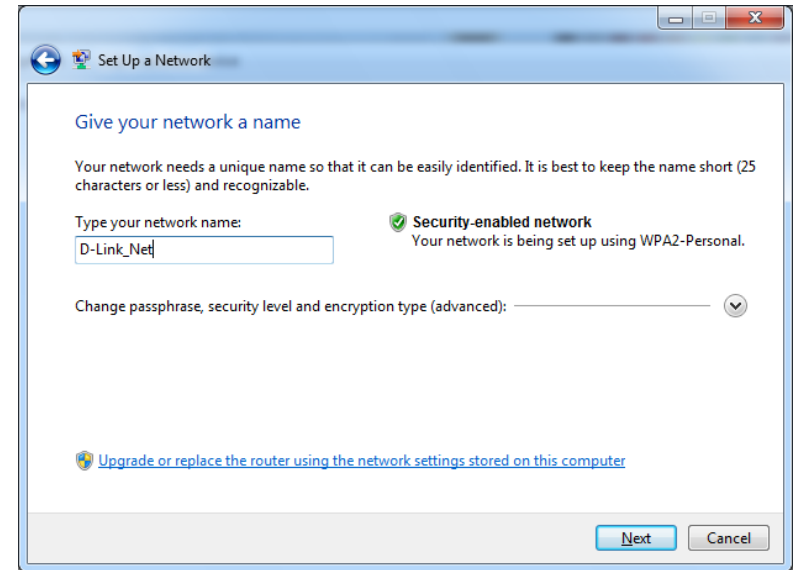
3. Double-click the DIR-813.



4. Input the WPS PIN number (displayed in the WPS window on the Router's LCD screen or in the **Setup** > **Wireless Setup** menu in the Router's Web UI) and click **Next**.

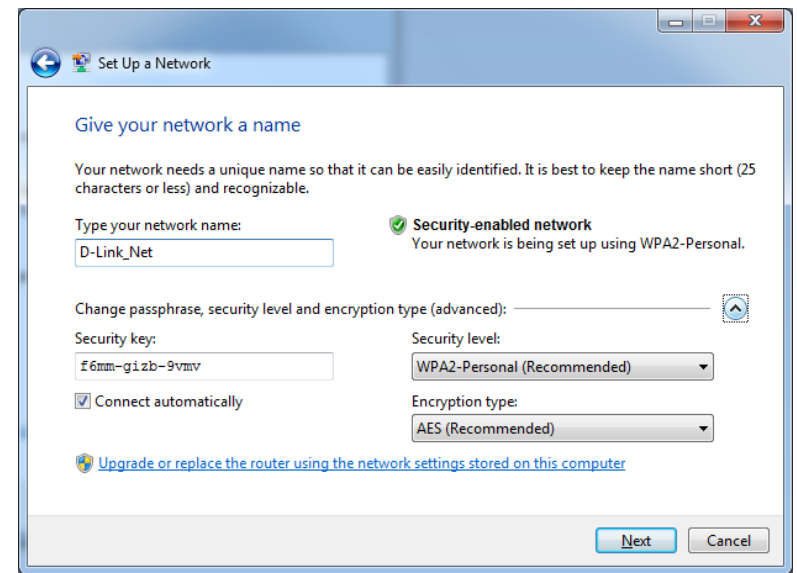


5. Type a name to identify the network.



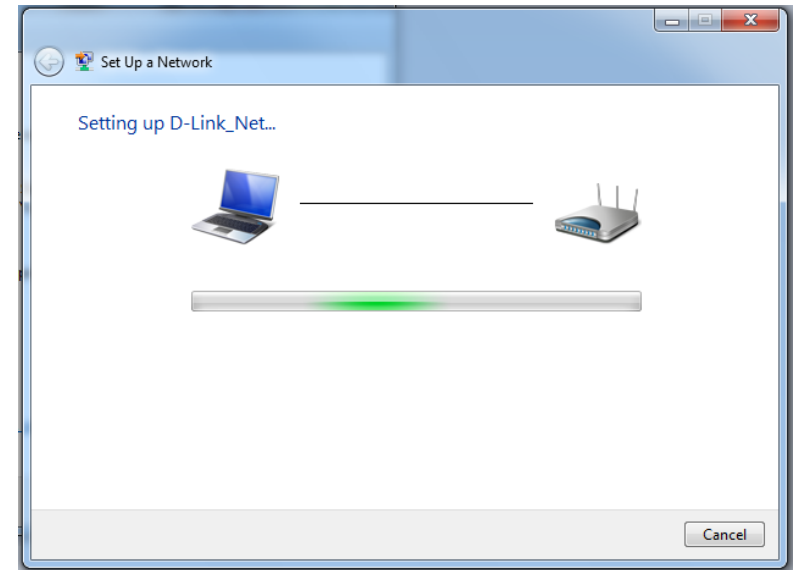
6. To configure advanced settings, click the  icon.

