D-Link®

Version 2.00 | 05/07/2014

User Manual

Wireless AC1200 Dual Band Gigabit Cloud Router

DIR-850L

Preface

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

Manual Revisions

Revision	Date	Description
2.00	17 June, 2014	• Update to Revision B1

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Table of Contents

Package Contents

DIR-850L Wireless AC1200 Dual Band Gigabit Cloud Router

Ethernet Cable

Power Adapter

Wi-Fi Configuration Card

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-850L will cause damage and void the warranty for this product.*

System Requirements

Network Requirements	• An Ethernet-based cable or DSL modem • IEEE 802.11ac, 802.11a, 802.11n or 802.11g wireless clients • 10/100/1000 Ethernet
Web-based Configuration Utility Requirements	**Computer with the following:** • Windows®, Macintosh, or Linux-based operating system • An installed Ethernet adapter **Browser Requirements:** • Internet Explorer 7 or higher • Firefox 3.5 or higher • Safari 4 or higher • Chrome 8 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	• iPhone/iPad/iPod Touch (iOS 3.0 or higher)
	• Android device (1.6 or higher)
	• Computer with the following browser requirements:
	  • Internet Explorer 7 or higher
	  • Firefox 3 or higher
	  • Safari 5 or higher
	  • Chrome 5 or higher
	
	iPhone, iPad, and iPod touch are registered trademarks of Apple Inc. Android is a trademark of Google, Inc.

Introduction

Now you can monitor and manage your home network right from your laptop, iPhone®, iPad®, or Android™ device. This cloud-enabled router can be configured to send an email anywhere, anytime, to keep you informed when new devices are connecting to your network or intruders are detected. With the new graphical user interface, monitor in real-time websites that are being visited with recent browser history displayed on the mydlink™ Lite app – great for parents on the go. The D-Link Cloud service can also detect and block cyber criminals from breaking into your wireless network and suspicious activities will be displayed right on your web browser or in the mydlink™ Lite app.

The D-Link DIR-850L is an IEEE 802.11ac compliant device that delivers up to 3 times faster speeds than 802.11n while staying backward compatible with 802.11a/g/b devices. Connect the DIR-850L to a cable or DSL modem and share high-speed Internet access to PCs, game consoles, and media players. Create a secure wireless network to share photos, files, music, videos, printers, and network storage to your mobile devices. Powered by the 802.11ac technology and equipped with two 2.4 GHz and 5 GHz dual-band internal antennas, this router provides superior wireless coverage for larger homes and offices, or for users running bandwidth-intensive applications. The DIR-850L also includes a 4-port 10/100/1000 gigabit switch that connects gigabit-wired devices for enjoying lag-free HD movie streaming, network gaming, and fast file transfers.

D-Link has created SharePort technology to bring more flexibility to your network. With SharePort technology, you can connect a USB printer and share it throughout your network. You can also share a USB storage device, providing network storage for everyone to share. On top of that, you can share and access media stored on your USB storage remotely over the Internet with the free mydlink SharePort app for mobile devices!

With some routers, all wired and wireless traffic, including VoIP, video streaming, online gaming, and web browsing are mixed together into a single data stream. By handling data this way, applications like video streaming could pause or delay. With the D-Link Intelligent QoS technology, wired and wireless traffic are analyzed and separated into multiple data streams.

For peace of mind, the DIR-850L supports the latest wireless security features to help prevent unauthorized access, be it from over a wireless network or the Internet. Support for WPA™ and WPA2™ standards ensure that you will be able to use the best possible encryption regardless of your client devices. In addition, this router utilizes dual-active firewalls (SPI and NAT) to prevent potential attacks from across the Internet for the ideal centerpiece of your home or office wireless network.

Features

- **Ultimate Wireless AC Networking** - The DIR-850L provides up to 300 Mbps wireless connection over 2.4 GHz band, 900 Mbps wireless connection over the 5 GHz band with 802.11ac and 802.11n wireless clients. This capability allows users to participate in real-time activities online, such as video streaming, online gaming, and real-time audio. The performance of this 802.11ac wireless router gives you the freedom of wireless networking at speeds 3x faster than 802.11n.

- **Multimedia on the Go** - The DIR-850L is designed to be the media hub for all of your mobile needs with the following features:
  - **USB Interface** - Easily store and share music, videos, photos, and files on your USB drive or charge another device.
  - **UPnP Support** - The DIR-850L can stream many compatible media formats to other devices wirelessly.
  - **mydlink SharePort app** - Stream your media and upload files locally or remotely through the Internet to your iPhone®, iPad® or Android™ device.

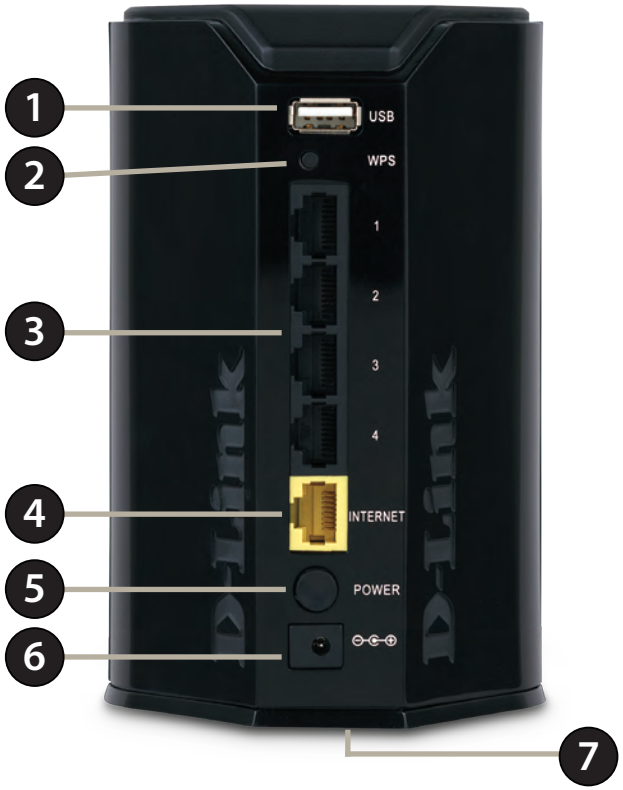
- **Compatible with 802.11a/b/g/n Devices** - The DIR-850L is still fully compatible with the IEEE 802.11a, 802.11g and 802.11n, so it can connect with existing 802.11a, 802.11b, 802.11g, and 802.11n PCI, USB, and CardBus adapters.

- **New User-friendly Graphical Interface** - Through its intuitive and easy-to-use web-based user interface, the DIR-850L lets you set up and manage your network with ease. You can even configure your router in minutes with the QRS Mobile app; free for mobile devices.

* Maximum wireless signal rate derived from IEEE Standard 802.11a, 802.11g, 802.11n and 802.11ac 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

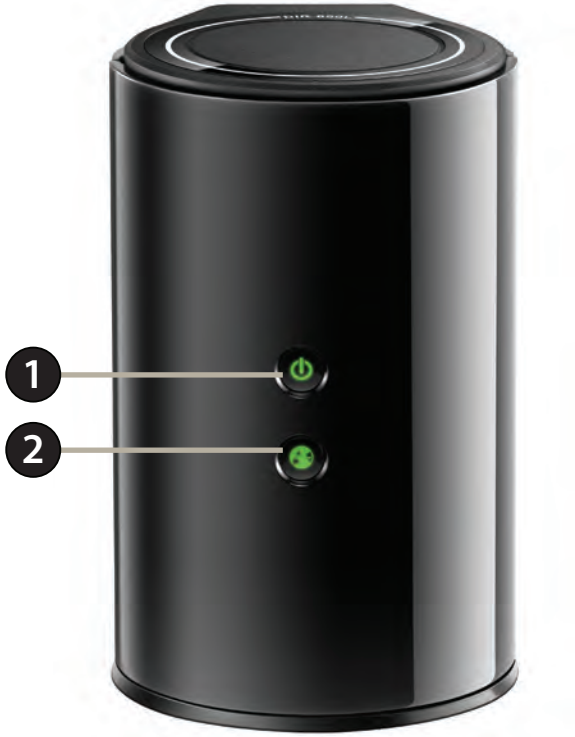
Connections



1	USB Port	Connect a USB flash drive to share content throughout your network.
2	WPS Button	Press to start the WPS process. The Internet LED will start to blink.
3	LAN Ports (1-4)	Connect 10/100/1000 Ethernet devices such as computers, switches, storage (NAS) devices and game consoles.
4	Internet Port	Using an Ethernet cable, connect your broadband modem to this port.
5	Power Button	Press the power button to power on and off.
6	Power Receptor	Receptor for the supplied power adapter.
7	Reset Button	Use a paperclip to press and hold the button for 10 seconds to reset the router to default settings.

Hardware Overview

LEDs



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

Installation

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

Before you Begin

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

Wireless Installation Considerations

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

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

2. Be aware of the direct line between network devices. A wall that is 1.5 feet thick (.5 meters), at a 45-degree angle appears to be almost 3 feet (1 meter) thick. At a 2-degree angle it looks over 42 feet (14 meters) thick! Position devices so that the signal will travel straight through a wall or ceiling (instead of at an angle) for better reception.

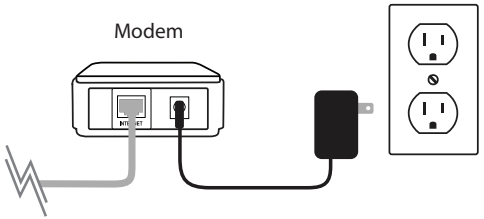
3. Building materials make a difference. A solid metal door or aluminum studs may have a negative effect on range. Try to position access points, wireless routers, and computers so that the signal passes through drywall or open doorways. Materials and objects such as glass, steel, metal, walls with insulation,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

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

5. If you are using 2.4 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 in not in use.

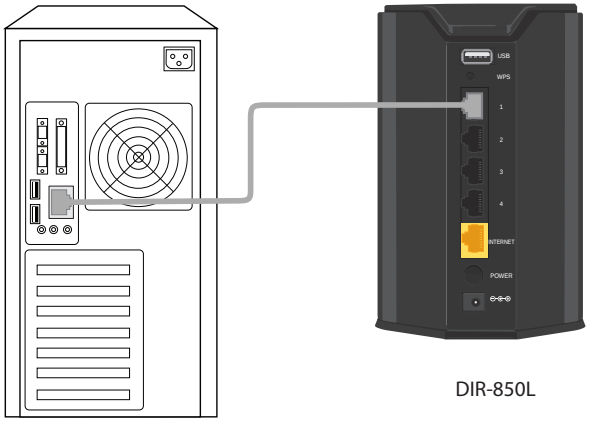
Hardware Installation

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



2. Position your router close to your modem and a computer. Place the router in an open area of your intended work area for better wireless coverage.

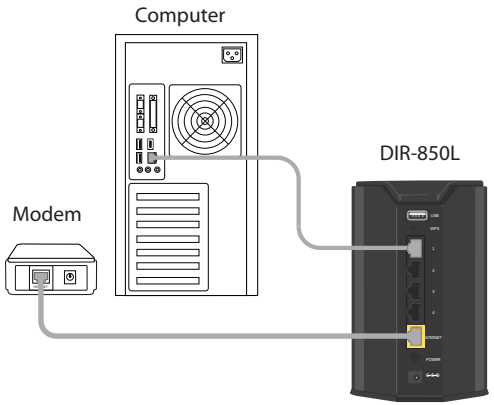
3. Unplug the Ethernet cable that is connected to your computer from your modem (or existing router if upgrading). Plug it into the LAN port labeled **1** on the back of your router. The router is now connected to your computer.



DIR-850L

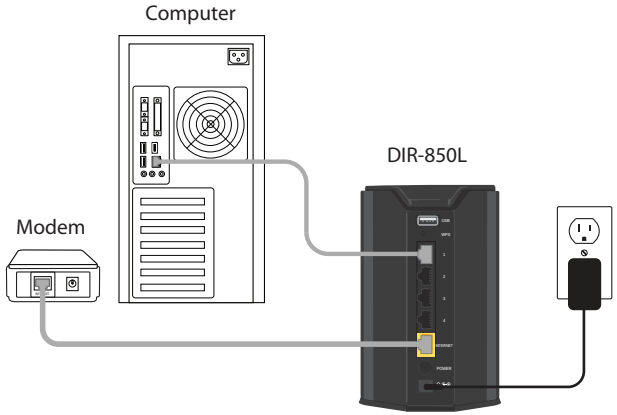
Computer

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



5. Reconnect the power adapter to your cable or DSL broadband modem and wait for two minutes.

6. Connect the supplied power adapter into the power port on the back of the router and then plug it into a power outlet or surge protector. Press the power button and verify that the power LED is lit. Allow 1 minute for the router to boot up.



7. If you are connecting to a broadband service that uses a dynamic connection (not PPPoE), you may be online already. Try opening a web browser and enter a web site. A solid light indicates a connection on the Internet port and the router can connect to the Internet. If the LED is orange, the connection is good but the router cannot connect to the Internet.

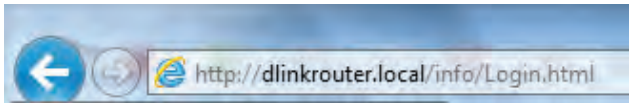
Getting Started

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 "Setup Wizard" on page 12.
- **QRS Mobile App** - Use your iPhone, iPad, or iPod Touch to configure your router. Refer to "QRS Mobile App" on page 17.
- **Manual Setup** - Log into the router and manually configure your router (advanced users only). Refer to "Network" on page 95.

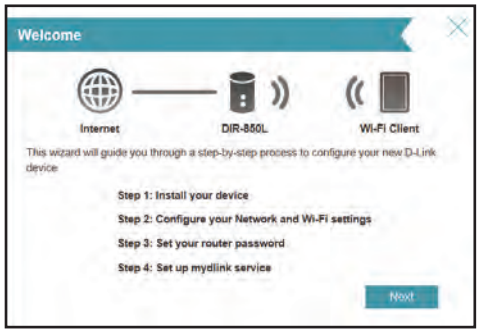
Setup Wizard

If this is your first time installing the router, open your web browser and enter **http://dlinkrouter.local./** in the address bar. Alternatively, enter the IP address of the router (default: **http://192.168.0.1**).

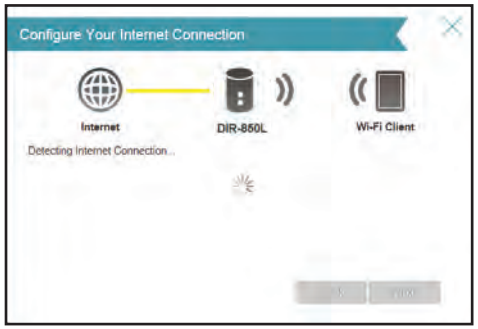


The wizard is designed to guide you through a step-by-step process to configure your new D-Link router and connect to the Internet.

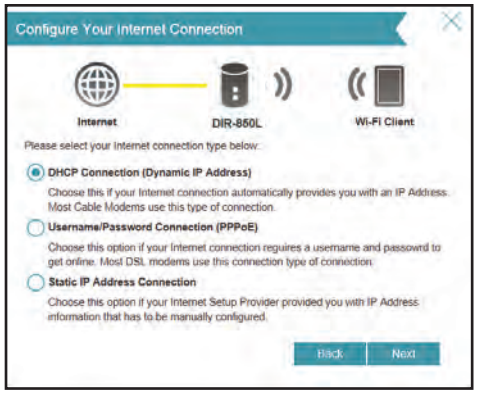
Click **Next** to continue.



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



If the router does not detect a valid Internet connection, a list of connection types to choose from will be displayed.

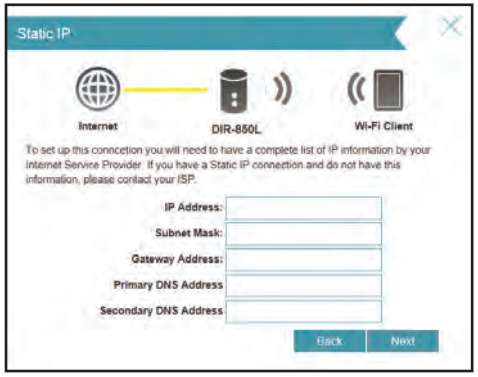


Select your Internet connection type (this information can be obtained from your Internet service provider) and click **Next** to continue.

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

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

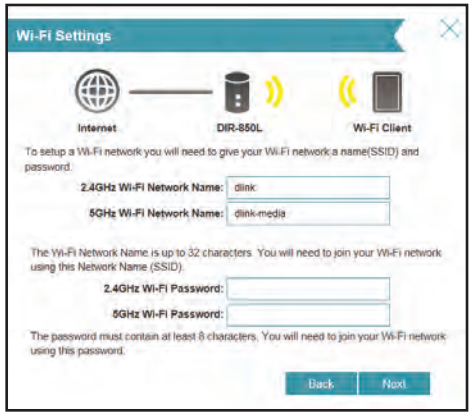
If the router detected or you selected **Static**, enter the IP and DNS settings supplied by your ISP. Click **Next** to continue.



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

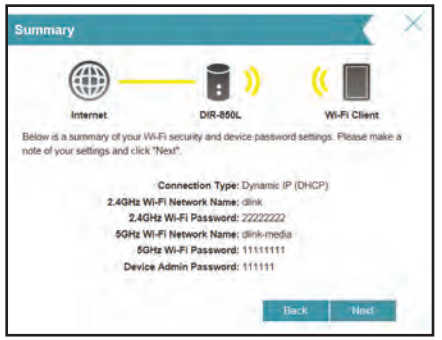
Create a Wi-Fi password (between 8-63 characters). Your wireless clients will need to have this passphrase or key entered to be able to connect to your wireless network.

Click **Next** to continue.



In order to secure the router, please enter a new 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 **Next** if you are satisfied, or click **Back** to make changes to them.



To use the mydlink service (mydlink.com or the mydlink Lite app), you must have an account. Select **Yes** if you have a mydlink account already, or **No** if you want to create one. Click **Next** to continue.

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

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

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

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

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

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

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

QRS Mobile App

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.

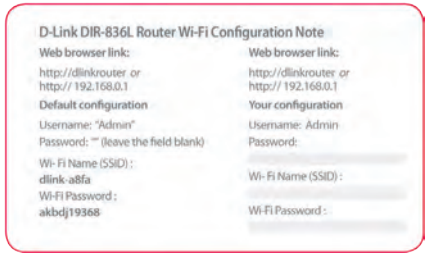
For the iTunes Store, you may also scan this code to download.

Available on the App Store

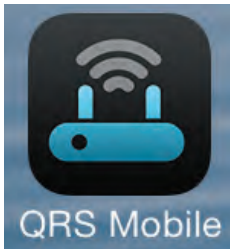
For Google Play, you may also scan this code to download.

GET IT ON Google play

Step 2
Once your app is installed, you may now configure your router. Connect to the router wirelessly by going to your wireless utility on your device. Scan for the Wi-Fi name (SSID) as listed on the supplied info card. Select and then enter your Wi-Fi password.

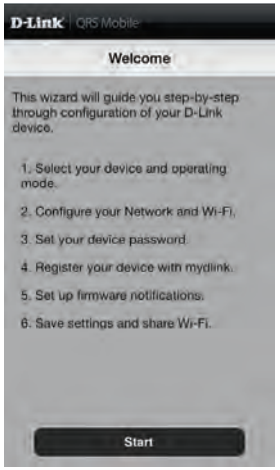


Step 3
Once you connect to the router, launch the QRS mobile app from the Home screen of your device.



Step 4

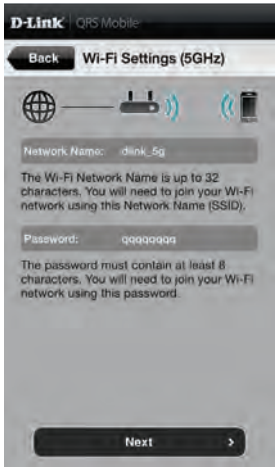
You will see the welcome screen. Tap **Start** to proceed, then **Next** once the Operation Mode screen appears.



Step 5

At this point, please ensure that you the 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-850L. 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 in turn; the 2.4 GHz band followed by the 5 GHz band.



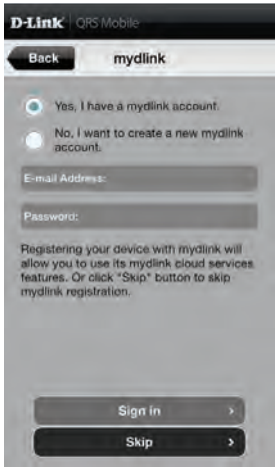
Firstly, enter a network name (SSID) of your choice, or leave it unchanged to accept the default SSID. Each wireless band can be assigned its own SSID.

Secondly, choose a Wi-Fi password of at least 8 characters. Any device trying to connect to the router wirelessly will need to enter this password the first time it connects.

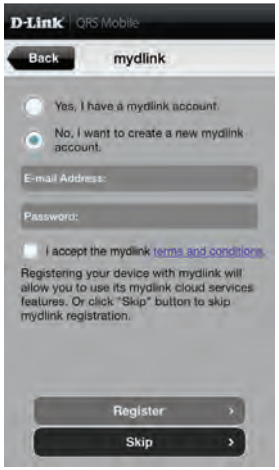
Finally, tap **Next** to proceed.

