D-Link®

Version 1.0 | December 17, 2014



User Manual

Wireless AC3200
Ultra Wi-Fi Router

DIR-890L

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	December 17, 2014	• Initial release for revision A1

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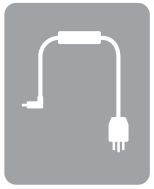
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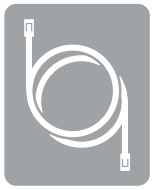
Package Contents



DIR-890L Wireless AC3200 Ultra Wi-Fi Router



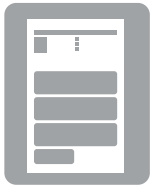
Power Adapter and Cable



Ethernet Cable



Wi-Fi Configuration Card



Quick Install Guide

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

Note: *Using a power supply with a different voltage rating than the one included with the DIR-890L will cause damage and void the warranty for this product.*

Minimum Requirements

Network Requirements	• An Ethernet-based broadband modem
Web-based Configuration Utility Requirements	**Computer with the following:** • An installed Ethernet adapter or wireless adapter **Browser Requirements:** • Internet Explorer® 8 • Mozilla® Firefox® 28 or higher • Google Chrome™ 33 or higher • Safari® 5.1 or higher **Windows® Users:** Make sure you have the latest version of Java installed. Visit www.java.com to download the latest version.
mydlink Requirements	For mydlink and mydlink app requirements refer to **http://www.mydlink.com**

Introduction

The DIR-890 uses advanced AC beamforming technology to maximize the speed and range of your wireless signal, so it can outperform other 802.11ac devices. It also comes equipped with four Gigabit ports to provide speeds up to 10x faster than standard 10/100 ports. With the addition of Advanced 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-890L 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 anywhere, no PC required.

The DIR-890L is also mydlink-enabled, which gives you access to your home network no matter where you are. 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 websites that are being visited in real-time, with recent browser history displayed on the mydlink™ Lite app, which is a useful tool for parents.

SharePort technology lets you take advantage of the USB 3.0 port located on the side of your DIR-890L, as well as an additional USB 2.0 port located on the back. Plug in a USB storage drive and you can use the mydlink SharePort™ app for iPad®, iPhone®, iPod Touch®, and Android™ devices 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 mydlink SharePort app to share that printer with all of your devices.

The DIR-890L provides incredible speeds, smart antenna technology, fast ports, cloud features, and excellent security features. It also features an innovative design and easy installation.

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

Features

Super-Charged with Smarter Wireless AC Features
Create a blazing fast home network that connects all of your computers and mobile devices to your broadband Internet connection. The newly introduced SmartConnect technology ensures that older wireless devices do not degrade the overall performance of the DIR-890L and allows wireless AC devices to have a total throughput of 3200 Mbps. The Advanced AC SmartBeam technology that is also in the DIR-890L brings you the future of high-bandwidth wireless connectivity, vastly increasing the speed and coverage of your network.

Use mydlink to Monitor Your Network
The AC3200 Ultra Wi-Fi Router is mydlink Cloud enabled, so you can effortlessly access and view your network no matter where you are. See who is connected to your router, change settings, or block someone from using your network connection, all from an Internet connected PC, tablet, or smartphone. Parents can monitor what sites their children are visiting, to stay informed and in control on the go.

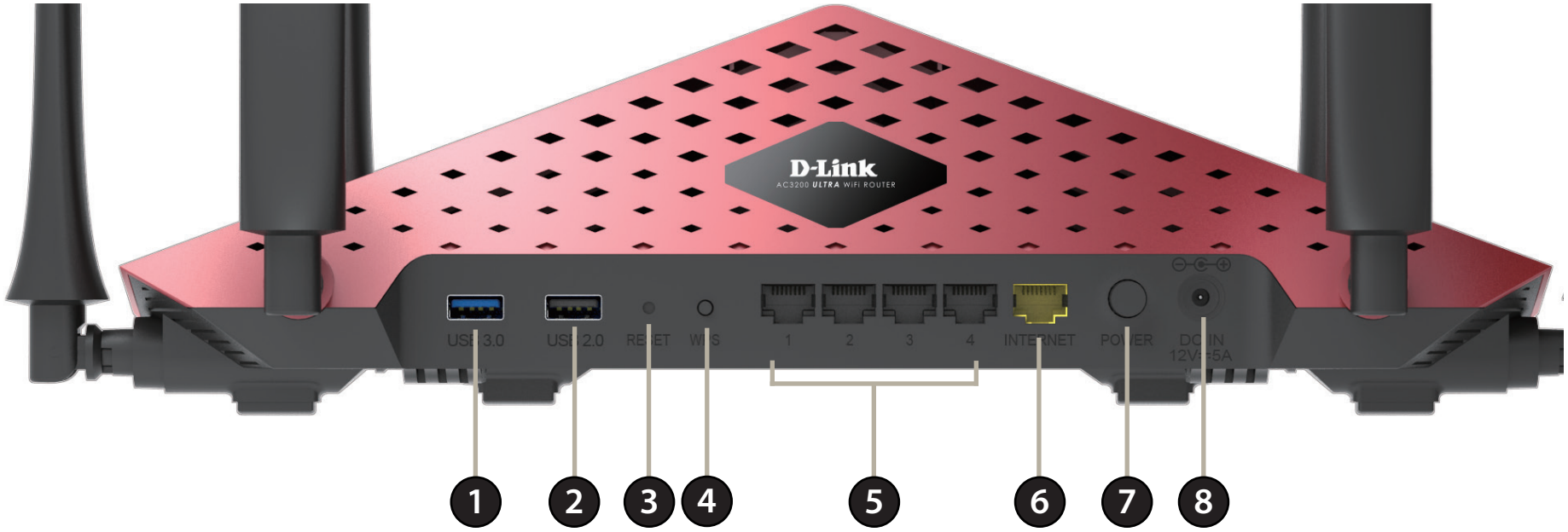
File Sharing at Your Fingertips
The mydlink SharePort app allows you to connect a USB storage device to the DIR-890L and instantly share documents, movies, pictures, and music with mobile devices. Put your music library on a USB drive and share it with everyone else in your home, or show photos on the living room TV while a family member watches a movie on their mobile device.

Easy to Set Up and Use
Get the DIR-890L up and running in no time right from your couch using the QRS (Quick Router Setup) Mobile app on your smartphone or tablet. Simply plug in the router, open the app, and follow a few easy steps to get your home network connected without having to touch a computer. You can also set up a secure network with the touch of a button using Wi-Fi Protected Setup.

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

Hardware Overview

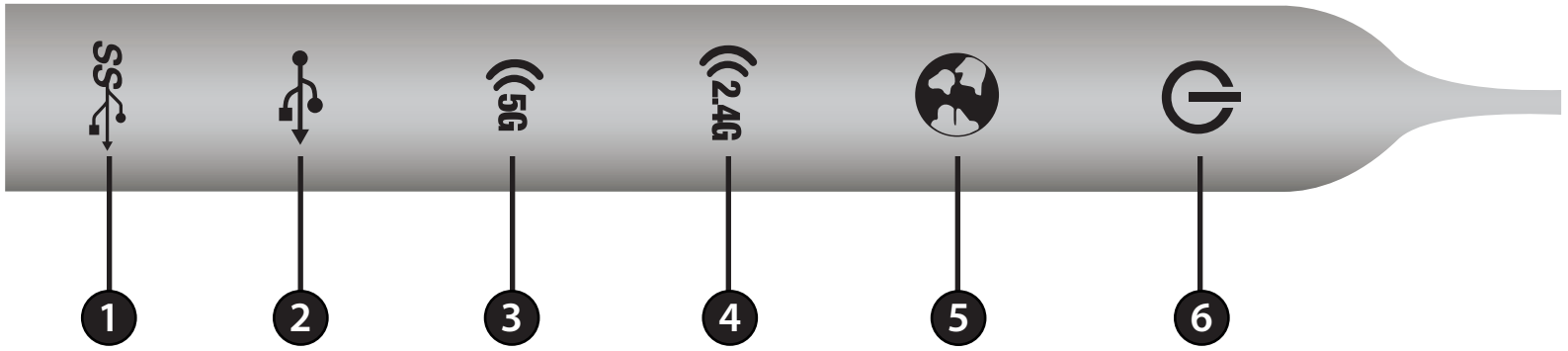
Connections



1	**USB 3.0 Port**	Connect a USB flash drive to share content throughout your network. Port supports USB 3.0 and USB 2.0 devices.
2	**USB 2.0 Port**	Connect a USB flash drive to share content throughout your network. Port supports USB 2.0 devices.
3	**Reset Button**	Press and hold the reset button with a paper clip for ten seconds to reset the router to the factory default settings.
4	**WPS Button**	Press to start the WPS process. The 2.4G or 5G LED will blink fast.
5	**LAN Ports (1-4)**	Connect Ethernet devices such as computers, switches, and game consoles.
6	**Internet Port**	Connect a broadband modem to this port using an Ethernet cable.
7	**Power Button**	Press to power the router on and off.
8	**Power Port**	Connect the supplied power adapter.

Hardware Overview

LEDs



1	**SS USB LED**	A solid white light indicates a USB 3.0 device is connected.
2	**USB LED**	A solid white light indicates a USB 2.0 device is connected.
3	**5G LED**	A solid white light indicates the 5GHz wireless function is working properly. During the WPS process, this light will blink quickly.
4	**2.4G LED**	A solid white light indicates the 2.4GHz wireless function is working properly. During the WPS process, this light will blink quickly.
5	**Internet LED**	A solid white light indicates a connection to the Internet port. If the LED is orange, the connection is good but the router cannot connect to the Internet.
6	**Power LED**	A solid white light indicates a proper connection to the power supply. The light will be solid orange during boot-up.

Installation

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

Before you Begin

- **Users with DSL providers** - If you are using a PPPoE connection, you will need your PPPoE user name and password. If you do not have this information, contact your Internet provider. Do not proceed until you have this information. Also, 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.
- **Users with Cable providers** - Make sure you unplug the power to your modem. In some cases, you may need to turn it off for up to five minutes.
- **Advanced Users** - If your ISP provided you with a modem/router combo, you will need to set it to "bridge" mode so the DIR-890L can work properly. For details, contact your ISP or refer to the user manual for your modem/router device.

Wireless Installation Considerations

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

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

2. Be aware of the direct line between network devices. A wall that is 1.5 feet thick (0.5 meters), at a 45-degree angle appears to be almost 3 feet (1 meter) thick. At a 2-degree angle it looks over 42 feet (14 meters) thick! Position devices so that the signal will travel straight through a wall or ceiling (instead of at an angle) for better reception.

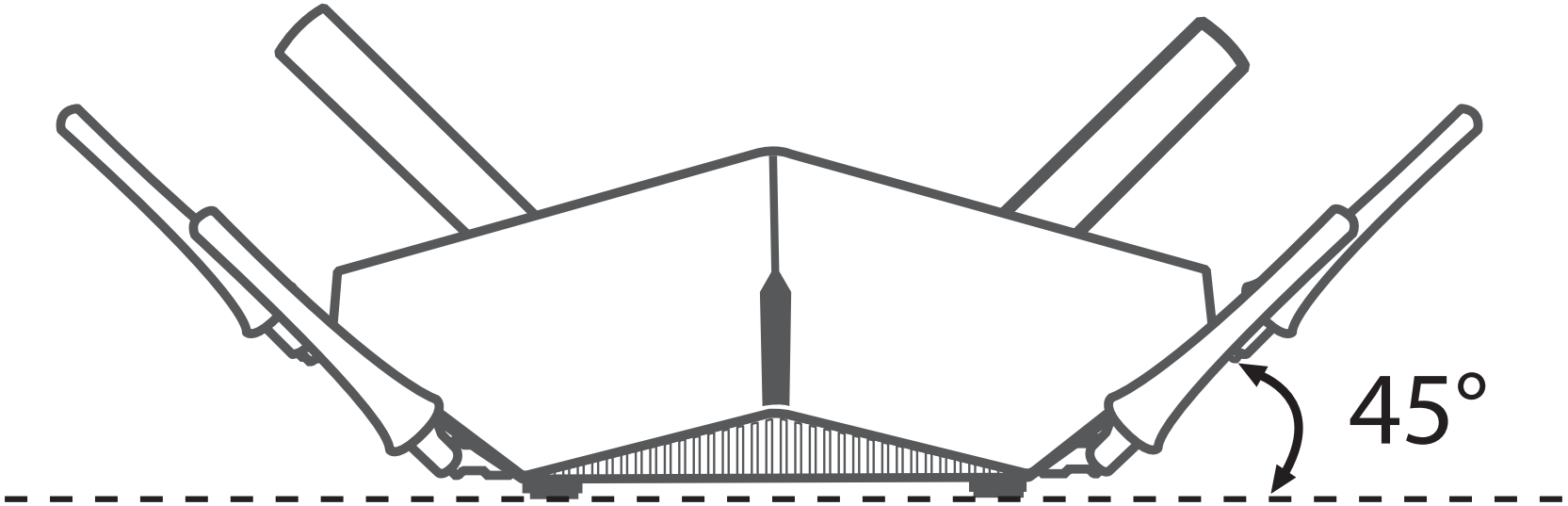
3. Building materials make a difference. A solid metal door or aluminum studs may have a negative effect on range. Try to position access points, wireless routers, and computers so that the signal passes through drywall or open doorways. Materials and objects such as glass, steel, metal, walls with insulation, water (fish tanks), mirrors, file cabinets, brick, and concrete will degrade your wireless signal.

4. Keep your product away (at least 3-6 feet or 1-2 meters) from electrical devices or appliances that generate RF noise.

5. If you are using 2.4 GHz cordless phones or X-10 (wireless products such as ceiling fans, lights, and home security systems), your wireless connection may degrade dramatically or drop completely. Make sure your 2.4 GHz phone base is as far away from your wireless devices as possible. The base transmits a signal even if the phone is not in use.

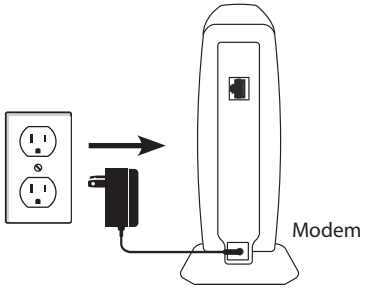
Antenna Setup

The DIR-890L is designed to give you the fastest, most stable network connection possible. In order to maximize performance, orient the antennas at an angle, pointing outward and away from the base unit.

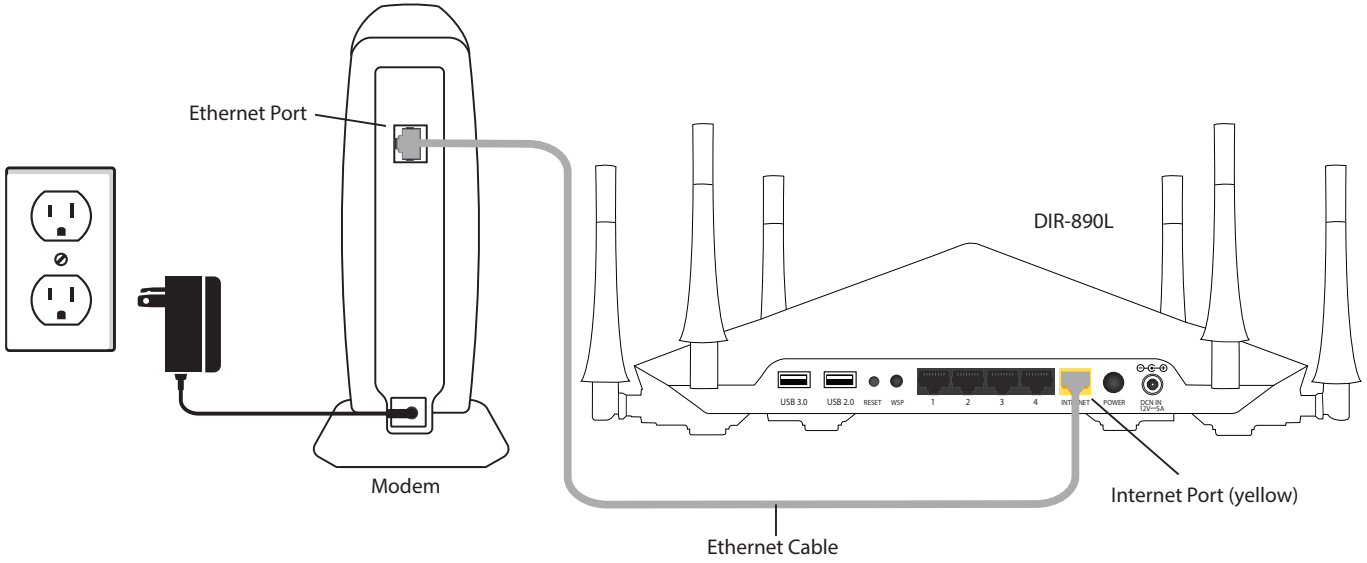


Manual Setup

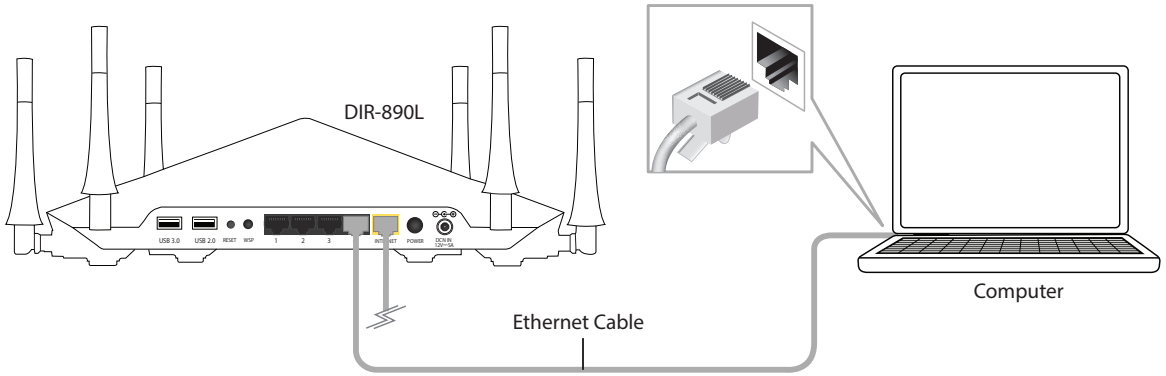
1. Turn off and unplug the power to your cable or DSL modem. This is required.



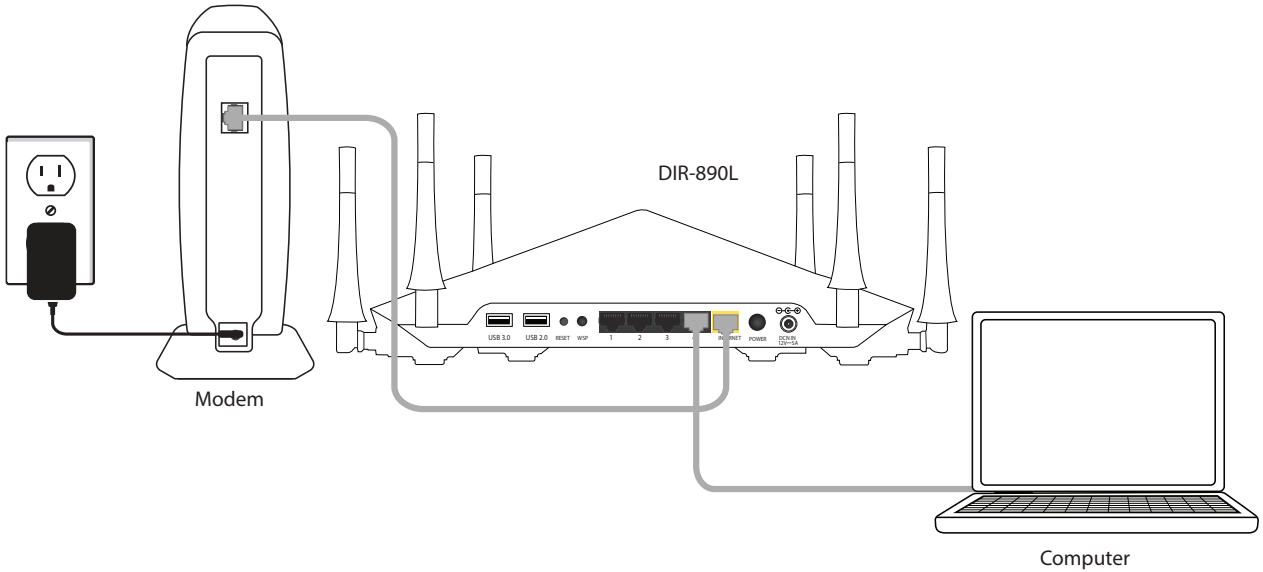
2. Connect an Ethernet cable from the Internet port of the router to the Ethernet port on your cable or DSL modem.



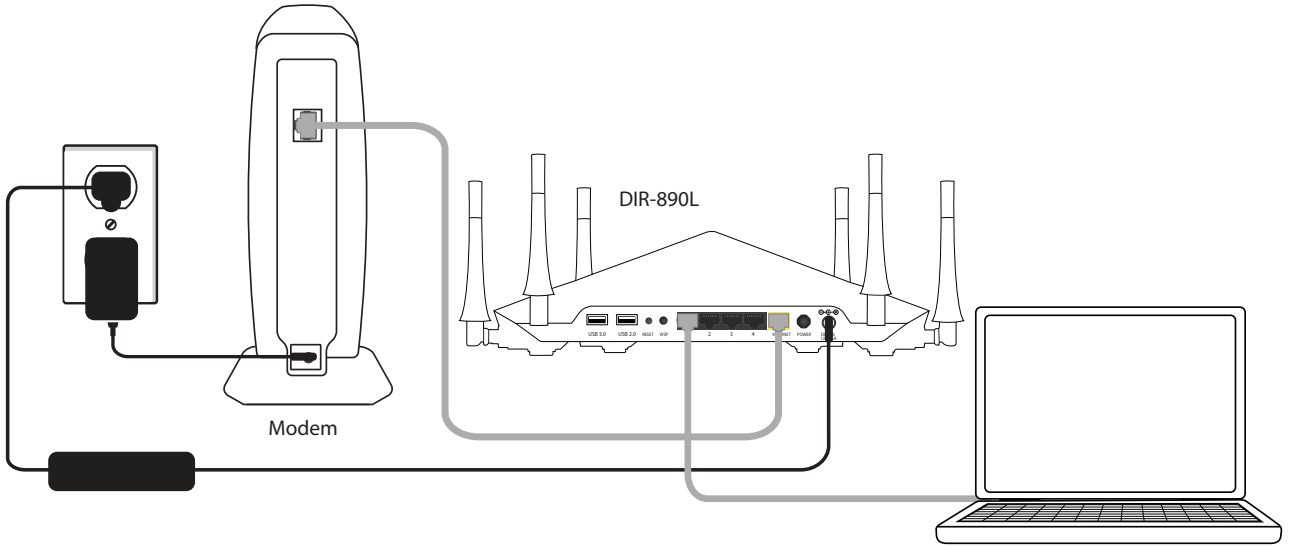
3. Connect another Ethernet cable from the Ethernet port on your computer to one of the LAN ports on the router.



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



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



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

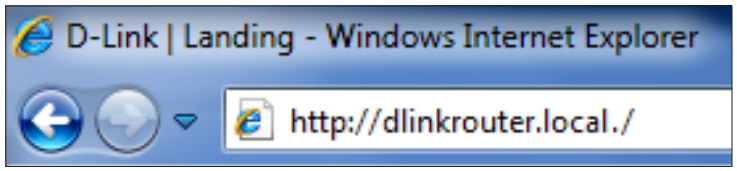
Configuration

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

- **D-Link Setup Wizard** - This wizard will launch when you log into the router for the first time. Refer to page 14.
- **QRS Mobile App** - Use your iPhone, iPad, or iPod Touch to configure your router. Refer to page 21.
- **Manual Setup** - Log into the router and manually configure your router. Refer to page 26

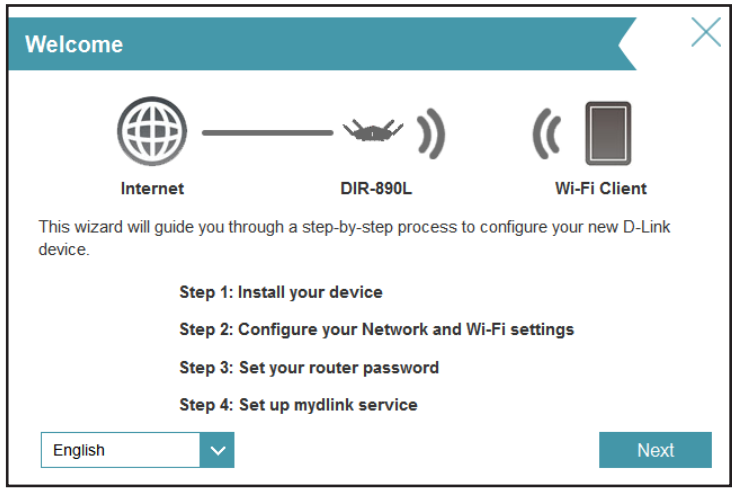
Setup Wizard

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

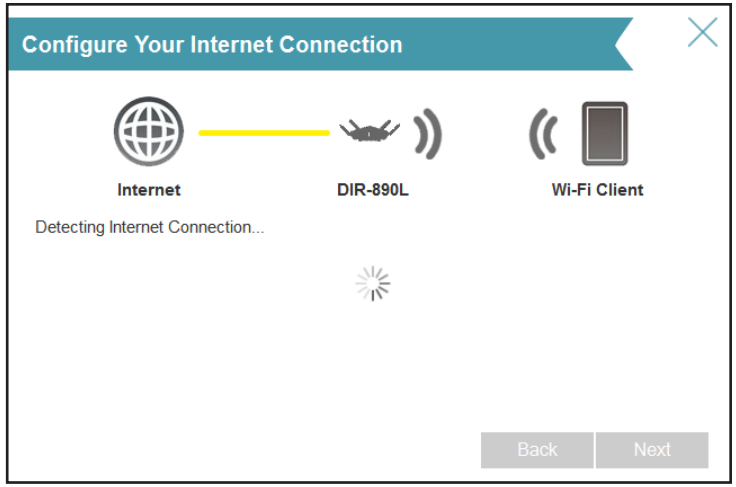


The wizard will guide you through a step-by-step process to configure your new D-Link router and connect to the Internet.

Click **Next** to continue.



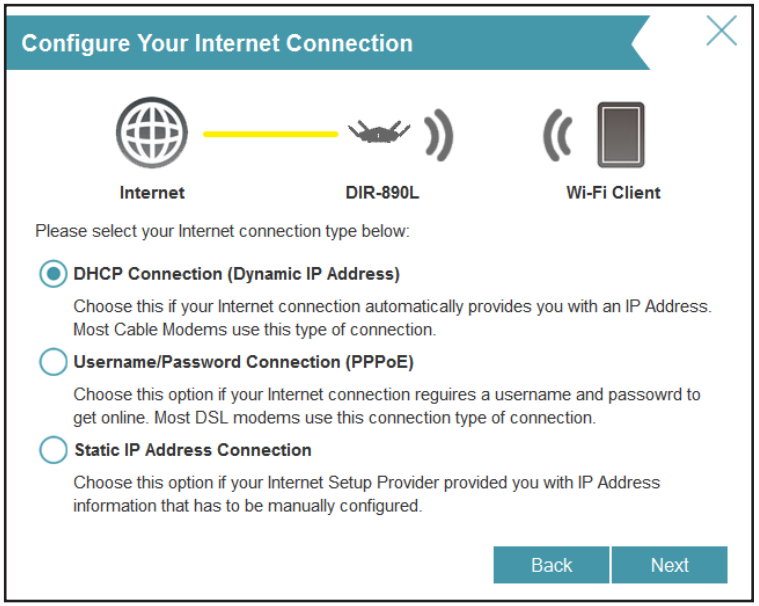
Wait a few moments while your router is detecting your Internet connection type. After the router detects your Internet connection, you may need to enter ISP information such as username and password.



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

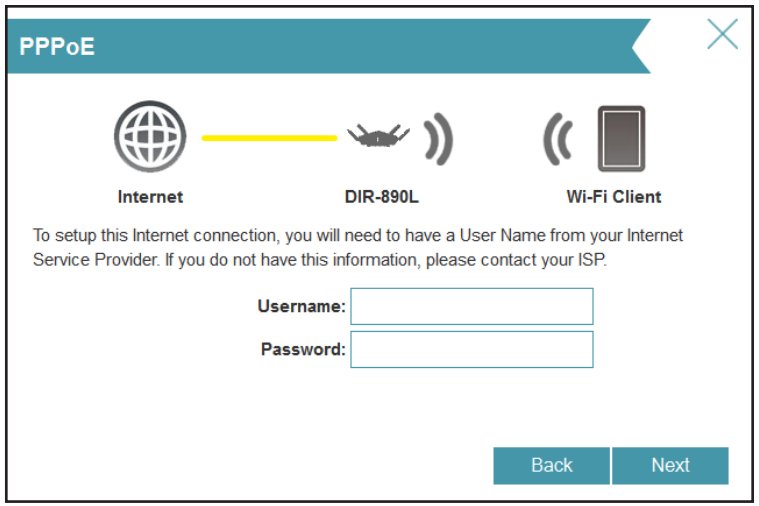
You can select **DHCP Connection (Dynamic IP Address)** if your Internet connection automatically provides you with an IP address.

Click **Next** to continue.



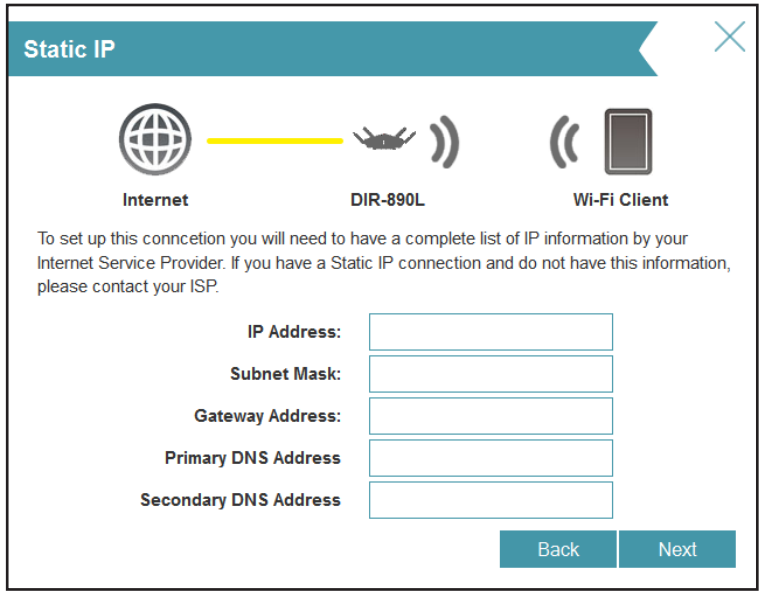
If the router detected PPPoE or you selected **Username/Password Connection (PPPoE)**, enter your PPPoE username and password and click **Next** to continue.

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



If the router detected or you selected **Static IP Adddress Connection**, enter the IP information and DNS settings supplied by your ISP.

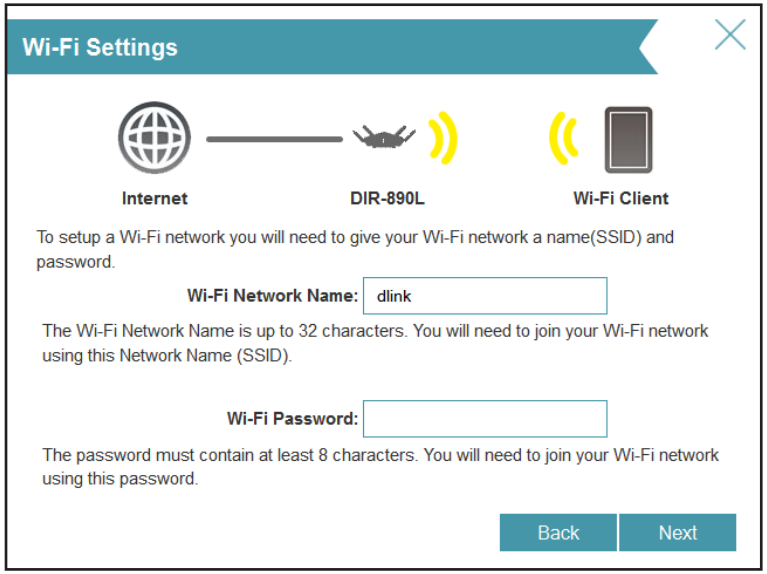
Click **Next** to continue.



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

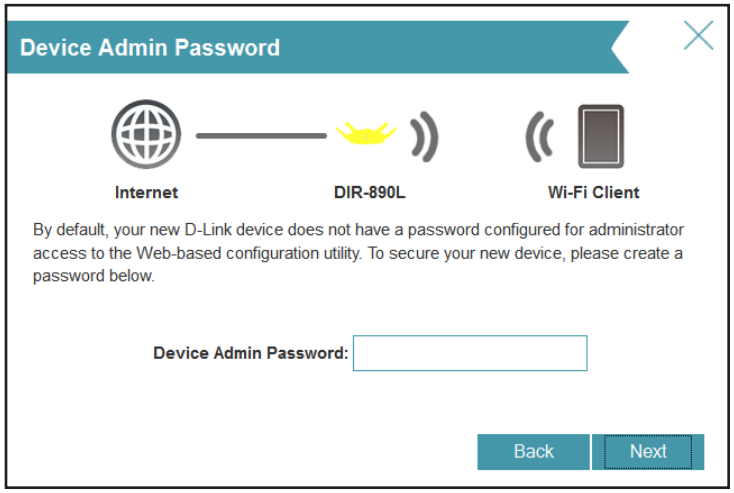
Create a Wi-Fi password (between 8-63 characters). Your wireless clients will need to have this passphrase or key entered to be able to connect to your wireless network.

Click **Next** to continue.



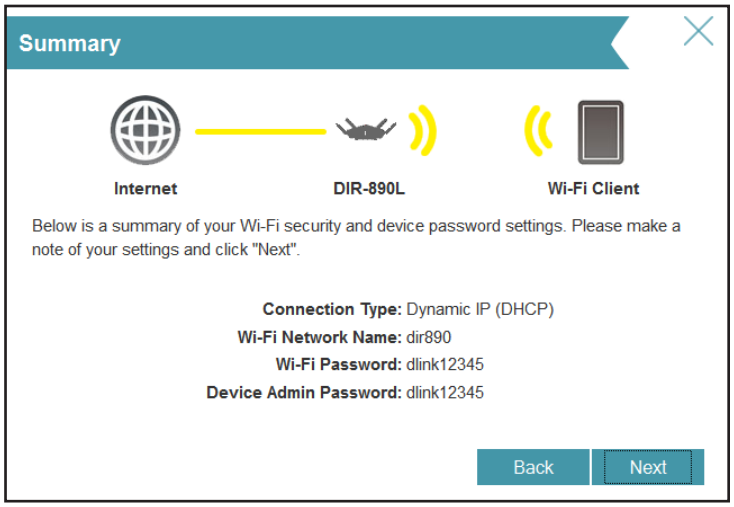
In order to secure the router, enter a new **Admin Password**. You will be prompted for this password every time you want to use the router's web configuration utility.

