## **D-Link**<sup>®</sup>



## **User Manual**

## Wireless AC750 Dual Band Router

**DIR-803** 

## Preface

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

### **Manual Revisions**

Revision	Date	Description
1.0	November 18, 2013	Initial release for Revision A1

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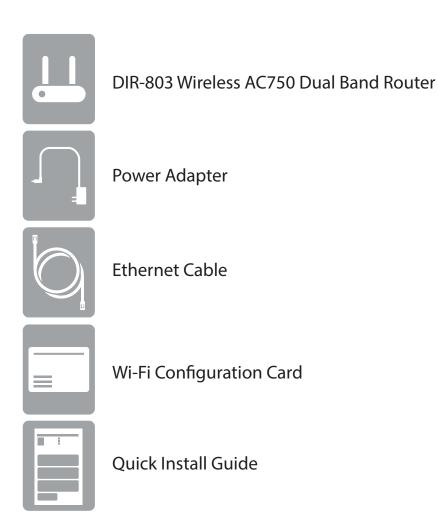
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## Package Contents



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

**Note:** Using a power supply with a different voltage rating than the one included with the DIR-803 will cause damage and void the warranty for this product.

## System Requirements

Network Requirements	<ul> <li>An Ethernet-based broadband modem</li> <li>IEEE 802.11ac, 802.11a, 802.11n, or 802.11g wireless clients</li> </ul>
Web-based Configuration Utility Requirements	<ul> <li>Computer with the following: <ul> <li>Windows® 8, 7, Vista®, XP SP2, Mac OS® X (v10.4)</li> <li>An installed Ethernet adapter or wireless adapter</li> </ul> </li> <li>Supported Browsers: <ul> <li>Internet Explorer 7 or higher</li> <li>Firefox</li> <li>Safari 4 or higher</li> <li>Chrome</li> </ul> </li> <li>Windows® Users: Make sure you have the latest version of Java installed. Visit www.java.com to download the latest version.</li> </ul>
Mobile Requirements	<b>QRS Mobile App Requires:</b> • iOS 4.3 or higher • Android 2.0 or higher

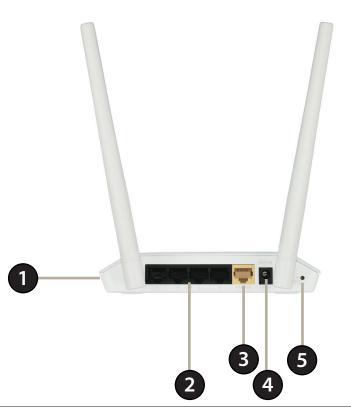
## Introduction

The DIR-803 Wireless AC750 Dual Band Router delivers revolutionary wireless speed, up to three times faster than 802.11n, while staying backward compatible with 802.11a/g/b devices. Connect the DIR-803 to a Cable or DSL modem for high-speed Internet access to multiple computers, video game consoles, and media players. Powered by the 802.11ac technology, this router provides wireless coverage for users running bandwidth-intensive applications.

The DIR-803 supports the latest wireless security features to help prevent unauthorized access over a wireless network or over the Internet. Support for WPA<sup>™</sup> and WPA2<sup>™</sup> standards ensure that you will be able to use the best possible encryption regardless of your client devices. In addition, this router utilizes Dual Active Firewalls (SPI and NAT) to prevent potential attacks from across the Internet.

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

## Hardware Overview Connections



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



1	Power LED	A solid green light indicates a proper connection to the power supply. The light will blink during boot-up.
2	Internet LED	A solid green light indicates a connection to your broadband modem.
3	WPS LED	This LED will blink during the WPS process.
4	Wireless LED	A solid light indicates that the wireless segment is ready. The light blinks during wireless data transmission.
5	LAN LEDs (1-4)	A solid green light indicates a connection to an Ethernet device, such as a computer, switch or video game console.

# Installation

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

## **Before you Begin**

- Please configure the router with the computer that was last connected directly to your modem.
- Users with DSL providers If you are using a PPPoE connection, you will need your PPPoE user name and password. If you do not have this information, contact your Internet provider. Do not proceed until you have this information.
- Users with Cable providers Make sure you unplug the power to your modem. In some cases, you may need to turn it off for up to 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-803 router can work properly. Please contact your ISP or refer to the user manual for your modem/router device.

## **Wireless Installation Considerations**

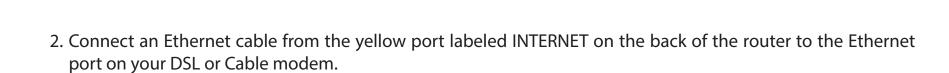
The D-Link wireless router lets you access your network using a wireless connection from virtually anywhere within the operating range of your wireless network. Keep in mind, however, that the number, thickness and location of walls, ceilings, or other objects that the wireless signals must pass through,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

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

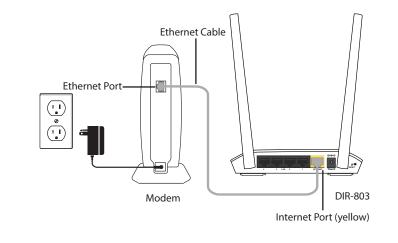
## **Connect to your Network**

1. Turn off and unplug your DSL or Cable modem. This is required. If you have an existing router, it is strongly recommended that you replace it with the DIR-803, instead of using both. (Refer to "Connect to an Existing Router" on page 11 if your modem is a combo router.)

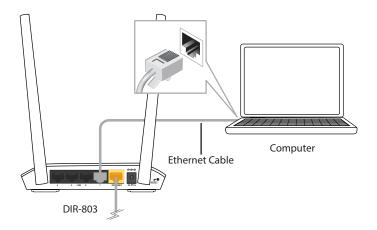
Modem



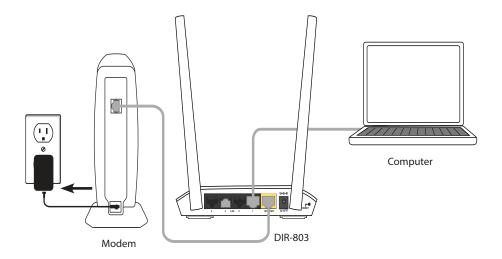
 $(\Box)$ 



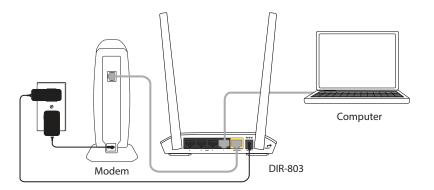
3. Connect another Ethernet cable from the Ethernet port on your computer to one of the LAN ports on the back of your router.



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



5. Plug the power adapter into the power receptor on the back of your router and connect to an available power outlet or surge protector.



6. After the router has powered up, verify that the power and Internet LEDs are both lit. Please skip to "Configuration" on page 13 for your router configuration choices. If you did not connect to the Internet, you can use the *D-Link Setup Wizard* (refer to "Quick Setup Wizard" on page 14).

## **Connect to an Existing Router**

**Note:** It is strongly recommended that you replace your existing router with the DIR-803 instead of using both. If your modem is a combo router, you may want to contact your ISP or review the manufacturer's user guide so you can put the router into Bridge mode, which will 'turn off' the router's (NAT) functions.

If you are connecting the DIR-803 router to an existing router to use as a wireless access point and/or switch, you will have to do the following to the DIR-803 before connecting it to your network:

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

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

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

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

# Configuration

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

- **QRS Mobile App** Use your iPhone, iPad, or Android device to configure your router. Refer to "QRS Mobile App" on page 19.
- D-Link Setup Wizard This wizard will launch when you log into the router for the first time. Refer to "Quick Setup Wizard" on page 14.
- Manual Setup Log into the router and manually configure your router (advanced users only). Refer to "Internet Connection Setup" on page 21.

## **Quick Setup Wizard**

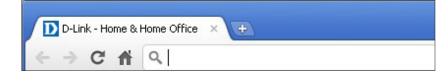
If this is your first time installing the router, launch your web browser (e.g., Internet Explorer), and you will automatically be directed to the **Setup Wizard** screen.

If you have already completed the initial setup, and you would like to access the configuration utility, refer to "Web-based Configuration Utility" on page 20.

If this is your first time logging into the router, and the wizard does not start automatically, enter **http://192.168.0.1**.

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

Click Next to continue.



WELCOME TO THE D-LINK SETUP WIZARD
This wizard will guide you through a step-by-step process to configure your new D-Link router and connect to the Internet.
<ul> <li>Step 1: Configure your Internet Connection</li> <li>Step 2: Configure your Wi-Fi Security</li> <li>Step 3: Set your Password</li> <li>Step 4: Select your Time Zone</li> <li>Step 5: Confirm WI-FI settings</li> </ul>
Next Cancel

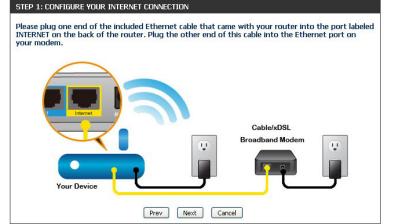
Please wait while your router detects your internet connection type. If the router detects your Internet connection, you may need to enter your ISP information such as username and password. (See instructions on page 16 for PPPoE, PPTP and L2TP).

Routers is detecti	og vour Inter	net connectio	n type r	lease wait		
			an etherth		-	
	181					
		Prev	Next	Cancel		

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

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

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



STEP 1: CONFIGURE YOUR INTERNET CONNECTION
Router is unable to detect your Internet connection type.
Cancel Try again Guide me through the Internet connection settings

If yo	P 1: CONFIGURE YOUR INTERNET CONNECTION pur Internet Service Provider was not listed or you don't know who it is, please select the rnet connection type below:
۲	DHCP Connection (Dynamic IP Address)
	Choose this if your Internet connection automatically provides you with an IP Address. Most Cable Modems use this type of connection.
$\circ$	Username / Password Connection (PPPoE)
	Choose this option if your Internet connection requires a username and password to get online. Most DSL modems use this type of connection.
	Username / Password Connection (PPTP) PPTP client.
	Username / Password Connection (L2TP) L2TP client.
$\bigcirc$	Static IP Address Connection
	Choose this option if your Internet Setup Provider provided you with IP Address information that has to be manually configured.
	Prev Next Cancel

D-Link DIR-803 User Manual

Section 3 - Configuration

If the router detected or you selected **PPPoE**, enter your PPPoE **User Name** and **Password** and click **Next** to continue.

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

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

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

Set username and password CC	INNECTION (PPPOE)
	need to have a Username and Password from your Internet e this information, please contact your ISP.
User Name	
Password	
	Prev Next Cancel

SET USERNAME AND PASSWORD CO	INNECTION (PPTP)
	eed to have a Username and Password from your Internet P IP address. If you do not have this information, please contact
Address Mode	: 💿 Dynamic IP 🔘 Static IP
PPTP IP Address	• 0.0.0.0
PPTP Subnet Mask	. 0.0.0.0
PPTP Gateway IP Address	. 0.0.0.0
PPTP Server IP Address (may be same as gateway) User Name	
Password	:
Verify Password	:
DNS SETTINGS	
Primary DNS Address	:
Secondary DNS Address	:
	Prev Next Cancel

SET USERNAME AND PASSWORD CO	NNECTION (L2TP)
	eed to have a Username and Password from your Internet P IP address. If you do not have this information, please contact
Address Mode	: 💿 Dynamic IP 🔘 Static IP
L2TP IP Address	0.0.0.0
L2TP Subnet Mask	0.0.0.0
L2TP Gateway IP Address	0.0.0.0
L2TP Server IP Address (may be same as gateway) User Name Password	:
Verify Password	
DNS SETTINGS	
Primary DNS Address Secondary DNS Address	

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

	eed to have a complete list of IP information provided by your e a Static IP connection and do not have this information,
IP Address	0.0.0.0
Subnet Mask	0.0.0.0
Gateway Address	: 0.0.0.0
DNS SETTINGS	
Primary DNS Address	: 0.0.0.0
Secondary DNS Address	: 0.0.0.0
1	Prev Next Cancel

SET STATIC IP ADDRESS CONNECTION

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

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

Click Next to continue.

	rk a name and a password. (2.4GHz Band)
Wi-Fi Network Name (S	
dlink-F860	(Using up to 32 characters)
Wi-Fi Password :	
qqqqqqq Give your Wi-Fi netwo	(Between 8 and 63 characters)
	rk a name and a password. (5GHz Band)
Give your Wi-Fi netwo	rk a name and a password. (5GHz Band)
Give your Wi-Fi netwo Wi-Fi Network Name (S	rk a name and a password. (5GHz Band) (SDD) :

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

ep 3: set your password	STEP 3: SET YOUR PASSWORD
default, your new D-Link Router does not have a password configured for administrator access the Web-based configuration pages. To secure your new networking device, please set and verify assword below, and enabling CAPTCHA Graphical Authentication provides added security otection to prevent unauthorized online users and hacker software from accessing your network tings.	to the Web-based configuration page a password below, and enabling CA
Password :	
Enable Graphical Authentication : 🔲	Enable Graphical Authentication
Prev Next Cancel	

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

The *Confirm Wi-Fi Settings* window will display your wireless settings. Make a note of this information so you can configure your Wi-Fi devices. Click **Next** to continue.

The Saving Settings window will appear.

STEP 4: SELECT	Your time zone	
	priate time zone for your location. This information is required to configure the	
	(GMT-08:00) Pacific Time (US & Canada, Tijuana 💌	
	Prev Next Cancel	

STEP 5: CONFIRM WI-FI SETTINGS	
	r Wi-Fi security settings. Please print this page out, or write the you can configure the correct settings on your Wi-Fi devices.
Wi-Fi Network Name (SSID) 2.4GHz	: dlink-F860
Wi-Fi Password	: qqqqqqqq
Wi-Fi Network Name (SSID) 5GHz	: dlink-F860-5GHz
Wi-Fi Password	: qqqqqqqq
	Prev Save Cancel

SAVING SETTINGS		
	Your settings are being saved.	
	Please wait	
	Checking WAN connectivity.	

If you would like to create a bookmark to *D-Link Router Web Management*, click **OK**. Otherwise, click **Cancel**.

STEP 5: CONFIRM WI-FI	SETTINGS
	nary of your Wi-Fi security settings. Please print this page out, or write the f paper, so you can configure the correct settings on your Wi-Fi devices.
Wi-Fi Network Name (St Wi-	Do you want to bookmark "D-Link Router Web Management"?
Wi-Fi Network Name (- Wi-	OK Cancel
	Prev Save Cancel

## **QRS Mobile App**

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

### Step 1

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

You may also scan this code to download.



### Step 2

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

### Step 3

Once you connect to the router, launch the *QRS Mobile* app and it will guide you through the installation process for your router.



D-Link Wi-Fi Confi	iguration Card
Default Configuration	Wi-Fi Name(SSID) 2.4GHz:
Wi-Fi Name(SSID) 2.4Ghz: dlink-xxxx	Wi-Fi Password:
Wi-Fi Name(SSID) 5GHz: dlink-xxxx-5GHz	Wi-Fi Name(SSID) 5GHz *:
Password: xxxxxxxx	Wi-Fi Password *:
To configure your router, go to: http://dlinkrouter.local. Or http://192.168.0.1	Your configuration Username: "Admin" Password:
Username: "Admin" Password:"" (leave the field blank)	*For applicable models
	DCWWROW



## Web-based Configuration Utility

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

Enter your password and click **Login**.

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

OGIN	
ogin to the router :	
	User Name : Admin
	Password : Login

http://dlinkrouter.local./



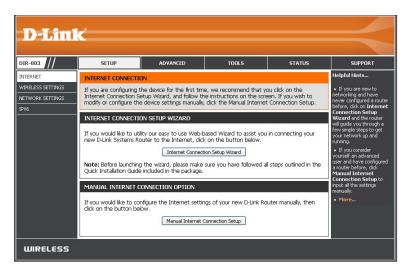
### **Internet Connection Setup**

If you want to configure your router to connect to the Internet using the wizard, click **Internet Connection Setup Wizard**. Refer to "Internet Connection Setup Wizard" on page 30.

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

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

At any given time, you can save the configuration by clicking on the **Save Settings** button. If you would like to discard any changes made, click on **Don't Save Settings**.





### Manual Internet Setup Static (assigned by ISP)

Select Static IP if all the IP information is provided to you by your ISP (Internet Service Provider).

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

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

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

Default Gateway: Enter the Gateway assigned by your ISP.

DNS Servers: Enter the DNS Server information supplied by your ISP.

- MTU: Maximum Transmission Unit you may need to change the MTU for optimal performance with your specific ISP. 1500 is the default MTU.
- MAC Address: The default MAC Address is set to the Internet port's physical interface MAC address on the Broadband Router. It is not recommended that you change the default MAC address unless required by your ISP. You can use the **Clone Your PC's MAC Address** button to replace the Internet port's MAC address with the MAC address of your Ethernet card.



### Internet Setup Dynamic (Cable)

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

- Host Name: The Host Name is optional but may be required by some ISPs. Leave blank if you are not sure.
- **Use Unicasting:** Check the box if you are having problems obtaining an IP address from your ISP.
- Primary/Secondary Enter the Primary and Secondary DNS Server IP addresses DNS Servers: assigned by your ISP. These addresses are usually obtained automatically from your ISP. Leave blank if you did not specifically receive these from your ISP.
  - **MTU:** Maximum Transmission Unit you may need to change the **MTU** for optimal performance with your specific ISP. 1500 is the default MTU.
  - MAC Address: The default MAC Address is set to the Internet port's physical interface MAC address on the Broadband Router. It is not recommended that you change the default MAC address unless required by your ISP. You can use the **Clone Your PC's MAC** Address button to replace the Internet port's MAC address with the MAC address of your Ethernet card.



### Internet Setup PPPoE (DSL)

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

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

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

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

Username: Enter your PPPoE Username.

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

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

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

- Maximum Idle Enter a Maximum Idle Time during which the Internet connection is Time: maintained during inactivity. Enable Auto-reconnect to disable this feature.
  - **DNS Mode:** Allows the router to obtain the DNS IP address from the ISP when **Receive DNS from ISP** is selected.



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

- MTU: Maximum Transmission Unit you may need to change the MTU for optimal performance with your specific ISP. 1492 is the default MTU.
- MAC Address: The default MAC Address is set to the Internet port's physical interface MAC address on the Broadband Router. It is not recommended that you change the default MAC address unless required by your ISP. You can use the **Clone Your PC's MAC** Address button to replace the Internet port's MAC address with the MAC address of your Ethernet card.

### Internet Setup PPTP

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

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

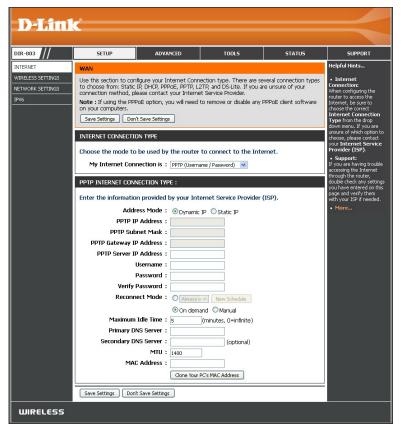
Address Mode: Select Static IP if your ISP assigned you the IP address, subnet mask, gateway, and DNS server addresses. In most cases, select **Dynamic IP**.

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

- PPTP Subnet Enter the Subnet Mask (Static PPTP only). Mask:
- PPTP Gateway IP Enter the Gateway IP Address provided by your ISP. Address:
  - PPTP Server IP Enter the Server IP Address provided by your ISP (optional). Address:

Username: Enter your PPTP Username.

- **Password:** Enter your PPTP **Password** and then retype the password in the next box.
- Reconnect Mode: Select either Always-on, On-Demand, or Manual.
  - Maximum Idle Enter a Maximum Idle Time during which the Internet connection is maintained during inactivity. To disable this feature, enable Time: Auto-reconnect.
    - DNS Servers: Enter the Primary and Secondary DNS Server Addresses. The DNS server information will be supplied by your ISP.



- MTU: Maximum Transmission Unit you may need to change the MTU for optimal performance with your specific ISP. 1400 is the default MTU.
- MAC Address: The default MAC Address is set to the Internet port's physical interface MAC address on the Broadband Router. It is not recommended that you change the default MAC address unless required by your ISP. You can use the **Clone Your PC's MAC Address** button to replace the Internet port's MAC address with the MAC address of your Ethernet card.

# Internet Setup

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

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

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

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

- L2TP Subnet Enter the Subnet Mask supplied by your ISP (Static only). Mask:
- L2TP Gateway IP Enter the Gateway IP Address provided by your ISP. Address:
  - L2TP Server IP Enter the Server IP Address provided by your ISP (optional). Address:

Username: Enter your L2TP Username.

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

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

- Maximum Idle Enter a Maximum Idle Time during which the Internet connection Time: is maintained during inactivity. To disable this feature, enable Auto-reconnect.
- **DNS Servers:** Enter the Primary and Secondary **DNS Server** Addresses (Static L2TP only).



- MTU: Maximum Transmission Unit you may need to change the MTU for optimal performance with your specific ISP. 1400 is the default MTU.
- MAC Address: The default MAC Address is set to the Internet port's physical interface MAC address on the Broadband Router. It is not recommended that you change the default MAC address unless required by your ISP. You can use the **Clone Your PC's MAC Address** button to replace the Internet port's MAC address with the MAC address of your Ethernet card.

