



# User Manual

## Wireless AC1750 Dual Band Gigabit Cloud Router USB 3.0

DIR-868L

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# Preface

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

## Manual Revisions

Revision	Date	Description
1.0	January 16, 2013	• Initial release

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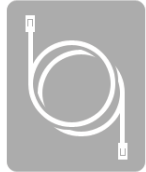
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# Package Contents



DIR-868L Wireless AC1750 Dual-Band Gigabit Cloud Router USB 3.0



Ethernet Cable



Power Adapter



Wi-Fi Configuration Note

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-868L will cause damage and void the warranty for this product.

# System Requirements

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

# Introduction

The D-Link Wireless AC1750 Dual-Band Gigabit Cloud Router USB 3.0 (DIR-868L) comes equipped with four Gigabit ports to provide speeds up to 10x faster than standard 10/100 ports. It also uses 802.11ac (draft) technology with multiple intelligent antennas to maximize the speed and range of your wireless signal to significantly outperform 802.11n devices. With the addition of Intelligent Quality of Service (QoS), data streams are separated which helps organize and prioritize your network traffic so your video streaming, gaming, and VoIP calls run smoother over both your wired and wireless network.

The DIR-868L supports a host of cloud features including QRS Mobile which allows you to setup and configure the router using a mobile app. You can set up your router right from your sofa, no PC required.

The Wireless AC1750 Dual-Band Gigabit Cloud Router USB 3.0 is also mydlink-enabled, which gives you access to your home network no matter where you go. Now you can monitor and manage your home network right from your laptop, iPhone®, iPad®, or Android™ device. mydlink-enabled routers can be configured to send an email to keep you informed anywhere, anytime when new devices are connecting to your network or unwanted access is detected. Monitor in real-time websites that are being visited with recent browser history displayed on the mydlink™ Lite app – which is great for parents.

SharePort Mobile technology lets you take advantage of the USB 3.0 port found on the back of your DIR-868L. Plug in a USB storage drive and you can use the SharePort Mobile app for iOS and Android to access files, stream videos, view photos, or listen to music on your laptop or mobile devices. Plug in a printer and you can use the SharePort Mobile Plus app to share that printer with all of your devices.

The DIR-868L Wireless AC1750 Dual-Band Gigabit Cloud Router USB 3.0 provides incredible speeds, smart antenna technology, fast ports, cloud features, and terrific security features. It also features an innovative design and easy installation options.

# Features

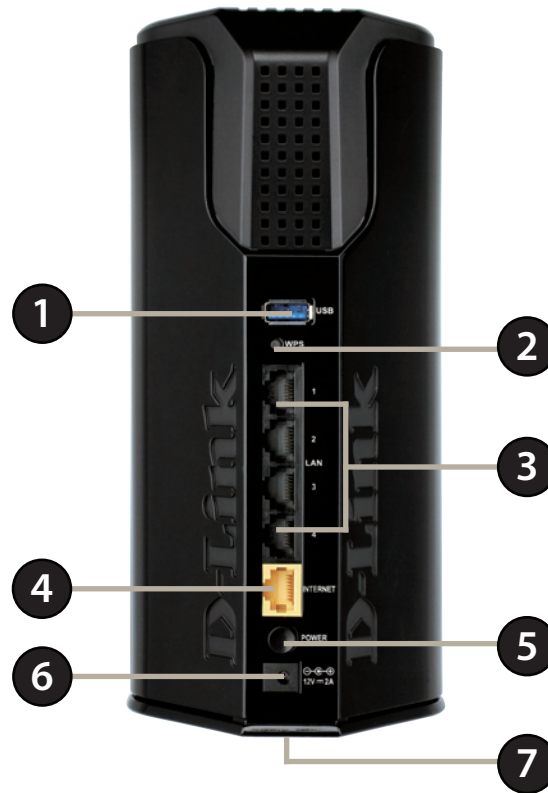
- **Faster Wireless Networking** - The DIR-868L can provide up to a full 1750Mbps\* wireless connection with concurrent 801.11ac and 802.11n wireless clients . It also operates on both the 2.4 GHz and 5 GHz bands to allow separation of traffic so users can participate in high-bandwidth activities, such as video streaming, online gaming, and real-time audio, without affecting low-priority traffic like email and web surfing.
- **Cloud Features** - The DIR-868L support the QRS Mobile app to setup the router using a mobile device. It is also mydlink-enabled so you can remotely access and manage your DIR-868L from a mobile device. SharePort Mobile can be used to share files, stream videos, view photos, and play music. SharePort Plus lets you share a printer.
- **Compatible with 802.11a/b/g/n Devices** - The DIR-868L is still fully compatible with the 802.11n, IEEE 802.11g and 802.11a standards, so it can connect with existing 802.11n, 802.11g, 802.11b, and 802.11a wireless devices.
- **Advanced Firewall Features** - The Web-based user interface displays a number of advanced network management features including:
  - **Content Filtering** - Easily applied content filtering based on MAC Address, URL, and/or Domain Name.
  - **Filter Scheduling** - These filters can be scheduled to be active on certain days or for a duration of hours or minutes.
  - **Secure Multiple/Concurrent Sessions** - The DIR-868L can pass through VPN sessions. It supports multiple and concurrent IPsec and PPTP sessions, so users behind the DIR-868L can securely access corporate networks.
- **User-friendly Setup Wizard** - Through its easy-to-use Web-based user interface, the DIR-868L lets you control what information is accessible to those on the wireless network, whether from the Internet or from your company's server. Configure your router to your specific settings within minutes.

\* Maximum wireless signal rate derived from IEEE Standard 802.11a, 802.11b, 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

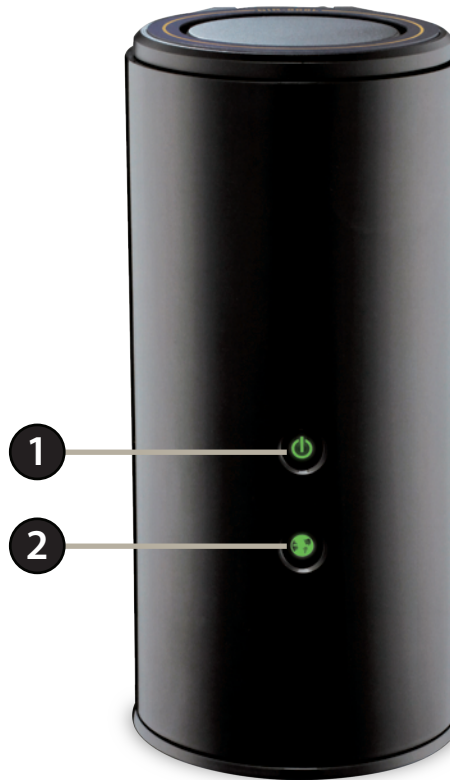
## Connections



<b>1</b>	USB 3.0 Port	Connect a USB flash drive to share content , or connect it to a USB printer to share it on your network.
<b>2</b>	WPS Button	Press to start the WPS process and automatically create a secure connection to a WPS client.
<b>3</b>	Gigabit LAN Ports (1-4)	Connect Ethernet devices such as computers, switches, storage (NAS) devices and game consoles.
<b>4</b>	Gigabit Internet Port	Using an Ethernet cable, connect your broadband modem to this port.
<b>5</b>	Power Button	Press the power button to power on and off.
<b>6</b>	Power Receptor	Receptor for the supplied power adapter.
<b>7</b>	Reset Button	Insert a paperclip in the hole and wait for several seconds to reset the router to default settings.

# Hardware Overview

## LEDs



<b>1</b>	Power LED	A solid green light indicates a proper connection to the power supply. The light will blink green during the WPS process. The light will be a solid orange during boot up.
<b>2</b>	Internet LED	A solid light indicates connection on the Internet port. If the LED is orange, the connection is good but the router cannot connect to the Internet.

# Installation

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

## Before you Begin

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

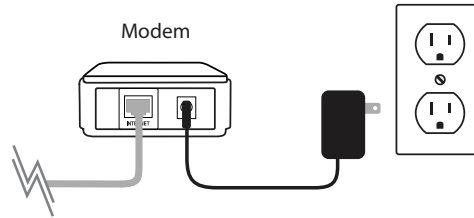
# Wireless Installation Considerations

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:

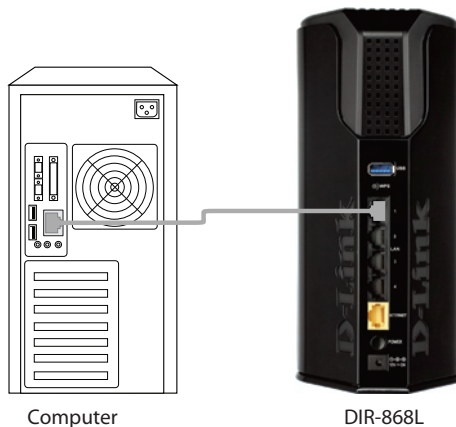
1. Keep the number of walls and ceilings between the D-Link router and other network devices to a minimum - each wall or ceiling can reduce your adapter's range from 3-90 feet (1-30 meters.) Position your devices so that the number of walls or ceilings is minimized.
2. Be aware of the direct line between 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.

# Manual Setup

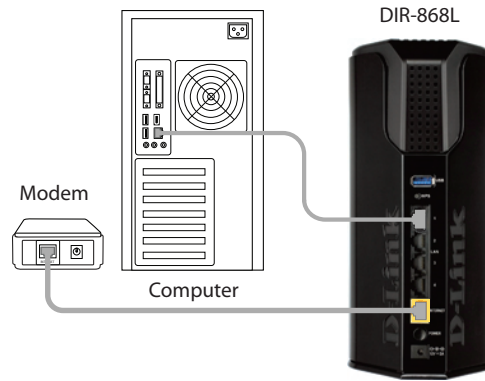
1. Turn off and unplug your cable or DSL broadband modem. This is required.



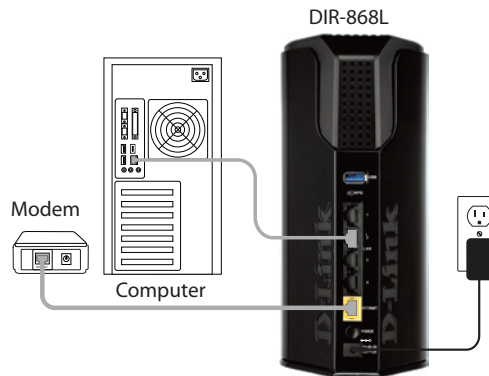
2. Position your router close to your modem and a computer. Place the router in an open area of your intended work area for better wireless coverage.
3. Unplug the Ethernet cable from your modem (or existing router if upgrading) that is connected to your computer. Plug it into the LAN port labeled **1**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



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



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



7. If you are connecting to a Broadband service, you may be online already and further configuration will be optional.

# Configuration

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

- **D-Link Setup Wizard** - This wizard will launch when you log into the router for the first time. Refer to page 12.
- **QRS Mobile App** - Use your iPhone, iPad, or iPod Touch to configure your router. Refer to page 19.
- **Manual Setup** - Log into the router and manually configure your router (advanced users only). Refer to pagepage 26.

# D-Link Quick Setup Wizard

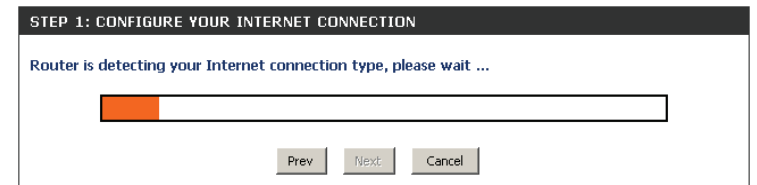
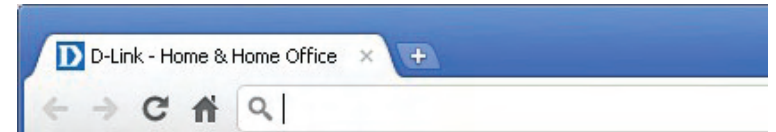
If this is your first time installing the router, open your web browser. You will automatically be directed to the **Wizard Setup Screen**.

If the wizard does not open automatically, you can alternately reach the configuration utility by entering the IP address of the router (**http://192.168.0.1**). Please refer to page 24.

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

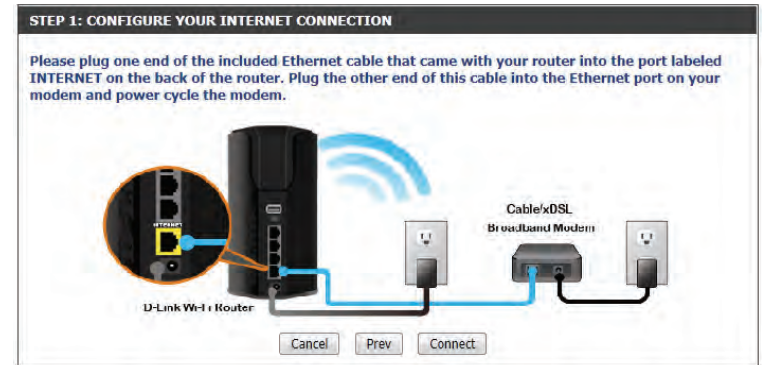
Click **Next** to continue.