Click **Next** to continue.



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

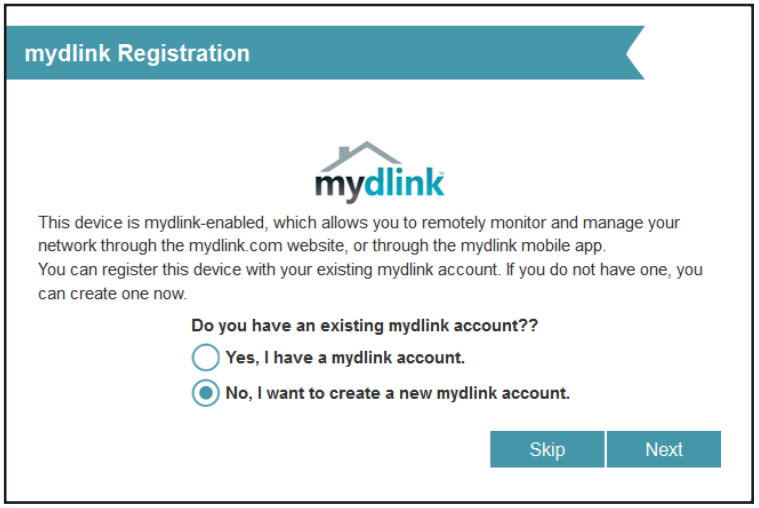
Click **Next** to continue.



If you would like to use the mydlink services (the mydlink portal at mydlink.com or the *mydlink Lite* app), you must have an account. Click **Yes** if you already have a mydlink account, or **No** if you would like to create one.

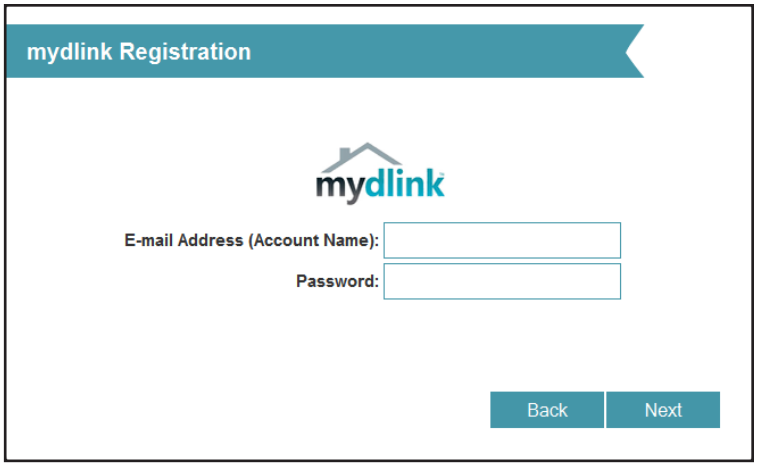
Click **Next** to continue.

Note: *If you do not want to register at this time, you may click* ***Skip*** *to proceed.*

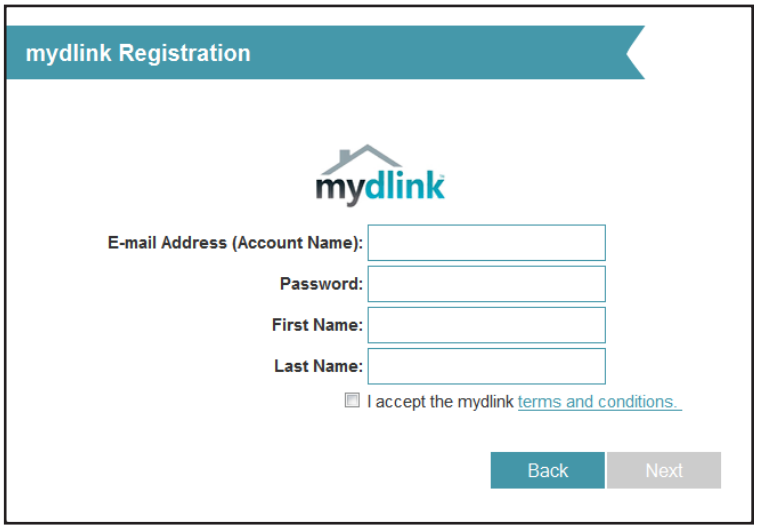


If you selected **Yes, I have a mydlink account**, enter your mydlink **Account Name** (e-mail address) and **Password**.

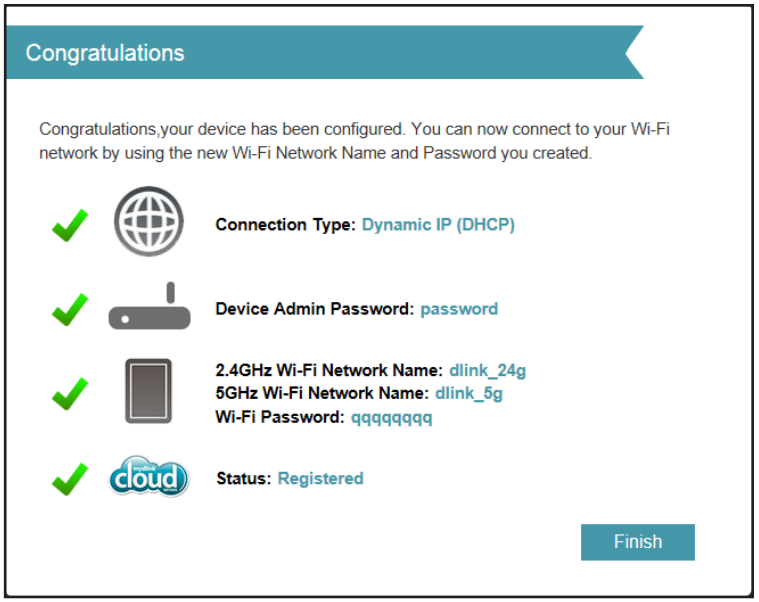
Click **Next** to register your router with your mydlink account.



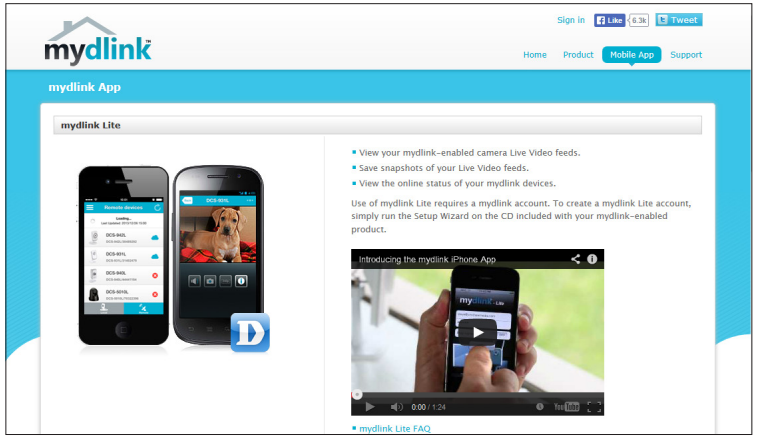
If you selected **No, I want to create a new mydlink account**, enter the requested information and click **Next** to create your mydlink account.



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

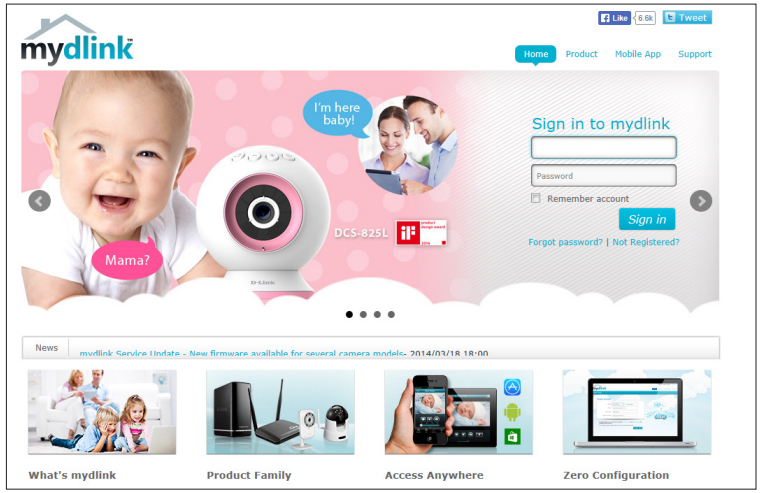


To download the *mydlink Lite* app, visit the **App Store**, **Google Play**, **Android Market** or **https://mydlink.com/apps**.



The *mydlink Lite* app allows you to set up e-mail notifications, view the online status of your mydlink devices, and change your wireless settings from an iPhone/iPad/iPod Touch, or Android device. For mydlink app requirements, refer to **http://www.mydink.com**.

PC and Mac users can access the mydlink portal at **http://mydlink.com**.



QRS Mobile App

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

Step 1

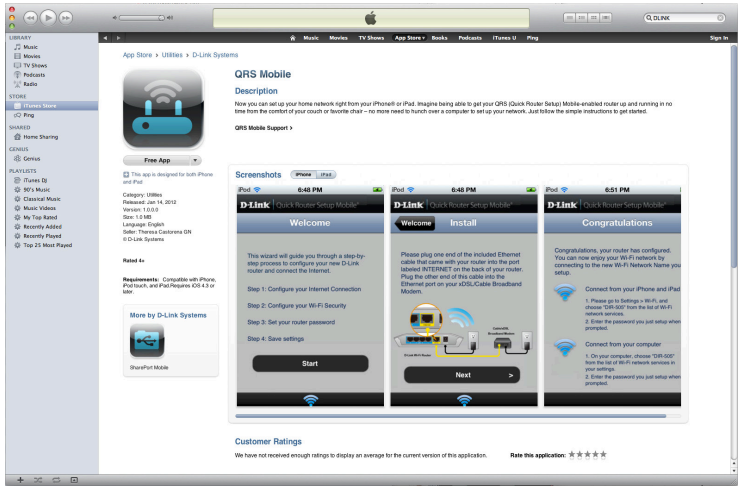
Search for the free **QRS Mobile** app on the iTunes Store or Google Play.

For the iTunes Store, you may also scan this code to download.

Available on the App Store

For Google Play, you may also scan this code to download.

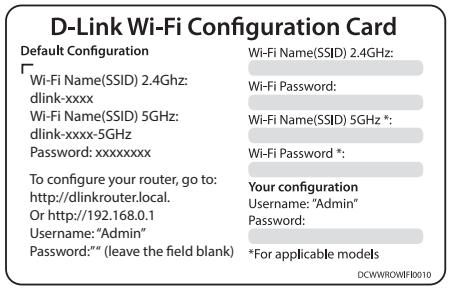
GET IT ON Google play



Step 2

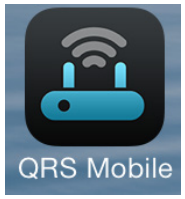
Once the app is installed on your mobile device, you may configure your router. Connect to the router wirelessly by going to your wireless utility on your device. Scan for the *Wi-Fi Name* (SSID) as listed on the supplied Wi-Fi Configuration card. Select and then enter your Wi-Fi password.





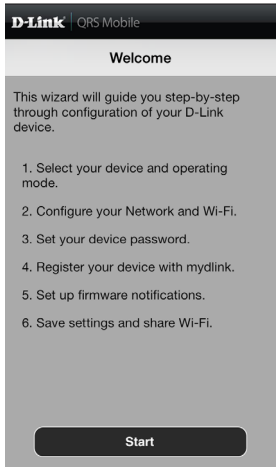
Step 3

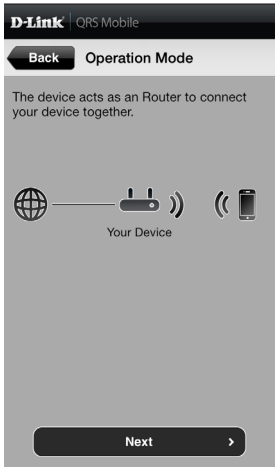
Once you connect to the router, launch the QRS mobile app from the Home screen of your device.



Step 4

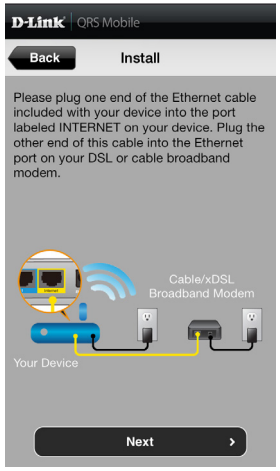
You will see the welcome screen. Tap **Start** to proceed. When the *Operation Mode* screen appears, tap **Next**.





Step 5

At this point, make sure that your router is connected to a modem. Plug one end of the provided Ethernet cable into your DSL or cable modem, and plug the other end into the port marked INTERNET on the DIR-890L. Tap **Next** to automatically detect your Internet connection and proceed to the next step.



Step 6
You will be prompted to set up each wireless frequency band; the 2.4GHz band followed by the 5GHz band.





A - Enter a **Network Name** (SSID) of your choice, or you may leave it unchanged to accept the default SSID. Each wireless band can be assigned its own SSID.

B - Choose a Wi-Fi **Password** of at least eight characters. You will need to enter this password the first time you connect any device to the router wirelessly.

Tap **Next** to proceed.

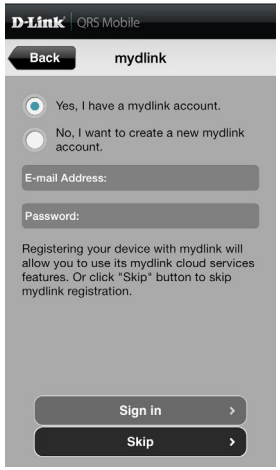
Step 7
Enter the **Device Password** *(Admin Password)* of your choice. Unlike the Wi-Fi password, this password is only required when you need to configure the router. Refer to "Web-based Configuration Utility" on page 26 to learn how this password is used. Tap **Next** to proceed.

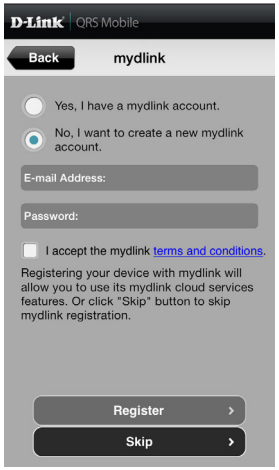


Step 8
If you already have a mydlink account, select **Yes, I have a mydlink account**. Tap **Sign In** to set up the router to use your mydlink account.

If you do not have a mydlink account, select **No, I want to create a new mydlink account**. You must provide your email address, choose a mydlink password and check the **I accept the mydlink terms and conditions** check box. Tap **Register** to create your new mydlink account.

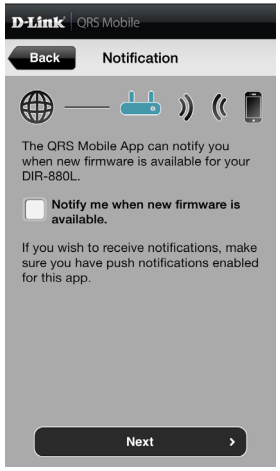
If you do not want to configure your router with mydlink at this point, tap **Skip** to proceed.





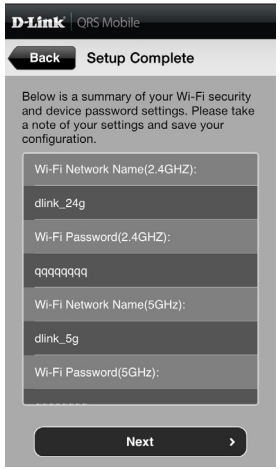
Step 9
If you would like to receive notification whenever a new firmware update is available, check the **Notify me when new firmware is available** check box and tap **Next**.

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

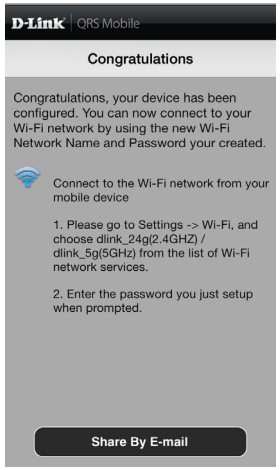


Step 10
You will see a summary of your chosen settings. If you need to make any changes, tap **Back** to step back through the previous pages.

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

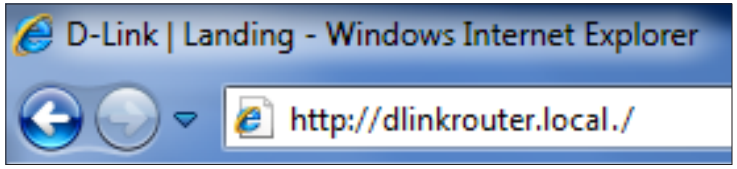


Congratulations, your device has been successfully configured! You may now exit the QRS Mobile app.



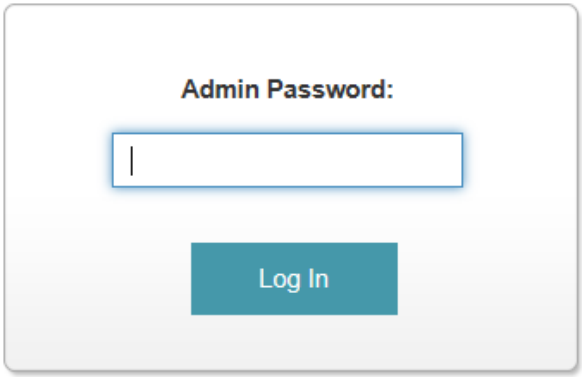
Web-based Configuration Utility

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



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

Note: *If you cannot remember your password and cannot log in, press the reset button (see page 5) to restore the router to its factory default settings.*



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

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

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

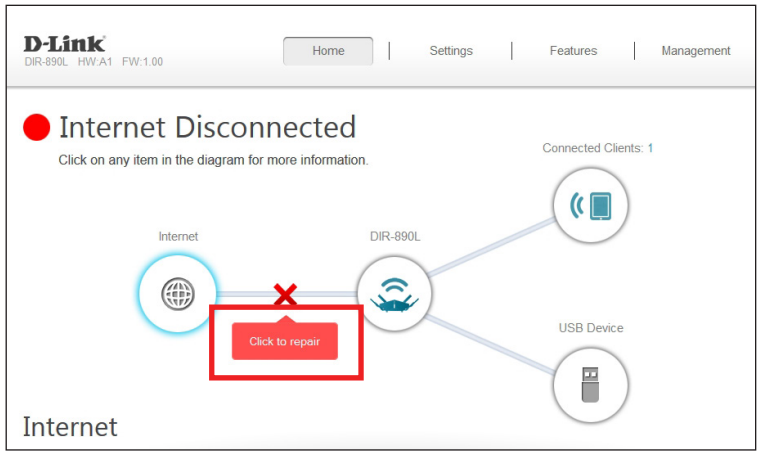


Home

The current status of the router is displayed on the *Home* page in the form of an interactive diagram. You can click on an icon to display information about each part of the network at the bottom of the screen. The menu bar at the top of the page allows you to easily navigate to other pages.

Internet

The Home page shows whether or not the router is currently connected to the Internet. If disconnected, click on **Click to repair** to launch the *Setup Wizard*. (Refer to "Setup Wizard" on page 14.)



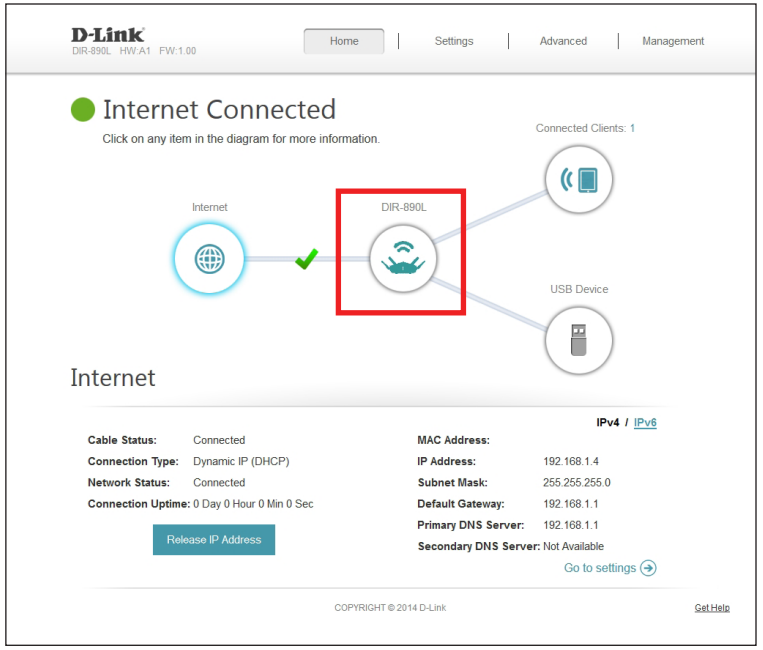
To view details about your Internet connection, click on the **Internet** icon. Click **Release IP Address** to disconnect from the Internet. If you do this and wish to reconnect, click **Renew**.

To reconfigure the Internet settings, refer to "Internet" on page 31.



DIR-890L

Click on the **DIR-890L** icon to view details about the router and its wireless settings. Here you can see the router's current wireless settings, as well as its MAC address.



To reconfigure the router's network settings, either click **Go to settings** on the lower left, or click **Settings** (at the top of the page) and then **Network** on the drop-down menu that appears. Refer to page 55.

To reconfigure the router's wireless settings, either click **Go to settings**, on the lower right, or click **Settings** (at the top of the page) and then **Wireless** on the drop-down menu that appears. Refer to page 51.

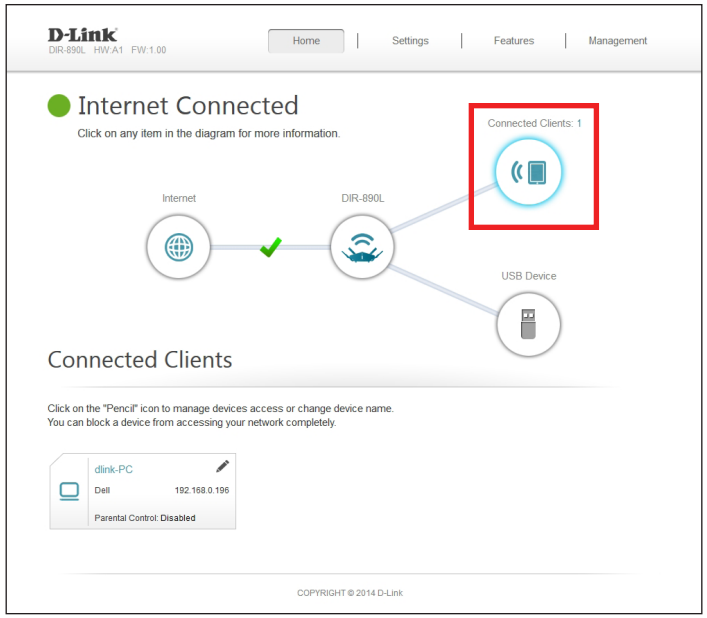


Connected Clients

Click on the **Connected Clients** icon to view details about the router and its wireless settings.

On this page you can see all the clients currently connected to the router, and their corresponding IP addresses.

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



Name: Enter a custom name for this client.

Vendor: Displays the vendor of the device.

MAC Address: Displays the MAC address of the client.

IP Address: Enter a specific IP address you want to reserve for this client. This IP address must be within the DHCP IP range.

Reserve IP: Enable to reserve the IP address for this client.

Parental Control: Enable to assign a specific schedule for this client.

Schedule: Select a schedule from the drop-down or click Schedule to create a new time range.

Click **Save** when you are done.



USB Device

Click on the **USB Device** icon to view details about the currently connected USB device, *DLNA Media Server*, *SharePort*, and *Windows File Sharing*.

If you have a USB device connected, you can see its name and how much free space it has.

To configure your SharePort settings, click **Go to settings** or click **Settings** (at the top of the page) and then **SharePort** on the drop-down menu that appears and refer to page 57.



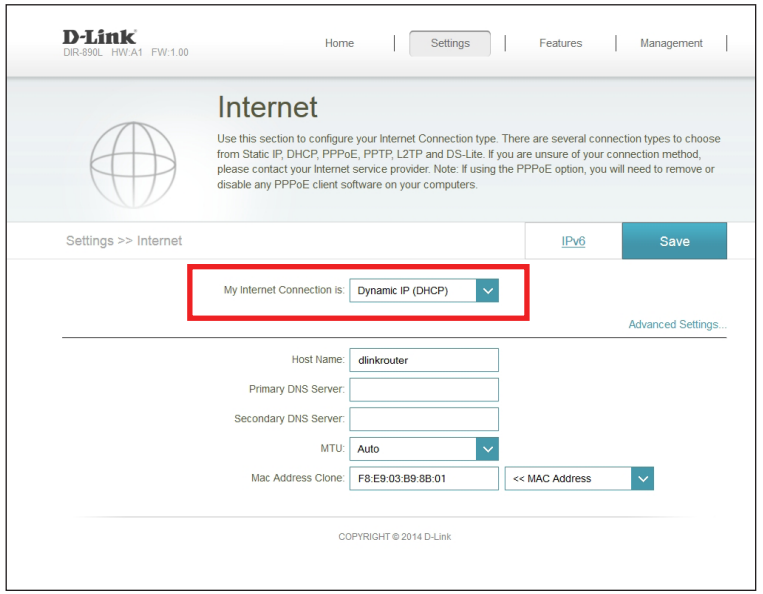
Settings
Wizard

From the **Settings** menu on, click **Wizard** to open the *Setup Wizard*. This is the same wizard that appeared when you first installed the router.

Internet

From the **Settings** menu on the bar on the top of the page, click **Internet** for Internet configuration.

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



Dynamic IP (DCHP)

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

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

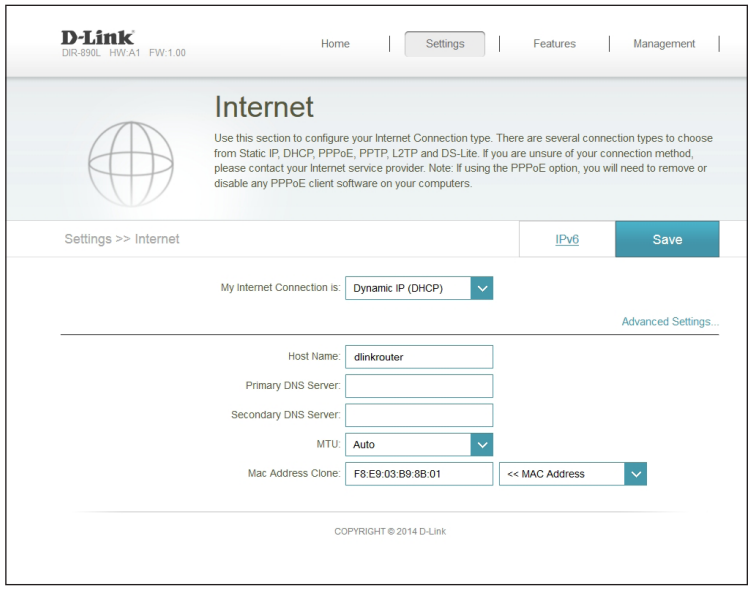
Primary DNS Server: Enter the **Primary DNS Server** IP address assigned by your ISP. This address is usually obtained automatically from your ISP.

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

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

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

Click **Save** when you are done.



Static IP

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

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

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

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

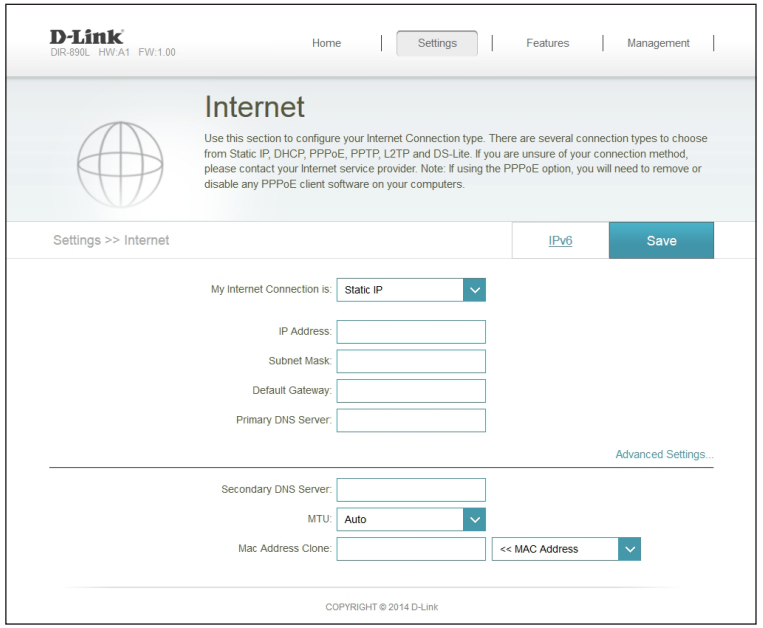
Primary DNS Server: Enter the **Primary DNS Server** IP address assigned by your ISP.

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

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

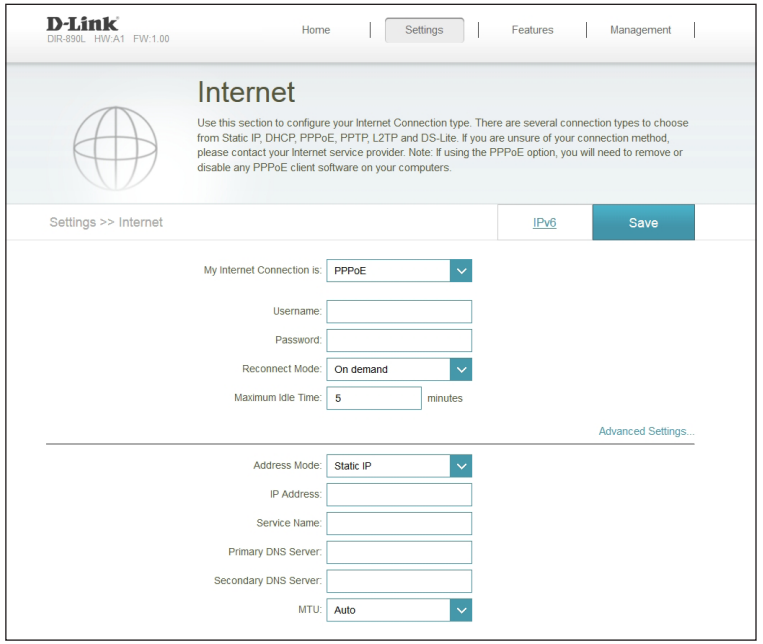
MAC Address Clone: The default MAC address is set to the Internet port's physical interface MAC address on the router. You can use drop-down menu to replace the Internet port's MAC address with the MAC address of a connected client.

Click **Save** when you are done.



PPPoE

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



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

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

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

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

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

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

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

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

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

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

Click **Save** when you are done.

PPTP

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

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

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

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

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

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

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

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

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

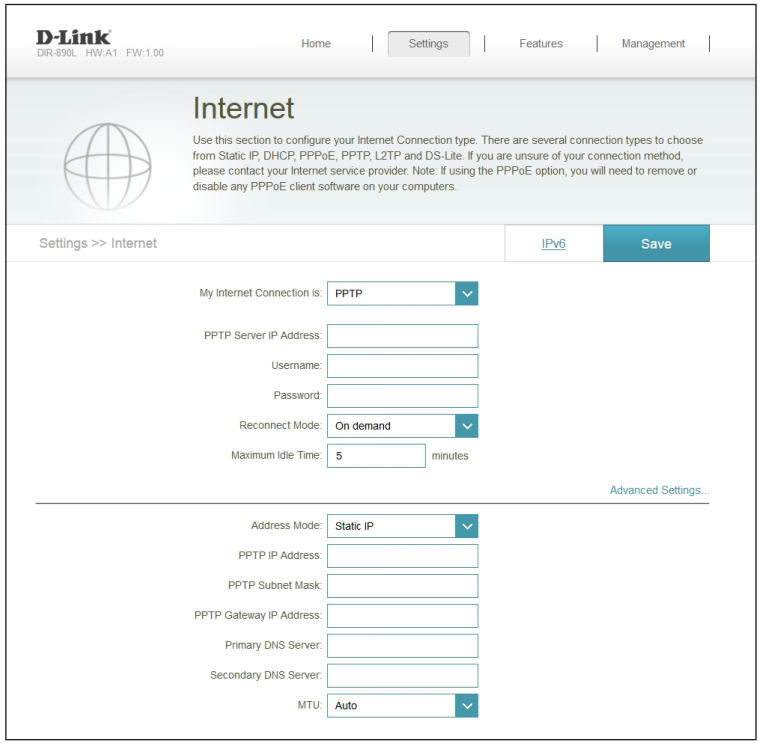
PPTP Gateway IP Address: Enter the **PPTP Gateway IP Address** provided by your ISP (for Static IP only).

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

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

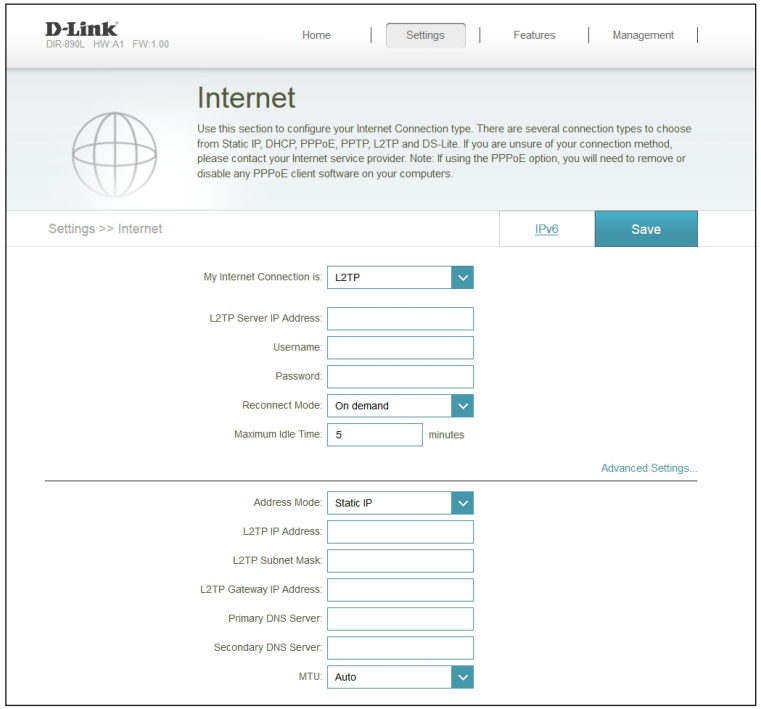
MTU: Maximum Transmission Unit - by default this field will be set to *Auto*. Select **Manual** if you need to change the MTU for optimal performance with your ISP.