Click **Next** to continue.



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

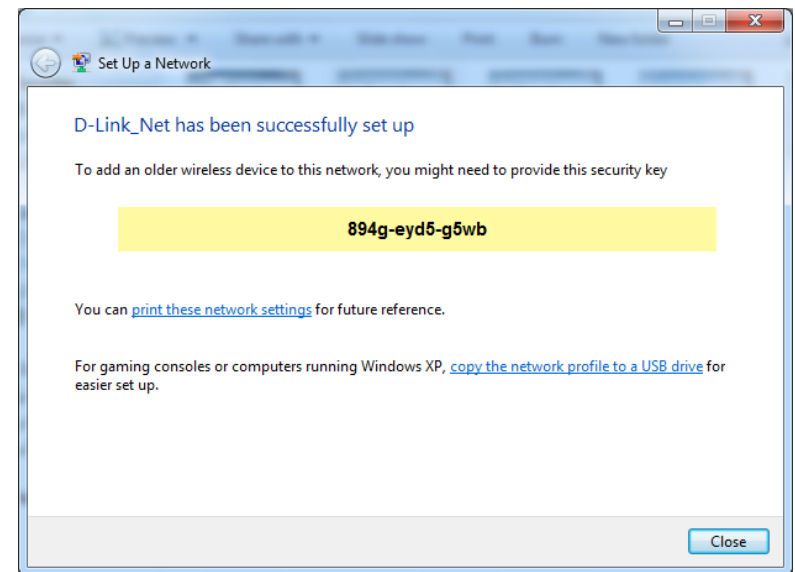
Wait for the configuration to complete.



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

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

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



Windows Vista®

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

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

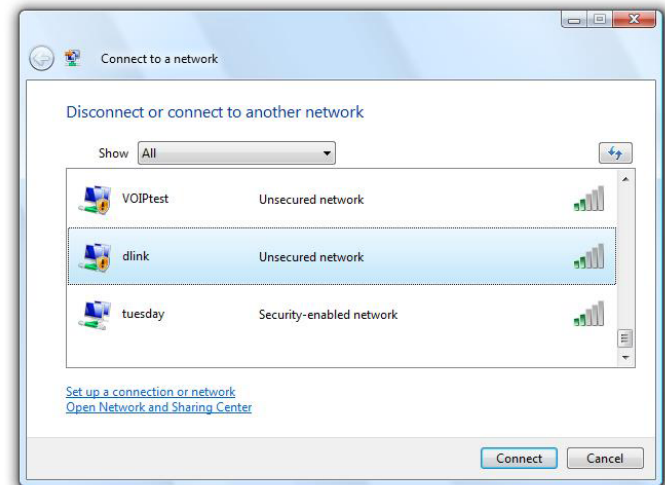
or

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



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

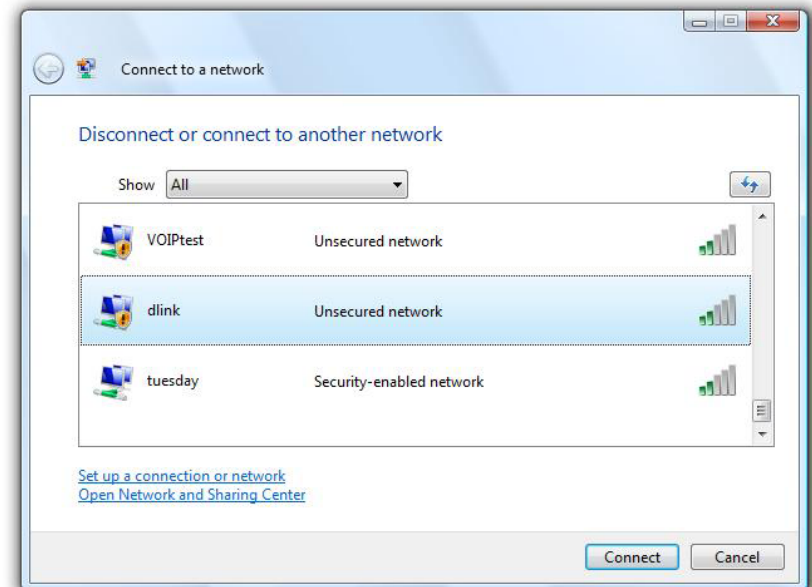
If you get a good signal but cannot access the Internet, check you TCP/IP settings for your wireless adapter. Refer to the **Networking Basics** section in this manual for more information.



