



User Manual

AC1300 Mesh-Enabled Smart Wi-Fi Router

DIR-1360

Preface

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

Manual Revisions

Revision	Date	Description
1.00	December 20, 2018	Initial A1 release

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Power Usage

This device is an Energy Related Product (ErP) with High Network Availability (HiNA), and automatically switches to a power-saving Network Standby mode within 1 minute of no packets being transmitted. It can also be turned off through a power switch to save energy when it is not needed.

Network Standby: 4.87 watts

Switched Off: 0.06 watts

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Package Contents



DIR-1360



Ethernet Cable



Power Adapter



Quick Installation Document

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

Note: Using a power supply with a different voltage rating than the one included with the DIR-1360 will cause damage and void the warranty for this product.

System Requirements

<p>Network Requirements</p>	<ul style="list-style-type: none"> • An Ethernet-based cable or DSL modem • IEEE 802.11ac/n/g/b/a wireless clients • 10/100/1000 Ethernet
<p>Web-based Configuration Utility Requirements</p>	<p>Computer with the following:</p> <ul style="list-style-type: none"> • Windows®, Macintosh, or Linux-based operating system • An installed Ethernet adapter <p>Browser Requirements:</p> <ul style="list-style-type: none"> • Internet Explorer 10 or higher • Firefox 28 or higher • Safari 6 or higher • Chrome 28 or higher <p>Windows® Users: Make sure you have Javascript enabled.</p>
<p>Wi-Fi App Requirements</p>	<ul style="list-style-type: none"> • iPhone®/iPad® Android™ smartphone or tablet. (Please refer to the mobile app's store page to check whether your device is compatible)

Introduction

The D-Link DIR-1360 AC1300 Mesh-Enabled Smart Wi-Fi Router shares your Internet connection over a blazing-fast Gigabit Wireless AC connection of up to 1300 Mbps (Up to 867 Mbps on the 5 GHz Wireless AC band and up to 400 Mbps on the 2.4 GHz Wireless N band)¹ by using advanced AC beamforming technology to significantly outperform 802.11n and other 802.11ac devices. Equipped with a Gigabit WAN/Internet port and four Gigabit LAN ports to provide wired speeds of up to 10 times faster than standard 10/100 ports, the DIR-1360 lets you experience networking at its best – no matter if you're using wireless or wired Ethernet.

Featuring four antennas and a 2x2 + 2x2 Multiple In Multiple Out (MIMO) hardware and software configuration, the DIR-1360 offers better data rates, fewer dead-spots, more coverage, and better reliability. Operating exclusively in the 5 GHz band, the DIR-1360's 802.11ac wireless connections bypasses the crowded 2.4 GHz band, giving you faster speeds while still maintaining backward compatibility with older 802.11n/g/b devices through the 2.4 GHz band. A stronger Wi-Fi signal means you can install more wireless surveillance cameras, baby monitors, sensors, and alarms in the places where you need them. Add these features together, and the DIR-1360 lets you expand your Smart Home by bringing Wi-Fi to places your old signal can't reach.

The DIR-1360's Smart Connect technology makes connecting to wireless networks easy automating multiple networks. Since the introduction of 5 GHz multi-band wireless technology, choosing between 5 GHz or 2.4 GHz networks to optimize range and speed involved guesswork. Smart Connect eliminates the guesswork by unifying both bands into a single network name. Behind the scenes, when a connection is initiated, the DIR-1360's advanced algorithms determine the best band for your device and automatically distributes each device to its optimal band – providing a faster, more reliable, and hassle-free experience for all users.

¹ Maximum wireless signal rate derived from IEEE Standard 802.11a, 802.11b, 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.

Features

- **Superior Wireless Networking** - The DIR-1360 provides Gigabit wireless speeds of up to a combined 1300 Mbps (867 Mbps 802.11ac 5 GHz, plus 400 Mbps 802.11n 2.4 GHz)¹. These speeds rival wired connections and allow users enjoy online activities such as HD video communication, online gaming, and Voice over IP telephony lag-free from anywhere in your home while still offering full 802.11n/g/b backward compatibility.
- **Extreme Wired LAN and WAN Networking** - With four 10/100/1000 Gigabit Ethernet LAN ports, and a 10/100/1000 Gigabit Ethernet WAN port, the DIR-1360 has an enormous amount of bandwidth to take full advantage of the fastest broadband speeds available.
- **IPv6 Support** - The DIR-1360 fully supports IPv6 and includes support for a variety of IPv6 connection types including: SLAAC/DHCPv6, 6to4, 6rd, Static IPv6, IPv6 PPPoE, IPv6 in IPv4 tunneling, and local connectivity.
- **Smart Connect** - Creates a single wireless SSID for your devices. Behind the scenes, the DIR-1360 automatically determines whether to connect a device to the 2.4 or 5 GHz network, thereby providing the best speed and range for each device and optimally distributing devices to each network.
- **Advanced Firewall Features** - The web-based user interface displays a number of advanced network management features. Easily apply content filtering based on MAC address, URL, and/or domain name. Schedule these filters to be active on certain days or for a duration of hours or minutes.
- **Encrypted Multiple/Concurrent Sessions** - The DIR-1360 supports VPN passthroughs. It supports multiple and concurrent IPsec and PPTP sessions, so users behind the DIR-1360 can access corporate networks through encrypted channels.
- **User-friendly Setup Wizard** - Using its easy-to-use web-based user interface or D-Link Wi-Fi App, the DIR-1360 lets you quickly configure and secure your router to your specific settings in minutes.