### Internet Setup DS-Lite

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

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

- DS-LiteSelect the DS-Lite DHCPv6 Option to let the router allocateConfiguration:the AFTR IPv6 address automatically. Select the ManualConfiguration option to enter the AFTR IPv6 address in<br/>manually.
  - AFTR IPv6 After selecting the Manual Configuration option above, Address: enter the AFTR IPv6 Address here.
- B4 IPv4 Address: Enter the B4 IPv4 Address here. (Optional.)
  - **WAN IPv6** Once connected, the *WAN IPv6 Address* will be displayed here. **Address:**

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



### **Internet Connection Setup Wizard**

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

#### INTERNET CONNECTION

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

#### INTERNET CONNECTION SETUP WIZARD

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

#### Internet Connection Setup Wizard

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

#### MANUAL INTERNET CONNECTION OPTION

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

Manual Internet Connection Setup

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

Click **Next** to continue.



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

Select your **Time Zone** from the drop-down menu and click **Next** to continue.

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

#### STEP 3: CONFIGURE YOUR INTERNET CONNECTION

#### Please select the Internet connection type below:

#### OHCP Connection (Dynamic IP Address)

Choose this if your Internet connection automatically provides you with an IP Address. Most Cable Moderns use this type of connection.

#### O Username / Password Connection (PPPoE)

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

#### O Username / Password Connection (PPTP)

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

#### O Username / Password Connection (L2TP)

Prev

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

#### Static IP Address Connection

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

Next Cancel



STEP 2: SELECT YOUR TIME ZONE
Select the appropriate time zone for your location. This information is required to configure the time-based options for the router.
Time Zone : (GMT-08:00) Pacific Time (US & Canada, Tijuana 💌
Prev Next Cancel Connect

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

	ESS) sure that you are connected to the D-Link Router with the ur broadband connection. If you are, then click the Clone
MAC button to copy your computer's N	
MAC Address :	(optional)
ſ	Clone Your PC's MAC Address
Host Name :	linkrouter
Note: You may also need to provide a Host your ISP.	Name.If you do not have or know this information, please contact
DNS SETTINGS	
Primary DNS Address : 0	0.0.0.0
Secondary DNS Address :	0.0.0.0 (optional)
Prev	Next Cancel Connect

If you selected **PPPoE**, enter your PPPoE **User Name** and **Password**. Click **Next** to continue.

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

SET USERNAME AND PASSWORD CONN	NECTION (PPPOE)
	ed to have a Username and Password from your Internet this information, please contact your ISP.
User Name :	
Password :	
Prev	Next Cancel Connect

# If you selected **PPTP**, enter your PPTP **User Name**, **Password**, and other information supplied by your ISP. Click **Next** to continue.

SET USERNAME AND PASSWORD CO	ONNECTION (PPTP)	
To set up this connection you will a Service Provider. You also need PPT your ISP.	need to have a Userna IP IP address. If you o	ame and Password from your Internet do not have this information, please contact
Address Mode	: 💿 Dynamic IP 🔘	Static IP
PPTP IP Address	: 0.0.0.0	
PPTP Subnet Mask	: 0.0.0.0	
PPTP Gateway IP Address	: 0.0.0.0	
PPTP Server IP Address	: 0.0.0.0	(may be same as gateway)
User Name	:	
Password	:	
Verify Password	:	
DNS SETTINGS		
Primary DNS Address	: 0.0.0.0	]
Secondary DNS Address	: 0.0.0.0	(optional)
Prev	Next Cancel	Connect

If you selected **L2TP**, enter your L2TP **User Name**, **Password**, and other information supplied by your ISP. Click **Next** to continue.

SET USERNAME AND PASSWORD CONNECTION (L2TP)	
To set up this connection you will need to have a Userna Service Provider. You also need L2TP IP address. If you d your ISP.	
Address Mode : 💿 Dynamic IP 🔿 g	Static IP
L2TP IP Address : 0.0.0.0	]
L2TP Subnet Mask : 0.0.0.0	]
L2TP Gateway IP Address : 0.0.0.0	]
L2TP Server IP Address : 0.0.0.0	(may be same as gateway)
User Name :	]
Password :	]
Verify Password :	]
DNS SETTINGS	
Primary DNS Address : 0.0.0.0	
Secondary DNS Address : 0.0.0.0	 (optional)
Prev Next Cancel	Connect

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

	need to have a compl	ete list of IP information provided by your ction and do not have this information,
IP Address	: 0.0.0.0	
Subnet Mask	: 0.0.0.0	
Default Gateway	: 0.0.0.0	
DNS SETTINGS Primary DNS Address	: 0.0.0.0	7
Secondary DNS Address		(optional)
Prev	Next Cancel	Connect

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

SETUP COMPLETE!	
The Internet Connection Setup W settings.	lizard has completed. Click the Connect button to save your
Pre	ev Next Cancel Connect

# **Wireless Settings**

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

Click **Add Wireless Device with WPS** if you want to add a wireless device using Wi-Fi Protected Setup (WPS). Refer to "Add Wireless Device with WPS Wizard" on page 38.

Click **Manual Wireless Connection Setup** if you want to manually configure the wireless settings on your router. Refer to "Manual Wireless Settings" on page 40.

DEFENSE           DIR-803         SETUP         ADVANCED         TOOLS         STATUS         SUPPORT           NUTRONE         WIRELESS SETTINGS         NIRELESS SETTINGS         Helpful Hints         Helpful Hints           NETWORK SETTINGS         Device with website connection.         Device with addition of these with ands, please make sure you have followed all steps outlined in the package.         Helpful Hints         1. You alloady have a webbsite setting of the package.         If you alloady have a webbsite setting of the package.         If you alloady have a webbsite setting of the package.         If you are new to webbsite setting of the package.         If you are new to webbsite setting of the package.         If you are new to webbsite setting of the package.         If you are new to webbsite setting of the package.         If you are new to webbsite setting of the package.         If you are new to webbsite setting of the package.         If you are new to webbsite setting of the package.         If you are new to webbsite setting of the package.         If you are new to webbsite setting of the package.         If you are new to webbsite setting of the package.         If you are new to webbsite setting of the package.         If you are new to webbsite setting of the package.         If you are new to webbsite setting of the package.         If you are new to webbsite setting of the package.         If you are new to webbsite setting of the package.         If you are new to webbsite setting of the package.         If you are new to webbsite sethore of the package.         If you condit w						
INTERNET         WIRELESS SETTINGS           INTERNET         The following Web-based wizards are designed to assist you in your wireless network setup and wireless device connection.         If you already have a wireless device to you wireless network setup and wireless network setup.           IPV6         Before launching these wizards, please make sure you have followed all steps outlined in the Quick Installation Guide included in the package.         If you already have a wireless network setup. It will guide you through step-by-step instructions on how to set up your wireless network and how to make it secure. (If you are new to wireless network and how to make it secure.)         If you are new to wireless network and how to make it secure.           Note: Some changes made using this Setup Wizard         Wireless connection Setup Wizard         If you are new to wireless network up and numing.           ADD WIRELESS DEVICE WITH WPS (WI-FI PROTECTED SETUP) WIZARD         If you consider your wireless device to your wireless network up and numing.           If you release the button below to begin.         Add Wireless Device with WPS           MANUAL WIRELESS NETWORK SETUP         If your wireless network will destroy the existing wireless network. If you would like to configuration of the wrieless network is already set up with Wi-FI Protected Setup, manual configuration of the wrieless network will destroy the existing wireless network. Will destroy the existing wireless network. If you would like to configure the wrieless network will destroy the existing wireless network. Will destroy the existing wireless network, the on the manual the wrieless network is already set up with Wi-FI Protected Setup, manual configuration of the	D-Lini	C				
WIRELESS SETTINGS         WIRELESS SETTINGS         NETWORK SETTINGS         PY6         Outcome         Before launching these wizards, please make sure you have followed all steps outlined in the Quick Installation Guide included in the package.         WIRELESS NETWORK SETUP         This wizard is designed to assist you in your wireless network and how to make it secure.         WIRELESS Device with Wireless Connection Setup Wizard         This wizard is designed to assist you in your wireless network and how to make it secure.         Wireless Connection Setup Wizard         Note: Some changes made using this Setup Wizard may require you to change some settings on your wireless clent adapters so they can still connect to the D-Link Route.         ADD WIRELESS DEVICE WITH WPS (WI-FI PROTECTED SETUP) WIZARD         This wizard is designed to assist you in connecting your wireless device to your wireless router. It will guide you through step is beyne to get your wireless device connected.         Click the button below to begin.         Add Wireless Device with WPS         If your wireless network will destroy the existing wireless network. If you consider your wireless network will destroy the existing wireless network. Will were your wireless network will destroy the existing wireless network. Will destroy the existing wireless network. Will destroy the existing wireless network. If you would like to configure to find wireless network will destroy the existing wireless network. Will destroy the existing wireless network. Will destroy the existing wireless network. Will	DIR-803	SETUP	ADVANCED	TOOLS	STATUS	SUPPORT
Wireless Network Setup Dutton Delow. Manual Wireless Connection Setup	INTERNET WIRELESS SETTINGS NETWORK SETTINGS IPV6	WIRELESS SETTINGS The following Web-bas wireless device connec Before launching these Quick Installation Guide WIRELESS NETWORK This wizard is designed step-by-step instruction Note: Some changes r on your wireless client ADD WIRELESS DEVI This wizard is designed will guide you through Click the button below MANUAL WIRELESS If your wireless network v the wireless network v the wireless network v	ed wizards are designed 1 tion. wizards, please make sur- included in the package, <b>SETUP WIZARD</b> to assist you in your wire- ns on how to set up your Wireless Connect wireless or they can still <b>ICE WITH WPS (WI-FI P</b> to assist you in connecting to begin. <b>Add Wireless D</b> <b>NETWORK SETUP</b> k is already set up with W will destroy the existing with your new D-Link System p button below.	to assist you in your wirele e you have followed all ste less network setup. It will wireless network and how tion Setup Wizard and may require you to ch connect to the D-Link Rou ROTECTED SETUP) WIZ/ ing your wireless device to on how to get your wirele evice with WPS	ss network setup and aps outlined in the guide you through w to make it secure. hange some settings uter. ARD your wireless router. It ass device connected.	Helpful Hints I Fyou already have a wireless network cetup with WFI Proceedsd Setup, click on Add Wireless Device with WFS to add new device to your wireless networks and the seture before, click on Wireless Connection Setup to Wizard and the router will quide you through a few single steps to get your wireless network up and running. • If you consider your wireless network up and running. • If you consider yourself an advanced user and have configured a wireless router before, click Anaual Wireless Connection Setup to Input al the settings manually.

### Wireless Connection Setup Wizard

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

#### WIRELESS SETTINGS

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

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

#### WIRELESS NETWORK SETUP WIZARD

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

Wireless Connection Setup Wizard

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

Enter a **Network Name** for your wireless network (SSID). Do not use personal information as your SSID since users with wireless devices within range of your router will be able to see this information.

Then select one of the following options:

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

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

Network Name (S	ID) 2.4GHz :	dlink-F860				
Network Name (	SSID) 5Ghz :	dlink-F860-5GHz				
Automatically assig	n a network ke	v (Recomme	nded)			
To prevent outsiders WEP or WPA key) to	rom accessing yo	• •		tomatically as	ssign a security (a	lso calle
Manually assign a n	etwork kev					
Use this options if you		e our own key.				
te: All D-Link wireles	adaptore curre		14173.4			

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

Wireless Band	1 : 2.4GHz Band
Wireless Network Name (SSID)	): dlink-F860
Security Mode	e : Auto (WPA or WPA2) - Personal
Cipher Type	e : TKIP and AES
Pre-Shared Key	/:d329345611
Wireless Banc	1 : 5GHz Band
Wireless Network Name (SSID)	): dlink-F860-5GHz
Security Mode	e : Auto (WPA or WPA2) - Personal
Cipher Type	e : TKIP and AES
Pre-Shared Key	/: d329345611

SETUP COMPLETE

If you selected **Manually**, the following screen will appear. Create a passphrase for your **Wireless Security Password**. Click **Next** to continue. You will see a *Setup Complete* screen like the one above.

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

STEP 2: SET YOUR WIRELESS SECURITY PASSWORD
You have selected your security level - you will need to set a wireless security password.
The WPA (Wi-Fi Protected Access) key must meet one of following guidelines:
- Between 8 and 63 characters (A longer WPA key is more secure than a short one )
- Exactly 64 characters using 0-9 and A-F
Use the same Wireless Security Password on both 2.4GHz and 5GHz band
Wireless Security Password :
Note: You will need to enter the same password as keys in this step into your wireless clients in order to enable proper wireless communication.
Prev Next Cancel Save

## Add Wireless Device with WPS Wizard

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

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

STEP 1: SELECT CONFIG	JRATION METHOD FOR YOUR WIRELESS NETWORK	
Please select one of fol	owing configuration methods and click next to continue.	
-	option if your wireless device supports WPS (Wi-Fi Protected Setup) nis option will display the current wireless settings for you to configure the wireless Prev Next Cancel Connect	

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

Add Wireless Device with WPS

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

Click the button below to begin.

If you selected **Manual**, a settings summary screen will appear. Write down the security key and enter this on your wireless clients. Click **Wireless Status** to finish. This will take you to the *Wireless Status* screen. Skip to the bottom of the next page.

STEP 2: CONNECT YOUR WIRELESS DEVICE
Below is a detailed summary of your wireless security settings. Please print this page out, or write the information on a piece of paper, so you can configure the correct settings on your wireless client adapters.
2.4 Ghz Frequency
SSID: dlink-F860
Security Mode: Auto (WPA or WPA2) - Personal
Cipher Type: TKIP and AES
qqqqqqq
5 Ghz Frequency
SSID: dlink-F860-5GHz
Security Mode: Auto (WPA or WPA2) - Personal
Cipher Type: TKIP and AES
9999999
Prev Next Cancel Wireless Status

Section 4 - Security

**PIN:** Select this option to use the Personal Identification Number (PIN) method. In order to use this method, you must enter the wireless client's eight digit PIN code. Click **Connect**.

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

Once you click **Connect**, you will have a 120 second time limit to press the **Push Button** (physical or virtual) on your wireless client(s) and successfully establish a connection.

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

STEP 2: CONNECT YOUR WIRELESS DEVICE
There are two ways to add wireless device to your wireless network: -PIN (Personal Identification Number) -PBC (Push Button Configuration)
• PIN :
please enter the PIN from your wireless device and click the below "Connect" Button within 120 seconds
○ рвс
please press the push button on your wireless device and click the below "Connect" Button within 120 seconds
Prev Next Cancel Connect

STEP 2: CONNECT YOUR WIRELESS DEVICE
Please press down the Push Button (physical or virtual) on the wireless device you are adding to your wireless network. Remain time in second: 116
Adding wireless device: Started.
Prev Next Cancel Connect

step 2: Connect Your W	IRELESS DEVICE	
Adding wireless device: Succ Wireless Status button to ch	eeded. To add another device click on the Cancel button below or click on the eck wireless status.           Prev         Next         Cancel         Wireless Status	

View the Wireless Status screen.

	and the second se	×		
View the wireless clien few minutes after an u			ne router. (A clier	nt might linger in the list for a
NUMBER OF WIRELE	SS CLIENTS - 2	2.4GHZ BAN	ND:1	
MAC Address	IP Address	Mode	Rate (Mbps)	Signal (%)
CA:D3:A3:A6:7B:63		11n	130	100

## Manual Wireless Settings 802.11n/g (2.4GHz)

- **Enable Wireless:** Check the box to enable the wireless function. If you do not want to use wireless, uncheck the box to disable all the wireless functions.
  - Schedule: Select the time frame that you would like your wireless network enabled. The schedule may be set to **Always**. Any schedule you create will be available in the drop-down menu. Click **New Schedule** to create a schedule.
- Wireless Network Service Set Identifier (SSID) is the name of your wireless network. CreateName: a name for your wireless network using up to 32 characters. The SSID is case-sensitive.
- 802.11 Mode: Select one of the following:
  802.11b Only Select only if all of your wireless clients are 802.11b.
  802.11g Only Select only if all of your wireless clients are 802.11g.
  802.11n Only Select only if all of your wireless clients are 802.11n.
  Mixed 802.11n, 802 11g, and 802 11b Select if you are using a mix of 802.11n, 802.11g, and 802.11b wireless clients.
- **Enable Auto Channel** The **Auto Channel Scan** setting can be enabled to allow the DIR-803 to **Scan:** choose the channel with the least amount of interference.
  - Wireless Channel: Indicates the channel setting for the DIR-803. The Channel can be changed to fit the channel setting for an existing wireless network or to customize the wireless network. If you check **Enable Auto Channel Scan**, this option will be greyed out.

#### WIRELESS NETWORK

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

To protect your privacy you can configure wireless security features. Securing your wireless network is important as it is used to protect the integrity of the information being transmitted. The router is capable of 4 types of wireless security; WEP, WPA only, WPA2 only, and WPA/WPA2 (auto-detect).

Save Settings | Don't Save Settings

Security Mode : WPA-Personal 🗸

#### WIRELESS NETWORK SETTINGS

Enable Wireless	: 🗹 Always 💌 New Schedule
Wireless Network Name	: dlink-F860 (Also called the SSID)
802.11 Mode	: Mixed 802.11n, 802.11g and 802.11b 💌
Enable Auto Channel Scan	: 🗸
Wireless Channel	2:412 GHz - CH 1 💉
Transmission Rate	: Best (automatic) 💌 (Mbit/s)
Channel Width	: 20/40 MHz(Auto) 💌
<b>Visibility Status</b>	: 💿 Visible 🔿 Invisible

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

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

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

Visibility Status: Select Invisible if you do not want the SSID of your wireless network to be broadcast by the DIR-803. If Invisible is selected, the SSID of the DIR-803 will not be seen by Site Survey utilities so your wireless clients will have to know the SSID of your DIR-803 in order to connect to it.

Wireless Security: Refer to "Wireless Security" on page 42 for more information regarding wireless security.

## 802.11ac/n/a (5GHz)

- **Enable Wireless:** Check the box to enable the wireless function. If you do not want to use wireless, uncheck the box to disable all the wireless functions.
  - Schedule: Select the time frame that you would like your wireless network enabled. The schedule may be set to **Always**. Any schedule you create will be available in the drop-down menu. Click **New Schedule** to create a schedule.
- Wireless Network Service Set Identifier (SSID) is the name of your wireless network. Name: Create a name for your wireless network using up to 32 characters. The SSID is case-sensitive.
  - 802.11 Mode: Select one of the following:

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

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

**Mixed 802.11ac, 802.11n and 802.11a** - Select if you are using a mix of 802.11ac, 802.11n, and 802.11a wireless clients.

WIRELESS NETWORK SETTINGS	
Wireless Band :	5GHz Band
Enable Wireless :	🖌 Always 💌 New Schedule
Wireless Network Name :	dlink-F860-5GHz (Also called the SSID)
802.11 Mode :	Mixed 802.11ac, 802.11n and 802.11a 💌
Enable Auto Channel Scan :	
Wireless Channel:	5.180 GHz - CH 36 🔍
Transmission Rate :	Best (automatic) 💌 (Mbit/s)
Channel Width :	20/40/80 MHz(Auto) 💌
Visibility Status :	⊙ Visible ○ Invisible
WIRELESS SECURITY MODE	
Security Mode : None	<b>v</b>
Save Settings Don't Save Settings	

Enable Auto Channel The Auto Channel Scan setting can be enabled to allow the DIR-803 to choose the channel with the least amount of interference. Scan:

- Wireless Channel: Indicates the channel setting for the DIR-803. The Channel can be changed to fit the channel setting for an existing wireless network or to customize the wireless network. If you check Enable Auto Channel Scan, this option will be greyed out.
- Transmission Rate: Best (Automatic) is selected by default, or you can select a channel from the drop-down menu.

#### Channel Width: Select the Channel Width:

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.

Visibility Status: Select Invisible if you do not want the SSID of your wireless network to be broadcasted by the DIR-803. If Invisible is selected, the SSID of the DIR-803 will not be seen by Site Survey utilities so your wireless clients will have to know the SSID of your DIR-803 in order to connect to it.

Wireless Security: Refer to "Wireless Security" on page 42 for more information regarding wireless security.

# **Wireless Security**

This section will show you the different levels of security you can use to protect your data from intruders. The DIR-803 offers the following types of security:

- WPA2 (Wi-Fi Protected Access 2)
- WPA (Wi-Fi Protected Access)

- WPA2-PSK (Pre-Shared Key)
- WPA-PSK (Pre-Shared Key)

## What is WPA?

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

The 2 major improvements over WEP:

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

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

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

## WPA/WPA2-Personal (PSK)

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

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

Security Mode :       WPA-Personal         WPA         Use WPA or WPA2 mode to achieve a balance of strong security and best compode uses WPA for legacy clients while maintaining higher security with stations capable. Also the strongest cipher that the client supports will be used. For best WPA2 Only mode. This mode uses AES(CCMP) cipher and legacy stations are not support.	that are WPA2
Use <b>WPA or WPA2</b> mode to achieve a balance of strong security and best comp mode uses WPA for legacy clients while maintaining higher security with stations capable. Also the strongest cipher that the client supports will be used. For best <b>WPA2 Only</b> mode. This mode uses AES(CCMP) cipher and legacy stations are no	that are WPA2
mode uses WPA for legacy clients while maintaining higher security with stations capable. Also the strongest cipher that the client supports will be used. For best <b>WPA2 Only</b> mode. This mode uses AES(CCMP) cipher and legacy stations are no	that are WPA2
access with WPA security. For maximum compatibility, use <b>WPA Only</b> . This mode cipher. Some gaming and legacy devices work only in this mode. To achieve better wireless performance use <b>WPA2 Only</b> security mode (or in oth cipher).	ot allowed e uses TKIP
WPA Mode : Auto(WPA or WPA2)	
Cipher Type : TKIP and AES 💌	
Group Key Update Interval: 3600 (seconds)	

## **Configure WPA/WPA2-Enterprise (RADIUS)**

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

- Log into the web-based configuration by opening a web browser and entering the IP address of the router (192.168.0.1). Click on Setup and then click Wireless Settings on the left side.
- 2. Next to Security Mode, select WPA-Enterprise.
- 3. Next to **WPA Mode**, select **Auto(WPA or WPA2)**, **WPA2 Only**, or **WPA Only**. Use **Auto** if you have wireless clients using both WPA and WPA2.
- 4. Next to Cypher Type, select TKIP and AES, TKIP, or AES.
- 5. Next to **Group Key Update Interval**, enter the amount of time before the group key used for broadcast and multicast data is changed (3600 is default).
- 6. Next to **RADIUS Server IP Address** enter the **IP Address** of your RADIUS server.
- 7. Next to **RADIUS Server Port**, enter the port you are using with your RADIUS server. 1812 is the default port.