WPA/WPA2

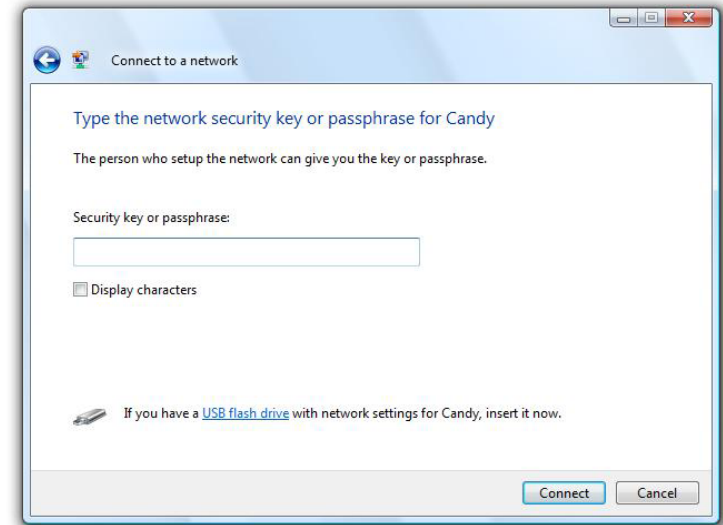
It is recommended to enable wireless security (WPA/WPA2) on your wireless router or access point before configuring your wireless adapter. If you are joining an existing network, you will need to know the security key or passphrase being used.

1. Open the Windows Vista® Wireless Utility by right-clicking on the wireless computer icon in your system tray (lower right corner of screen). Select **Connect to a network**.
2. Highlight the wireless network (SSID) you would like to connect to and click **Connect**.



3. Enter the same security key or passphrase that is on your router and click **Connect**.

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

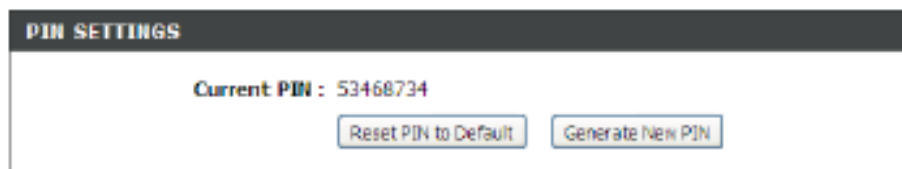


WPS/WCN 2.0

The router supports Wi-Fi protection, referred to as WCN 2.0 in Windows Vista®. The following instructions for setting this up depends on whether you are using Windows Vista® to configure the router or third party software.

When you first set up the router, Wi-Fi protection is disabled and unconfigured. To enjoy the benefits of Wi-Fi protection, the router must be both enabled and configured. There are three basic methods to accomplish this: use Windows Vista's built-in support for WCN 2.0, use software provided by a third party, or manually configure.

If you are running Windows Vista®, log into the router and click the **Enable** checkbox in the **Basic > Wireless** section. Use the Current PIN that is displayed on the **Advanced > Wi-Fi Protected Setup** section or choose to click the **Generate New PIN** button or **Reset PIN to Default** button.



If you are using third party software to set up Wi-Fi Protection, carefully follow the directions. When you are finished, proceed to the next section to set up the newly-configured router.

Troubleshooting

This chapter provides solutions to problems that can occur during the installation and operation of the DIR-813. Read the following descriptions if you are having problems. (The examples below are illustrated in Windows® XP. If you have a different operating system, the screenshots on your computer will look similar to the following examples.)