¹ 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

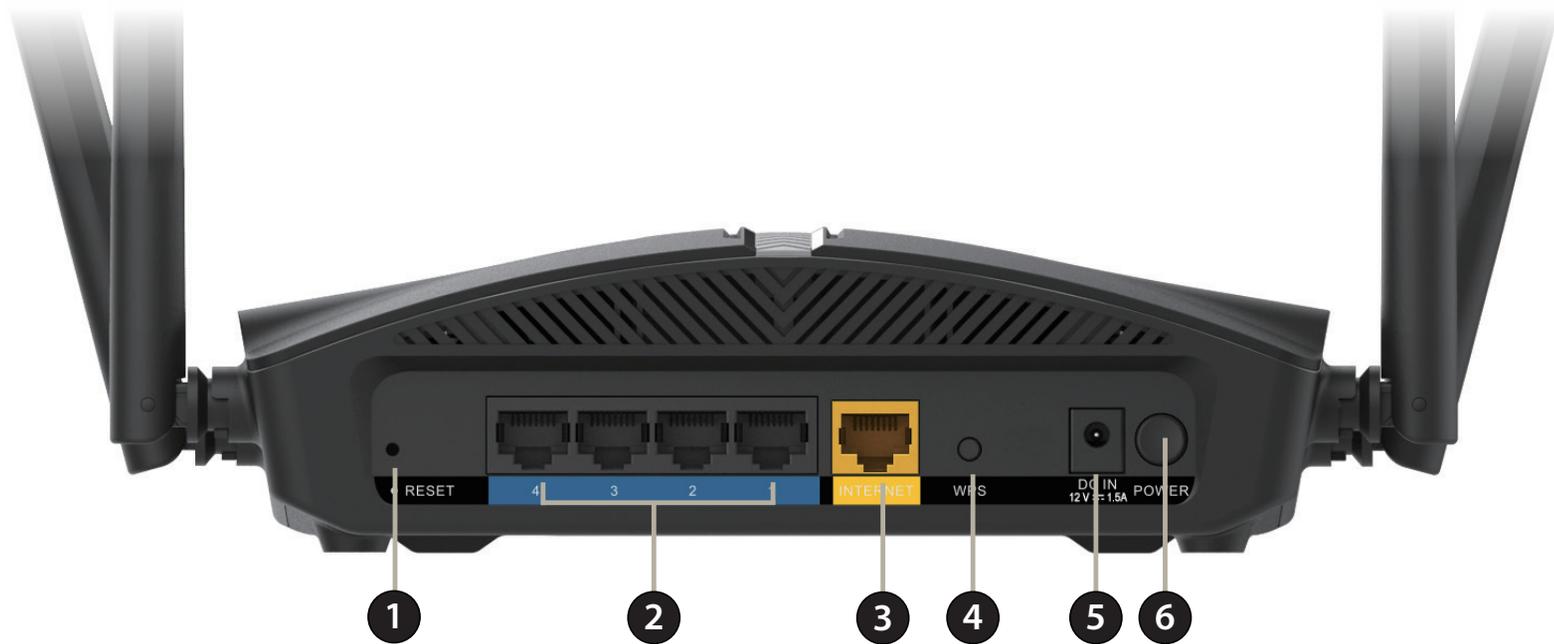
LED Indicators



1	Power LED	A solid blue light indicates a proper connection to the power supply. The light will be solid orange during boot up.
2	Internet LED	A solid blue light indicates a connection on the Internet port. If the LED is orange, the router cannot connect to the Internet.
3	Wireless (2.4 GHz LED)	A solid blue light indicates that the 2.4 GHz wireless band is enabled.
4	Wireless (5 GHz LED)	A solid blue light indicates that the 5 GHz wireless band is enabled.
5	USB 3.0 Port	Connect a USB storage device to share files over the network.

Hardware Overview

Back Panel



1	Reset Button	Insert a paperclip in the hole to press the recessed button, hold for 10 seconds, and release to reset the router to default settings
2	Gigabit LAN Ports (1- 4)	Connect Ethernet devices such as computers, switches, storage (NAS) devices, and game consoles.
3	Gigabit WAN Port	Using an Ethernet cable, connect your broadband modem to this port.
4	WPS Button	Press to start the WPS process and automatically create an encrypted connection to a WPS client.
5	Power Connector	Connect the supplied power adapter here.
6	Power Button	Press the power button to power the device on or off.

Installation

This section will walk you through the installation of the DIR-1360.

Before you Begin

- Placement of the router is very important. Do not place the router in an enclosed area such as a closet, cabinet, attic, or garage. This is to allow proper ventilation and prevent overheating.
- Configure the router with the computer that was last connected directly to your Internet connection. Verify that it is connected to the Internet before connecting additional devices.
- If your Internet Service provider (ISP) provided you with a modem/router combo, you will need to set it to “bridge” mode so the router can work properly. Please contact your ISP or refer to the user manual for your modem/router device.
- If connecting to a DSL modem, make sure to have your DSL service information provided by your Internet Service Provider handy. This information is likely to include your DSL account's Username and Password. Your ISP may also supply you with additional WAN configuration settings which might be necessary to establish a connection.
- If you are connecting a considerable amount of networking equipment, it may be a good idea to take the time to label each cable or take a picture of your existing setup before making any changes.
- 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.

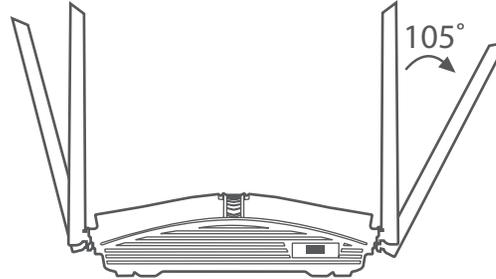
Wireless Installation Considerations

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 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:

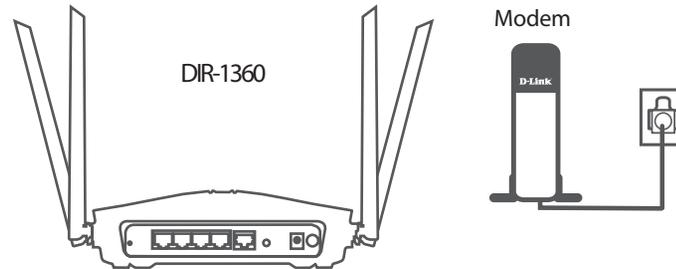
- Keep the number of walls and ceilings between the D-Link router and other network devices to a minimum - each wall or ceiling can reduce your adapter's range from 3-90 feet (1-30 meters.) Position your devices so that the number of walls or ceilings is minimized.
- Be aware of the direct line between network devices. A wall that is 1.5 feet thick (0.5 meters), at a 45-degree angle appears to be almost 3 feet (1 meter) thick. At a 2-degree angle it looks over 42 feet (14 meters) thick! Position devices so that the signal will travel straight through a wall or ceiling (instead of at an angle) for better reception.
- 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.
- Keep your product away (at least 3-6 feet or 1-2 meters) from electrical devices or appliances that generate RF noise.
- If you are using 2.4 GHz cordless phones or X-10 (wireless products such as ceiling fans, lights, and home security systems), your wireless connection may degrade dramatically or drop completely. Make sure your 2.4 GHz phone base is as far away from your wireless devices as possible. The base transmits a signal even if the phone is not in use.

Hardware Setup

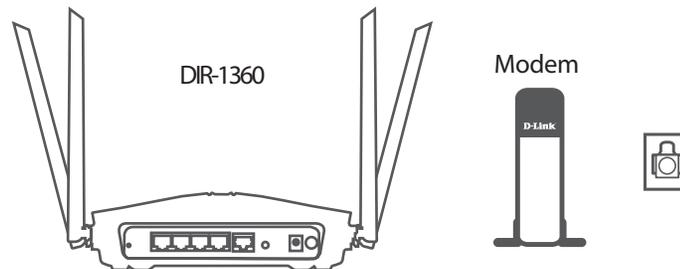
1. The DIR-1360 is designed to give you the fastest, most stable network connection possible. In order to maximize performance, fully extend the antennas into a 105-degree angle (middle notch) to provide optimal wireless coverage. Keep the router in an open area for better wireless coverage.