Please wait while your router detects your internet connection type. If the router detects your Internet connection, you may need to enter your ISP information such as username and password.

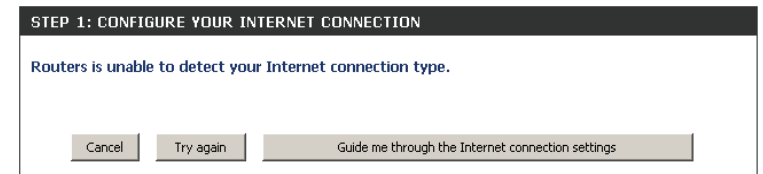




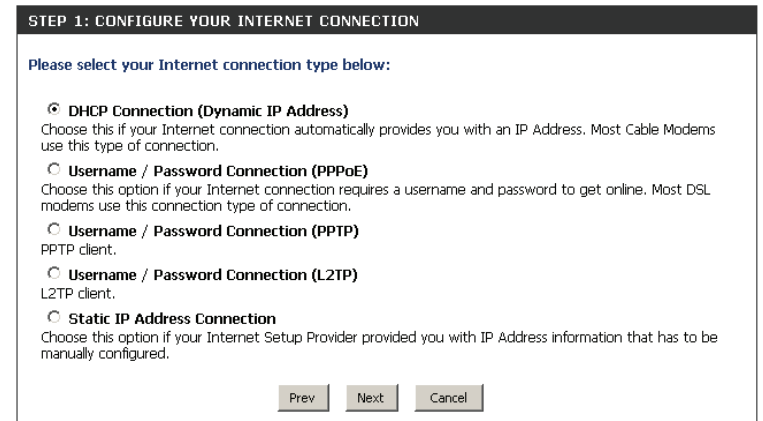
If the router does not detect a valid Ethernet connection from the Internet port, this screen will appear. Connect your broadband modem to the Internet port and then click **Try Again**.



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



Select your Internet connection type and click **Next** to continue.



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

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

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

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

**SET USERNAME AND PASSWORD CONNECTION (PPPoE)**

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

User Name :

Password :

Prev Next Cancel

**SET USERNAME AND PASSWORD CONNECTION (PPTP)**

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

Address Mode :  Dynamic IP  Static IP

PPTP IP Address :

PPTP Subnet Mask :

PPTP Gateway IP Address :

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

User Name :

Password :

Verify Password :

**DNS SETTINGS**

Primary DNS Address :

Secondary DNS Address :

Prev Next Cancel

**SET USERNAME AND PASSWORD CONNECTION (L2TP)**

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

Address Mode :  Dynamic IP  Static IP

L2TP IP Address :

L2TP Subnet Mask :

L2TP Gateway IP Address :

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

User Name :

Password :

Verify Password :

**DNS SETTINGS**

Primary DNS Address :

Secondary DNS Address :

Prev Next Cancel

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

**SET STATIC IP ADDRESS CONNECTION**

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

IP Address :

Subnet Mask :

Gateway Address :

**DNS SETTINGS**

Primary DNS Address :

Secondary DNS Address :

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

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

Click **Next** to continue.

**STEP 2: CONFIGURE YOUR WI-FI SECURITY**

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

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

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

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

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

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

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

**STEP 3: SET YOUR PASSWORD**

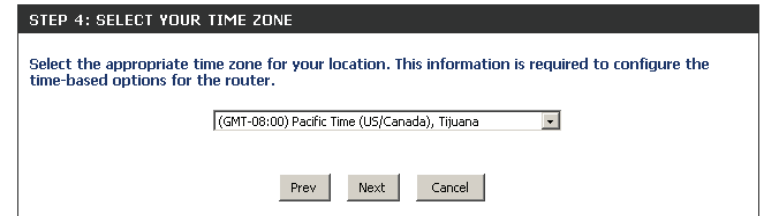
By default, your new D-Link Router does not have a password configured for administrator access to the Web-based configuration pages. To secure your new networking device, please set and verify a password below, and enabling CAPTCHA Graphical Authentication provides added security protection to prevent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

Password:

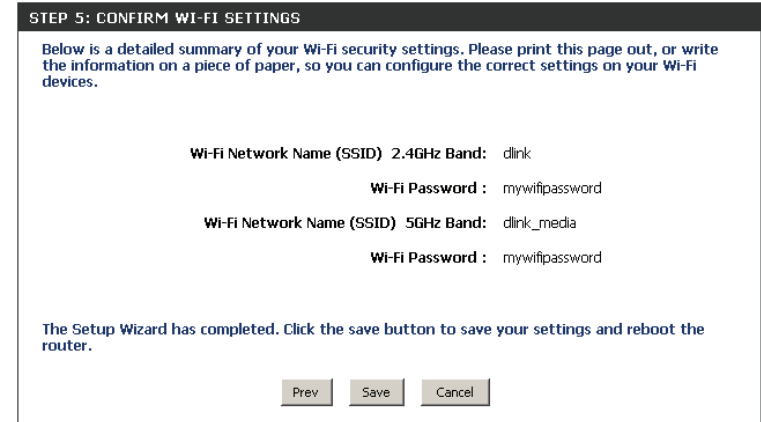
Verify Password :

Enable Graphical Authentication :

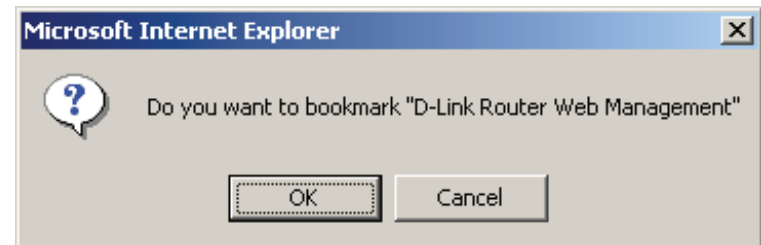
Select your time zone from the drop-down menu and click **Next** to continue.



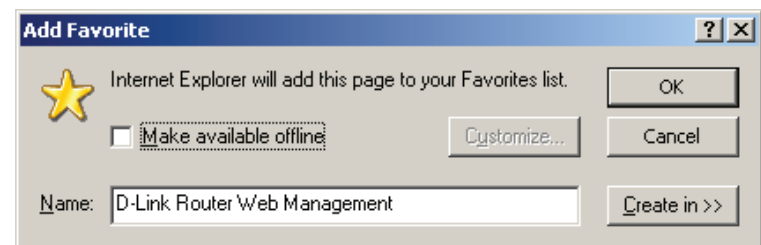
The Setup Complete window will display your Wi-Fi settings. Click **Save and Connect** to continue.



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



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



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

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

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

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

**MYDLINK REGISTRATION**

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

Do you have mydlink account?

Yes, I have a mydlink account.

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

Next Cancel

**STEP 6: MYDLINK REGISTRATION**

E-mail Address (Account Name): mydlinkaccount

Password: \*\*\*\*\*

Login Prev Cancel

**STEP 6: MYDLINK REGISTRATION**

Please full the options to complete the registration.

Email Address (Account Name):

Password:

Confirm Password:

Last name:

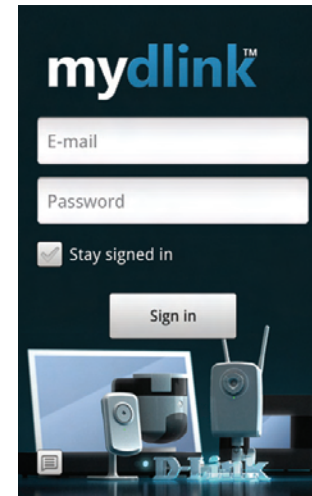
First Name:

I Accept the mydlink terms and conditions.

Next Prev Cancel

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

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



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



# QRS Mobile App (iOS, Android)

D-Link offers an app for your iOS or Android device to install and configure your router.

## Step 1

From an iOS device, go to the iTunes Store. From an Android device go to Google Play. Search for 'D-Link', select **QRS Mobile**, and download the app to your device. You may also scan the appropriate code on the right to locate the app download page.



iOS



Android

## Step 2

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

D-Link DIR-836L Router Wi-Fi Configuration Note	
Web browser link: http://dlinkrouter or http:// 192.168.0.1	Web browser link: http://dlinkrouter or http:// 192.168.0.1
Default configuration	Your configuration
Username: "Admin"	Username: Admin
Password: "" (leave the field blank)	Password: <input type="text"/>
Wi- Fi Name (SSID) :	Wi- Fi Name (SSID) : <input type="text"/>
dlink-a8fa	Wi- Fi Password : <input type="text"/>
Wi-Fi Password :	
akbdj19368	

## Step 3

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

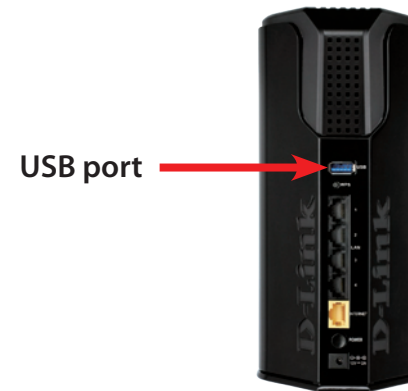


# SharePort Mobile App (iOS, Android)

The SharePort Mobile app will allow you to access files from a USB storage drive that is plugged into your router. You must enable file sharing from the **Setup > Storage** page (refer to page 22) for this app to work properly.

1. Plug your USB storage drive into the USB port.

**Note:** The DIR-868L supports hard drives with up to one terabyte of storage capacity.



2. Use your iOS or Android mobile device to scan the QR code to the right to download the **SharePort Mobile** app.

You can also search for the SharePort Mobile app directly in the iOS App Store or Google Play.



3. From your iOS or Android mobile device, choose **Settings**.

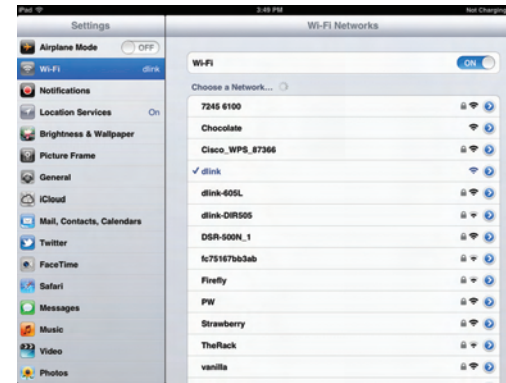
**Note:** These steps are for the iOS version of the app. The Android version may differ slightly.



Settings



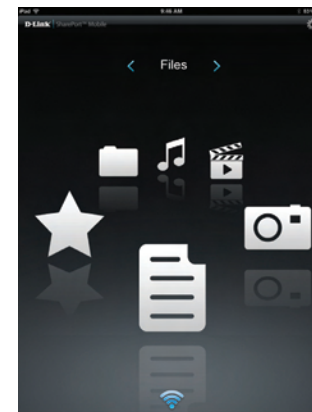
4. Click **Wi-Fi**, select the Wi-Fi Network Name (SSID) that you created during setup and then enter the default Wi-Fi password located on your Wi-Fi configuration note.



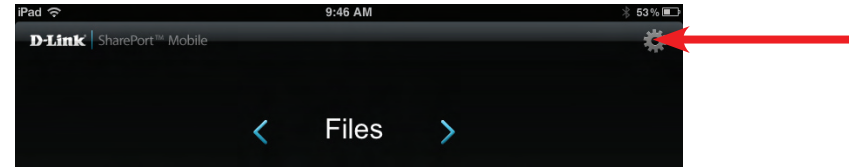
5. Once connected, tap on the **SharePort Mobile** icon.



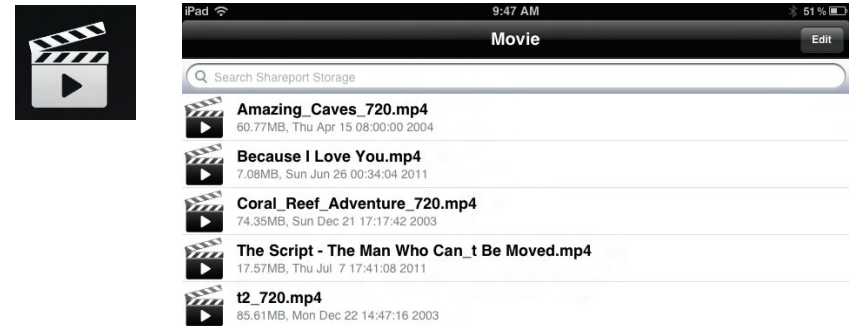
6. The following screen will appear.