Step 7
Enter the administrator password of your choice. Unlike the Wi-Fi password, this password is only required when you need to configure the router. See page 114 for details of when this password is used. Tap **Next** to proceed.

Step 8
If you already have a mydlink account, select **Yes, I have a mydlink account** and enter your mydlink email address and password. Lastly, tap **Sign In** to set up the router to use your mydlink account.

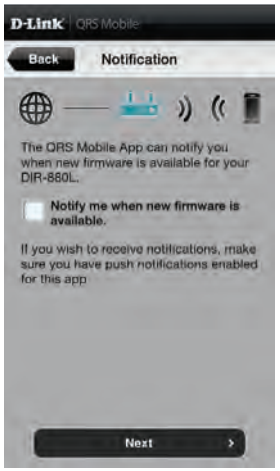


If you do not have a mydlink account, select **No, I want to create a new mydlink account**. Enter your email address, choose a mydlink password and check the **I accept the mydlink terms and conditions** box. Finally, tap **Register** to create your new mydlink account.



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

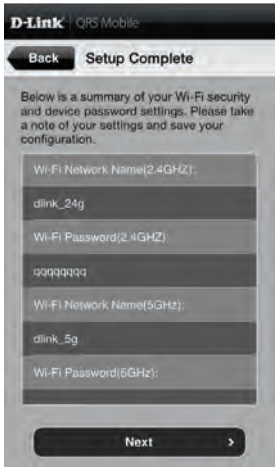
Step 9
If you wish to receive push notifications whenever a new firmware update is available, check the **Notify me when new firmware is available** box and tap **Next**.



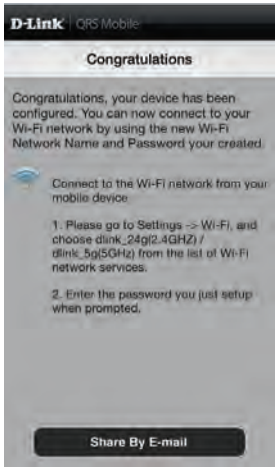
Otherwise, just tap **Next** to proceed.

Step 10
You will be presented with a summary of your chosen settings. If you wish 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 app.



mydlink SharePort

Using the mydlink SharePort app for iPad®, iPhone®, and iPod touch®

The mydlink SharePort app is a streamlined mobile application that allows you to conveniently stream media and share files stored on a removable storage connected to your router. 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. It 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.

1. If you are connecting remotely through the mydlink SharePort app from the Internet, you will need a **mydlink** account. Please refer to "mydlink SharePort" on page 22 for more details.

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

Note: If you connect a removable storage with many files or 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 for **mydlink SharePort** to the right.

Available on the App Store

4. If you are connecting to the router from a local network:

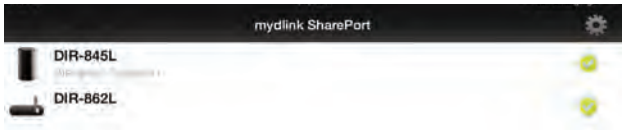
   On your mobile device, go to your Wi-Fi settings and connect to your router's wireless network using the default Wi-Fi settings. Locate the Wi-Fi name (SSID) and password for your device as printed on the included Wi-Fi Configuration Card.

   If you are connecting to the router from a remote network:

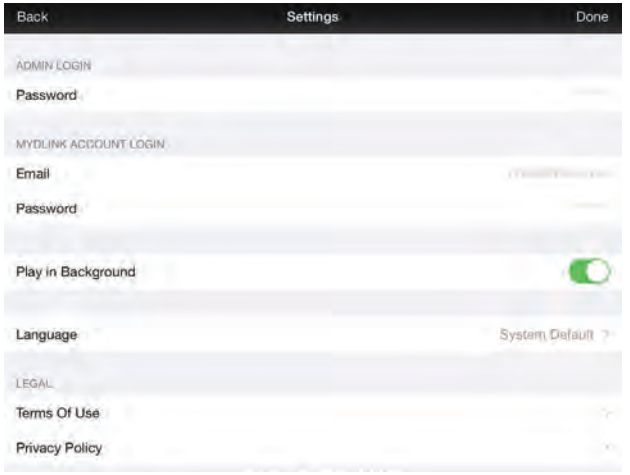
   Go directly to the next step.

5. Tap the **mydlink SharePort** icon, and the app will load.

6. At the mydlink SharePort device list page, tap the gear icon at the top right to enter the Settings page.



7. Enter your Admin Login and your mydlink Account Login information in the fields and click **Done**. You will be taken back to the device list where you can select the device for use with mydlink SharePort.



8. 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 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 let you see all the documents, photos, movies, or music stored on your removable storage. 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 the gear icon if it is not lit.

Tap on the document icon to view documents.

Tap the camera icon to view photos.

Tap on the movie icon to play videos.

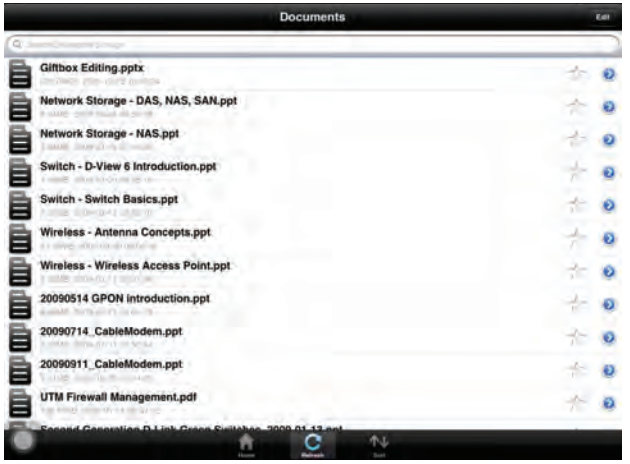
Tap on the music icon to play audio files.

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-850L 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 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 this icon gives you additional options:

- **Open In...**: Tap to use a third-party app to open the file.

The bottom menu bar includes these options:

Tap to go back to the main menu.

Tap to update the list of files.

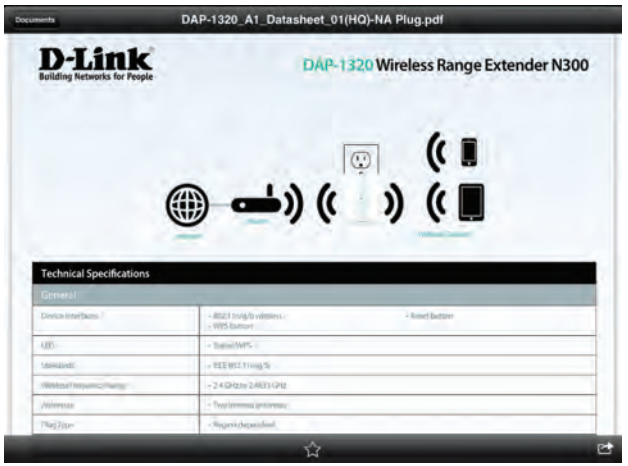
Tap to reorder the files alphabetically.

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

Tap to add/remove the file from your Favorites.

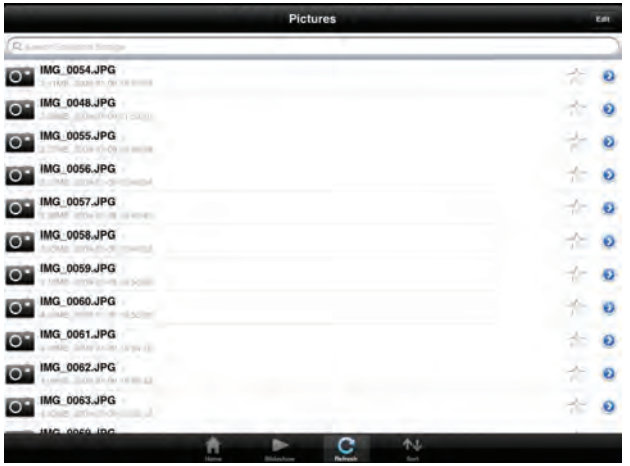
Tap to bring up the same options as >.

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



Pictures

The Pictures section allows you to stream images from your DIR-850L 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 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 this icon gives you additional options:

- **Open In...**: Tap to use a third-party app to open the file.

The bottom menu bar includes these options:

Home — Tap to go back to the main menu.

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

Refresh — Tap to update the list of files.

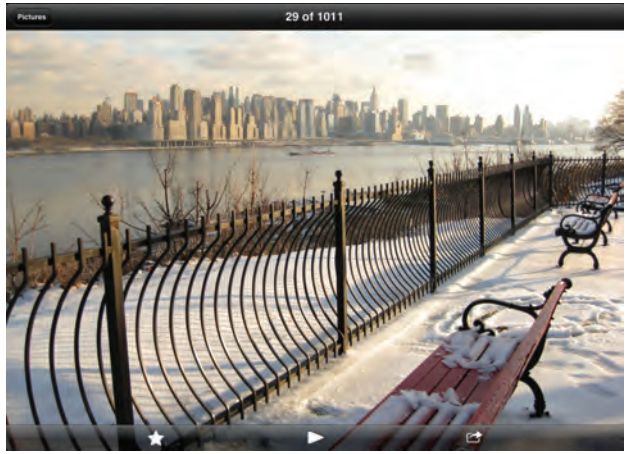
Sort — Tap to reorder the files alphabetically.

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 options as >.



Videos

The Videos section allows you to stream video clips and movies from your DIR-850L 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.

Tap 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 this icon gives you additional options:

- **Open In...**: Lets you use a third-party app to open the file.

The bottom menu bar includes these options:

Tap to go back to the main menu.

Tap to update the list of files.

Tap 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 fullscreen mode.

Tap to add/remove the file from your Favorites.

Tapping this icon gives you additional options:

- **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-850L 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.

Tap 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 this icon gives you additional options:

- **Open In...**: Lets you use a third-party app to open the file.

The bottom menu bar includes these options:

Tap to go back to the main menu.

Tap to update the list of files.

Tap to reorder the files alphabetically.

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

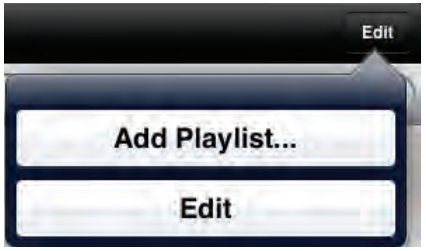
Tap to repeat all. Tap again to repeat a single song.

Tap to skip to the previous/next song.

Tap to enable/disable shuffle mode.

To create a playlist:

- Tap **Edit** > **Add Playlist**.
- 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.
- Tick the songs you wish to add and tap **Done**.

To delete songs from the playlist:

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

Folders

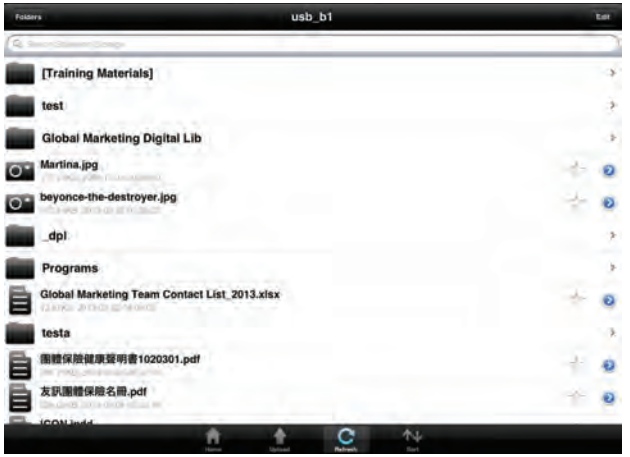
You can browse your removable storage in a folder view in the folders section. Tapping the filename will open the viewer/player for that file type as described in the previous pages. You can also upload files from your mobile device to the removable storage attached to your router.

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

Tap 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 > icon gives you additional options depending on the file type.



The bottom menu bar includes these options:

Tap to go back to the main menu.

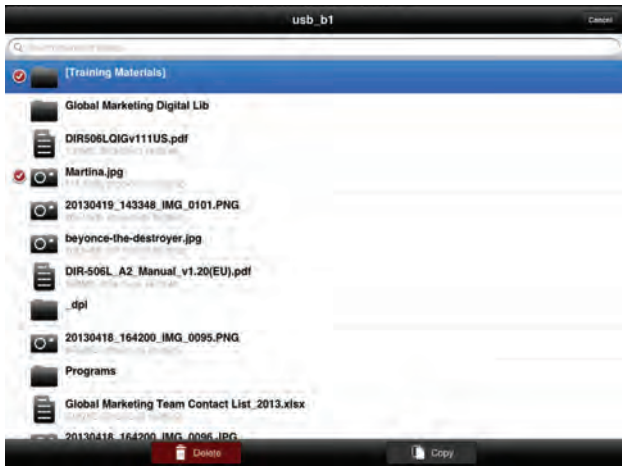
Tap to upload files from your device to your removable storage.

Tap to update the list of files.

Tap to reorder the files alphabetically.

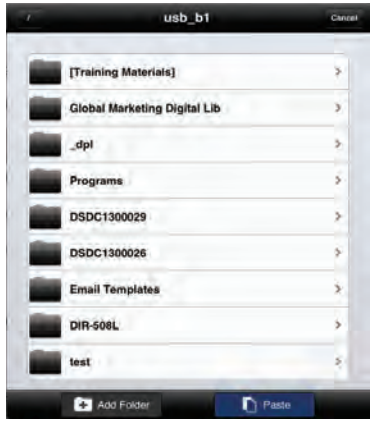
To delete files:

- Tap **Edit** at the top right.
- Tick the circle next to a file 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:

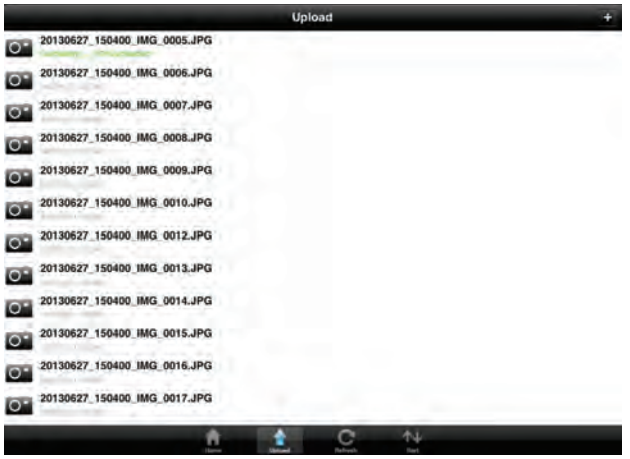
- Browse to the directory you wish to create a new folder in.
- Tap **Edit** at the top right.
- Tap **Add Folder** to add a new folder.
- Enter the name of the new folder, then tap **Save**.
- Tap **OK** to confirm folder creation.

To upload images and videos from your mobile device:

- Browse to the folder you wish to upload to.
- Tap **Upload** at the bottom.
- Select the photos/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 often 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.

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

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

The bottom menu bar includes these options:

Home — Tap to go back to the main menu.

Refresh — Tap to update the list of files.

Sort — Tap 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 streamlined mobile application that allows you to conveniently stream media and share files stored on a removable storage connected to your router. 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. It 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.

1. If you are connecting remotely through the mydlink SharePort app from the Internet, you will need a **mydlink** account. Please refer to page 99 for more details.

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

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

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

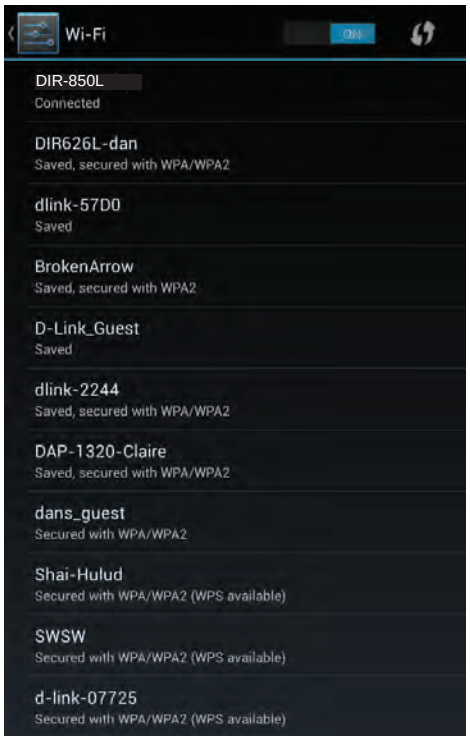
   If you have a QR code reader, you can scan the code for **mydlink SharePort** to the right.

4. If you are connecting to the router from a local network:

   On your mobile device, go to your Wi-Fi settings and connect to your router's wireless network using the default Wi-Fi settings. Locate the Wi-Fi name (SSID) and password for your device as printed on the included Wi-Fi Configuration Card.

   If you are connecting to the router from a remote network:

   Go directly to the next step.

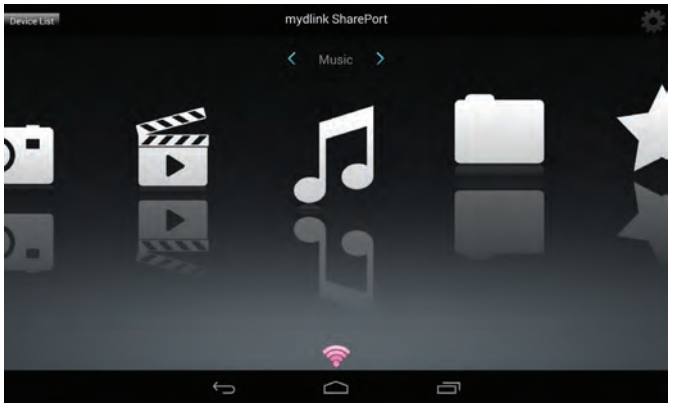


5. Tap the **mydlink SharePort** icon, and the app will load.

6. At the mydlink SharePort device list page, tap the gear icon at the top right to enter the Settings page.

7. Enter your Admin Login and your mydlink Account Login information in the fields and click **Apply**. You will be taken back to the device list where you can select the device for use with mydlink SharePort.

8. 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 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 let you see all the documents, photos, movies, or music stored on your removable storage. 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 the gear icon if it is not lit.

Tap on the document icon to view documents.

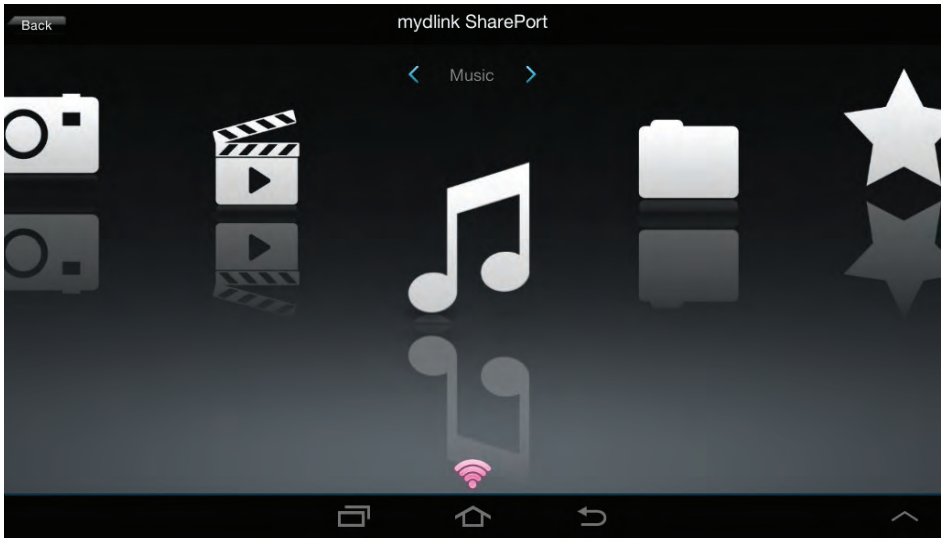
Tap the camera icon to view pictures.

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 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

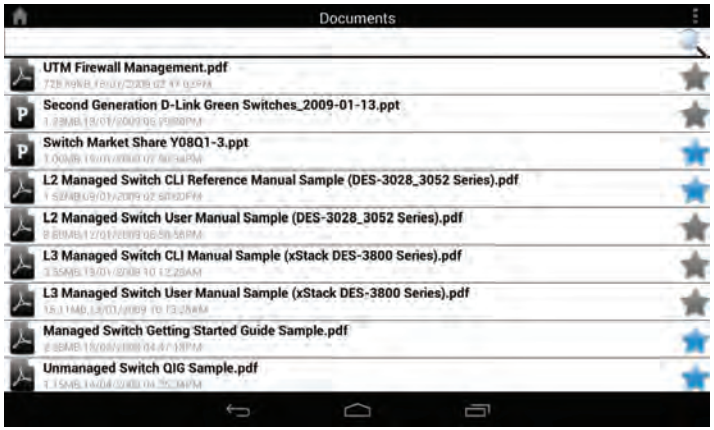
The Documents section allows you to share, print, and view documents streamed from your DIR-850L to your mobile device. Tap the document icon on the main menu to browse the files on your mobile device.

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

Tap to return to the main menu.

Tap 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.