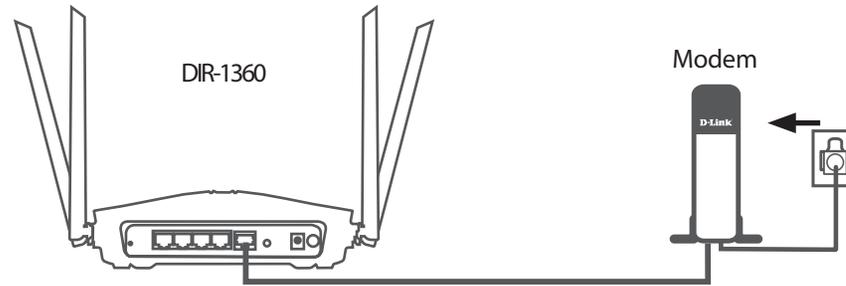
2. Position your DIR-1360 near your Internet-connected modem. Place it in an open area for better wireless coverage.



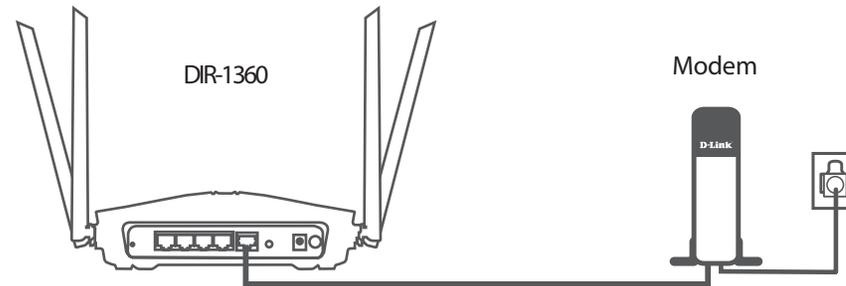
3. Turn off and unplug the power and Ethernet cable to your cable or DSL broadband modem. This is required. In some cases, you may need to turn it off for up to five minutes.



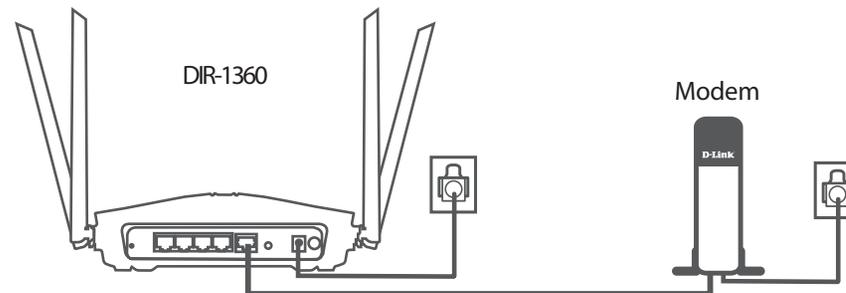
4. Use the included Ethernet cable to connect your modem to the yellow port labeled **INTERNET** on the router.



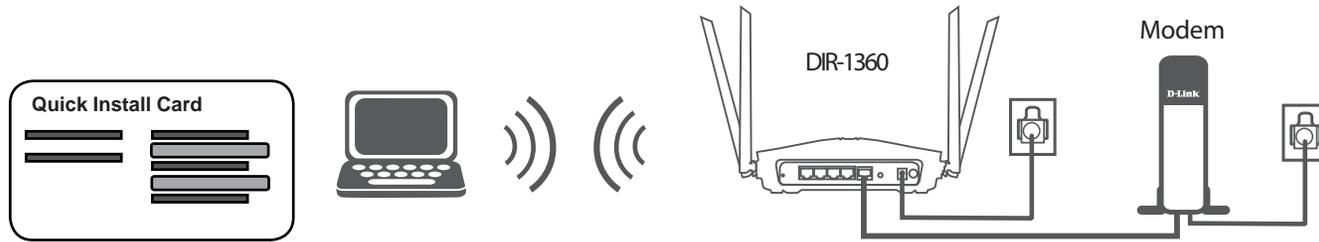
5. Turn on or plug your modem back in and wait approximately one minute before proceeding onward.



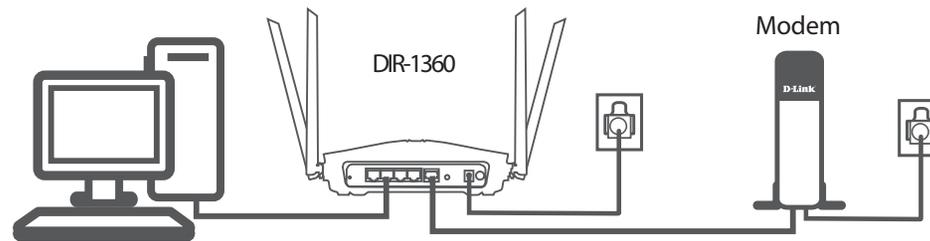
6. Connect the supplied power adapter to the router and a power outlet, press the power button, and wait approximately one minute until the LED indicator on the front of the device changes from orange to solid blue.



7. If you are configuring the DIR-1360 wirelessly from a PC, connect to a Wi-Fi network printed on the included Wi-Fi Configuration Card. You can also find the Wi-Fi network names and passwords printed on the label attached to the bottom your router.



If you are configuring the DIR-1360 from a PC with a wired Ethernet connection, plug one end of an Ethernet cable into the port labeled 1 on the back of the router, and the other end into the Ethernet port on your computer.



8. 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 connecting to a website. If the website does not load, proceed to **Setup Wizard on page 13**.

Completing Setup

There are 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 **13**.
- **D-Link Wi-Fi App** - Use your Android™ device, iPhone™ or iPad™ to configure your router. Refer to D-Link Wi-Fi App on page **17**.
- **Manual Setup** - Log in to the router and manually configure your router. Refer to **Configuration** on page **19**.

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**).