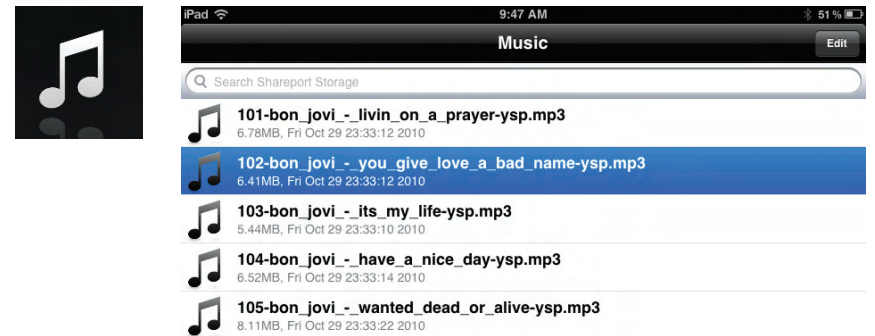
7. Tap on the **Settings** icon located on the right top corner of the screen. Tap **Edit** to enter your User Name and Password (the default username is **admin** and the password field should be left blank). Once you finish, click **Done** to continue.



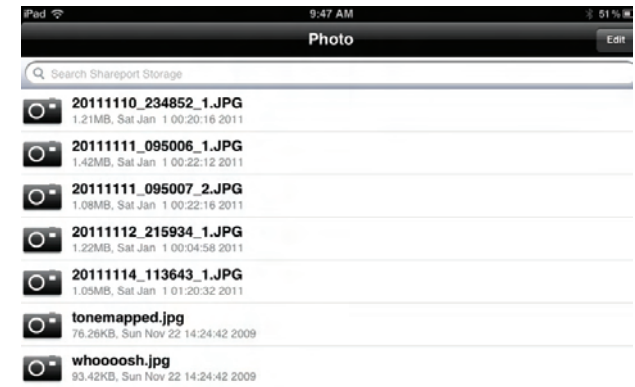
8. For the Movie section, click the movie icon to play your movie from your USB flash drive.



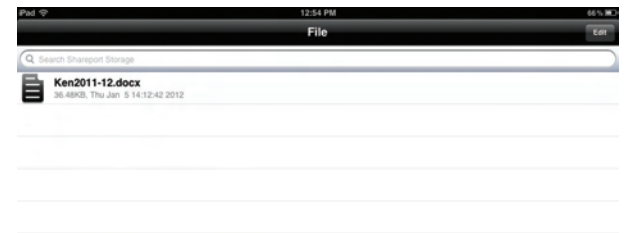
9. For the Music section, click the music icon to play your music from your USB flash drive.



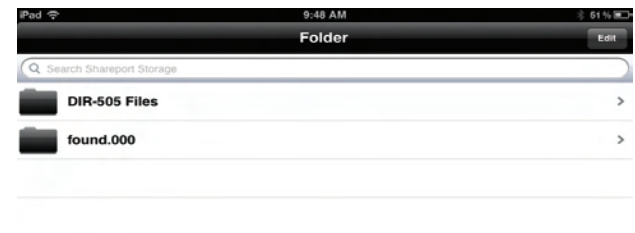
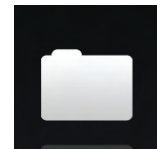
10. For the Photo section, click the Photo icon to view your photos from your USB flash drive.



11. For the Files section, click on the Files icon to view your files from your USB flash drive.



12. For the Folder section, click the folder icon to view your folders from your USB flash drive.



# Web-based Configuration Utility

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

Windows and Mac users may also connect by typing the IP address of the router (**http://192.168.0.1**) in the address bar.



Enter your password. The password should be left blank by default.

**LOGIN**

Log in to the router

User Name :

Password :

# Internet Connection Setup

If you want to configure your router to connect to the Internet using the wizard, click **Internet Connection Setup Wizard**. You will be directed to the Quick Setup Wizard. Please refer to page 12.

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

The screenshot displays the D-Link web interface for the DIR-868L router. The top navigation bar includes 'DIR-868L', 'SETUP', 'ADVANCED', 'TOOLS', 'STATUS', and 'SUPPORT'. The 'SETUP' menu is expanded to show 'INTERNET', 'WIRELESS SETTINGS', 'NETWORK SETTINGS', 'STORAGE', 'MEDIA SERVER', 'IPV6', and 'MYDLINK SETTINGS'. The 'INTERNET' option is selected, leading to the 'INTERNET CONNECTION' page. This page features a 'Helpful Hints...' sidebar on the right and a main content area with two sections: 'INTERNET CONNECTION SETUP WIZARD' and 'MANUAL INTERNET CONNECTION OPTION'. The wizard section includes a button for 'Internet Connection Setup Wizard' and a note about following the Quick Installation Guide. The manual option section includes a button for 'Manual Internet Connection Setup'.

DIR-868L //	SETUP	ADVANCED	TOOLS	STATUS	SUPPORT
INTERNET	<b>INTERNET CONNECTION</b>				<b>Helpful Hints...</b> <ul style="list-style-type: none"> <li>If you are new to networking and have never configured a router before, click on <b>Internet Connection Setup Wizard</b> and the router will guide you through a few simple steps to get your network up and running.</li> <li>If you consider yourself an advanced user and have configured a router before, click <b>Manual Internet Connection Setup</b> to input all the settings manually.</li> <li><a href="#">More...</a></li> </ul>
WIRELESS SETTINGS	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.				
NETWORK SETTINGS	<b>INTERNET CONNECTION SETUP WIZARD</b>				
STORAGE	If you would like to utilize our easy to use Web-based Wizard to assist you in connecting your new D-Link Systems Router to the Internet, click on the button below. <input type="button" value="Internet Connection Setup Wizard"/>				
MEDIA SERVER	<b>Note:</b> Before launching the wizard, please make sure you have followed all steps outlined in the Quick Installation Guide included in the package.				
IPV6	<b>MANUAL INTERNET CONNECTION OPTION</b>				
MYDLINK SETTINGS	If you would like to configure the Internet settings of your new D-Link Router manually, then click on the button below. <input type="button" value="Manual Internet Connection Setup"/>				

**WIRELESS**

# Manual Internet Setup

## Static IP

Select your connection type from the **My Internet Connect Is** drop-down box. Choose Static IP if all of the port's IP information has been provided by your ISP. You will need to enter the IP address, subnet mask, gateway address, and DNS address(es). Each IP address entered in the fields must be in the appropriate IP form, which are four octets separated by a dot (x.x.x.x). The Router will not accept the IP address if it is not in this format.

### My Internet

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

### Enable Advanced

**DNS Service:** Advanced Domain Name System (DNS) services enhances your Internet performance by getting you the information and web pages you are looking for faster and more reliably. In addition, it improves your overall Internet experience by correcting many common typo mistakes automatically, taking you where you intended to go and saving you valuable time.

### Enable True

**Gigabit Routing Connectivity:** Check to enable true Gigabit routing. This will increase the through-put of the WAN-LAN connectivity of the router.

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

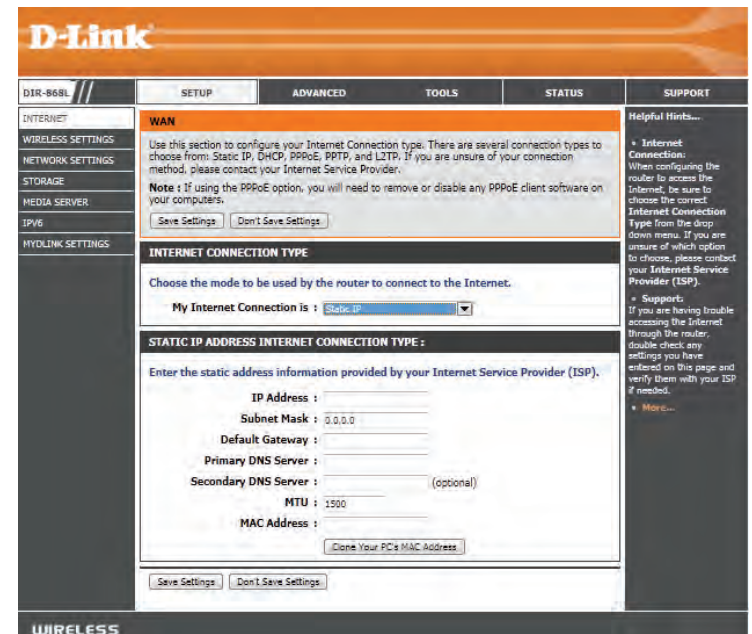
**Subnet Mask:** Enter the Subnet Mask assigned by your ISP.

**Default Gateway:** Enter the Gateway assigned by your ISP.

**DNS Servers:** The DNS server information will be supplied by your ISP

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



## Dynamic IP (DHCP)

If you are unsure what method you use to connect to the Internet, try this first. Cable modems usually use this type of connection

**My Internet Connection:** Select **Dynamic IP (DHCP)** to obtain IP Address information automatically from your ISP. Select this option if your ISP does not give you any IP numbers to use. This option is commonly used for cable modem services.

**Enable Advanced DNS Service:** Advanced Domain Name System (DNS) services enhances your Internet performance by getting you the information and web pages you are looking for faster and more reliably. In addition, it improves your overall Internet experience by correcting many common typo mistakes automatically, taking you where you intended to go and saving you valuable time.

**Disclaimer:** D-Link makes no warranty as to the availability, reliability, functionality and operation of the Advanced DNS service or its features.

**Enable True Gigabit Routing Connectivity:** Check to enable true Gigabit routing. This will increase the through-put of the WAN-LAN connectivity of the router.

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

**Host Name:** Check the box if you are having problems obtaining an IP address from your ISP.

**Use Unicasting:** Enter the Primary and secondary DNS server IP addresses assigned by your ISP. These addresses are usually obtained automatically from your ISP. Leave at 0.0.0.0 if you did not specifically receive these from your ISP.

**Primary/Secondary DNS Server:** Maximum Transmission Unit - you may need to change the MTU for optimal performance with your specific ISP. 1500 is the default MTU.

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

**MAC Address:**

**INTERNET CONNECTION TYPE**

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

My Internet Connection is :

---

**DYNAMIC IP (DHCP) INTERNET CONNECTION TYPE :**

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

Host Name :

Use Unicasting :  (compatibility for some DHCP Servers)

Primary DNS Server :

Secondary DNS Server :  (optional)

MTU :

MAC Address :



## PPPoE (Username/Password)

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

### My Internet

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

**Enable Advanced DNS Service:** Advanced Domain Name System (DNS) services enhances your Internet performance by getting you the information and web pages you are looking for faster and more reliably. In addition, it improves your overall Internet experience by correcting many common typo mistakes automatically, taking you where you intended to go and saving you valuable time.

**Disclaimer:** D-Link makes no warranty as to the availability, reliability, functionality and operation of the Advanced DNS service or its features.

### Enable True

**Gigabit Routing Connectivity:** Check to enable true Gigabit routing. This will increase the through-put of the WAN-LAN connectivity of the router.

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

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

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

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

### Reconnect

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

The screenshot shows the router's configuration interface for PPPoE. It is divided into two main sections:

- INTERNET CONNECTION TYPE:** This section prompts the user to "Choose the mode to be used by the router to connect to the Internet." A dropdown menu is shown with "PPPoE (Username / Password)" selected.
- PPPOE INTERNET CONNECTION TYPE:** This section prompts the user to "Enter the information provided by your Internet Service Provider (ISP)." It contains several fields and options:
  - Address Mode:** Radio buttons for "Dynamic IP" (selected) and "Static IP".
  - IP Address:** A text input field.
  - Username:** A text input field.
  - Password:** A text input field.
  - Verify Password:** A text input field.
  - Service Name:** A text input field with "(optional)" next to it.
  - Reconnect Mode:** Radio buttons for "Always-on", "On demand" (selected), and "Manual". There is also a "New Schedule" link.
  - Maximum Idle Time:** A text input field with "(minutes, 0=infinite)" next to it.
  - DNS Mode:** Radio buttons for "Receive DNS from ISP" (selected) and "Enter DNS Manually".
  - Primary DNS Server:** A text input field.
  - Secondary DNS Server:** A text input field with "(optional)" next to it.
  - MTU:** A text input field with the value "1492" entered.
  - MAC Address:** A text input field with a "Clone Your PC's MAC Address" button below it.