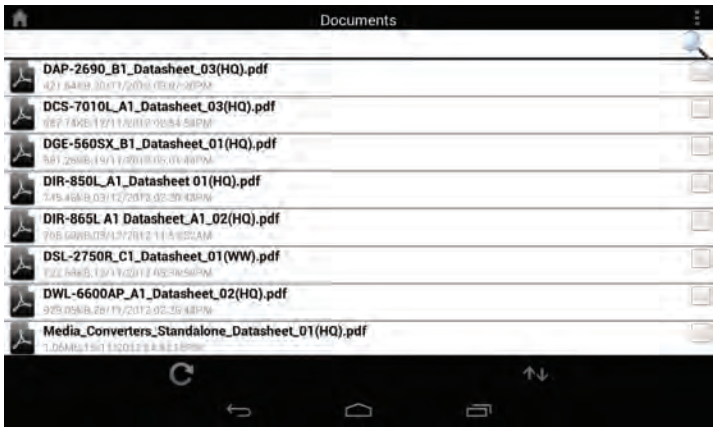
Tap for additional options:

Tap to return to the main menu.

Tap to update the list of files.

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

Check a file then tap 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-850L to your mobile device. Tap the camera icon on the main menu to browse your photo collection on your removable storage.

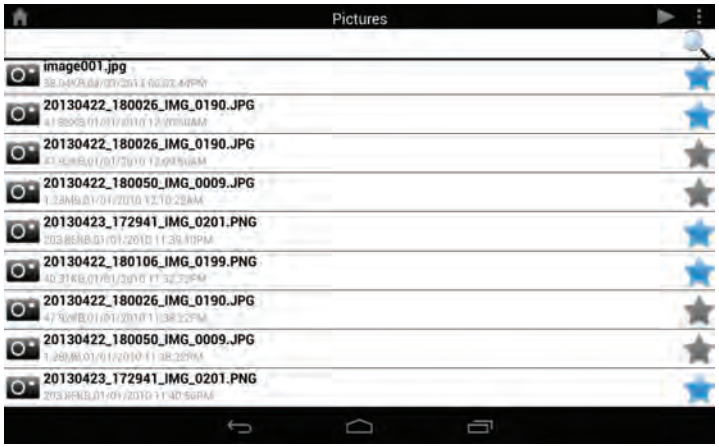
Search Bar: Type in the name of a file to search for it.

Tap to return to the main menu.

Tap to start a slideshow.

Tap 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.



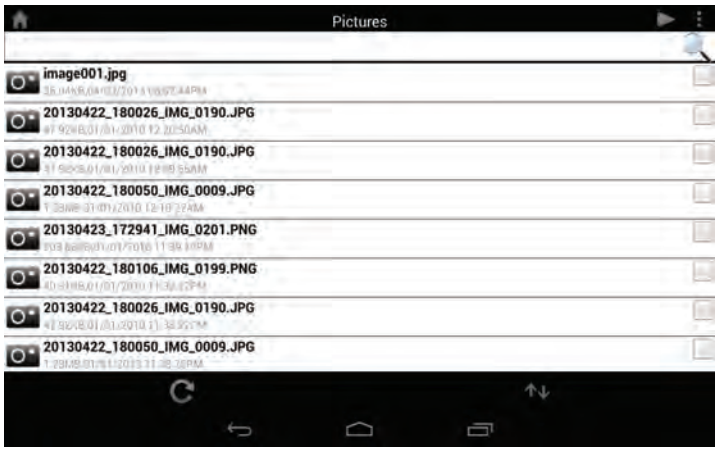
Tap for additional options:

Tap to return to the main menu.

Tap to update the list of files.

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

Check a file then tap 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 to start a slideshow. Tap the image to stop the slideshow.

Tap to delete the current image. Tap **OK** to confirm.

Tap to bring up additional options using other applications.

Tap 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-850L 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 to return to the main menu.

Tap 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 to return to the main menu.

Tap to update the list of files.

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

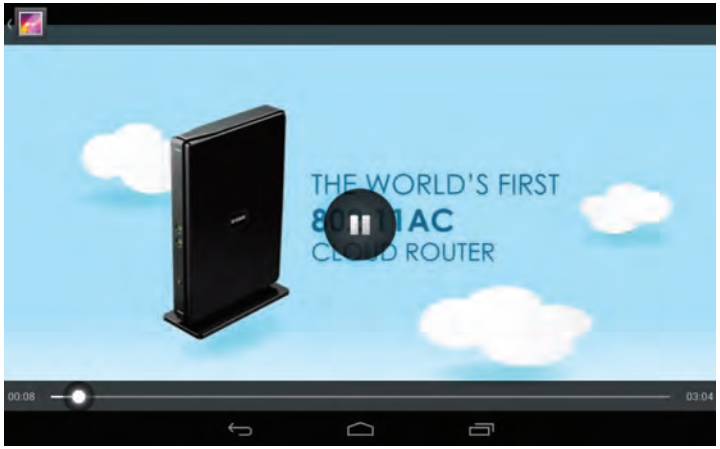
Check a file then tap this icon to delete it.

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-850L to your mobile device. Tap the music icon on the main menu to browse your music collection on your removable storage.

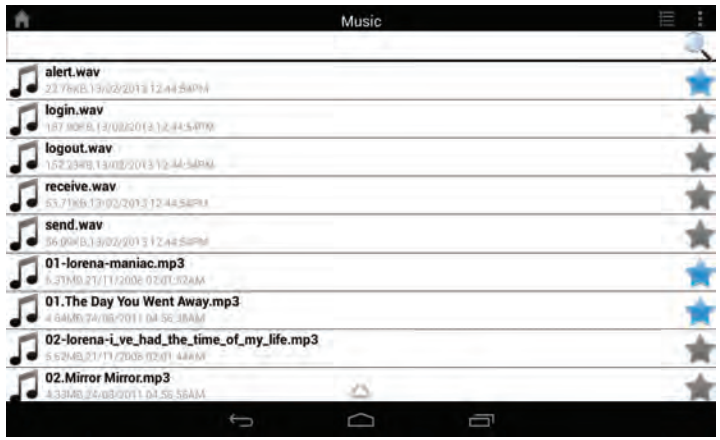
Search Bar: Type in the name of a file to search for it.

Tap to return to the main menu.

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

Tap 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 to return to the main menu.

Tap to update the list of files.

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

Check a file then tap this icon to delete it.

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

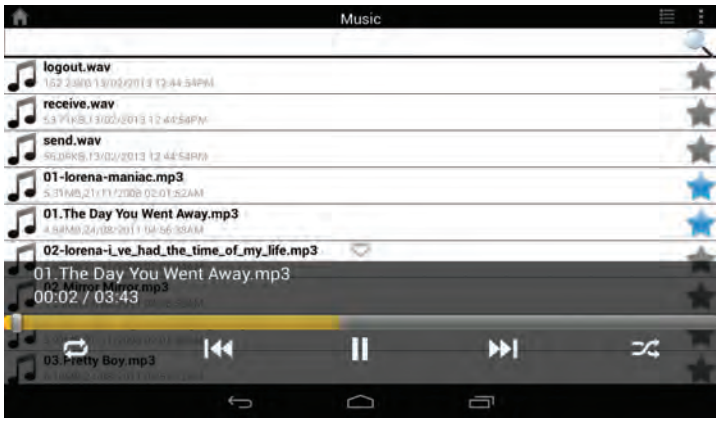
Tap on the up/down arrow to show/hide the player controls.

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

Tap to skip to the previous/next song.

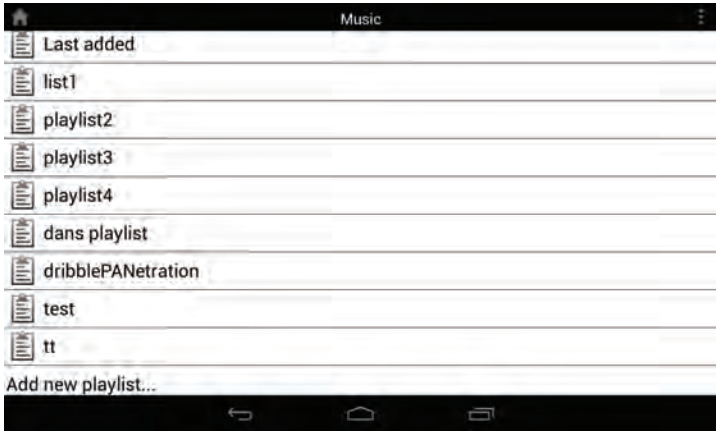
Tap to play or pause the song.

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.

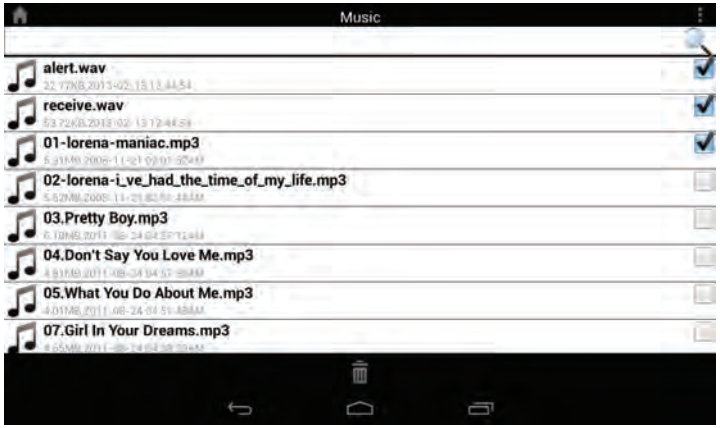


To add songs to a playlist:

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

To delete songs from the playlist:

- Tap **Edit** in the playlist browser and mark the files to be deleted.
- Tap then tap **OK** to confirm.



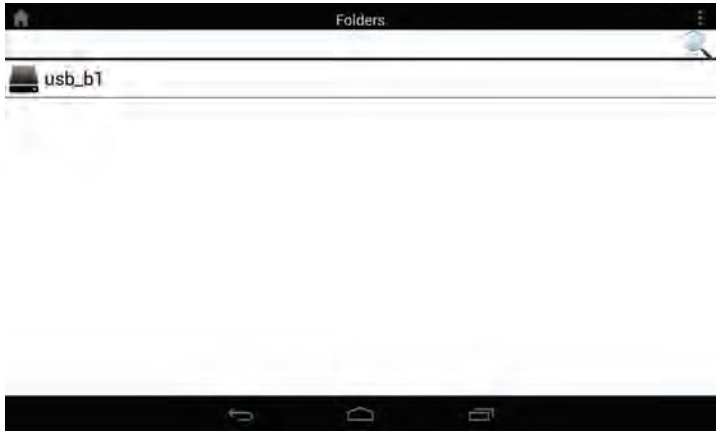
Folders

You can browse your removable storage in a folder view in the folders section. Tapping the filename will 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 removable storage attached to your router.

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

Tap to return to the main menu.

Tap to access file options.

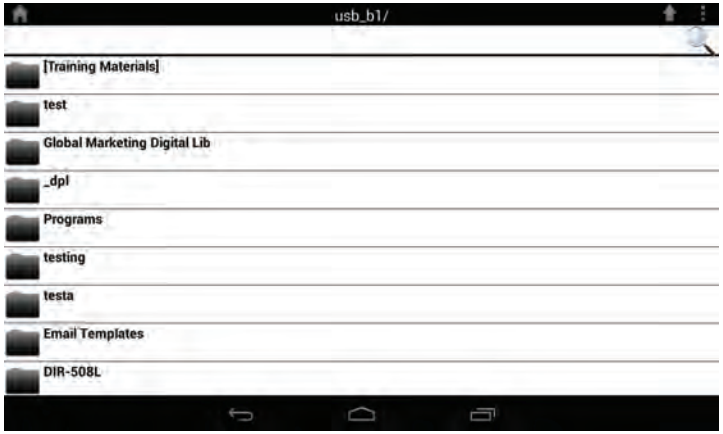


In the file browser:

Tap to return to the main menu.

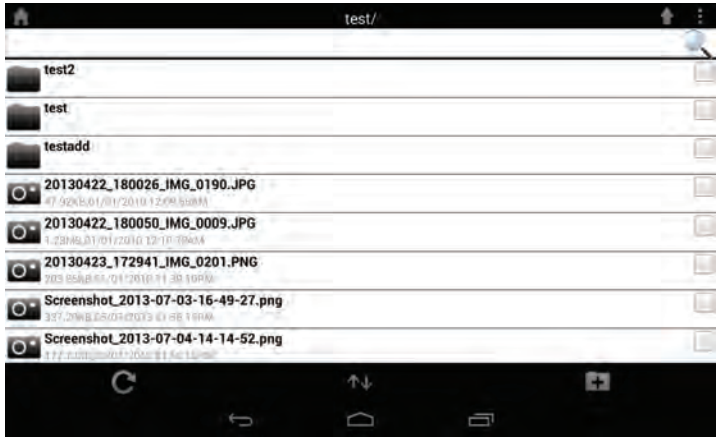
Tap to upload files.

Tap to refresh, sort, create a new folder, or mark files for deletion and copying.



Tap to select files and perform the following actions:

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



To delete files:

- Tap on and tick the box next to a file for deletion.
- Tap on to delete your selected files. Tap **OK** to confirm.

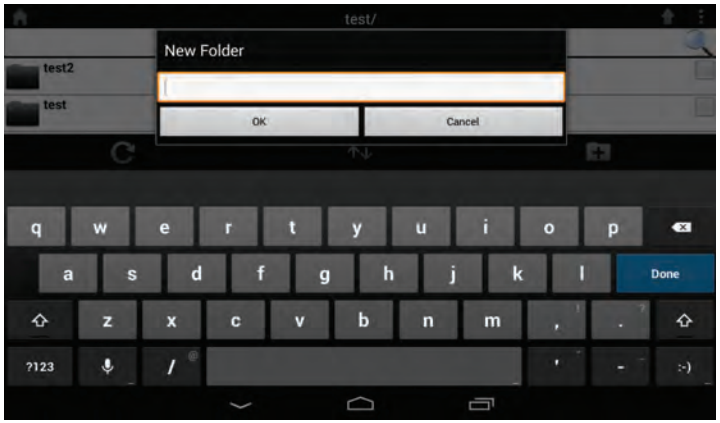
To copy files:

- Tap on to select files for copying. Tick the box next to each file for copying.
- Tap on to browse to the destination.

- Tap **Paste** or **Cancel.**
- You can also tap **New Folder** if you wish to create a 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.**

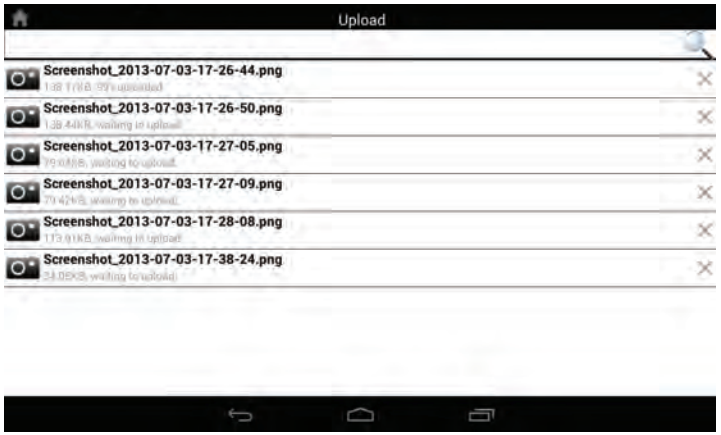


To upload images and videos from your mobile device:

- 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.
- Tick the 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 next to it.



Favorites

The Favorites section allows you to quickly access your most often 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 to return to the main menu.

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

Tap for additional options:

Tap to return to the main menu.

Tap to update the list of files.

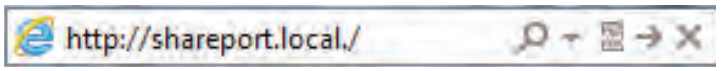
Tap to sort the files by name, size, type, or date.

Check a file then tap to delete it.

Using SharePort Web Access

SharePort Web Access lets you stream music, photos, and movies from a USB drive attached to your DIR-850L through a Web browser. You can also download and upload files to and from a computer through the Web browser interface.

- Type **http://shareport.local.** in your browser's URL to take you to the SharePort Web Access log in page.

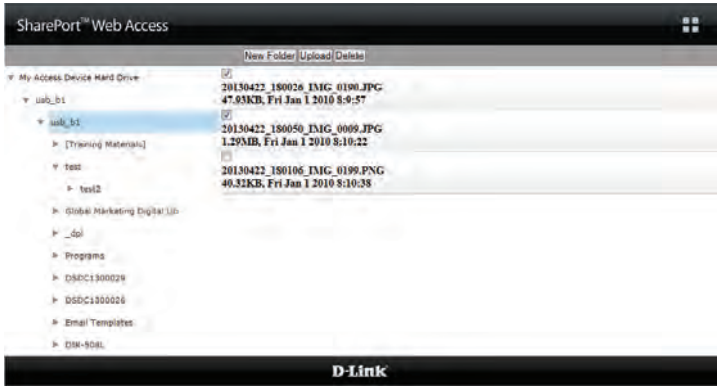


- Log in with your admin password or a SharePort Username and Password.

At the main menu, you can browse the files stored on your USB drive by file type.

- Click  to browse by folders.

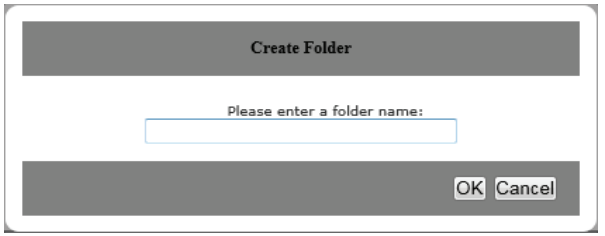
The folder browser section will show folder hierarchy at the left and files at the right. You can quickly browse directories and perform operations by using the buttons in the folder browser view.



- Click  to return to the main menu.

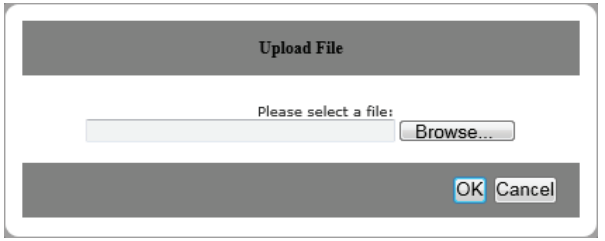
To create a new folder:

- Click **New Folder** in the current directory.
- Enter a folder name in the Create Folder pop-up.
- Click **OK**. The new folder will appear in the left column.



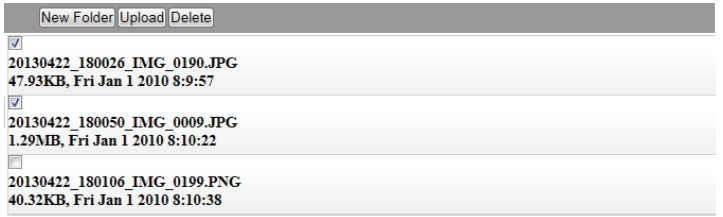
To upload a file:

- Click **Upload** to upload a file to the current folder.
- In the pop-up browse to the file you wish to upload.
- Click **OK**. The file will appear after the browser refreshes.



To delete a file:

- Tick the checkbox next to the files you wish to delete.
- Click **Delete** and a dialog box will appear.
- Click **OK** to confirm.



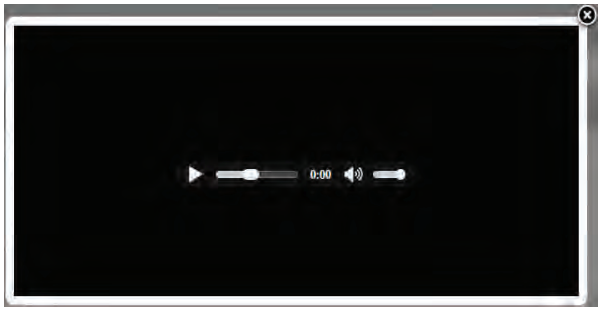
Music

You can go to the Music section to browse and play the music files on your storage. Click **Back** to return to the main menu.

- Click on the audio filename to play it in the browser.

You can pause, seek, mute and adjust the volume in the window.

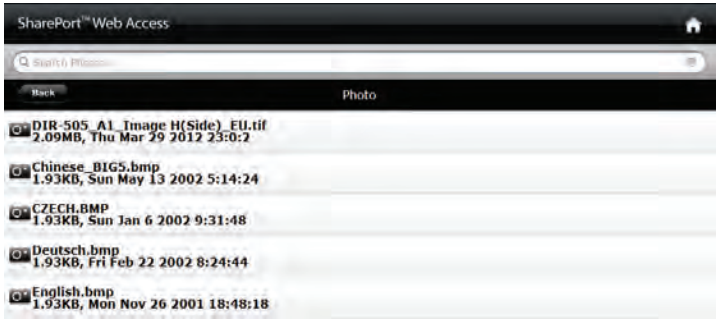
- Close the window to end playback.



Pictures

You can go to the Pictures section to browse and view the image files on your storage. Click **Back** to return to the main menu.

- Click on the image name to view it in the browser.

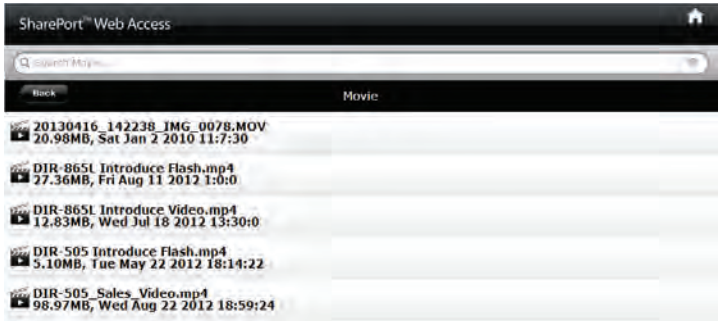


- Hover your mouse over the left or right side of the image and click < or > to view the previous or next image.