Click **Save** when you are done.



L2TP

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



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

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

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

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

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

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

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

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

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

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

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

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

Click **Save** when you are done.

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

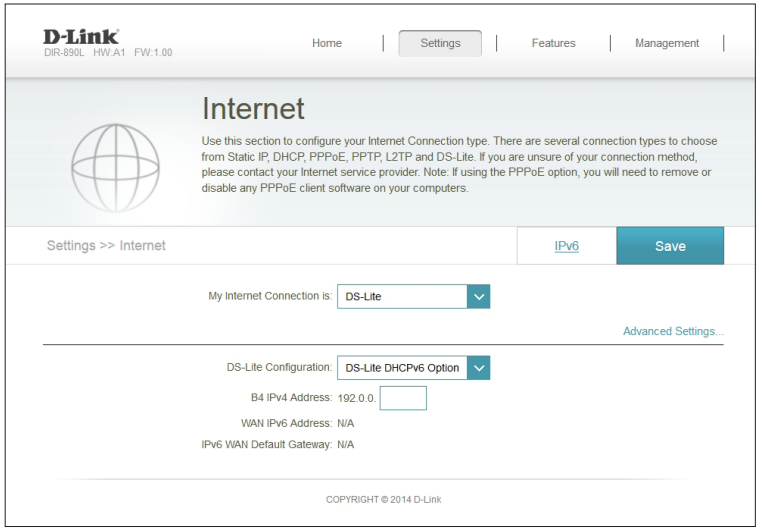
AFTR IPv6 Address: If you selected **Manual Configuration** above, enter the **AFTR IPv6 address** used here.

B4 IPv6 Address: Enter the **B4 IPv4 address** value used here.

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

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

Click **Save** when you are done.

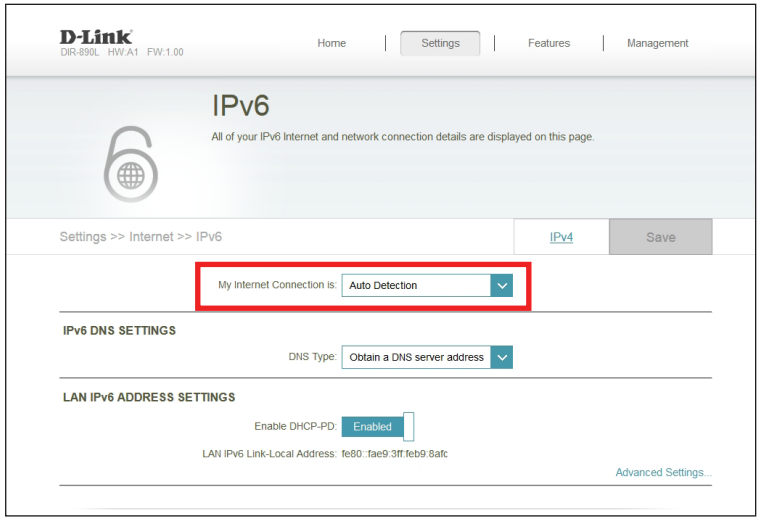


IPv6

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

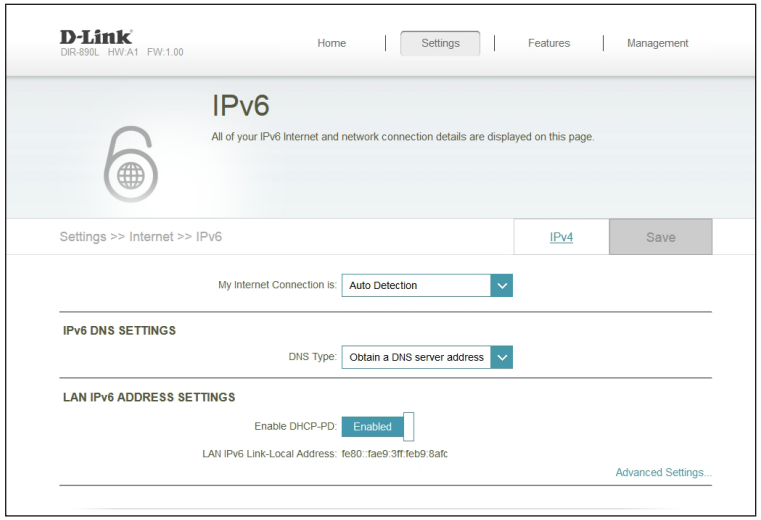


My Internet Connection Is: Choose your IPv6 **Internet Connection** type from the drop-down menu. For most of the connection types, after you make a selection you will see additional fields below that require input. The exception is for **Local Connectivity Only**. For this connection type you must click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



Auto Detection

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



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

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

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

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

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

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

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

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

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

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

Click **Save** when you are done.

Static IPv6

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

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

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

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

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

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

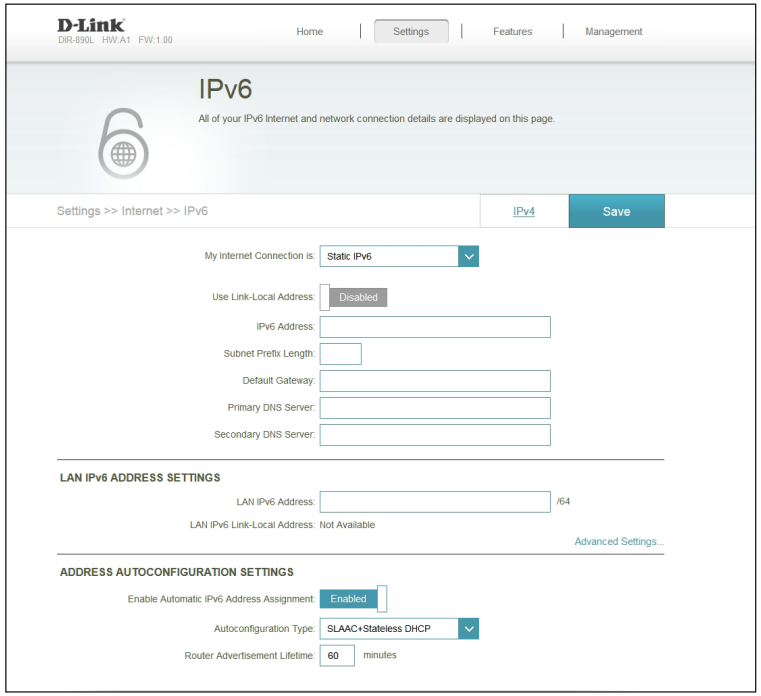
Secondary DNS Server: Enter the **Secondary DNS Server** address.

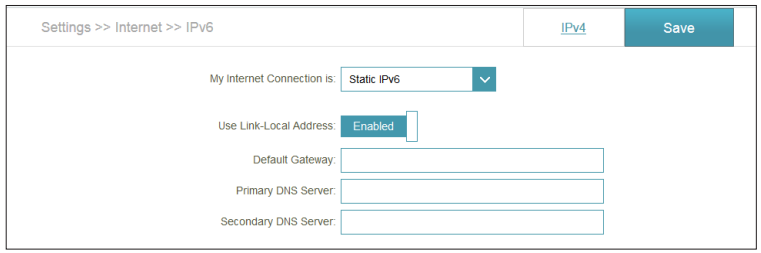
LAN IPv6 Address: Enter the LAN (local) IPv6 address for the router.

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

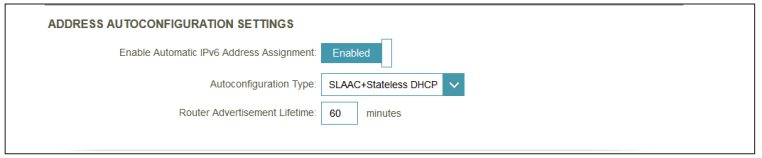
Enable Automatic IPv6 Address Assignment: Enable or disable the *Automatic IPv6 Address Assignment* feature.

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





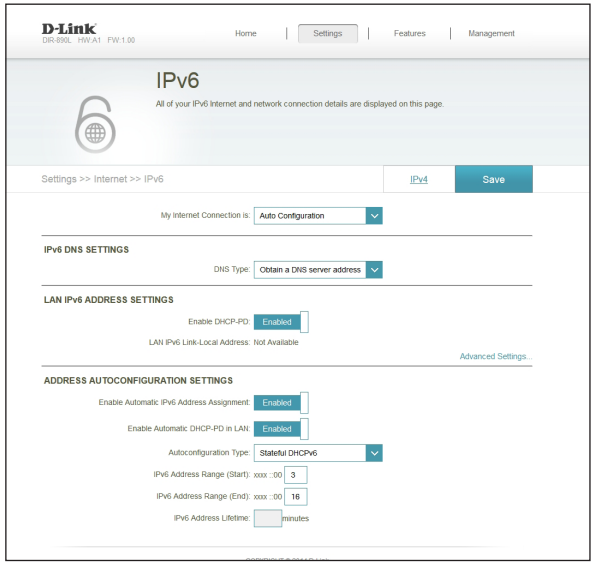
Router Advertisement Lifetime: Enter the IPv6 address lifetime (in minutes).



Click **Save** when you are done.

Auto Configuration

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



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

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

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

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

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

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

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

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

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

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

Click **Save** when you are done.

PPPoE

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

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

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

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

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

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

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

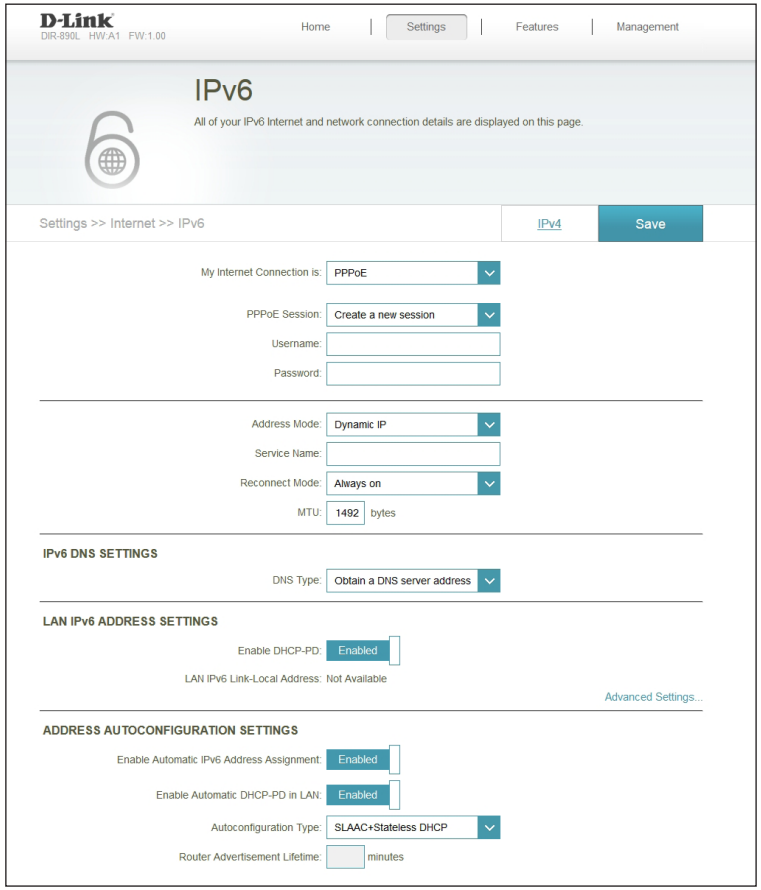
Reconnect Mode: If you selected **Create a new session** above, select either **Always on**, **On demand**, or **Manual**.

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

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

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

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



***Note:** When you select **Share with IPv4** and **Dynamic IP** instead of **Create a new session** and **Static IP,** less fields are required. See screen shot on the next page.*

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

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

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

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

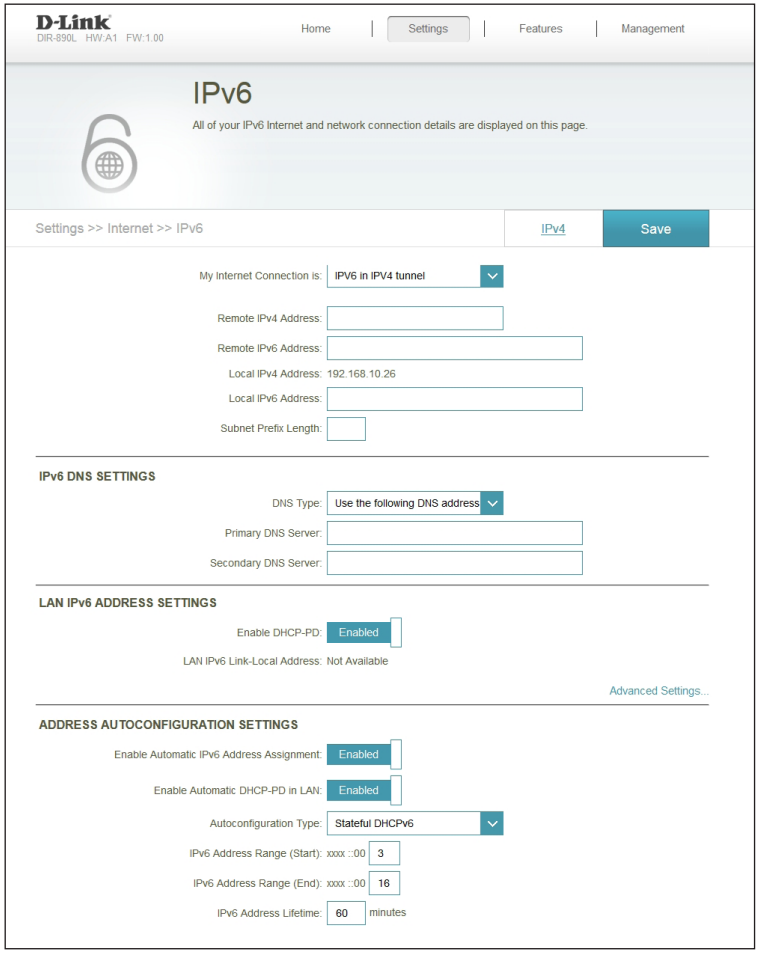
Auto Configuration Type: Select **SLAAC + RDNSS**, **SLAAC + Stateless DHCP** or **Stateful DHCPv6**.

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

Click **Save** when you are done.

IPv6 in IPv4 Tunnel

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



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

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

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

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

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

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

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

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

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

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

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

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

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

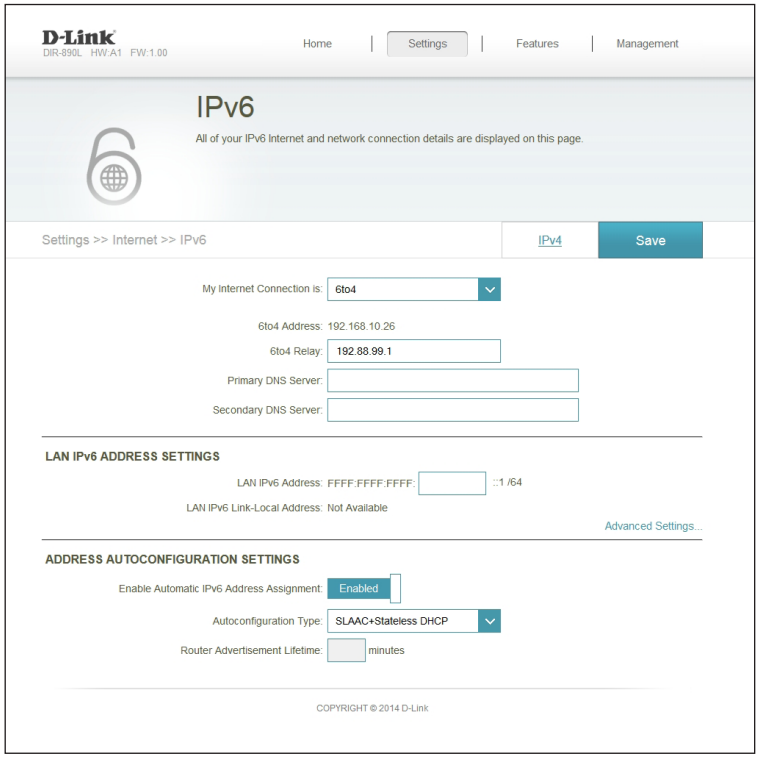
Autoconfiguration Type: Select **SLAAC + RDNSS**, **SLAAC + Stateless DHCP**, or **Stateful DHCPv6**.

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

Click **Save** when you are done.

6 to 4

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



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

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

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

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

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

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

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

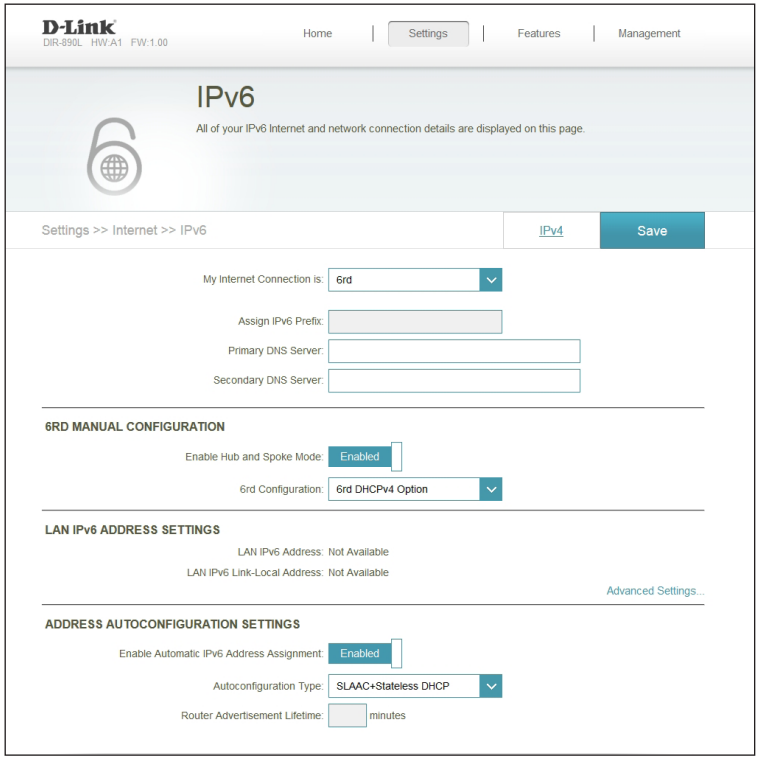
Autoconfiguration Type: Select **SLAAC + RDNSS** or **SLAAC + Stateless DHCP**, or **Stateful DHCPv6**.

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

Click **Save** when you are done.

6rd

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



Assign IPv6 Prefix: Currently unsupported.

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

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

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

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

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

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

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

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

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

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

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

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

Click **Save** when you are done.

Local Connectivity Only

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

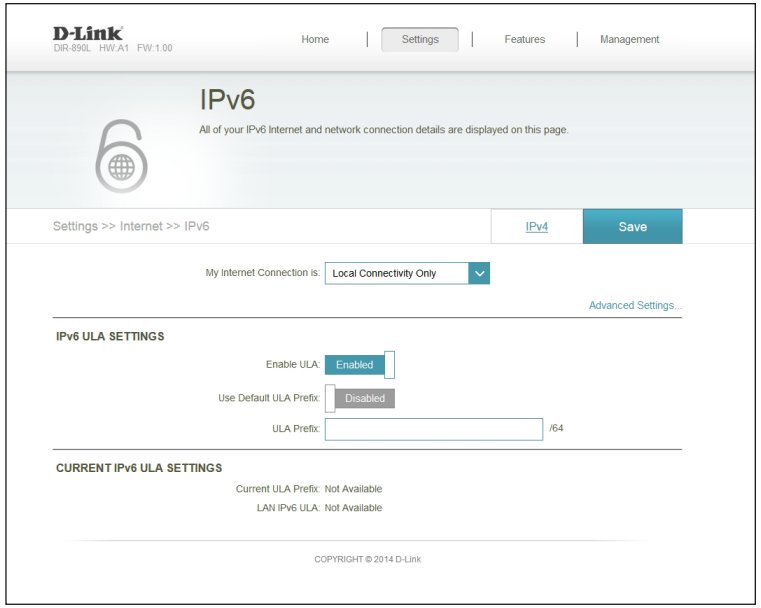
Enable ULA: Click to enable Unique Local IPv6 Unicast Addresses settings.

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

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

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

Click **Save** when you are done.



Wireless

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

Smart Connect

Enable Smart Connect to allow the router to automatically assign your wireless clients to the best available wireless band. When enabled, the 2.4GHz and both 5GHz bands will have the same Wi-Fi name and password.

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

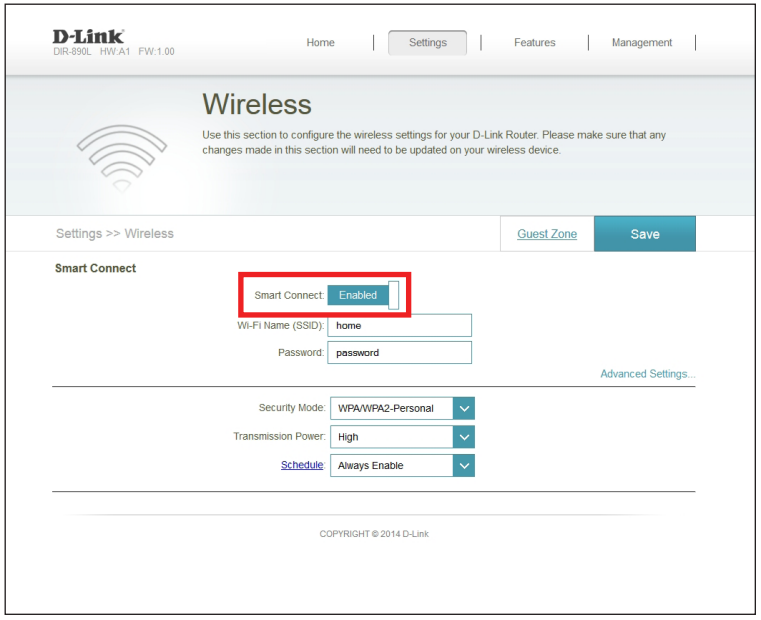
Password: Create a **Password** to use for wireless security. Wireless clients will need to enter this password to successfully connect to the network.

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

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

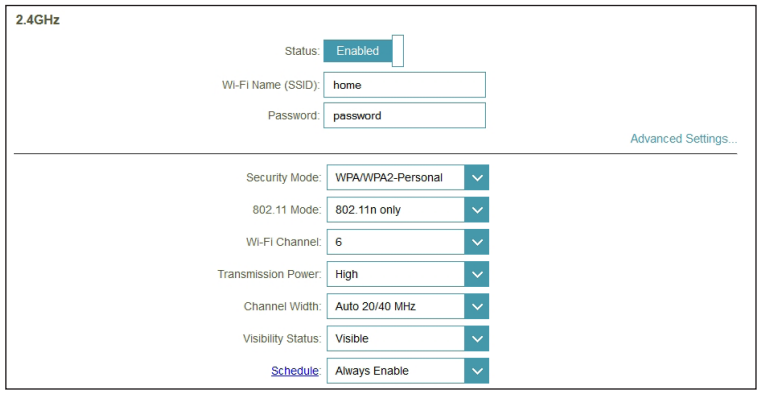
Schedule: Use the drop-down menu to select a schedule for enabling the rule. The schedule may be set to **Always Enable**, or you can create your own schedules in the **Schedules** section (refer to page 73).

Click **Save** when you are done.



2.4GHz

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



Smart Connect: Select **Disabled**.

Status: Enable or disable the wireless frequency band.

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

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

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

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

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

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

Channel Width: Select **Auto 20/40 MHz** if you are using both 802.11n and non-802.11n wireless devices, or select **20 MHz** if you are not using any 802.11n wireless clients.

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

Schedule: Use the drop-down menu to select a schedule for enabling the rule. The schedule may be set to **Always Enable**, or you can create your own schedules in the **Schedules** section (refer to page 73).

Click **Save** when you are done.

Primary and Secondary 5GHz

Status: Enable or disable the wireless frequency band.

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

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

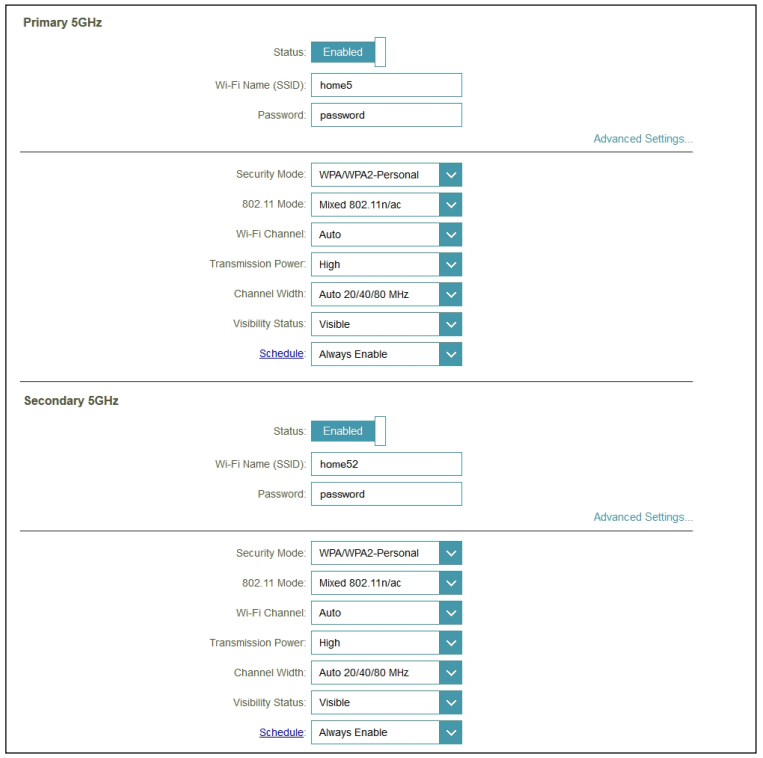
Security Mode: Select **None**, **WEP**, or **WPA/WPA2-Personal (**recommended).

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

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

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

Channel Width: Select **Auto 20/40/80 MHz** if you are using 802.11ac, 802.11n, and non-802.11n wireless devices, or select **Auto 20/40 MHz** if you are using both 802.11n and non-802.11n wireless devices.



Guest Zone

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

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



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

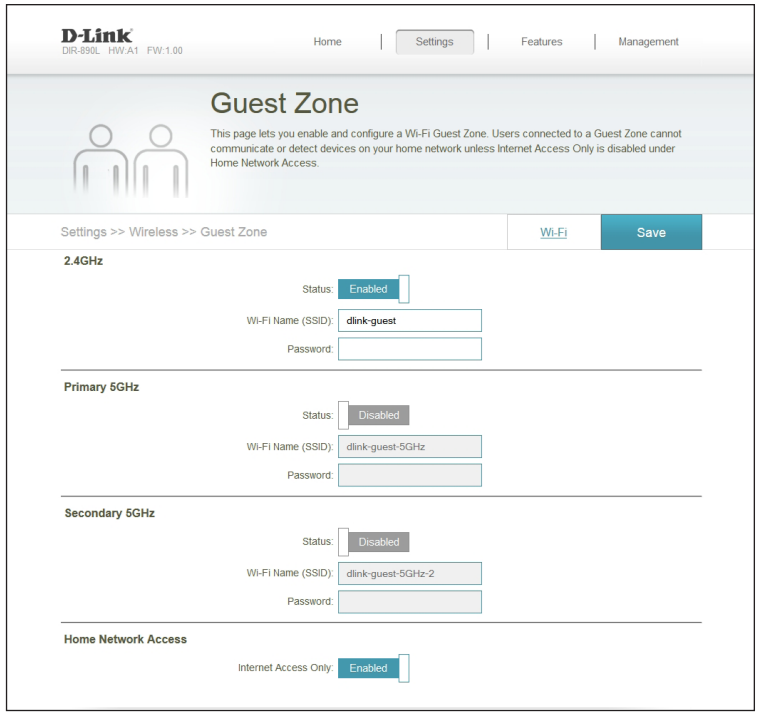
Status: Enable or disable the Guest Zone for each wireless frequency band.

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

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

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

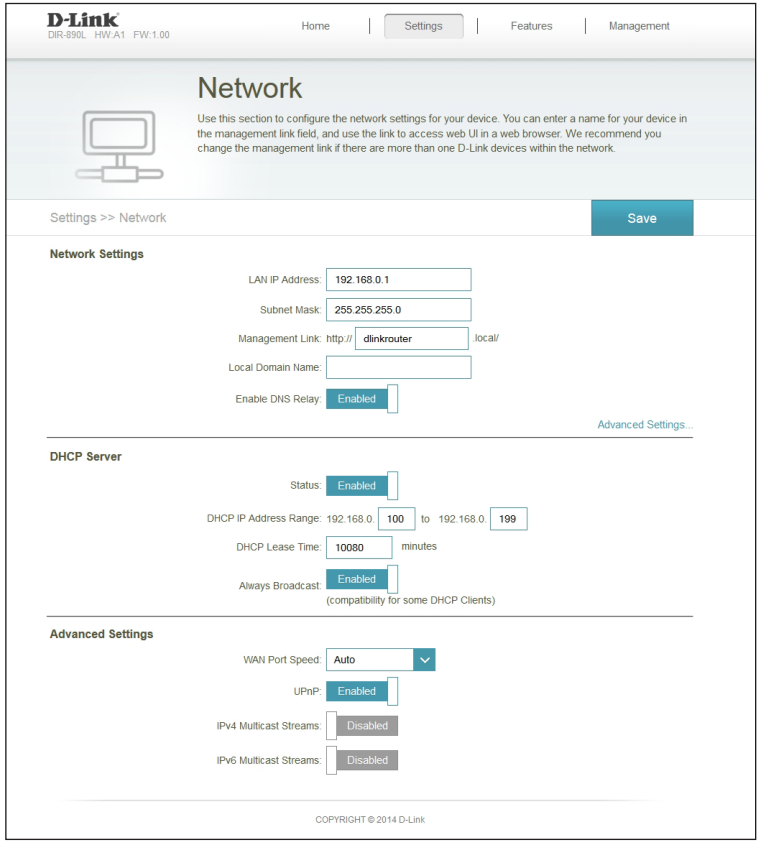
Click **Save** when you are done.



Network

This section allows you to change the local network settings of the router and to configure the DHCP (Dynamic Host Control Protocol) settings. You can enable the use of the DIR-890L as a DNS server. From the **Settings** menu, click **Network**.

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



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

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

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

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

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

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

Status: Enable or disable the DHCP server.

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

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

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

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

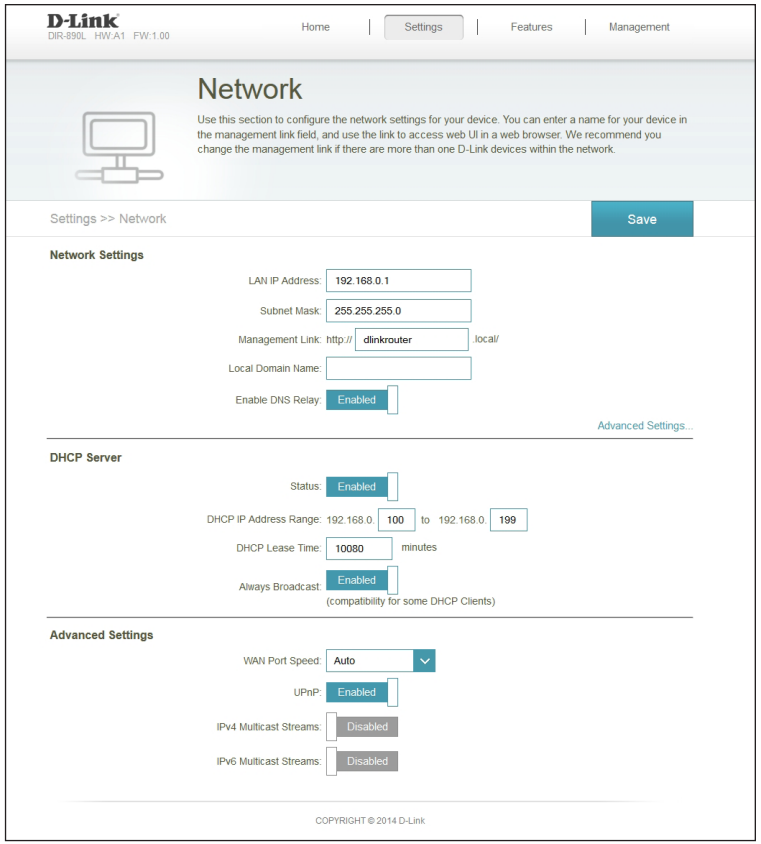
WAN Port Speed: You may set the port speed of the Internet port to 10 Mbps, 100 Mbps, 1000 Mbps, or **Auto** (recommended).

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

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

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

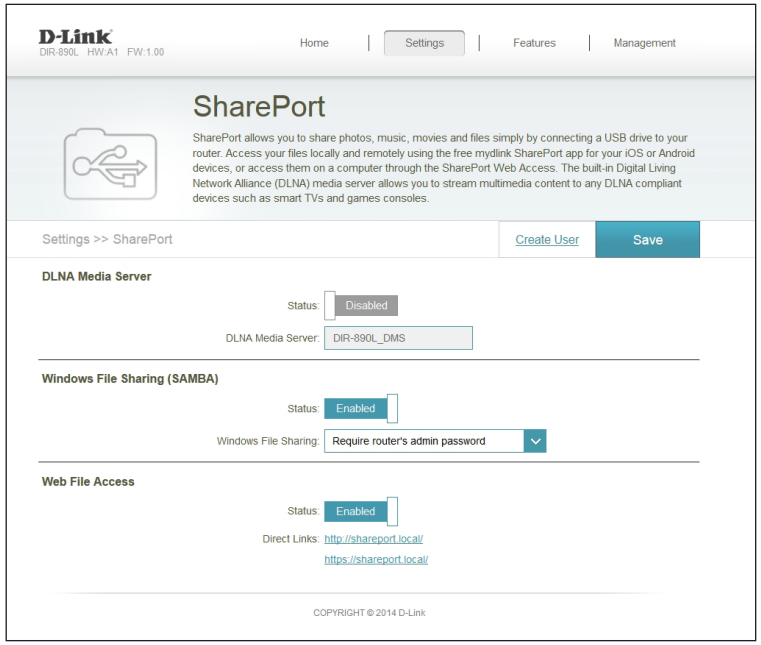
Click **Save** when you are done.



SharePort

This page allows you to set up access to files on an external USB device plugged into the router. You can do this through the local network or from the Internet, using either a web browser or an app for your smartphone or tablet, like the mydlink SharePort app. Refer to "Using the mydlink SharePort™ App" on page 79.

From the **Settings** menu on the bar on the top of the page, click **SharePort**.



Status: Click to enable *DLNA Media Server* functions, allowing connected clients access to media files over the network.