580	urity Mode : WPA-Enterprise 💌
WPA	
mode uses WF capable, Also t <b>WPA2 Only</b> m access with W	<b>WPA2</b> mode to achieve a balance of strong security and best compatibility. This PA for legacy clients while maintaining higher security with stations that are WPA: the strongest cipher that the client supports will be used. For best security, use hode. This mode uses AES(CCMP) cipher and legacy stations are not allowed PA security. For maximum compatibility, use <b>WPA Only</b> . This mode uses TKIP paming and legacy devices work only in this mode.
To achieve be cipher).	tter wireless performance use $\mathbf{WPA2}$ Only security mode (or in other words AES
	WPA Mode : Auto(WPA or WPA2)
	Cipher Type : TKIP and AES 💌
Group Key	y Update Interval: 3600 (seconds)
EAP (802.1X	
When WPA e	nterprise is enabled, the router uses EAP (802.1x) to authenticate clien RADIUS server.
RADIUS	server IP Address :
RA	DIUS server Port : 1812
RADIUS serv	ver Shared Secret :
Advanced >	

- 8. Next to **RADIUS Server Shared Secret**, enter the security key.
- 9. Click **Advanced** to enter settings for a secondary RADIUS Server.
- 10. Click **Save Settings** to save your settings.

EAP (802.1X)	
When WPA enterprise is enabled via a remote RADIUS server.	l, the router uses EAP (802.1x) to authenticate clients
RADIUS server IP Address :	
RADIUS server Port :	1812
RADIUS server Shared Secret :	
<< Advanced	
Optional backup RADIUS server	
Second RADIUS server IP : Address	
Second RADIUS server Port :	1812
Second RADIUS server Shared : Secret	

# **Network Settings**

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

## **Router Settings**

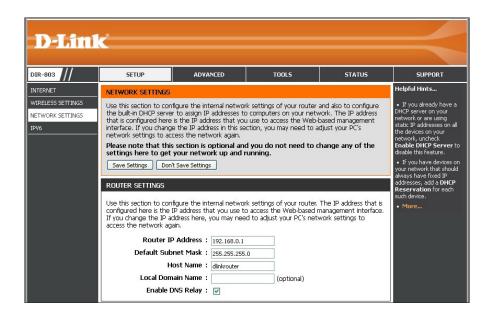
**Router IP** Enter the **IP Address** of the router. The default IP address **Address:** is 192.168.0.1.

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

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

Host Name: Enter a name for the router.

- Local Domain Enter the Domain Name (Optional). Name:
  - **Enable DNS** Uncheck the box to transfer the DNS server information **Relay:** from your ISP to your computers. If this box is checked, your computers will use the router for a DNS server.



## **DHCP Server Settings**

DHCP stands for Dynamic Host Control Protocol. The DIR-803 has a built-in DHCP server. The DHCP Server will automatically assign an IP address to the computers on the LAN/private network. Be sure to set your computers to be DHCP clients by setting their TCP/IP settings to "Obtain an IP Address Automatically." When you turn your computers on, they will automatically load the proper TCP/IP settings provided by the DIR-803. 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.

	Check this box to <b>Enable</b> the DHCP server on your router. Uncheck to disable this function.	DHCP SERVER SETTINGS
DHCP IP Address Range:	Enter the starting and ending <b>IP Addresses</b> for the DHCP server's IP assignment.	Use this section to configure the built-in DHCP server to assign IP address to the computers on your network.  Enable DHCP Server :  DHCP IP Address Range : 100 to 199 (addresses within the LAN subnet)
	<b>Note:</b> 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 : 10080 (minutes) Always broadcast :  (compatibility for some DHCP Clients) NetBIOS announcement :  Learn NetBIOS from WAN :
	The length of time for the IP address lease. Enter the <b>DHCP Lease</b> <b>Time</b> in minutes.	NetBIOS Scope :       (optional)         NetBIOS node type :       Broadcast only (use when no WINS servers configured)         Point-to-Point (no broadcast)
	Enable this feature to broadcast your network's DHCP server to LAN/WLAN clients.	Mixed-mode (Broadcast then Point-to-Point) Hybrid (Point-to-Point then Broadcast) Primary WINS IP Address : Secondary WINS IP Address :

NetBIOS NetBIOS allows LAN hosts to discover all other computers within

Announcement: the network. Enable this feature to allow the DHCP Server to offer NetBIOS configuration settings.

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

**NetBIOS Scope:** This is an advanced setting and is normally left blank. This feature allows the configuration of a NetBIOS 'domain' name under which network hosts operate. This setting has no effect if the *Learn NetBIOS from WAN* option is enabled.

NetBIOS Node This field indicates how network hosts are to perform NetBIOS name registration and discovery. Select the type of NetBIOS Node: Type: Broadcast only, Point-to-Point, Mixed-mode, or Hybrid. This setting has no effect if the *Learn NetBIOS from WAN* option is enabled.

WINS IP Enter your Primary and Secondary WINS Server IP Address(es). Address:

## **DHCP** Reservation

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

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

Enable: Check this box to Enable the reservation.

- **Computer Name:** Enter the **Computer Name** or select from the drop-down menu and click <<.
  - **IP Address:** Enter the **IP Address** you want to assign to the computer or device. This IP Address must be within the DHCP IP Address Range.

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

- Clone Your PC's You can use the Clone Your PC's MAC Address button MAC Address: to replace the Internet port's MAC Address with the MAC address of your Ethernet card.
  - Add/Update: Click Add/Update to save your entry. You must click Save Settings at the top to activate your reservations.

### **DHCP** Reservations List

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

Enable: Check the box to Enable the reservation.

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

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

	Computer N	tress :		er Name 💌
The second state at the second state				
DHCP RI Enable	SERVATIONS LIS	IP Address	MAC Address	
Enable		IP Address	MAC Address	
Enable	Host Name	IP Address	MAC Address MAC Address	Expired Time
Enable NUMBER	Host Name OF DYNAMIC DH me	IP Address CP CLIENTS	1	Expired Time 6 Days 23 Hours 10 Minutes

Enable	Host Name	IP Address	MAC Address		
	dlink-a96deaea7	192.168.0.122	00:10:dc:d1:b8:12	E	9
	OF DYNAMIC DHCF			Evnirod T	imo
		P CLIENTS IP Address	MAC Address	Expired T	ïme
NUMBER Host Nai dlink-a960	me		MAC Address	Expired T 6 Days 23 10 Minute	Hour

## IPv6

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

For the beginner user that has never configured a router before, click on the **IPv6 Internet Connection Setup Wizard** button and the router will guide you through a few simple steps to get your network up and running. (Refer to "IPv6 Internet Connection Setup Wizard" on page 52.)

For the advanced user that has experience with configuring a router, click on the **Manual IPv6 Internet Connection Setup** button to input all the settings manually. (Refer to "IPv6 Manual Setup" on page 57.)

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



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

Click on **Save Settings**.

IPV6 LOCAL CONNECTIVITY SETTINGS
Use this section to configure Unique Local IPv6 Unicast Address (ULA) settings for your router. ULA is intended for local communications and not expected to be routable on the global Internet. Save Settings Don't Save Settings
IPV6 ULA SETTINGS
Enable ULA : Use default ULA prefix : ULA Prefix : /64
CURRENT IPV6 ULA SETTINGS
Current ULA Prefix : /64 LAN IPv6 ULA : /64
Save Settings Don't Save Settings

## IPv6 Internet Connection Setup Wizard

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

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

#### IPV6 INTERNET CONNECTION

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

#### IPV6 INTERNET CONNECTION SETUP WIZARD

If you would like to utilize our easy to use Web-based Wizards to assist you in connecting your new D-Link Systems Router to the IPv6 Internet, click on the button below.

IPv6 Internet Connection Setup Wizard

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

Click <b>Next</b> to	continue t	to the next j	page.
----------------------	------------	---------------	-------

WELCOME TO THE D-LINK IPV6 INTERNET CONNECTION SETUP WIZARD
This wizard will guide you through a step-by-step process to configure your new D-Link router and connect to the IPv6 Internet.
<ul> <li>Step 1: Configure your IPv6 Internet Connection</li> <li>Step 2: Save Settings and Connect</li> </ul>
Prev Next Cancel Connect

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

		uon type, p	lease wait .			
			A STATE OF THE OWNER			
_						
	Dra	Prev	Prev Next Cancel	Prev Next Cancel Connect	Pray Navt Cancel Connect	Prev Nevt Cancel Connect

Section 3 - Configuration

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

STEP 1: CONFIGURE YOUR IPV6 INTERNET CONNECTION
Router is unable to detect your IPv6 Internet connection type.
Cancel Try again Guide me through the IPv6 settings

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

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

There are three options to choose from. These connection types are explained on the pages that follow. Select IPv6 over PPPoE, Static IPv6 address and Route, or Tunneling Connection (6rd). Click Next to continue.

v6 over PPPoE
pose this option if your IPv6 Internet connection requires a username and password to get online. N L modems use this type of connection.
atic IPv6 address and Route
oose this option if your Internet Setup Provider (ISP) provided you with IPv6 Address information the manually configured.
nneling Connection (6rd)
oose this option if your Internet Setup Provider (ISP) provided you a IPv6 Internet Connection by u I automatic tunneling mechanism.

#### IPv6 over PPPoE

Most DSL modems use this type of connection. If you select the **IPv6 over PPPoE** option, you will need a User Name and Password from you IPv6 Internet Service Provider (ISP). This IPv6 Internet connection type requires a username and password to get online.

- **PPPoE Session:** Select the PPPoE Session value used here. This option will state that this connection shares it's information with the already configured IPv6 PPPoE connection, or the user can create a new PPPoE connection here.
  - User Name: Enter the PPPoE Username used here. If you do not know your user name, please contact your ISP.
  - **Password:** Enter the PPPoE **Password** used here. If you do not know your password, please contact your ISP.
- Verify Password: Re-enter the PPPoE Password used here.
  - **Service Name:** Enter the **Service Name** for this connection here. This field is optional.

Click **Next** to continue.

	DDDoC Cossis		tion, please conta		
			rith IPv4 🔘 Create	a new session	
	User Nan	ne :			
	Passwor	rd:			
	Verify Passwo	rd :			
	Service Nan	ne :	(optional)		
ite: You may ntact your IS		a Service Name, If	f you do not have o	know this information	n, please

### **Static IPv6 Address Connection**

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

- **Use Link-Local** The **Link-Local Address** is used by nodes and routers when communicating with neighboring nodes on the same link. This mode enables IPv6-capable devices to communicate with each other on the LAN side.
- IPv6 Address: Enter the WAN IPv6 Address for the router here.
- **Subnet Prefix** Enter the WAN **Subnet Prefix Length** value used here. **Length:**
- Default Gateway: Enter the WAN Default Gateway IPv6 address used here.
- Primary IPv6 DNS Enter the WAN Primary IPv6 DNS Server Address used here. Address:
  - Secondary IPv6 Enter the WAN Secondary IPv6 DNS Server Address used here. DNS Address:
- LAN IPv6 Address: These are the settings of the LAN (Local Area Network) IPv6 interface for the router. The router's LAN IPv6 Address configuration is based on the IPv6 Address and Subnet assigned by your ISP. (A subnet with prefix /64 is supported in LAN.)

Click Next to continue.

SET STATIC IPV6 ADDRESS CONNECTION To set up this connection you will need to have a c your IPv6 Internet Service Provider. If you have a S information, please contact your ISP.	
Use Link-Local Address : 📝	
IPv6 Address : fe80::7a54:2eff:	fefd:f863
Subnet Prefix Length : 64	
Default Gateway :	
Primary IPv6 DNS Address :	
Secondary IPv6 DNS Address :	
LAN IPv6 Address :	/64
Prev Next C	ancel

#### **Tunneling Connection (6rd)**

If you select the **Tunneling Connection (6rd)** option, you must obtain the information listed below from your ISP. Then you can configure the IPv6 6rd tunneling connection settings.

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

- IPv4 Address: Enter the IPv4 Address used here.
- Mask Length: Enter the IPv4 Mask Length used here.
- Assigned IPv6 Prefix: Displays the Assigned IPv6 Prefix value here.
- 6rd Border Relay IPv4 Enter the 6rd Border Relay IPv4 Address used Address: here.
  - IPv6 DNS Server: Enter the primary IPv6 DNS Server address used here.

Click Next to continue.

The IPv6 Internet Connection Setup Wizard is complete. Click on the **Connect** button to save your settings and reboot the router.

If you need to make changes, click on the **Prev** button to return to the previous page. Or click on **Cancel** to discard all the changes made and return to the main page.

	6rd IPv6 Prefix :			
	IPv4 Address :	10.10.10.108	Mask Length :	
Ass	gned IPv6 Prefix :			
6rd Border Re	ay IPv4 Address :			
	IPv6 DNS Server :			
		- 100		

SETUP COMPLETE!	
The IPv6 Internet C settings and reboot	onnection Setup Wizard has completed. Click the Connect button to save your the router.
	Prev Next Cancel Connect

SAVING	
	The settings are being saved and are taking effect.
	Please wait

## IPv6 Manual Setup

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

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

IPV6	
meth	his section to configure your IPv6 Connection Type. If you are unsure of your connection od, please contact your Internet Service Provider. e Settings Don't Save Settings
IPV6	CONNECTION TYPE
Choc	ese the mode to be used by the router to connect to the IPv6 Internet. My IPv6 Connection is : Auto Detection
IPV6	DNS SETTINGS
Obta	in DNS server address automatically or enter a specific DNS server address.
	Obtain IPv6 DNS Servers automatically
	Ouse the following IPv6 DNS Servers
	Primary DNS Server :
	Secondary DNS Server :
LAN	IPV6 ADDRESS SETTINGS
LAN I	his section to configure the internal network settings of your router. If you change the IPv6 Address here, you may need to adjust your PC network settings to access the ork again.
	Enable DHCP-PD : 🔽
	LAN IPv6 Address : /64
LAN	NIPv6 Link-Local Address : fe80::7a54:2eff:fefd:f860 /64
ADD	RESS AUTOCONFIGURATION SETTINGS
	his section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on network. You can also enable DHCP-PD to delegate prefixes for routers in your LAN.
Enable	e Automatic IPv6 address : 🕑 assignment
Enab	le Automatic DHCP-PD in : 🔽
	LAN Autoconfiguration Type : SLAAC+Stateless DHCP
Route	er Advertisement Lifetime: (minutes)

### **Auto Detection**

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

Click Save Settings.

## Static IPv6

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

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

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

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

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

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

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

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

Click Save Settings.

IPV6	
Use this section to configure your IPv6 Connection Type. If method, please contact your Internet Service Provider. Save Settings Don't Save Settings	you are unsure of your connection
IPV6 CONNECTION TYPE	
Choose the mode to be used by the router to conner My IPv6 Connection is : Static IPv6	ct to the IPv6 Internet.
WAN IPV6 ADDRESS SETTINGS	
Enter the IPv6 address information provided by your	Internet Service Provider (ISP).
Use Link-Local Address : 🚽	
IPv6 Address : fe80::7a54:2eff:fefd:f86	3
Subnet Prefix Length : 64	
Default Gateway :	
Primary DNS Server :	
Secondary DNS Server :	
LAN IPV6 ADDRESS SETTINGS	
Use this section to configure the internal network settings LAN IPv6 Address here, you may need to adjust your PC ne network again.	
LAN IPv6 Address :	/64
LAN IPv6 Link-Local Address : fe80::7a54:2eff:fefd:f8	60 /64
ADDRESS AUTOCONFIGURATION SETTINGS	
Use this section to setup IPv6 Autoconfiguration to assign I your network.	P addresses to the computers on
Enable Automatic IPv6 address : 🔽	
assignment Autoconfiguration Type : SLAAC+Stateless DHCP	~
Router Advertisement Lifetime : (minutes)	
Save Settings Don't Save Settings	

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

## Autoconfiguration

My IPv6 Connection is: Select Autoconfiguration (SLAAC/DHCPv6) from the dropdown menu.

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

Primary/Secondary IPv6 If you selected the second option above, enter the Primary and DNS Server: Secondary DNS Server addresses.

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

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

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

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

**Enable Automatic** Check this box to **Enable Automatic DHCP-PD in LAN**. **DHCP-PD in LAN:** 

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

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

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

Router Advertisement Enter the Router Advertisement Lifetime (in minutes). Lifetime: Click Save Settings.

CIICK Save Sett

Lico thic	section to configure your IPv6 Connection Type. If you are unsure of your connection
	please contact your Internet Service Provider.
Save Se	ettings Don't Save Settings
IPV6 CC	INNECTION TYPE
Choose	the mode to be used by the router to connect to the IPv6 Internet.
1	My IPv6 Connection is : Autoconfiguration(SLAAC/DHCPv6) 💌
	IS SETTINGS
Obtain I	DNS server address automatically or enter a specific DNS server address.
	Obtain IPv6 DNS Servers automatically
	Ouse the following IPv6 DNS Servers
	Primary DNS Server :
	Secondary DNS Server:
LAN IPV	6 ADDRESS SETTINGS
	section to configure the internal network settings of your router. If you change the Address here, you may need to adjust your PC network settings to access the again.
	Enable DHCP-PD : 🕑
	LAN IPv6 Address : /64
LAN IF	Pv6 Link-Local Address : fe80::7a54:2eff:fefd:f860 /64
ADDRES	S AUTOCONFIGURATION SETTINGS
Lico thic	section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on
	work. You can also enable DHCP-PD to delegate prefixes for routers in your LAN.
nable A	utomatic IPv6 address : 🕑
Enable 4	assignment Automatic DHCP-PD in : 🔽
	utoconfiguration Type : SLAAC+Stateless DHCP 💌
A	

### PPPoE

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

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

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

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

Username: Enter your PPPoE Username.

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

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

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

- **Maximum Idle Time:** Enter a **Maximum Idle Time** during which the Internet connection is maintained during inactivity. To disable this feature, enable Auto-reconnect.
  - MTU: Maximum Transmission Unit you may need to change the MTU for optimal performance with your specific ISP. 1492 is the default MTU.

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

Primary/Secondary IPv6 If you selected the second option above, enter the Primary and DNS Servers: Secondary DNS Server addresses.