Videos

You can go to the Videos section to browse and play the video files on your storage. Click **Back** to return to the main menu.

- Click on the video file to open the file in a window for streaming.



You can pause, seek, mute, adjust the volume, and activate full screen mode in the window controls.

- Close the window to end playback.

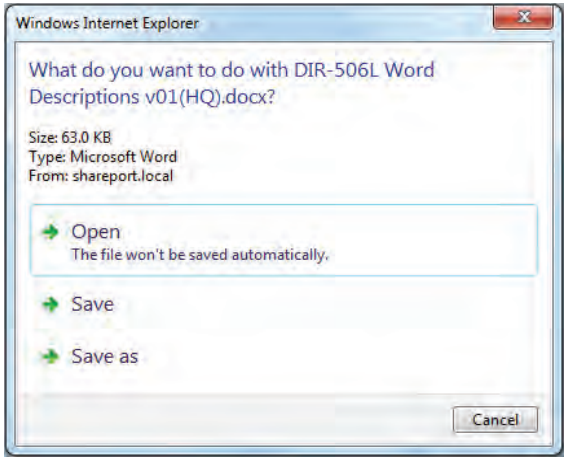
Note: Depending on your browser, the video file may be played back using the default player associated with that file format.

Documents

You can go to the Documents section to open and save files from your storage to your computer. Click **Back** to return to the main menu.

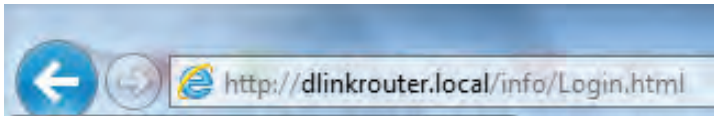
- Click on the filename to open the file.

- Depending on the file type, the default program will be started or a pop-up may ask you to open or save the file.



Configuration

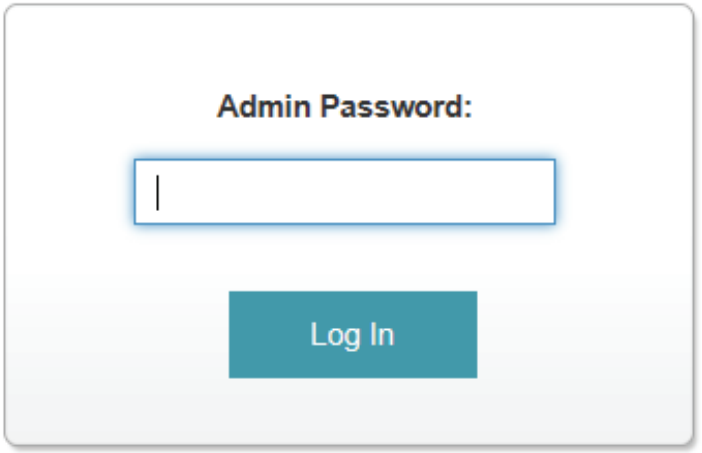
To access the configuration utility, open a web-browser such as Internet Explorer and enter **http://dlinkrouter.local./**



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

Enter your password. If you previously followed the setup wizard (see page 12), please use the admin password you entered during the wizard. Otherwise, leave the password blank. Click **Log In** to proceed.

Note: *If you cannot remember your password and cannot log in, press the reset button (see "Admin" on page 114) to restore the router to its 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 quickly jump back Home at any time.

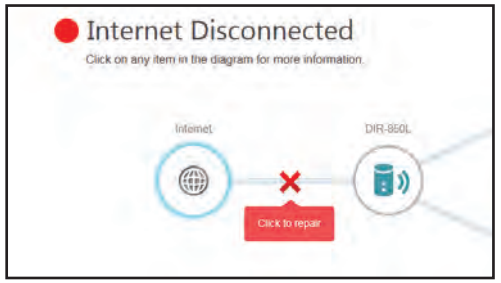
Note: *The system will automatically log out after a period of inactivity.*

Home

The Home page displays the current status of the router in the form of an interactive diagram. You can click each 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 will allow you to quickly navigate to other pages.

Internet

The Home page displays whether or not the router is currently connected to the Internet. If it is disconnected, click **Click to repair** to bring up the setup wizard (see page 68).



To bring up more details about your Internet connection, click on the **Internet** icon. Click **IPv4** or **IPv6** to see details of the IPv4 connection and IPv6 connection respectively.

Click **Release IP Address** to disconnect from the Internet. If you do this and wish to reconnect, click **Renew IP Address**.

To reconfigure the Internet settings, refer to page 68.

DIR-850L

Click on the **DIR-850L** icon to view details about the router and its wireless settings.

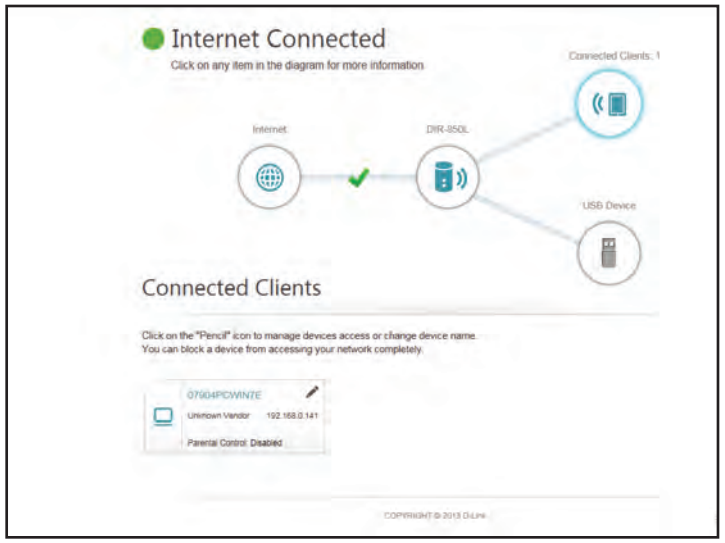
Here you can see the router's current wireless settings, as well as its MAC address and IPv4/IPv6 addresses.

To reconfigure the 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 menu that appears. Refer to page 22.

To reconfigure the 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 menu that appears.

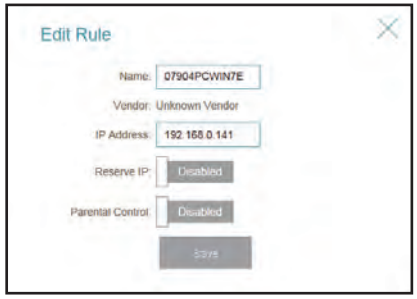
Connected Clients

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 IP addresses.

To edit each client's settings, click the pencil icon on the client you want to edit.



Name: Enter a custom name for this client.

Vendor: Displays the vendor of the device.

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

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

Parental Control: Enable and to disable network access during the chosen schedule for firewall and website filters.

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** and refer to "SharePort" on page 97.

Settings

Wizard

In the Settings menu on the bar on the top of the page, click **Wizard** to open the setup wizard. This is the same wizard that appears when you start the router for the first time. Refer to page 12 for details.

Internet

In the Settings menu on the bar on the top of the page, click **Internet** to see the Internet configuration options.

My Internet Connection Is: Choose your Internet connection type from the drop-down menu. You will be presented with the appropriate options for your connection type. Click **Advanced Settings...** to expand the list and see all of the options.

For **Static IP** refer to page 70.

For **Dynamic IP (DHCP)** refer to page 69.

For **PPPoE** refer to page 71.

For **PPTP** refer to page 72.

For **L2TP** refer to page 74.

For **DS-Lite** refer to page 76.

To configure an IPv6 connection, click the **IPv6** link. Refer to page 77

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 give you 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.

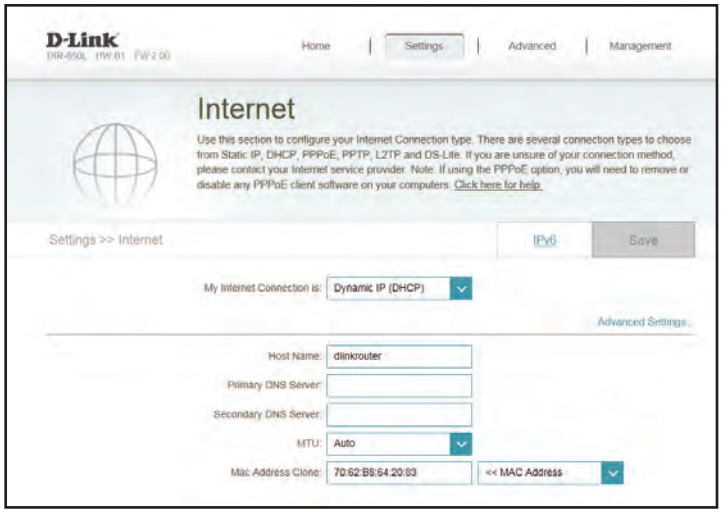
Primary DNS Server: Enter the primary DNS server IP address assigned by your ISP. This address is usually obtained automatically from your ISP.

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 - you may need to change the MTU for optimal performance with your ISP.

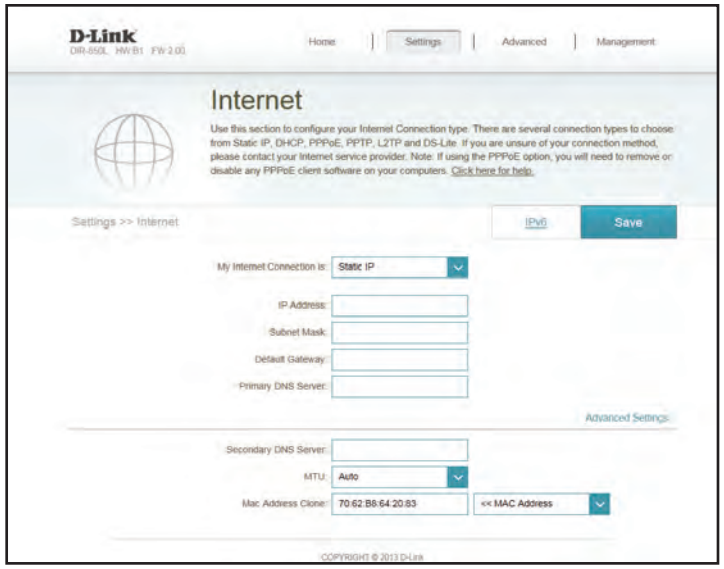
MAC Address Clone: The default MAC address is set to the Internet port's physical interface MAC address on the router. You can use the drop-down menu to replace the Internet port's MAC address with the MAC address of a connected client.

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.

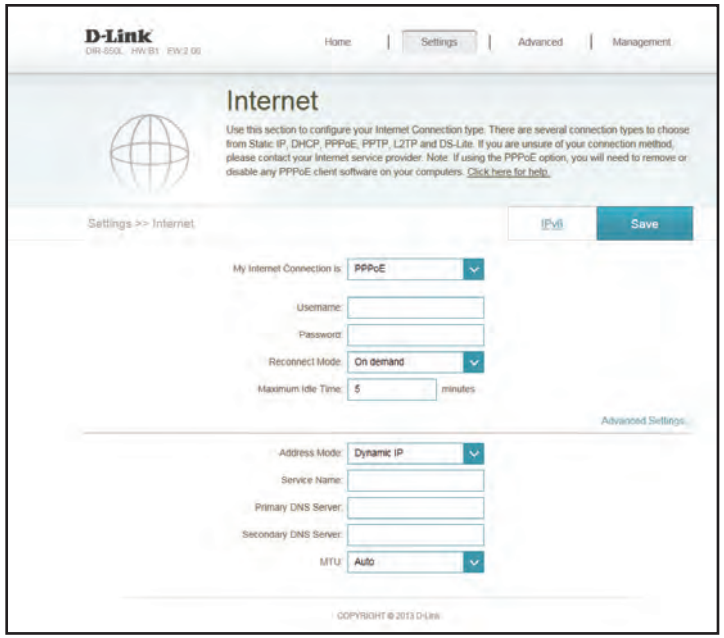
MTU: Maximum Transmission Unit - you may need to change the MTU for optimal performance with your ISP.

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** if your Internet connection requires you to enter a username and password. This information is 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.

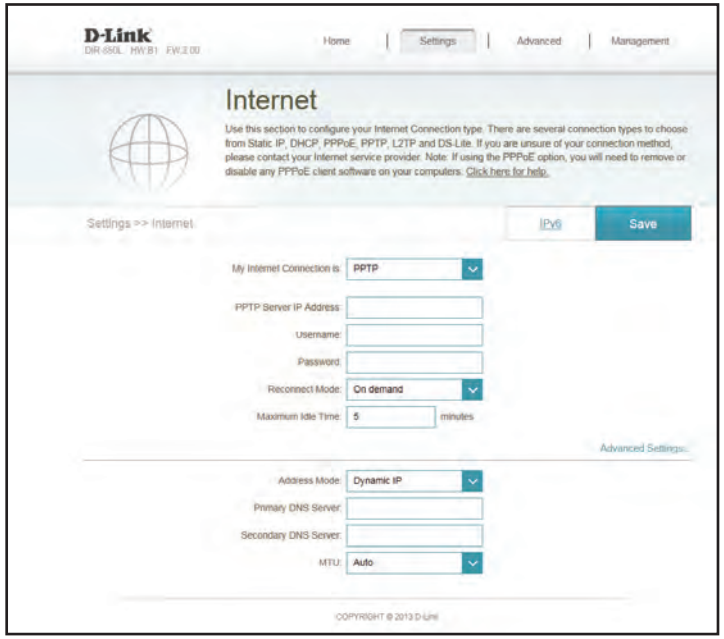
Secondary DNS Server: Enter the secondary DNS server IP address assigned by your ISP.

MTU: Maximum Transmission Unit - you may 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 ISP will 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 IP address provided by your ISP (Static IP only).

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

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

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

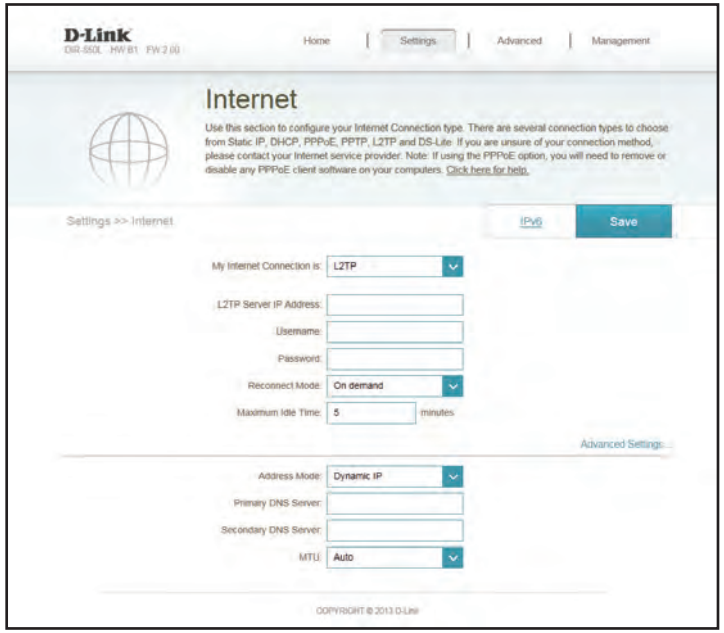
Secondary DNS Server: Enter the secondary DNS server IP address assigned by your ISP.

MTU: Maximum Transmission Unit - you may 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 will 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 IP address provided by your ISP (Static IP only).

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

L2TP Gateway IP Address: Enter the gateway IP address provided by your ISP (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 - you may 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** to let the router allocate the AFTR IPv6 address automatically. Select **Manual Configuration** to enter the AFTR IPv6 address manually.

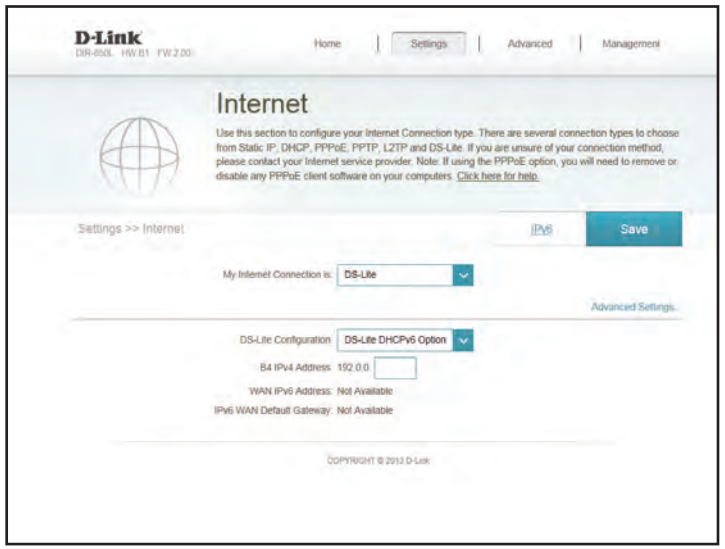
AFTR IPv6 Address: If you selected Manual Configuration above, enter the AFTR IPv6 address used here.

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 connection type from the drop-down menu. You will be presented with the appropriate options for your connection type. Click **Advanced Settings...** to expand the list and see all of the options.

For **Auto Detection** refer to page 78.

For **Static IPv6** refer to page 80.

For **Auto Configuration (SLAAC/DHCPv6)** refer to page 82.

For **PPPoE** refer to page 84.

For **IPv6 in IPv4 Tunnel** refer to page 86.

For **6 to 4** refer to page 88.

For **6rd** refer to page 89.

For **Local Connectivity Only** refer to page 91.

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 make some settings on your side before your router can connect to the IPv6 Internet.

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

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 services.

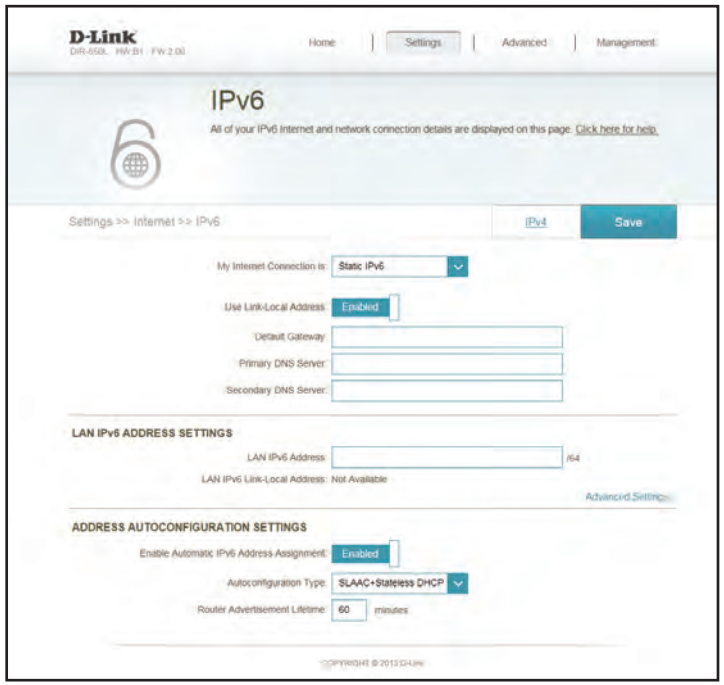
Auto Configuration Type: Select **SLAAC + RDNSS** or **SLAAC + Stateless DHCP, Stateful (DHCPv6)**.

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 a link-local address.

IPv6 Address: If you disabled **Use Link-Local Address**, enter the 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.

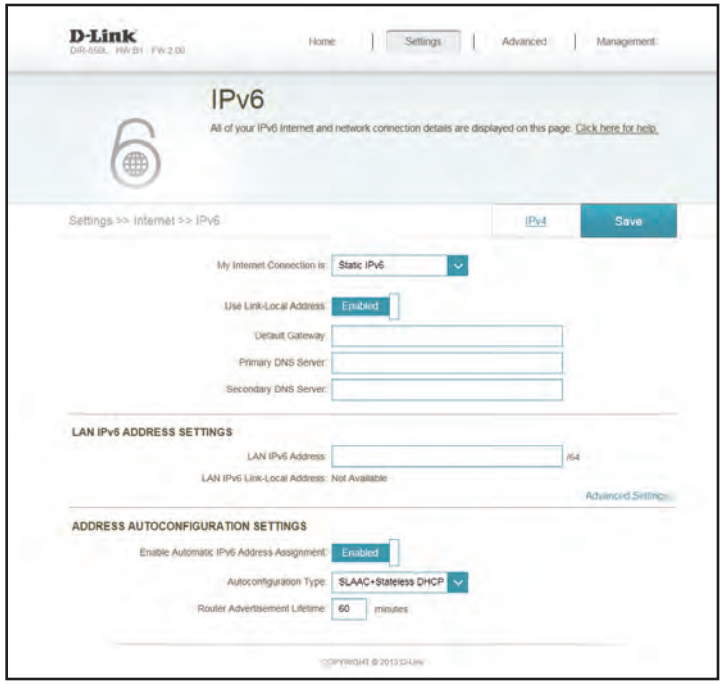
LAN IPv6 Link-Local Address: Displays the router's LAN link-local address.

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

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

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

Click **Save** when you are done.



Auto Configuration (SLAAC/DHCPv6)

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 make some settings on your side before your router can connect to the IPv6 Internet.