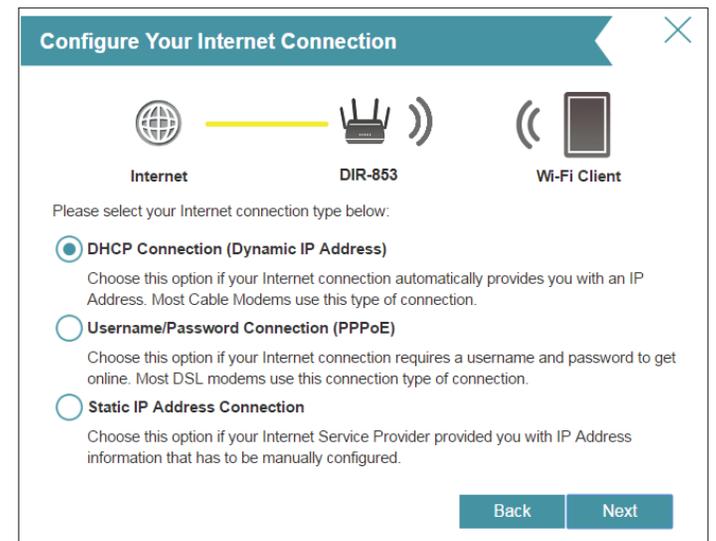
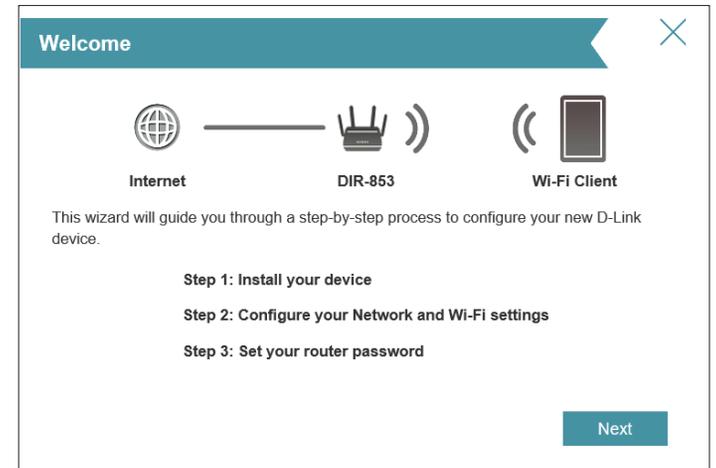
The wizard is designed to guide you through a step-by-step process to configure your new D-Link router and connect to the Internet.

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.

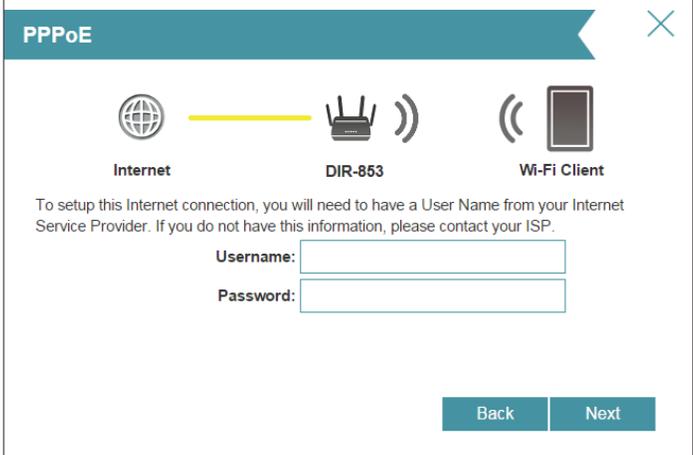
Select your Internet connection type (this information can be obtained from your Internet Service Provider) and click **Next** to continue.



Setup Wizard (continued)

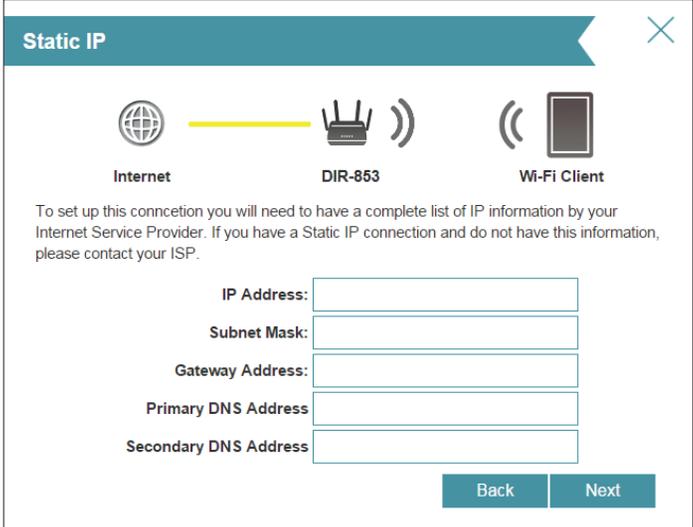
If the router detected or you selected **PPPoE**, enter your PPPoE username and password and click **Next** to continue.

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



The screenshot shows the 'PPPoE' configuration screen. At the top, there is a teal header with the text 'PPPoE' and a close button (X). Below the header, there is a diagram showing 'Internet' (globe icon) connected to 'DIR-853' (router icon) which is connected to 'Wi-Fi Client' (smartphone icon). A yellow line connects the Internet and DIR-853 icons. Below the diagram, there is a text block: 'To setup this Internet connection, you will need to have a User Name from your Internet Service Provider. If you do not have this information, please contact your ISP.' Below this text are two input fields: 'Username:' and 'Password:'. At the bottom right, there are two buttons: 'Back' and 'Next'.

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



The screenshot shows the 'Static IP' configuration screen. At the top, there is a teal header with the text 'Static IP' and a close button (X). Below the header, there is a diagram showing 'Internet' (globe icon) connected to 'DIR-853' (router icon) which is connected to 'Wi-Fi Client' (smartphone icon). A yellow line connects the Internet and DIR-853 icons. Below the diagram, there is a text block: 'To set up this connection you will need to have a complete list of IP information by your Internet Service Provider. If you have a Static IP connection and do not have this information, please contact your ISP.' Below this text are five input fields: 'IP Address:', 'Subnet Mask:', 'Gateway Address:', 'Primary DNS Address', and 'Secondary DNS Address'. At the bottom right, there are two buttons: 'Back' and 'Next'.

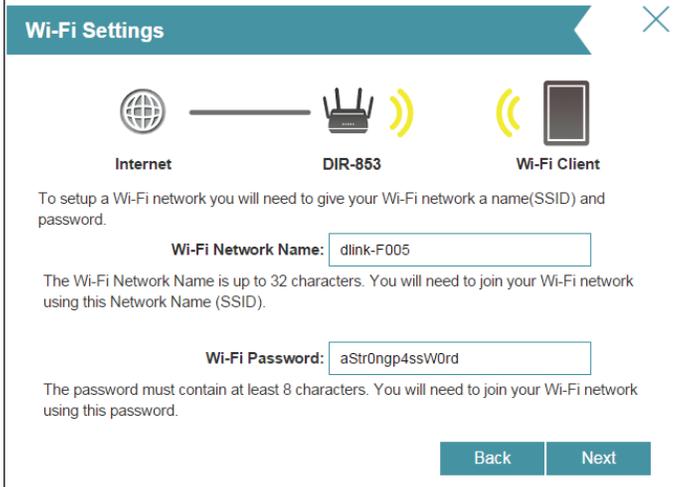
Setup Wizard (continued)

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.

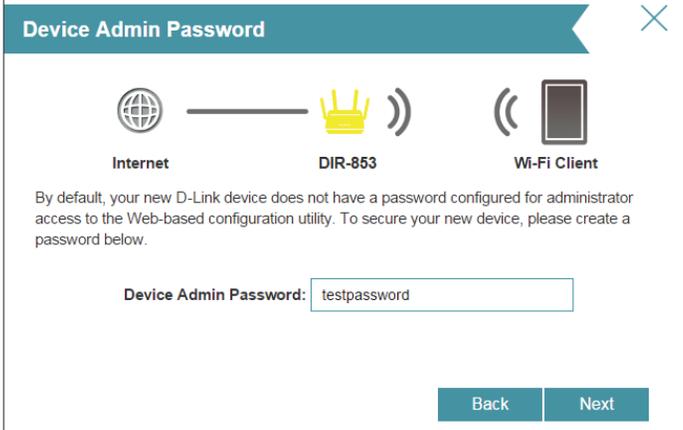
Click **Next** to continue.