IPV6	
Use this section to configure you	ur IPv6 Connection Type. If you are unsure of your connection
method, please contact your Int	ternet Service Provider.
Save Settings Don't Save Set	tings
IPV6 CONNECTION TYPE	
Choose the mode to be used	by the router to connect to the IPv6 Internet.
My IPv6 Connection i	is : PPPoE
PPPOE INTERNET CONNECTION	
Enter the information provid	ed by your Internet Service Provider (ISP).
PPPoE Session	n: 💿 Share with IPv4 🔘 Create a new session
	e: 💿 Dynamic IP 🔘 Static IP
IP Addres	
Usernam	
Password	
Verify Password	
Service Name	(ap an only
Reconnect Mode	e: Always on On demand Manual
Maximum Idle Time	e: (minutes, O=infinite)
MT	U: 1492 (bytes) MTU default = 1492
IPV6 DNS SETTINGS	
	utomatically or enter a specific DNS server address.
Obtain DNS server address au	
Obtain DNS server address au	Dbtain IPv6 DNS Servers automatically
Obtain DNS server address au ©	) Obtain IPv6 DNS Servers automatically ) Use the following IPv6 DNS Servers
Obtain DNS server address au © Primary DNS Server	Dbtain IPv6 DNS Servers automatically Use the following IPv6 DNS Servers r :
Obtain DNS server address au ©	Dbtain IPv6 DNS Servers automatically Use the following IPv6 DNS Servers r :
Dbtain DNS server address au C Primary DNS Serve Secondary DNS Serve	Dbtain IPv6 DNS Servers automatically Use the following IPv6 DNS Servers r: r:
Obtain DNS server address au C Primary DNS Server	Dbtain IPv6 DNS Servers automatically Use the following IPv6 DNS Servers r: r:
Dbtain DNS server address au Primary DNS Serve Secondary DNS Serve LAN IPV6 ADDRESS SETTINGS Use this section to configure the	Dobtain IPv6 DNS Servers automatically Use the following IPv6 DNS Servers r: r: r: S s einternal network settings of your router. If you change the
Dbtain DNS server address au Primary DNS Serve Secondary DNS Serve LAN IPV6 ADDRESS SETTINGS Use this section to configure the LAN IPv6 Address here, you may	Dobtain IPv6 DNS Servers automatically Use the following IPv6 DNS Servers IPv6 DNS Servers IPv6 DNS Servers IPv6 DNS Servers
Dbtain DNS server address at Primary DNS Serve Secondary DNS Serve LAN IPV6 ADDRESS SETTINGS Use this section to configure the LAN IPv6 Address here, you may network again.	Dobtain IPv6 DNS Servers automatically Use the following IPv6 DNS Servers  r : r : r : s  a internal network settings of your router. If you change the r need to adjust your PC network settings to access the
Dbtain DNS server address at Primary DNS Server Secondary DNS Server LAN IPV6 ADDRESS SETTINGS Use this section to configure the LAN IPv6 Address here, you may network again. Enable DHCP-PU	Dobtain IPv6 DNS Servers automatically Use the following IPv6 DNS Servers  r : r :  s the internal network settings of your router. If you change the need to adjust your PC network settings to access the D : v
Dbtain DNS server address au Primary DNS Server Secondary DNS Server LAN IPV6 ADDRESS SETTINGS Use this section to configure the LAN IPv6 Address here, you may network again. Enable DHCP-PE LAN IPv6 Address	Obtain IPv6 DNS Servers automatically         Use the following IPv6 DNS Servers         # :
Dbtain DNS server address au Primary DNS Server Secondary DNS Server LAN IPV6 ADDRESS SETTINGS Use this section to configure the LAN IPv6 Address here, you may network again. Enable DHCP-PE LAN IPv6 Address	Dobtain IPv6 DNS Servers automatically Use the following IPv6 DNS Servers  r : r :  s the internal network settings of your router. If you change the need to adjust your PC network settings to access the D : v
Dbtain DNS server address au Primary DNS Server Secondary DNS Server LAN IPV6 ADDRESS SETTINGS Use this section to configure the LAN IPv6 Address here, you may network again. Enable DHCP-PE LAN IPv6 Address	Obtain IPv6 DNS Servers automatically         Use the following IPv6 DNS Servers         # :
Dbtain DNS server address au Primary DNS Server Secondary DNS Server LAN IPV6 ADDRESS SETTINGS Use this section to configure the LAN IPv6 Address here, you may network again. Enable DHCP-PE LAN IPv6 Address	Obtain IPv6 DNS Servers automatically         Use the following IPv6 DNS Servers         # :
Dbtain DNS server address au Primary DNS Server Secondary DNS Server LAN IPV6 ADDRESS SETTINGS Use this section to configure the LAN IPV6 Address here, you may network again. Enable DHCP-PE LAN IPv6 Address LAN IPv6 Address LAN IPv6 Link-Local Address ADDRESS AUTOCONFIGURATE	Obtain IPv6 DNS Servers automatically         Use the following IPv6 DNS Servers         rr:         rr:         rr:         se internal network settings of your router. If you change the y need to adjust your PC network settings to access the         D:         S:         s:         s:         your your your your your your you
Dbtain DNS server address au Primary DNS Server Secondary DNS Server Secondary DNS Server LAN IPV6 ADDRESS SETTINGS Use this section to configure the LAN IPv6 Address here, you may network again. Enable DHCP-PU LAN IPv6 Address LAN IPv6 Link-Local Address ADDRESS AUTOCONFIGURATION Use this section to setup IPv6 A	Obtain IPv6 DNS Servers automatically         Use the following IPv6 DNS Servers         # :
Dbtain DNS server address au Primary DNS Server Secondary DNS Server Secondary DNS Server LAN IPV6 ADDRESS SETTINGS Use this section to configure the LAN IPV6 Address Section to second LAN IPV6 Address LAN IPV6 Address LAN IPV6 Address LAN IPV6 Link-Local Address ADDRESS AUTOCONFIGURATI Use this section to setup IPv6 Al your network. You can also end	Obtain IPv6 DNS Servers automatically         Use the following IPv6 DNS Servers         # :
Dbtain DNS server address au Primary DNS Serve Secondary DNS Serve LAN IPV6 ADDRESS SETTINGS Use this section to configure the LAN IPV6 Address here, you may network again. Enable DHCP-PE LAN IPV6 Address LAN IPV6 Address LAN IPV6 Address LAN IPV6 Address LAN IPV6 Address LAN IPV6 Link-Local Address ADDRESS AUTOCONFIGURATI Use this section to setup IPv6 Advorts your network. You can also enable Enable Automatic IPV6 address	Obtain IPv6 DNS Servers automatically         Use the following IPv6 DNS Servers         r:         g:         g: <t< th=""></t<>
Dbtain DNS server address au Primary DNS Serve Secondary DNS Serve Secondary DNS Serve LAN IPV6 ADDRESS SETTINGS Use this section to configure the LAN IPV6 Address Section to second LAN IPV6 Address LAN IPV6 Address LAN IPV6 Link-Local Address ADDRESS AUTOCONFIGURATI Use this section to setup IPV6 Ai your network. You can also enail Enable Automatic IPV6 Address	Obtain IPv6 DNS Servers automatically   Ouse the following IPv6 DNS Servers   ar :   ar :   ar :   b :   c : <t< th=""></t<>
Dbtain DNS server address au Primary DNS Serve Secondary DNS Serve LAN IPV6 ADDRESS SETTINGS LAN IPV6 ADDRESS SETTINGS LAN IPV6 Address here, you may network again. Enable DHCP-PC LAN IPv6 Address LAN IPv6 Address LAN IPv6 Address LAN IPv6 Address LAN IPv6 Address LAN IPv6 Address LAN IPv6 Cink-Local Address ADDRESS AUTOCONFIGURATI Use this section to setup IPv6 Ad your network. You can also enal Enable Automatic IPv6 address assignmen Enable Automatic DHCP-PD in LAY	Dobtain IPv6 DNS Servers automatically   Duse the following IPv6 DNS Servers   at itemal network settings of your router. If you change the meed to adjust your PC network settings to access the   D:   S   at itemal network settings of your router. If you change the meed to adjust your PC network settings to access the   D:   S   s:   fe80::7a54:2eff:fefd:f860 /64   Utoconfiguration to assign IP addresses to the computers on ale DHCP-PD to delegate prefixes for routers in your LAN.    s:   w
Dbtain DNS server address au Primary DNS Serve Secondary DNS Serve LAN IPV6 ADDRESS SETTINGS Use this section to configure the LAN IPV6 Address here, you may network again. Enable DHCP-PI LAN IPV6 Address LAN IPV6 Address LAN IPV6 Address LAN IPV6 Address LAN IPV6 Address LAN IPV6 Address LAN IPV6 Link-Local Address ADDRESS AUTOCONFIGURATI Use this section to setup IPV6 Address assignmen Enable Automatic IPV6 address assignmen Enable Automatic DHCP-PD in LAN Autoconfiguration Type	Dobtain IPv6 DNS Servers automatically   Duse the following IPv6 DNS Servers   r:   r:   r:   r:   a internal network settings of your router. If you change the rheed to adjust your PC network settings to access the rheed to adjust your pC network settings to access the rheed to adjust your pC network settings to access the rheed to adjust your pC network settings to access the rheed to adjust your pC network settings to access the rheed to adjust your pC network settings to access the rhe
Dbtain DNS server address au Primary DNS Serve Secondary DNS Serve LAN IPV6 ADDRESS SETTINGS LAN IPV6 ADDRESS SETTINGS LAN IPV6 Address here, you may network again. Enable DHCP-PC LAN IPv6 Address LAN IPv6 Address LAN IPv6 Address LAN IPv6 Address LAN IPv6 Address LAN IPv6 Address LAN IPv6 Cink-Local Address ADDRESS AUTOCONFIGURATI Use this section to setup IPv6 Ad your network. You can also enal Enable Automatic IPv6 address assignmen Enable Automatic DHCP-PD in LAY	Dobtain IPv6 DNS Servers automatically   Duse the following IPv6 DNS Servers   r:   r:   r:   r:
Dbtain DNS server address au Primary DNS Serve Secondary DNS Serve LAN IPV6 ADDRESS SETTINGS Use this section to configure the LAN IPV6 Address here, you may network again. Enable DHCP-PI LAN IPV6 Address LAN IPV6 Address LAN IPV6 Address LAN IPV6 Address LAN IPV6 Address LAN IPV6 Address LAN IPV6 Link-Local Address ADDRESS AUTOCONFIGURATI Use this section to setup IPV6 Address assignmen Enable Automatic IPV6 address assignmen Enable Automatic DHCP-PD in LAN Autoconfiguration Type	Dobtain IPv6 DNS Servers automatically   Duse the following IPv6 DNS Servers   r:   r:   r:   r:   a internal network settings of your router. If you change the rheed to adjust your PC network settings to access the rhe

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

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

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

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

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

- Autoconfiguration Select Stateful (DHCPv6), SLAAC + RDNSS or SLAAC + Stateless Type: DHCP.
- IPv6 Address Range Enter the start IPv6 Address for the DHCPv6 range for your local Start: computers.
- IPv6 Address Range Enter the end IPv6 Address for the DHCPv6 range for your local End: computers.

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

Click Save Settings.

	nternal network settings of your router. If you change the need to adjust your PC network settings to access the
Enable DHCP-PD	: 🗸
LAN IPv6 Address	: /64
LAN IPv6 Link-Local Address	: fe80::7a54:2eff:fefd:f860 /64
ADDRESS AUTOCONFIGURATIO	
ADDRESS AUTOCONFIGURATIO Use this section to setup IPv6 Aut your network. You can also enable Enable Automatic IPv6 address	oconfiguration to assign IP addresses to the computers on 2 DHCP-PD to delegate prefixes for routers in your LAN.
ADDRESS AUTOCONFIGURATIO Use this section to setup IPv6 Aut your network. You can also enable	oconfiguration to assign IP addresses to the computers on DHCP-PD to delegate prefixes for routers in your LAN. : v
ADDRESS AUTOCONFIGURATIO Use this section to setup IPv6 Aut your network. You can also enable Enable Automatic IPv6 address assignment Enable Automatic DHCP-PD in	oconfiguration to assign IP addresses to the computers on I DHCP-PD to delegate prefixes for routers in your LAN. I IV

## IPv6 in IPv4 Tunneling

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

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

IPv6 DNS Settings: Select either Obtain IPv6 DNS Servers automatically or Use the following IPv6 DNS Servers.

**Primary/Secondary** If you selected the second option above, enter the Primary and **IPv6 DNS Servers:** Secondary **DNS Server** addresses.

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

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

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

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

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

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

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

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

IPV6
Use this section to configure your IPv6 Connection Type. If you are unsure of your connection
method, please contact your Internet Service Provider.
Save Settings Don't Save Settings
IPV6 CONNECTION TYPE
Choose the mode to be used by the router to connect to the IPv6 Internet.
My IPv6 Connection is : IPv6 in IPv4 Tunnel
IPV6 IN IPV4 TUNNEL SETTINGS
Enter the IPv6 in IPv4 Tunnel information provided by your Tunnel Broker.
Remote IPv4 Address :
Remote IPv6 Address :
Local IPv4 Address :
Local IPv6 Address :
Subnet Prefix Length :
IPV6 DNS SETTINGS
Obtain DNS server address automatically or enter a specific DNS server address.
Obtain IPv6 DNS Servers automatically
○ Use the following IPv6 DNS Servers
O Use the following IPv6 DNS Servers Primary DNS Server :
Primary DNS Server :
Primary DNS Server : Secondary DNS Secondary DNS Server : Secondary DNS Secondary Se
Primary DNS Server :
Primary DNS Server :         Secondary DNS Server :         LAN IPV6 ADDRESS SETTINGS         Use this section to configure the internal network settings of your router. If you change the LAN IPv6 Address here, you may need to adjust your PC network settings to access the
Primary DNS Server :         Secondary DNS Server :         LAN IPV6 ADDRESS SETTINGS         Use this section to configure the internal network settings of your router. If you change the LAN IPv6 Address here, you may need to adjust your PC network settings to access the network again.
Primary DNS Server :         Secondary DNS Server :         LAN IPV6 ADDRESS SETTINGS         Use this section to configure the internal network settings of your router. If you change the LAN IPv6 Address here, you may need to adjust your PC network settings to access the network again.         Enable DHCP-PD :
Primary DNS Server :         Secondary DNS Server :         LAN IPV6 ADDRESS SETTINGS         Use this section to configure the internal network settings of your router. If you change the LAN IPv6 Address here, you may need to adjust your PC network settings to access the network again.         Enable DHCP-PD :       Image: Content of the internal inte
Primary DNS Server :         Secondary DNS Server :         LAN IPV6 ADDRESS SETTINGS         Use this section to configure the internal network settings of your router. If you change the LAN IPv6 Address here, you may need to adjust your PC network settings to access the network again.         Enable DHCP-PD :       Image: Content of the internal inte
Primary DNS Server :         Secondary DNS Server :         LAN IPV6 ADDRESS SETTINGS         Use this section to configure the internal network settings of your router. If you change the LAN IPv6 Address here, you may need to adjust your PC network settings to access the network again.         Enable DHCP-PD :       Image: Configure the internal network settings to access the network again.         Enable DHCP-PD :       Image: Configure the internal network settings to access the network again.         Enable DHCP-PD :       Image: Configure the internal network settings to access the network again.         Enable DHCP-PD :       Image: Configure the internal network settings to access the network again.         Enable DHCP-PD :       Image: Configure the internal network settings to access the network again.         LAN IPv6 Address :       Image: Configure the internal network settings to access the network again.
Primary DNS Server :         Secondary DNS Server :         LAN IPV6 ADDRESS SETTINGS         Use this section to configure the internal network settings of your router. If you change the LAN IPv6 Address here, you may need to adjust your PC network settings to access the network again.         Enable DHCP-PD :       ✓         LAN IPv6 Address :       /64         LAN IPv6 Link-Local Address :       fe80::7a54:2eff:fefd:f860 /64         ADDRESS AUTOCONFIGURATION SETTINGS         Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network.         Enable Automatic IPv6 address :       ✓
Primary DNS Server :         Secondary DNS Server :         LAN IPV6 ADDRESS SETTINGS         Use this section to configure the internal network settings of your router. If you change the LAN IPv6 Address here, you may need to adjust your PC network settings to access the network again.         Enable DHCP-PD :       ✓         LAN IPv6 Address :       /64         LAN IPv6 Link-Local Address :       /64         ADDRESS AUTOCONFIGURATION SETTINGS         Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network.         Enable Automatic IPv6 address :       ✓         assignment       →         Enable Automatic IPv6 address :       ✓         assignment       →         Enable Automatic DHCP-PD in :       ✓
Primary DNS Server :         Secondary DNS Server :         LAN IPV6 ADDRESS SETTINGS         Use this section to configure the internal network settings of your router. If you change the LAN IPv6 Address here, you may need to adjust your PC network settings to access the network again.         Enable DHCP-PD :       ✓         LAN IPv6 Address :       /64         LAN IPv6 Address :       /64         LAN IPv6 Link-Local Address :       /64         ADDRESS AUTOCONFIGURATION SETTINGS         Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network.         Enable Automatic IPv6 address :       ✓
Primary DNS Server :         Secondary DNS Server :         LAN IPV6 ADDRESS SETTINGS         Use this section to configure the internal network settings of your router. If you change the LAN IPV6 Address here, you may need to adjust your PC network settings to access the network again.         Enable DHCP-PD :       ✓         LAN IPV6 Address :       /64         LAN IPV6 Link-Local Address :       /64         ADDRESS AUTOCONFIGURATION SETTINGS         Use this section to setup IPV6 Autoconfiguration to assign IP addresses to the computers on your network.         Enable Automatic IPv6 address :       ✓         Lable Automatic DHCP-PD in :       ✓

## 6 to 4 Tunneling

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

- **WAN IPv6 Address** Enter the IPv6 address information supplied by your Internet **Settings:** Service Provider (ISP).
- Primary/Secondary Enter the Primary and Secondary IPv6 DNS Server addresses. IPv6 DNS Servers:

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

- LAN IPv6 Link-Local Displays the Router's LAN IPv6 Link-Local Address. Address:
- **Enable Automatic IPv6** Check the box to enable the Autoconfiguration feature. **address assignment:** 
  - Autoconfiguration Select Stateful (DHCPv6), SLAAC + RDNSS or SLAAC + Stateless Type: DHCP.
  - IPv6 Address Range Enter the start IPv6 Address for the DHCPv6 range for your local Start: computers.
  - IPv6 Address Range Enter the end IPv6 Address for the DHCPv6 range for your local End: computers.
  - Router Advertisemt Enter the Router Advertisement Lifetime (in minutes). Lifetime:

Click Save Settings.

IPV6	
method, plea	ion to configure your IPv6 Connection Type. If you are unsure of your connection ase contact your Internet Service Provider.
Save Settin	gs Don't Save Settings
IPV6 CONNE	ECTION TYPE
Choose the	mode to be used by the router to connect to the IPv6 Internet.
My	IPv6 Connection is : 6to4
WAN IPV6 /	ADDRESS SETTINGS
Enter the I	Pv6 address information provided by your Internet Service Provider (ISP).
	6to4 Address :
	6to4 Relay :
	Primary DNS Server :
Sec	ondary DNS Server :
LAN IPV6 A	DDRESS SETTINGS
	ion to configure the internal network settings of your router. If you change the dress here, you may need to adjust your PC network settings to access the in.
	LAN IPv6 Address : XXXX:XXXX:XXXX: ::1 /64
LAN IPv6	Link-Local Address : fe80::7a54:2eff:fefd:f860 /64
ADDRESS A	UTOCONFIGURATION SETTINGS
your network	ion to setup IPv6 Autoconfiguration to assign IP addresses to the computers on $\!$
Enable Auto	natic IPv6 address : 📝 assignment
Auto	configuration Type : SLAAC+Stateless DHCP 💟

## 6rd

- My IPv6 Connection is: Select 6rd from the drop-down menu.
  - WAN IPv6 Address Enter the address information supplied by your Internet Service Settings: Provider (ISP).
- Primary/Secondary IPv6 Enter the Primary and Secondary IPv6 DNS Server addresses. DNS Servers:
  - LAN IPv6 Address: Enter the LAN (local) IPv6 Address for the router.
  - LAN IPv6 Link-Local Displays the Router's LAN IPv6 Link-Local Address. Address:
- **Enable Automatic IPv6** Check the box to enable the Autoconfiguration feature. **address assignment:**
- Autoconfiguration Type: Select Stateful (DHCPv6), SLAAC+RDNSS or SLAAC + Stateless DHCP.
  - Router Advertisement Enter the Router Advertisement Lifetime (in minutes). Lifetime:
    - Click Save Settings.