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

#### DNS

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

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

## PPTP

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

### My Internet

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

**Enable Advanced DNS Service:** Advanced Domain Name System (DNS) services enhances your Internet performance by getting you the information and web pages you are looking for faster and more reliably. In addition, it improves your overall Internet experience by correcting many common typo mistakes automatically, taking you where you intended to go and saving you valuable time.

**Disclaimer:** D-Link makes no warranty as to the availability, reliability, functionality and operation of the Advanced DNS service or its features.

### Enable True

**Gigabit Routing Connectivity:** Check to enable true Gigabit routing. This will increase the throughput of the WAN-LAN connectivity of the router.

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

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

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

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

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

**Username:** Enter your PPTP username.

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

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

The screenshot shows the 'INTERNET CONNECTION TYPE' configuration page. At the top, it says 'Choose the mode to be used by the router to connect to the Internet.' Below this, a dropdown menu is set to 'PPTP (Username / Password)'. The next section is 'PPTP INTERNET CONNECTION TYPE : Enter the information provided by your Internet Service Provider (ISP)'. It includes several fields: 'Address Mode' with radio buttons for 'Dynamic IP' (selected) and 'Static IP'; 'PPTP IP Address', 'PPTP Subnet Mask', and 'PPTP Gateway IP Address' (all empty); 'PPTP Server IP Address' (empty); 'Username' and 'Password' (empty); 'Verify Password' (empty); 'Reconnect Mode' with radio buttons for 'Always-on' (selected), 'On demand', and 'Manual', and a 'New Schedule' button; 'Maximum Idle Time' (empty) with '(minutes, 0=infinite)' in parentheses; 'Primary DNS Server' (empty); 'Secondary DNS Server' (empty) with '(optional)' in parentheses; 'MTU' (1400); 'MAC Address' (empty); and a 'Clone Your PC's MAC Address' button.

## L2TP

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

### My Internet

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

**Enable Advanced DNS Service:** Advanced Domain Name System (DNS) services enhances your Internet performance by getting you the information and web pages you are looking for faster and more reliably. In addition, it improves your overall Internet experience by correcting many common typo mistakes automatically, taking you where you intended to go and saving you valuable time.

**Disclaimer:** D-Link makes no warranty as to the availability, reliability, functionality and operation of the Advanced DNS service or its features.

### Enable True

**Gigabit Routing Connectivity:** Check to enable true Gigabit routing. This will increase the throughput of the WAN-LAN connectivity of the router.

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

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

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

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

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

**Username:** Enter your PPTP username.

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

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

The screenshot shows the 'INTERNET CONNECTION TYPE' configuration page. The 'My Internet Connection is' dropdown menu is set to 'L2TP (Username / Password)'. Below this, the 'L2TP INTERNET CONNECTION TYPE' section is active, showing fields for 'Address Mode' (Dynamic IP selected), 'L2TP IP Address', 'L2TP Subnet Mask', 'L2TP Gateway IP Address', 'L2TP Server IP Address', 'Username', 'Password', 'Verify Password', 'Reconnect Mode' (On demand selected), 'Maximum Idle Time' (minutes, 0=infinite), 'Primary DNS Server', 'Secondary DNS Server' (optional), 'MTU' (1400), and 'MAC Address' (with a 'Clone Your PC's MAC Address' button).

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

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

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

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

## DS-Lite

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

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

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

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

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

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

The screenshot displays two configuration panels. The top panel, titled "INTERNET CONNECTION TYPE", prompts the user to "Choose the mode to be used by the router to connect to the Internet." and shows "My Internet Connection is" set to "DS-Lite". The bottom panel, titled "AFTR ADDRESS INTERNET CONNECTION TYPE", prompts the user to "Enter the AFTR address information provided by your Internet Service Provider (ISP)". It includes "DS-Lite Configuration" with "DS-Lite DHCPv6 Option" selected, and fields for "AFTR IPv6 Address", "B4 IPv4 Address" (pre-filled with "192.0.0." and marked as optional), "WAN IPv6 Address", and "IPv6 WAN Default Gateway".

# Wireless Settings

If you want to configure the wireless settings on your router using the wizard, click **Wireless Network Setup Wizard** and refer to page 42.

Click **Add Wireless Device with WPS** if you want to add a wireless device using Wi-Fi Protected Setup (WPS) and refer to page 44.

If you want to manually configure the wireless settings on your router click **Manual Wireless Network Setup** and refer to the next page.

**D-Link**

DIR-868L // SETUP ADVANCED TOOLS STATUS SUPPORT

**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.

**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-by-step instructions on how to get your wireless device connected. Click the button below to begin.

[Add Wireless Device with WPS](#)

**MANUAL WIRELESS NETWORK SETUP**

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

[Manual Wireless Connection Setup](#)

**Helpful Hints...**

- If you already have a wireless network setup with Wi-Fi Protected Setup, click on **Add Wireless Device with WPS** to add new device to your wireless network.
- If you are new to wireless networking and have never configured a wireless router before, click on **Wireless Connection Setup Wizard** and the router will guide you through a few simple steps to get your wireless network up and running.
- If you consider yourself an advanced user and have configured a wireless router before, click **Manual Wireless Connection Setup** to input all the settings manually.
- [More...](#)

**WIRELESS**

## Wireless Connection Setup Wizard

To run the security wizard, click on Setup at the top and then click **Wireless Connection Setup Wizard**.

The screenshot shows the D-Link web interface for the DIR-868L router. The top navigation bar includes 'SETUP', 'ADVANCED', 'TOOLS', 'STATUS', and 'SUPPORT'. The left sidebar lists various settings categories, with 'WIRELESS SETTINGS' selected. The main content area is titled 'WIRELESS SETTINGS' and contains the following sections:

- WIRELESS SETTINGS:** A text block explaining that Web-based wizards assist in wireless network setup and device connection, with a reference to the Quick Installation Guide.
- WIRELESS NETWORK SETUP WIZARD:** A section with a 'Wireless Connection Setup Wizard' button. A note below states that some changes made using this wizard may require changing settings on wireless client adapters.
- ADD WIRELESS DEVICE WITH WPS (WI-FI PROTECTED SETUP) WIZARD:** A section with an 'Add Wireless Device with WPS' button, explaining that it guides users through step-by-step instructions for connecting wireless devices.
- MANUAL WIRELESS NETWORK SETUP:** A section with a 'Manual Wireless Connection Setup' button, explaining that manual configuration will destroy an existing network and is for users who prefer manual settings.

A 'Helpful Hints...' sidebar on the right provides additional guidance:

- If you already have a wireless network setup with Wi-Fi Protected Setup, click on **Add Wireless Device with WPS** to add new device to your wireless network.
- If you are new to wireless networking and have never configured a wireless router before, click on **Wireless Connection Setup Wizard** and the router will guide you through a few simple steps to get your wireless network up and running.
- If you consider yourself an advanced user and have configured a wireless router before, click **Manual Wireless Connection Setup** to input all the settings manually.
- [More...](#)

**STEP 1:** Type your desired wireless network names (SSIDs) for both the 2.4 GHz band and the 5 GHz band.

**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**.

The screenshot shows the 'STEP 1: WELCOME TO THE D-LINK WIRELESS SECURITY SETUP WIZARD' screen. The instructions are as follows:

- Give your network a name, using up to 32 characters.**
- Network Name (SSID) 2.4GHz :** dlink-2234
- Network Name (SSID) 5GHz :** dlink-2236-media
- Automatically assign a network key (Recommended)**  
To prevent outsiders from accessing your network, the router will automatically assign a security (also called WEP or WPA key) to your network.
- Manually assign a network key**  
Use this options if you prefer to create our own key.
- Note: All D-Link wireless adapters currently support WPA.**

Navigation buttons at the bottom: **Prev**, **Next**, **Cancel**, **Save**.

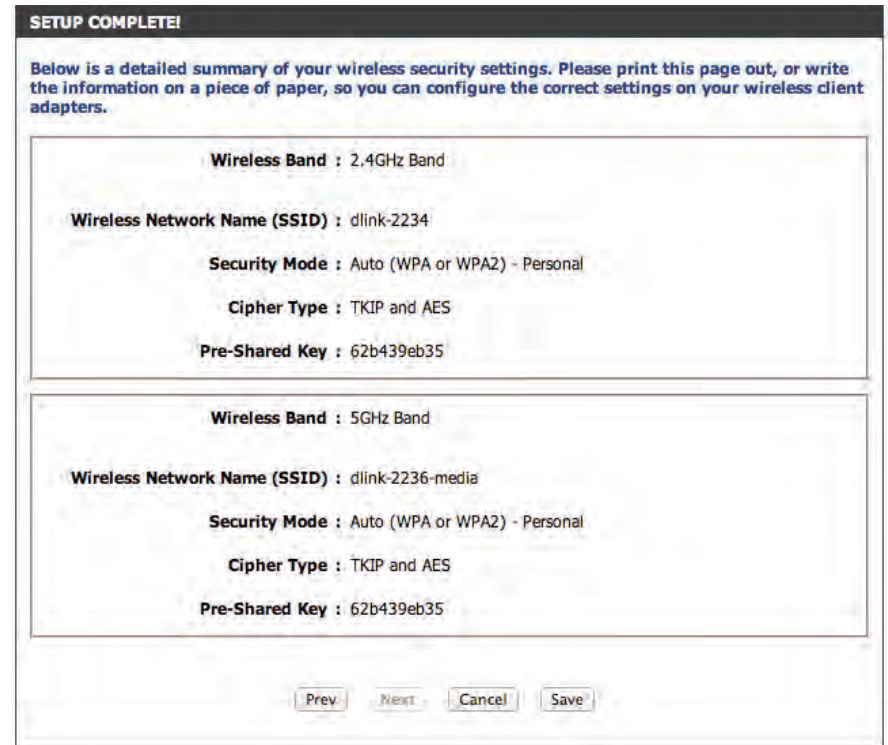


If you selected **Automatically**, the option to make your password the same on both bands will be offered. If you choose to make them the same, you can select your own password in the box below.

Click **Next**.

You will now see a summary window that displays your settings. Write down the security key and enter this on your wireless clients.

Click **Save** to save your settings.





If you selected **Manually**, the option to make your password the same on both bands will be offered.

Enter your wireless password in the box below.

Click **Next**.

**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.

You will now see a summary window that displays your settings. Write down the security key and enter this on your wireless clients.

Click **Save** to save your settings.

**SETUP COMPLETE!**

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

<b>Wireless Band :</b> 2.4GHz Band
<b>Wireless Network Name (SSID) :</b> dlink-2234
<b>Security Mode :</b> Auto (WPA or WPA2) - Personal
<b>Cipher Type :</b> TKIP and AES
<b>Pre-Shared Key :</b> 12345678

<b>Wireless Band :</b> 5GHz Band
<b>Wireless Network Name (SSID) :</b> dlink-2236-media
<b>Security Mode :</b> Auto (WPA or WPA2) - Personal
<b>Cipher Type :</b> TKIP and AES
<b>Pre-Shared Key :</b> 12345678

## Wireless Security Setup Wizard

If you are unfamiliar with the types of wireless security, more information is located in the appendix at back of this manual.

To run the security wizard, click on Setup at the top and then click **Wireless Network Setup Wizard**.

The screenshot shows the D-Link web interface for the DIR-868L router. The top navigation bar includes 'D-Link', 'DIR-868L //', and tabs for 'SETUP', 'ADVANCED', 'TOOLS', 'STATUS', and 'SUPPORT'. The left sidebar lists various settings categories: INTERNET, WIRELESS SETTINGS, NETWORK SETTINGS, STORAGE, MEDIA SERVER, IPV6, and MYDLINK SETTINGS. The main content area is titled 'WIRELESS SETTINGS' and contains the following sections:

- WIRELESS SETTINGS**: A general introduction to the web-based wizards for wireless network setup and device connection, with a note to follow the Quick Installation Guide.
- WIRELESS NETWORK SETUP WIZARD**: A section for step-by-step instructions on setting up a wireless network, with a button for 'Wireless Connection Setup Wizard'.
- ADD WIRELESS DEVICE WITH WPS (WI-FI PROTECTED SETUP) WIZARD**: A section for connecting wireless devices, with a button for 'Add Wireless Device with WPS'.
- MANUAL WIRELESS NETWORK SETUP**: A section for manual configuration, with a button for 'Manual Wireless Connection Setup'.

On the right side, there is a 'Helpful Hints...' section with several bullet points providing additional guidance.

Type your desired wireless network name (SSID).