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

When entering the IP address of the D-Link router (192.168.0.1 for example), you are not connecting to a website on the Internet or have to be connected to the Internet. The device has the utility built-in to a ROM chip in the device itself. Your computer must be on the same IP subnet to connect to the web-based utility.

- Make sure you have an updated Java-enabled web browser. We recommend the following:
 - Internet Explorer 8 or higher
 - Firefox 20 or higher
 - Safari 5 or higher
 - Chrome 20 or higher
- Verify physical connectivity by checking for solid link lights on the device. If you do not get a solid link light, try using a different cable or connect to a different port on the device if possible. If the computer is turned off, the link light may not be on.
- Disable any internet security software running on the computer. Software firewalls such as Zone Alarm, Black Ice, Sygate, Norton Personal Firewall, and Windows® XP firewall may block access to the configuration pages. Check the help files included with your firewall software for more information on disabling or configuring it.

- 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 the web management.
 - If you still cannot access the configuration, unplug the power to the router for 10 seconds and plug back in. Wait about 30 seconds and try accessing the configuration. If you have multiple computers, try connecting using a different computer.

2. What can I do if I forgot my password?

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

To reset the router, locate the reset button (hole) on the rear panel of the unit. With the router powered on, use a paperclip to hold the button down for 10 seconds. Release the button and the router will go through its reboot process. Wait about 30 seconds to access the router. The default IP address is 192.168.0.1. When logging in, the username is **admin** and leave the password box empty.

3. Why can't I connect to certain sites or send and receive emails when connecting through my router?

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

Note: AOL DSL+ users must use MTU of 1400.

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

- Click on **Start** and then click **Run**.
- Windows® 95, 98, and Me users type in **command** (Windows® NT, 2000, and XP 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 the **Save Settings** button to save your settings.
- Test your email. If changing the MTU does not resolve the problem, continue changing the MTU in increments of ten.

Wireless Basics

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

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

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

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

What is Wireless?

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

Why D-Link Wireless?

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

How does wireless work?

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

Wireless Local Area Network (WLAN)

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

Wireless Personal Area Network (WPAN)

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

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

Who uses wireless?

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

Home

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

Small Office and Home Office

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

Where is wireless used?

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

Using a D-Link Cardbus Adapter with your laptop, you can access the hotspot to connect to Internet from remote locations like airports, hotels, coffee shops, libraries, restaurants, and convention centers.

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

Tips

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

Centralize your router or Access Point

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

For the wireless repeater, there are two types of repeater in D-Link for user to select:

- Universal repeater: It acts as an AP and a wireless STA at the same time. It can support all AP and wireless STA if they work in the same wireless channel.
- AP-repeater (AP with WDS): only repeat same model or limited models which base on the same proprietary protocol.

Please choose a universal repeater to boost the signal to extend the range.

Eliminate Interference

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

Security

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

Wireless Modes

There are basically two modes of networking:

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

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

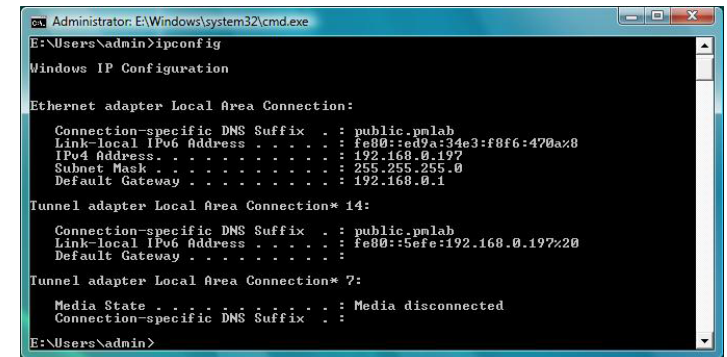
To verify your IP address, please follow the steps below:

Windows® 8 Users

- Press the **Windows key** and **R** together. Type **cmd** in the box and click **OK**.
- At the prompt, type **ipconfig** and press **Enter**.
- This will display the IP address, subnet mask, and default gateway of your adapter.