IPVG         Use this section to configure your IPV6 Connection Type. If you are unsure of your connection method, please contact your internet Service Provider.         Save Settings       Don't Save Settings         IPV6 CONNECTION TYPE         Choose the mode to be used by the router to connect to the IPv6 Internet.         My IPv6 Connection is :       Grd         WAN IPV6 ADDRESS SETTINGS         Enter the IPv6 address information provided by your Internet Service Provider (ISP).         Enable Hub and Spoke Mode :         Grd Configuration :       Grd Ch(Ppv4 option)         Mask Length :       IPv4 Address :         Mask Length :       IPv4 Address :         Assigned IPv6 Prefix :       IPv4 Address :         Primary DNS Server :       IPv6 Address SETTINGS         LAN IPv6 ADDRESS SETTINGS       IVPv6 Address SETTINGS         LAN IPv6 Address SETTINGS       Use this section to configure the internal network settings of your router. If you change the LAN IPv6 Address here, you may need to adjust your PC network settings to access the network again.         LAN IPv6 Link-Local Address :       fe80::7a54:2eff:fefd:f860 /64         ADDRESS AUTOCONFIGURATION SETTINGS       Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network.         Enable Automatic IPv6 address :       Image: Stance+Stateless DHCP Image: Stance+Stateless DHCP Image: Stance+Stateless DHCP Imag	10000	
method, please contact your Internet Service Provider.   Save Settings   Don't Save Settings   IPV6 CONNECTION TYPE Choose the mode to be used by the router to connect to the IPv6 Internet. My IPv6 Connection is : @rd WAN IPv6 ADDRESS SETTINGS Enter the IPv6 address information provided by your Internet Service Provider (ISP). Enable Hub and Spoke Mode :	IPV6	
Save Settings       Don't Save Settings         IPV6 CONNECTION TYPE         Choose the mode to be used by the router to connect to the IPv6 Internet. My IPv6 Connection is : 6rd         Market Settings         WAN IPv6 ADDRESS SETTINGS         Enter the IPv6 address information provided by your Internet Service Provider (ISP).         Enter the IPv6 address information provided by your Internet Service Provider (ISP).         Enter the IPv6 address information provided by your Internet Service Provider (ISP).         Enter the IPv6 address information provided by your Internet Service Provider (ISP).         Enter the IPv6 address information provided by your Internet Service Provider (ISP).         Enter the IPv6 address information provided by your Internet Service Provider (ISP).         Enter the IPv6 address information provided by your Internet Service Provider (ISP).         Enter the IPv6 Address information provided by your Internet Service Provider (ISP).         Enter the IPv6 Address :         Mask Length :		
IPV6 CONNECTION TYPE         Choose the mode to be used by the router to connect to the IPv6 Internet.         MY IPv6 Connection is : ord IPv6 Internet.         WAN IPv6 ADDRESS SETTINGS         Enter the IPv6 address information provided by your Internet Service Provider (ISP).         Enter the IPv6 address information provided by your Internet Service Provider (ISP).         Enter the IPv6 address information provided by your Internet Service Provider (ISP).         Enter the IPv6 address information provided by your Internet Service Provider (ISP).         Enter the IPv6 address information provided by your Internet Service Provider (ISP).         Enable Hub and Spoke Mode :	_	
Choose the mode to be used by the router to connect to the IPv6 Internet.         My IPv6 Connection is : 6rd         WAN IPv6 ADDRESS SETTINGS         Enter the IPv6 address information provided by your Internet Service Provider (ISP).         Enable Hub and Spoke Mode : □         Grd Configuration : ● 6rd DHCPv4 option ● Manual Configuration         Grd IPv6 Prefix : □         IPv4 Address : Mask Length : □         Assigned IPv6 Prefix :         Tunnel Link-Local Address :         Primary DNS Server : □         Secondary DNS Server : □         Secondary DNS Server : □         LAN IPv6 ADDRESS SETTINGS         Use this section to configure the internal network settings of your router. If you change the LAN IPv6 Address is fe80::7a54:2eff:fefd:f860 /64         ADDRESS AUTOCONFIGURATION SETTINGS         Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network.         Enable Automatic IPv6 address : □         assignment assignment         Autoconfiguration Type : SLAAC+Stateless DHCP ▼	Save S	Settings Don't Save Settings
My IPv6 Connection is :       6rd         WAN IPV6 ADDRESS SETTINGS         Enter the IPv6 address information provided by your Internet Service Provider (ISP).         Enable Hub and Spoke Mode :         Grd Configuration :       ● 6rd DHCPv4 option ● Manual Configuration         Grd IPv6 Prefix :       /	IPV6 C	ONNECTION TYPE
WAN IPV6 ADDRESS SETTINGS         Enter the IPv6 address information provided by your Internet Service Provider (ISP).         Enable Hub and Spoke Mode :         Grd Configuration :	Choose	e the mode to be used by the router to connect to the IPv6 Internet.
Enter the IPv6 address information provided by your Internet Service Provider (ISP). Enable Hub and Spoke Mode : Grd Configuration : Of Configuration : Grd Configuration : Grd IPv6 Prefix : IPv4 Address : Assigned IPv6 Prefix : Tunnel Link-Local Address : Grd Border Relay IPv4 Address : Primary DNS Server : Secondary DNS Server : Secondary DNS Server : LAN IPv6 ADDRESS SETTINGS Use this section to configure the internal network settings of your router. If you change the LAN IPv6 Address : LAN IPv6 Address : LAN IPv6 Address : Enable AutoconFigURATION SETTINGS Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network. Enable Automatic IPv6 address : Secondary Type : SLAAC+Stateless DHCP		My IPv6 Connection is : Grd
Enable Hub and Spoke Mode : Grd Configuration : Grd DP46 Prefix : IPv4 Address : Mask Length : IPv4 Address : Assigned IPv6 Prefix : Tunnel Link-Local Address : Grd Border Relay IPv4 Address : Primary DNS Server : Secondary DNS Server : Secondary DNS Server : LAN IPv6 ADDRESS SETTINGS Use this section to configure the internal network settings of your router. If you change the LAN IPv6 Address i: LAN IPv6 Address : LAN IPv6 Address : LAN IPv6 Link-Local Address : fe80::7a54:2eff:fefd:f860 /64 ADDRESS AUTOCONFIGURATION SETTINGS Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network. Enable Automatic IPv6 address : assignment : Autoconfiguration Type : SLAAC+Stateless DHCP v	WAN IF	PV6 ADDRESS SETTINGS
Enable Hub and Spoke Mode : Grd Configuration : Grd DP46 Prefix : IPv4 Address : Mask Length : IPv4 Address : Assigned IPv6 Prefix : Tunnel Link-Local Address : Grd Border Relay IPv4 Address : Primary DNS Server : Secondary DNS Server : Secondary DNS Server : LAN IPv6 ADDRESS SETTINGS Use this section to configure the internal network settings of your router. If you change the LAN IPv6 Address i: LAN IPv6 Address : LAN IPv6 Address : LAN IPv6 Link-Local Address : fe80::7a54:2eff:fefd:f860 /64 ADDRESS AUTOCONFIGURATION SETTINGS Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network. Enable Automatic IPv6 address : assignment : Autoconfiguration Type : SLAAC+Stateless DHCP v	Furthern A	the TDuck address information municipal burners. Tetamate Comics Descrides (TOD)
Grd Configuration : Image: Grd DHCPv4 option Image: Manual Configuration Grd IPv6 Prefix :   IPv4 Address : Image: Mask Length :   IPv4 Address : Mask Length :   Assigned IPv6 Prefix : Image: Mask Length :   Tunnel Link-Local Address : Image: Mask Length :   Grd Border Relay IPv4 Address : Image: Mask Length :   Primary DNS Server : Image: Mask Length :   Secondary DNS Server : Image: Mask Length :   Secondary DNS Server : Image: Mask Length :   Use this section to configure the internal network settings of your router. If you change the LAN IPv6 Address here, you may need to adjust your PC network settings to access the network again.   LAN IPv6 Address : Image: LAN IPv6 Link-Local Address :   LAN IPv6 Link-Local Address : fe80::7a54:2eff:fefd:f860 /64   Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network. Enable Automatic IPv6 address :   Enable Automatic IPv6 address : Image: SLAAC+Stateless DHCP Image: SLAAC+Stateless DHCP Image: Stateless		
6rd IPv6 Prefix :       /         IPv4 Address :       Mask Length :         Assigned IPv6 Prefix :       ////////////////////////////////////	Enable	
IPv4 Address :       Mask Length :         Assigned IPv6 Prefix :		6rd Configuration : 💿 6rd DHCPv4 option 🔘 Manual Configuration
Assigned IPv6 Prefix : Tunnel Link-Local Address : 6rd Border Relay IPv4 Address : Primary DNS Server : Secondary DNS Server : Secondary DNS Server : LAN IPv6 ADDRESS SETTINGS Use this section to configure the internal network settings of your router. If you change the LAN IPv6 Address here, you may need to adjust your PC network settings to access the network again. LAN IPv6 Address : LAN IPv6 Link-Local Address : fe80::7a54:2eff:fefd:f860 /64 ADDRESS AUTOCONFIGURATION SETTINGS Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network. Enable Automatic IPv6 address : assignment Autoconfiguration Type : SLAAC+Stateless DHCP v		6rd IPv6 Prefix :
Tunnel Link-Local Address :         6rd Border Relay IPv4 Address :         Primary DNS Server :         Secondary DNS Server :         LAN IPv6 ADDRESS SETTINGS         LAN IPv6 Address here, you may need to adjust your PC network settings to access the network again.         LAN IPv6 Address :         LAN IPv6 Link-Local Address :         fe80::7a54:2eff:fefd:f860 /64         ADDRESS AUTOCONFIGURATION SETTINGS         Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network.         Enable Automatic IPv6 address :         assignment         assignment         Autoconfiguration Type :         SLAAC+Stateless DHCP V		IPv4 Address : Mask Length :
Grd Border Relay IPv4 Address :		Assigned IPv6 Prefix :
Primary DNS Server :         Secondary DNS Server :         LAN IPV6 ADDRESS SETTINGS         Use this section to configure the internal network settings of your router. If you change the LAN IPv6 Address here, you may need to adjust your PC network settings to access the network again.         LAN IPv6 Address here, you may need to adjust your PC network settings to access the network again.         LAN IPv6 Address :         LAN IPv6 Link-Local Address :         fe80::7a54:2eff:fefd:f860 /64         ADDRESS AUTOCONFIGURATION SETTINGS         Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network.         Enable Automatic IPv6 address :         assignment         Autoconfiguration Type :         SLAAC+Stateless DHCP V	Tur	nnel Link-Local Address :
Secondary DNS Server :         LAN IPV6 ADDRESS SETTINGS         Use this section to configure the internal network settings of your router. If you change the LAN IPv6 Address here, you may need to adjust your PC network settings to access the network again.         LAN IPv6 Address here, you may need to adjust your PC network settings to access the network again.         LAN IPv6 Address :         LAN IPv6 Link-Local Address :         fe80::7a54:2eff:fefd:f860 /64         ADDRESS AUTOCONFIGURATION SETTINGS         Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network.         Enable Automatic IPv6 address :         assignment         Autoconfiguration Type :         SLAAC+Stateless DHCP V	6rd Bor	der Relay IPv4 Address :
LAN IPV6 ADDRESS SETTINGS         Use this section to configure the internal network settings of your router. If you change the LAN IPv6 Address here, you may need to adjust your PC network settings to access the network again.         LAN IPv6 Address here, you may need to adjust your PC network settings to access the network again.         LAN IPv6 Address :         LAN IPv6 Link-Local Address :         fe80::7a54:2eff:fefd:f860 /64         ADDRESS AUTOCONFIGURATION SETTINGS         Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network.         Enable Automatic IPv6 address :         assignment         Autoconfiguration Type :         SLAAC+Stateless DHCP V		Primary DNS Server :
Use this section to configure the internal network settings of your router. If you change the LAN IPv6 Address here, you may need to adjust your PC network settings to access the network again.  LAN IPv6 Address : LAN IPv6 Link-Local Address : fe80::7a54:2eff:fefd:f860 /64  ADDRESS AUTOCONFIGURATION SETTINGS  Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network.  Enable Automatic IPv6 address : SLAC+Stateless DHCP V		Secondary DNS Server :
Use this section to configure the internal network settings of your router. If you change the LAN IPv6 Address here, you may need to adjust your PC network settings to access the network again.  LAN IPv6 Address : LAN IPv6 Link-Local Address : fe80::7a54:2eff:fefd:f860 /64  ADDRESS AUTOCONFIGURATION SETTINGS  Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network.  Enable Automatic IPv6 address : SLAC+Stateless DHCP V		
LAN IPv6 Address here, you may need to adjust your PC network settings to access the network again.  LAN IPv6 Address : LAN IPv6 Link-Local Address : fe80::7a54:2eff:fefd:f860 /64  ADDRESS AUTOCONFIGURATION SETTINGS  Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network.  Enable Automatic IPv6 address : assignment Autoconfiguration Type : SLAAC+Stateless DHCP v	LAN IP	V6 ADDRESS SETTINGS
LAN IPv6 Link-Local Address : fe80::7a54:2eff:fefd:f860 /64         ADDRESS AUTOCONFIGURATION SETTINGS         Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network.         Enable Automatic IPv6 address : assignment         Autoconfiguration Type : SLAAC+Stateless DHCP v	LAN IPv	6 Address here, you may need to adjust your PC network settings to access the
ADDRESS AUTOCONFIGURATION SETTINGS Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network. Enable Automatic IPv6 address :  assignment Autoconfiguration Type : SLAAC+Stateless DHCP		LAN IPv6 Address :
Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network. Enable Automatic IPv6 address :  assignment Autoconfiguration Type :  SLAAC+Stateless DHCP	LAN I	Pv6 Link-Local Address : fe80::7a54:2eff:fefd:f860 /64
Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network. Enable Automatic IPv6 address :  assignment Autoconfiguration Type :  SLAAC+Stateless DHCP		
Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network. Enable Automatic IPv6 address :  assignment Autoconfiguration Type : SLAAC+Stateless DHCP V		
your network. Enable Automatic IPv6 address : assignment Autoconfiguration Type : SLAAC+Stateless DHCP V	ADDRE	SS AUTOCONFIGURATION SETTINGS
assignment Autoconfiguration Type : SLAAC+Stateless DHCP		
assignment Autoconfiguration Type : SLAAC+Stateless DHCP	Enable A	Automatic IPv6 address : 🔽
		assignment
Router Advertisement Lifetime : (minutes)	2004	
	Router	Advertisement Lifetime : (minutes)
	save 5	Settings Don't Save Settings

## Local Connectivity

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

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

Click Save Settings.

IPV6	
method,	section to configure your IPv6 Connection Type. If you are unsure of your connection please contact your Internet Service Provider. ettings Don't Save Settings
IPV6 CO	DNNECTION TYPE
	the mode to be used by the router to connect to the IPv6 Internet. My IPv6 Connection is : Local Connectivity Only
LAN IP	76 ADDRESS SETTINGS
Use this	section to configure the internal network settings of your router.
LAN IF	Pv6 Link-Local Address : fe80::7a54:2eff:fefd:f860 /64
Save S	ettings Don't Save Settings

## Advanced Virtual Server

If you disable UPnP<sup>™</sup> (Universal Plug and Play), you will need to manually open ports or set up application rules for certain applications. Refer to your application's documentation or website for port information. The *Virtual Server* will allow you to open a single port. To open a range of ports, refer to *Port Forwarding* on the next page. *Application Rules* are covered on the page that follows.

#### Name: Entera Name for the rule or select an Application name from the drop-down menu. When an Application Name is selected click << to populate the field.

- **IP Address:** Enter the **IP Address** of the computer on your local network that you want to allow the incoming service to. If your computer is receiving an IP address automatically from the router (DHCP), you computer will be listed in the **Computer Name** drop-down menu. Select your computer and click <<.
- Private Port/ Enter the port(s) that you want to open in the fields Public Port: below Private Port and Public Port. The private and public ports are usually the same. The public port is the port seen from the Internet side, and the private port is the port being used by the application on the computer within your local network.

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

- Schedule: The schedule of time when the Virtual Server Rule will be enabled. The schedule may be set to **Always**, which allows the service to always be enabled. You can create your own schedule in the **Tools** > **Schedules** section.
- Inbound Filter: Select Allow All (most common) or a pre-defined Inbound filter. You may create your own inbound filters in the Advanced > Inbound Filter page.

DIR-803		SETUP	ADVANCED	TOOLS		STATUS	SUPPORT
VIRTUAL SERVER	VIR	TUAL SERVER					Helpful Hints
PORT FORWARDING	The	e Virtual Server op	tion allows you to define a si	ngle public port	: on your route	r for redirection	Check the
APPLICATION RULES	to a onli	an internal LAN IP ne services such a	Address and Private LAN por s FTP or Web Servers.	t if required. T	nis feature is us	eful for hosting	Application Name d down menu for a list of
QOS ENGINE	_		n't Save Settings				predefined server type If you select one of the
NETWORK FILTER							predefined server type click the arrow button
INBOUND FILTER	24	- VIRTUAL SERV	ERS LIST				next to the drop down menu to fill out the
ACCESS CONTROL	Ren	naining number of	rules that can be created: 2	4			corresponding field.
WEBSITE FILTER				Port	Traffic Type		<ul> <li>You can select a computer from the list</li> </ul>
FIREWALL SETTINGS		Name		Public Port	Protocol	Schedule	DHCP clients in the Computer Name dro
ROUTING			Application name	·	Both 💌	Always 💌	down menu, or you ca manually enter the IP
ADVANCED WIRELESS		IP Address		Private Port		Inbound Filter	address of the comput at which you would like
WI-FI PROTECTED SETUP			Computer Name			Allow All 💌	<ul> <li>open the specified por</li> <li>Select a schedule for</li> </ul>
ADVANCED NETWORK		Name	</td <td>Public Port</td> <td>Protocol Both</td> <td>Schedule Always</td> <td>when the virtual serve</td>	Public Port	Protocol Both	Schedule Always	when the virtual serve
GUEST ZONE		IP Address	,	Private Port		Inbound Filter	will be enabled. If you not see the schedule y
			Computer Name			Allow All 🔽	need in the list of schedules, go to the
		Name		Public Port	Protocol	Schedule	Tools -> Schedules screen and create a ne
			Application name		Both 💌	Always 💌	<ul> <li>schedule.</li> <li>Select a filter that</li> </ul>
		IP Address	<	Private Port		Inbound Filter	<ul> <li>Select a filter that restricts the Internet hosts that can access</li> </ul>
		Name		Public Port	Protocol	Schedule	virtual server to hosts
			Application name		Both 💌	Always 💟	that you trust. If you on not see the filter you
		IP Address		Private Port		Inbound Filter	need in the list of filter go to the Advanced
			Computer Name			Allow All 💌	Inbound Filter scree and create a new filter
		Name	<	Public Port	Protocol Both 💌	Schedule Always 💌	• More
		IP Address	< Computer Name	Private Port		Inbound Filter	
		Name	< Application name	Public Port	Protocol Both 💌	Schedule Always 💌	
		IP Address		Private Port		Inbound Filter	

## **Port Forwarding**

If you disable UPnP<sup>™</sup> (Universal Plug and Play), you will need to manually open ports or set up application rules for certain applications. Refer to your application's documentation or website for port information. *Port Forwarding* will allow you to open a single port or a range of ports in your router for specific applications. (*Application Rules* are covered in the next section.)

- Name: Enter a Name for the rule or select an Application Name from the drop-down menu. When an Application Name is selected, click << to populate the field.
- **IP Address:** Enter the **IP Address** of the computer on your local network that you want to allow the incoming service to. If your computer is receiving an IP address automatically from the router (DHCP), you computer will be listed in the **Computer Name** drop-down menu. Select your computer and click <<.
- Ports to Open Enter the TCP and/or UDP port or ports that you want TCP/UDP: to open. You can enter a single port or a range of ports. Separate ports with a comma.

Example: 24,1009,3000-4000

- Schedule: The schedule of time when the Port Forwarding Rule will be enabled. The schedule may be set to **Always**, which will allow the service to always be enabled. You can create your own schedule in the **Tools** > Schedules section.
- Inbound Filter: Select Allow All (most common) or a pre-defined Inbound filter. You may create your own inbound filters in the Advanced > Inbound Filter page.

DIR-803	27	SETUP	ADVANCED	т	00L5	STATUS	SUPPORT
VIRTUAL SERVER	PO	RT FORWARDING					Helpful Hints
PORT FORWARDING APPLICATION RULES QOS ENGINE NETWORK FILTER	thre the Thi:	ough those ports to format, Port Ranges s option is only applic	pen multiple ports or a ra a single PC on your netv : (100-150), Individual P able to the INTERNET s Save Settings	vork. This fe orts (80, 68	eature allows you to	enter ports in	<ul> <li>Check the Application Name drop-down menu for a l of pre-defined applications that you ca select from. If you sele one of the pre-defined</li> </ul>
INBOUND FILTER ACCESS CONTROL WEBSITE FILTER		PORT FORWARD	NG RULES	24			applications, click the arrow button next to the drop-down menu to fill out the appropriate fields.
FIREWALL SETTINGS					Ports to Open		<ul> <li>You can select your computer from the list of</li> </ul>
ROUTING ADVANCED WIRELESS		Name	< Application N	lame 💌	TCP	Schedule Always 💌	DHCP clients in the Computer Name drop-down menu, or
WI-FI PROTECTED SETUP		IP Address	< Computer Na	ame 💌	UDP	Inbound Filter Allow All 😒	enter the IP address manually of the comput you would like to open
ADVANCED NETWORK		Name	< Application N	Jame 🗸	ТСР	Schedule Always 💙	the specified port to. • Select a schedule for when the port forwardi
GUEST ZONE		IP Address	Computer Na	ame 💌	UDP	Inbound Filter Allow All	will be enabled. If you a not see the schedule yo need in the list of
		Name	< Application N	lame 🔽	ТСР	Schedule Always 💌	schedules, go to the Tools -> Schedules screen and create a ne
		IP Address	< Computer Na	ame 💌	UDP	Inbound Filter Allow All	<ul> <li>schedule.</li> <li>You can enter ports various formats:Range</li> </ul>
		Name	< Application N	lame 🔽	ТСР	Schedule Always 💌	(50-100) Individual (80) 68, 888) Mixed (1020-5000, 689)
		IP Address	< Computer Na	ame 💌	UDP	Inbound Filter Allow All 💌	• More
		Name	< Application N	lame 🔽		Schedule Always 💌	
		IP Address	< Computer Na	ame 💌	UDP	Inbound Filter Allow All 💉	
		Name	< Application N	lame 🔽		Schedule Always 💌	
		IP Address	< Computer Na	ame 💌	UDP	Inbound Filter	

#### **Application Rules**

If you disable UPnP<sup>™</sup> (Universal Plug and Play), you will need to manually open ports or set up application rules for certain applications. Refer to your application's documentation or website for port information. (Opening ports is covered in the preceding pages, under *Virtual Server* and *Port Forwarding*.)

If you need to run applications that require multiple connections, specify the port normally associated with an application in the **Trigger Port** field, select the **Traffic Type** as **TCP** or **UDP**, then enter the **Firewall** (public) **Port**(s) associated with the **Trigger Port** to open them for inbound traffic.

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

*Note:* The DIR-803 provides some predefined applications that you can select from.

- **Trigger:** This is the port used to trigger the application. You can enter 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.

Example: 24,1009,3000-4000

- Traffic Type: Select the protocol of each Trigger and Firewall Port (TCP, UDP, or Both).
  - Schedule: The schedule of time when the Application Rule will be enabled. The schedule may be set to **Always**, which will allow the service to always be enabled. You can create your own schedule in the **Tools** > **Schedules** section.

DIR-803 ///	SETUP	ADVANCED	TOOLS	5	TATUS	SUPPORT
VIRTUAL SERVER	APPLICATION RU	LES				Helpful Hints
PORT FORWARDING		es option is used to open single				• Use this feature if ye
APPLICATION RULES		sent to the Internet on an out ply to all computers on your int		oort or port range	. Special	are trying to execute o of the listed network
QOS ENGINE		Don't Save Settings	onnarnotwork			applications and it is no communicating as
NETWORK FILTER						expected.
INBOUND FILTER	24 APPLICATIO	IN RULES				<ul> <li>Use the Application</li> <li>Name drop-down men</li> </ul>
ACCESS CONTROL	Remaining number	of rules that can be created: 24	4			to view a list of pre-defined application
WEBSITE FILTER			Port	Traffic Type	Schedule	that you can select from If you select one of the
FIREWALL SETTINGS				Traffic Type	schedule	pre-defined application click the arrow button
ROUTING	Name	Application	Trigger	All 💌		next to the drop-down menu to fill out the
ADVANCED WIRELESS		< Application Name	Firewall		Always 💌	appropriate fields.
WI-FI PROTECTED				All 💌		<ul> <li>Select a schedule for when the service will be</li> </ul>
	-		Trigger	Al 💙		enabled. If you do not see the schedule you
SUEST ZONE	Name	Application			Always 🗸	need in the list of schedules, go to the
JUEST ZONE		Application Name	Firewall	All 💌		Tools -> Schedules
			Trigger			screen and create a ne schedule.
	Name	Application	mgger	All 💌		• More
		< Application Name	Firewall		Always 💌	
				All 💌		
			Trigger	Al 💙		
	Name	Application			Always 🔽	
		Application Name	Firewall	All 💌		
			Trigger			
	Name	Application	nggel	All 💌		
		Application Name</td <td>Firewall</td> <td></td> <td>Always 💌</td> <td></td>	Firewall		Always 💌	
				All 💌		

## **QoS Engine**

Quality of Service (QoS) assigns priority to specified applications, providing better performance of data flow. The QoS Engine option helps improve your network gaming experience by prioritizing your game traffic over other network traffic, like FTP. For most applications, automatic classification will be adequate, and specific QoS Engine Rules are not required.