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

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 services.

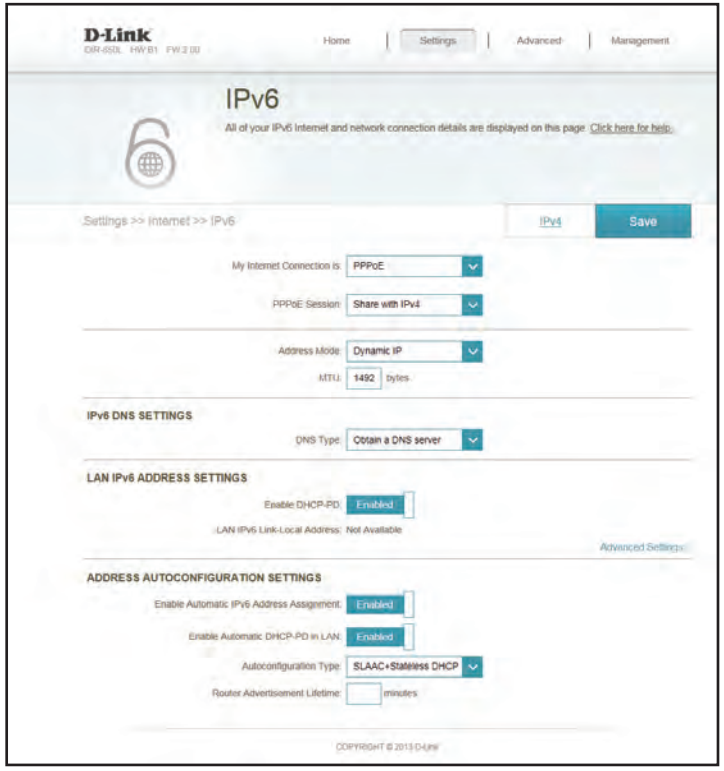
Auto Configuration Type: Select **SLAAC + RDNSS** or **SLAAC + Stateless DHCP, Stateful (DHCPv6)**.

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

Click **Save** when you are done.

PPPoE

Select **PPPoE** if your Internet connection requires you to enter a username and password. This information is provided by your Internet service provider (ISP).



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 here.

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

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:

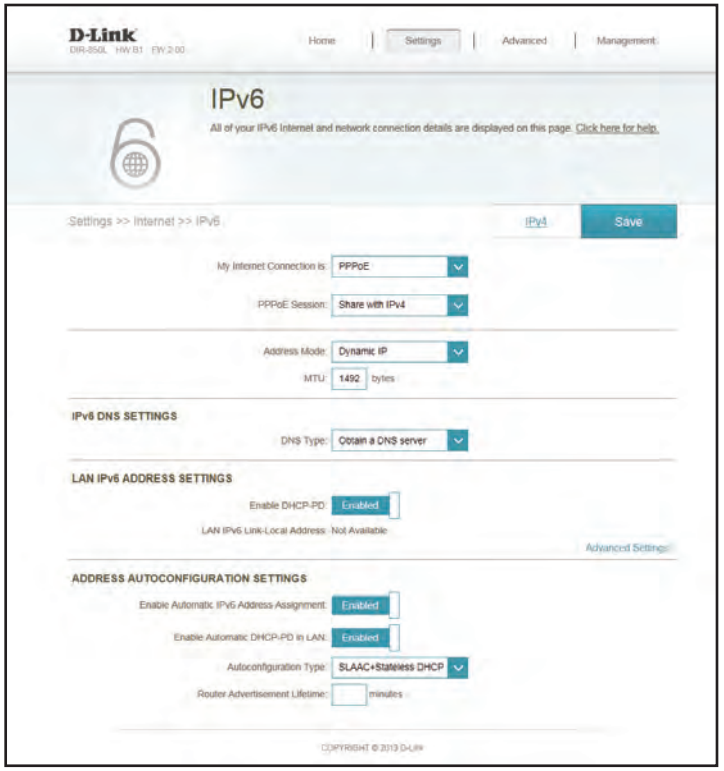
Reconnect Mode:

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

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.



LAN IPv6 Address: 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.

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

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

Click **Save** when you are done.

IPv6 in IPv4 Tunnel

The user 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 IPv4 remote address you will use.

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

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

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

Subnet Prefix Length: Enter the subnet prefix length supplied by your ISP.

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

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 services.

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.

6 to 4

In this section the user can configure the IPv6 6 to 4 connection settings. 6to4 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.

6 to 4 Address: Displays the 6 to 4 address.

6 to 4 Relay: Enter the 6 to 4 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 link-local address.

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

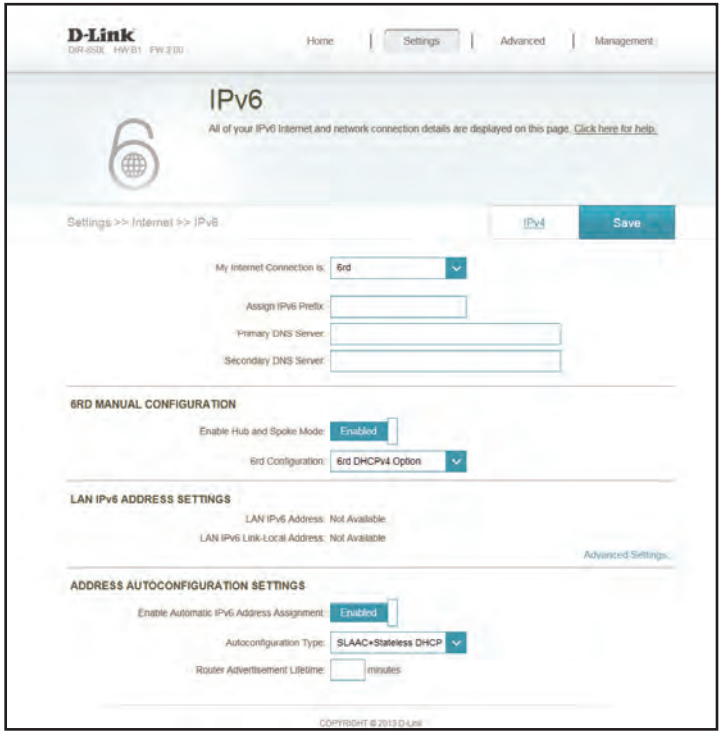
Auto Configuration Type: Select **Stateful (DHCPv6)**, **SLAAC + RDNSS** or **SLAAC + Stateless DHCPv6**.

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 discover and populate the data values, or **Manual Configuration** to enter the settings yourself.

WAN IPv4 Address: This is the IPv4 address given to you by your ISP and cannot be changed.

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

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

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

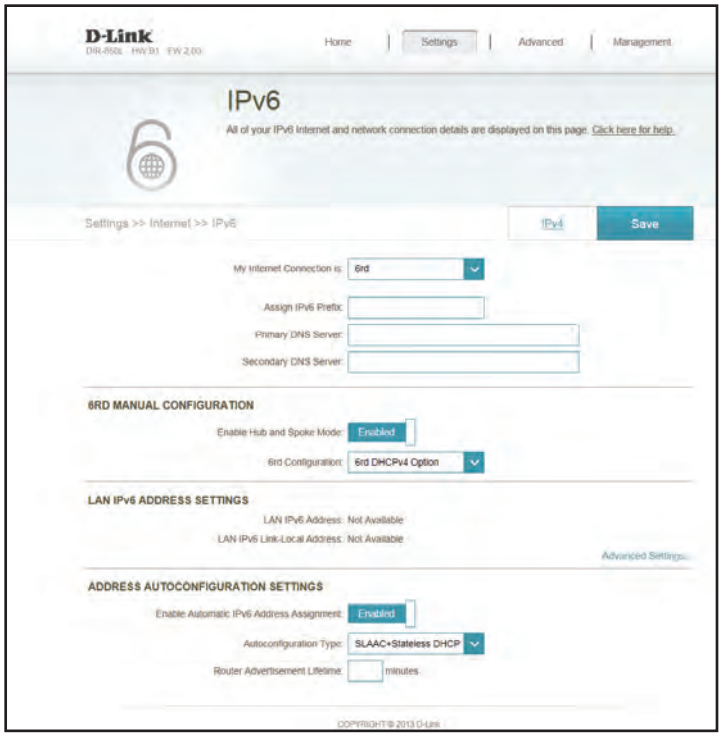
LAN IPv6 Link-Local Address: Displays the router's LAN link-local address.

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

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

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

Use Default ULA Prefix: Checking this box will automatically configure the ULA prefix for the default setting.

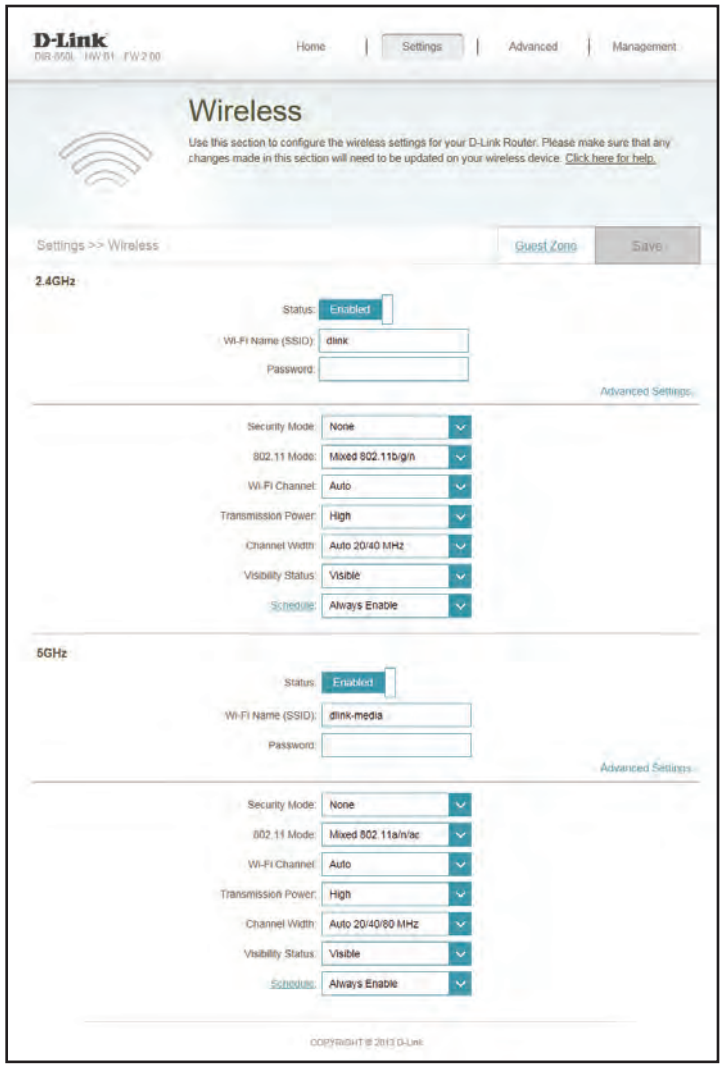
ULA Prefix: If you wish to choose your own ULA prefix, enter it here.

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

Click **Save** when you are done.

Wireless

In the Settings menu on the bar on the top of the page, click **Wireless** to see the wireless configuration options. To configure the router's guest zone, click the **Guest Zone** link. Refer to page 94 for details. Click **Advanced Settings...** to expand the list and see all of the options. The following options apply to both the 2.4 GHz and the 5 GHz wireless frequency bands:



Status: Enable or disable the wireless frequency band.

Wi-Fi Name (SSID): Create a 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: Choose **None**, **WEP**, or **WPA/WPA2-(Personal)** (recommended).

802.11 Mode: Select the desired wireless networking standards to use. 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).

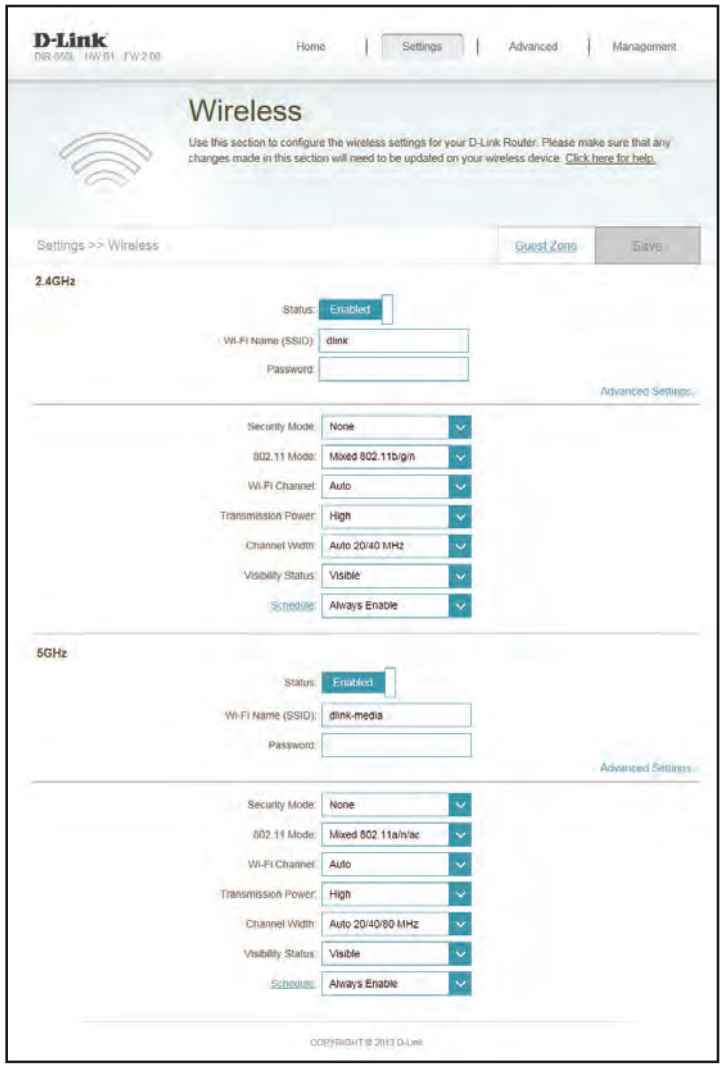
Transmission Power: Select the desired wireless transmission power.

Channel Width: Select **Auto 20/40** 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 the time schedule that the rule will be enabled on. The schedule may be set to **Always Enable**, or you can create your own schedules in the **Schedules** section (refer to page 88).

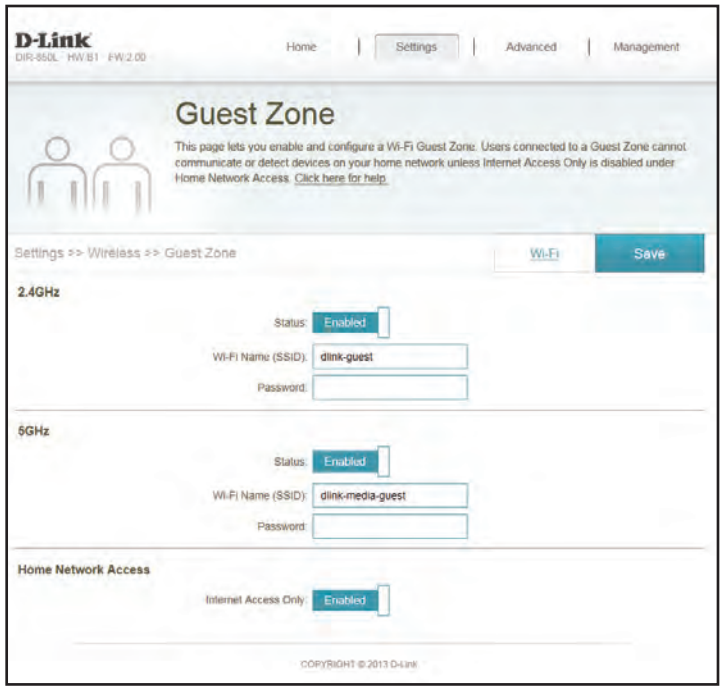
Click **Save** when you are done.



Guest Zone

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

In the Settings menu on the bar on the top of the page, click **Wireless**, then click the **Guest Zone** link. Click **Advanced Settings...** to expand the list and see all of the options. The following options apply to both the 2.4 GHz and the 5 GHz 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.

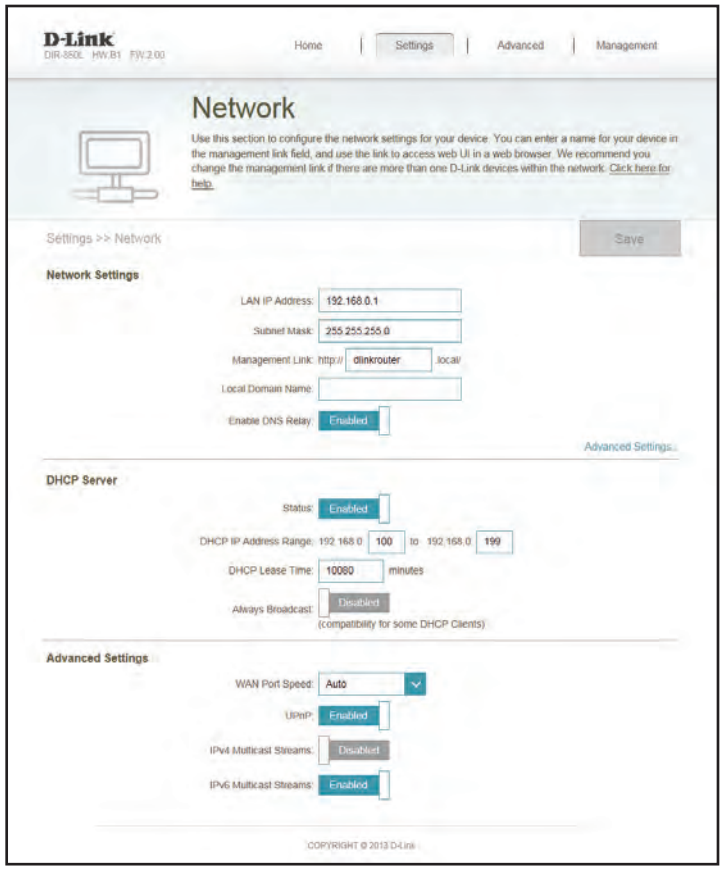
Password: Create a password to use for wireless security. Wireless clients will need to enter this password to successfully connect to the guest zone.

Internet Access Only: Enabling this option will confine connectivity to the Internet, disallowing guests from accessing other local network devices.

Click **Save** when you are done.

Network

This section will allow you to change the local network settings of the router and to configure the DHCP settings. In the Settings menu on the bar on the top of the page, click **Network**. Click **Advanced Settings...** to expand the list and see all of the options.



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

If you change the IP address, once you click **Save**, 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 is **http://dlinkrouter.local**./ Here, you can replace **dlinkrouter** with a name of your choice.

Local Domain Name: Enter the domain name (optional).

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

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.

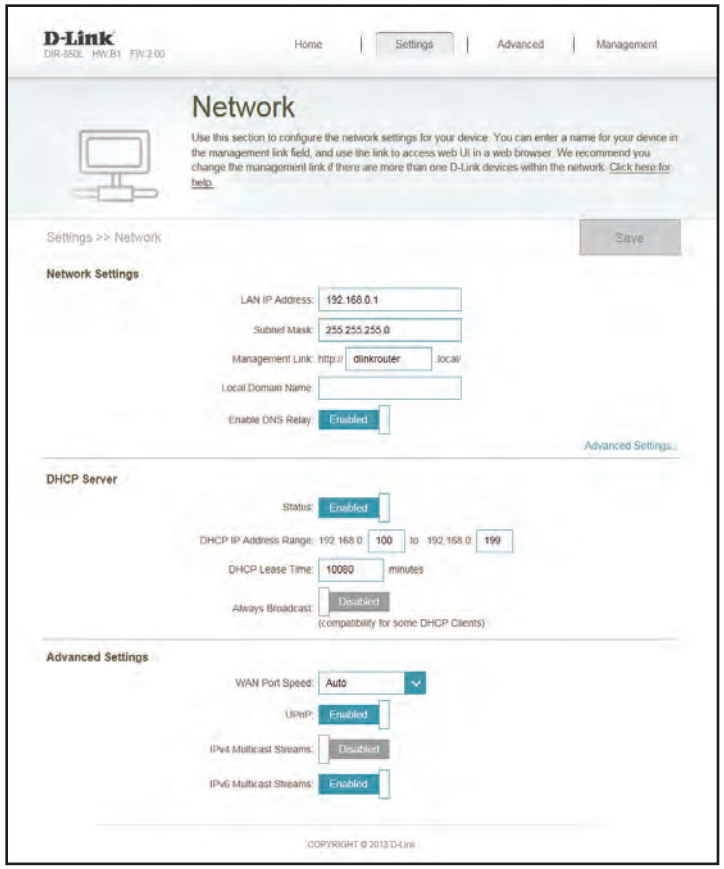
UPnP: Enable or disable Universal Plug and Play (UPnP). UPnP provides compatibility with networking equipment, software and peripherals.