Windows® 7/Vista® Users

- Click **Start**, type **cmd** in the search box and then click **OK**.
- At the prompt, type **ipconfig** and press **Enter**.
- This will display the IP address, subnet mask, and default gateway of your adapter.



```
Administrator: E:\Windows\system32\cmd.exe
E:\Users\Admin>ipconfig

Windows IP Configuration

Ethernet adapter Local Area Connection:

    Connection-specific DNS Suffix  . : public.pmlab
    Link-local IPv6 Address . . . . . : fe80::ed9a:34e3:f8f6:470a%8
    IPv4 Address. . . . . : 192.168.0.197
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 192.168.0.1

Tunnel adapter Local Area Connection* 14:

    Connection-specific DNS Suffix  . : public.pmlab
    Link-local IPv6 Address . . . . . : fe80::5efe:192.168.0.197%20
    Default Gateway . . . . . :

Tunnel adapter Local Area Connection* 7:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix  . :

E:\Users\Admin>
```

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

Statically Assign an IP address

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

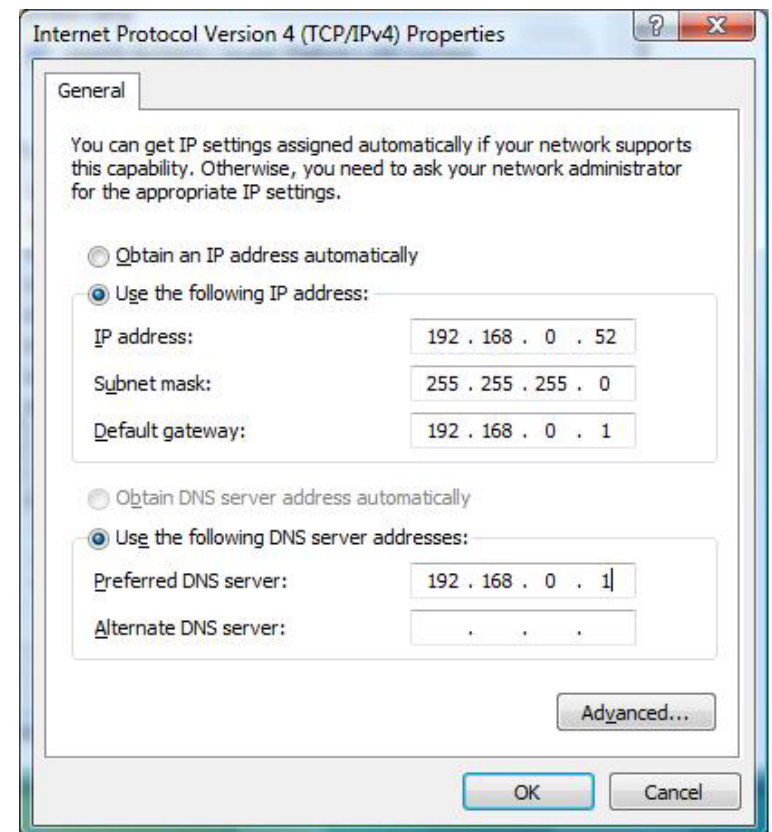
Windows® 8 Users

- Press the **Windows** key and then type **IP**. Click **Settings** on the right side and then click **View Network Connections**.
- Right-click on the adapter which represents your D-Link wireless network adapter.
- Highlight **Internet Protocol Version 4 (TCP /IPv4)** and click **Properties**.

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

Example: If the router's LAN IP address is 192.168.0.1, make your IP address 192.168.0.X where X is a number between 2 and 99. Make sure that the number you choose is not in use on the network.

- Set **Default Gateway** the same as the LAN IP address of your router or gateway.
- Set **Primary DNS** the same as the LAN IP address of your router or gateway.
- The **Secondary DNS** is optional (you may enter a DNS server from your ISP).
- Click **OK** to save your settings.