DLNA Media Server: Enter a name for your *DLNA Media Server* so that it can be found.

Status: Enable or disable *Windows File Sharing (SAMBA)*.

Windows File Sharing: From the drop-down menu, choose either **Allow all users to access (no password)** or **Require router's admin password** to specify whether the router's password will be required for access.

Web File Access: Enable or disable remote access to files stored on a USB device plugged into the router through a web browser.

Direct Links: This area will display the *HTTP* and *HTTPS* links you can use to connect to your SharePort drive through a web browser from a device on your network.

Click **Save** when you are done.

***Note:** To manage user accounts for SharePort access, click **Create User** and refer to the next page for details.*

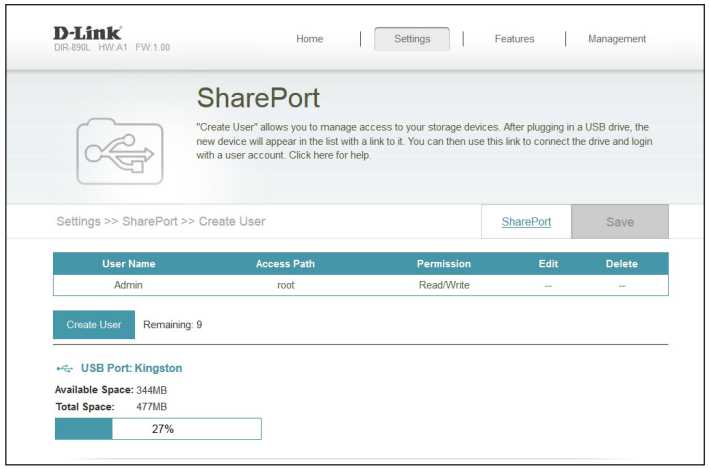
Create User

The Create User page allows you to manage your SharePort user accounts If a user does not have an account, he or she will be restricted to guest access only. This means they will only have access to the *Guest* folder on the media server.

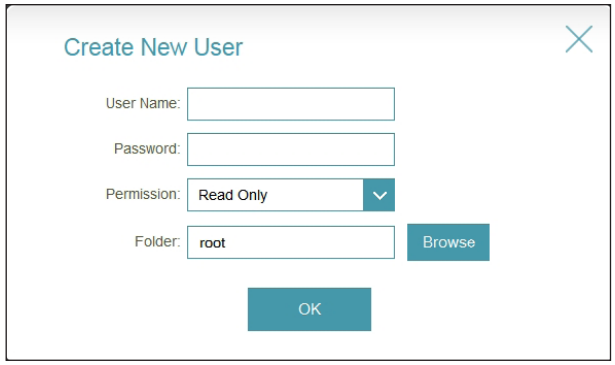
From the SharePort page, click on the **Create User** link.



The DIR-890L can store a maximum of ten accounts (including the *Admin* account). If you want to remove an account, click on its trash can icon in the *Delete* column. If you would like to edit an account, click on its pencil icon in the *Edit* column. If you wish to create a new account, click the **Create User** button.



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



User Name: Enter the **User Name** for the new account.

Password: Enter the **Password** the user will need to enter when logging in.

Permission: Select either **Read Only** or **Read/Write** to specify whether the user has permission to only read files, or permission to edit, add, and delete files on the storage device.

Folder: Select the parent folder that you would like the user to be able to access. If you select *root,* which is the highest level, the user can access all files on the device. To change the selected access level, click **Browse** and navigate to the desired folder.

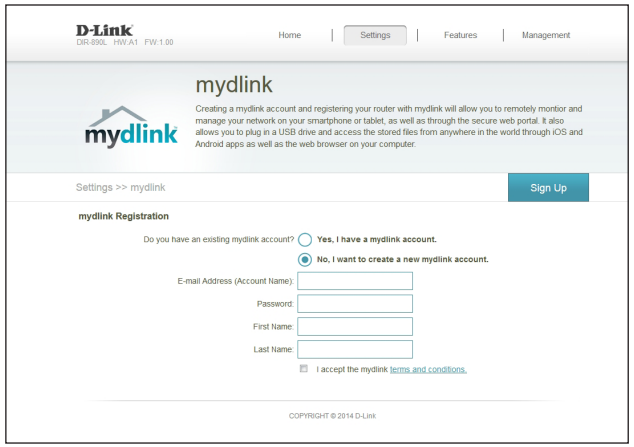
Click **OK** when you are done. The new user will be added to the list of user accounts. To save the new list, click **Save**. To return to the SharePort page, click **SharePort**.

mydlink

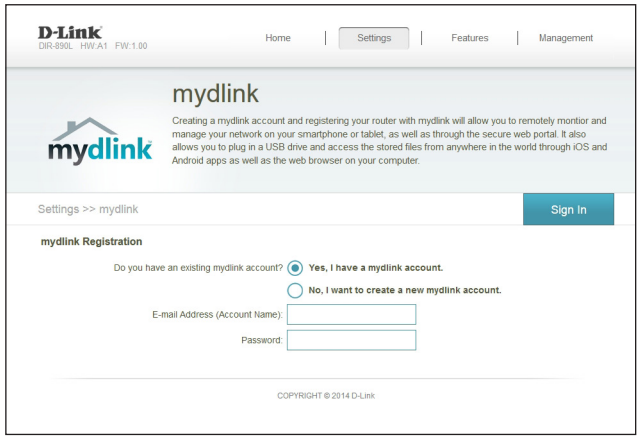
This page allows you to sign in to an existing mydlink account, or create a new account. With a mydlink account, you can access and manage all of your registered mydlink-compatible home devices when you are away from home. Use web browser to access the mydlink portal website, or access your home devices from a mobile device using the *mydlink Lite* app, which is free.

From the **Settings** menu, click **mydlink**.

If you do not already have a mydlink account, click **No, I want to create a new mydlink account**. Enter your **E-mail Address** (your username), a Password, your first and last name. Then, click **Sign Up** to create your new mydlink account.



If you already have an existing account, click **Yes, I have a mydlink account**. Enter your **E-mail Address** (your username) and your **Password**. Then, click **Sign In** and register your DIR-890L with your mydlink account.

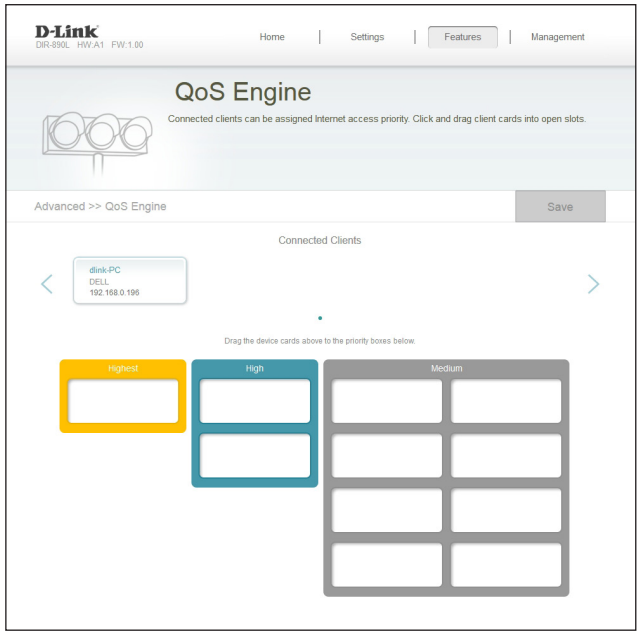


Features
QoS Engine

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

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

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



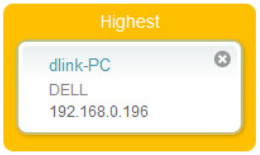
A maximum of **one** device can be assigned **Highest** priority.

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

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

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

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

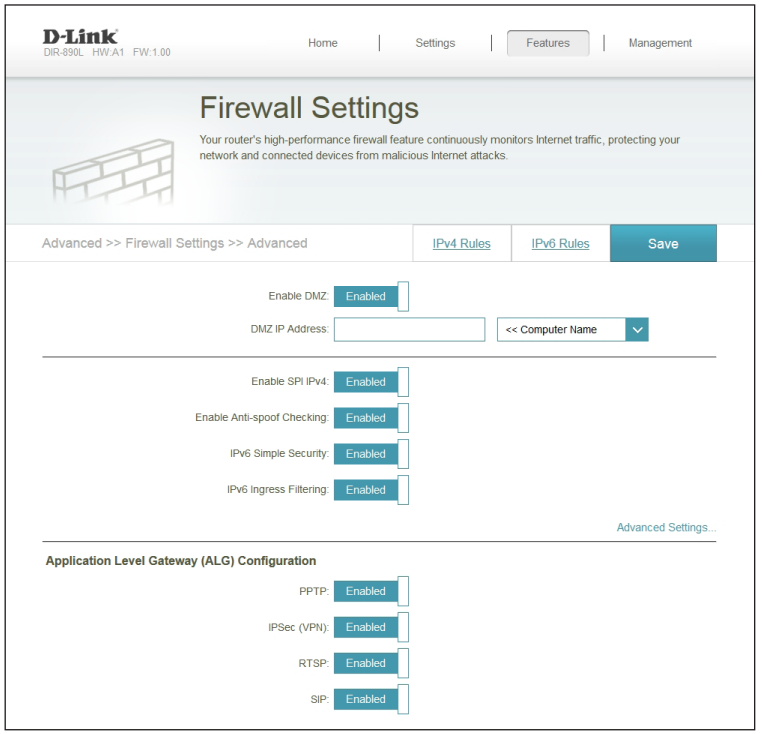


Click **Save** when you are done.

Firewall Settings

A firewall protects your network from malicious attacks over the Internet. The DIR-890L offers a high-performance firewall features like SPI (Stateful Packet Inspection).

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



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

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

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

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

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

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

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

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

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

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

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

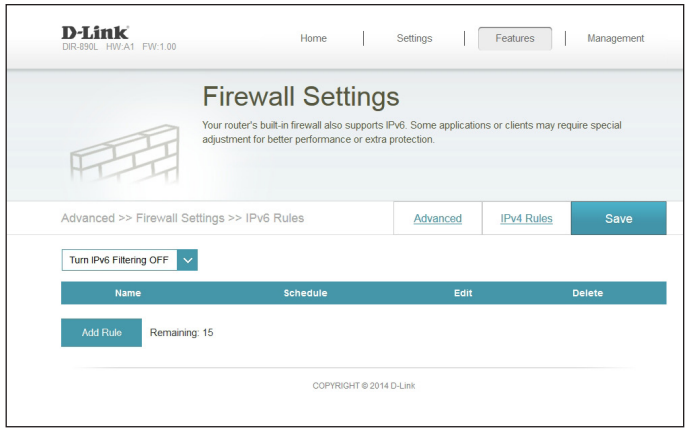
Click **Save** when you are done.

IPv4/IPv6 Rules

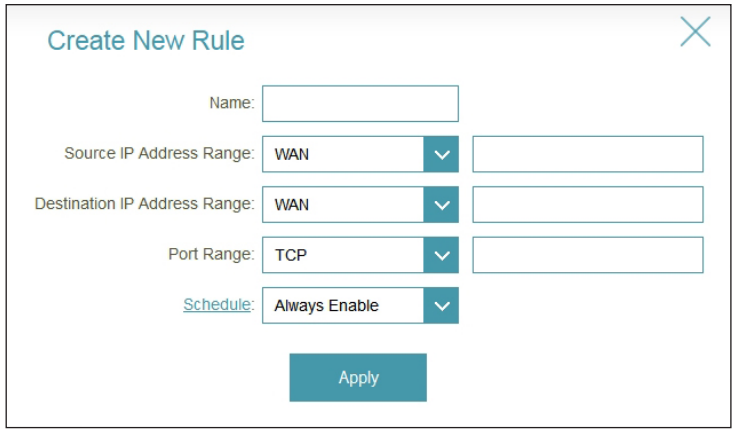
The IPv4/IPv6 Rules section allows you to specify the kind of traffic that is allowed to pass through the network.

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

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



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



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

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

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

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

Schedule: Use the drop-down menu to select a **Schedule** when the rule will be enabled. The schedule may be set to **Always Enable**, or you can create a schedule from the **Schedules** section (refer to page 73).

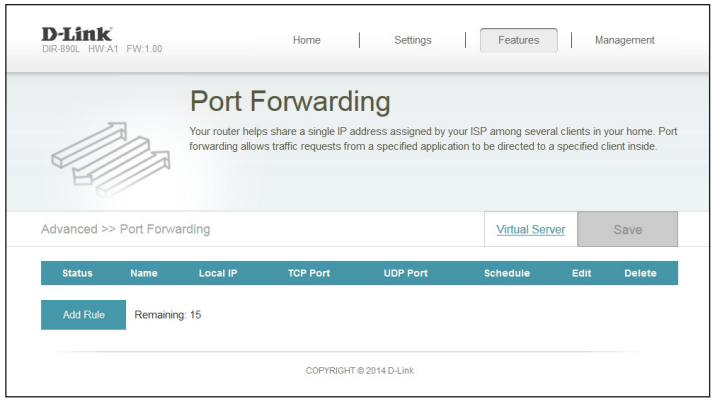
Click **Apply** when you are done.

Port Forwarding

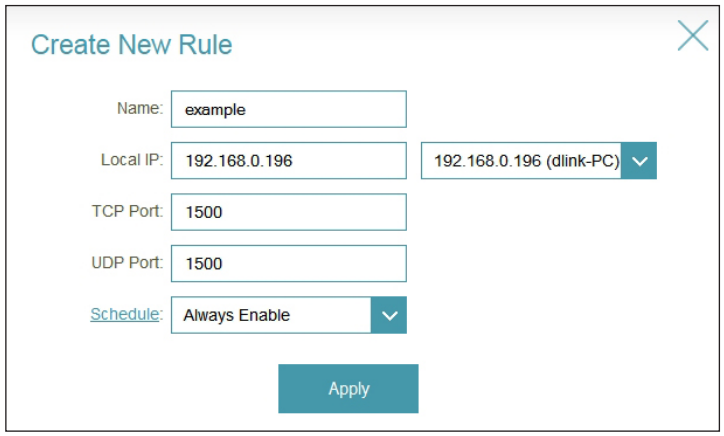
Port forwarding allows you to specify a single port or a range of ports to open for specific devices on the network. It allows traffic requests from a specific application to be directed to a specific client.

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

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



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



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

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

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

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

Schedule: Use the drop-down menu to select a **Schedule** when the rule will be enabled. The schedule may be set to **Always Enable**, or you can create a schedules from the **Schedules** section (refer to page 73).

Click **Apply** when you are done.

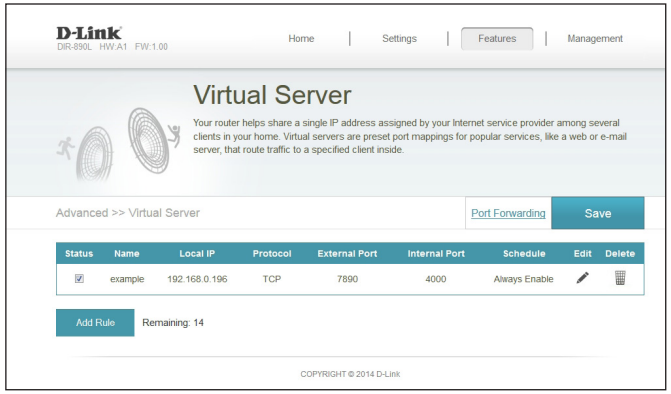
Virtual Server

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

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



The DIR-890L can store a maximum of 15 rules. If you wish to remove a rule, click on its trash can icon in the *Delete* column. If you wish to edit a rule, click on its pencil icon in the *Edit* column. If you wish to create a new rule, click the **Add Rules** button. Click **Save** when you are done.



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

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

Local IP: Enter the IP address of the device on your local network that you want to allow the incoming service to or select the device from the drop-down menu.

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

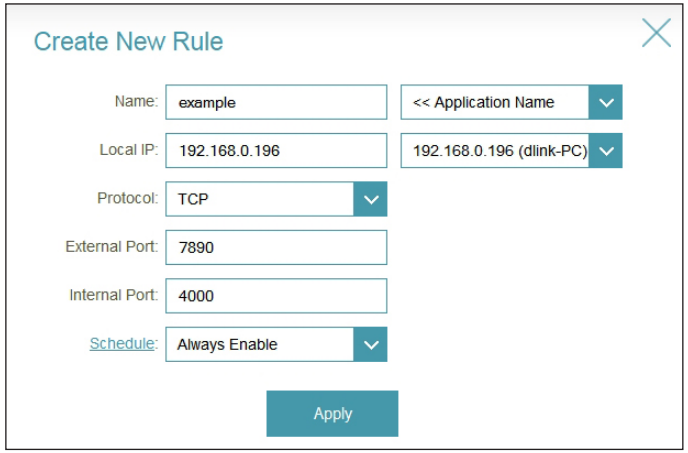
Protocol: If you selected **Other**, enter the **Protocol Number**.

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

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

Schedule: Use the drop-down menu to select a schedule when the rule will be enabled. The schedule may be set to **Always Enable**, or create your own schedule from the **Schedules** section (refer to page 73).

Click **Apply** when you are done.



Website Filter

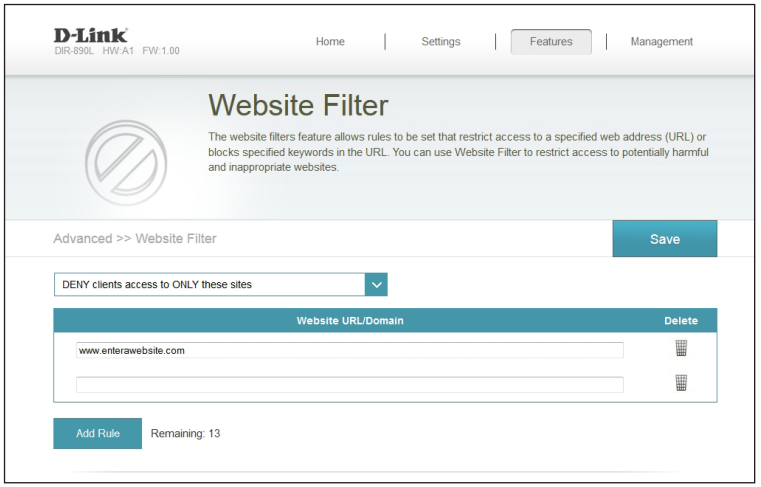
The Website Filter page allows you to create a list of websites that may be viewed by specified users or blocked from those users.

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

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

You may specify a maximum of 15 websites. To add a new website to the list, click **Add Rule**. Next, under *Website URL/Domain* enter the **URL** or **Domain**. If you wish to remove a rule, click on its trash can icon in the *Delete* column. To edit a rule, simply replace the **URL** or **Domain**.

Click **Save** when you are done.



Static Routes

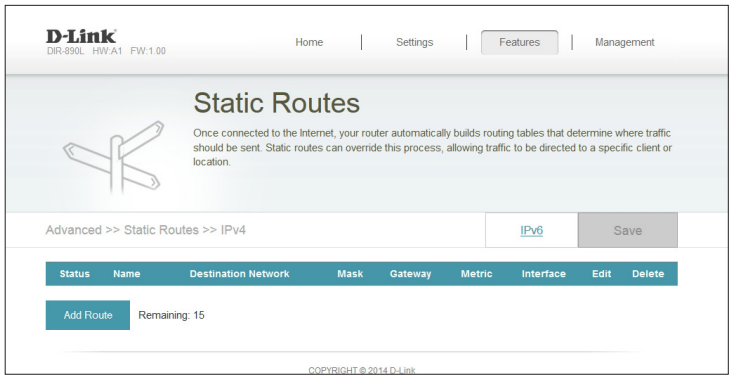
The Static Routes section allows you to define custom routes allowing traffic to be directed to a specific client or location.

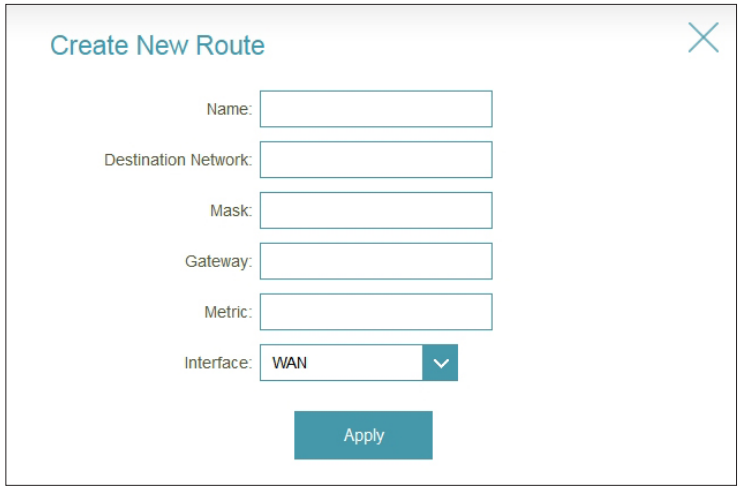
From the **Features** menu, click **Static Routes**.

To configure IPv6 rules, click **IPv6** and refer to page 68. To return to the main IPv4 static routes page, click **IPv4**.

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

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





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

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

Mask: Enter the netmask of the route.

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

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

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

Click **Apply** when you are done.

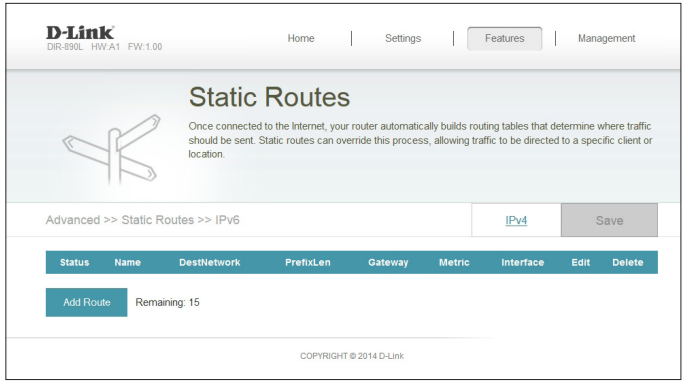
IPv6

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



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

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



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

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

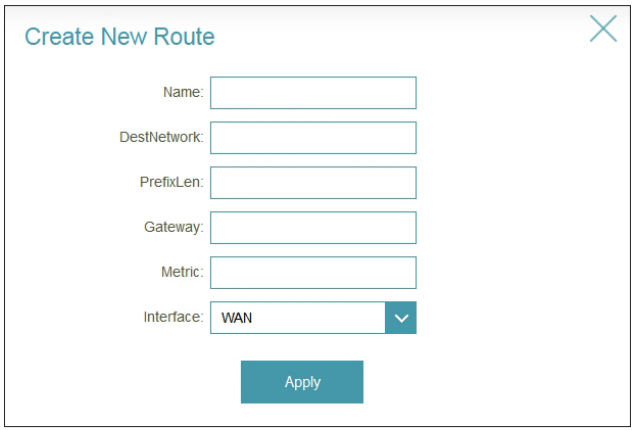
PrefixLen: Enter the IPv6 address prefix length of the packets that will take this route.

Gateway: Enter the gateway address for this rule here.

Metric: Enter the metric value for this rule here.

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

Click **Apply** when you are done.



Dynamic DNS

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

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

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

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

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

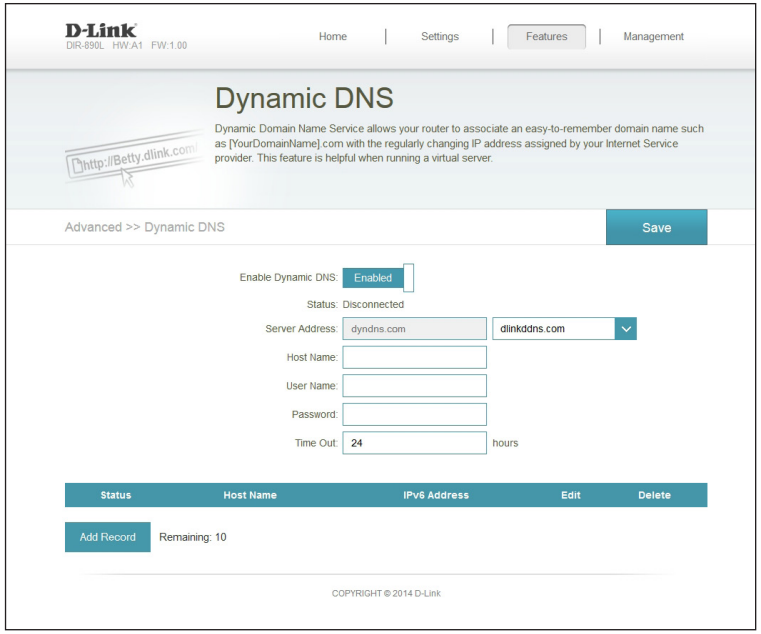
Host Name: Enter the **Host Name** that you registered with your dynamic DNS service provider.

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

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

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

Click **Save** when you are done.



At the bottom of the page are the IPv6 host settings. To configure an IPv6 dynamic DNS host, refer to page 70.

IPv6 Host

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



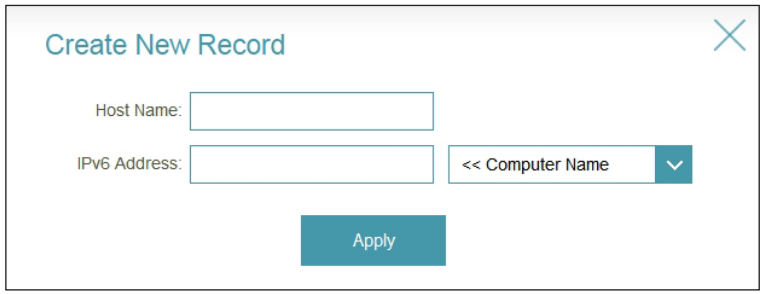
If you wish to remove a rule, click on its trash can icon in the *Delete* column. If you wish to edit a rule, click on its pencil icon in the *Edit* column. If you wish to create a new rule, click the **Add Record** button. Click **Save** when you are done.

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

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

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

Click **Apply** when you are done.



QuickVPN

The QuickVPN feature is a fast and easy way to create a profile for secure remote access to a Local Area Network (LAN). This profile can be used to configure other devices to connect to your LAN via a secure VPN tunnel.

From the **Features** menu, click **Quick VPN**. Click **Advanced Settings...** to expand the list and see all of the options.

L2TP over IPSec: Enable to allow QuickVPN access to your network.

Username: Enter a **Username** of your choice.

Password: Enter a **Password** of your choice.

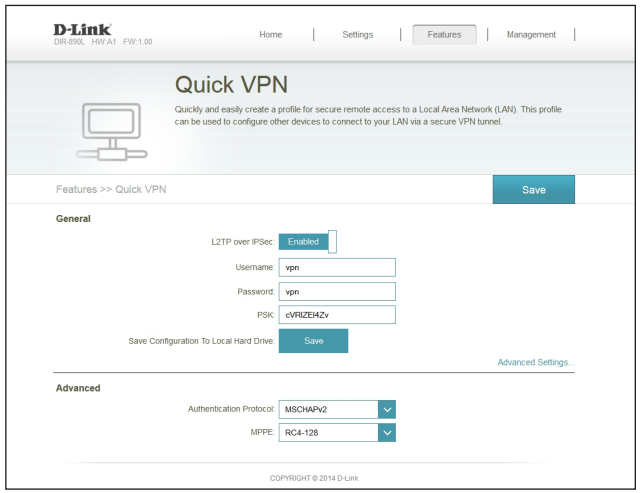
PSK: Enter a pre-shared key (PSK). Clients attempting to connect to your network through a VPN will need to enter this key.

Save Configuration To Local Hard Drive: iOS users can quickly and easily establish a VPN (Virtual Private Network) using a VPN configuration file. Click **Save** to export these settings as a VPN profile, allowing anyone with the file to connect to your network on an iOS device.

Authentication Protocol: Select either **MSCHAPv2**, **PAP** (Password Authentication Protocol), or **CHAP** (Challenge-Handshake Authentication Protocol).

MPPE: Select either **None**, **RC4-40**, or **RC4-128** (encryption).

Click **Save** when you are done.



Management

Time & Schedule

Time

The Time page allows you to configure, update, and maintain the correct time on the DIR-890L's internal system clock. The router's internal clock is used for data logging and schedules.

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

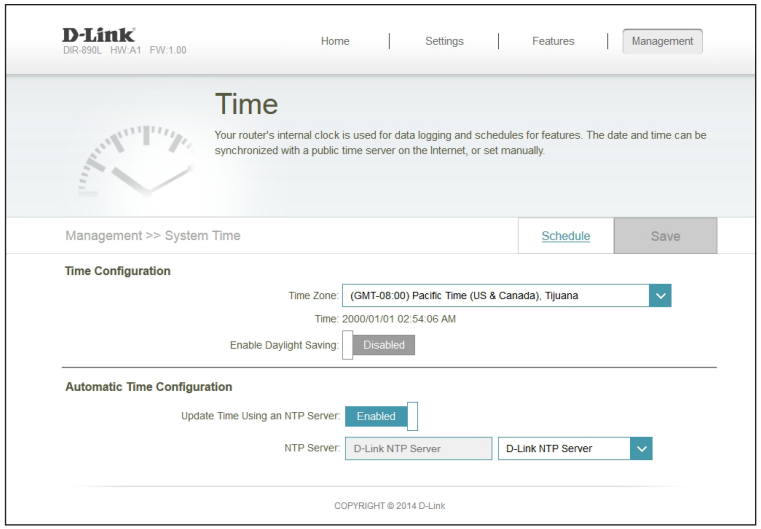
Time Zone: Select your **Time Zone** from the drop-down menu.

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

Daylight Saving: Enable or disable daylight saving time.

Update Time Using an NTP Server: Enable to allow an NTP (Network Time Protocol) server on the Internet to synchronize the time and date with your router. If you enable this option, select an NTP server from the drop-down menu. To configure the router's time and date manually, disable this option and use the drop-down menus that appear to input the time and date.

Click **Save** when you are done.



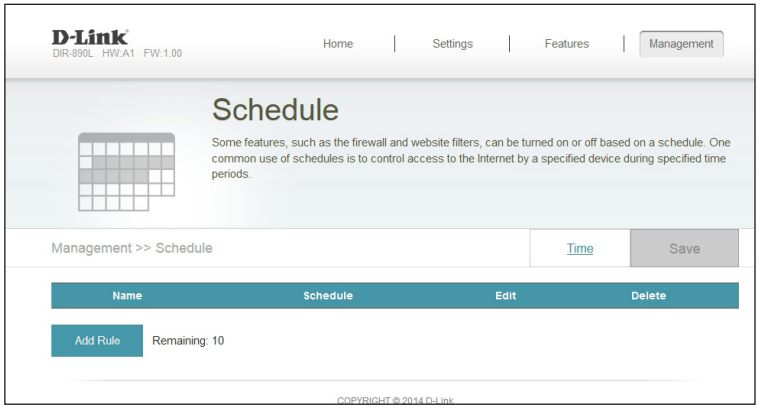
To configure and manage your schedules, click **Schedule** and refer to page 73.

Schedule

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

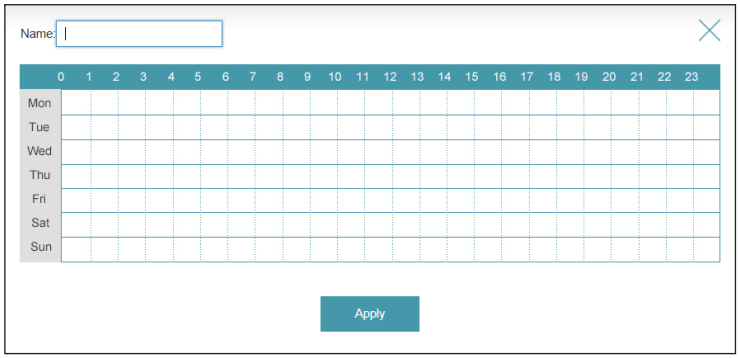


If you wish to remove a rule, click on its trash can icon in the *Delete* column. If you wish to edit a rule, click on its pencil icon in the *Edit* column. If you wish to create a new rule, click the **Add Rule** button. Click **Save** when you are done.



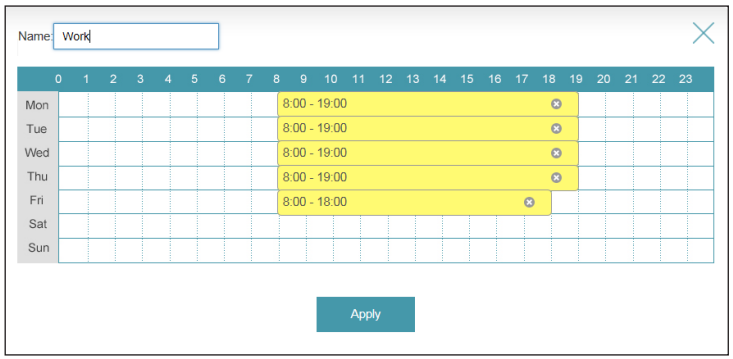
When you click on **Add Rules**, the following screen will appear:
First, enter the **Name** of your schedule.

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



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

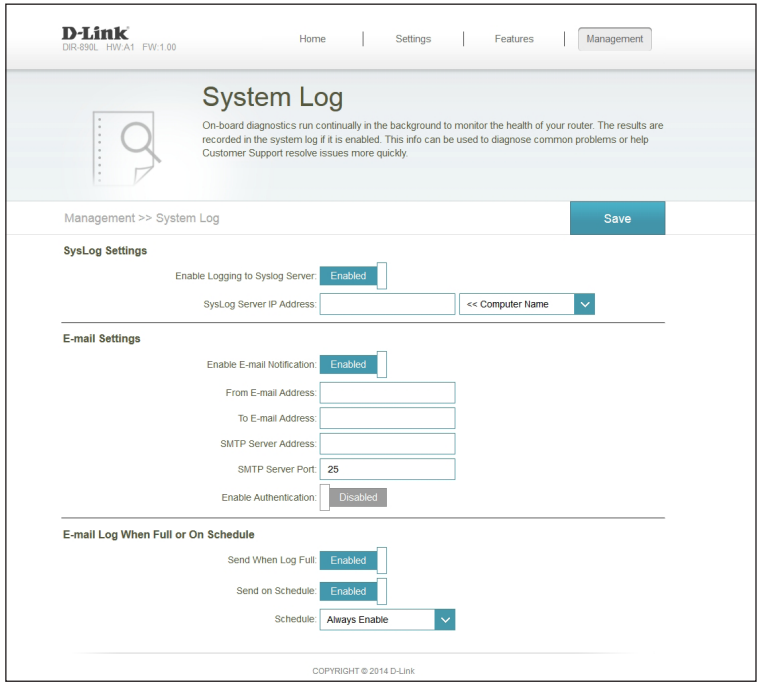
Click **Apply** when you are done.