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

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

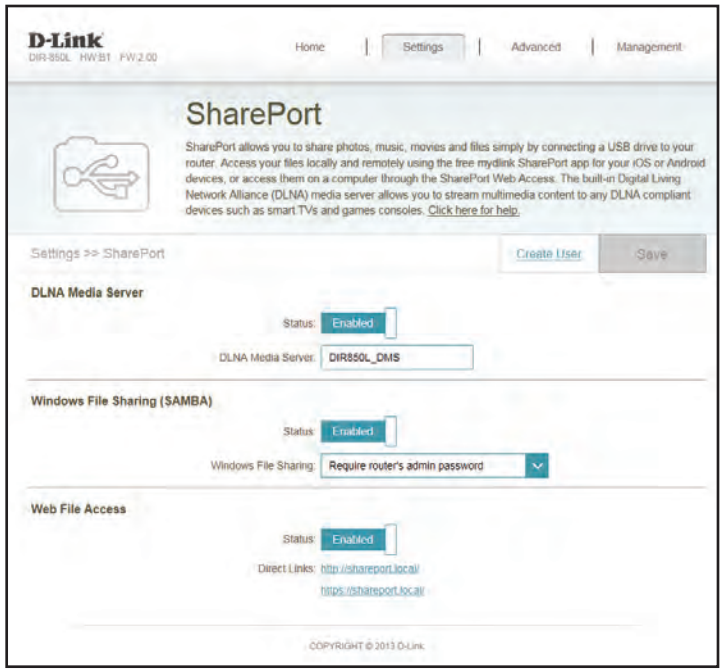
IPv6 Multicast Stream: Enable to allow IPv6 multicast traffic to pass through the router from the Internet.

Click **Save** when you are done.



SharePort

This page will allow 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 on your smartphone or tablet. In the Settings menu on the bar on the top of the page, click **SharePort**.



Status: Check to enable DLNA media server functions, allowing connected clients access to media files over the network.

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

Windows File Sharing (SAMBA): 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 remote access to files stored on a USB device plugged into the router through a web browser.

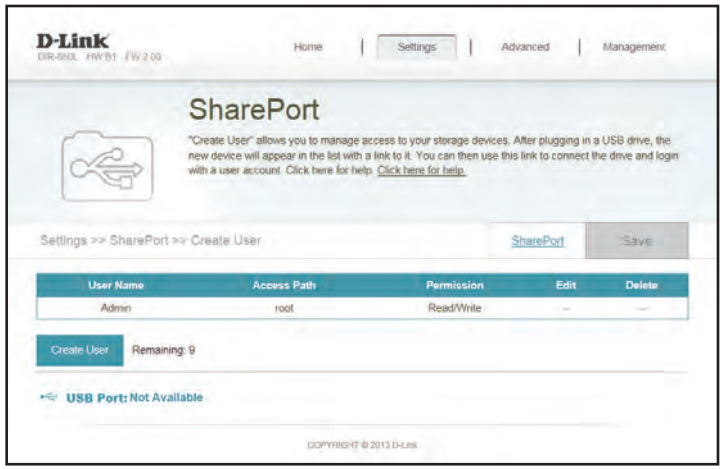
Direct Links: This area will display the HTTP and HTTPS links to connect to your SharePort drive through a web browser from a device on your network.

Click **Save** when you are done.

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. The current list of user accounts will be displayed, along with their current permissions and access path. If they do not have an account set up, users will be restricted to guest access; only having access to the "Guest" folder on the media server. The router can store a maximum of ten accounts (including the "Admin" account).



If you wish to remove an account, click on its trash can icon in the Delete column. If you wish 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. If you edit or create a user, the following options will appear:

User Name: Enter the desired user name for the new account.

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

Permission: Select either **Read Only** or **Read/Write** to control whether the user can edit, add, or delete files on the device.

Folder: Choose the parent folder that the user will be able to access. Files and folders on a higher level will be unavailable. "root" means that the user can access all files on the device. To change the selected folder, click **Browse** and browse to the desired folder.

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

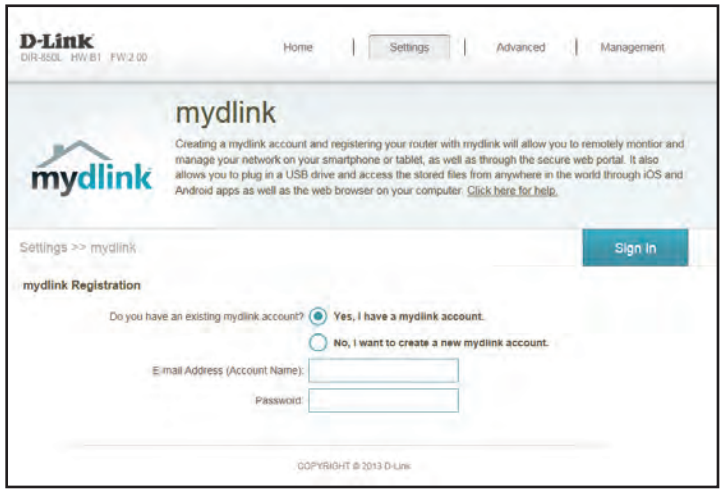
mydlink

Enabling mydlink will allow you to access and manage the mydlink-compatible devices on your network. This can be done either through a web browser or via a smartphone app.

This page allows you to sign in to an existing mydlink account, or sign up for a new mydlink account. In the Settings menu on the bar on the top of the page, click **mydlink**.

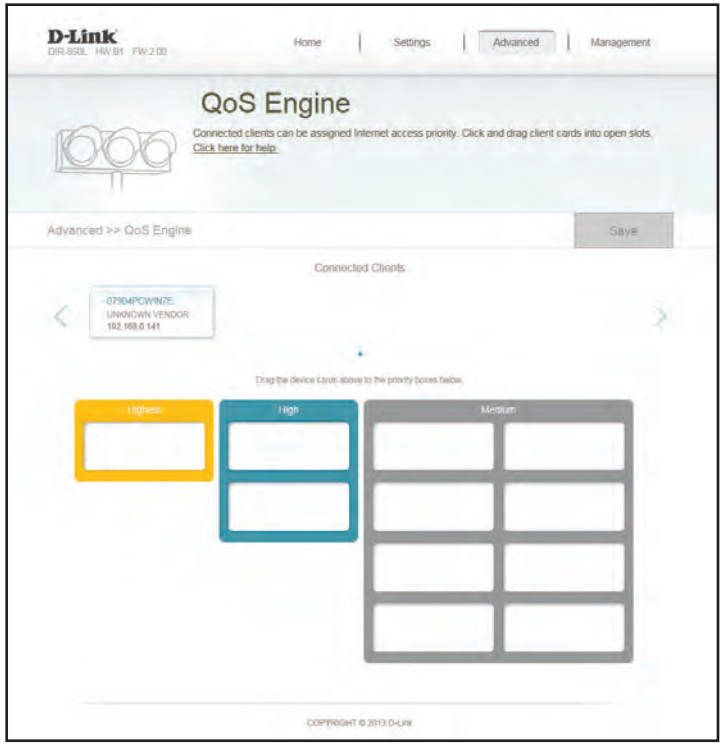
If you do not already have a mydlink account, click **No, I want to create a new mydlink account**. Fill out your email address (which will also function as your username), choose a password, and enter your first and last name. Then, click **Sign Up** to create your new mydlink account.

If you already have a mydlink account, click **Yes, I have a mydlink account**. Enter your email address (which is also your username) and your password. Then, click **Sign In** to register your existing mydlink account with your router.



Advanced
QoS Engine

This section will allow you to prioritize particular clients over others, so that those 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 device a higher priority than the latter so that the movie streaming is not disrupted by the traffic of the other devices on the network.



In the Advanced menu on the bar on the top of the page, click **QoS Engine**.

Under All Devices, you will see device cards representing each connected client. If some are off-screen, you can use the **<** and **>** buttons to scroll through the cards.

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.

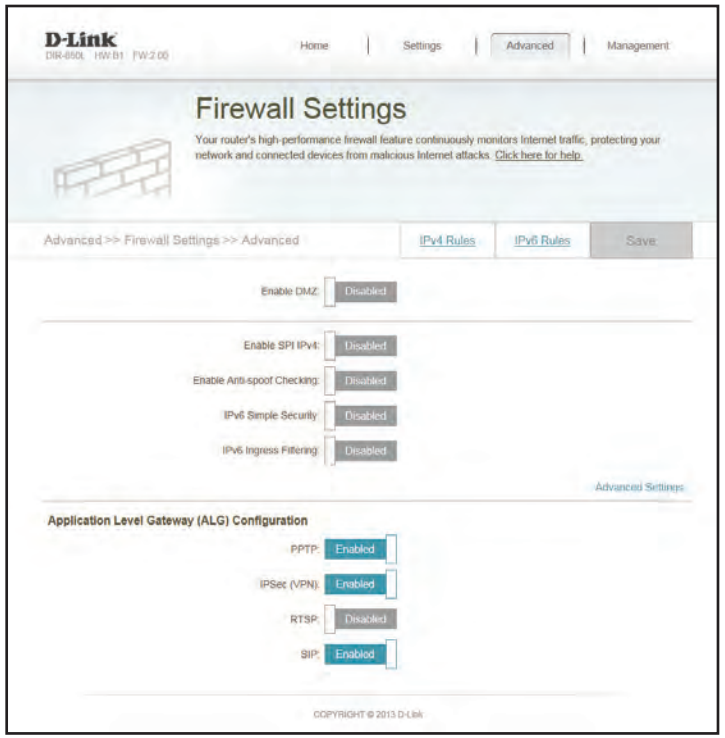
If no devices are explicitly assigned a priority, they will all be treated with equal priority. If some devices are not assigned a priority and others are, the unassigned devices will be treated with the lowest priority.

To assign a priority level to a device, drag the device card from the All Devices 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 All Devices list, click the cross icon in the top right of the device card.

Click **Save** when you are done.

Firewall

The router's firewall protects your network from malicious attacks over the Internet. In the Advanced menu on the bar on the top of the page, click **Firewall Settings**. Click **Advanced Settings...** to expand the list and see all of the options.



Enable DMZ: Enable or disable Demilitarized Zone (DMZ). This completely exposes the client to threats over the Internet, and is not recommended in ordinary situations.

DMZ IP Address: If you enabled DMZ, enter the IP address of the client you wish to expose, or use the drop-down menu to quickly select it.

Enable SPI IPv4: Enabling Stateful Packet Inspection (SPI) helps to prevent cyber attacks by validating that the traffic passing through the session conforms to the protocol.

Enable Anti-Spoof Checking: Enable this feature to protect your network from certain kinds of "spoofing" attacks.

IPv6 Simple Security: Enable or disable IPv6 simple security.

IPv6 Ingress Filtering: Enable or disable IPv6 ingress filtering.

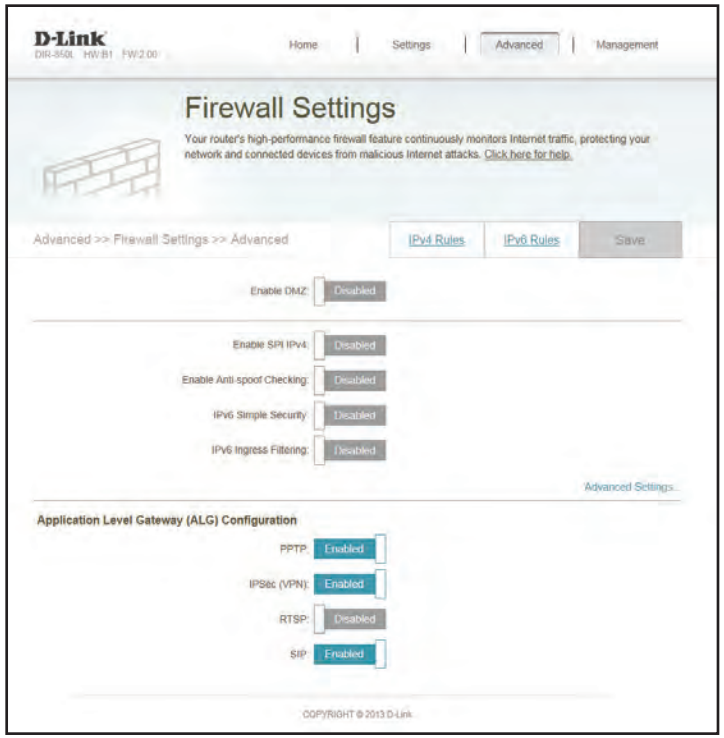
PPTP: Allows multiple machines on the LAN to connect to their corporate network using the PPTP protocol.

IPSec (VPN): Allows 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. Please check with the system administrator of your corporate network whether your VPN client supports NAT traversal.

RTSP: Allows applications that uses Real Time Streaming Protocol (RTSP) to receive streaming media from the Internet.

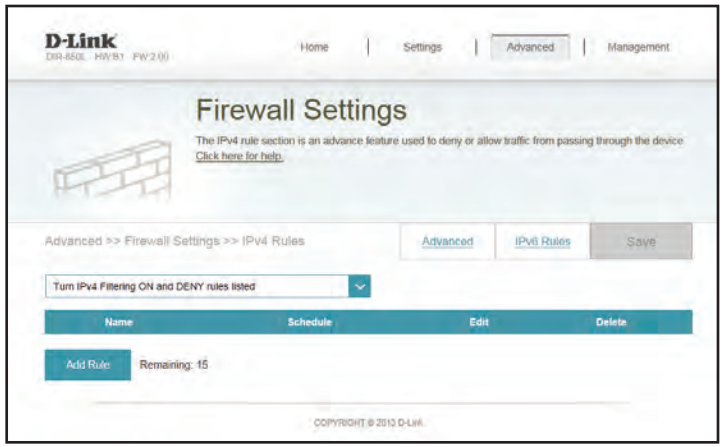
SIP: Allows devices and applications using VoIP (Voice over IP) to communicate across NAT. Some VoIP applications and devices have the ability to discover NAT devices and work around them. This ALG may interfere with the operation of such devices. If you are having trouble making VoIP calls, try turning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

Click **Save** when you are done.



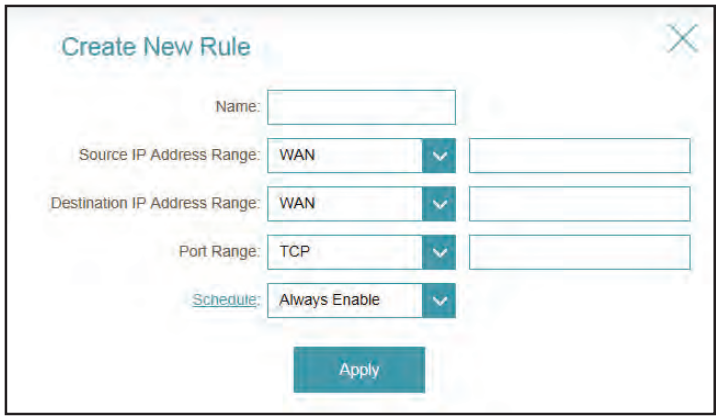
IPv4/IPv6 Rules

The IPv4/IPv6 Rules section is an advanced option that lets you configure what kind of traffic is allowed to pass through the network. To configure the IPv4 rules, from the Firewall Settings page click **IPv4 Rules**. To configure IPv6 rules, from the Firewall Settings page click **IPv6 Rules**. To return to the main Firewall Settings page, click **Security Check**.



To begin, use the drop-down menu to select whether you want to **ALLOW** or **DENY** the rules you create. You can also choose to turn 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 the **Add Rule** button. Click **Save** when you are done. If you edit or create a rule, the following options will appear:



Name: Enter a name for the rule.

Source IP Address Range: Enter the source IP address range that the rule will apply to, and 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 will apply to, and using the drop-down menu, specify whether it is a **WAN** or **LAN** IP address.

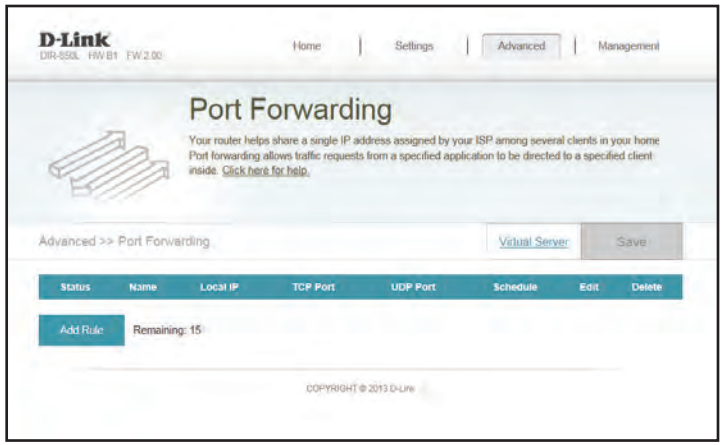
Port Range: Select the protocol of the traffic to allow or deny (**Any**, **TCP**, or **UDP**) and then enter the range of ports that the rule will apply to.

Schedule: Use the drop-down menu to select the time schedule that the rule will be enabled on. The schedule may be set to **Always Enable**, or you can create your own schedules in the **Schedules** section (refer to page 88).

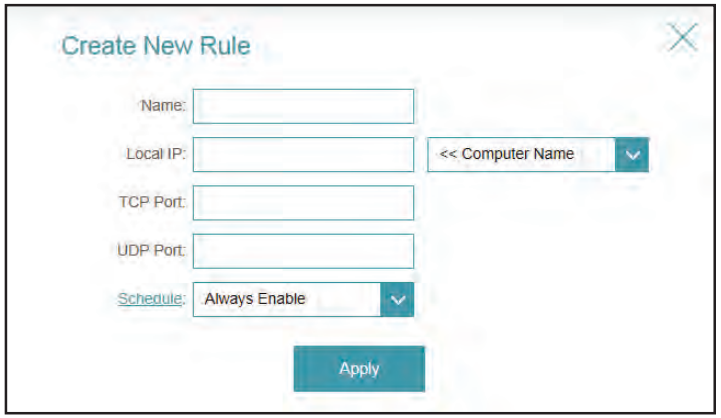
Click **Apply** when you are done.

Port Forwarding

Port forwarding allows you to specify a port or range of ports to open for specific devices on the network. This might be necessary for certain applications to connect through the router. In the Advanced menu on the bar on the top of the page, 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 the **Add Rule** button. Click **Save** when you are done. If you edit or create a rule, the following options will appear:



Name: Enter a name for the rule.

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

TCP Port: Enter the TCP ports that you want to open. You can enter a single port or a range of ports. Separate ports with a comma (for example: 24,1009,3000-4000).

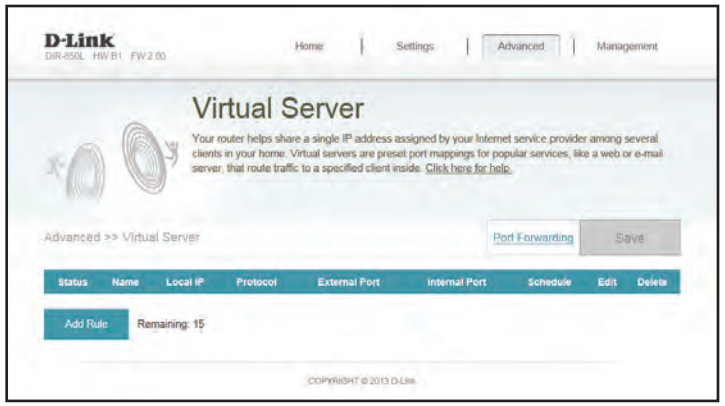
UDP Port: Enter the UDP ports that you want to open. You can enter a single port or a range of ports. Separate ports with a comma (for example: 24,1009,3000-4000).

Schedule: Use the drop-down menu to select the time schedule that the rule will be enabled on. The schedule may be set to **Always Enable**, or you can create your own schedules in the **Schedules** section (refer to page 88).

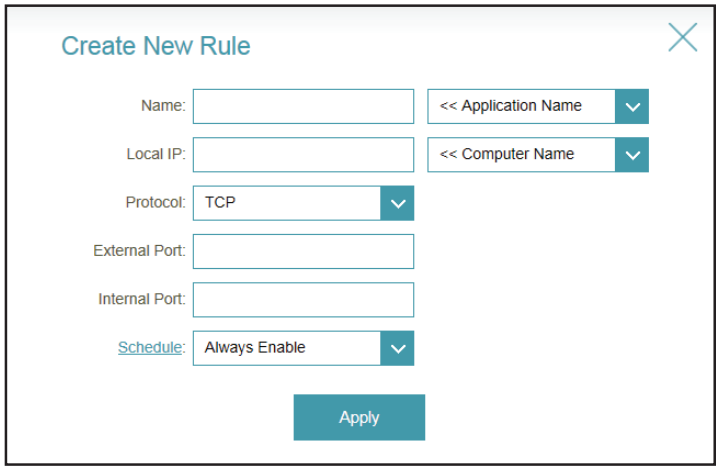
Click **Apply** when you are done.

Virtual Server

The virtual server allows you to specify a single public port on your router for redirection to an internal LAN IP Address and Private LAN port. To configure the virtual server, from the Port Forwarding page click **Virtual Server**. To return to the main Port Forwarding page, 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 the **Add Rule** button. Click **Save** when you are done. If you edit or create a rule, the following options will appear:



Name: Enter a name for the rule.

Local IP: Enter the IP address of the computer on your local network that you want to allow the incoming service to. Alternatively, 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 Number: If you entered **Other** above, enter the protocol number.