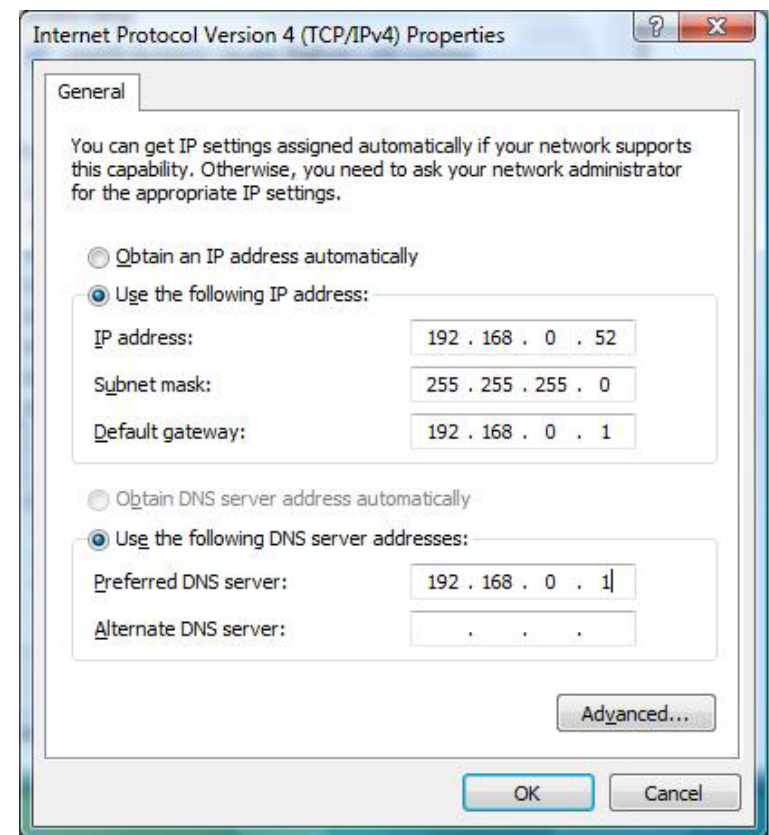


Windows® 7/ Vista® Users

- Click on **Start > Control Panel** (make sure you are in Classic View). Double-click on the **Network and Sharing Center** icon. If you are using Windows Vista, click on **Manage network connections** along the left panel in the window. For Windows® 7, click on **Change adapter settings**.
- Right-click on the **Local Area Connection** which represents your D-Link wireless network adapter which will be connected to your network.
- Highlight **Internet Protocol Version 4 (TCP /IPv4)** and click **Properties**.
- Click **Use the following IP address** and enter an IP address that is on the same subnet as your network or LAN IP address on your router or network.

Example: If the router's LAN IP address is 192.168.0.1, make your IP address 192.168.0.X where X is a number between 2 and 99. Make sure that the number you choose is not in use on the network.

- Set **Default Gateway** the same as the LAN IP address of your router or gateway.
- Set **Primary DNS** the same as the LAN IP address of your router or gateway.
- The **Secondary DNS** is optional (you may enter a DNS server from your ISP).
- Click **OK** to save your settings.



Technical Specifications

Standards

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

Security

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

External Antenna Type

- Three fixed external antenna

Advanced Features

- VPN passthrough/multi-session PPTP/L2TP/IPSec
- Multi-language web setup wizard
- Green Ethernet
- Web Setup Wizard
- Dual Active Firewall (IPv4/IPv6)
- Stack Network Address Translation (NAT)
- Stateful Packet Inspection (SPI)
- Wireless Repeater

Power

- Input: 100 to 240V AC, 50/60 Hz
- Output: 5 V DC, 1A

Temperature

- Operating: 32 to 104 °F
- Storage: -4 to 149 °F

Humidity

- Operating: 10% to 90% non-condensing
- Storage: 5% to 95% non-condensing

Safety and Emissions

- FCC

LEDs

- Power
- LAN (x4)
- Internet
- WPS
- WLAN (Internet)

Dimensions (excludes antennas)

- 7.48 x 5.24 x 1.25 inches

Weight

- 0.5 lb

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-813)
- Hardware Revision (located on the label on the bottom of the router (e.g. rev B1))
- Serial Number (s/n number located on the label on the bottom of the router).

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

For customers within the United States:

Phone Support:

(877) 453-5465

Internet Support:

<http://support.dlink.com>

For customers within Canada:

Phone Support:

(800) 361-5265

Internet Support:

<http://support.dlink.ca>

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.

- One (1) Year Limited Warranty

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 1-877-453-5465, who will attempt to assist the customer in resolving any suspected defects with the product. If the product is considered defective, the customer must obtain a Return Material Authorization ("RMA") number by completing the RMA form and entering the assigned Case ID Number at <https://rma.dlink.com/>.

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

Submitting A Claim (Canada):

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

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

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

What Is Not Covered:

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

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

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

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.

Trademarks:

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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.

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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