System Log

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

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



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

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

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

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

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

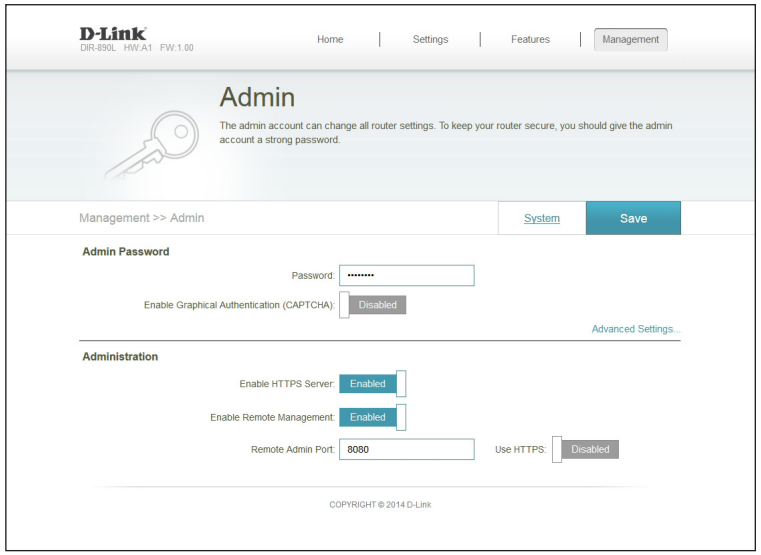
Schedule: If you enable **Send on Schedule**, use the drop-down menu to select the schedule that the rule will be enabled on. The schedule may be set to **Always Enable**, or you can create your own schedule from the **Schedules** section (refer to page 73).

Click **Save** when you are done.

Admin

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

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



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

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

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

Enable Remote Management: Remote management allows the DIR-890L to be configured from the Internet by a web browser. A password is still required to access the web management interface.

Remote Admin Port: The port number used to access the DIR-890L is used in the URL. Example: **http://x.x.x.x:8080** where x.x.x.x is the Internet IP address of the DIR-890L and 8080 is the port used for the web management interface. If you enable **HTTPS Server,** you must enter **https://** as part of the URL to access the router remotely.

Click **Save** when you are done.

To load, save, or reset the settings, or to reboot the router, click **System** and refer to page 76.

System

This page allows you to save the DIR-890L's current configuration, load a previously saved configuration, and reset the router to the factory default settings.

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

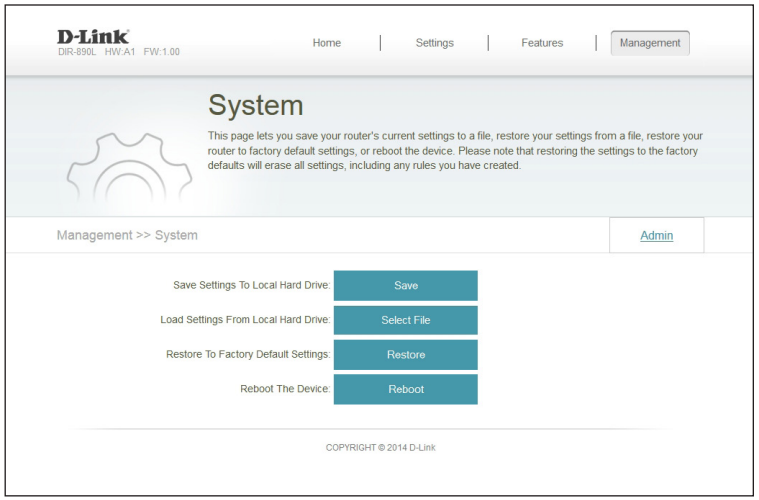


Save Settings To Local Hard Drive: Click **Save** to save the current router configuration settings to a file on your computer's hard drive.

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

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

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



Firmware Upgrade

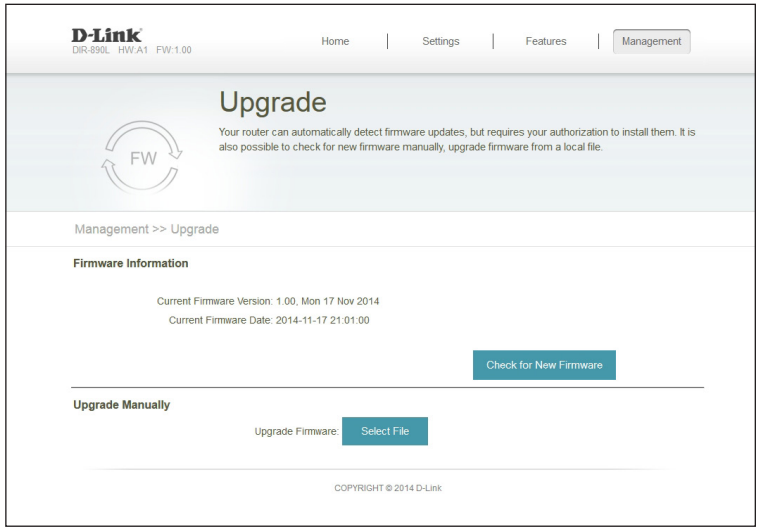
This page will allow you to upgrade the router's firmware, either automatically or manually. To manually upgrade the firmware, you must first download the file from **http://support.dlink.com**.

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

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

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

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



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

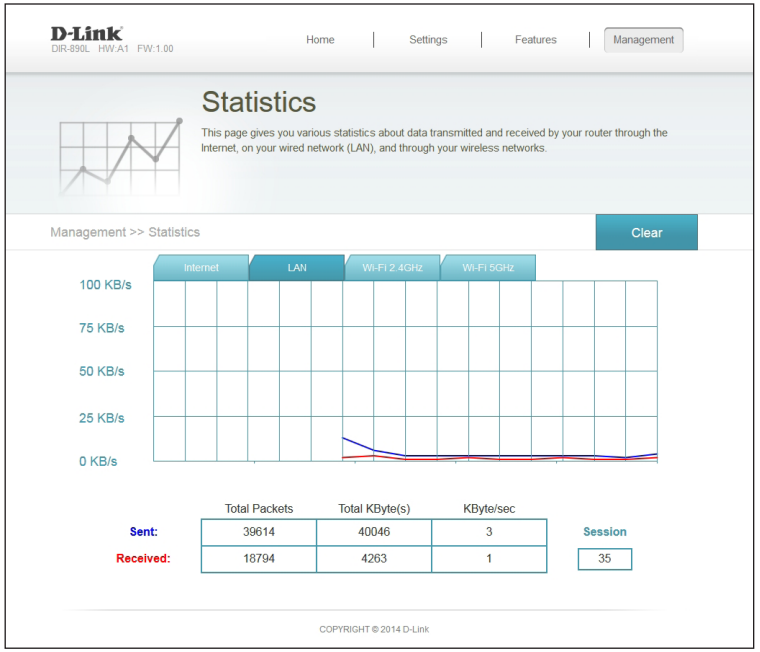
Statistics

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

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

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

The traffic counter will reset if the device is rebooted.



Using the mydlink SharePort™ App

The mydlink SharePort app is a mobile application that allows you to conveniently stream media and share files stored on a USB drive connected to your DIR-890L. Once the router is set up, you can start the app and easily connect from a local network or through the Internet to access your photos, videos, music, and documents. The SharePort app allows you to create your own personal cloud storage. You can upload files and photos from your mobile device to the removable storage via the app from anywhere in the world!

Note: *In order to ensure smooth streaming performance, you will need a minimum of 2 Mbit/s upload bandwidth for your router's Internet connection. Streaming performance will vary depending on the quality of your Internet connection.*

The mydlink SharePort™ App iOS Devices

The instructions that follow are for the mydlink SharePort app for iPad®, iPhone®, and iPod Touch®. Users of other types of devices may skip to "Using the mydlink SharePort™ app for Android™" on page 97, or go to "Using SharePort Mobile for Windows® 8/RT" on page 116.

1. If you are connecting remotely through the mydlink SharePort app from the Internet, you will need a **mydlink** account. (For more information, go to **www.mydlink.com**.)

2. Make sure the device is powered on. Then plug your USB drive into the USB port on the back of the router.

Note: *If you connect a USB drive containing many files or with a large capacity, it may take a while for the router to scan and catalog your files.*

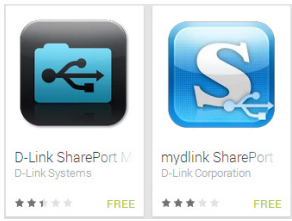


3. Use your iPhone, iPad or iPod Touch to search for and download the free **mydlink SharePort™** app from the App Store.

   If you have a QR code reader, you can scan the code to the right for **mydlink SharePort**.

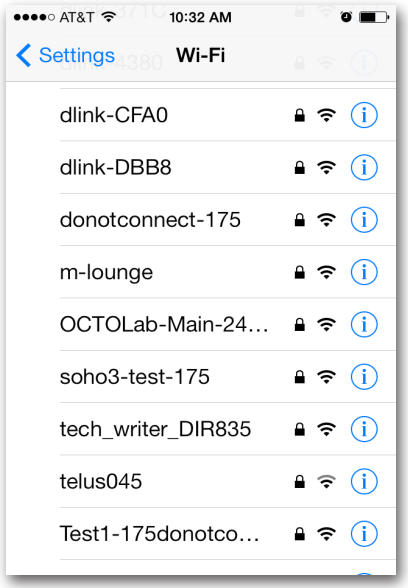


Note: *For remote access, you will need the* ***mydlink SharePort*** app. *The* ***SharePort Mobile*** *app is for local access only.*



4. On your mobile device, go to your Wi-Fi settings and connect to your router's wireless network using the default Wi-Fi settings. By default, your *Network Name* and *Password* are:

   - Wi-Fi Network Name (SSID): **dlink-XXXX***
   - Password: (leave this blank)



****Note:*** *For the 2.4GHz band, the SSID is dlink-XXXX, with XXXX representing the last four digits of your router's MAC address. For the 5GHz band, the SSID is dlink-XXXX-5GHz.*

5. Once connected, tap the **mydlink SharePort™** icon and the app will load.



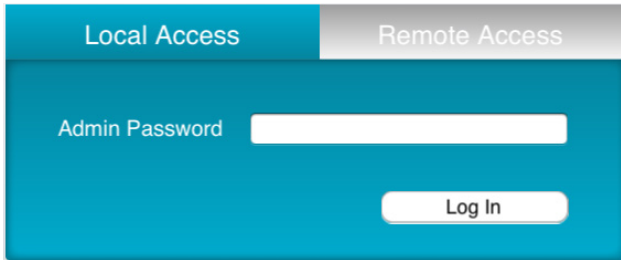
6. From the login page, you can tap **Help?** if you would like information about the two types of connections.

Local Access:
Local mode will connect you to storage on your current network. For example, if you are at home connecting to your router, choose this mode.

Remote Access:
Remote mode will connect you to storage on your router in a different location. For example, from your office connecting to your router at home.

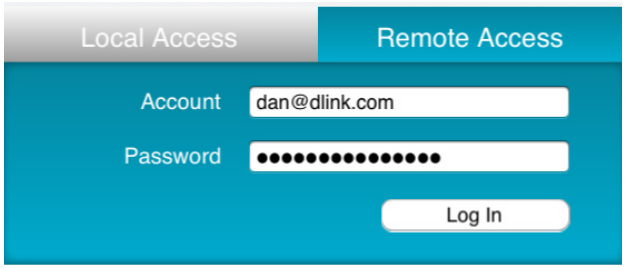


If you are directly connected to the DIR-890L's wireless network, tap **Local Access** and enter the Admin Password of your router, then tap **Log In.**



If you are connecting through the Internet tap **Remote Access** and enter your mydlink login information, then tap **Log In**. Tap on your router on the devices page that appears. You can now share your files.

Note: *If you are unsure about which connection method to choose, you can just click* ***Remote Access****.*



After logging in, select your router from the device list.



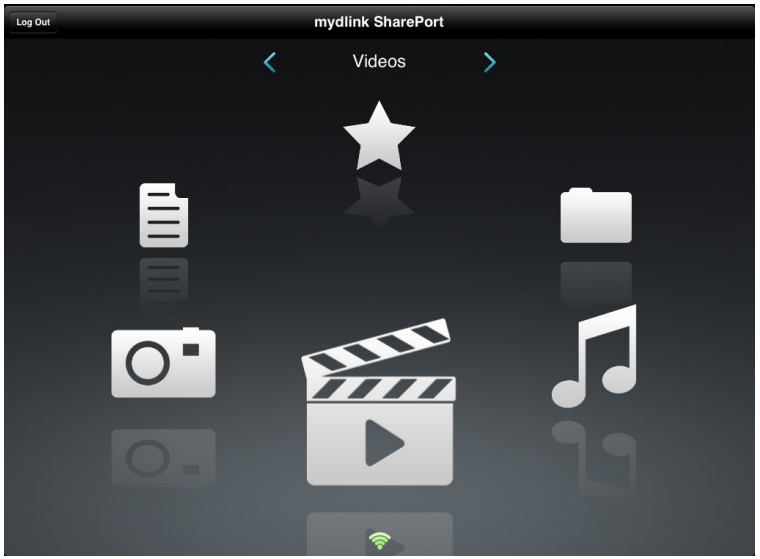
7. You can now use the mydlink SharePort app interface to stream media and access files stored on your removable drive. The wireless icon at the bottom of your screen will be lit blue to indicate a Local Access connection. It will be green to indicate you are connected to the router through Remote Access.



Note: *If you see a red wireless icon, your router's network environment may not be suitable for a direct network connection and you may experience slow network speeds.*

Main Menu

The mydlink SharePort main menu has different sections that allow you to view all the documents, photos, movies, or music stored on your USB drive. Tap < or >, or swipe left or right to move between the different sections. The Wi-Fi icon at the bottom indicates an active local network connection (blue) or remote connection (green/red). Tap **Log In** if it is not lit, or **Log Out** to return to the login page.





Tap on the **document** icon to view documents.



Tap the **camera** icon to view photos.



Tap on the **movie** icon to play videos.



Tap on the **music** icon to play audio files.



Tap on the **folder** icon to browse all files in a folder view.

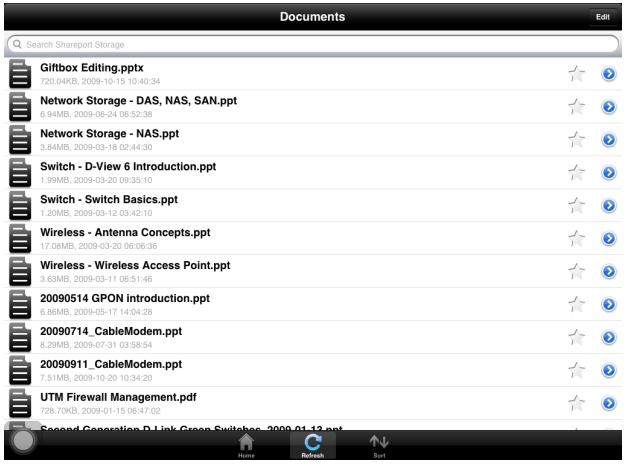


Tap on the **star** icon to access your favorite files.

Documents

The Documents section allows you to share, print, and view documents streamed from your DIR-890L to your mobile device. Tap the **document** icon on the main menu to browse the documents on your mobile device.





Search Bar: Enter a filename here to search your storage.



Tap **Edit** to mark files for deletion.



Tap the **star** icon next to each file to download it to your device and add it into your Favorites section.



Tapping the **arrow** icon gives you additional options:

- **Mail**: Tap to e-mail the file.
- **iCloud**: Tap to store the file on iCloud.
- **AirPrint**: Tap to print the file.
- **Open In...**: Tap to use a third-party app to open the file.

The bottom menu bar includes these options:



Tap **Home** to go back to the main menu.



Tap **Refresh** to update the list of files.



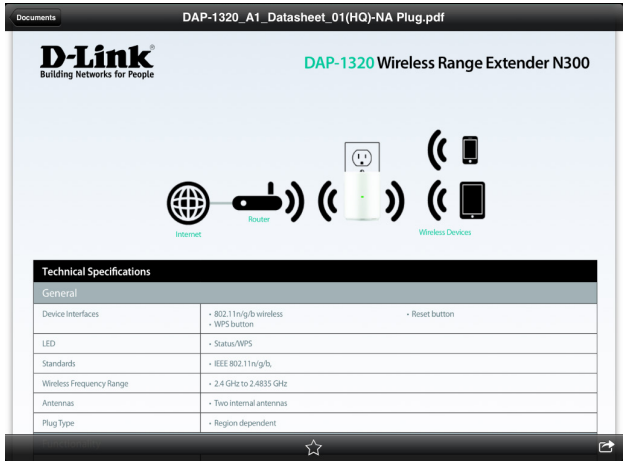
Tap **Sort** to reorder the files alphabetically.

Tap on a file to start the document viewer. In the viewer:

Tap to add/remove the file from your Favorites.

Tap to bring up the same options as (>) on the previous page.

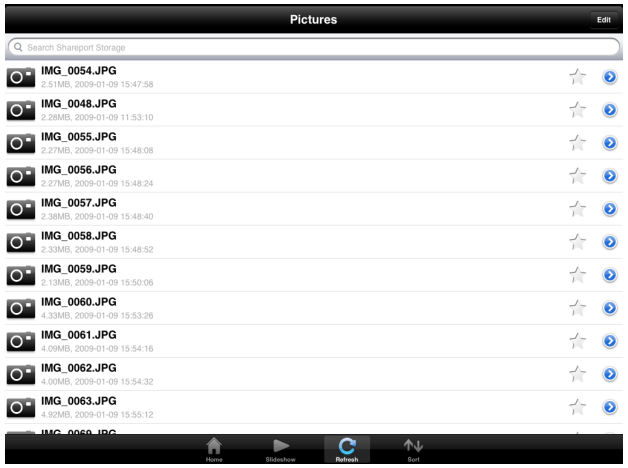
Note: *Some files may require a third-party app to view them.*



Pictures

The Pictures section allows you to stream images from your DIR-890L to your mobile device. Tap the **camera** icon on the main menu to browse your photo collection on your removable storage.





Search Bar: Enter a filename here to search your storage.

Edit Tap **Edit** to mark files for deletion.

Tap the **star** icon next to each file to download it to your device and add it into your Favorites section.

Tapping the **arrow** icon gives you these image options:

- **Mail**: Tap to e-mail the image.
- **iCloud**: Tap to store the image on iCloud.
- **AirPrint**: Tap to print the image.
- **Facebook:** Tap to upload the image to your Facebook account.
- **Twitter:** Tap to upload the image to your Twitter account.
- **Open In...**: Tap to use a third-party app to open the file.

The bottom menu bar includes these options:

Home Tap **Home** to go back to the main menu.

Slideshow Tap **Slideshow** to start a slideshow of your photos. Tap the screen again to bring up the menu.

Refresh Tap **Refresh** to update the list of files.

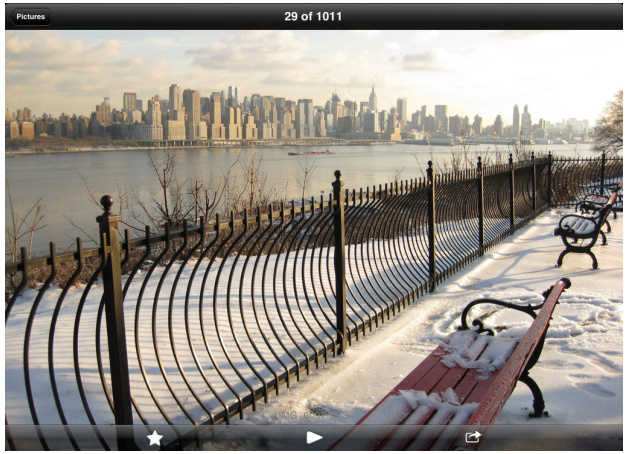
Sort Tap **Sort** to reorder the files alphabetically.

Tap on a file to start the photo viewer. In the viewer:

 Tap to add/remove the current image from your Favorites.

 Tap to start the slideshow.

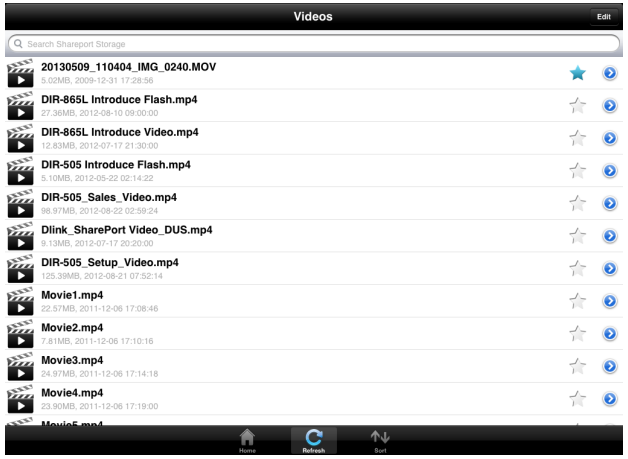
 Tap to bring up the same image options as (**>**) on the previous page.



Videos

The Videos section allows you to stream video clips and movies from your DIR-890L to your mobile device. Tap the **movie** icon on the main menu to browse your videos on your removable storage.





Search Bar: Enter a filename here to search for a specific file.

Edit — Tap **Edit** to mark files for deletion.

Tap the **star** icon next to a file to download it to your device and add it into your Favorites section.

Tapping the **arrow** icon gives you these additional options:

- **Mail**: Lets you e-mail the file.
- **iCloud**: Lets you store the file on iCloud.
- **Open In...**: Lets you use a third-party app to open the file.

The bottom menu bar includes these options:

Home — Tap **Home** to go back to the main menu.

Refresh — Tap **Refresh** to update the list of files.

Sort — Tap **Sort** to reorder the files alphabetically.

Tap on a file to start playing it. In the player:

Tap to play/pause the video. You can scroll to any time on the time line by holding and sliding your finger.

Tap to enter/exit full-screen mode.

Tap to add/remove the file from your Favorites.

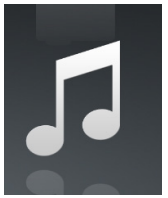
Tapping this icon gives you these additional options:

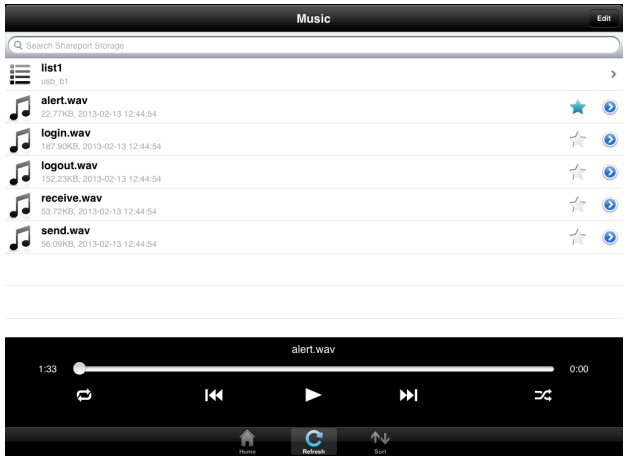
- **Mail**: Lets you e-mail the video.
- **iCloud**: Lets you store the video on iCloud.
- **Open In...**: Lets you use a third-party app to open the file.



Music

The Music section allows you to stream songs from your DIR-890L to your mobile device. Tap the **music** icon on the main menu to browse your music collection on your removable storage.





Search Bar: Enter a filename here to search your storage.

Edit — Tap **Edit** to create a playlist and mark files for deletion.

Tap the **star** icon next to each file to download it to your device and add it into your Favorites section.

Tapping the **arrow** icon gives you these additional options:

- **Mail**: Lets you e-mail the file.
- **iCloud**: Lets you store the file on iCloud.
- **Open In...**: Lets you use a third-party app to open the file.

The bottom menu bar includes these options:

Home — Tap **Home** to go back to the main menu.

Refresh — Tap **Refresh** to update the list of files.

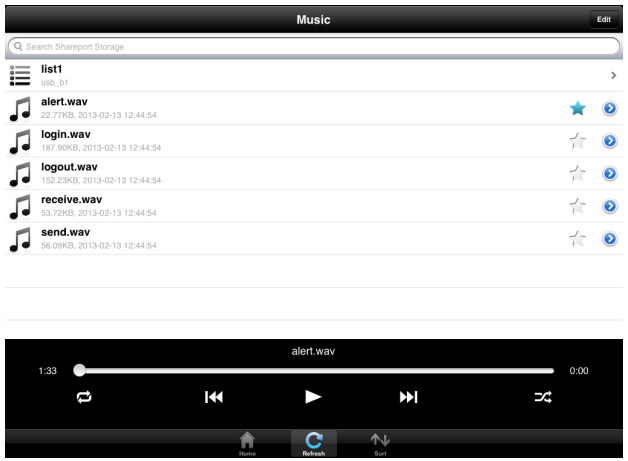
Sort — Tap **Sort** to reorder the files alphabetically.

Tap on a file to start playing it. In the player:

Tap to repeat all. Tap again to repeat a single song.

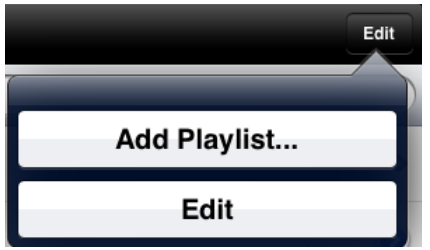
Tap to skip to the previous/next song.

Tap to enable/disable shuffle mode.

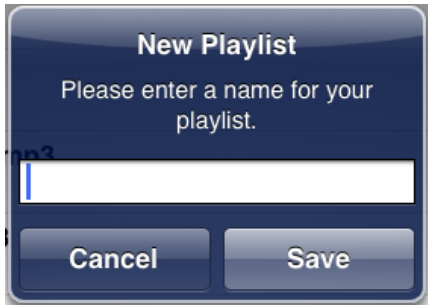


To create a playlist:

- Tap **Edit** > **Add Playlist**. The *New Playlist* window will open.



- Enter a name for the playlist, then tap **Save.**



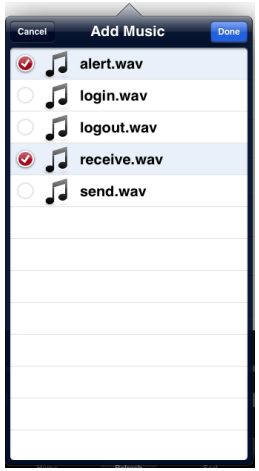
- The name of the playlist will appear in the browser next to the icon.

To add songs to a playlist:

- Tap the **playlist** in the browser.
- Tap **Add Music...** to add songs to the current playlist.
- Tap to the left of the file names to add check marks for the songs you would like to add.
- Tap **Done**. The playlist will be saved.

To delete songs from the playlist:

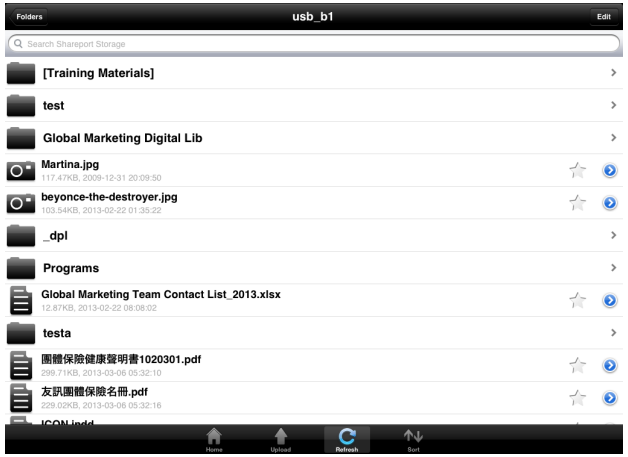
- Tap **Edit** in the playlist browser and mark the files to be deleted.
- Tap **Delete**.



Folders

You can view the contents of your USB drive, using a folder view in the folders section. Tap the **filename** to open the viewer/player for that file type as described in the previous pages. You can also upload files from your mobile device to the USB drive attached to your router.





Search Bar: Enter a filename here to search your storage.

Edit — Tap **Edit** to take you to the editing screen where you can add a folder and mark files for deletion or copying.

Tap the **star** icon next to each file to download it to your device and add it into your Favorites section.

Tapping the **arrow** icon gives you additional options depending on the file type.

The bottom menu bar includes these options:

Home — Tap **Home** to go back to the main menu.

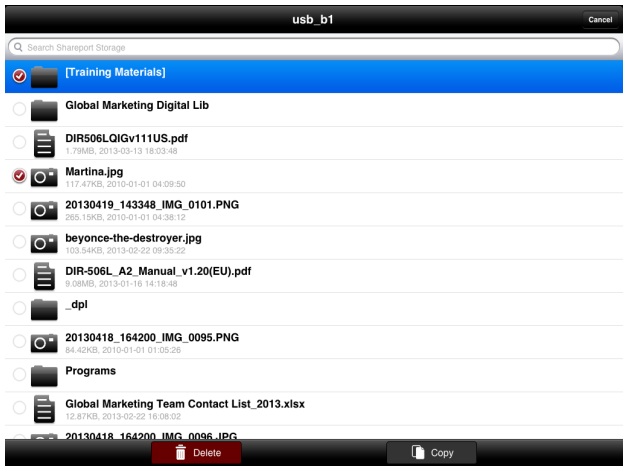
Upload — Tap **Upload** to upload files from your device to your removable storage.

Refresh — Tap **Refresh** to update the list of files.

Sort — Tap **Sort** to reorder the files alphabetically.

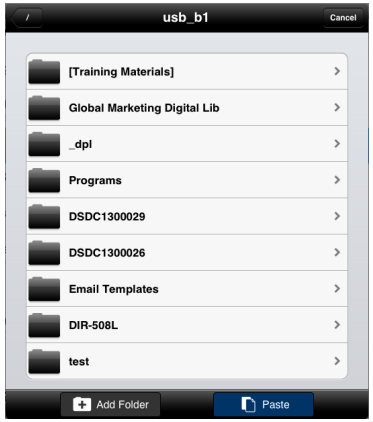
To delete files:

- Tap **Edit** at the top right.
- Tap to the left of the file icon to mark it for deletion.
- Tap on **Delete** at the bottom to delete the file.



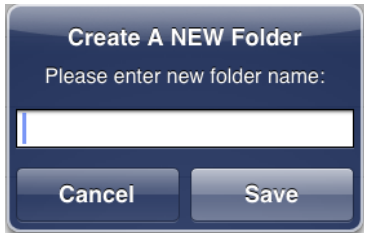
To copy files:

- Tap on **Copy** to bring up a window where you can select the folder to copy to.
- Browse to the directory you want to copy the marked files to and tap **Paste**.
- You can also tap **Add Folder** to create a new folder.



To create a new folder:

- Browse to the directory you wish to create a new folder in.
- Tap **Edit** at the top right.
- Tap **Add Folder** to add a new folder.
- Enter the **Name** of the new folder, then tap **Save**.
- Tap **OK** to confirm folder creation.



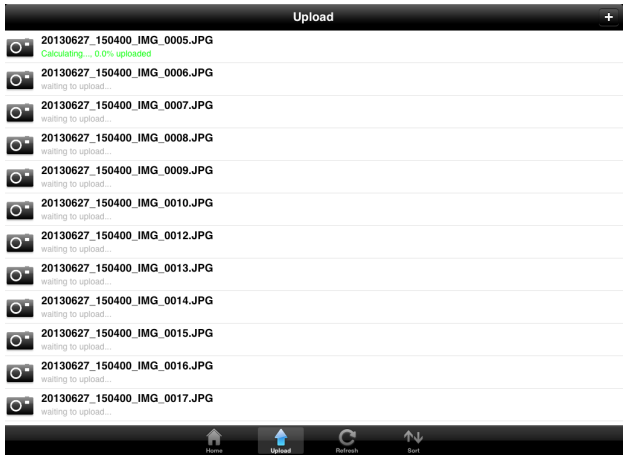
To upload images and videos from your mobile device:

- Browse to the folder you wish to upload to.
- Tap **Upload** at the bottom.
- Tap to select the photos or videos you wish to upload.
- Tap **Done**.



During the upload process, the size of the file and the upload progress will be displayed.

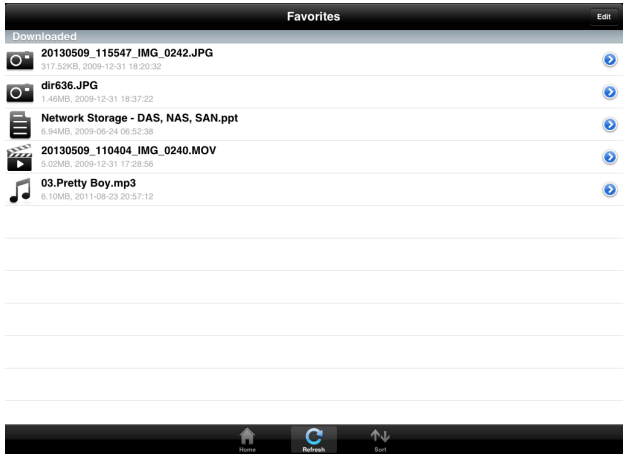
To upload more files, tap the **+** icon at the top right and repeat the steps listed above.



Favorites

The Favorites section allows you to quickly access your most frequently used files, no matter what file type, in a special section. Files added to the Favorites section will be copied here for playback in a centralized location.







Tap **Edit** to mark files for deletion from the local storage in Favorites. The file will still be accessible in other mydlink SharePort sections.



Tapping the **arrow** icon gives you additional options depending on the file type.

The bottom menu bar includes these options:



Tap **Home** to go back to the main menu.



Tap **Refresh** to update the list of files.



Tap **Sort** to reorder the files alphabetically.

Tap on a file to start the file viewer. In the viewer:



Tap to add/remove the file from your Favorites.



Tap to bring up additional options.

Note: *The file options available will vary depending on the file type.*

Using the mydlink SharePort™ app for Android™

The mydlink SharePort™ app is a mobile application that allows you to conveniently stream media and share files stored on a USB drive connected to your DIR-890L. Once the router is set up, you can start the app and easily connect from a local network or through the Internet to access your photos, videos, music, and documents. The SharePort app allows you to create your own personal cloud storage. You can upload files and photos from your mobile device to the removable storage via the app from anywhere in the world!

Note: *In order to ensure smooth streaming performance, you will need a minimum of 2 Mbit/s upload bandwidth for your router's Internet connection. Streaming performance will vary depending on the quality of your Internet connection.*

The instructions that follow are for the mydlink SharePort app for Android devices. For Windows devices, refer to "Using SharePort Mobile for Windows® 8/RT" on page 116. For the mydlink SharePort app for iPad®, iPhone®, and iPod Touch®, refer to "The mydlink SharePort™ App iOS Devices" on page 79.

If you are connecting remotely through the mydlink SharePort™ app from the Internet, you will need a **mydlink** account. For more information, go to **www.mydlink.com**.)

Make sure the device is powered on. Then plug your USB drive into the USB port of the device.