**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**.

The screenshot shows the first step of the D-Link Wireless Security Setup Wizard. The title is 'STEP 1: WELCOME TO THE D-LINK WIRELESS SECURITY SETUP WIZARD'. The main instruction is 'Give your network a name, using up to 32 characters.' Below this, there is a text input field for 'Network Name (SSID) 2.4GHz Band:' with the value 'dlink-8E89'. There are three radio button options:

- Manually set 5GHz band Network Name(SSID)
- Automatically assign a network key for both 2.4GHz and 5GHz band (Recommended)
- Manually assign a network key

Below the options, there is a note: 'To prevent outsiders from accessing your network, the router will automatically assign a security (also called WEP or WPA key) to your network.' and another note: 'Use this options if you prefer to create our own key.' At the bottom, there is a 'Note: All D-Link wireless adapters currently support WPA.' and three buttons: 'Prev', 'Next', and 'Cancel'.

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

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

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

**Network Name (SSID) 2.4GHz Band:**

Manully set 5GHz band Network Name(SSID)

**Network Name (SSID) 5GHz Band:**

Automatically assign a network key for both 2.4GHz and 5GHz band (Recommended)  
To prevent outsiders from accessing your network, the router will automatically assign a security (also called WEP or WPA key) to your network.

Manully assign a network key  
Use this options if you prefer to create our own key.

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

If you selected **Manually**, the following screen will appear. Create a passphrase for your security password. Click **Next** to continue.

**STEP 2: SET YOUR WIRELESS SECURITY PASSWORD**

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

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

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

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

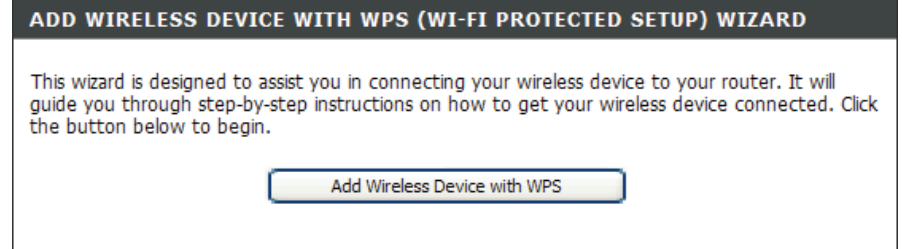
**Wireless Security Password :**

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

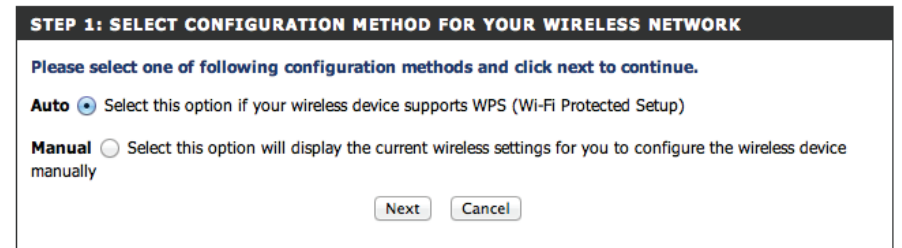
## Add Wireless Device with WPS Wizard

If you are unfamiliar with the types of wireless security, more information is located in the appendix at back of this manual.

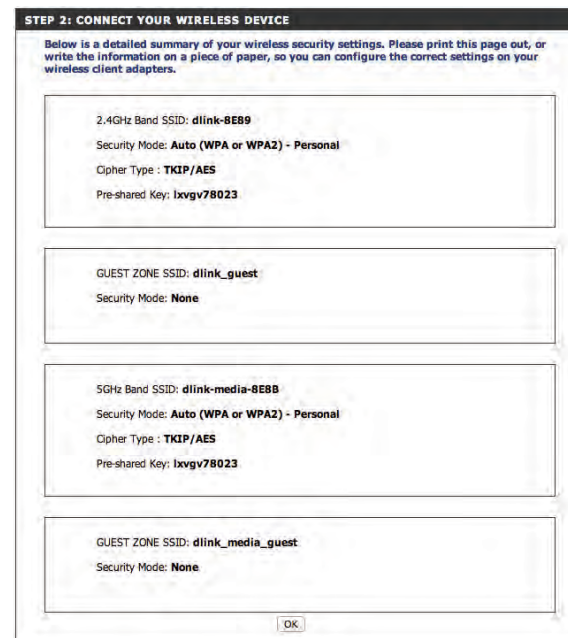
From the **Setup > Wireless Settings** screen, click **Add Wireless Device with WPS**.



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



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



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

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

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

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

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

**PIN :**

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

**PBC**

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

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

**ADD WIRELESS DEVICE WITH WPS**

Please press down the Push Button (physical or virtual) on the wireless device you are adding to your wireless network within 117 seconds ...



# Manual Wireless Settings

## 802.11 b/g/n (2.4GHz)

If you are unfamiliar with the types of wireless security, more information is located in the appendix at back of this manual.

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

**802.11 Mode:** Select one of the following:

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

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

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

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

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

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

**Enable Auto Channel Scan:** The **Auto Channel Scan** setting can be selected to allow the DIR-868L to choose the channel with the least amount of interference.

**Wireless Channel:** Indicates the channel setting for the DIR-868L. By default the channel is set to 6. The Channel can be changed to fit the channel setting for an existing wireless network or to customize the wireless network. If you enable **Auto Channel Scan**, this option will be greyed out.

**Channel Width:** Select the Channel Width:

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

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

**Visibility Status:** Select **Invisible** if you do not want the SSID of your wireless network to be broadcasted by the DIR-868L. If Invisible is selected, the SSID of the DIR-868L will not be seen by Site Survey utilities so your wireless clients will have to know the SSID of your DIR-868L in order to connect to it.

**Wireless Security:** Refer to the appendix in the back of the manual for more information regarding wireless security.

**WIRELESS NETWORK SETTINGS**

Wireless Band : 2.4GHz Band

Enable Wireless :  Always:

Wireless Network Name : dir-868L-1 (Also called the SSID)

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

Enable Auto Channel Scan :

Wireless Channel : 2.412 GHz - CH 1

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

Channel Width : 20/40 MHz(Auto)

Visibility Status :  Visible  Invisible

## 802.11ac draft (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 Name:** Service Set Identifier (SSID) is the name of your wireless network. Create a name for your wireless network using up to 32 characters. The SSID is case-sensitive.

**802.11 Mode:** Select one of the following:

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

**WIRELESS NETWORK SETTINGS**

Wireless Band : 5GHz Band

Enable Wireless :  Always

Wireless Network Name : dir-868L-2 (Also called the SSID)

802.11 Mode : Mixed 802.11ac

Enable Auto Channel Scan :

Wireless Channel : 5.805 GHz - CH 161

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

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

Visibility Status :  Visible  Invisible

### Enable Auto Channel

**Scan:** The **Auto Channel Scan** setting can be selected to allow the DIR-868L to choose the channel with the least amount of interference.

**Wireless Channel:** Indicates the channel setting for the DIR-868L. By default the channel is set to 6. The Channel can be changed to fit the channel setting for an existing wireless network or to customize the wireless network. If you enable **Auto Channel Scan**, this option will be greyed out.

**Channel Width:** Select the Channel Width:

- Auto 20/40/80** - Select if you are using both 802.11ac, 802.11n and non-802.11n wireless devices.
- Auto 20/40** - This is the default setting. Select if you are using both 802.11n and non-802.11n wireless devices.
- 20MHz** - Select if you are not using any 802.11n wireless clients.

**Visibility Status:** Select **Invisible** if you do not want the SSID of your wireless network to be broadcasted by the DIR-868L. If Invisible is selected, the SSID of the DIR-868L will not be seen by Site Survey utilities so your wireless clients will have to know the SSID of your DIR-868L in order to connect to it.

**Wireless Security:** Refer to the next page for more information regarding wireless security.

# Network Settings

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

The screenshot displays the D-Link DIR-868L web interface. The top navigation bar includes 'D-Link', 'DIR-868L', and tabs for 'SETUP', 'ADVANCED', 'TOOLS', 'STATUS', and 'SUPPORT'. A left sidebar lists various configuration sections: 'INTERNET', 'WIRELESS SETTINGS', 'NETWORK SETTINGS', 'STORAGE', 'MEDIA SERVER', 'IPV6', and 'HYDLINK SETTINGS'. The main content area is divided into three sections:

- NETWORK SETTINGS:** Contains instructions on configuring internal network settings and a note that this section is optional. It includes 'Save Settings' and 'Don't Save Settings' buttons.
- ROUTER SETTINGS:** Contains instructions and fields for 'Router IP Address' (192.168.0.1), 'Default Subnet Mask' (255.255.255.0), 'Host Name' (dlinkrouter), 'Local Domain Name' (optional), and 'Enable DNS Relay' (checked).
- DHCP SERVER SETTINGS:** Contains instructions and fields for 'Enable DHCP Server' (checked), 'DHCP IP Address Range' (100 to 199), 'DHCP Lease Time' (10000 minutes), 'Always broadcast' (checked), 'NetBIOS announcement' (unchecked), 'Learn NetBIOS from WAN' (unchecked), 'NetBIOS Scope' (optional), 'NetBIOS node type' (Broadcast only selected), 'Primary WINS IP Address', and 'Secondary WINS IP Address'.

On the right side, there is a 'Helpful Hints...' section with additional instructions regarding DHCP server configuration and DHCP Reservation.



## Router Settings

This section will allow you to configure the router settings.

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

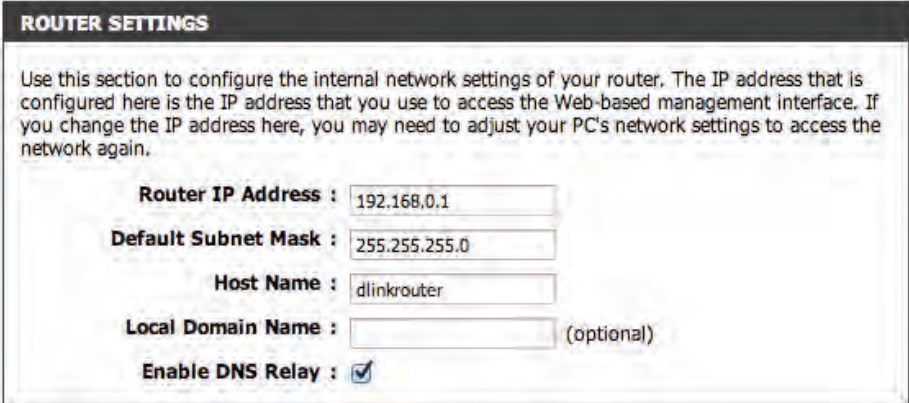
If you change the IP address, once you click **Save Settings**, you will need to enter the new IP address in your browser to get back into the configuration utility.

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

**Device Name:** Enter a name for the router.

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

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



The screenshot shows a web-based configuration interface titled "ROUTER SETTINGS". It contains a text box with instructions: "Use this section to configure the internal network settings of your router. The IP address that is configured here is the IP address that you use to access the Web-based management interface. If you change the IP address here, you may need to adjust your PC's network settings to access the network again." Below the text are five input fields: "Router IP Address" (192.168.0.1), "Default Subnet Mask" (255.255.255.0), "Host Name" (dlinkrouter), "Local Domain Name" (empty, with "(optional)" to its right), and "Enable DNS Relay" (checked checkbox).

## DHCP Server Settings

DHCP stands for Dynamic Host Control Protocol. The DIR-868L 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-868L. The DHCP Server will automatically allocate an unused IP address from the IP address pool to the requesting computer. You must specify the starting and ending address of the IP address pool.

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

**Server:** Uncheck to disable this function.

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

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

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

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

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

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

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

**NetBIOS Node:**

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

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

## DHCP Reservation

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

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

**Enable:** Check this box to enable the reservation.

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

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

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

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

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

### DHCP Reservations List

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

**Enable:** Check to enable the reservation.

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

**Delete:** Click to remove the reservation from the list.

DHCP RESERVATIONS LIST			
Enable	Host Name	IP Address	MAC Address

NUMBER OF DYNAMIC DHCP CLIENTS			
Host Name	IP Address	MAC Address	Expired Time
DaveBook-Pro-2	192.168.0.100	00:25:4b:c3:55:3c	6 Days 23 Hours 57 Minutes

# Storage

This page will allow you to set up access to files on an external USB hard drive<sup>1</sup> or thumb drive that is plugged into the router. You can do this through local network or from the Internet using either a web browser or an app on your smartphone or tablet. You can create users that can be allowed access to these files through SharePort Mobile services accessible through a web UI or on mobile devices using the SharePort Mobile app available for iOS and Android.

**Enable SharePort Web Access** Check this box if you wish to be able to access SharePort through a browser as well as the mobile app.

**HTTP Access Port:** Enter the port you want to use when accessing SharePort using a web browser.

**HTTPS Access Port:** Enter the port you want to use when accessing SharePort through a secure connection using a web browser.

**Allow Remote Access:** Check this box if you wish to be able to access SharePort through a web browser over the Internet.

**User Creation:** To give a new user access to your SharePort storage, enter a User Name and Password here. You can Add new users or choose existing users from the drop-down menu if you wish to Edit or Delete them.