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

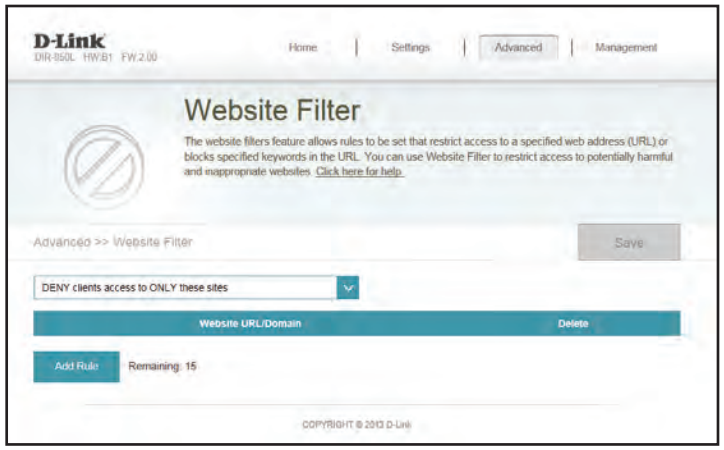
Internal Port: Enter the private port you want to open.

Schedule: Use the drop-down menu to select the time schedule that the rule will be enabled on. The schedule may be set to **Always Enable**, or you can create your own schedules in the **Schedules** section (refer to page 88).

Click **Apply** when you are done.

Website Filter

The website filter settings allow you to block access to certain web sites. You can either create a list of sites to block, or create a list of sites to allow (with all other sites being blocked).



In the Advanced menu on the bar on the top of the page, 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 fifteen web sites. To add a new site 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. If you wish to edit a rule, simply replace the URL or domain.

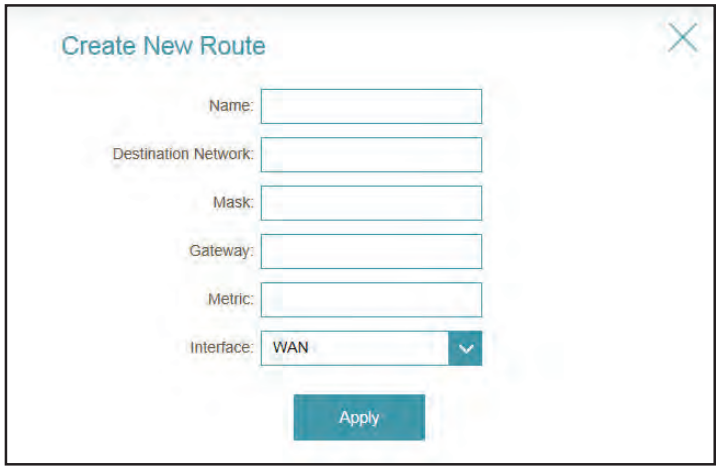
Click **Save** when you are done.

Static Route

The Static Routes section allows you to define custom routes to control how data traffic is moved around your network.

In the Advanced menu on the bar on the top of the page, click **Static Routes**. To configure IPv6 rules, click **IPv6** and refer to page 82. To return to the main IPv4 static routes page, click **IPv4**.

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. If you edit or create a rule, the following options will appear:



Name: Enter a name for the rule.

Destination IP: 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, on the Static Routes page click **IPv6**. To return to the main IPv4 static routes page, click **IPv4**.

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. If you edit or create a rule, the following options will appear:

Name: Enter a name for the rule.

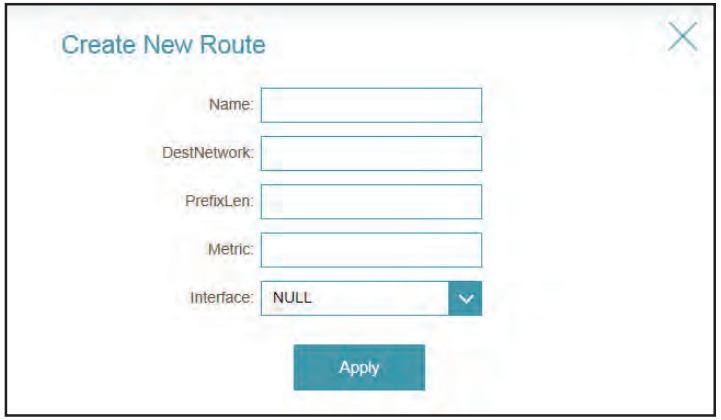
DestNetwork: This is the IP address of the router used to reach the specified destination.

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

Metric: Enter the metric value for this rule here.

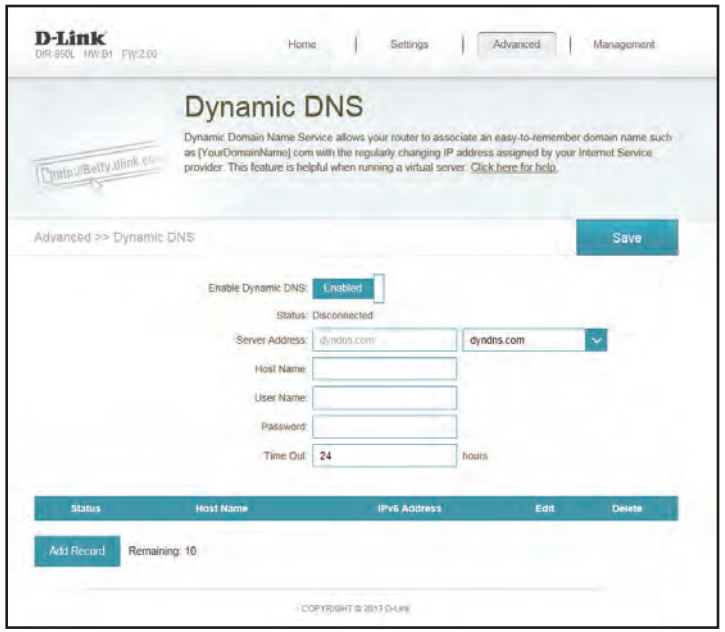
Interface: Select the interface that the IP packet must use to transit out of the router when this route is used.

Click **Apply** when you are done.



Dynamic DNS

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



In the Advanced menu on the bar on the top of the page, click **Dynamic DNS**.

Enable Dynamic DNS: Enabling dynamic DNS 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 username.

Password: Enter your dynamic DNS password.

Time Out: Enter a timeout time (in hours).

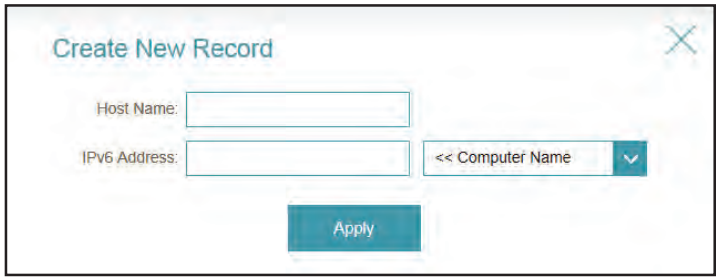
Click **Save** when you are done.

At the bottom of the page are the IPv6 host settings. To configure an IPv6 dynamic DNS host, refer to page 86.

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. If you edit or create a rule, the following options will appear:



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. Alternatively, select the server device in the drop-down menu.

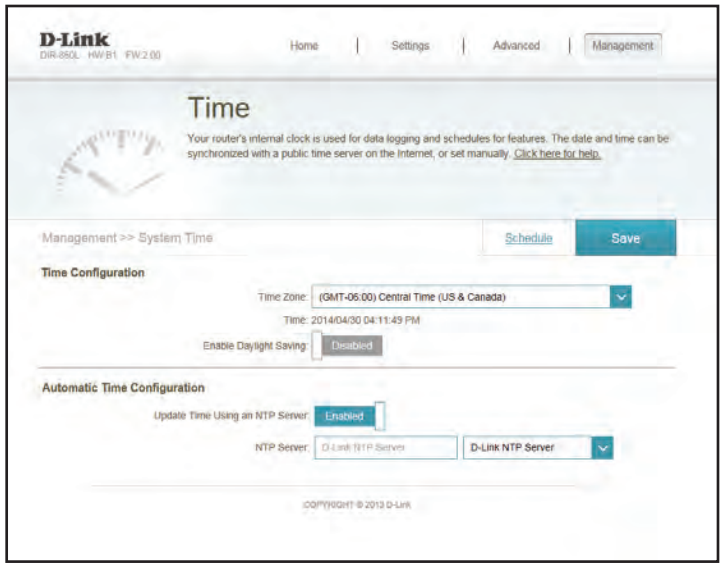
Click **Apply** when you are done.

Management

Time & Schedule

Time

The Time page allows you to configure, update, and maintain the correct time on the internal system clock. From here you can set the time zone, the Network Time Protocol (NTP) server, and enable or disable daylight saving time.



In the Management menu on the bar on the top of the page, click **Time & Schedule**.

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

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

Daylight Saving: Enable or disable daylight saving time.

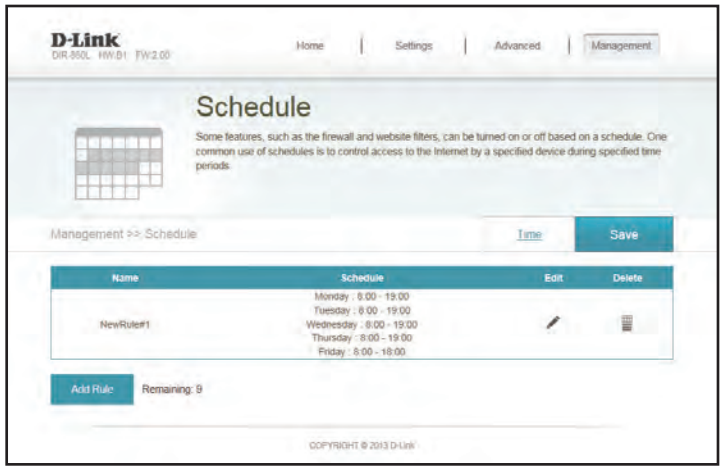
Update Time Using an NTP Server: Enable or disable to allow an NTP server on the Internet to synchronize the time and date with your router. If you enable this option, select an NTP server from the drop-down menu. To configure the router's time and date manually, disable this option and use the drop-down 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 88.

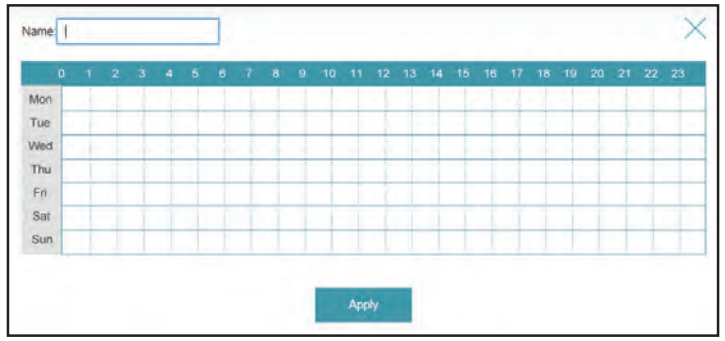
Schedule

Some configuration rules can be set according to a pre-configured schedule. To create, edit, or delete schedules, from the Time page click **Schedule**. To return to the Time page, click **Time**.



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. If you edit or create a rule, the following screen will appear:

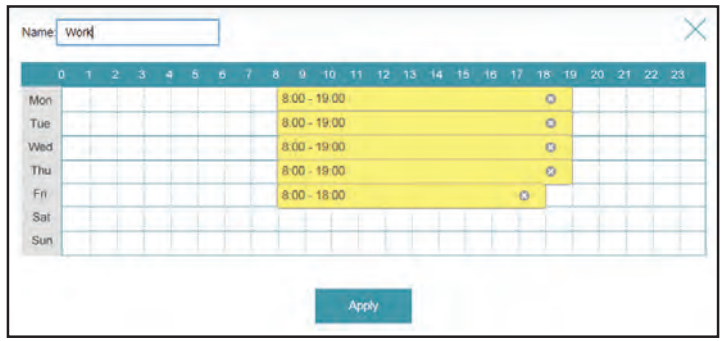
First, enter the name of your schedule in the **Name** field.



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.

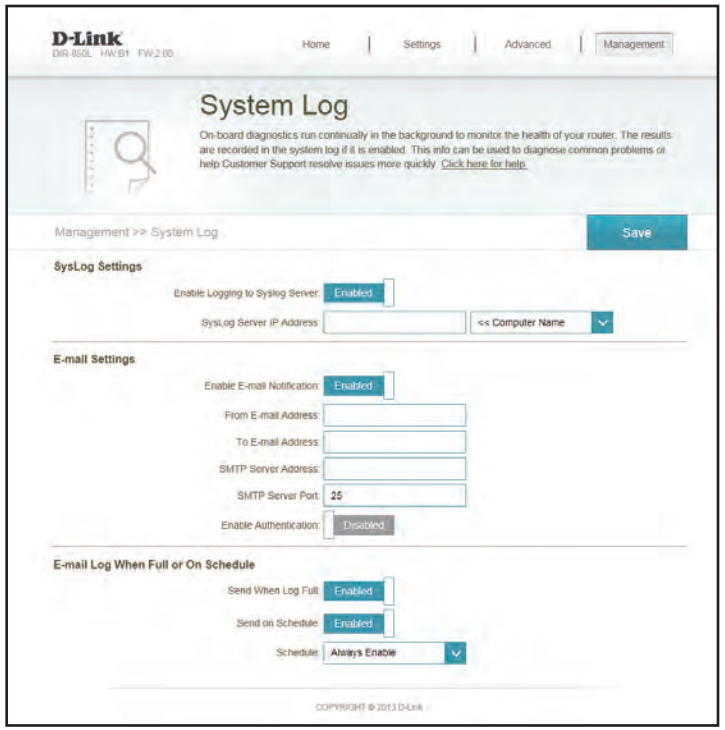
To remove a time period from the schedule, click on the cross icon.

Click **Apply** when you are done.



System Log

The router keeps a running log of events. This log can be sent to a Syslog server, and sent to your email address. In the Management menu on the bar on the top of the page, click **System Log**.



Enable Logging to Syslog Server: Check this box 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, select it from the drop-down menu to automatically populate the field.

Enable Email Notification: If you want the logs to be automatically sent to an email address, enable this option.

Enter the settings for your email account. These are obtained from your email service provider.

Send When Log Full: If email notification is enabled, this option will set the router to send the log by email when the log is fully.

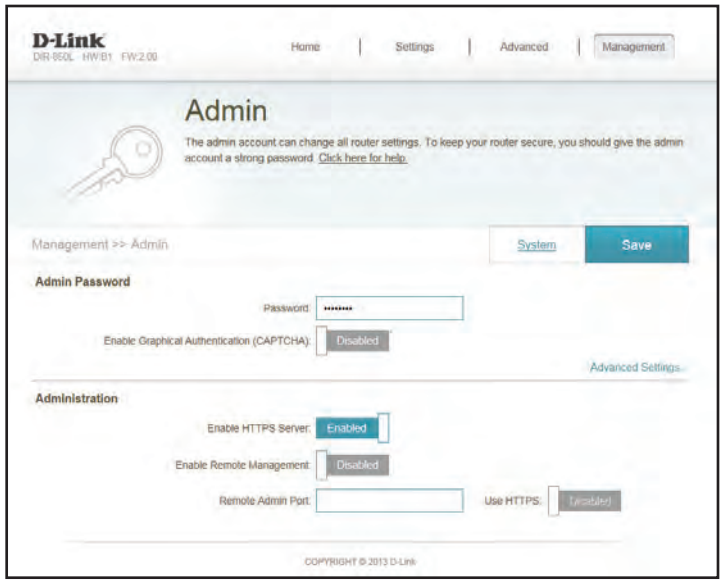
Send On Schedule: This option can be enabled to send an email according to a pre-configured schedule. See below.

Schedule: If you enable **On Schedule** is enabled, use the drop-down menu to select the time schedule that the rule will be enabled on. The schedule may be set to **Always Enable**, or you can create your own schedules in the **Schedules** section (refer to page 112).

Click **Save** when you are done.

Admin

This page will allow you to change the administrator (Admin) password and enable remote management.



In the Management menu on the bar on the top of the page, click **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 to require users to type letters or numbers from a distorted image displayed on the screen 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-850L 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-850L 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-850L and 8080 is the port used for the web management interface. If you enable **Use HTTPS,** you must enter **https://** as part of the URL to access the router remotely.

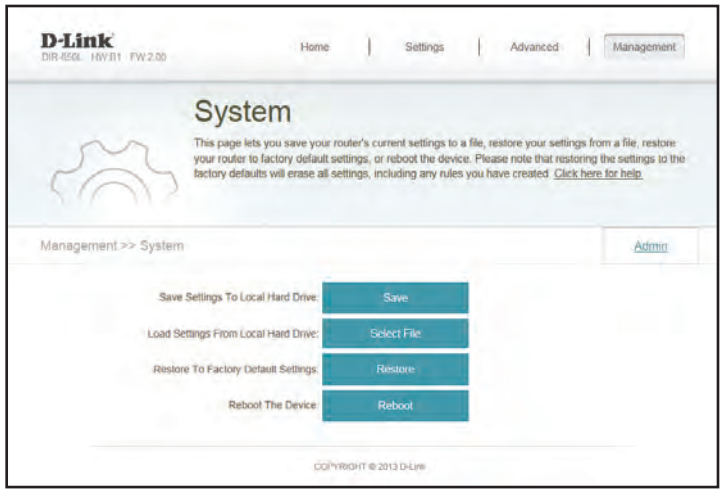
Click **Save** when you are done.

To load, save, or reset settings, or reboot the router, click **System** and refer to page 115.

System

This page allows you to save the router's current configuration, load a previously saved configuration, reset the router to its factory default settings, or reboot the router.

From the Admin page click **System**. To return to the Admin page, click **Admin**.



Save Settings To Local Hard Drive: This option will save the current router configuration settings to a file on your computer.

Load Settings From Local Hard Drive: This option will 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 save the current router configuration settings, use the **Save Settings To Local Hard Drive** button above.

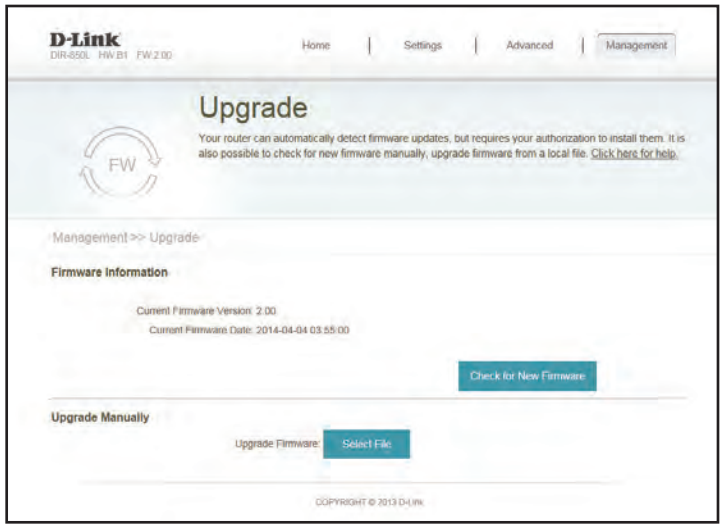
Reboot The Device: Click to reboot the router.

Click **Save** when you are done.

Upgrade

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

In the Management menu on the bar on the top of the page, click **Upgrade**.



Firmware Information: The current firmware's version and date will be displayed.

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

Upgrade Firmware: If you wish to upgrade manually, first download the firmware file you wish to upgrade to. Next, click the **Select File** button and browse to the file to install the new firmware. You can also browse to a language pack file to install a new language pack.

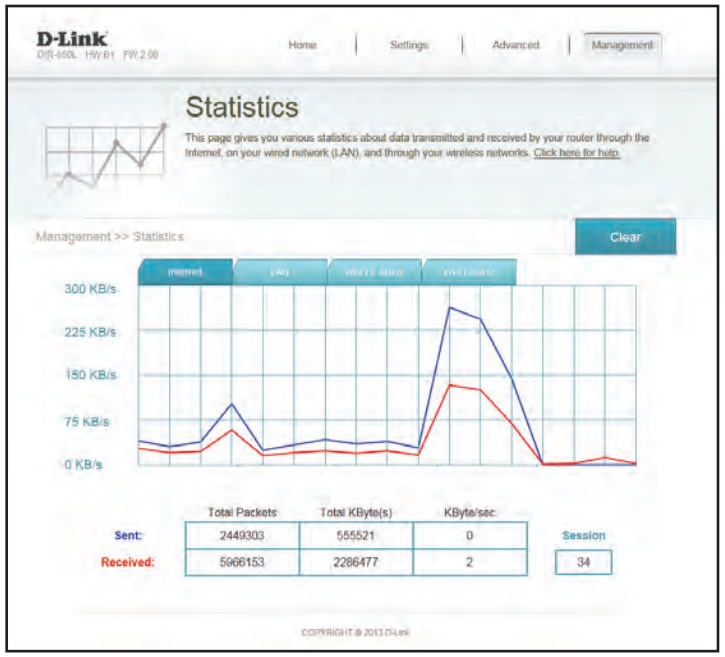
Statistics

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

In the Management menu on the bar on the top of the page, click **Statistics**.

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

The traffic counter will reset if the device is rebooted.



Connect a Wireless Client to your Router

WPS Button

The easiest and most secure way to connect your wireless devices to the router is 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-850L router. Please refer to your user manual for the wireless device you want to connect to make sure you understand how to enable WPS. Once you know, follow the steps below:

Step 1 - Press the WPS button on the DIR-850L for about 1 second. The Internet LED on the front will start to blink.