Note: *If you connect a USB drive containing many files or with a large capacity, it may take a while for the router to scan and catalog your files.*

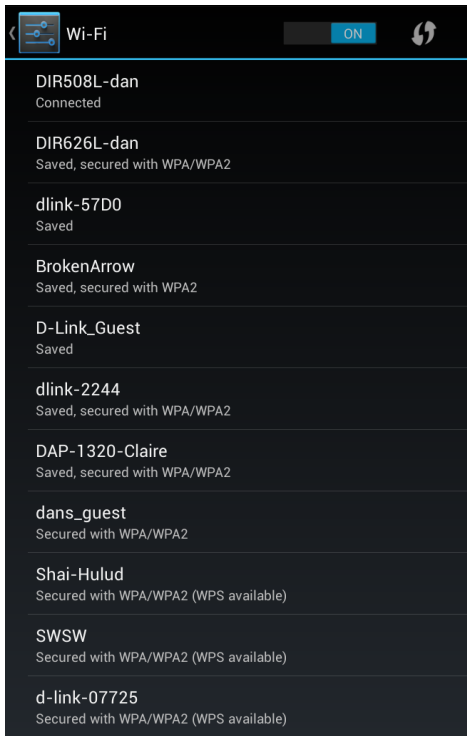


Use your Android mobile device to search for and download the free **mydlink SharePort** app from Google Play™.

If you have a QR code reader, you can scan the code to the right for **mydlink SharePort**.

On your mobile device, go to your Wi-Fi settings and connect to your router's wireless network using the default Wi-Fi settings. By default, your *Network Name* and *Password* are:

- Wi-Fi Network Name (SSID): **dlink-XXXX***
- Password: (leave this blank)



*__Note:__ *For the 2.4GHz band, the SSID is dlink-XXXX, with XXXX representing the last four digits of your router's MAC address. For the 5GHz band, the SSID is dlink-XXXX-5GHz.*

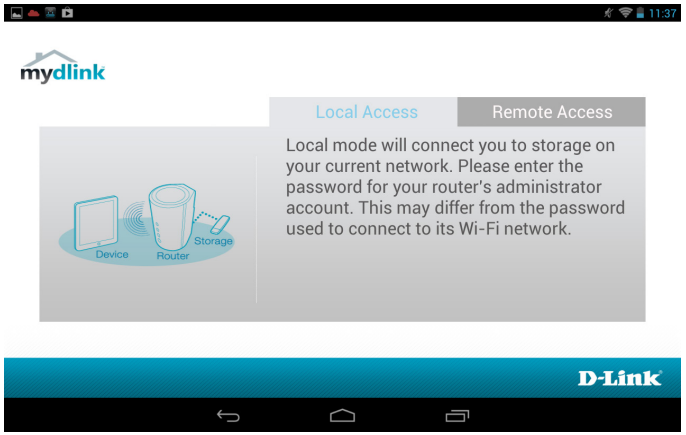
Once connected, tap the **mydlink SharePort** icon, and the app will load.



At the login page, tap **?** if you would like to see descriptions of the two types of available connections.

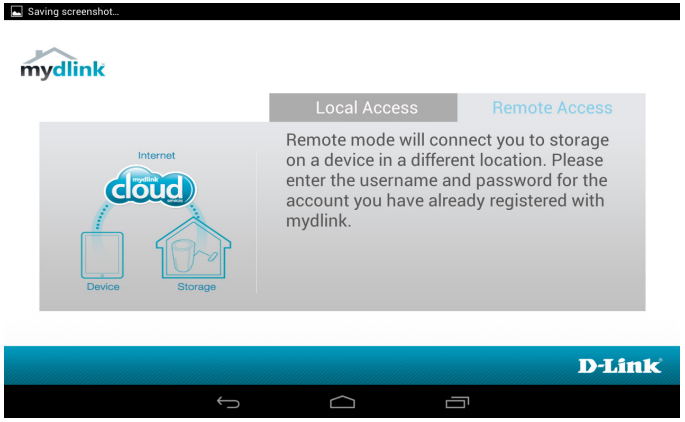
Local Access:

Local mode will connect you to storage on your current network. For example, if you are at home connecting to your router, choose this mode.

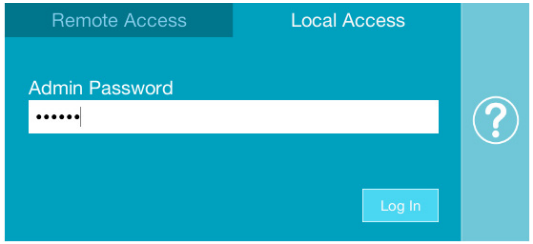


Remote Access:

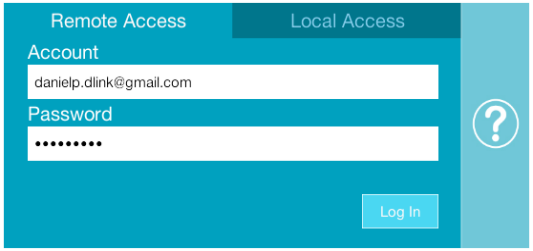
Remote mode will connect you to storage on your router in a different location. For example, you are at your office connecting to your router at home.



If you are directly connected to the DIR-890L's wireless network, tap **Local Access** and enter the **Admin Password** of your router, then tap **Log In.**



If you are connecting through the Internet tap **Remote Access** and enter your mydlink login information, then tap **Log In**. Tap on your router on the devices page that appears. You can now share your files.



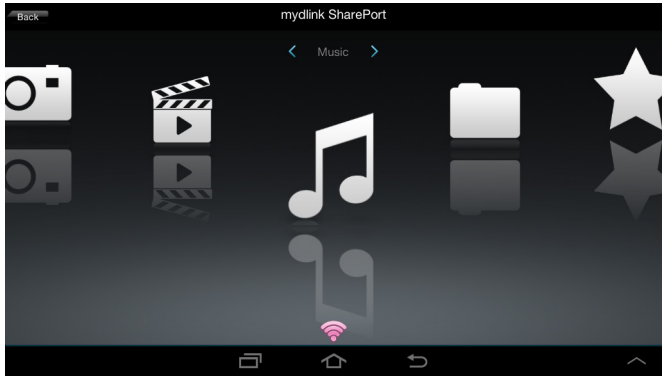
After logging in, select your router from the device list.



You can use the mydlink SharePort app interface to stream media and access files stored on your USB drive.

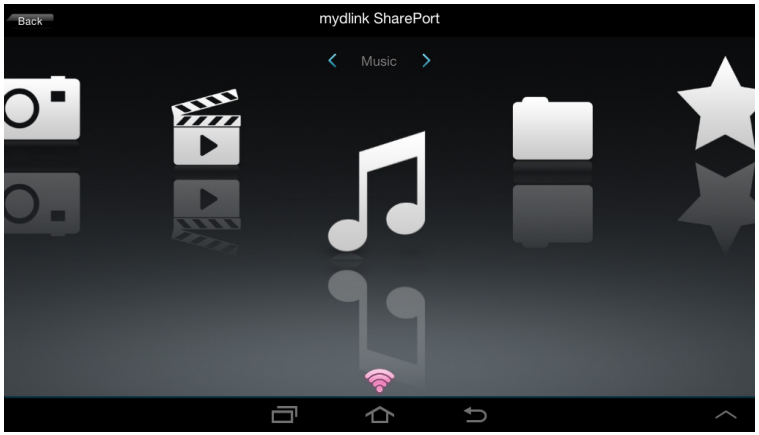
When the wireless icon at the bottom is lit blue, it indicates you have a good Local Access connection. When it is lit green, it indicates that you have a good Remote Access connection.

Note: *If you see a red wireless icon, your router's network environment may not be suitable for a direct network connection and you may experience slow network speeds.*



Main Menu

The mydlink SharePort main menu has different sections that allow you view all the documents, photos, movies, or music stored on your USB drive. Tap < or >, or swipe left or right to move between the different sections. The Wi-Fi icon at the bottom indicates an active local network connection (blue) or remote connection (green/red). Tap **Log In** if it is not lit, or **Log Out** to return to the login page.





Tap on the **document** icon to view documents.



Tap the **camera** icon to view photos.



Tap on the **movie** icon to play videos.



Tap on the **music** icon to play audio files.



Tap on the **folder** icon to browse files in a folder view.



Tap on the **star** icon to access your favorite files.

Note: *Available features may differ depending on the Android OS version of your device.*

Documents

The Documents section allows you to share, print, and view documents streamed from your DIR-890L to your mobile device. Tap the **document** icon on the main menu to browse the files on your mobile device.

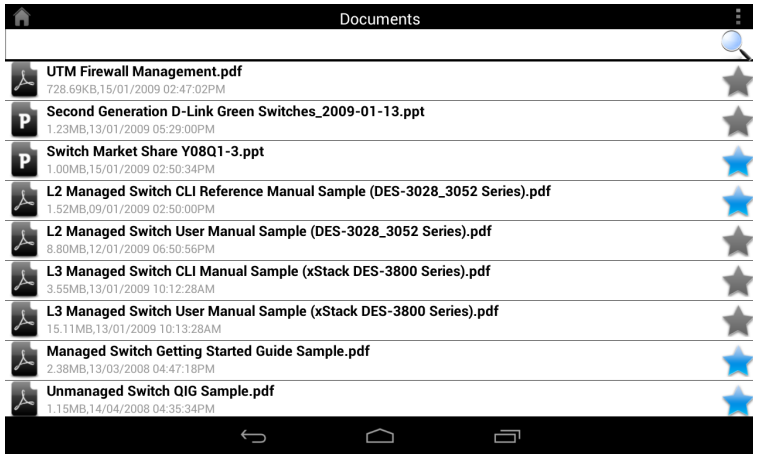


Search Bar: Type in the name of a file to search for it.

Tap the icon to return to the main menu.

Tap the icon to refresh, sort, or mark files for deletion.

Tap the star icon next to each file to download it to your device and add it into your Favorites section.



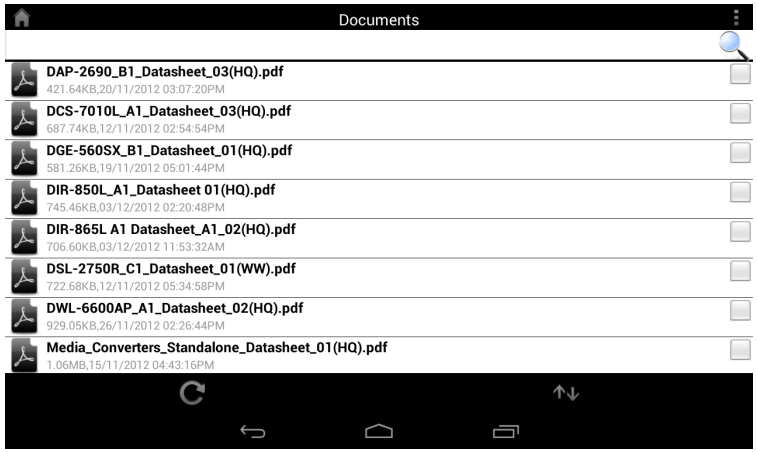
Tap for additional options:

Tap the icon to return to the main menu.

Tap the icon to update the list of files.

Tap the icon to sort the files by name, size, type, or date.

Tap the check box to check a file, then tap trash icon to delete it.



Tap on a file to start the document viewer. In the viewer:

- Tap the screen to bring up zoom in/out buttons.
- Drag the screen up or down to scroll between pages.
- Tap ⋮ to perform File, Find, Zoom, Reading View, Go to Page, and Bookmarks actions.

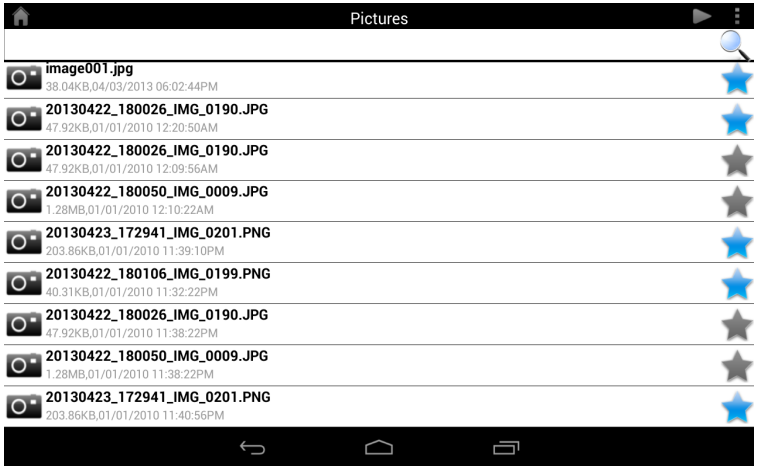
Note: *Available actions may differ depending on your Android OS*.



Pictures

The Pictures section allows you to view images streamed from your DIR-890L to your mobile device. Tap the **camera** icon on the main menu to browse your photo collection on your removable storage.





Search Bar: Type in the name of a file to search for it.

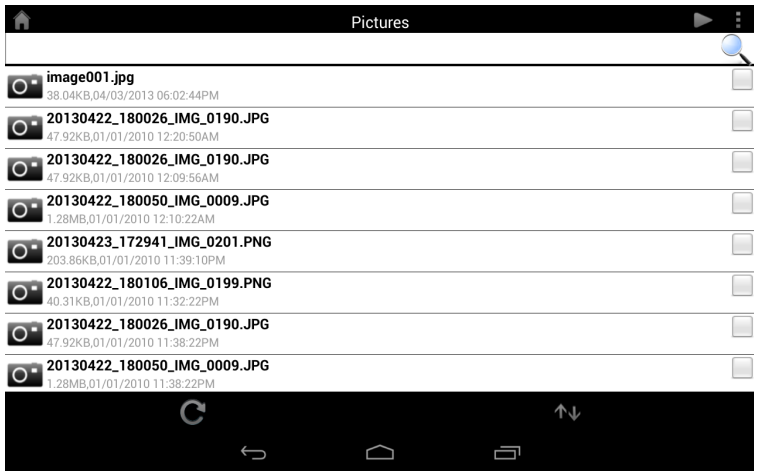
Tap the icon to return to the main menu.

Tap the icon to start a slideshow.

Tap the icon to refresh, sort, or mark files for deletion.

Tap the star icon next to each file to download it to your device and add it into your Favorites section.

Tap for additional options:



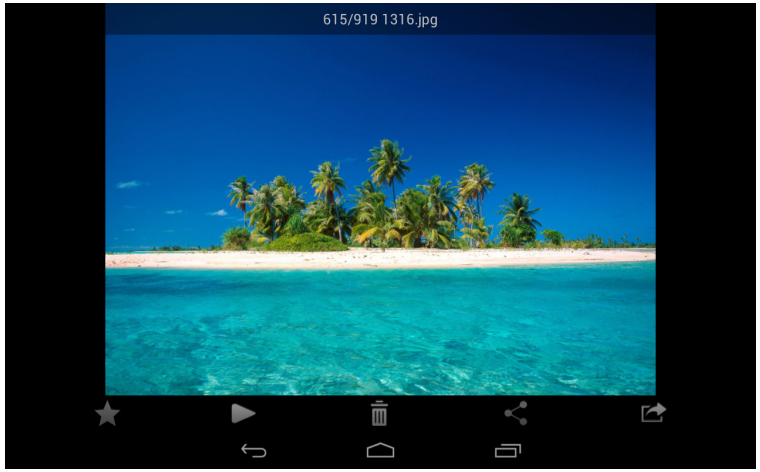
Tap the icon to return to the main menu.

Tap the icon to update the list of files.

Tap the icon to sort the files by name, size, type, or date.

Tap the check box to check a file, then tap the trash icon to delete it.

Tap on an image file to start the image viewer. In the viewer:



- Tap the star icon to download it to your device and add it into your Favorites section.
- Tap the icon to start a slideshow. Tap the image to stop the slideshow.
- Tap the icon to delete the current image. Tap **OK** to confirm.
- Tap the icon to bring up additional options using other applications.
- Tap the icon to access the image editor.

Note: *This function may vary depending on the version of your Android OS.*

Videos

The Videos section allows you to stream video clips and movies from your DIR-890L to your mobile device. Tap the **movie** icon on the main menu to browse your videos on your removable storage.



Search Bar: Type in the name of a file to search for it.

Tap the icon to return to the main menu.

Tap the icon to refresh, sort, or mark files for deletion.

Tap the star icon next to a file to download it to your device and add it into your Favorites section.



Tap for additional options:

Tap the icon to return to the main menu.

Tap the icon to update the list of files.

Tap the icon to sort the files by name, size, type, or date.

Tap the check box to check a file, then tap the trash icon to delete it.

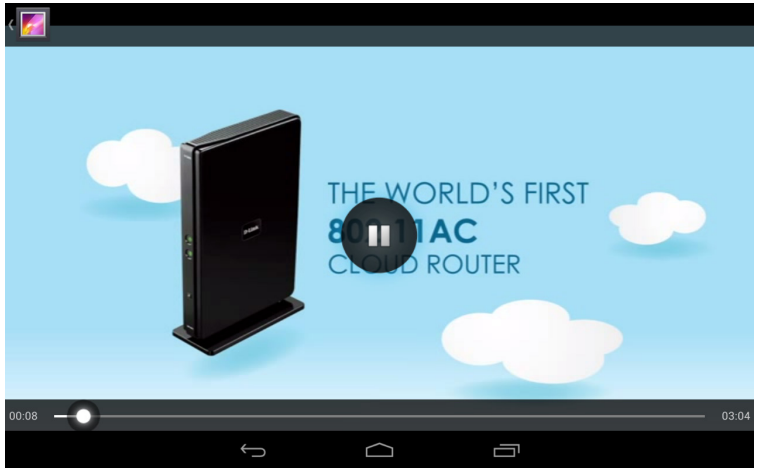


Tap on a file to start playing it. Tap on the screen to bring up the scroll bar, pause button, and play button.

Tap to resume playback.

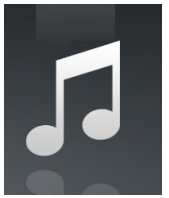
Tap to pause the video.

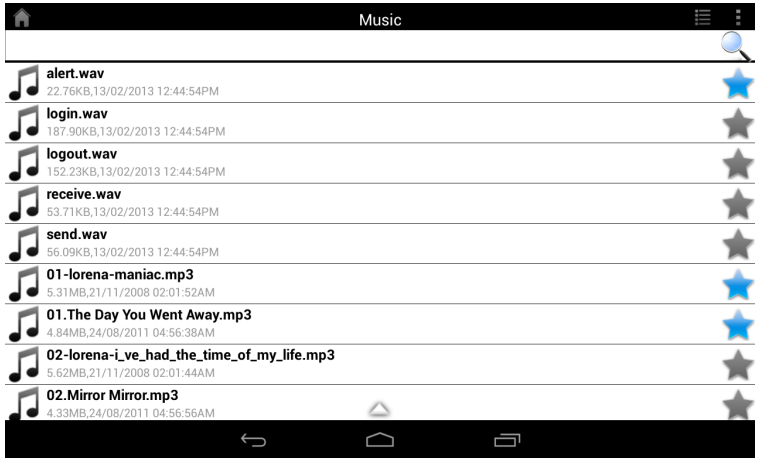
Note: *Available features may vary depending on the Android OS version installed on your device.*



Music

The Music section allows you to stream songs from your DIR-890L to your mobile device. Tap the **music** icon on the main menu to browse your music collection on your removable storage.





Search Bar: Type in the name of a file to search for it.

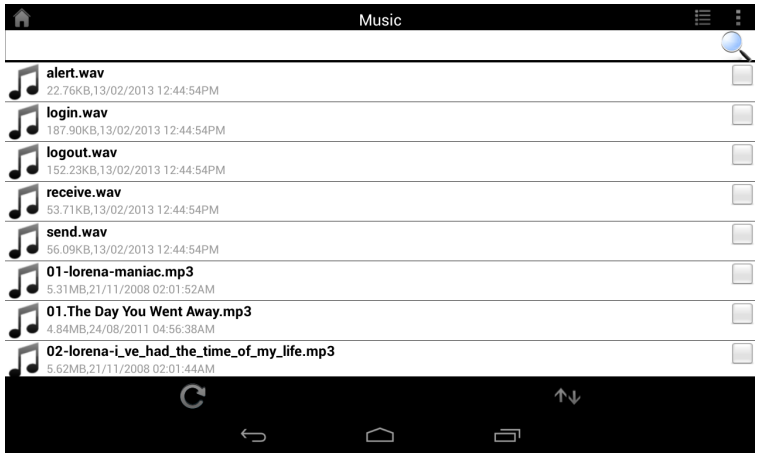
Tap the icon to return to the main menu.

Tap the icon to refresh, sort, or mark files for deletion.

Tap the icon to browse your playlists.

Tap the star icon next to a file to download it to your device and add it into your Favorites section.

Tap for additional options:



Tap the icon to return to the main menu.

Tap the icon to update the list of files.

Tap the icon to sort the files by name, size, type, or date.

Tap the check box to check a file, then tap the trash icon to delete it.

Tap on a file to start playing it. In the player:

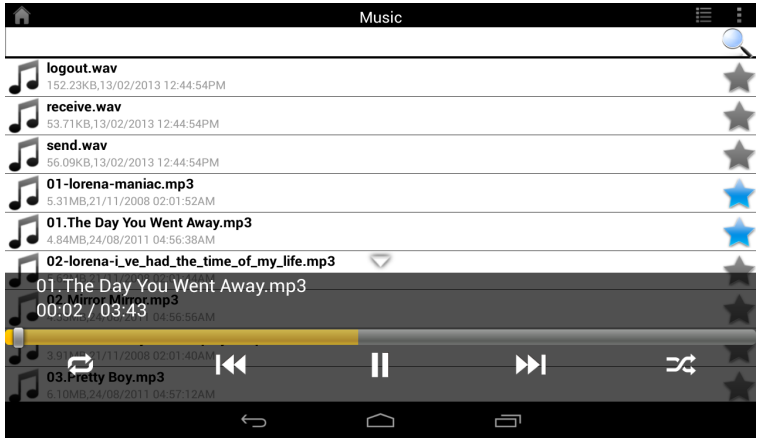
Tap on the up/down arrow to show/hide the player controls.

Tap to repeat all. Tap again to repeat a single song.

Tap to skip to the previous/next song.

Tap to play or pause the song.

Tap to enable/disable shuffle mode.



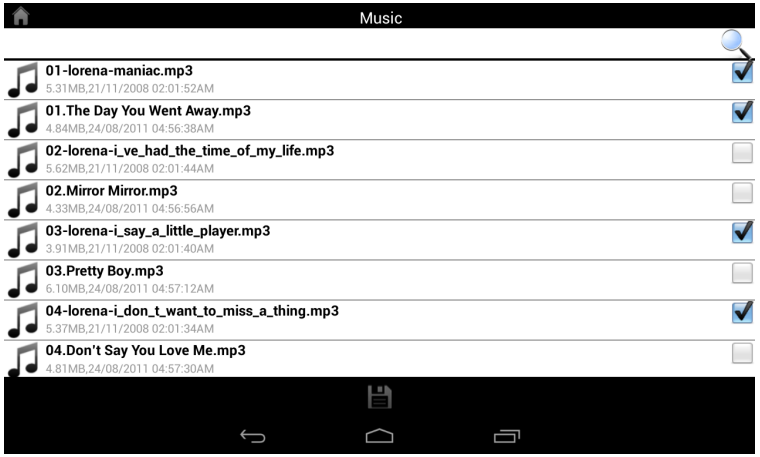
To create a playlist:

- Tap
- Tap **Add new playlist...**
- Enter a name for the playlist, then tap **OK**. The name of the playlist will appear in the browser next to the icon.
- You can tap then to refresh the playlist page.



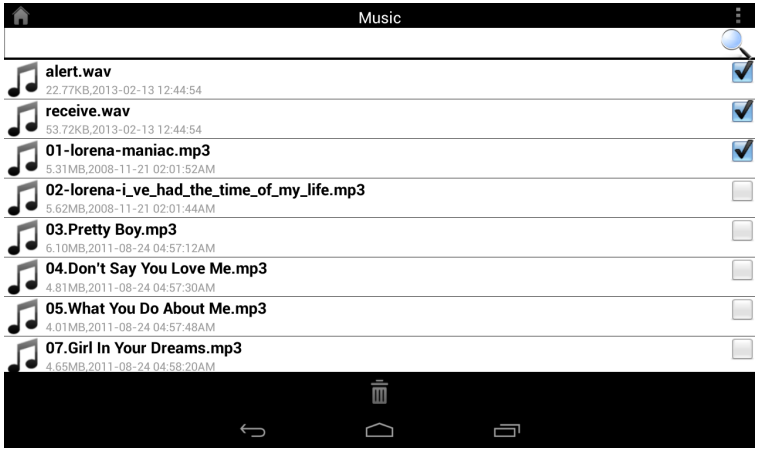
To add songs to a playlist:

- Tap a playlist to see its contents.
- Tap **Add Music...** to add songs to the current playlist.
- Tap the check boxes by the songs you wish to add, and tap  to save.



To delete songs from the playlist:

- Tap **Edit** in the playlist browser and tap the check boxes by the files you would like to delete.
- Tap  then tap **OK** to confirm.

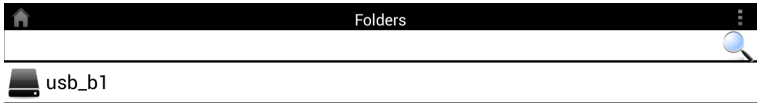


Folders

You can view the contents of your USB drive, using a folder view in the folders section. Tap the **filename** to open the viewer/player for that file type as described in the previous pages. You can also upload files from your mobile device to the USB drive attached to your router.



Search Bar: Type in the name of a file to search for it.

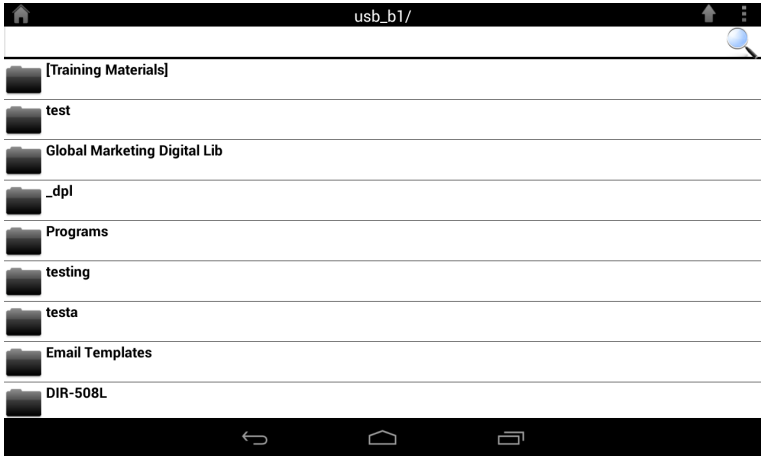


Tap the icon to return to the main menu.

Tap the icon to access file options.



In the file browser:



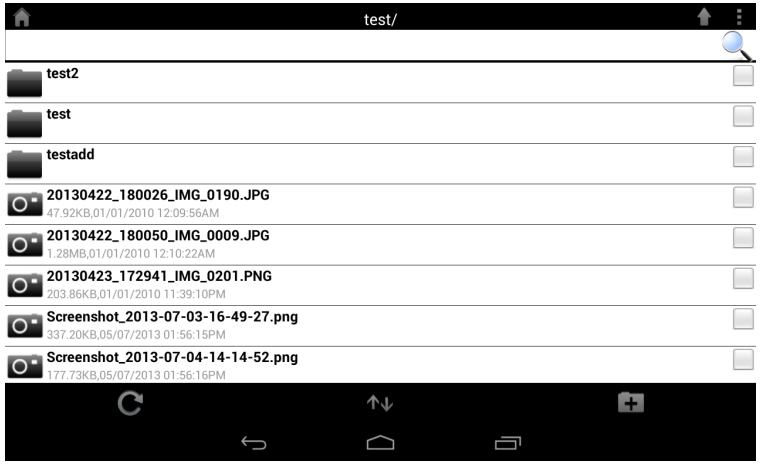
Tap the icon to return to the main menu.

Tap the icon to upload files.

Tap the icon to refresh, sort, create a new folder, or mark files for deletion and copying. (See the list beginning on the next page for details.)

Tap to select files and perform the following actions:

- Tap the icon to update the list of files.
- Tap the icon to sort the files by name, size, type, or date.
- Tap the icon to create a new folder.
- Tap the check box to check a file, then tap this icon to delete it.
- Tap the check box to check a file, then tap this icon to copy it.

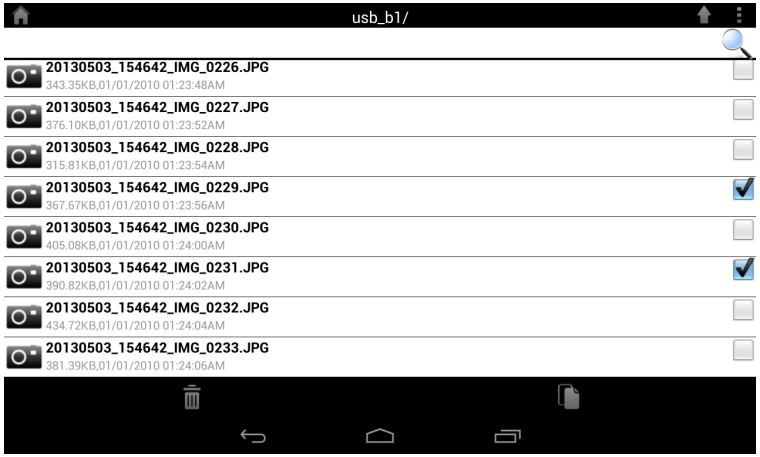


To delete files:

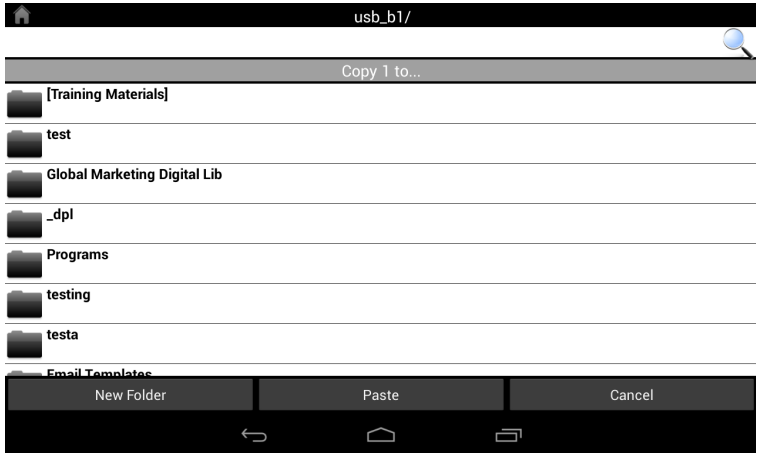
- Tap on and tap the check box next to a file to be deleted.
- Tap on to delete selected files. Tap **OK** to confirm.

To copy files:

- Tap on to select files for copying. Tap the check box next to each file to be copied.
- Tap on to browse for a destination folder for the copies of the files.

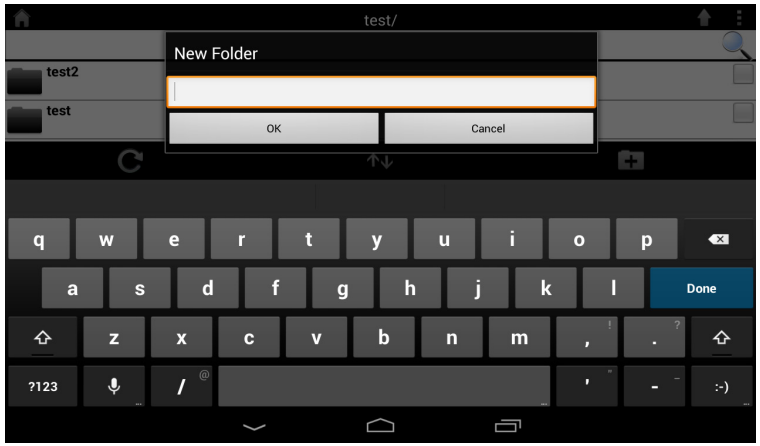


- You have the option to **Paste** to the copy to a destination folder or **Cancel.**
- You may also tap **New Folder** if you wish to create a new destination folder in the current directory.



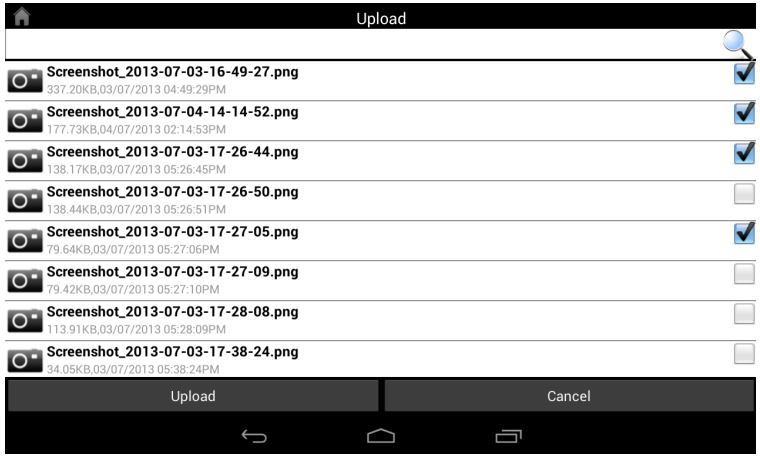
To create a new folder:

- Browse to the directory you wish to create a new folder in.
- Tap  then  .
- Enter the **Name** of the folder in the box, then tap **OK.**



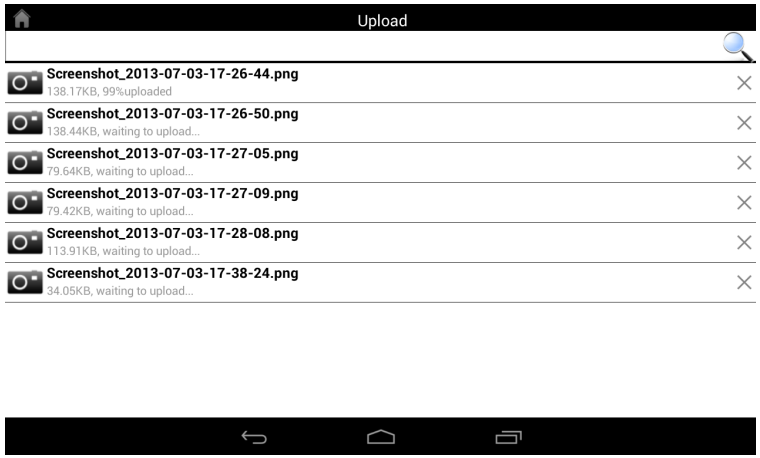
To upload images and videos from your mobile device:

- Browse to the folder you wish to upload to.
- Tap and browse to the file or files you wish to upload from the local device.
- Tap the check box next to each of the files you wish to upload.
- Tap **Upload**.