Note: The DIR-1360's Smart Connect feature presents a single wireless network. When connecting clients to an extension network, they will be automatically added to the best band, either 2.4 GHz or 5 GHz. To disable the Smart Connect feature and individually configure 2.4 GHz and 5 GHz networks, refer to *Wireless* on page 54.

To help protect your 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.



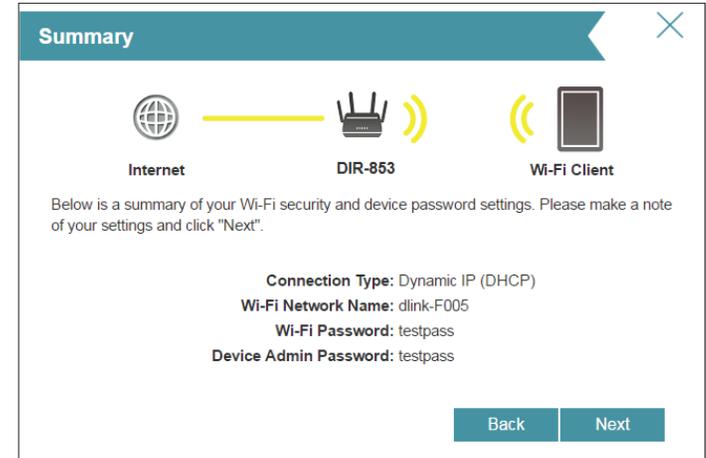
The screenshot shows the 'Wi-Fi Settings' screen. At the top, there is a teal header with the title 'Wi-Fi Settings' and a close button. Below the header is a network diagram showing 'Internet' connected to 'DIR-853' (the router), which is connected to 'Wi-Fi Client'. The main content area contains instructions: 'To setup a Wi-Fi network you will need to give your Wi-Fi network a name (SSID) and password.' There are two input fields: 'Wi-Fi Network Name' with the value 'dlink-F005' and 'Wi-Fi Password' with the value 'aStr0ngp4ssW0rd'. Below the password field, a note states: 'The password must contain at least 8 characters. You will need to join your Wi-Fi network using this password.' At the bottom right, there are two buttons: 'Back' and 'Next'.



The screenshot shows the 'Device Admin Password' screen. At the top, there is a teal header with the title 'Device Admin Password' and a close button. Below the header is a network diagram showing 'Internet' connected to 'DIR-853' (the router), which is connected to 'Wi-Fi Client'. The main content area contains instructions: 'By default, your new D-Link device does not have a password configured for administrator access to the Web-based configuration utility. To secure your new device, please create a password below.' There is one input field: 'Device Admin Password' with the value 'testpassword'. At the bottom right, there are two buttons: 'Back' and 'Next'.

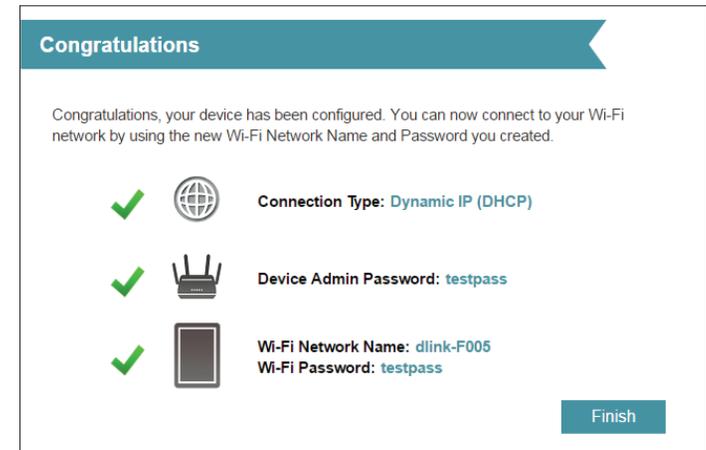
Setup Wizard (continued)

You will be presented with a summary of your settings. Click **Next** to finalize the settings or **Back** to make changes.



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

Congratulations, your device has been successfully configured!



D-Link Wi-Fi App

The D-Link Wi-Fi App allows you to install and configure your DIR-1360 AC1300 Mesh-Enabled Smart Wi-Fi Router from your mobile device.

Note: *The screenshots may be different depending on your mobile device's OS version. The following steps show the Android interface of the D-Link Wi-Fi app. If you are using an iOS device, the appearance may be different from that of the screenshots, but the process is the same.*

Step 1

Search for the free **D-Link Wi-Fi App** on the Apple App Store or Google Play and install. You can also scan the QR code on the right, which will take you to the respective D-Link Wi-Fi app store page directly.



Step 2

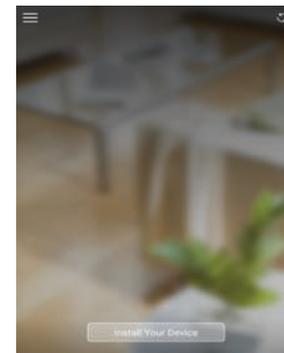
Launch the D-Link Wi-Fi App from the Home screen of your device.



D-Link Wi-Fi

Step 3

Click on the Install Your Device Button at the bottom of the screen. (Or click on the Menu button on the top left of the app and do the same.)



D-Link Wi-Fi App (continued)

Step 4

Select from list of options the device you want to install. If you do not see your device listed choose "Others" then tap **NEXT**.



Step 5

You will now be guided through a step-by-step process for setting up your device. Simply follow the on-screen instructions to complete the installation and DIR-1360 configuration process.

Configuration

To access the configuration utility, open a web-browser such as Internet Explorer and enter **http://dlinkrouter.local/** or you may also connect by typing the IP address of the router (by default this is **http://192.168.0.1**) in the address bar.

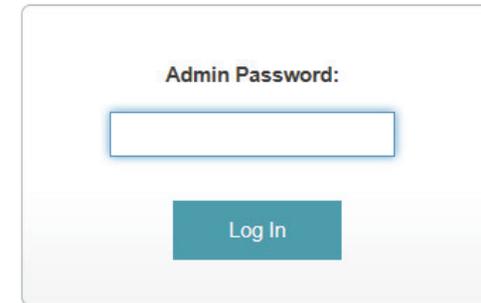
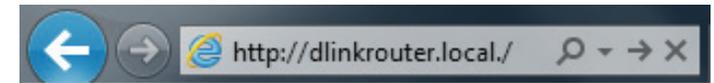
Enter your password. If you previously followed the setup wizard, please use the admin password you entered during the wizard. Otherwise, leave the password blank. Click **Log In** to proceed.