***Note:** The Admin password is the same as the admin password for the router. The Guest password is "guest" and cannot be changed.*

**User List:** This list displays all of the users with access to the SharePort Mobile content, what they can access, and their Read/Write Permissions.

The screenshot shows the D-Link web interface for the DIR-868L router. The 'STORAGE' configuration page is displayed, featuring a sidebar with navigation options like INTERNET, WIRELESS SETTINGS, NETWORK SETTINGS, STORAGE, MEDIA SERVER, IPV6, and MYDLINK SETTINGS. The main content area is divided into several sections: 'STORAGE' with a 'Web File Access' description and 'Save Settings'/'Don't Save Settings' buttons; 'SHAREPOINT WEB ACCESS' with checkboxes for 'Enable SharePort Web Access' (checked), 'HTTP Access Port' (8181), 'HTTPS Access Port' (4433), and 'Allow Remote Access' (unchecked); '10 -- USER CREATION' with input fields for 'User Name', 'Password', and 'Verify Password' and an 'Add/Edit' button; 'USER LIST' with a table showing user details; 'NUMBER DEVICES:0' with a table for device information; and 'SHAREPOINT ACCESS LINK' with a description and 'Save Settings'/'Don't Save Settings' buttons. A 'Helpful Hints...' sidebar is visible on the right.

**Number of Devices:** All devices you have set up for SharePort access will be listed here.

**SharePort Web Access Link:** This area will display the HTTP and HTTPS links to connect to your SharePort drive through a web browser from a device on your network.

<sup>1</sup> Supports capacities of up to 1TB for USB storage drives.



# Media Server

This page will allow you to enable a DLNA Media Server. DLNA (Digital Living Network Alliance) is the standard for the interoperability of Network Media Devices (NMDs). The user can enjoy multimedia applications (music, pictures and videos) on your network connected PC or media devices. If you agree to share media with devices, any computer or device that connects to your network can play your shared music, pictures and videos.

**Note:** *The shared media may not be secure. Allowing any devices to stream is recommended only on secure networks.*

**DLNA Server:** Check to enable DLNA Media Server functions.

**DLNA Server Name:** Choose a name for your DLNA media server so that it can be found.

**Folder:** Choose the location of the folder you wish to share or check the box to use the root folder of the entire drive.

**iTunes Server:** Check to enable iTunes Server functions.

**Folder:** Choose the location of the iTunes Library folder you wish to share or check the box to use the root folder if it is located on the root folder of the connected drive.

**USB 3.0:** Use this setting to enable USB 3.0 functionality for the USB port on the back of the router. USB 3.0 provides high-speed transfer speeds with compatible devices. This setting is disabled by default, which means that the USB port will operate at the USB 2.0 specification.

**D-Link**

DIR-868L // SETUP ADVANCED TOOLS STATUS SUPPORT

**MEDIA SERVER**

DLNA (Digital Living Network Alliance) is the standard for the interoperability of Network Media Devices (NMDs). The user can enjoy multi-media applications (music, pictures and videos) on your network connected PC or media devices. The iTunes server will allow iTunes software to automatically detect and play music from the router.

**NOTE: The shared media may not be secure. Allowing any devices to stream is recommended only on secure networks.**

Save Settings Don't Save Settings

**DLNA SERVER**

DLNA Server :  Enable  Disable

DLNA Server Name : DIR868L\_DMG

Folder :  root  /  Browse

**iTunes SERVER**

iTunes Server :  Enable  Disable

Folder :  root  /  Browse

**USB 3.0**

USB 3.0 :  Enable  Disable

Save Settings Don't Save Settings

**WIRELESS**

Helpful Hints...  
 • After adding new media content to the router, click the Enable or Disable button and then save settings.  
 • More...

# IPv6

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

If you are a beginner that has not configured a router before, click on the **IPv6 Internet Connection Setup Wizard** button and the router will guide you through a few simple steps to get your network up and running.

If you are an advanced user that has configured a router before, click on the **Manual IPv6 Internet Connection Setup** button to input all the settings manually.

The screenshot displays the D-Link web interface for the DIR-868L router. The top navigation bar includes 'D-Link' and tabs for 'SETUP', 'ADVANCED', 'TOOLS', 'STATUS', and 'SUPPORT'. The left sidebar lists various configuration sections: INTERNET, WIRELESS SETTINGS, NETWORK SETTINGS, STORAGE, MEDIA SERVER, IPv6, and MYDLINK SETTINGS. The main content area is titled 'IPv6 INTERNET CONNECTION' and provides instructions on how to set up the connection. It offers two options: using the 'IPv6 Internet Connection Setup Wizard' for a guided process or 'Manual IPv6 Local Connectivity Setup' and 'Manual IPv6 Internet Connection Setup' for manual configuration. A 'Helpful Hints...' section on the right provides additional guidance for new and advanced users.

**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 Wizard 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 the wizards, please make sure you have followed all steps outlined in the Quick Installation Guide included in the package.

**MANUAL IPV6 LOCAL CONNECTIVITY SETUP**

If you would like to configure the IPv6 local connectivity settings of your D-Link Router, then click on the button below.

[IPv6 Local Connectivity Settings](#)

**MANUAL IPV6 INTERNET CONNECTION SETUP**

If you would like to configure the IPv6 Internet settings of your new D-Link Router manually, then click on the button below.

[Manual IPv6 Internet Connection Setup](#)

**Helpful Hints...**

- + If you are new to networking and have never configured a router before, click on **IPv6 Internet Connection Setup Wizard** and the router will guide you through a few simple steps to get your network up and running.
- + If you consider yourself an advanced user and have configured a router before, click **Manual IPv6 Internet Connection Setup** to input all the settings manually.

[+ More...](#)

**WIRELESS**

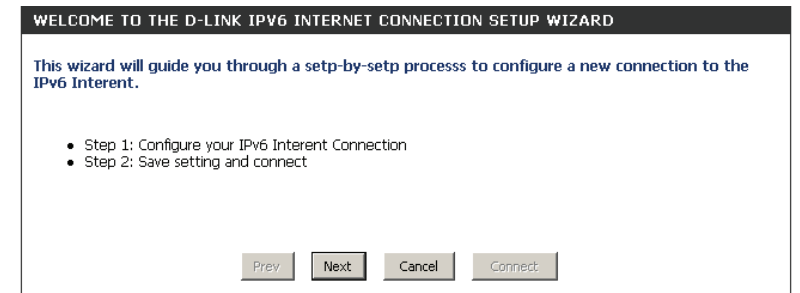
## IPv6 Internet Connection Setup Wizard

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

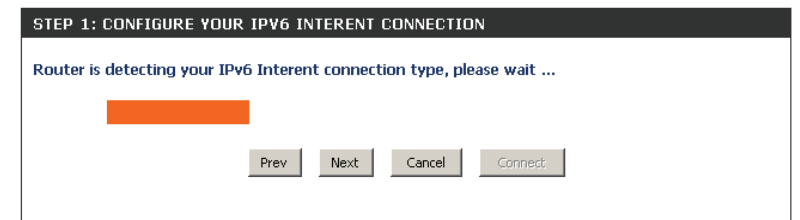
Click the **IPv6 Internet Connection Setup Wizard** button and the router will guide you through a few simple steps to get your network up and running.



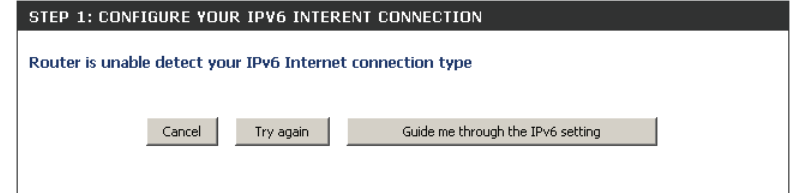
Click **Next** to continue to the next page. Click **Cancel** to discard the changes made and return to the main page.



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



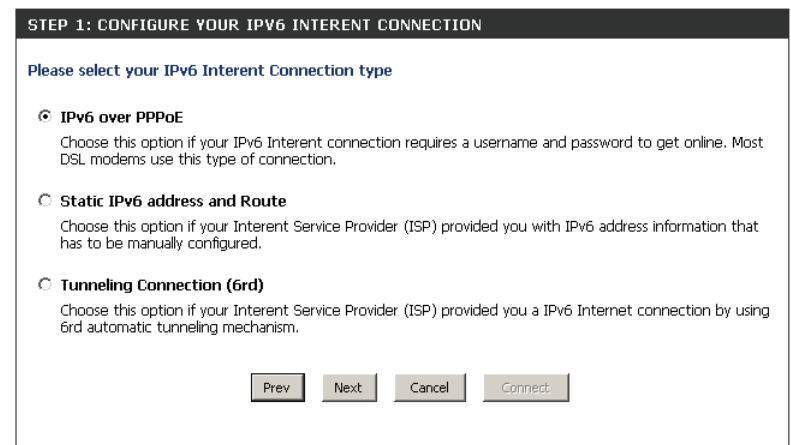
However, if the automatic detection fails, the user will be prompt to either **Try again** or to click on the **Guide me through the IPv6 settings** button to initiate the manual continual of the wizard.



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

**Note:** If using the PPPoE option, you will need to ensure that any PPPoE client software on your computers has been removed or disabled. The 3 options available on this page are **IPv6 over PPPoE**, **Static IPv6 address and Route**, and **Tunneling Connection**.

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



Click on the **Next** button to continue. Click on the **Prev** button to return to the previous page.

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



## IPv6 over PPPoE

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

The following parameters will be available for configuration:

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

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

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

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

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

**SET USERNAME AND PASSWORD CONNECTION (PPPoE)**

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

**PPPoE Session:**  Share with IPv4  Create a new session

**Username :**

**Password :**

**Verify Password :**

**Service Name :**  (Optional)

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

### Static IPv6 Address Connection

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

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

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

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

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

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

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

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

**SET STATIC IPv6 ADDRESS CONNECTION**

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

Use Link-Local Address :

IPv6 Address : FE80::218:E7FF:FE95:689F

Subnet Prefix Length : 64

Default Gateway :

Primary DNS Address :

Secondary DNS Address :

LAN IPv6 Address : /64

Prev Next Cancel Connect

### Tunneling Connection (6rd)

After selecting the Tunneling Connection (6rd) option, the user can configure the IPv6 6rd 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 IPv6 assigned prefix value here.

#### 6rd Border Relay

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

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

SET UP 6RD TUNNELING CONNECTION

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

6rd IPv6 Prefix :  /  32

IPv4 Address : 192.168.1.2 Mask Length :  0

Assign IPv6 Prefix : None

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

6rd Border Relay IPv4 Address :

IPv6 DNS Server :

Prev Next Cancel Connect

The IPv6 Internet Connection Setup Wizard is complete.

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

SETUP COMPLETE!

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

Prev Next Cancel Connect

## Manual IPv6 Local Connectivity Setup

You can set up a local-only IPv6 Internet connection as well. If you want to configure an IPv6 connection that will not connect to the Internet, click on the **Manual IPv6 Local Connectivity Settings** button.

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

**Use Default** Checking this box will automatically configure

**ULA Prefix:** the ULA prefix for the default setting.

**ULA Prefix:** If you wish to choose your own ULA prefix, enter it here.

**Current IPv6**

**ULA Settings:** This section will display the current settings for your IPv6 ULA.

The screenshot displays the D-Link web interface for the DIR-868L router. The top navigation bar includes 'D-Link' and tabs for 'SETUP', 'ADVANCED', 'TOOLS', 'STATUS', and 'SUPPORT'. The left sidebar lists various configuration categories: INTERNET, WIRELESS SETTINGS, NETWORK SETTINGS, STORAGE, MEDIA SERVER, IPv6, and MYDLINK SETTINGS. The main content area is titled 'IPv6 LOCAL CONNECTIVITY SETTINGS' and contains the following information:

- IPv6 LOCAL CONNECTIVITY SETTINGS:** A section with a description: "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." It includes 'Save Settings' and 'Don't Save Settings' buttons.
- IPv6 ULA SETTINGS:** A section with three options:
  - Enable ULA :** A checkbox that is currently unchecked.
  - Use default ULA prefix :** A checkbox that is checked.
  - ULA Prefix :** A text input field containing '/64'.
- CURRENT IPv6 ULA SETTINGS:** A section showing:
  - Current ULA Prefix :** /64
  - LAN IPv6 ULA :** /64
 It also includes 'Save Settings' and 'Don't Save Settings' buttons.

On the right side, there is a 'Helpful Hints...' section with a bullet point: "• ULA is useful for Local IPv6 communications. If you would like to enable it, click Enable ULA. By default ULA is disabled." and a link for "• More...". The bottom of the page features a 'WIRELESS' section header.