During the upload process, the size of the file and the upload progress will be displayed under the file name.

- To remove a file from the upload queue, tap the **X** at the end of the row.



Favorites

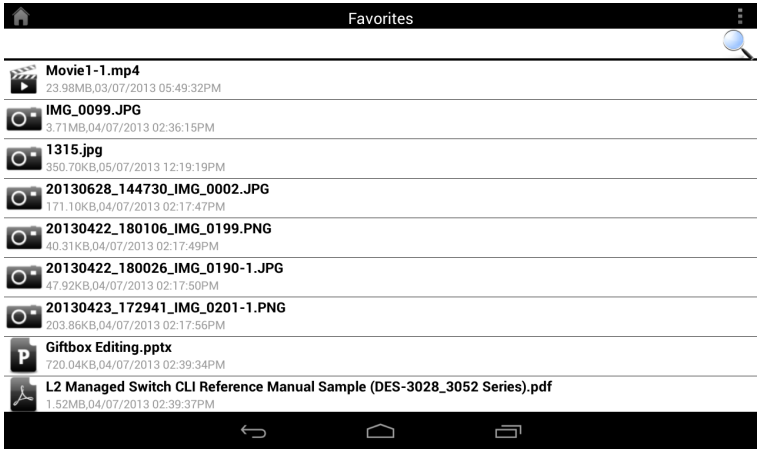
The Favorites section allows you to quickly access your most frequently used files, no matter what file type, in a special section. Files added to the Favorites section will be copied here for playback in a centralized location.



Search Bar: Type in the name of a file to search for it.

Tap the icon to return to the main menu.

Tap the icon to refresh, sort, or mark files for deletion.



Tap for additional options:

Tap the icon to return to the main menu.

Tap the icon to update the list of files.

Tap the icon to sort the files by name, size, type, or date.

Tap the check box to check a file, then tap the trash icon to delete it.

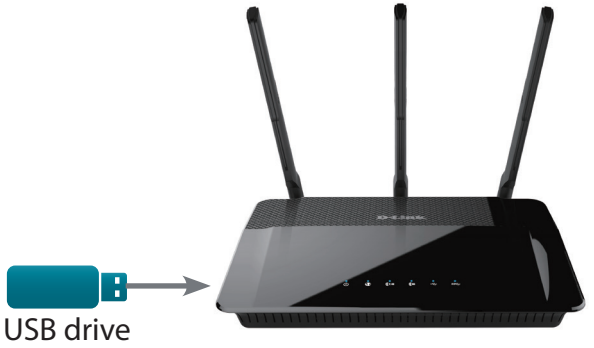


Using SharePort Mobile for Windows® 8/RT

The *SharePort Mobile* app allows you to conveniently stream media and share files stored on a USB drive connected to your router. Connect from a local network to access your photos, videos, music, and documents. You can upload files and photos from your mobile device to your router's USB drive via the app wirelessly!

1. Make sure the DIR-890L is powered on. Then plug your USB drive into the USB port on the back of your router.

Note: *If you connect a USB drive that contains numerous large files, it may take a while for the router to scan and catalog all of your files.*



2. Use your Windows 8/RT mobile device to search for the free *SharePort Mobile* app from the Windows Store.

3. On your mobile device, go to your Wi-Fi settings and connect to your router's wireless network using the default Wi-Fi settings. By default, your *Network Name* and *Password* are:

    - Wi-Fi Network Name (SSID): **dlink-XXXX***
    - Password: (leave this blank)

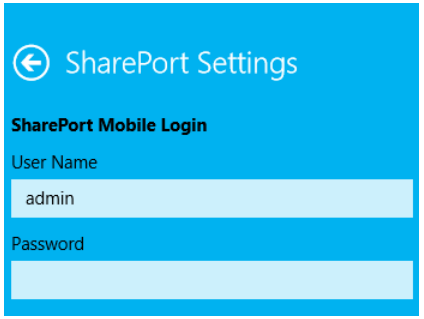


Note: *For the 2.4GHz band, the SSID is dlink-XXXX, with XXXX representing the last four digits of your router's MAC address. For the 5GHz band, the SSID is dlink-XXXX-5GHz.*

4. Once connected, tap the **SharePort Mobile** icon, and the app will download.



5. At the main menu, if you see any greyed out icons, swipe the right edge of the screen to bring up **Settings**. Then tap **SharePort Settings** and enter your admin **Password**. Tap on the back icon **(<)** to exit settings and log in.



6. You will see the *SharePort Mobile* main menu.



Main Menu

The SharePort Mobile main menu contains icons representing the file categories. Tap an icon to access your files by type. In each section, you can tap at any time to go back.



Tap on the **document** icon to view documents.



Tap the **camera** icon to view pictures.



Tap on the **movie** icon to play videos.



Tap on the **music** icon to play audio files.



Tap on the **folder** icon to browse all files in a folder.



Tap on the **star** icon to access your favorite files.

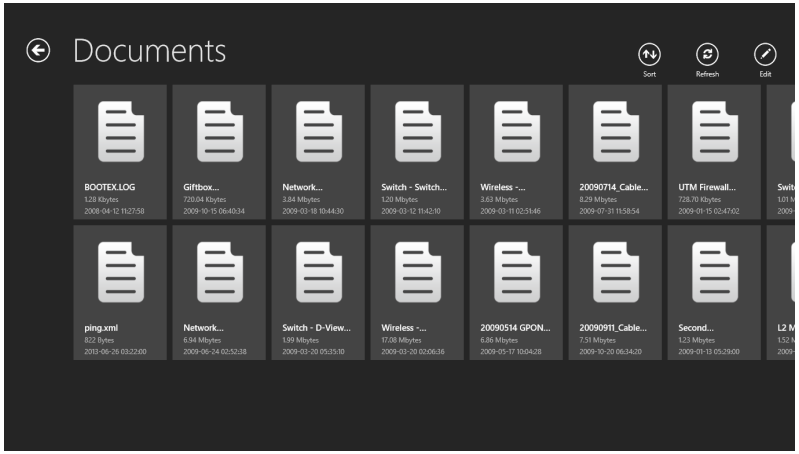


Documents

The Documents section allows you to share, print, and view documents streamed from your DIR-890L to your mobile device. Tap the **document** icon on the main menu to browse the documents stored on your USB drive.



In the *Documents* browser, tap the **document** to open it with a third-party application.





Tap **Sort** to sort files by...

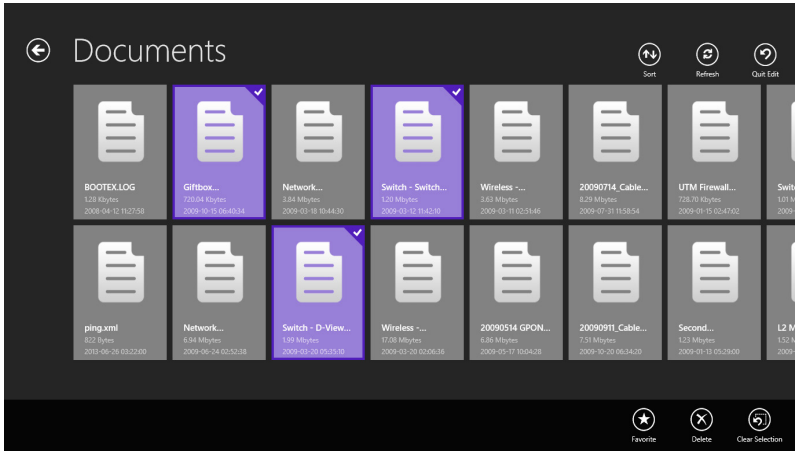


Tap **Refresh** to refresh the list of files.



Tap **Edit** to add files to *Favorite* or delete files. (See below list.)

Tap **Edit** and select one or more files for the following options:





Tap **Quit Edit** to leave the editing screen.



Tap **Favorite** to add the file to *Favorite* and download it to your local device.



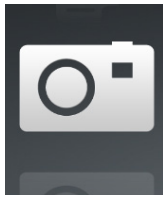
Tap **Delete** to delete the selected file or files.



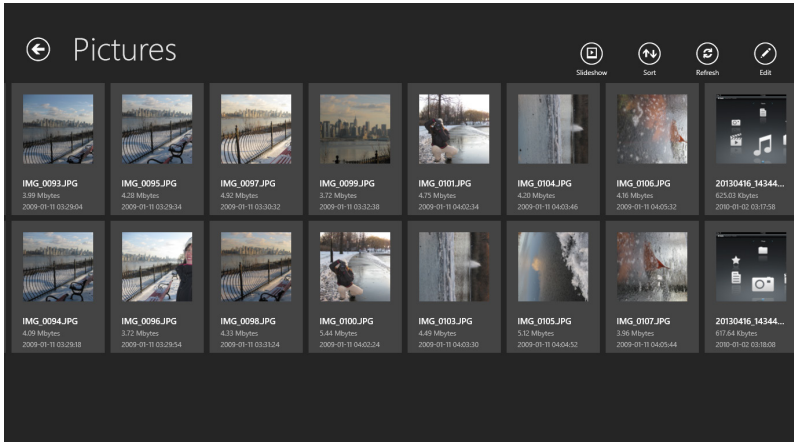
Tap **Clear Selection** to deselect all selected files.

Pictures

The Pictures section allows you to stream images from your DIR-890L to your mobile device. Tap the **camera** icon on the main menu to browse your photo collection stored on your USB drive.

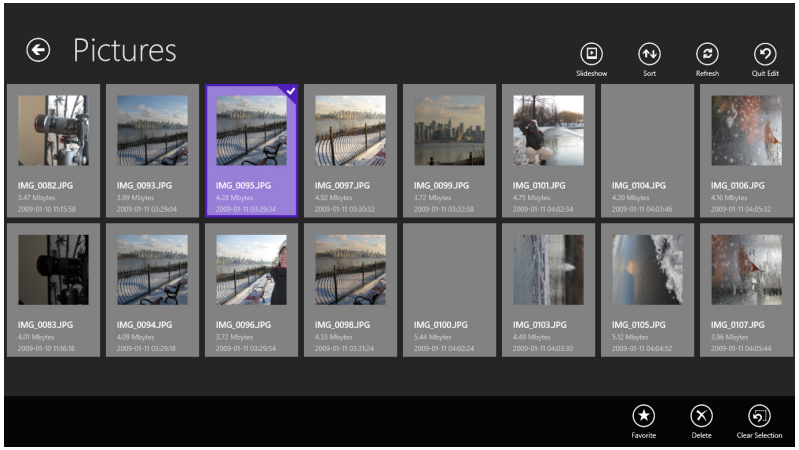


In the image browser, tap the image to open it.



- Tap **Slideshow** to start a slideshow of your images.
- Tap **Sort** to sort files by....
- Tap **Refresh** to refresh the list of files.
- Tap **Edit** to add files to *Favorite* or delete files. (See below list.)

Tap **Edit** and select one or more files for the following options:



- Tap **Quit Edit** to leave the editing screen.
- Tap **Favorite** to add the file to Favorite and download it to your local device.
- Tap **Delete** to delete the selected file or files.
- Tap **Clear Selection** to deselect all selected files.

In the image viewer:



Tap **Slideshow** to start a slideshow of your images.



Tap **Edit** to open, mark as *Favorite*, or delete the image. (See list below.)

After tapping **Edit**:



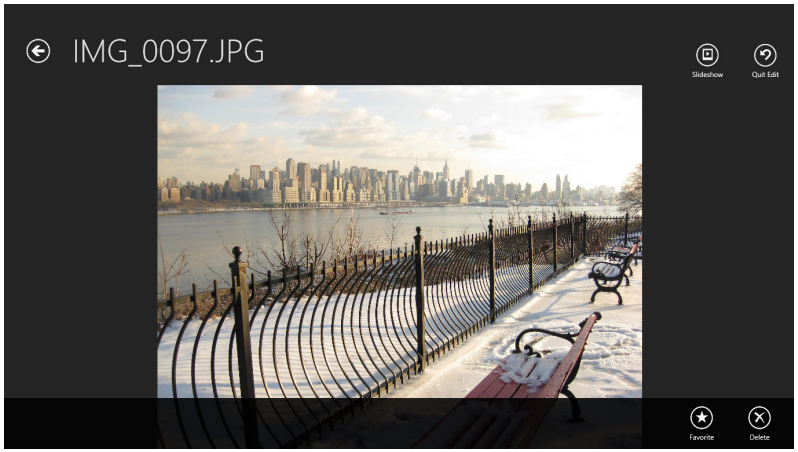
Tap **Quit Edit** to leave the editing screen.



Tap **Favorite** to add the file to *Favorite* and download it to your local device.



Tap **Delete** to delete the selected file or files.

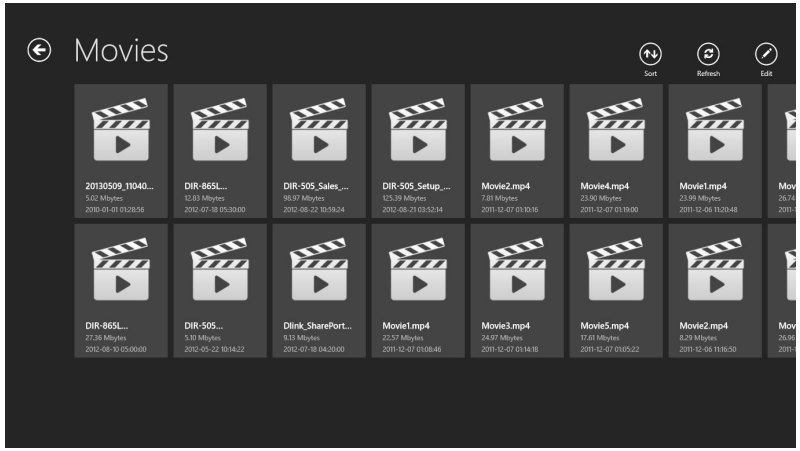


Movies

The Movies section allows you to stream video clips and movies from your DIR-890L to your mobile device. Tap the **movie** icon on the main menu to browse your videos stored on your USB drive.



In the movies browser, tap the file to play it.





Tap **Sort** to sort files by....

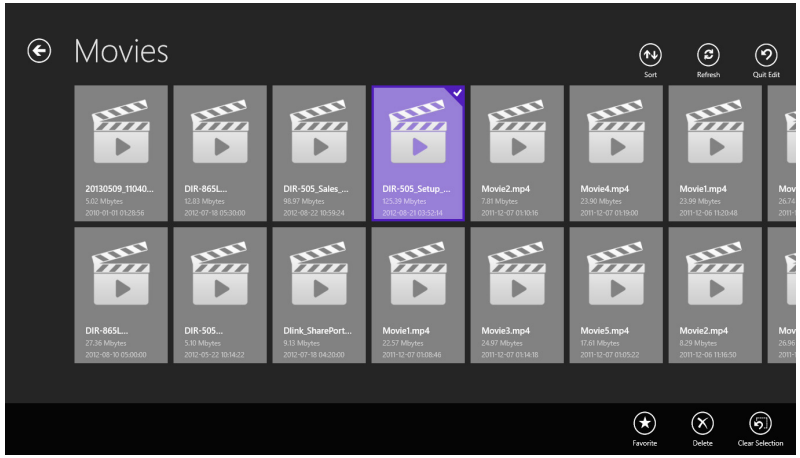


Tap **Refresh** to refresh the list of files.



Tap **Edit** to add files to *Favorite* or delete files. (See below list.)

Tap **Edit** and select a file for the following options:





Tap **Quit Edit** to leave the editing screen.



Tap **Favorite** to add the file to *Favorite* and download it to your local device.



Tap **Delete** to delete the selected file or files.



Tap **Clear Selection** to deselect all selected files.

Tap on a file to start playing it. In the player:

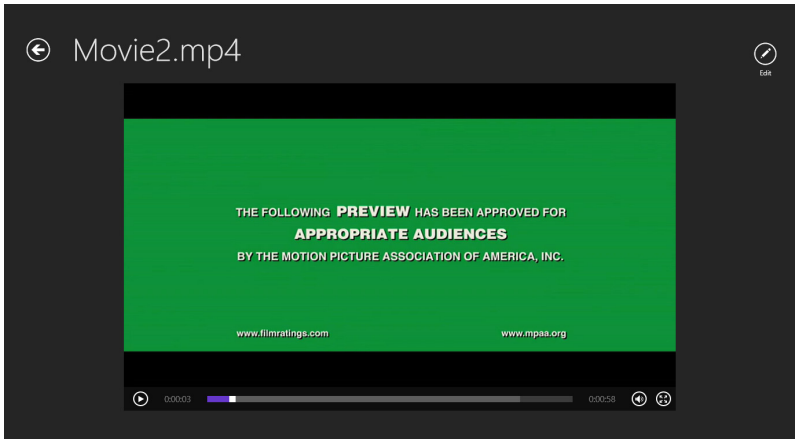
Tap to play or pause the video. You can scroll to any time on the time line by pressing and then sliding your finger.

Tap the icon with arrows pointing out to enter full screen mode.

Tap the icon with arrows pointing in to exit full screen mode.

Tap to adjust the volume.

Tap to add file to *Favorite* or delete the file. (See list below.)



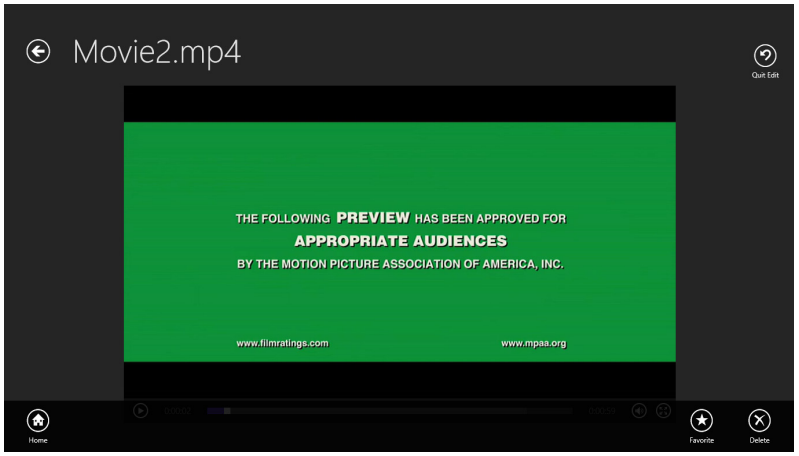
After tapping **Edit:**

Tap to leave the editing screen.

Tap to return to the main menu.

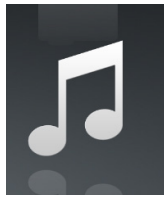
Tap to add the file to *Favorite* and download it to your local device.

Tap to delete the file.

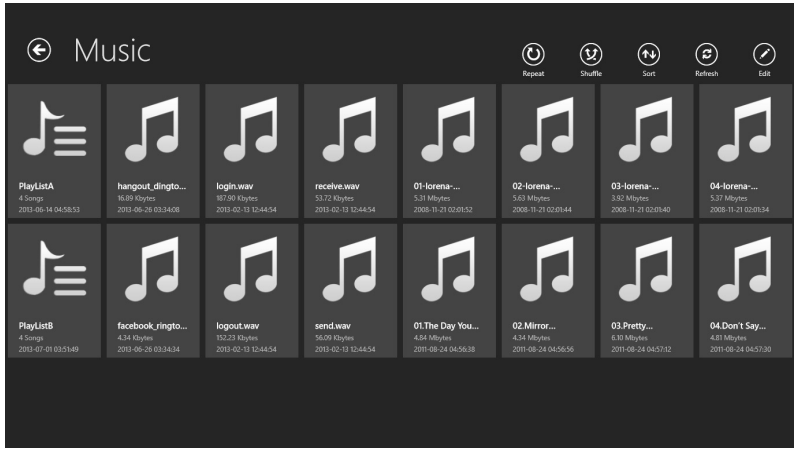


Music

The Music section allows you to stream songs from your DIR-890L to your mobile device. Tap the **music** icon on the main menu to browse your music collection stored on your USB drive.



In the music browser, tap a file to play it with the music player.





Tap **Repeat** to repeat one or all songs.



Tap **Shuffle** to enable/disable shuffle mode.



Tap **Sort** to sort files by....

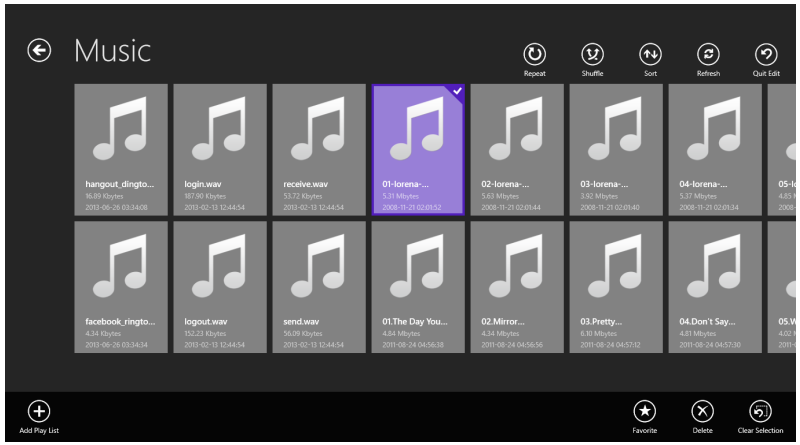


Tap **Refresh** to refresh the list of files.



Tap **Edit** to add file to *Favorite* or delete the file. (See list below.)

Tap **Edit** and select one or more files for the following options:



Tap **Quit Edit** to leave the editing screen.



Tap **Add Play List** to add selected songs to a new *playlist*.



Tap **Favorite** to add the file to *Favorite* and download it to your local device.

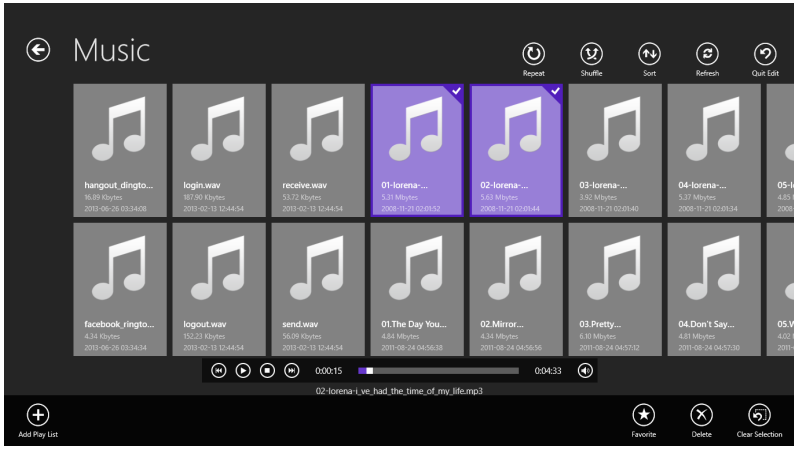


Tap **Delete** to delete the selected file or files.



Tap **Clear Selection** to deselect all selected files.

Tap on a file to start playing it. In the player:



Tap to play/pause the song.

Tap to skip to the previous song.

Tap to skip to the next song.

Tap to stop playback.

Tap to adjust the volume.

To create a *playlist*:

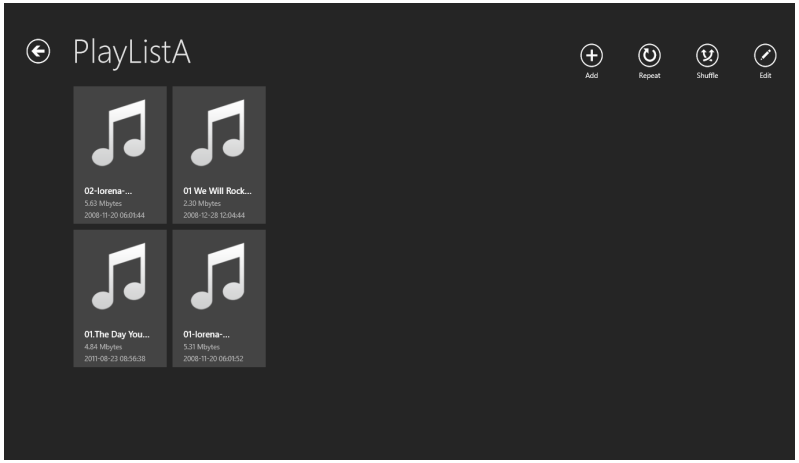
- Tap **Edit**, then select songs to be added to a new *playlist*.
- Tap **Add Playlist**. The *New Playlist* window will open.
- Enter a **name** for the *playlist*, then tap **Save.**



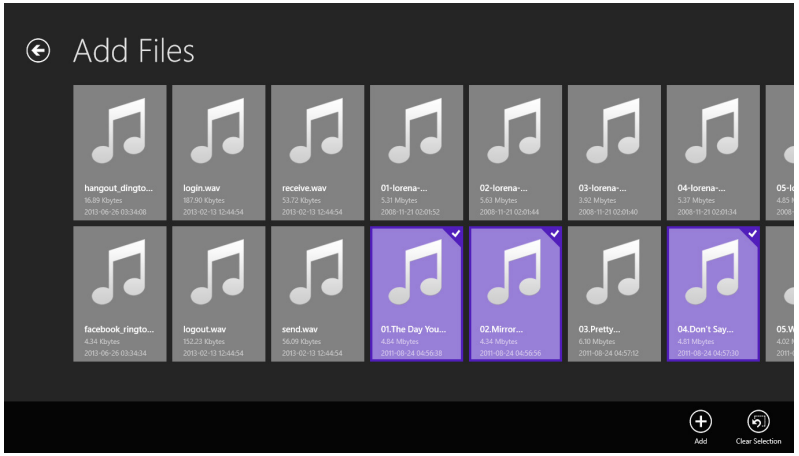
The *playlist* will appear in the browser as an icon.

To add songs to a *playlist*:

- Tap your **playlist** to see its current contents.
- Tap the **Edit** icon.
- Tap the **Add** icon.

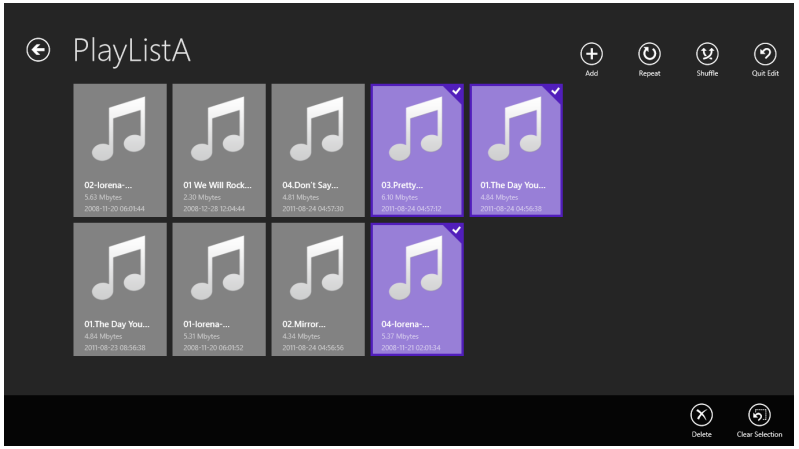


- Select songs to be added to your *playlist*, then tap the **Add** icon.



To delete songs from your *playlist*:

- Tap your *playlist* to see its current contents.
- Tap the **Edit** icon in the *playlist* browser and tap to mark the files to be deleted.
- Tap the **Delete** icon to remove the file.

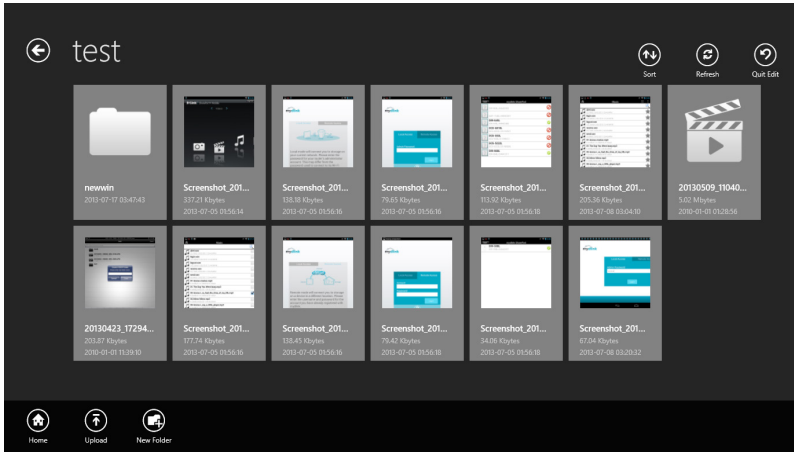


Folder

In the Folder section, you can browse your files stored on your USB drive. Tapping the filename will open the viewer/player for that file type as described on the previous pages. You can also upload files from your mobile device to the USB drive attached to your router.



In the browser, tap the file to open it.





Tap **Sort** to sort files by....



Tap **Refresh** to refresh the list of files.



Tap **Edit** to upload files or create a new folder (See list below.) You can select files to be copied, opened, added to *favorite* or deleted.*

Tap **Edit** for the following options:



Tap **Home** to return to the main menu.



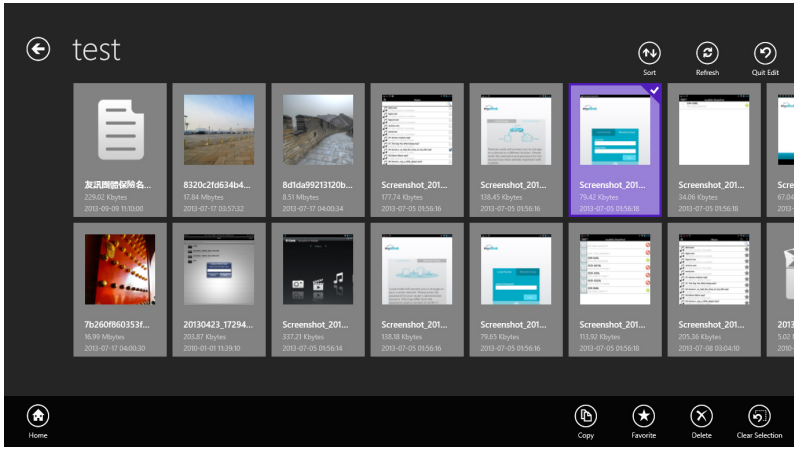
Tap **Upload** to upload a file from your device.



Tap **New Folder** to create a new folder.

***Note:** Refer to the next page for the additional **Edit** options available when you select a file.*

Tap **Edit** and select a file for the following options:



Tap **Quit Edit** to leave the editing screen.

Tap **Home** to return to the main menu.

Tap **Copy** to copy selected files.

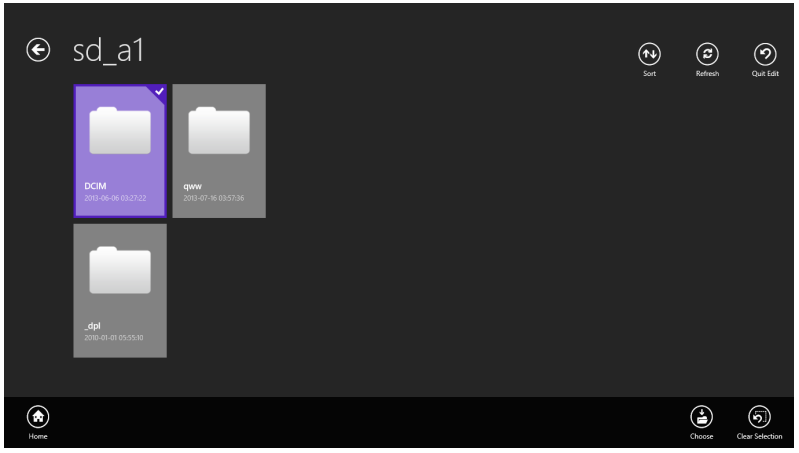
Tap **Favorite** to add the file to *Favorite* and download it to your local device.

Tap **Delete** to delete the selected file or files.

Tap **Clear Selection** to deselect all selected files.

To delete files:

- Browse to the folder with the file to be deleted.
- Tap the **Edit** icon in the browser, and tap to mark the file to be deleted.
- Tap **Delete** to delete the file.

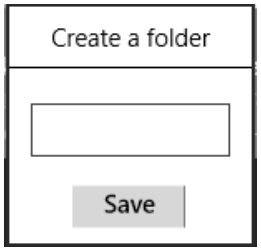


To copy files:

- Tap to select the file to be copied, and tap the **Copy** icon.
- Browse to and select the **destination** folder.
- Tap the **Choose** icon to copy the file to that destination folder.

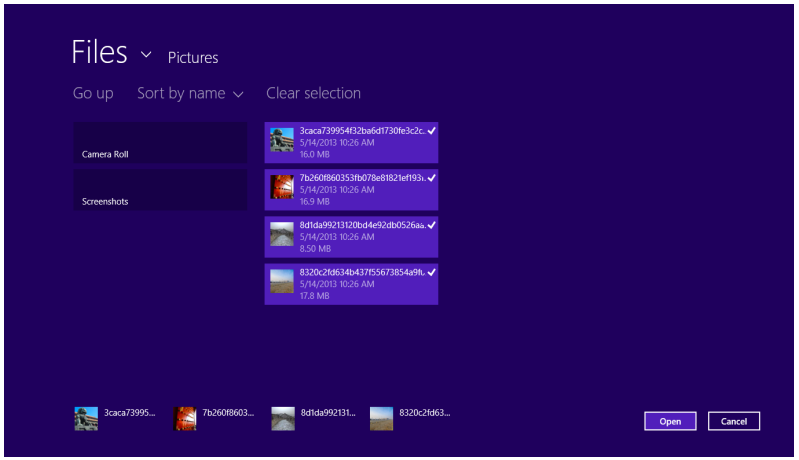
To create a new folder:

- Browse to the directory you wish to create a new folder in.
- Tap the **Edit** icon at the top right.
- Tap the **New Folder** icon and enter the **name** of the new folder.
- Tap **Save** to create the folder.



To upload images and videos from your mobile device:

- Browse to the folder you wish to upload to.
- Tap the **Upload** icon. In the *Upload* screen, tap **Upload** to bring up Windows file browser.
- Select your files to be uploaded from your device to the USB storage and tap **Open**. The files will begin uploading.



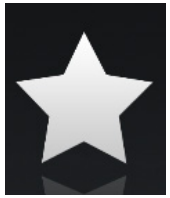
Additional options available:

- During the upload process, you may tap the upload queue files to delete them from the queue.
- To upload more files, tap the **Upload** icon at the top right and repeat the steps above.