Note: If you cannot remember your password and cannot log in, press and hold the recessed reset button for longer than 10 seconds 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.

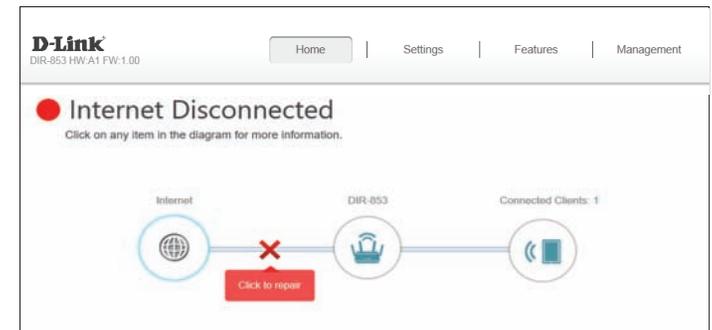
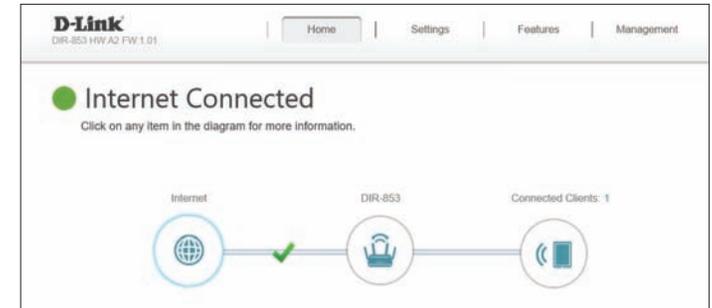
The Home page displays whether or not the router is currently connected to the Internet. If it is disconnected, click **Click to repair** to bring up the setup wizard, refer to **Setup Wizard** on page **13** for more information.

Internet

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**.

To reconfigure the Internet settings, refer to **Internet** on page **23**.



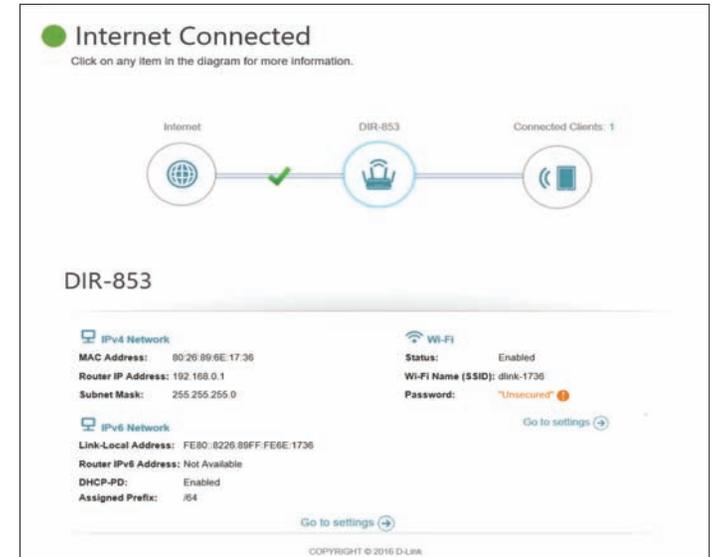
DIR-1360

Click on the **DIR-1360** icon to view details about the router and its wireless settings.

Here you can see the router's current Wi-Fi network name and password, as well as the router's MAC address, IPv4 address, and IPv6 address.

To reconfigure the network settings, either click **Go to settings** in the center, or click **Settings** (at the top of the page) and then **Network** on the menu that appears. Refer to **Network** on page **58** for more information.

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. Refer to **Wireless** on page **54** for more information.



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.

MAC Address: Displays the MAC address of the device.

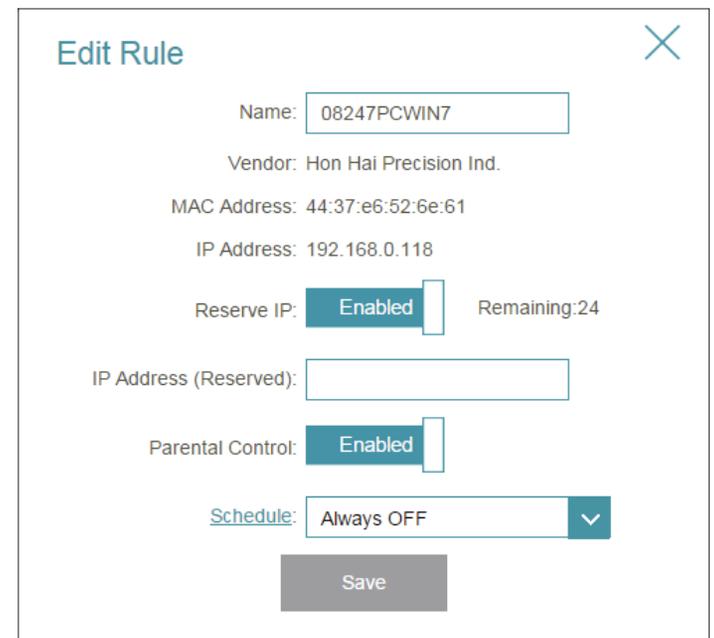
IP Address: Displays the current IP address of this client.

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

IP Address (Reserved): Specify an IP address for the DIR-1360's DHCP server to assign.

Parental Control: Allow or Block access to the router.

Click **Save** when you are done.



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 **Setup Wizard** on page **13** 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 **Dynamic IP (DHCP)** refer to page **24**.

For **Static IP** refer to page **25**.

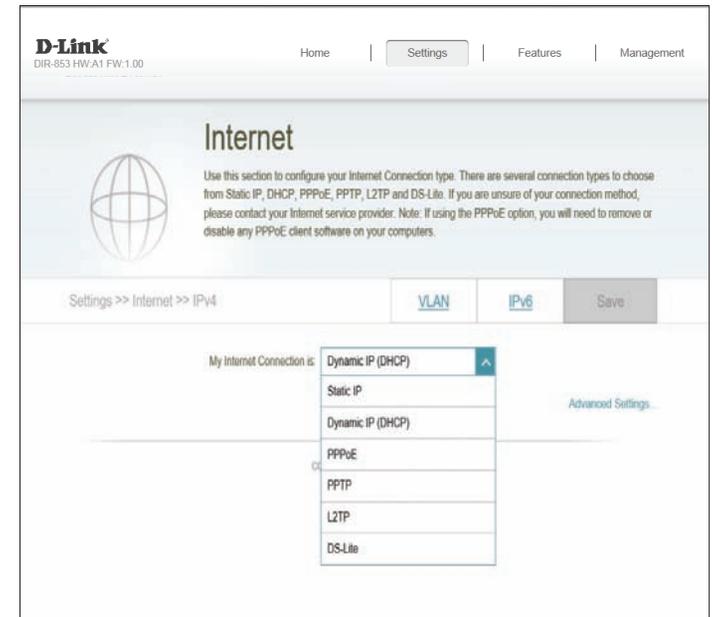
For **PPPoE** refer to page **26**.