- **Enable QoS:** This option is disabled by default. Check the box to enable this option for providing better performance with online games and other interactive applications, such as VoIP.
- Uplink Speed: This field displays the data transfer rate from the router to your Internet Service Provider (ISP). When the *Enable QoS* option is checked, this will allow you to enter the **Uplink Speed** manually, or select a rate from the drop-down menu that says **Select Transmission Rate**.
- **Downlink Speed:** This field displays the speed at which data can be transferred from the Internet to your router. This is determined by your ISP.
  - Queue Type: Select either Strict Priority Queue (based on traffic priority) or Weighted Fair Queue (based on queue weight, by percentage).
    - **Queue ID:** The Queue ID that is used will be shown in the first column.
- **Queue Priority:** When *Strict Priority Queue* is selected, the *Queue Priority* will be displayed in the second column
- Queue Weight: When Weighted Fair Queue is selected, you will be able to manually enter the percentages for the Queue Weight in the second column for each Queue ID.
  - Classification The QoS Engione supports overlaps between rules, where more Rules: than one rule can match for a specific message flow. If more than one rule is found to match, the rule with the highest priority will be used.



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

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

Protocol: The Protocol used by the messages.

- Local IP Range: The rule applies to a flow of messages whose LAN-side IP address falls within the range set here.
- **Remote IP Range:** The rule applies to a flow of messages whose WAN-side IP address falls within the range set here.
- **Application Port:** Select an **Application Port** from the drop-down menu and click <<.

Name Youtube	Queue ID	Protocol TCP << ALL V
Local IP Range	to	Application Port
Remote IP Range	; to	YOUTUBE     <
Name	Queue ID	Protocol
Local IP Range	to	Application Port
Remote IP Range	e to	
Name	Queue ID	Protocol
Local IP Range	to	Application Port
Remote IP Range		ALL V

#### **Network (MAC) Filters**

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

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

MAC Address: Enter the MAC Address you would like to filter, or select from the DHCP Client List (see below).

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

- DHCP Client List: Devices that have obtained an IP address from the router's DHCP server will be in the DHCP Client List. Select a DHCP Client from the drop-down menu and click << to copy that device's MAC Address.
  - Schedule: The schedule may be set to Always, which will allow the filtering to always be enabled. Use the dropdown menu to select a pre-defined a schedule in the router. Or, you can click on New Schedule to add one.

DIR-803	SETUP	ADVA	ANCED	т	DOLS	STATUS	SUPPORT
VIRTUAL SERVER	MAC ADDRESS FILTER						Helpful Hints
	The MAC (Media Access Co						d • Create a list of MA
	on the MAC Address of the manufacturer of the netwo						addresses and choose whether to allow or d
QOS ENGINE	network/Internet access.		_		-		them access to your network.
NETWORK FILTER	Save Settings Don't Sav	/e Setting	IS				<ul> <li>Computers that has obtained an IP address</li> </ul>
	24 MAC FILTERING RU	LES					from the router's DHC server will be in the D
ACCESS CONTROL							Client List. Select a device from the drop
	Configure MAC Filtering belo Turn MAC Filtering OFF	DW:			×		down menu and click l arrow to add that
FIREWALL SETTINGS	Romaining purpher of rules	that can	be created: 24				device's MAC to the li
ROUTING	Remaining number of rules	that can					<ul> <li>device's MAC to the li</li> <li>Use the check box</li> <li>the left to either enablished</li> </ul>
ROUTING ADVANCED WIRELESS	Remaining number of rules MAC Address		DHCP Clier			Schedule	<ul> <li>Use the check box the left to either enal or disable a particular</li> </ul>
ROUTING	-	that can		t List	Always	Schedule New Schedule	<ul> <li>Use the check box the left to either enal or disable a particular entry.</li> <li>Use the <b>Always</b> d</li> </ul>
ROUTING ADVANCED WIRELESS WI-FI PROTECTED	-		DHCP Clier				<ul> <li>Use the check box the left to either enal or disable a particular entry.</li> <li>Use the <b>Always</b> d down menu if you hav previously defined a</li> </ul>
ROUTING ADVANCED WIRELESS WI-FI PROTECTED SETUP	-	<<	DHCP Clier	~	Always 🗸	New Schedule	<ul> <li>Use the check box the left to either enal or disable a particular entry.</li> <li>Use the <b>Always</b> d down menu if you hav previously defined a schedule in the router not, dick on the New</li> </ul>
ROUTING ADVANCED WIRELESS WI-FI PROTECTED SETUP ADVANCED NETWORK	-	<	DHCP Clier Computer Name	~	Always 💙	New Schedule	<ul> <li>Use the check box the left to either enal or disable a particular entry.</li> <li>Use the <b>Always</b> d down menu if you hay previously defined a schedule in the router</li> </ul>
ROUTING ADVANCED WIRELESS WI-FI PROTECTED SETUP ADVANCED NETWORK	-	<	DHCP Clier Computer Name Computer Name	<ul> <li></li> /ul>	Always V Always V Always V	New Schedule New Schedule New Schedule	<ul> <li>Use the check box the left to either enal or disable a particular entry.</li> <li>Use the Always d down menu if you has previously defined a schedule in the route not, dick on the New Schedule button to</li> </ul>
ROUTING ADVANCED WIRELESS WI-FI PROTECTED SETUP ADVANCED NETWORK	-	<	DHCP Clier Computer Name Computer Name Computer Name		Always V Always V Always V Always V	New Schedule New Schedule New Schedule New Schedule	<ul> <li>Use the check box the left to either enal or disable a particular entry.</li> <li>Use the <b>Always</b> d down menu if you have previously defined a schedule in the route not, click on the <b>New</b> Schedule button to one.</li> </ul>
ROUTING ADVANCED WIRELESS WI-FI PROTECTED SETUP ADVANCED NETWORK	-	>> >> >> >> >> >> >> >> >> >>	DHCP Clier Computer Name Computer Name Computer Name Computer Name		Always V Always V Always V Always V Always V	New Schedule New Schedule New Schedule New Schedule New Schedule	<ul> <li>Use the check box the left to either enal or disable a particular entry.</li> <li>Use the <b>Always</b> d down menu if you have previously defined a schedule in the route not, click on the <b>New</b> Schedule button to one.</li> </ul>
ROUTING ADVANCED WIRELESS WI-FI PROTECTED SETUP ADVANCED NETWORK	-	>> >> >> >> >> >> >> >> >> >> >> >> >>	DHCP Clier Computer Name Computer Name Computer Name Computer Name Computer Name	<ul> <li>&gt;</li> /ul>	Always       Always       Always       Always       Always       Always       Always       Always	New Schedule New Schedule New Schedule New Schedule New Schedule New Schedule	<ul> <li>Use the check box the left to either enal or disable a particular entry.</li> <li>Use the <b>Always</b> d down menu if you have previously defined a schedule in the route not, click on the <b>New</b> Schedule button to one.</li> </ul>

#### **Inbound Filters**

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

Name: Enter a Name that is meaningful to you for the inbound filter rule.

Action: You may choose to Allow or Deny access.

**Remote IP** Check to **Enable** rule. **Range: Enable:** 

**Remote IP Start:** Enter the starting WAN-side IP address.

Remote IP End: Enter the ending WAN-side IP address.

- Add: Click the Add button to apply your settings. The rule will appear in the *Inbound Filter Rules List* below.
- Inbound Filter This section will list all rules that are created. Rules List: You may click the Edit icon to change the settings or enable/disable the rule, or click the Trash icon to permanently delete the rule.

DIR-803	SETUP	ADVANO	ED.	то	DLS	STATUS	SUPPORT
VIRTUAL SERVER	INBOUND FILTER						Helpful Hints
PORT FORWARDING	The Inbound Filter opt With this feature you o address range.						
QOS ENGINE NETWORK FILTER	Inbound Filters can be of systems. Filter rules Administration features	can be used wi					• Each rule can either Allow or Deny access from the WAN.
INBOUND FILTER							<ul> <li>Up to eight ranges of WAN IP addresses can be</li> </ul>
ACCESS CONTROL WEBSITE FILTER FIREWALL SETTINGS	ADD INBOUND FILTER	Name :					controlled by each rule. The checkbox by each I range can be used to disable ranges already
ROUTING	Bernote	Action : Al e IP Range : Er		ote IP Start	Remote IP	End	<ul><li>defined.</li><li>The starting and</li></ul>
ADVANCED WIRELESS			0.0.0		255.255.255	.255	ending IP addresses are WAN-side address.
WI-FI PROTECTED SETUP			0.0.0		255.255.255	.255	<ul> <li>Click the Add button to store a finished rule i</li> </ul>
ADVANCED NETWORK			0.0.0		255.255.255		<ul> <li>the Rules List below.</li> <li>Click the Edit icon in</li> </ul>
GUEST ZONE			0.0.0		255.255.255		the Rules List to change rule.
			0.0.0		255.255.255		<ul> <li>Click the Delete icon</li> </ul>
			0.0.0		255.255.255		in the Rules List to permanently remove a
			0.0.0		255.255.255	.255	rule. • More
			Add	Cancel	255.255.255	.255	• Plore
		ES LIST	Muu	Cancer			

#### **Access Control**

The Access Control section allows you to control access in and out of your network. Use this feature to set up parental controls. Grant access only to approved sites, limit web access based on times or dates, and/or block access from applications like P2P utilities or games.

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



#### **Access Control Wizard**

The wizard will guide you through a step-by-step process for creating a rule. Click **Next** to continue.

ADD NEW POLICY	
This wizard will guide you through the following steps to add a new policy for Access Control.	
Step 1 - Choose a unique name for your policy	
Step 2 - Select a schedule	
Step 3 - Select the machine to which this policy applies	
Step 4 - Select filtering method	
Step 5 - Select filters	
Step 6 - Configure Web Access Logging	
Prev Next Save Cancel	

#### Section 3 - Configuration

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

hoose a unique i	name for yo	ur policy.				
	Poli	icy Name :				
		Prev	Next	Save	Cancel	

Always V Details : Always

Prev Next Save Cancel

STEP 2: SELECT SCHEDULE

Choose a schedule to apply to this policy.

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

Enter the following information:

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

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

Select a filtering method from Log Web Access Only, Block All Access or Block Some Access. Click Save.

elect the method fo	r filtering.
	Method :      O Log Web Access Only O Block All Access O Block Some Access
	Prev Next Save Cancel

STEP 3: SELECT MACHINE			
Select the machine to which this policy applie	s.		
Specify a machine with its IP or MAC address, or se	lect 'Other Machines' fr	or machines that do not	have a policy.
Address Type : 💿 🛛		schings	
IP Address :	<		*
Machine Address :	<<	Computer Name	~
Clo	ne Your PC's MAC Address		
Adi	d Cancel		
Machine			
Prev	Next Save	Cancel	

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

Click Next to continue.

#### If you checked Apply Advanced Port Filters, add Port Filter Rules:

Enable - Check to Enable the rule.

Name - Enter a Name for your rule.

Dest IP Start - Enter the starting IP address.

Dest IP End - Enter the ending IP address.

Protocol - Select the Protocol from the drop-down list.

Dest Port Start - Enter the starting port number.

Dest Port End - Enter the ending port number.

Click Next.

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

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

Your newly created policy will now show up under *Policy Table*. You may click the **Edit** icon to change the policy, or click the **Trash** icon to delete the policy.

the method for filtering.	
м	tethod : ○Log Web Access Only ○Block All Access ④Block Some Access
	b Filter : 🔽
Apply Advanced Port	Filters : 🔽

Specify rul	es to prohibit a	access to specific IP add	resses and ports.			
Enable	Name	Dest IP Start	Dest IP End	Protocol	Dest Port Start	Dest Port End
		0.0.0.0	255.255.255.255	Any 💌	1	65535
		0.0.0.0	255.255.255.255	Any 💌	1	65535
		0.0.0.0	255.255.255.255	Any 💌	1	65535
		0.0.0.0	255.255.255.255	Any 💌	1	65535
		0.0.0.0	255.255.255.255	Any 💌	1	65535
		0.0.0.0	255.255.255.255	Any 💌	1	65535
		0.0.0.0	255.255.255.255	Any 💌	1	65535
		0.0.0.0	255.255.255.255	Any 💌	1	65535

TEP 6: CONFIGURE WEB ACCESS LOGGING	
Web Access Logging : Opsabled @ Enabled	
Prev Next Save Cancel	



#### **Website Filters**

Website Filters are available for you to set up a list of Websites that users on your network can be allowed to view or denied access to. To use this feature select to **Allow** or **Deny**, enter the domain or website, and click **Save Settings**. Make sure you also select **Apply Web Filter** under the *Access Control* section. (Refer to "Access Control" on page 73).

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

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

D-Lini	ĸ				$\prec$
DIR-803	SETUP	ADVANCED	TOOLS	STATUS	SUPPORT
VIRTUAL SERVER	WEBSITE FILTER				Helpful Hints
PORT FORWARDING APPLICATION RULES QOS ENGINE NETWORK FILTER INBOUND FILTER ACCESS CONTROL WEBSITE FILTER FIREWALL SETTINGS ROUTING	The Website Filter opt through your network checkbox in the Acces	. To use this feature, you s Control section. It Save Settings RING RULES ar below:	list of Web sites you wou must also select the "Appi		Create a list of Websites that you would like the devices on your network to be allowed or denied access to.     Keywords can be entered in this list in order to block any URL containing the keyword entered.     Use with Advanced -> Access Control.     More
ADVANCED WIRELESS WL-FL PROTECTED SETUP ADVANCED NETWORK GUEST ZONE		Website U	RL/Domain		
WIRELESS					

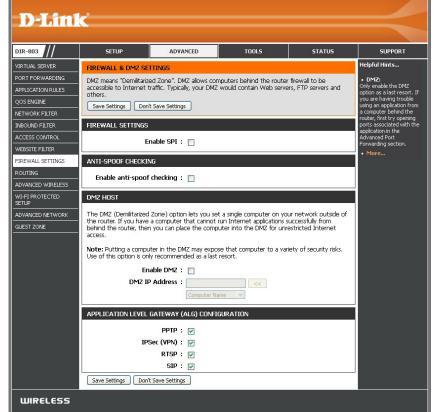
#### **Firewall Settings**

A firewall protects your network from the outside world. The DIR-803 offers a firewall type functionality. The SPI (Stateful Packet Inspection) feature helps prevent cyber attacks. There may be times when you may want a computer exposed to the outside world for certain types of applications. If you choose to expose a computer, you can enable DMZ.

- **Enable SPI:** SPI (Stateful Packet Inspection, also known as dynamic packet filtering) helps prevent cyber attacks by tracking more state per session. It validates that the traffic passing through the session conforms to the protocol.
- Enable Anti-Spoof Enable this feature to protect your network from certain kinds Checking: of "spoofing" attacks.
  - **Enable DMZ:** If an application has trouble working from behind the router, you can **Enable DMZ** to expose a computer to the Internet and run the application on that computer.

**Note:** Placing a computer in the DMZ may expose that computer to a variety of security risks. Using this option is only recommended as a last resort.

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



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

- **IPSec (VPN):** Allows multiple **VPN** (Virtual Private Network) clients to connect to their corporate network using **IPSec** (Internet Protocol Security). Some VPN clients support traversal of IPSec through NAT (Network Address Translation). This ALG (Application Level Gateway) may interfere with the operation of such VPN clients. If you are having trouble connecting with your corporate network, try turning this ALG off. Check with the system administrator of your corporate network whether your VPN client supports NAT traversal.
  - **RTSP:** Allows application that uses **RTSP** (Real Time Streaming Protocol) to receive streaming media from the Internet. QuickTime and Real Player are some of the common applications using this protocol.
    - **SIP:** Allows devices and applications using VoIP (Voice over IP) to communicate across NAT. Some VoIP applications and devices have the ability to discover NAT devices and work around them. This function may interfere with the operation of such devices. If you are having trouble making VoIP calls, try turning this option off.

#### Routing

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

Name: Enter a Name for your route.

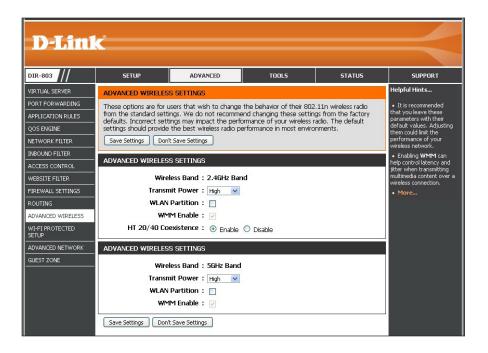
- **Destination IP:** Enter the IP address of packets that will take this route.
  - **Netmask:** Enter the **Netmask** of the route, please note that the octets must match your destination IP address.
  - **Gateway:** Enter your next hop gateway to be taken if this route is used.
    - Metric: The route Metric is a value from 1 to 16 that indicates the cost of using this route. A value 1 is the lowest cost and 15 is the highest cost.
  - Interface: Select the Interface that the IP packet must use to transit out of the router when this route is used.

DIR-803 ///	SETUP	ADVANCED	TOOLS	STATU	5	SUPPORT	
VIRTUAL SERVER	ROUTING			<i></i>		Helpful Hint <i>s</i>	
ORT FORWARDING		ws you to define static rout t Save Settings	es to specific c	estinations.		• Enable: Specifies whether the entry will be enabled disabled.	
OS ENGINE						<ul> <li>Interface:</li> </ul>	
ETWORK FILTER	32 ROUTE LIST					Specifies the interfac WAN that the IP	
NBOUND FILTER	Remaining number of ru	ules that can be created: 32				packet must use to transit out of the rou	
CCESS CONTROL			Metric	Interface		when this route is us	
VEBSITE FILTER	Name	Destination IP				• Destination IP: The IP address of	
IREWALL SETTINGS			1	WAN (10.10.10.108)		packets that will take route.	
OUTING	Netmask	Gateway				<ul> <li>Netmask:</li> </ul>	
DVANCED WIRELESS	Name	Destination IP				One bit in the mask specifies which bits o	
VI-FI PROTECTED ETUP	Name	Desunation te				IP address must mate	
DVANCED NETWORK	Netmask	Gateway	1	WAN (10.10.10.108)	~	• Gateway: The gateway IP addr	
UEST ZONE						is the IP address of t router, if any, used to	
	Name	Destination IP				reach the specified destination.	
			1	WAN (10.10.10.108)	~	• More	
	Netmask	Gateway					
	Name	Destination IP					
	Name	Descination IP					
	Netmask	Gateway	1	WAN (10.10.10.108)	~		
	Name	Destination IP					
			1	WAN (10.10.10.108)	~		
	Netmask	Gateway					
	Name	Destination IP					
		Desunation 1P					
	Netmask	Gateway	1	WAN (10.10.10.108)	~		

#### **Advanced Wireless**

The Advanced Wireless options are available for users who wish to deviate from standard settings.

- **Transmit Power:** Select the transmit power of the antennas from the drop-down list.
- WLAN Partition: Checking this box enables 802.11d operation. 802.11d is a wireless specification developed to allow implementation of wireless networks in countries that cannot use the 802.11 standard. This feature should only be enabled if you are in a country that requires it.
  - **WMM Enable:** WMM is QoS for your wireless network. Enabling this will improve the quality of video and voice applications for your wireless clients.
  - **HT 20/40MHz** 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.



#### Wi-Fi Protected Setup (WPS)

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

Enable: Click to Enable the Wi-Fi Protected Setup feature.

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

- Lock WPS-PIN Locking the WPS-PIN method prevents the settings from Setup: being changed by any external registrar using its PIN. Devices can still be added to the wireless network using the Wi-Fi Protected Setup Push Button Configuration (WPS-PBC). It is still possible to change wireless networks settings with Manual Wireless Network Setup or Wireless Network Setup Wizard.
- **PIN Settings:** A PIN is a unique number that can be used to add the router to an existing network or to create a new network. Only the Administrator ("admin" account) can change or reset the PIN.

**PIN:** Displays the current *PIN*.

- **Reset PIN to** Click to restore the default PIN of the router. **Default:**
- **Generate New PIN:** Create a random number that is a valid PIN. This becomes your router's PIN. You can then copy this PIN to the user interface of the wireless client.



Add Wireless This section gives you access to a Wizard that helps you add wireless devices to the wireless network.

Station:

The wizard will prompt you to select a configuration method. It will guide you through manual configuration, or allow you to choose between the Push Button (PBC) and PIN methods. If the device supports Wi-Fi Protected Setup and has a WPS button, you can add it to the network by pressing the WPS button on the device and then the on the router within 60 seconds.

Add Wireless Click to start the wizard and refer to "Add Wireless Device with WPS Wizard" on page 38. Device with WPS:

#### **WPS Button**

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

Refer to "WPS Button" on page 103 for more information about WPS.



#### **Advanced Network Settings**

- Enable UPnP IGD: UPnP Universal Plug and Play) allows the router to automatically open ports. For maximum security, uncheck to disable this feature. However, you will need to manually open ports for certain applications. Refer to "Port Forwarding" on page 67 and "Application Rules" on page 68.
- **Enable WAN Ping** Checking this box will allow the DIR-803 to respond **Response:** to pings. Unchecking the box may provide some extra security from hackers.
- WAN Port Speed: The WAN speed is usually detected automatically. You may set the port speed of the Internet port to 10Mbps, 100Mbps, or Auto 10/100Mbps (recommended).
- **Enable Multicast** Check the box to allow multicast traffic to pass through **Streams:** the router from the Internet (IPv4).