## IPv6 Manual Setup

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

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

**D-Link**

DIR-868L // SETUP ADVANCED TOOLS STATUS SUPPORT

**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 : Auto Detection

**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

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::1ea7:f7ff:fe23:3c9b /64

**ADDRESS AUTOCONFIGURATION SETTINGS**

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

Enable Automatic IPv6 address assignment :

Enable Automatic DHCP-PD in LAN :

Autoconfiguration Type : SLAAC+Stateless DHCP

Router Advertisement Lifetime :  (minutes)

Save Settings Don't Save Settings

**Helpful Hints...**

- When configuring the router to access the IPv6 Internet, be sure to choose the correct IPv6 Connection Type from the drop down menu. If you are unsure of which option to choose, contact your Internet Service Provider(ISP).
- If you are having trouble accessing the IPv6 Internet through the router, double check any settings you have entered on this page and verify them with your ISP if needed.
- [Help...](#)

## Static IPv6

### My IPv6

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

### Use Link-Local

**Address:** Enter the address settings supplied by your Internet provider (ISP).

### Subnet Prefix

**Length:** Enter a subnet prefix length.

### IPv6 Default

**Gateway:** Enter the default gateway for your IPv6 connection.

### Primary/ Secondary IPv6

**DNS Servers:** Enter the primary and secondary DNS server addresses.

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

### LAN Link-Local

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

### Enable Automatic IPv6 Address

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

**Autoconfiguration** Choose either **Stateful DHCPv6**, **SLAAC + RDNSS** or **SLAAC + Stateless DHCPv6** from the drop-down menu.

### Router Advertisement

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

IPv6 CONNECTION TYPE	
Choose the mode to be used by the router to the IPv6 Internet.	
My IPv6 Connection Is :	Static IPv6
WAN IPv6 ADDRESS SETTINGS :	
Enter the IPv6 address information provided by your Internet Service Provider (ISP).	
Use Link-Local Address :	<input checked="" type="checkbox"/>
IPv6 Address :	FE80::CEB2:55FF:FED2:8E8A
Subnet Prefix Length :	64
IPv6 Default Gateway :	<input type="text"/>
Primary IPv6 DNS Server :	<input type="text"/>
Secondary IPv6 DNS Server :	<input type="text"/>
LAN IPv6 ADDRESS SETTINGS :	
Use this section to configure the internal network settings of your router. If you change the LAN IPv6 Address here, you may need to adjust your PC network settings to access the network again.	
LAN IPv6 Address :	<input type="text"/> /64
LAN IPv6 Link-Local Address :	FE80::CEB2:55FF:FED2:8E89 /64
ADDRESS AUTOCONFIGURATION SETTINGS	
Use this section to setup IPv6 Autoconfiguration to assign IPv6 addresses to the computers in your network.	
Enable automatic IPv6 address assignment :	<input checked="" type="checkbox"/>
Autoconfiguration Type :	SLAAC + Stateless DHCPv6
Router Advertisement Lifetime :	1440 (minutes)



## Auto Detection

**My IPv6** Select **Auto Detection** from the drop-down menu.

**Connection Is:**

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

**IPv6 DNS Settings:**

**following DNS Address.**

**Primary/Secondary**

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

**Enable DHCP-PD:** Check this box to enable DHCP-PD services.

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

**LAN Link-Local**

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

**Enable Automatic IPv6 Address**

**Assignment:** Check to enable the Automatic IPv6 Address Assignment feature.

**Enable Automatic**

**DHCP-PD in LAN:** Check this box to automatically enable DHCP-PD services.

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

**Router Advertisement**

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

**IPv6 CONNECTION TYPE**

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

**My IPv6 Connection is :** Auto Detection

---

**IPv6 DNS SETTINGS :**

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

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

**Primary IPv6 DNS Server :**  

**Secondary IPv6 DNS Server :**  

---

**LAN IPv6 ADDRESS SETTINGS :**

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

**Enable DHCP-PD :**

**LAN IPv6 Address :**   /64

**LAN IPv6 Link-Local Address :** FE80::CEB2:55FF:FED2:8E89/64

---

**ADDRESS AUTOCONFIGURATION SETTINGS**

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

**Enable automatic IPv6 address assignment :**

**Enable Automatic DHCP-PD in LAN :**

**Autoconfiguration Type :** SLAAC + Stateless DHCPv6

**Router Advertisement Lifetime :** 1440 (minutes)

## PPPoE

### My IPv6

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

**PPPoE Session:** Enter the PPPoE account settings supplied by your Internet provider.

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

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

**Username:** Enter your PPPoE user name.

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

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

### Reconnection

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

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

**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 DNS server address automatically** or **Use the following DNS Address**.

### Primary/Secondary

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

The screenshot displays the IPv6 configuration interface, divided into three main sections:

- IPv6 CONNECTION TYPE:** A header section with the instruction "Choose the mode to be used by the router to the IPv6 Internet." Below this, a dropdown menu labeled "My IPv6 Connection is:" is set to "PPPoE".
- PPPOE :** A section titled "Enter the information provided by your Internet Service Provider (ISP)." It contains several fields:
  - PPPoE Session:** Radio buttons for "Share with IPv4" (selected) and "Create a new session".
  - Address Mode:** Radio buttons for "Dynamic IP" (selected) and "Static IP".
  - IP Address:** A text input field.
  - User Name:** A text input field.
  - Password:** A text input field with masked characters.
  - Verify Password:** A text input field with masked characters.
  - Service Name:** A text input field with "(optional)" next to it.
  - Reconnect Mode:** Radio buttons for "Always on", "On demand", and "Manual".
  - Maximum Idle Time:** A text input field with "5" and "(minutes, 0=infinite)" next to it.
  - MTU:** A text input field with "1492" and "(bytes) MTU default = 1492" next to it.
- IPv6 DNS SETTINGS :** A section titled "Enter a specific DNS server address" with two radio button options:
  - "Obtain IPv6 DNS server address automatically" (selected).
  - "Use the following IPv6 DNS servers".
 Below these are two text input fields labeled "Primary IPv6 DNS Server:" and "Secondary IPv6 DNS Server:".



**Enable DHCP-D:** Check this box to enable DHCP prefix delegation for each LAN on the network.

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

**LAN Link-Local**

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

**Enable Automatic IPv6 Address**

**Assignment:** Check to enable the Automatic IPv6 Address Assignment feature.

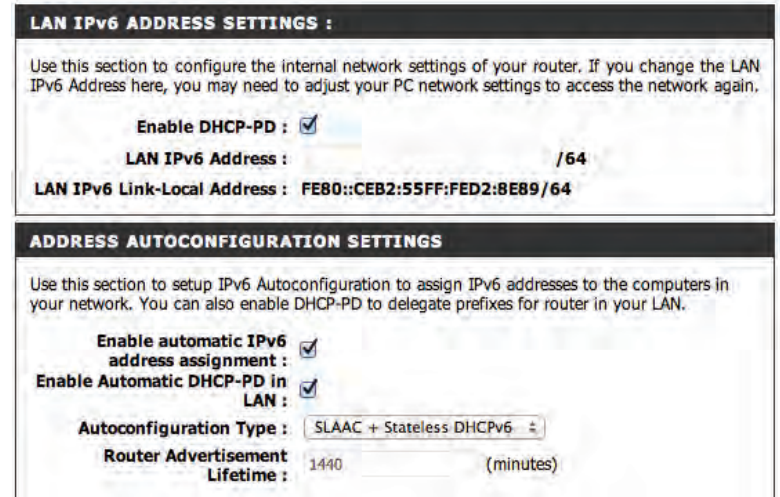
**Enable Automatic DHCP-PD in LAN:** Check this box to enable automatic configuration of the DHCP prefix delegation for each LAN on the network.

**Autoconfiguration**

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

**IPv6 Address**

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



## IPv6 in IPv4 Tunneling

### My IPv6

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

### Remote IPv4

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

### Remote IPv6

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

**Local IPv4 Address:** Enter the IPv4 local address you will use.

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

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

### Primary/Secondary

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

**Enable DHCP-D:** Check this box to enable DHCP prefix delegation for each LAN.

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

### LAN IPv6 Lin-Local

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

**IPv6 CONNECTION TYPE**

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

**My IPv6 Connection is :** IPv6 in IPv4 Tunnel

---

**IPv6 in IPv4 TUNNEL SETTINGS :**

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

**Remote IPv4 Address :** 0.0.0.0

**Remote IPv6 Address :**

**Local IPv4 Address :** 172.17.5.119

**Local IPv6 Address :**

---

**IPv6 DNS SETTINGS :**

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

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

**Primary IPv6 DNS Server :**

**Secondary IPv6 DNS Server :**

---

**LAN IPv6 ADDRESS SETTINGS :**

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

**Enable DHCP-PD :**

**LAN IPv6 Address :**  /64

**LAN IPv6 Link-Local Address :** FE80::CEB2:55FF:FED2:8E89/64

**Enable Automatic IPv6 Address Assignment:**

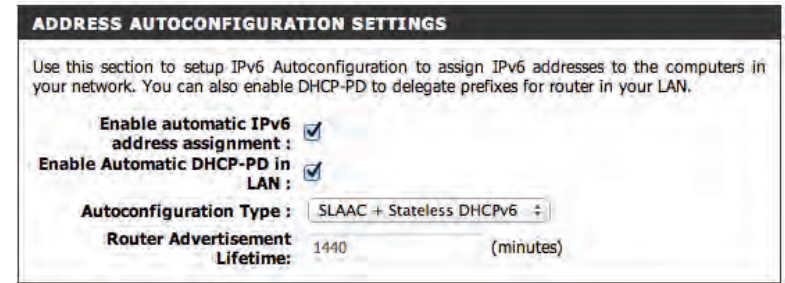
**Assignment:** Check to enable the Automatic IPv6 Address Assignment feature.

**Enable Automatic DHCP-PD in LAN:** Check this box to enable automatic configuration of the DHCP prefix delegation for each LAN on the network.

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

**Router Advertisement Lifetime:**

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



## 6to4

### My IPv6

**Connection Is:** Select **6to4** from the drop-down menu.

**6to4 Address:** Enter the IPv6 settings supplied by your ISP.

**6to4 Relay:** Enter the IPv6 relay supplied by your ISP.

### Primary/Secondary

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

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

### LAN Link-Local

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

### Enable Automatic IPv6 Address

**Assignment:** Check to enable the Automatic IPv6 Address Assignment feature.

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

### Router Advertisement

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

IPv6 CONNECTION TYPE	
Choose the mode to be used by the router to the IPv6 Internet.	
My IPv6 Connection is :	6to4
6to4 SETTINGS :	
Enter the IPv6 address information provided by your Internet Service Provider (ISP).	
6to4 Address :	2002:AC11:0577::AC11:0577
6to4 Relay :	192.88.99.1
Primary IPv6 DNS Server :	
Secondary IPv6 DNS Server :	
LAN IPv6 ADDRESS SETTINGS :	
Use this section to configure the internal network settings of your router. If you change the LAN IPv6 Address here, you may need to adjust your PC network settings to access the network again.	
LAN IPv6 Address :	2002:AC11:0577: 1 ::1/64
LAN IPv6 Link-Local Address :	FE80::CEB2:55FF:FED2:8E89/64
ADDRESS AUTOCONFIGURATION SETTINGS	
Use this section to setup IPv6 Autoconfiguration to assign IPv6 addresses to the computers in your network.	
Enable automatic IPv6 address assignment :	<input checked="" type="checkbox"/>
Autoconfiguration Type :	SLAAC + Stateless DHCPv6
Router Advertisement Lifetime :	480 (minutes)

## 6rd

### My IPv6

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

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

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

**6rd IPv6 Prefix:** Enter the 6rd IPv6 prefix settings supplied by your ISP.

**IPv4 Address:** You IPv4 address will appear here.

**Mask Length:** Enter the desired IPv4 mask length.

### Assigned IPv6

**Prefix:** When an IPv6 prefix is assigned, it will appear here.

### 6rd Border Relay

**IPv4 Address:** Enter the 6rd Border Relay IPv4 address settings supplied by your ISP.

### Primary/ Secondary DNS

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

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

### LAN Link-Local

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

IPv6 CONNECTION TYPE	
Choose the mode to be used by the router to the IPv6 Internet.	
My IPv6 Connection is :	6rd
6RD SETTINGS	
Enter the IPv6 address information provided by your Internet Service Provider (ISP).	
Enable Hub and Spoke Mode :	<input checked="" type="checkbox"/>
6rd Configuration :	<input checked="" type="radio"/> 6rd DHCPv4 Option <input type="radio"/> Manual Configuration
6rd IPv6 Prefix :	/ 0
IPv4 Address:	172.17.5.119 Mask Length: 0
Assigned IPv6 Prefix :	None
6rd Border Relay IPv4 Address :	0.0.0.0
Primary IPv6 DNS Server :	<input type="text"/>
Secondary IPv6 DNS Server :	<input type="text"/>
LAN IPv6 ADDRESS SETTINGS	
Use this section to configure the internal network settings of your router. If you change the LAN IPv6 Address here, you may need to adjust your PC network settings to access the network again.	
LAN IPv6 Address :	None
LAN IPv6 Link-Local Address :	FE80::CEB2:55FF:FED2:8E89/64