For **PPTP** refer to page **28**.

For **L2TP** refer to page **30**.

For **DS-Lite** refer to page **32**.

To configure an IPv6 connection, click the **IPv6** link. Refer to page **33**.



Dynamic IP (DHCP)

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

Advanced Settings

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 (Default is AUTO).

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.

The screenshot shows the D-Link web interface for configuring the Internet connection. The page title is "Internet" and it includes a navigation menu with "Home", "Settings", "Features", and "Management". Below the title, there is a globe icon and a note: "Use this section to configure your Internet Connection type. There are several connection types to choose from: Static IP, DHCP, PPPoE, PPTP, L2TP and DS-Lite. If you are unsure of your connection method, please contact your Internet service provider. Note: If using the PPPoE option, you will need to remove or disable any PPPoE client software on your computer." The "Settings" breadcrumb shows "Settings >> Internet >> IPv4". There are tabs for "VLAN", "IPv6", and "Save". The "My Internet Connection is:" dropdown menu is set to "Dynamic IP (DHCP)". Below this, there is an "Advanced Settings" link. The form fields are: "Host Name" (text box with "D-Link"), "Primary DNS Server" (text box with "188.188.250"), "Secondary DNS Server" (text box), "MTU" (dropdown menu with "Auto"), and "MAC Address Clone" (text box with a dropdown menu set to "<< MAC Address"). The footer of the page reads "COPYRIGHT © 2016 D-Link".

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.

Advanced Settings

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. The recommended setting is **Auto**.

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.

The screenshot shows the D-Link web interface for configuring the Internet connection. The 'Internet' section is active, and 'Static IP' is selected as the connection type. The following fields are visible:

- My Internet Connection is: **Static IP** (dropdown)
- IP Address:
- Subnet Mask:
- Default Gateway:
- Primary DNS Server:
- Secondary DNS Server:
- MAC Address Clone: << MAC Address (dropdown)

Buttons for 'VLAN', 'IPv6', and 'Save' are also visible. The page includes a navigation menu at the top with 'Home', 'Settings', 'Features', and 'Management'.

This close-up shows the 'Advanced Settings' section with the following details:

- Secondary DNS Server:
- MTU: **Auto** (dropdown)
- MAC Address Clone: << MAC Address (dropdown)

PPPoE

Select **PPPoE** if your ISP provides and requires you to enter a PPPoE username and password in order to connect to the Internet.

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, select **Always on** as the reconnect mode.

Advanced Settings

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**.

Dynamic IP

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. The recommended setting is **Auto**.

The screenshot shows the D-Link Internet settings page. At the top, there are navigation links for Home, Settings, Features, and Management. The main heading is 'Internet'. Below the heading, there is a globe icon and a note: 'Use this section to configure your Internet Connection type. There are several connection types to choose from: Static IP, DHCP, PPPoE, PPTP, L2TP and DS-Lite. If you are unsure of your connection method, please contact your Internet service provider. Note: If using the PPPoE option, you will need to remove or disable any PPPoE client software on your computers.' Below this, there is a breadcrumb trail: 'Settings >> Internet >> IPv4'. There are three buttons: 'VLAN', 'IPv6', and 'Save'. The 'My Internet Connection is' dropdown is set to 'PPPoE'. Below this, there are input fields for 'Username' and 'Password'. The 'Reconnect Mode' dropdown is set to 'On demand'. The 'Maximum Idle Time' is set to '5 minutes'. There is a link for 'Advanced Settings...' at the bottom right.

The screenshot shows the advanced settings for Dynamic IP. The 'Address Mode' dropdown is set to 'Dynamic IP'. Below this are input fields for 'Service Name', 'Primary DNS Server', and 'Secondary DNS Server'. The 'MTU' dropdown is set to 'Auto'. The 'MAC Address Clone' field is set to '00:0C:43:28:80:45' and has a dropdown arrow.

PPPoE (continued)

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.

The screenshot shows the PPPoE configuration page with the following settings: Address Mode is set to 'Dynamic IP', Service Name is empty, Primary DNS Server is empty, Secondary DNS Server is empty, MTU is set to 'Auto', and MAC Address Clone is set to '00:0C:43:28:60:45' with a dropdown menu labeled '<< MAC Address'.

Static IP

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

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. The recommended setting is **Auto**.

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.

The screenshot shows the PPPoE configuration page with the following settings: Address Mode is set to 'Static IP', IP Address is empty, Service Name is empty, Primary DNS Server is empty, Secondary DNS Server is empty, MTU is set to 'Auto', and MAC Address Clone is set to '00:0C:43:28:60:45' with a dropdown menu labeled '<< MAC Address'.

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, select **Always on** as the reconnect mode.

Advanced Settings

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**.

Dynamic IP

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. The recommended setting is **Auto**.

The screenshot shows the D-Link web interface for configuring the Internet connection. The page title is 'Internet'. Below the title, there is a navigation bar with 'Settings >> Internet >> IPv4'. The 'My Internet Connection is' dropdown menu is set to 'PPTP'. Below this, there are input fields for 'PPTP Server', 'Username', and 'Password'. The 'Reconnect Mode' dropdown menu is set to 'On demand' and the 'Maximum Idle Time' is set to '5 minutes'. There is a 'Save' button and an 'Advanced Settings' link.

The screenshot shows the Advanced Settings section for Dynamic IP. The 'Address Mode' dropdown menu is set to 'Dynamic IP'. Below it, there are input fields for 'Primary DNS Server' and 'Secondary DNS Server'. The 'MTU' dropdown menu is set to 'Auto'.

PPTP (continued)

Static IP

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

PPTP Subnet Mask: Enter the subnet mask provided by your ISP.

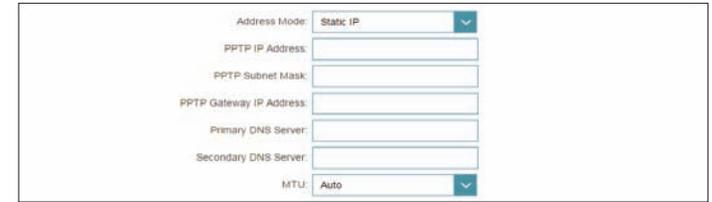
PPTP Gateway IP Address: Enter the gateway IP address provided by your ISP.

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. The recommended setting is **Auto**.

Click **Save** when you are done.



The screenshot shows a configuration form for PPTP. It includes a dropdown menu for 'Address Mode' set to 'Static IP'. Below it are five text input fields for 'PPTP IP Address', 'PPTP Subnet Mask', 'PPTP Gateway IP Address', 'Primary DNS Server', and 'Secondary DNS Server'. At the bottom, there is an 'MTU' dropdown menu set to 'Auto'.