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

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

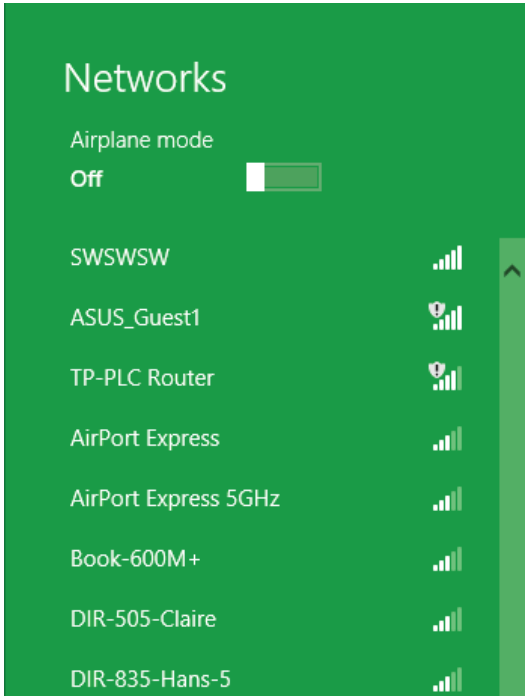
Windows® 8
WPA/WPA2

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

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

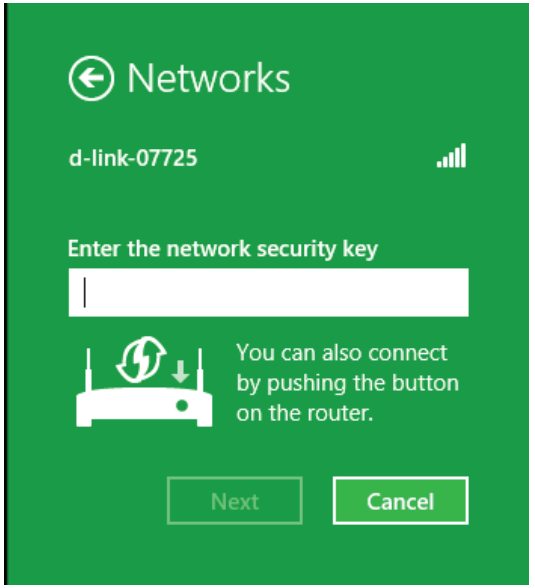
Wireless Icon

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

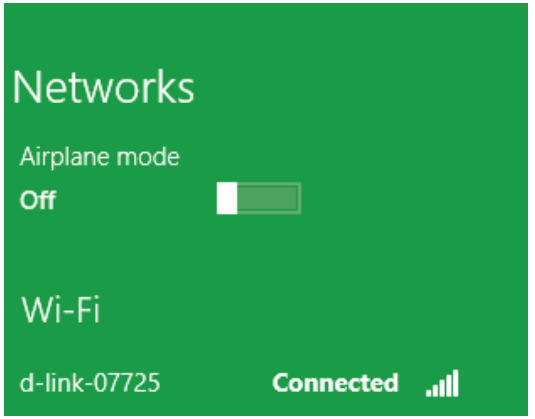


You will then be prompted to enter the network security key (Wi-Fi password) for the wireless network. Enter the password into the box and click **Next**.

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 at the point to enable the WPS function.



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



Windows® 7
WPA/WPA2

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

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

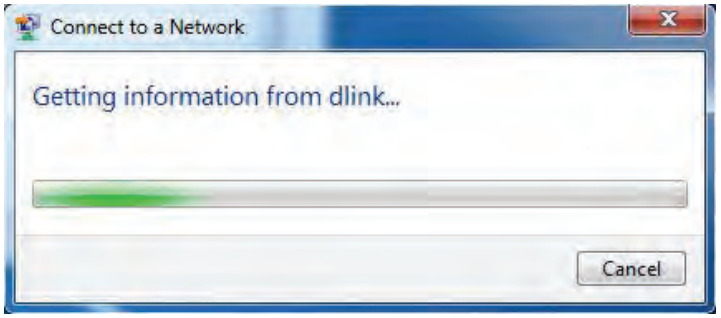
Wireless Icon

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

3. Highlight the wireless 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 on the wireless router.

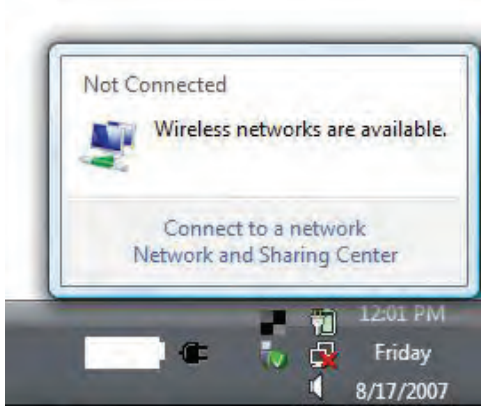
Windows Vista®

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

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

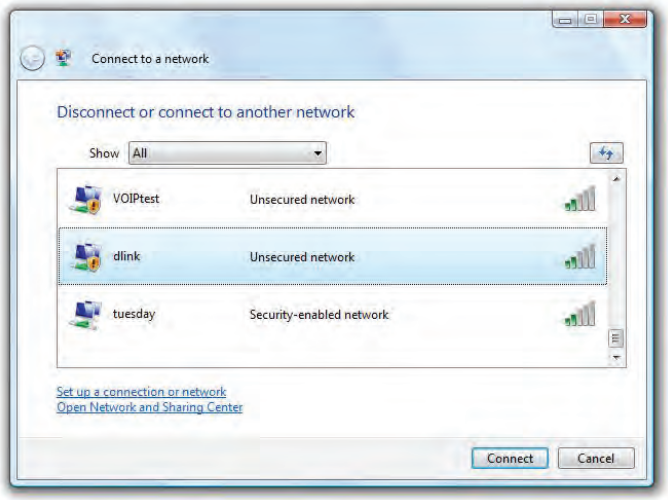
or

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



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

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

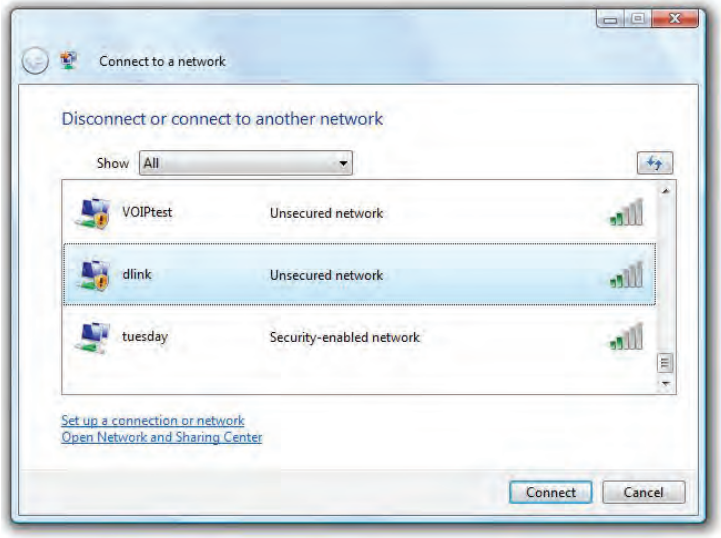


WPA/WPA2

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

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

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



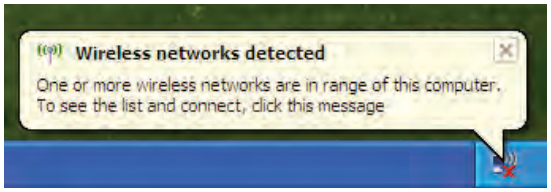
3. Enter the same security key or passphrase (Wi-Fi password) that is on your router and click **Connect**.

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 on the wireless router.

Windows® XP

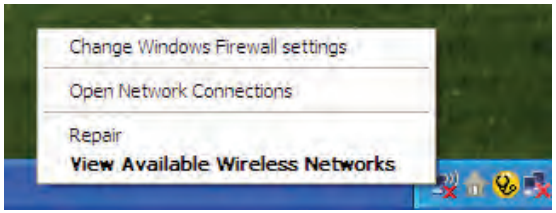
Windows® XP users may use the built-in wireless utility (Zero Configuration Utility). The following instructions are for Service Pack 2 users. If you are using another company's utility, please refer to the user manual of your wireless adapter for help with connecting to a wireless network. Most utilities will have a "site survey" option similar to the Windows® XP utility as seen below.

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



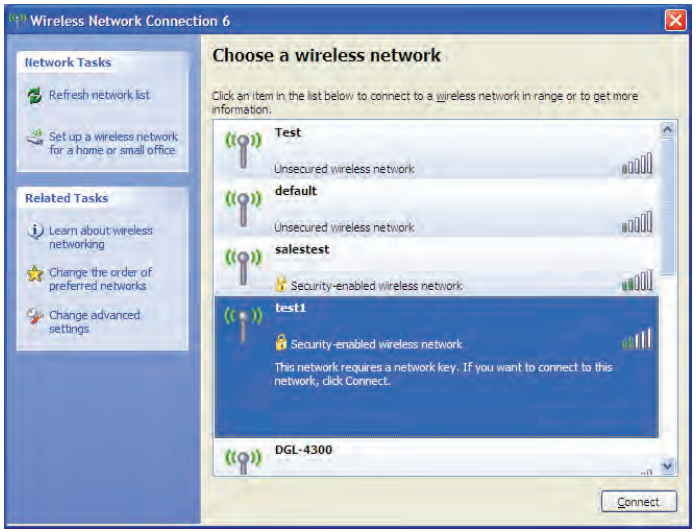
or

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



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

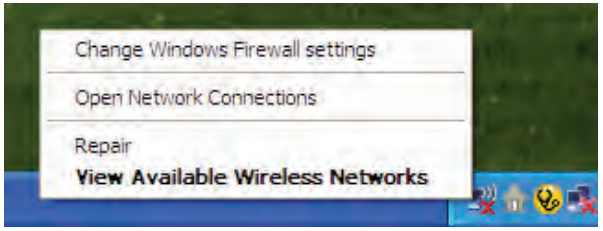
If you get a good signal but cannot access the Internet, check you TCP/IP settings for your wireless adapter. Refer to the **Networking Basics** section in this manual for more information.



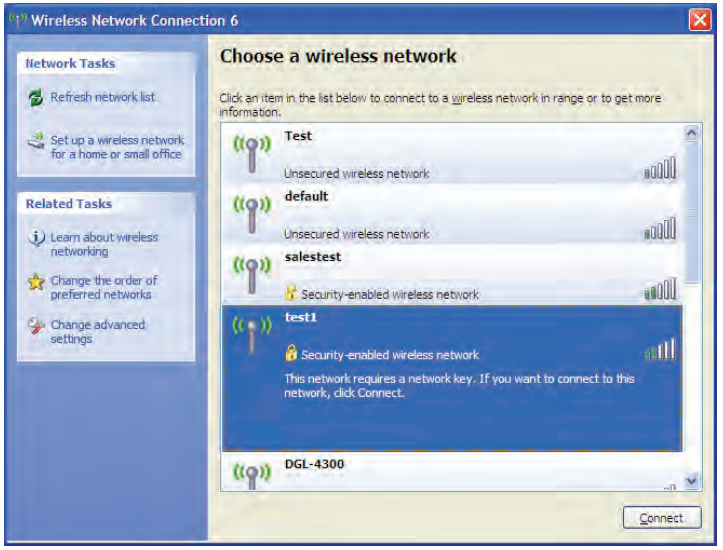
WPA/WPA2

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

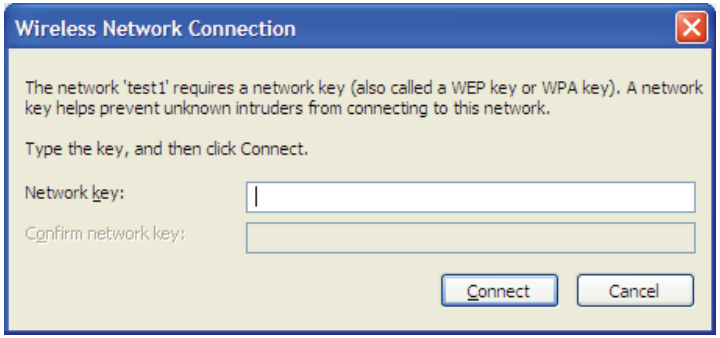
1. Open the Windows® XP Wireless Utility by right-clicking on the wireless computer icon in your system tray (lower-right corner of screen). Select **View Available Wireless Networks**.



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



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



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

Troubleshooting

This chapter provides solutions to problems that can occur during the installation and operation of the DIR-850L. Read the following descriptions if you are having problems. The examples below are illustrated in Windows® XP. If you have a different operating system, the screenshots on your computer will look similar to the following examples.

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

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

Make sure you have an updated Java-enabled web browser. We recommend the following:

- Microsoft Internet Explorer® 7 and higher
- Mozilla Firefox 3.5 and higher
- Google™ Chrome 8 and higher
- Apple Safari 4 and higher

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

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

Configure your Internet settings:

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

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

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

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

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

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

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

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

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

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

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

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

```
C:\>ping yahoo.com -f -l 1482

Pinging yahoo.com [66.94.234.13] with 1482 bytes of data:

Packet needs to be fragmented but DF set.
Packet needs to be fragmented but DF set.
Packet needs to be fragmented but DF set.
Packet needs to be fragmented but DF set.

Ping statistics for 66.94.234.13:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum =  0ms, Average =  0ms

C:\>ping yahoo.com -f -l 1472

Pinging yahoo.com [66.94.234.13] with 1472 bytes of data:

Reply from 66.94.234.13: bytes=1472 time=93ms TTL=52
Reply from 66.94.234.13: bytes=1472 time=109ms TTL=52
Reply from 66.94.234.13: bytes=1472 time=125ms TTL=52
Reply from 66.94.234.13: bytes=1472 time=203ms TTL=52

Ping statistics for 66.94.234.13:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 93ms, Maximum =  203ms, Average =  132ms

C:\>
```

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

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

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

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

Wireless Basics

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

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

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

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

What is Wireless?

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

Why D-Link Wireless?

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

How does wireless work?

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

Wireless Local Area Network (WLAN)

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

Wireless Personal Area Network (WPAN)

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

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

Who uses wireless?

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

Home

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

Small Office and Home Office

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

Where is wireless used?

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

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

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

Tips

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

Centralize Your Router or Access Point

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

Eliminate Interference

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

Security

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

Wireless Modes

There are basically two modes of networking:

- **Infrastructure** – All wireless clients will connect to an access point or wireless router.
- **Ad-Hoc** – Directly connecting to another computer, for peer-to-peer communication, using wireless network adapters on each computer, such as two or more DIR-850L 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

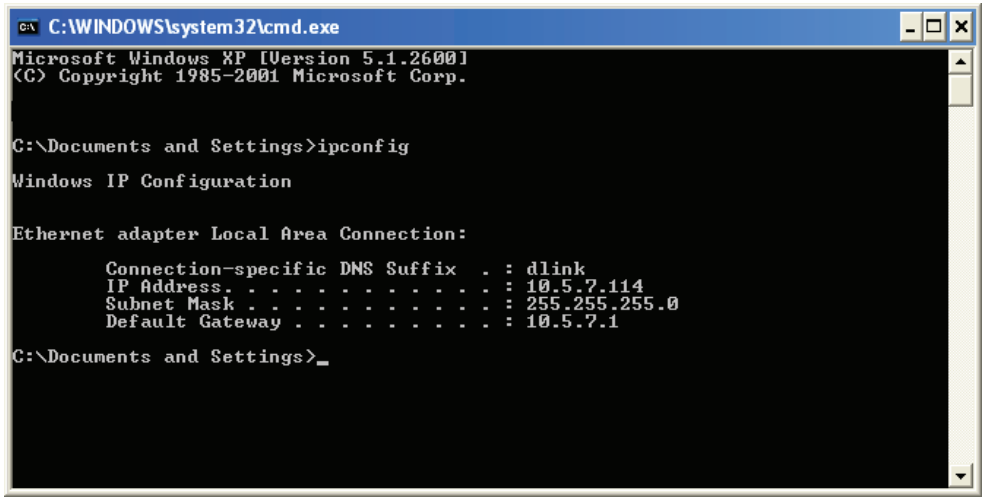
After you install your new D-Link adapter, by default, the TCP/IP settings should be set to obtain an IP address from a DHCP server (i.e. wireless router) automatically. To verify your IP address, please follow the steps below.

Click on **Start** > **Run**. In the run box type ***cmd*** and click **OK.** (Windows® 7/Vista® users type *cmd* in the **Start Search** box.)

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

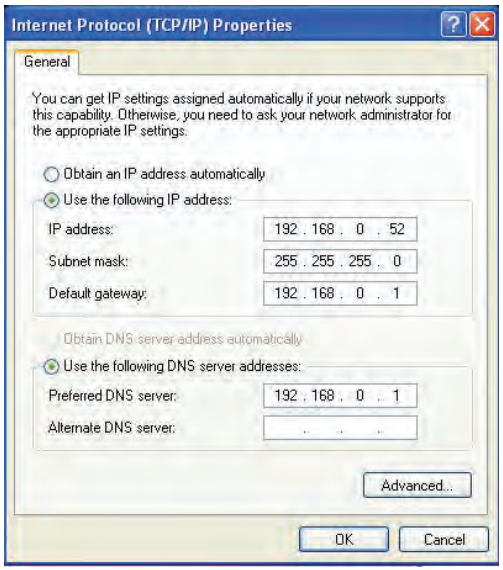
Right-click on the **Local Area Connection** which represents your network adapter and select **Properties**.

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.

Technical Specifications

Hardware Specifications
- LAN Interface: Four 10/100/1000 Mbps LAN ports
- WAN Interface: One 10/100/1000 Mbps Internet port
- Wireless Interface (2.4 GHz): IEEE 802.11b/g/n
- Wireless Interface (5 GHz): IEEE 802.11a/n/ac
- USB Interface: Compliant USB 2.0

Operating Voltage
- Input: 100~240 V (±20%), 50~60 Hz
- Output: DC 12 V, 1.5 A

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

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

Wireless Frequency Range
- IEEE 802.11a: 5180 MHz~5240 MHz, 5745 MHz~5825 MHz
- IEEE 802.11b: 2412 MHz~2462 MHz
- IEEE 802.11g: 2412 MHz~2462 MHz
- IEEE 802.11n: 2412 MHz~2462 MHz, 5180 MHz~5240 MHz, 5745 MHz~5825 MHz
- IEEE 802.11ac: 5180 MHz~5240 MHz, 5745 MHz~5825 MHz

Wireless Bandwidth Rate
- IEEE 802.11a: 54, 48, 36, 24, 18, 12, 9, and 6 Mbps
- IEEE 802.11b: 11, 5.5, 2, and 1 Mbps
- IEEE 802.11g: 54, 48, 36, 24, 18, 12, 9, and 6 Mbps
- IEEE 802.11n: 6.5 to 300 Mbps
- IEEE 802.11ac: 6.5 to 1300 Mbps

Antenna Type
- Two dual-band internal antennas (2.4 GHz and 5 GHz)

Wireless Security
- 64/128-bit WEP, WPA/WPA2-Personal
- WPA/WPA2-Enterprise
- WPS (PIN & PBC)

Certifications
- FCC
- CE
- C-Tick
- CSA
- Wi-Fi / WPS
- DLNA
- IPv6 Ready
- WIN 8
- CCC

Dimensions & Weight
- 93 x 116 x 145 mm (3.7 x 4.6 x 5.76 inches)
- 330 grams (11.6 ounces)

FCC Statement:

Federal Communication Commission Interference 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.

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.

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.

For product available in the USA/Canada market, only channel 1~11 can be operated. Selection of other channels is not possible.

This device and it's antennas(s) must not be co-located or operating in conjunction with any other antenna or transmitter except in accordance with FCC multi-transmitter product procedures.

This device is going to be operated in 5.15~5.25GHz frequency range, it is restricted in indoor environment only.

IMPORTANT NOTE:
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.

IC Statement:

This device complies with Industry Canada license-exempt RSS standard(s). 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.
Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

For product available in the USA/Canada market, only channel 1~11 can be operated. Selection of other channels is not possible.
Pour les produits disponibles aux États-Unis / Canada du marché, seul le canal 1 à 11 peuvent être exploités. Sélection d'autres canaux n'est pas possible.

This device and it's antennas(s) must not be co-located or operating in conjunction with any other antenna or transmitter except in accordance with IC multi-transmitter product procedures.
Cet appareil et son antenne (s) ne doit pas être co-localisés ou fonctionnement en association avec une autre antenne ou transmetteur.

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.
les dispositifs fonctionnant dans la bande 5150-5250 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux;

IC Radiation Exposure Statement:

This equipment complies with IC RSS-102 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.
Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.

「經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能」。
「低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。前項合法通信，指依電信法規定作業之無線電通信。低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾」。
「不致造成違反低功率電波輻射性電機管理辦法之所有控制、調整及開關之使用方法」。
「對任何可能造成違反管理辦法規定之調整予以警告，或建議由具有發射機維修專長之技術人員執行或由其直接監督及負責」。
「對任何可能造成違反管理辦法之零件(晶體、半導體等)置換之警告」。
「電磁波曝露量MPE標準值1mW/cm2，送測產品實測值為：0.220861 mW/cm2」。
「電磁波曝露量MPE標準值1mW/cm2，本產品使用時建議應距離人體：20 cm」。
「5.25-5.35 GHz頻帶內操作之無線資訊傳輸設備，限於室內使用」。