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



#### **Guest Zone**

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

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

- Enable Guest Check the box to enable the Guest Zone feature. Zone:
  - Schedule: The schedule of time when the Guest Zone will be active. The schedule may be set to Always, which will allow the particular service to always be enabled. You can create your own schedule in the Tools > Schedules section or click New Schedule to create one.

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

Security Mode: Select a Security Mode from the drop-down menu.



# Tools Admin

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

Password: Enter a new Password for the Administrator login. Enter again to verify.

- Enable Graphical Check to enable a challenge-response test that requires users to type letters Authentication: or numbers from a distorted image displayed on the screen. This helps prevent online hackers and unauthorized users from gaining access to your router's network settings.
  - Enable HTTPS Check to enable HTTPS to connect to the router securely. This means to Server: connect to the router, you must enter https://192.168.0.1 (for example) instead of http://192.168.0.1.
- Enable Remote Remote management allows the DIR-803 to be configured from the InternetManagement: by a web browser. A username/password is still required to access the Web Management interface.
- Remote Admin Port: The port number used to access the DIR-803 is used in the URL. Example: http://x.x.x.x8080 whereas x.x.x.x is the Internet IP address of the DIR-803 and 8080 is the port used for the Web Management interface.

If you have enabled **HTTPS Server**, you must enter **https:**// as part of the URL to access the router remotely.

**Remote Admin** Select **Allow All** or **Deny All** from the drop-down menu. **Inbound Filter:** 

Details: This field will display the current remote admin filter.



#### Time

The Time Configuration option allows you to configure, update, and maintain the correct time on the internal system clock. From this section you can set the time zone that you are in and set the NTP (Network Time Protocol) Server. An NTP server will sync the time and date with your router. Daylight Saving can also be configured to automatically adjust the time when needed.

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

- Time Zone: Select your Time Zone from the drop-down menu.
- Enable Daylight Check to enable manual entry of daylight saving Saving: time.
- **Daylight Saving** When daylight saving manual entry is enabled, the **Offset:** offset value is one hour by default.
- Daylight Saving Enter a DST Start, and DST End. Select Month,Dates: Week, Day of Week, and Time for daylight saving time.

Automatically This option is strongly recommended. Check synchronize with the box to synch the date and time with D-Link's D-Link's Internet Internet time server. time server:

- NTP Server Used: Select an NTP Server from the drop-down menu and click Update Now.
  - Date and Time: To manually input the Date and Time, enter the values in these fields for the Year, Month, Day, Hour, Minute, and Second.

D-Link DIR-803 SETUP ADVANCED TOOLS STATUS SUPPORT Heloful Hints. ADMIN TIME AND DATE TIME The Time and Date Configuration option allows you to configure, update, and maintain the Either enter the time correct time on the internal system clock. From this section you can set the time zone you are anually by clicking the ync. Your Computers in and set the NTP (Network Time Protocol) Server. Daylight Saving can also be configured to ime Settings button, EMAIL SETTINGS adjust the time when needed. r use the Automatic Save Settings | Don't Save Settings Time Configuration tion to have your, IRMWARE outer synchronize with -TIME AND DATE CONFIGURATION ime server on the YNAMIC DNS nternet YSTEM CHECK Time: 2013/11/06 16:27:11 CHEDULES Time Zone : (GMT-08:00) Pacific Time (US & Canada, Tijuana ¥ Enable Daylight Saving : 🔲 Daylight Saving Offset : +01:00 V Daylight Saving Dates : Month Week Day of Week Time DST Start Jan 💙 1st 💙 Sun 💙 DST End AUTOMATIC TIME AND DATE CONFIGURATION Automatically synchronize with D-Link's Internet time server NTP Server Used : ntp1.dlink.com Vpdate Now The time has been successfully synchronized. (NTP Server Used: ntp1.dlink.com, Time: 2013/11/06 13:56:42) Next time synchronization: 2013/11/13 13:56:42 SET THE TIME AND DATE MANUALLY Year Month Dav Hour Minute

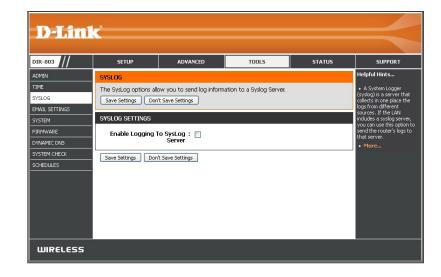
Save Settings Don't Save Settings

## SysLog

The DIR-803 keeps a running log of events and activities occurring on the Router. You may send these logs to a SysLog server, which is a server that collects logs from different sources. It serves as a central repository.

**Enable Logging to** Check this box to send the router logs to a SysLog **SysLog Server:** Server on your network.

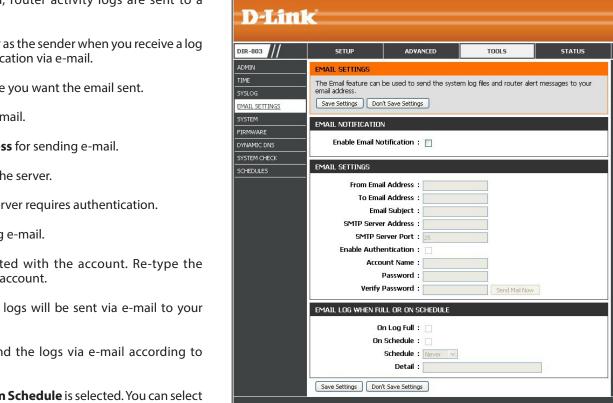
SysLog Server IP The IP Address of the SysLog server that the logs Address: will be sent to (receiver). You may also select your computer from the drop-down menu (only if receiving an IP address from the router via DHCP).





#### **Email Settings**

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



WIRELESS

**Enable Email** When this option is enabled, router activity logs are sent to a **Notification:** designated e-mail address.

- From Email Address: This e-mail address will appear as the sender when you receive a log file or firmware upgrade notification via e-mail.
  - To Email Address: Enter the e-mail address where you want the email sent.

Email Subject: Enter a subject line for your e-mail.

SMTP Server Address: Enter the SMTP Server Address for sending e-mail.

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

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

Account Name: Enter your account for sending e-mail.

- **Password:** Enter the **Password** associated with the account. Re-type the password associated with the account.
- **On Log Full:** When this option is selected, logs will be sent via e-mail to your account when the log is full.
- **On Schedule:** Selecting this option will send the logs via e-mail according to schedule.
  - Schedule: This option is enabled when **On Schedule** is selected. You can select a schedule from the list of defined schedules. To create a schedule, go to **Tools > Schedules**.

**Details:** Detail will display selected schedule.

Click Save Settings.

SUPPORT

You may want to mak

e email settings simila

leinful Hints

ient program

#### System

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

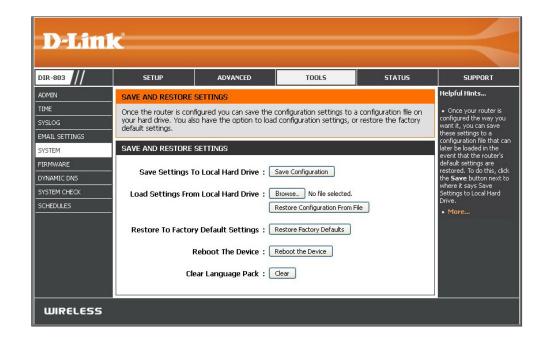
Save Settings to Use this option to save the current router Local Hard Drive: configuration settings to a file on the hard disk of the computer you are using. First, click the Save Configuration button. A file dialog will appear, allowing you to select a location and file name for the settings.

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

Restore toThis option will restore all configuration settingsFactory Defaultback to the settings that were in effect at theSettings:time the router was shipped from the factory.Any settings that have not been saved will belost, including any rules that you have created. Ifyou want to save the current router configurationsettings, use the Save Configuration button above.

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

Clear Language Click on Clear to delete the Language Pack. Refer Pack: to "Firmware" on page 90 for Language Pack upgrade instructions.



#### Firmware

You can check for firmware updates and upgrade the firmware for your router here. Check online for the latest updates by clicking on **Check Now**. Make sure the firmware you want to use is downloaded to the local hard drive of your computer.

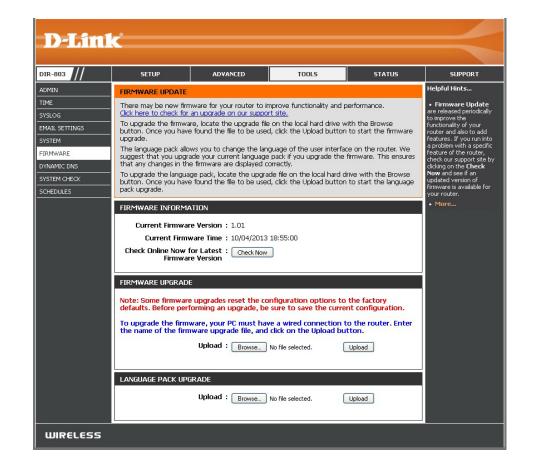
#### Firmware Upgrade

- **Browse:** After you have downloaded the new firmware, click **Browse** to locate the firmware update on your hard drive.
- **Upload:** Once you have located the firmware update on your computer, click **Upload** to upgrade your firmware.

#### Language Pack Upgrade

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.
- **Upload:** Once you have located the language pack update on your computer, click **Upload** to upgrade your language pack.



## **Dynamic DNS**

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

*Note:* You can sign up for D-Link's Free DDNS service by clicking on the link to **www.DLinkDDNS.com**.

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

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

- Host Name: Enter the Host Name that you registered with your DDNS service provider.
- Username or Enter the Username or Key for your DDNS account. Key:
- Password or Enter the Password or Key for your DDNS account. Key:

Timeout: Enter a Timeout time (in hours).

Status: Displays the current connection Status.

<b>D</b> -Lini	_°				
	And and a second se				
DIR-803	SETUP	ADVANCED	TOOLS	STATUS	SUPPORT
ADMIN	DYNAMIC DNS				Helpful Hints
TIME		ure allows you to host a s			<ul> <li>To use this feature, you must first have a</li> </ul>
SYSLOG	assigned IP address. M	have purchased (www.w ost broadband Internet Se	ervice Providers assign dyn	namic (changing) IP	you must nirst have a Dynamic DNS account from one of the providers
EMAIL SETTINGS		NS service provider, your fr natter what your IP addre:		: name to connect to	in the drop down menu.
SYSTEM FIRMWARE	Sign up for D-Link's Fre	e DDNS service at www.D	DLinkDDNS.com.		<ul> <li>We could also use DDNS function for IPv6</li> </ul>
DYNAMIC DNS	Save Settings Don	with the same account as IPv4.			
SYSTEM CHECK	DYNAMIC DNS SETTI	NGS			• More
SCHEDULES	Epoble Dur	namic DNS : 🗖			
		r Address : dinkddns.com	m(Free)		
	222	lost Name :	1(100)		
	Userna	me or Key :			
	Passwo	ord or Key :			
	Verify Passwo	ord or Key :			
		Timeout : 567	(hours)		
		Status : Disconnecte	d		
	DYNAMIC DNS FOR I	PV6 HOSTS			
		Enable : 🗖			
	IPv	6 Address :	<< Com	nputer Name 💙	
	H	lost Name :		mydomain.net)	
	Save				
	IPV6 DYNAMIC DNS	LIST			
	Enable Host Name		IPv6 Address		
			1 70 Muli 635		
	Save Settings Don	't Save Settings			
WIRELESS					

#### **DDNS for IPv6 Hosts**

Enable: Check the box to Enable DDNS for IPv6 Hosts.

- IPv6 Address: Enter the IPv6 Address of your computer/server in your local network. You can click the << button and select a **Computer Name** or server from the drop-down list.
  - Host Name: Enter the IPv6 Host Name that you registered with your DDNS service provider. Click **Save**.
- IPv6 Dynamic After you save your entry, the IPv6 DDNS host DNS List: information will be displayed here.

Enable: Check to Enable the entry.

Host Name: Displays the name of your IPv6 DDNS host.

- IPv6 Address: Displays the IPv6 Address of your computer/ server associated with the IPv6 DDNS host.
  - **Edit/Delete:** Click the edit icon to make changes to the entry or click the trash icon to delete the entry.

Enable : 🔲	
IPv6 Address :	Computer Name 💌
Host Name :	(e.g.: ipv6.mydomain.net)
PV6 DYNAMIC DNS LIST	
PV6 DYNAMIC DNS LIST Enable Host Name	IPv6 Address

#### System Check

The *Ping Test* is used to send Ping packets to test if a computer on the Internet is running and responding.

Ping Test/Host Enter the IP Address of the computer that you wish to Ping Name or IP and click Ping. Address:

IPv6 Ping Test/ Enter the IPv6 Address of the computer that you wish to Host Name or Ping and click Ping. IPv6 Address:

**Ping Result:** The results of your **Ping** attempts will be displayed here.



#### Schedules

Schedules can be created for use with enforcing rules. For example, if you want to restrict web access to Mon-Fri from 3:00 pm to 8:00 pm, you could create a schedule selecting Mon, Tue, Wed, Thu, and Fri and enter a Start Time of 3:00 pm and End Time of 8:00 pm.

- Name: Enter a Name that is meaningful to you for your new schedule.
- Day(s): Click on All Week to implement your schedule every day of the week. Or, select a specific Day or a range of Days to implement your schedule.

Check **All Day - 24 hrs** or click on the arrow for the drop-down menu for **Time Format** and make a selection. Enter a **Start Time** and **End Time** for your schedule below. Click **Add** to save the schedule.

Schedule Rules The list of schedules will be listed here. Click theList: Edit icon to make changes or click the Trash icon to delete the schedule.

<b>D-Lin</b>	k				
DIR-803	SETUP	ADVANCED	TOOLS	STATUS	SUPPORT
ADMIN TIME SYSLOG EMAIL SETTINGS SYSTEM FIRMWARE DYNAMIC DNS SYSTEM CHECK SCHEDULES	"Virtual Server", "Port	Name :	" and "Network Filter".	Thu □Fri □Sat	Helpful Hints • Schedules are used with a number of other features to define when those features are in effect. • Give each schedule a name that is meaningful to you. For example, a schedule for Monday through Friday from 9:00pm to 9:00pm, night be called "After School". • Click Add to add a completed schedule to the list below. • Click Fdit icon to permanently delete a schedule. • More
WIRELESS					

## Status Device Info

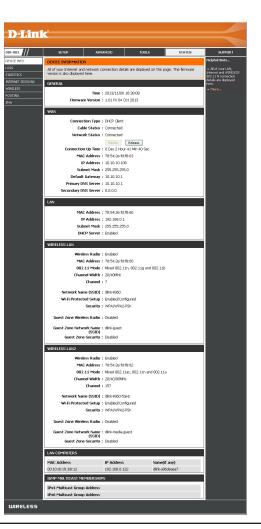
The Device Info page displays the connection details for the DIR-803. It will display the WAN, LAN, and Wireless LAN information. If your Internet connection is set up for a Dynamic IP address then a **Release** button and a **Renew** button will be displayed. Use **Release** to disconnect from your ISP and use **Renew** to connect to your ISP. If your Internet connection is set up for PPPoE, a **Connect** button and a **Disconnect** button will be displayed. Use **Disconnect** to drop the PPPoE connection and use **Connect** to establish the PPPoE connection.

**General:** Displays the router's current *Time* and *Firmware* version.

WAN: Displays the MAC Address and the public IP settings.

- LAN: Displays the *MAC Address* and the private (local) IP settings for the router.
- Wireless LAN: Displays the 2.4GHz wireless MAC Address and your wireless settings such as Network Name (SSID) and Channel.
- **Wireless LAN2:** Displays the 5GHz wireless *MAC Address* and your wireless settings such as *Network Name* (*SSID*) and *Channel*.
- LAN Computers: Displays a *MAC Address* and *IP Address* for each computer and device connected to the router via Ethernet that is receiving an IP address assigned by the router (DHCP).

**IGMP Multicast** Displays IPv4 and IPv6 *Multicast Group Addresses*. **Memberships:** 



### Logs

The router automatically logs (records) events of possible interest in it's internal memory. If there isn't enough internal memory for all events, logs of older events are deleted and logs of the latest events are retained. You can define what types of events you want to view and the level of the events you would like to view. This router also has external Syslog Server support so you can send the log files to a computer on your network that is running a Syslog utility.

Save: Click to Save the log file to your local hard drive.

Log Type: Select the type of event you would like to view.

Log Level: Select the level of event you are interested in viewing.

First Page: Click to go to the First page of the Log Files.

Last Page: Click to go to the Last page of the Log Files.

**Previous:** Click to go back one page.

**Next:** Click to go to the **Next** page.

Refresh: Click to Refresh the page.

Clear: Clears all of the contents of the Log Files.

Link to Email Click this link to send copy of the router log to your e-mail Log Settings: address configured in the **Tools** > Email Settings page.

R-803	SETUP	ADVANCED	TOOLS	STATUS	SUPPORT
VICE INFO	VIEW LOG		·		Helpful Hints
SS NTISTICS ERNET SESSIONS RELESS UTING 6				ter Status	Click on the Save button to save log file local hard drive which later send to the netw administrator for troubleshooting. You c also select what type event you would like t be logged from Log Ty & Level.     Check the log frequently to detect unauthorized network usage.     You can also have t
	Log Level: O Criti	cal O Warning		rmation	log malled to you periodically. Refer to Tools -> EMail. • More
	Time	Message			
	Wed Nov 6 16:26:50 2013	Got new client [CA:D3:A (2.4 Ghz)	(3:A6:7B:63] associated fr	om BAND24G-1.1	
	Wed Nov 6 16:24:54 2013	Web logout from 192.10	58.0.122		
	Wed Nov 6 16:08:13 2013	Web logout from 192.16	58.0.122		
	Wed Nov 6 15:33:53 2013	Web logout from 192.10	58.0.122		
	Wed Nov 6 15:25:39 2013	Web logout from 192.10	58.0.122		
	Wed Nov 6 15:22:33				

#### Statistics

The screen below displays the **Traffic Statistics**. Here you can view the number of packets that pass through the DIR-803 on both the LAN, WAN ports and the Wi-Fi<sup>®</sup> segments. The traffic counter will reset if the device is rebooted.

<b>D-Lin</b>						
DIR-803	SETUP	ADV	ANCED	TOOLS	STATUS	SUPPORT
DEVICE INFO	TRAFFIC STATISTICS					Helpful Hints
.0G5	Traffic Statistics displays	Receive ar	nd Transmit pa	ackets passing through the de	vice.	<ul> <li>This is a summary displaying the number of</li> </ul>
TATISTICS	Refresh Statistics R	eset Statist	ics			packets that have pass between the Internet
VTERNET SESSIONS	LAN STATISTICS					and the LAN since the router was last initialize
OUTING		Sent :	00.47	Received	. 3050	• More
Pv6	TX Packets Dro		8947 0	RX Packets Dropped	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
	_	isions :	0	Errors		
	WAN STATISTICS					
	WAN STATISTICS			torige are been		
	TV Dedete De	Sent :	544	Received	20000	
	TX Packets Dro Coll	ippea : isions :	0 0	RX Packets Dropped Errors		
					. 0	
	WIRELESS STATISTICS	5 - 2.4GH	z Band			
		Sent :	18238	Received	- 371070	
	TX Packets Dro		0	RX Packets Dropped	30574	
	Coll	isions :	0	Errors	: 22717	
	WIRELESS STATISTICS	5 - 5GHZ	BAND			
		Sent :	12040	Received	: 221084	
	TX Packets Dro	pped :	0	RX Packets Dropped	: o	
	Coll	isions :	0	Errors	: 1077	

#### **Internet Sessions**

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

D-Lini	Ľ				$\prec$
DIR-803	SETUP	ADVANCED	TOOLS	STATUS	SUPPORT
DEVICE INFO	INTERNET SESSIONS				Helpful Hints
LOGS	This page displays Sour	ce and Destination sessior	ns passing through the de	vice.	<ul> <li>This is a list of all active conversations</li> </ul>
STATISTICS	Refresh				between WAN computers and LAN computers.
WIRELESS					• More
ROUTING	IP	TCP Cour		ount	
IPv6	<u>192.168.0.122</u>	2	0		
WIRELESS					

#### Wireless

The wireless client table displays a list of currently connected wireless clients. This table displays information including the *MAC Address* and the connection *Rate* of connected wireless clients.

DIR-803 //	SETUP	ADVANC	ED	TOOLS		STATUS	SUPPORT	
DEVICE INFO	CONNECTED WIREL	ESS CLIENT LIS	T				Helpful Hints	
.OGS STATISTICS		View the wireless clients that are connected to the router. (A client might linger in the list for a few minutes after an unexpected disconnect.)						
INTERNET SESSIONS	NUMBER OF WIREL	NUMBER OF WIRELESS CLIENTS - 2.4GHZ BAND : 1						
ROUTING	MAC Address	IP Address	Mode	Rate (Mbps)	Signal (	%)		
IPv6	CA:D3:A3:A6:7B:63		11n	130	100			
	NUMBER OF WIREL	ESS CLIENTS - 5	GHZ BAND	):0				
	MAC Address	IP Address	Mode	Rate (Mbps)	Signal (	%)		

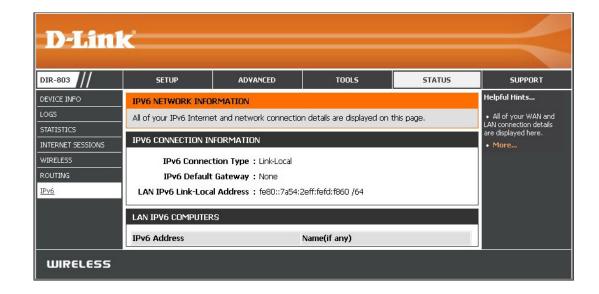
## Routing

This page will display your current routing table.