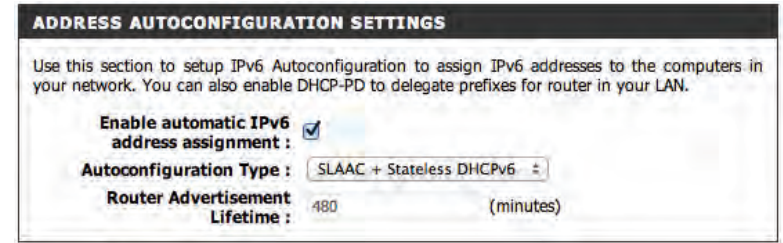
**Enable Automatic IPv6 Address**

**Assignment:** Check to enable the Automatic IPv6 Address Assignment feature.

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

**Router Advertisement**

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





## Link-Local Connectivity

### My IPv6

**Connection Is:** Select **Link-Local Only** from the drop-down menu.

### LAN IPv6 Address

**Settings:** Displays the IPv6 address of the router.

The screenshot displays two sections of a configuration interface. The first section, titled "IPv6 CONNECTION TYPE", contains the instruction "Choose the mode to be used by the router to the IPv6 Internet." Below this, a dropdown menu is set to "Local Connectivity Only". The second section, titled "LAN IPv6 ADDRESS SETTINGS :", contains the text "LAN IPv6 address for local IPv6 communicatoins." and a label "LAN IPv6 Link-Local Address :" followed by the value "FE80::CEB2:55FF:FED2:8E89/64".

# mydlink Settings

Devices that are mydlink-enabled can be accessed and managed through the mydlink website and by using mydlink mobile apps for iOS and Android. You cannot take advantage of these features without a mydlink account. If you have a mydlink account already, you can log in when you first set up the router, or by visiting this setup page.

**mydlink Service:** Displays whether your device is registered with a mydlink account or not.

**mydlink E-mail:** Displays the email address associated with your mydlink account if you have an active account.

**Register mydlink Service:** Click to go to the mydlink website to register your device or edit your settings.

The screenshot shows the D-Link DIR-868L web interface. The top navigation bar includes the D-Link logo and tabs for SETUP, ADVANCED, TOOLS, STATUS, and SUPPORT. The left sidebar lists various settings categories: INTERNET, WIRELESS SETTINGS, NETWORK SETTINGS, STORAGE, MEDIA SERVER, IPV6, and MYDLINK SETTINGS. The main content area is titled 'MYDLINK SETTINGS' and contains the following information:

- Setting and registering your product with mydlink will allow you to use its mydlink cloud services features, including online access and management of your device through mydlink portal website.
- MYDLINK**
- mydlink Service : Non-Registered
- mydlink E-mail :
- REGISTER MYDLINK SERVICE**
- Register mydlink Service

The bottom of the page features the 'WIRELESS' section header.



# Advanced Virtual Server

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

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

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

**Private Port/ Public Port:** Enter the port that you want to open next to Private Port and Public Port. The private and public ports are usually the same. The public port is seen from the Internet side, and the private port is 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 will allow the particular service to always be enabled. You can create your own times in the **Tools > Schedules** section.

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

**D-Link**

DIR-868L // SETUP ADVANCED TOOLS STATUS SUPPORT

**VIRTUAL SERVER**

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

Save Settings Don't Save Settings

**24 - VIRTUAL SERVERS LIST**

Remaining number of rules that can be created: 24

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

Save Settings Don't Save Settings

**WIRELESS**

**Helpful Hints...**

- Check the **Application Name** drop down menu for a list of predefined server types. If you select one of the predefined server types, click the arrow button next to the drop down menu to fill out the corresponding field.
- You can select a computer from the list of DHCP clients in the **Computer Name** drop down menu, or you can manually enter the IP address of the computer at which you would like to open the specified port.
- Select a schedule for when the virtual server will be enabled. If you do not see the schedule you need in the list of schedules, go to the **Tools -> Schedules** screen and create a new schedule.
- Select a filter that restricts the Internet hosts that can access this virtual server to hosts that you trust. If you do not see the filter you need in the list of filters, go to the **Advanced -> Inbound Filter** screen and create a new filter.
- **More...**

# Port Forwarding

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

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

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

Enter the TCP and/or UDP port or ports that you want to open.

**TCP/UDP:** You can enter a single port or a range of ports. Separate ports with a common. Example: 24,1009,3000-4000

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

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

The screenshot displays the D-Link DIR-868L web interface for configuring port forwarding. The main content area is titled "24 - PORT FORWARDING RULES" and shows a list of rules. Each rule has a checkbox, a "Name" field with a dropdown menu, an "IP Address" field with a dropdown menu, and "Ports to Open" (TCP/UDP) and "Schedule" fields. The "Inbound Filter" field is set to "Allow A". The interface includes a sidebar with navigation options like SETUP, ADVANCED, TOOLS, STATUS, and SUPPORT. A "Helpful Hints..." section on the right provides instructions on selecting applications and schedules.

# Application Rules

Some applications require multiple connections, such as Internet gaming, video conferencing, Internet telephony and others. These applications have difficulties working through NAT (Network Address Translation). Special Applications makes some of these applications work with the DIR-868L. If you need to run applications that require multiple connections, specify the port normally associated with an application in the "Trigger Port" field, select the protocol type as TCP or UDP, then enter the firewall (public) ports associated with the trigger port to open them for inbound traffic.

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

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

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

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

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

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

The screenshot shows the D-Link DIR-868L web interface. The main content area is titled "APPLICATION RULES" and contains the following text: "The Application Rules option is used to open single or multiple ports in your firewall when the router senses data sent to the Internet on an outgoing 'Trigger' port or port range. Special Application rules apply to all computers on your internal network." Below this text are two buttons: "Save Settings" and "Don't Save Settings".

The main configuration area is titled "24 - APPLICATION RULES" and shows a table with the following columns: Name, Application, Trigger, Traffic Type, and Schedule. There are 7 rows of configuration options, each with a checkbox and a "Save Settings" button.

The table structure is as follows:

Name	Application	Trigger	Traffic Type	Schedule
<input type="checkbox"/>	Application <<>	Firewall	All	Always
<input type="checkbox"/>	Application <<>	Firewall	All	Always
<input type="checkbox"/>	Application <<>	Firewall	All	Always
<input type="checkbox"/>	Application <<>	Firewall	All	Always
<input type="checkbox"/>	Application <<>	Firewall	All	Always
<input type="checkbox"/>	Application <<>	Firewall	All	Always
<input type="checkbox"/>	Application <<>	Firewall	All	Always

At the bottom of the table, there are two buttons: "Save Settings" and "Don't Save Settings".

The sidebar on the left contains the following navigation options: VIRTUAL SERVER, PORT FORWARDING, APPLICATION RULES, QOS ENGINE, NETWORK FILTER, ACCESS CONTROL, WEBSITE FILTER, INBOUND FILTER, FIREWALL SETTINGS, ROUTING, ADVANCED WIRELESS, WI-FI PROTECTED SETUP, ADVANCED NETWORK, GUEST ZONE, IPV6 FIREWALL, and IPV6 ROUTING.

The sidebar on the right contains the following "Helpful Hints...":

- Use this feature if you are trying to execute one of the listed network applications and it is not communicating as expected.
- Use the Application Name drop-down menu to view a list of pre-defined applications that you can select from. If you select one of the pre-defined applications, click the arrow button next to the drop-down menu to fill out the appropriate fields.
- Select a schedule for when the service will be enabled. If you do not see the schedule you need in the list of schedules, go to the **Tools -> Schedules** screen and create a new schedule.
- [More...](#)



# QoS Engine

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

**Enable QoS Engine:** This option is disabled by default. Enable this option for better performance and experience with online games and other interactive applications, such as VoIP.

**Automatic Uplink Speed:** This option is enabled by default when the QoS Engine option is enabled. This option will allow your router to automatically determine the uplink speed of your Internet connection.

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

**Manual Uplink Speed:** The speed at which data can be transferred from the router to your ISP. This is determined by your ISP. ISP's often speed as a download/upload pair. For example, 1.5Mbits/284Kbits. Using this example, you would enter 284. Alternatively you can test your uplink speed with a service such as speedtest.net.

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

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

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

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

**QoS SETTINGS**

Use this section to configure D-Link's QoS Engine powered by QoS Engine Technology. This QoS Engine improves your online gaming experience by ensuring that your game traffic is prioritized over other network traffic, such as FTP or Web. For best performance, use the Automatic Classification option to automatically set the priority for your applications.

Save Settings Don't Save Settings

**QoS SETUP**

Enable QoS :

Uplink Speed : 2048 kbps << Select Transmission Rate

Downlink Speed : 8192 kbps << Select Transmission Rate

Queue Type :  Strict Priority Queue  Weighted Fair Queue

Queue ID	Queue Weight
1	40 %
2	30 %
3	20 %
4	10 %

**32 - CLASSIFICATION RULES**

Remaining number of rules that can be created: 18

Name: Youtube Queue ID: 1 - Highest Protocol: TCP << ALL

Local IP Range: to Application Port: <<

Remote IP Range: to ALL

Name: Queue ID: 1 - Highest Protocol: << ALL

Local IP Range: to Application Port: <<

Remote IP Range: to ALL

Save Settings Don't Save Settings

**Protocol:** The protocol used by the messages.

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

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

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

**Remote Port**

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



# Access Control

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

**Add Policy:** Click the **Add Policy** button to start the Access Control Wizard.

The screenshot shows the D-Link DIR-868L web interface. The top navigation bar includes 'D-Link', 'DIR-868L //', and tabs for 'SETUP', 'ADVANCED', 'TOOLS', 'STATUS', and 'SUPPORT'. The left sidebar lists various configuration options, with 'ACCESS CONTROL' selected. The main content area is titled 'ACCESS CONTROL' and contains the following text: 'The Access Control option allows you to control access in and out of your network. Use this feature as Access Controls to only grant access to approved sites, limit web access based on time or dates, and/or block internet access for applications like P2P utilities or games.' Below this text are 'Save Settings' and 'Don't Save Settings' buttons. A section titled 'Enable Access Control : ' includes an 'Add Policy' button. Below that is a 'POLICY TABLE' with columns: 'Enable', 'Policy', 'Machine', 'Filtering', 'Logged', and 'Schedule'. At the bottom of the table are 'Save Settings' and 'Don't Save Settings' buttons. On the right side, a 'Helpful Hints...' sidebar provides instructions: 'Check Enable Access Control if you want to enforce rules that limit Internet access from specific LAN computers.', 'Click Add Policy to start the processes of creating a rule. You can cancel the process at any time. When you are finished creating a rule it will be added to the Policy Table below.', 'Click the Edit icon to modify an existing rule using the Policy Wizard.', and 'Click the Delete icon to permanently remove a rule.' A 'More...' link is also present.

## Access Control Wizard

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

The screenshot shows the 'ADD NEW POLICY' wizard screen. The title is 'ADD NEW POLICY'. The main text reads: 'This wizard will guide you through the following steps to add a new policy for Access Control.' Below this are six numbered steps: Step 1 - Choose a unique name for your policy; Step 2 - Select a schedule; Step 3 - Select the machine to which this policy applies; Step 4 - Select filtering method; Step 5 - Select filters; Step 6 - Configure Web Access Logging. At the bottom right, there are four buttons: 'Prev', 'Next', 'Save', and 'Cancel'.



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

**STEP 1: CHOOSE POLICY NAME**

Choose a unique name for your policy.

Policy Name :

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

**STEP 2: SELECT SCHEDULE**

Choose a schedule to apply to this policy.

Details :

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

- **Address Type** - Select IP address, MAC address, or Other Machines.
- **IP Address** - Enter the IP address of the computer you want to apply the rule to.
- **Machine Address** - Enter the PC MAC address (i.e. 00:00.00.00.00).

**STEP 3: SELECT MACHINE**

Select the machine to which this policy applies.

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

Address Type :  IP  MAC  Other Machines

IP Address :  <<

Machine Address :  <<

Machine		
192.168.0.112	<input type="button" value="v"/>	<input type="button" value="v"/>

Select the filtering method and then click **Next** to continue.

**STEP 4: SELECT FILTERING METHOD**

Select the method for filtering.

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

Apply Web Filter :

Apply Advanced Port Filters :