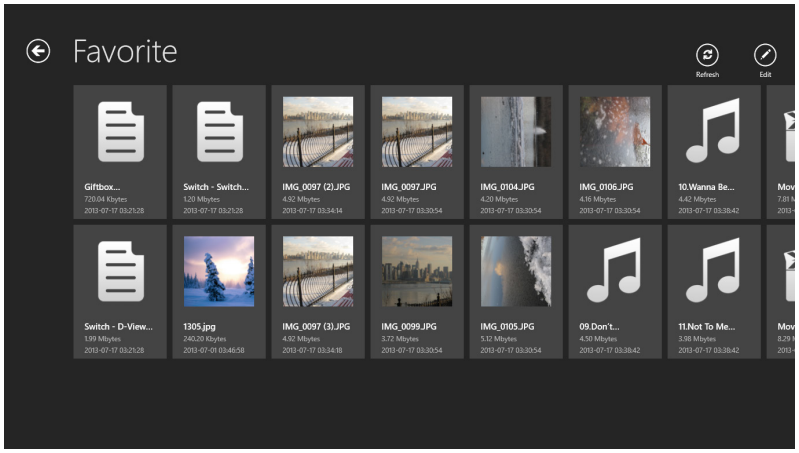


Favorite

The Favorite section allows you to quickly access your most frequently used files, no matter what file type, in a special central location.



In the *Favorite* browser, tap the file to open it.



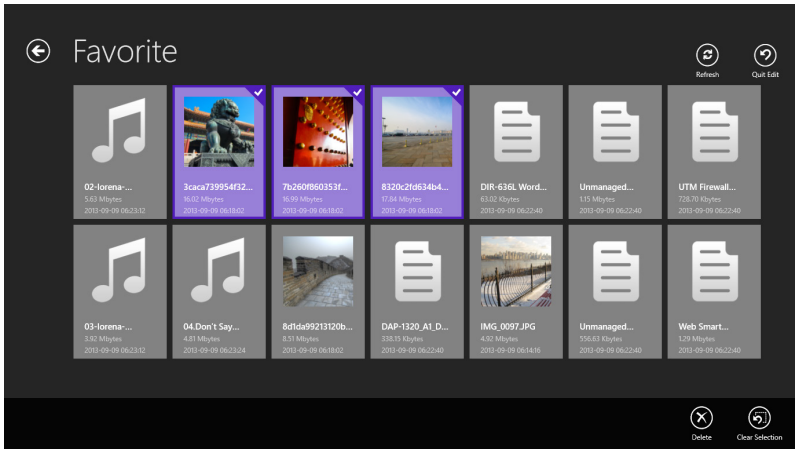


Tap **Refresh** to refresh the list of files.



Tap **Edit** to to add file to *Favorite* or delete the file. (See list below.)

Tap **Edit** and select a file for the following options:





Tap **Quit Edit** to leave the editing screen.



Tap **Delete** to delete the selected file or files.



Tap **Clear Selection** to deselect all selected files.

Connect a Wireless Client to your Router

WPS Button

The easiest and most secure way to connect your wireless devices to the router is with WPS (Wi-Fi Protected Setup). Most wireless devices such as wireless adapters, media players, Blu-ray DVD players, wireless printers and cameras will have a WPS button (or a software utility with WPS) that you can press to connect to the DIR-890L router. Refer to your user manual for the wireless device you want to connect to make sure you understand how to enable WPS. Once you know, follow the steps below:

Step 1 - Press the WPS button on the DIR-890L for about one second. The Internet LED on the front will start to blink.



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

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

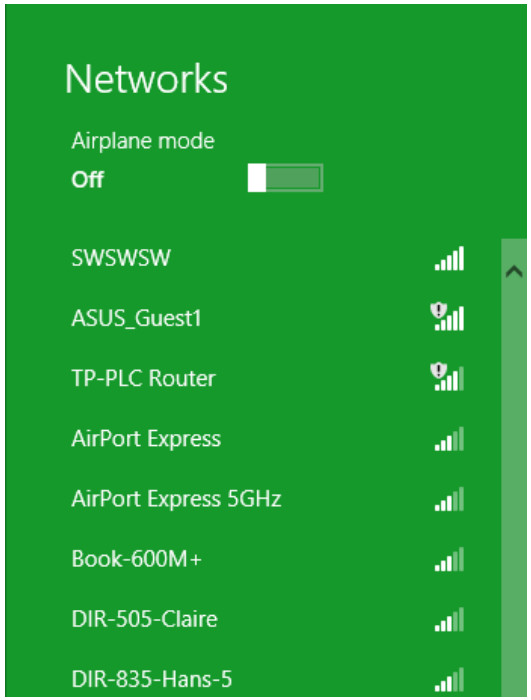
Windows® 8
WPA/WPA2

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

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

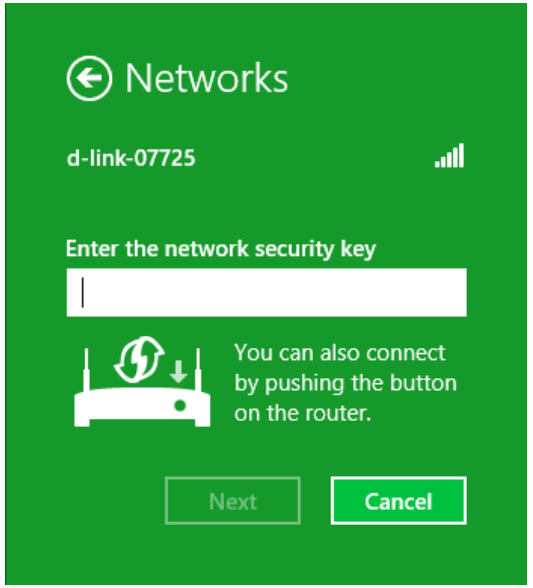


Clicking on this icon will display a list of wireless networks that are within connecting proximity of your computer. Select the desired network by clicking on the network name.

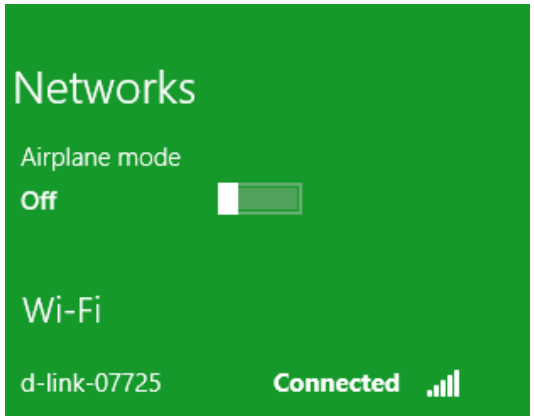


You will then be prompted to enter the network security key (Wi-Fi password) for the wireless network. Enter the password into the box and click **Next**.

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



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



Windows® 7
WPA/WPA2

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

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



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

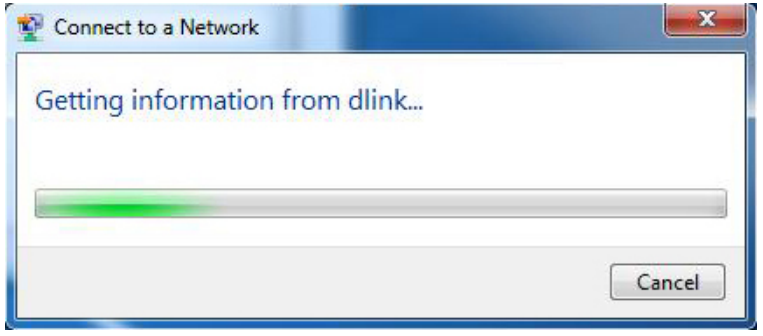


3. Highlight the wireless connection with Wi-Fi name (SSID) you would like to connect to and click the **Connect** button.

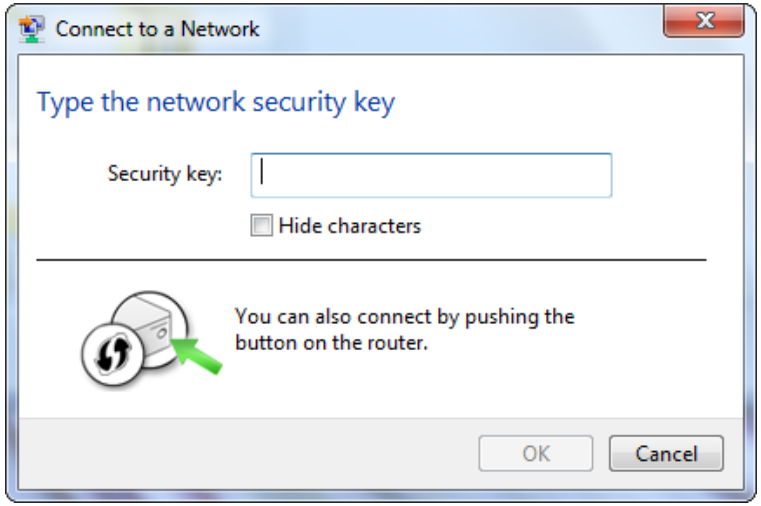
   If you get a good signal but cannot access the Internet, check your TCP/IP settings for your wireless adapter. Refer to the Networking Basics section in this manual for more information.



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



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

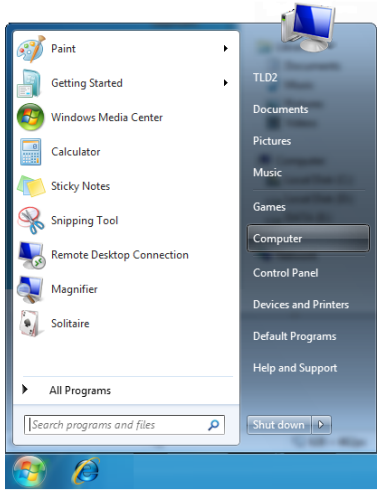


It may take 20-30 seconds to connect to the wireless network. If the connection fails, please verify that the security settings are correct. The key or passphrase must be exactly the same as the one on the wireless router.

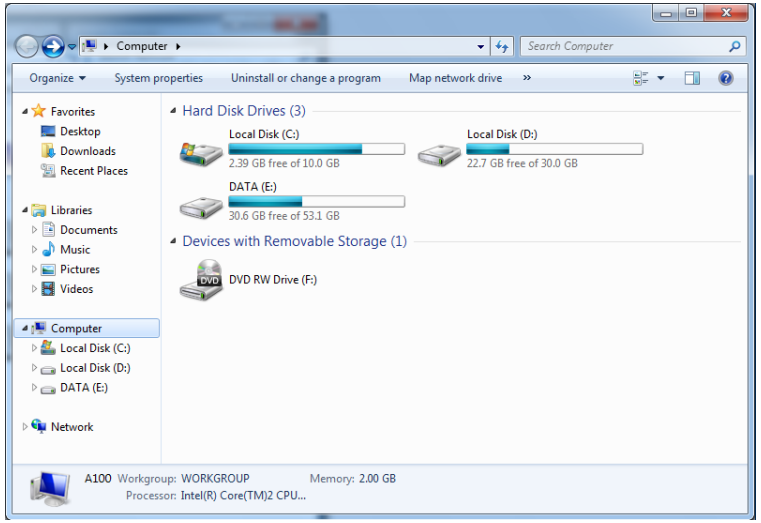
WPS

The WPS feature of the DIR-890L can be configured using Windows® 7. Carry out the following steps to use Windows® 7 to configure the WPS feature:

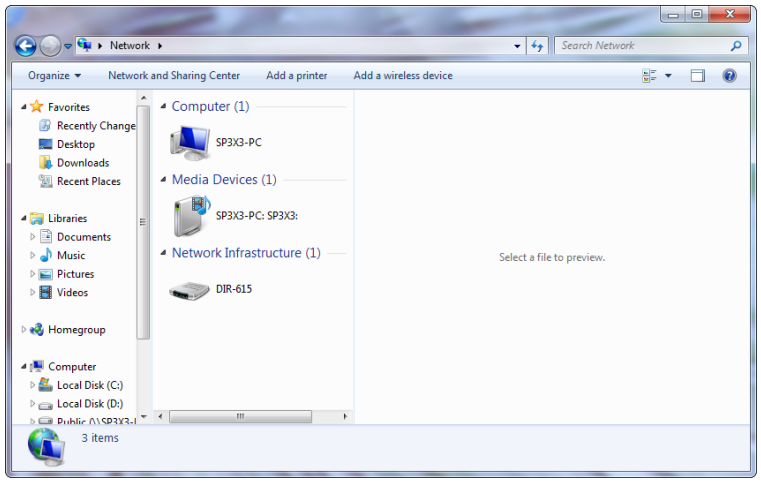
1. Click the **Start** button and select **Computer** from the Start menu.



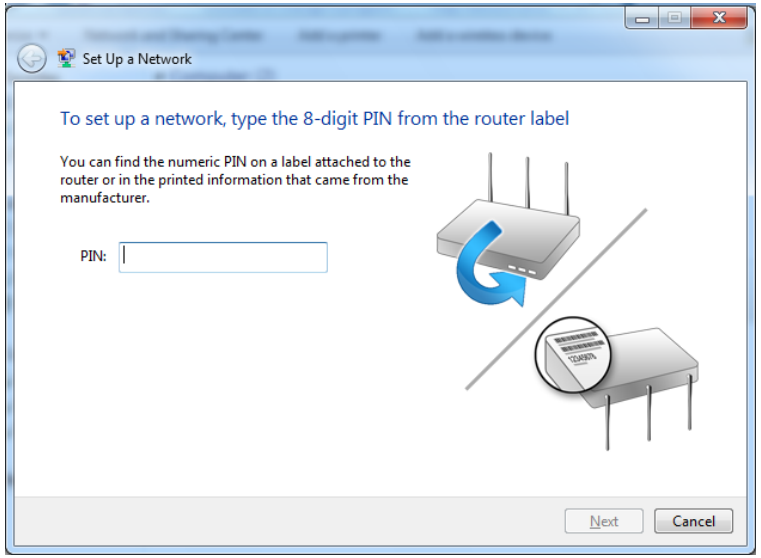
2. Click **Network** on the left side.



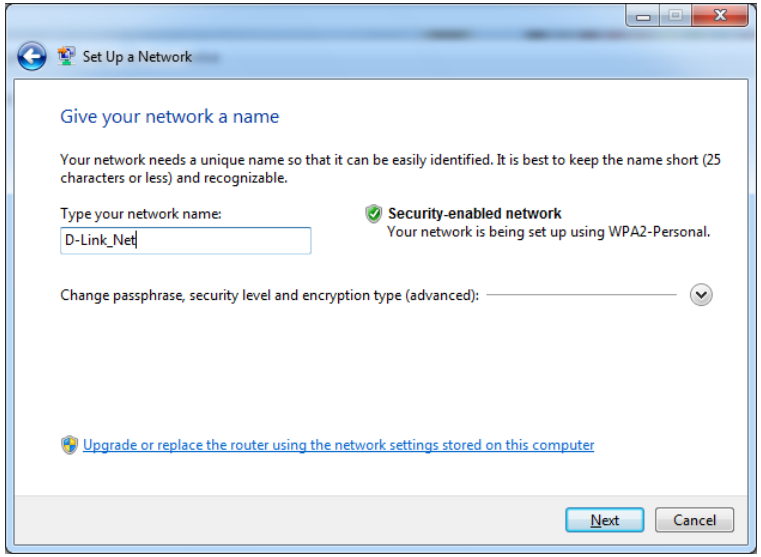
3. Double-click the DIR-890L.



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

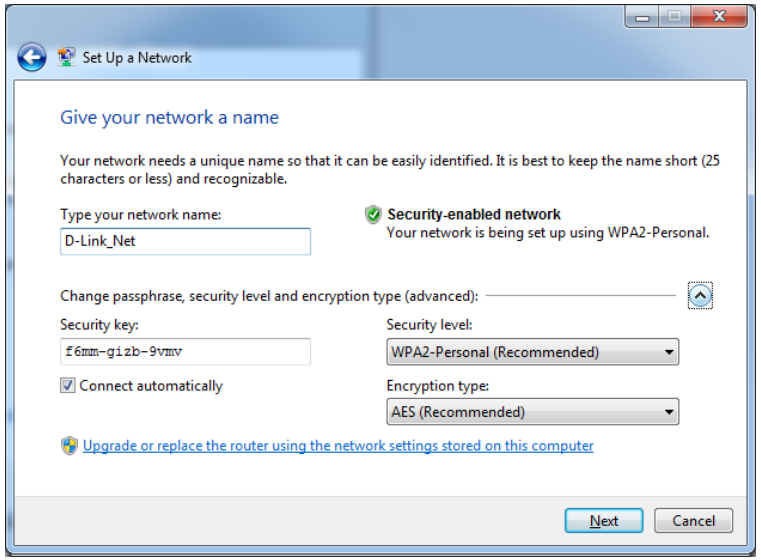


5. Type a name to identify the network.



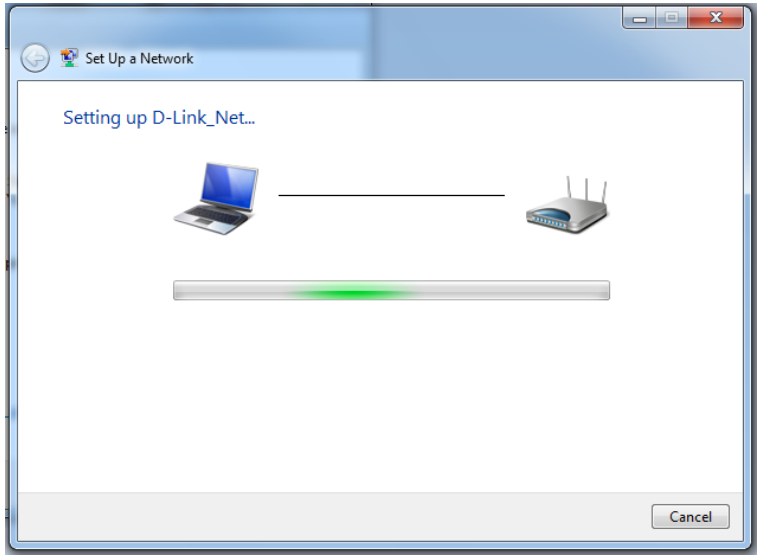
6. To configure advanced settings, click the icon.

Click **Next** to continue.



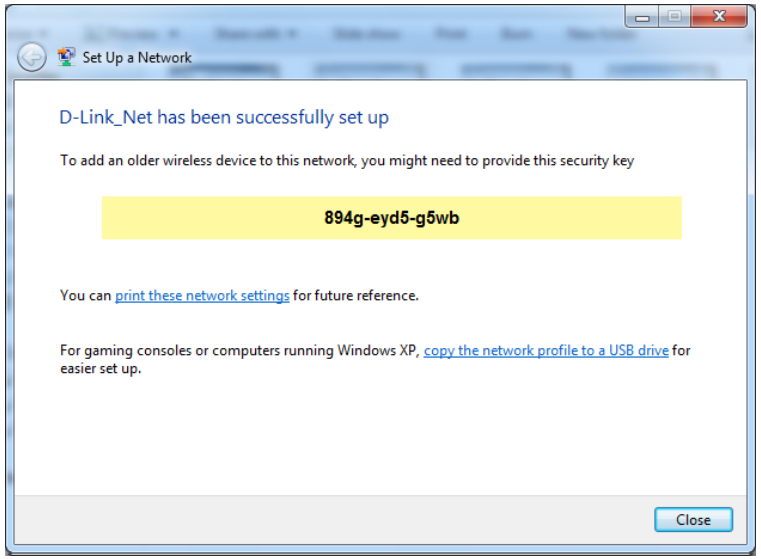
7. The following window appears while the Router is being configured.

   Wait for the configuration to complete.



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

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



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

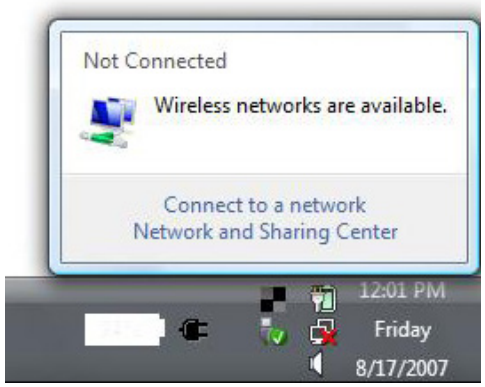
Windows Vista®

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

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

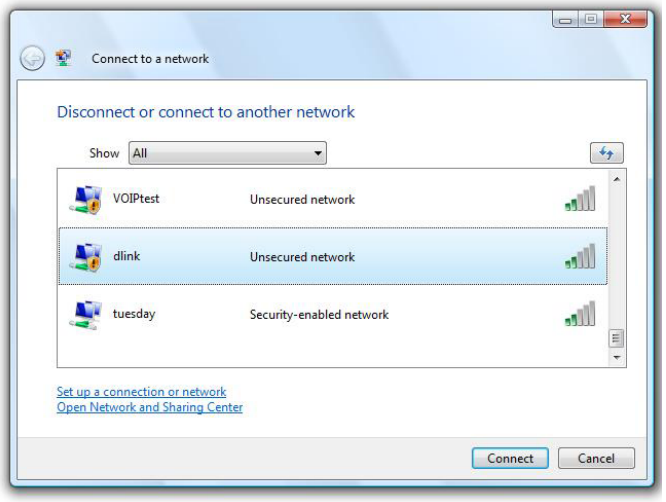
or

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



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

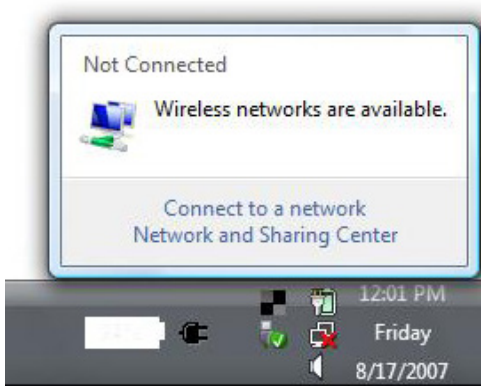
If you get a good signal but cannot access the Internet, check you TCP/IP settings for your wireless adapter. Refer to the **Networking Basics** section in this manual for more information.



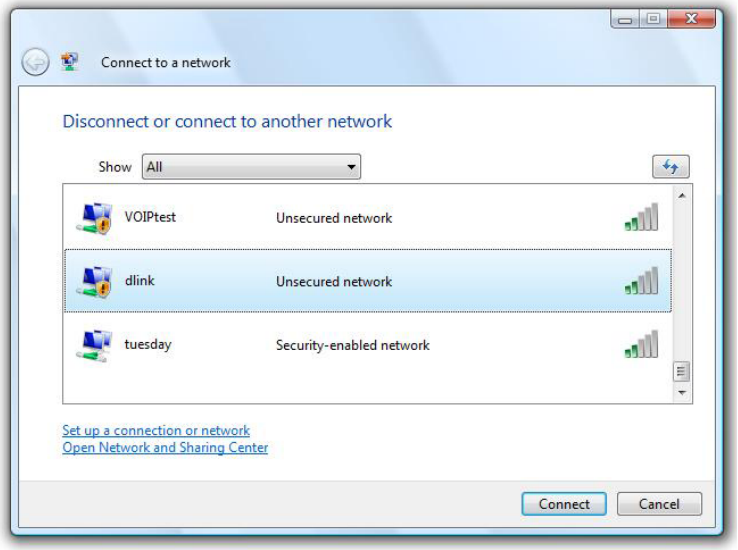
WPA/WPA2

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

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



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



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

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



Troubleshooting

This section provides solutions to problems that may occur during the installation and operation of the DIR-890L.

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

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

- Make sure you have an updated Java-enabled web browser. We recommend the following:
  - Explorer® 11 or higher
  - Firefox® v28 or higher
  - Chrome™ v33 or higher
  - Safari® v7 or higher

- Verify physical connectivity by checking for solid link lights on the device. If you do not get a solid link light, try using a different cable or connecting to a different port on the device. If the computer is turned off, the link light may not be on.

- Disable any Internet security software running on the computer. Software firewalls such as Zone Alarm, Black Ice, Sygate, and Norton Personal Firewall may block access to the configuration pages. Check the help files included with your firewall software for more information on disabling or configuring it.

- Configure your Internet settings:
  - Go to **Start** > **Settings** > **Control Panel**. Double-click the **Internet Options** Icon. From the **Security** tab, click the button to restore the settings to their defaults.
  - Click the **Connection** tab and set the dial-up option to Never Dial a Connection. Click the LAN Settings button. Make sure nothing is checked. Click **OK**.
  - Go to the **Advanced** tab and click the button to restore these settings to their defaults. Click **OK** three times.
  - Close your web browser (if open) and open it.

- Access the web management. Open your web browser and enter the IP address* of your D-Link router in the address bar. This should open the login page for your web management.

*** Note:** *The default IP address of your DIR-890 is* **http://192.168.0.1**. *If you connect the DIR-890L to your existing router in Bridge Mode, it will be assigned a new IP address based on your router/network's DHCP settings. You will have to access your other router's DHCP table to see what IP address was assigned to the DIR-890L. (Refer to the manufacturer's user manual if it is not a D-Link device.) If you are using a D-Link router, follow these instructions to find the IP address that was assigned:*
Using the router's Web-based configuration utility, go to ***Setup*** *>* ***Network Settings****. Scroll down to the bottom of the page, below the heading that says* ***Number of Dynamic DHCP Clients****, to view the list of connected devices. Refer to the MAC address that is printed on the label that is attached to the bottom of the DIR-890L to find the corresponding IP address.*

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

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

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

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



3. Can I connect the DIR-890L to an existing router?

We recommend that you replace your existing router with the DIR-890L instead of using both. If your modem is a combo router, you may want to contact your ISP or review the manufacturer's user guide so you can put the combo router into Bridge mode, which will turn off the device's NAT functions.

If you are using the DIR-890L in Bridge mode, and you need to connect it to a router, connect an Ethernet cable from the **LAN** port on your router to the **WAN** port on the DIR-890L. Restart the device and configure the settings. When you have completed the configuration of the DIR-890L, you can remove the Ethernet cable and move the device to the desired location.

Wireless Basics

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

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

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

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

What is Wireless?

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

Why D-Link Wireless?

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

How does wireless work?

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

Wireless Local Area Network (WLAN)

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

Wireless Personal Area Network (WPAN)

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

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

Who uses wireless?

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

Home Uses/Benefits

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

Small Office and Home Office Uses/Benefits

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

Where is wireless used?

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

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

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

Tips

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

Centralize your router or Access Point

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

Eliminate Interference

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

Security

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

Wireless Modes

There are basically two modes of networking:

- **Infrastructure** – All wireless clients will connect to an access point or wireless router.
- **Ad-Hoc** – Directly connecting to another computer for peer-to-peer communication using wireless network adapters on each computer, such as two or more DIR-890L wireless network Cardbus adapters.

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

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

Networking Basics

Check your IP address

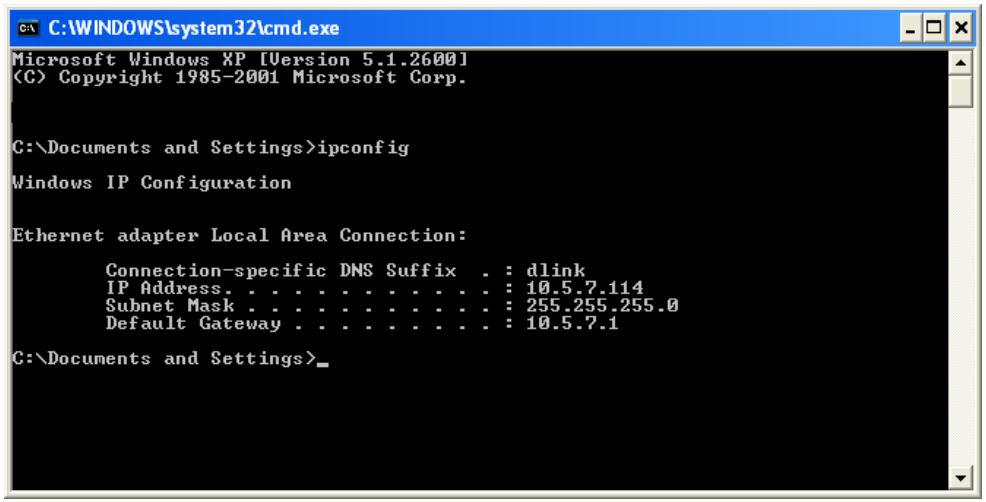
After you install your new D-Link adapter, by default, the TCP/IP settings should be set to obtain an IP address from a DHCP server (i.e. wireless router) automatically. To verify your IP address, please follow the steps below.

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

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

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

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



Statically Assign an IP address

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

Step 1

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

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

Windows® XP - Click on **Start** > **Control Panel** > **Network Connections**.

Windows® 2000 - From the desktop, right-click **My Network Places** > **Properties**.

Step 2

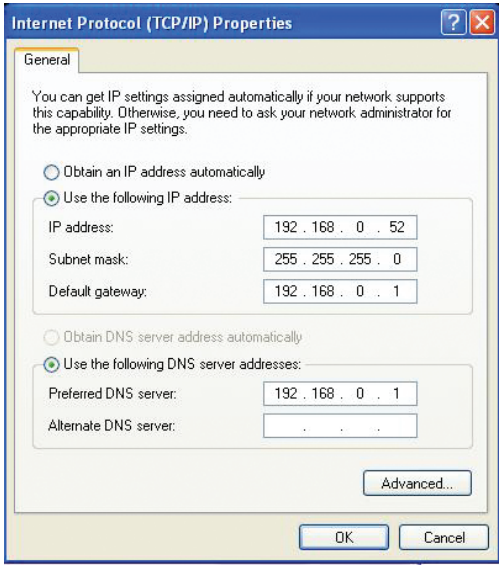
Right-click on the **Local Area Connection** which represents your network adapter and select **Properties**.

Step 3

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

Step 4

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



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

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

Step 5

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

Wireless Security

This section will show you the different levels of security you can use to protect your data from intruders. The DIR-890L offers the following types of security:

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

What is WPA?

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

The 2 major improvements over WEP:

- Improved data encryption through the Temporal Key Integrity Protocol (TKIP). TKIP scrambles the keys using a hashing algorithm and by adding an integrity-checking feature, ensures that the keys haven't been tampered with. WPA2 is based on 802.11i and uses Advanced Encryption Standard (AES) instead of TKIP.

- User authentication, which is generally missing in WEP, through the extensible authentication protocol (EAP). WEP regulates access to a wireless network based on a computer's hardware-specific MAC address, which is relatively simple to be sniffed out and stolen. EAP is built on a more secure public-key encryption system to ensure that only authorized network users can access the network.

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

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

Technical Specifications

Device Interfaces

- 802.11 a/b/g/n/ac wireless LAN
- Four 10/100/1000 Gigabit LAN ports
- 10/100/1000 Gigabit WAN port
- Two USB ports (one USB 3.0, one USB 2.0)

Standards

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

Security

- WPA - Personal/Enterprise
- WPA2 - Personal/Enterprise
- Wi-Fi Protected Setup (WPS) PIN/PBC

Power

- Input: 100 to 240V AC, 50/60Hz
- Output: 12V DC, 5A

Temperature

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

Humidity

- 90% maximum (non-condensing)

Certifications

- FCC
- CE
- IC
- Wi-Fi Certified

Dimensions

- L = 15.23 in (387.0 mm)
- W = 9.73 in (247.3 mm)
- H = 4.70 in (119.5 mm)

Weight

- 2.20 lbs (1 kg)

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

2 Frequency Range varies depending on country's regulation.

Contacting Technical Support

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

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

- Model number of the product (e.g., DIR-890L)
- Hardware Revision (located on the label on the bottom of the router (e.g., rev A1))
- Serial Number (s/n number located on the label on the bottom of the router).

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

For customers within the United States:

Phone Support:
(877) 453-5465

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

For customers within Canada:

Phone Support:
(800) 361-5265

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

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

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b) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by a written offer, valid for at least three years and valid for as long as you offer spare parts or customer support for that product model, to give anyone who possesses the object code either (1) a copy of the Corresponding Source for all the software in the product that is covered by this License, on a durable physical medium customarily used for software interchange, for a price no more than your reasonable cost of physically performing this conveying of source, or (2) access to copy the Corresponding Source from a network server at no charge.

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d) Convey the object code by offering access from a designated place (gratis or for a charge), and offer equivalent access to the Corresponding Source in the same way through the same place at no further charge. You need not require recipients to copy the Corresponding Source along with the object code. If the place to copy the object code is a network server, the Corresponding Source may be on a different server (operated by you or a third party) that supports equivalent copying facilities, provided you maintain clear directions next to the object code saying where to find the Corresponding Source. Regardless of what server hosts the Corresponding Source, you remain obligated to ensure that it is available for as long as needed to satisfy these requirements.

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

Warranty

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

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

Limited Warranty:

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

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

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

Limited Software Warranty:

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

Non-Applicability of Warranty:

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

Submitting A Claim (USA):

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

- The customer must submit with the product as part of the claim a written description of the Hardware defect or Software nonconformance in sufficient detail to allow D-Link to confirm the same, along with proof of purchase of the product (such as a copy of the dated purchase invoice for the product) if the product is not registered.

- The customer must obtain a Case ID Number from D-Link Technical Support at https://support.dlink.com, who will attempt to assist the customer in resolving any suspected defects with the product. If the product is considered defective, the customer must obtain a Return Material Authorization ("RMA") number by completing the RMA form and entering the assigned Case ID Number at https://rma.dlink.com/.

- After an RMA number is issued, the defective product must be packaged securely in the original or other suitable shipping package to ensure that it will not be damaged in transit, and the RMA number must be prominently marked on the outside of the package. Please refer to shipping and packaging instructions located online at http://rma.dlink.com/.

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

Submitting A Claim (Canada):

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

- Customers need to provide their receipt (proof of purchase) even if the product is registered. Without a receipt, no warranty service will be done. The registration is not considered a proof of purchase.

- The customer must submit with the product as part of the claim a written description of the Hardware defect or Software nonconformance in sufficient detail to allow D-Link to confirm the same, along with proof of purchase of the product (such as a copy of the dated purchase invoice for the product) if the product is not registered.

- The customer must obtain a Case ID Number from D-Link Technical Support at 1-800-361-5265, who will attempt to assist the customer in resolving any suspected defects with the product. If the product is considered defective, the customer must obtain a Return Material Authorization ("RMA") number by completing the RMA form and entering the assigned Case ID Number at https://rma.dlink.ca/.

- After an RMA number is issued, the defective product must be packaged securely in the original or other suitable shipping package to ensure that it will not be damaged in transit, and the RMA number must be prominently marked on the outside of the package. Do not include any manuals or accessories in the shipping package. D-Link will only replace the defective portion of the product and will not ship back any accessories.

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

- RMA phone number: 1-800-361-5265 Hours of Operation: Monday-Friday, 9:00AM – 9:00PM EST

What Is Not Covered:

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

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

Disclaimer of Other Warranties:

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

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CE Mark Warning:

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

FCC Statement:

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

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

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

FCC Caution:

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

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

IMPORTANT NOTICE:

FCC Radiation Exposure Statement:

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

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

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

ICC Notice:

Operation is subject to the following two conditions:

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

IMPORTANT NOTE:
IC Radiation Exposure Statement:

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

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

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

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

Règlement d'Industry Canada

Les conditions de fonctionnement sont sujettes à deux conditions:

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

Registration

Register your product online at registration.dlink.com



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

Version 1.0
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