DIR-803	SETUP	AD	ANCED	TOOLS		STATUS	SUPPORT
DEVICE INFO	ROUTING						Helpful Hints
.OGS STATISTICS	Routing Table This page display	rs the routing det	ails configured for you	ur router.			<ul> <li>This is a list of all routing rules on rout</li> <li>More</li> </ul>
INTERNET SESSIONS		E					
ROUTING	Destination	Gateway	Genmask	Metric	Iface	Creator	1
IPv6	192.168.7.0	0.0.0.0	255.255.255.0	0	LAN	SYSTEM	
	192.168.0.0	0.0.0	255.255.255.0	0	LAN	SYSTEM	
	10.10.10.0	0.0.0	255.255.255.0	0	INTERNET	SYSTEM	
	239.0.0.0	0.0.0	255.0.0.0	0	LAN	SYSTEM	
	0.0.0	10.10.10.1	255.255.255.255	100	INTERNET	SYSTEM	

#### IPv6

The IPv6 Status page displays a summary of the Router's IPv6 connection details, and displays the *IPv6 Address* and host *Name* (if any) for IPv6 clients.



# Support

D-Lini	¢				$\prec$
DIR-803	SETUP	ADVANCED	TOOLS	STATUS	SUPPORT
MENU SETUP ADVANCED TOOLS STATUS	SUPPORT MENU • Setup • Advanced • Tools • Status				
	SETUP HELP • Internet • Wireless Settings • Network Settings • IPv6				
	ADVANCED HELP Virtual Server Port Forwarding Application Rules OoS Engine Network Filter Access Control Website Filter Inbound Filter Eirewall Settings Routing Advanced Wireles Wi-Fi Protected S Advanced Netwo Guest Zone	etup			
	TOOLS HELP Device Administra Time Sysloa Email Settinas System Eirmware Dynamic DNS System Check Schedules	tion			
	STATUS HELP Device Info Logs Statistics Internet Sessions Wireless Routing IPv6				
WIRELESS					

# 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-803 router. Please refer to your user manual for the wireless device you want to connect to make sure you understand how to enable WPS. Once you know, follow the steps below:

**Step 1** - Press the WPS button on the side of the DIR-803 for about one second. The WPS LED on the front will start to blink.



- Step 2 Within two minutes, press the WPS button on your wireless client (or launch the software utility and start the WPS process).
- **Step 3** Allow up to one minute to configure. Once the WPS light stops blinking, you will be connected and your wireless connection will be secure with WPA2.

D-Link DIR-803 User Manual

## Windows<sup>®</sup> 8

- 1. Click on the wireless computer icon in your system tray (lower-right corner next to the time).
- 2. A list of available wireless networks will appear.

3. Click the wireless network (SSID) you want to connect to and then click **Connect**.

4. If the network is secure/encrypted, enter the Wi-Fi password (security key) and click **Next**.



Networks

Airplane mode

Wi-Fi 2 00265a493e1e

dlink-5A2C

dlinkedcf

Off

att

att

at l



Section 4 - Security

- 5. Click either to enable or disable file sharing.
- 6. You will now be connected to your wireless network.



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

### Windows<sup>®</sup> 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).



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



Section 4 - Security

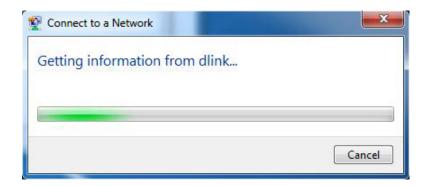
3. Highlight the wireless network (SSID) you would like to connect to and click the **Connect** button.

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.



Not connected

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



44

Section 4 - Security

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.

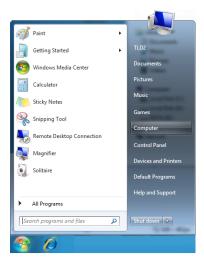
It may take 20-30 seconds to connect to the wireless network. If the connection fails, please verify that the security settings are correct. The key or passphrase must be exactly the same as on the wireless router.

Connect to a Network	×
Type the network security key	
Security key:	
Hide characters	
You can also connect by pushing the button on the router.	
OK	Cancel

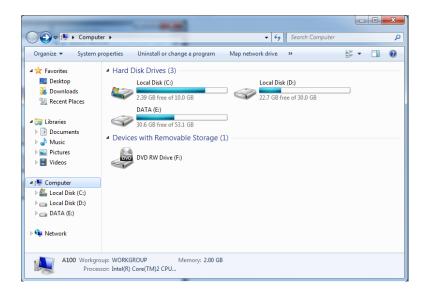
### WPS

The WPS feature of the DIR-803 can be configured using Windows<sup>®</sup> 7. Carry out the following steps to use Windows<sup>®</sup> 7 to configure the WPS feature:

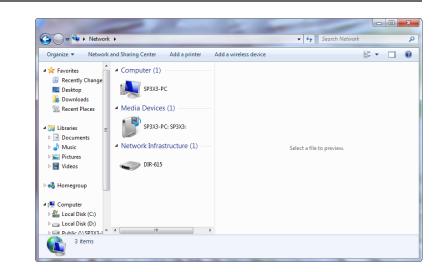
1. Click the **Start** button and select **Computer** from the Start menu.







3. Double-click the DIR-803.



 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.

0	🕞 😰 Set Up a Network
	To set up a network, type the 8-digit PIN from the router label
	You can find the numeric PIN on a label attached to the router or in the printed information that came from the manufacturer. PIN:
·	
	Next Cancel

5. Type a name to identify the network.

🕒 👰 Set Up a Network Give your network a name Your network needs a unique name so that it can be easily identified. It is best to keep the name short (25 characters or less) and recognizable. Type your network name: Security-enabled network Your network is being set up using WPA2-Personal. D-Link\_Net Change passphrase, security level and encryption type (advanced):  $\checkmark$ Opprade or replace the router using the network settings stored on this computer <u>N</u>ext Cancel

6. To configure advanced settings, click the  $\bigcirc$  icon.

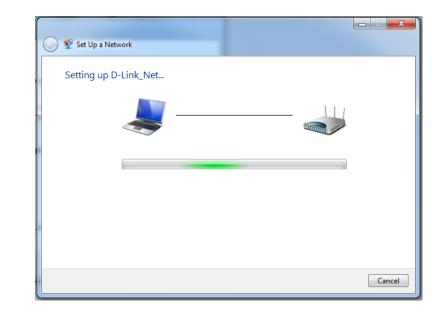
Click Next to continue.

	💱 Set Up a Network	
<u> </u>	Give your network a name	
	Your network needs a unique name so that it can characters or less) and recognizable.	be easily identified. It is best to keep the name short (25
	Type your network name:	🖉 Security-enabled network
	D-Link_Net	Your network is being set up using WPA2-Personal.
	Change passphrase, security level and encryption Security key:	type (advanced): 💽
	f6mm-gizb-9vmv	WPA2-Personal (Recommended)
	Connect automatically	Encryption type:
		AES (Recommended)
	😵 Upgrade or replace the router using the netw	ork settings stored on this computer
		Next Cancel

X

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.

9	😰 Set Up a Network	x
	D-Link_Net has been successfully set up To add an older wireless device to this network, you might need to provide this security key	
	894g-eyd5-g5wb	
	You can <u>print these network settings</u> for future reference. For gaming consoles or computers running Windows XP, <u>copy the network profile to a USB drive</u> for	
	easier set up.	
	Close	

## Windows Vista®

Windows Vista<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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.

Туре	the network security key or passphrase for Candy
The per	rson who setup the network can give you the key or passphrase.
Security	y key or passphrase:
Disp	lay characters
I	If you have a <u>USB flash drive</u> with network settings for Candy, insert it now.

### WPS/WCN 2.0

The router supports Wi-Fi protection, referred to as WCN 2.0 in Windows Vista<sup>®</sup>. The following instructions for setting this up depends on whether you are using Windows Vista<sup>®</sup> 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<sup>®</sup>, 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.

PIN SETTINGS
Current PIN : 53468734
Reset PIN to Default Generate New PIN

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

## Windows® XP

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

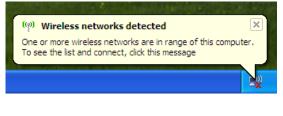
If you receive the **Wireless Networks Detected** bubble, click on the center of the bubble to access the utility.

or

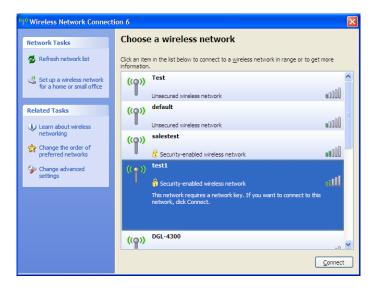
Right-click on the wireless computer icon in your system tray (lower-right corner next to the time). Select **View Available Wireless Networks**.

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

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







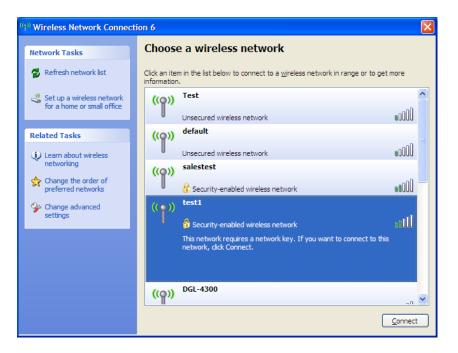
### WPA/WPA2

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

1. Open the Windows<sup>®</sup> XP Wireless Utility by right-clicking on the wireless computer icon in your system tray (lower-right corner of screen). Select **View Available Wireless Networks**.

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





Section 5 - Connecting to a Wireless Network

3. The **Wireless Network Connection** box will appear. Enter the WPA-PSK passphrase and click **Connect**.

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

Wireless Network Con	nection 🔀			
The network 'test1' requires a network key (also called a WEP key or WPA key). A network key helps prevent unknown intruders from connecting to this network.				
Type the key, and then clic	k Connect.			
Network <u>k</u> ey:	1			
Confirm network key:				
	<u>C</u> onnect Cancel			

# Troubleshooting

This chapter provides solutions to problems that can occur during the installation and operation of the DIR-803. Read the following descriptions if you are having problems. The examples below are illustrated in Windows<sup>®</sup> XP. If you have a different operating system, the screenshots on your computer will look similar to the following examples.

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

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

- Make sure you have an updated Java-enabled web browser. We recommend the following:
  - Microsoft Internet Explorer<sup>®</sup> 7 and higher
  - Mozilla Firefox 9.0 and higher
  - Google<sup>™</sup> Chrome 16.0 and higher
  - Apple Safari 4 and higher
- Verify physical connectivity by checking for solid link lights on the device. If you do not get a solid link light, try using a different cable or connect to a different port on the device if possible. If the computer is turned off, the link light may not be on.
- Disable any Internet security software running on the computer. Software firewalls such as Zone Alarm, Black Ice, Sygate, Norton Personal Firewall, and Windows<sup>®</sup> XP firewall may block access to the configuration pages. Check the help files included with your firewall software for more information on disabling or configuring it.

- Configure your Internet settings:
  - Go to Start > Settings > Control Panel. Double-click the Internet Options Icon. From the Security tab, click the button to restore the settings to their defaults.
  - Click the Connection tab and set the dial-up option to Never Dial a Connection. Click the LAN Settings button.
     Make sure nothing is checked. Click OK.
  - Go to the **Advanced** tab and click the button to restore these settings to their defaults. Click **OK** three times.
  - Close your web browser (if open) and open it.
- Access the web management. Open your web browser and enter the IP address of your D-Link router in the address bar. This should open the login page for your web management.
- If you still cannot access the configuration, unplug the power to the router for 10 seconds and plug back in. Wait about 30 seconds and try accessing the configuration. If you have multiple computers, try connecting using a different computer.

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

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

To reset the router, locate the reset button (hole) on the back of the unit. With the router powered on, use a paper clip to hold the button down for at least six seconds. Release the button and the router will go through its reboot process. Wait about 30 seconds to access the router. To re-configure the router, refer to "Configuration" on page 13.



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

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

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

- Click on **Start** and then click **Run**.
- Windows<sup>®</sup> 95, 98, and Me users type in **command** (Windows<sup>®</sup> NT, 2000, XP, Vista<sup>®</sup>, and 7 users type in **cmd**) and press **Enter** (or click **OK**).
- Once the window opens, you'll need to do a special ping. Use the following syntax:

ping	[url]	[ <b>-f</b> ]	[-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.
Ping statistics for 66.94.234.13:
Packets: Sent = 4, Received = 0, Lost = 4 (100% loss)
Approximate round trip times in milli-seconds:
      Minimum = Oms, Maximum = Oms, Average = Oms
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:
                                                                     132ms
     Minimum = 93ms, Maximum = 203ms, Average
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, lets say that 1452 was the proper value, the actual MTU size would be 1480, which is the optimum for the network we're working with (1452+28=1480).

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

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

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

# **Wireless Basics**

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

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

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

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

#### What is Wireless?

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

#### Why D-Link Wireless?

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

#### How does wireless work?

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

#### Wireless Local Area Network (WLAN)

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

#### Wireless Personal Area Network (WPAN)

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

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

#### Who uses wireless?

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

#### Home

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

#### **Small Office and Home Office**

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

#### Where is wireless used?

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

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

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

#### Tips

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

#### **Centralize your router or Access Point**

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

#### **Eliminate Interference**

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

#### Security

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

## **Wireless Modes**

There are basically two modes of networking:

- Infrastructure All wireless clients will connect to an access point or wireless router.
- Ad-Hoc Directly connecting to another computer, for peer-to-peer communication, using wireless network adapters on each computer, such as two or more DIR-803 wireless network Cardbus adapters.

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

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

# **Networking Basics**

### **Check your IP address**

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

#### Windows® 8 Users

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

#### Windows® 7/Vista® Users

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

#### Windows® XP Users

- Click on **Start** > **Run**. In the run box type **cmd** and click **OK**.
- At the prompt, type **ipconfig** and press **Enter**.
- This will display the IP address, subnet mask, and the default gateway of your adapter.

If the address is 0.0.0.0, check your adapter i	nstallation, security settings, a	and the settings on your ro	outer. Some firewall softw	are programs may
block a DHCP request on newly installed ada	pters.			

E:\Users\admin>ipconfig	
Windows IP Configuration	
Ethernet adapter Local Area Connection:	
Connection-specific DNS Suffix : public.pnlab Link-local IPv6 Address : fe80:red%a:34e3:f8f6:470ax8 IPv4 Address : 192.168.0.197 Subnet Mask : 255.255.255.0 Default Gateway : 292.168.0.1	
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>	

C:\WINDOWS\system32\cmd.exe	- 🗆 ×
Microsoft Windows XP [Version 5.1.2600] (C) Copyright 1985-2001 Microsoft Corp.	
C:\Documents and Settings>ipconfig	
Windows IP Configuration	
Ethernet adapter Local Area Connection:	
Connection-specific DNS Suffix .: dlink IP Address	
C:\Documents and Settings>_	

## **Statically Assign an IP Address**

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

#### 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.

<ul> <li>Highlight Internet Protocol Version 4 (TCP /IPv4) and click Properties.</li> </ul>	Internet Protocol Version 4 (TCP/IPv4) General	Properties
<ul> <li>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.</li> </ul>	You can get IP settings assigned autom this capability. Otherwise, you need to for the appropriate IP settings. <u>O</u> btain an IP address automaticall <u>O</u> Use the following IP address:	ask your network administrator
<b>Example:</b> 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.	IP address: S <u>u</u> bnet mask: Default gateway:	192.168.0.52         255.255.255.0         192.168.0.1
<ul> <li>Set <b>Default Gateway</b> the same as the LAN IP address of your router or gateway.</li> </ul>	<ul> <li>Obtain DNS server address autom</li> <li>Use the following DNS server address</li> <li>Preferred DNS server:</li> </ul>	resses:
<ul> <li>Set Primary DNS the same as the LAN IP address of your router or gateway.</li> </ul>	Alternate DNS server:	Ad <u>v</u> anced
<ul> <li>The Secondary DNS is optional (you may enter a DNS server from your ISP).</li> </ul>		OK Cancel

Click **OK** to save your settings.

#### Windows<sup>®</sup> 7/ Vista<sup>®</sup> 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<sup>®</sup> 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.

<ul> <li>Highlight Internet Protocol Version 4 (TCP /IPv4) and click Properties.</li> </ul>	Internet Protocol Version 4 (TCP/I	IPv4) Properties	
<ul> <li>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.</li> </ul>	You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings. © Obtain an IP address automatically © Use the following IP address:		;
<b>Example:</b> 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.	IP address: Sybnet mask: Default gateway:	192.168.0.52         255.255.255.0         192.168.0.1	
<ul> <li>Set <b>Default Gateway</b> the same as the LAN IP address of your router or gateway.</li> </ul>	<ul> <li>Obtain DNS server address automatically</li> <li>Use the following DNS server addresses:</li> <li>Preferred DNS server:</li> <li>192, 168, 0, 1</li> </ul>		
<ul> <li>Set Primary DNS the same as the LAN IP address of your router or gateway.</li> </ul>	Alternate DNS server:		1000
<ul> <li>The Secondary DNS is optional (you may enter a DNS server from your ISP).</li> </ul>		OK Cance	e

• Click **OK** to save your settings.

Cancel

8 3

#### Windows® XP Users

**Appendix B - Networking Basics** 

- Click on **Start** > **Control Panel**. Make sure you are in Classic View. Double-click on the Network Connections icon.
- Right-click on the **Local Area Connection** which represents your D-Link wireless network adapter (or other adapter) which will be connected to your router.
- Highlight Internet Protocol (TCP/IP) and click Properties.
- Click Use the following IP address and enter an IP address that is on the same subnet as your network or LAN IP address on your router.

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

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

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	automatically if your network supports ad to ask your network administrator fo
Obtain an IP address autom	atically
Use the following IP address	x
IP address:	192.168.0.52
Subnet mask:	255 . 255 . 255 . 0
Default gateway:	192.168.0.1
O Obtain DNS server address	automaticallu
Use the following DNS serve	
Preferred DNS server:	192.168.0.1
Alternate DNS server:	
	Advanced.

# **Technical Specifications**

#### **Hardware Specifications**

- LAN Interface: Four 10/100Mbps LAN ports
- WAN Interface: One 10/100Mbps Internet port
- Wireless Interface (2.4Ghz): IEEE 802.11b/g/n
- Wireless Interface (5Ghz): IEEE 802.11a/n/ac

#### **Operating Voltage**

- Input: 100~240V (±20%), 50~60Hz
- Output: DC5V, 1A

#### Temperature

- Operating: 32 ~ 104°F (0 ~ 40°C)
- Non-Operating: -4 ~ 149°F (-20 ~ 65°C)

#### Humidity

- Operating: 10% 90% non-condensing
- Non-Operating: 5% 95% non-condesing

#### Wireless Frequency Range

- IEEE 802.11a: 5180 MHz~5240 MHz, 5745 MHz~5825 MHz
- IEEE 802.11b: 2400 MHz~2483 MHz
- IEEE 802.11g: 2400 MHz~2484 MHz
- IEEE 802.11n: 2400 MHz~2484 MHz, 5180 MHz~5240 MHz, 5745 MHz~5825 MHz
- IEEE 802.11ac: 5180 MHz~5240 MHz, 5745 MHz~5825 MHz

#### Wireless Bandwidth Rate

- IEEE 802.11a: 54, 48, 36, 24, 18, 12, 9, and 6 Mbps
- IEEE 802.11b: 11, 5.5, 2, and 1 Mbps
- IEEE 802.11g: 54, 48, 36, 24, 18, 12, 9, and 6 Mbps
- IEEE 802.11n: 6.5 to 300 Mbps
- IEEE 802.11ac(Draft): 6.5 to 433 Mbps

#### Antenna Type

Two External Antennas

#### **Wireless Security**

WPA/WPA2-Personal, WPA/WPA2-Enterprise, WPS (PIN & PBC)

#### Certifications

FCC, IC, CE, and CSA

#### Dimensions

• 6 x 4.4 x 1.2 in (151.6 x 112 x 30.5 mm)

#### Weight

• 0.42 lbs (190 grams)

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

2 Frequency Range varies depending on country's regulation

# **Contacting Technical Support**

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

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

- Model number of the product (e.g. DIR-803)
- 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:

For customers within Canada:

**Phone Support:** 

(800) 361-5265

**Phone Support:** (877) 453-5465

Internet Support: http://support.dlink.com Internet Support: http://support.dlink.ca

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http://tsd.dlink.com.tw/GPL.asp

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

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# Warranty

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

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

# **Limited Warranty:**

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

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

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

# Limited Software Warranty:

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

# **Non-Applicability of Warranty:**

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

## Submitting A Claim (USA):

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

- The customer must submit with the product as part of the claim a written description of the Hardware defect or Software nonconformance in sufficient detail to allow DLink to confirm the same, along with proof of purchase of the product (such as a copy of the dated purchase invoice for the product) if the product is not registered.
- The customer must obtain a Case ID Number from D-Link Technical Support at 1-877-453-5465, who will attempt to assist the customer in resolving any suspected defects with the product. If the product is considered defective, the customer must obtain a Return Material Authorization ("RMA") number by completing the RMA form and entering the assigned Case ID Number at https:// rma.dlink.com/.

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

### Submitting A Claim (Canada):

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

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

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

# What Is Not Covered:

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

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

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# **CE Mark Warning:**

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

# **FCC Statement:**

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

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

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

## **FCC Caution:**

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

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

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

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

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

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

D-Link DIR-803 User Manual

# **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.

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# 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.