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: 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, select **Always on** as the reconnect mode.

Advanced Settings

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**.

Dynamic IP

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. The recommended setting is **Auto**.

L2TP (continued)

Static IP

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

L2TP Subnet Mask: Enter the subnet mask provided by your ISP.

L2TP Gateway IP Address: Enter the gateway IP 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. The recommended setting is **Auto**.

Click **Save** when you are done.

The screenshot shows a configuration form with the following fields and values:

- Address Mode: Static IP (dropdown menu)
- L2TP IP Address: (text input field)
- L2TP Subnet Mask: (text input field)
- L2TP Gateway IP Address: (text input field)
- Primary DNS Server: (text input field)
- Secondary DNS Server: (text input field)
- MTU: Auto (dropdown menu)

DS-Lite

DS-Lite is an IPV4/IPv6 hybrid connection type. After selecting DS-Lite, the following parameters will be available for configuration:

Advanced Settings

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

DS-Lite DHCPv6

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.

Manual

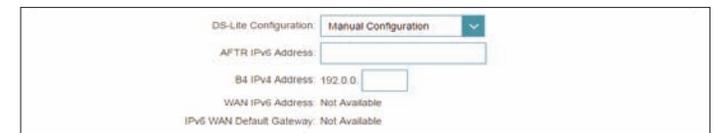
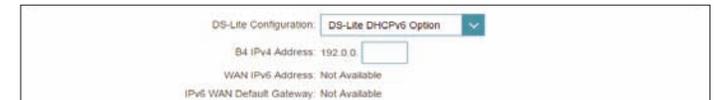
AFTR IPv6 Address: Enter the AFTR IPv6 address used here.

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 **34**.

For **Static IPv6** refer to page **36**.

For **Auto Configuration (SLAAC/DHCPv6)** refer to page **38**.

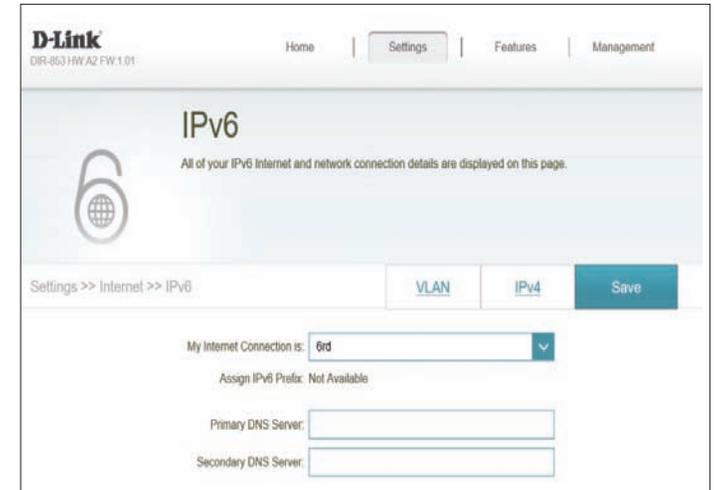
For **PPPoE** refer to page **41**.

For **IPv6 in IPv4 Tunnel** refer to page **45**.

For **6 to 4** refer to page **48**.

For **6rd** refer to page **50**.

For **Local Connectivity Only** refer to page **52**.



Auto Detection

Select **Auto Detection** to automatically detect the IPv6 connection method used by your Internet Service Provider (ISP). If Auto Detection fails, you can manually select another IPv6 connection type.

IPv6 DNS Settings

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

If **Use the following DNS address** is selected:

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 Settings

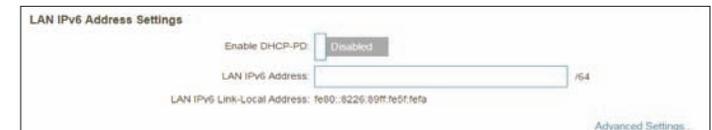
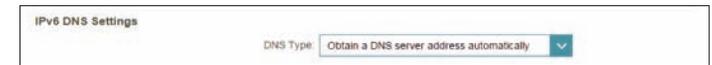
Enable DHCP-PD: Enable or disable DHCP Prefix Delegation.

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

If **Enable DHCP-PD** is disabled, these additional parameters are available for configuration:

LAN IPv6 Address: Enter a valid LAN IPv6 address.

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



Auto Detection (continued)

Advanced Settings - Address Autoconfiguration Settings

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

Enable Automatic DHCP-PD in LAN: Enable or disable DHCP-PD for other IPv6 routers connected to the LAN interface.
Note: This feature requires a smaller subnet prefix than /64 (i.e. allowing for a larger address allocation), such as /63. Contact your ISP for more information.

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

If you selected **SLAAC+RDNSS** or **SLAAC+Stateless DHCP** as the Autoconfiguration Type:

Router Advertisement Lifetime: Enter the router advertisement lifetime (in minutes).

If you selected **Stateful DHCPv6** as the Autoconfiguration Type:

IPv6 Address Range (Start): Enter the starting IPv6 address for the DHCP server's IPv6 assignment.

IPv6 Address Range (End): Enter the ending IPv6 address for the DHCP server's IPv6 assignment.

Click **Save** when you are done.

Address Autoconfiguration Settings

Enable Automatic IPv6 Address Assignment: Enabled

Enable Automatic DHCP-PD in LAN: Enabled

Autoconfiguration Type: SLAAC+RDNSS

Router Advertisement Lifetime: 60 minutes

Address Autoconfiguration Settings

Enable Automatic IPv6 Address Assignment: Enabled

Enable Automatic DHCP-PD in LAN: Enabled

Autoconfiguration Type: SLAAC+Stateless DHCP

Router Advertisement Lifetime: 60 minutes

Address Autoconfiguration Settings

Enable Automatic IPv6 Address Assignment: Enabled

Enable Automatic DHCP-PD in LAN: Enabled

Autoconfiguration Type: Stateful DHCPv6

IPv6 Address Range (Start): mmm: 00 1

IPv6 Address Range (End): mmm: 00 99

Static IPv6

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

IPv6 DNS Settings

If **Use the following DNS address** is selected for DNS Type:

Primary DNS Server: Enter the primary DNS server address.

Secondary DNS Server: Enter the secondary DNS server address.

LAN IPv6 Address Settings

If **Enable DHCP-PD** is disabled these additional parameters are available for configuration:

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.

Advanced Settings - Address Autoconfiguration Settings

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

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

Router Advertisement Lifetime: Enter the router advertisement lifetime (in minutes).

Static IPv6 (continued)

If you selected **Stateful DHCPv6** as the Autoconfiguration Type:

IPv6 Address Range (Start): Enter the starting IPv6 address for the DHCP server's IPv6 assignment.

IPv6 Address Range (End): Enter the ending IPv6 address for the DHCP server's IPv6 assignment.

Click **Save** when you are done.

The screenshot shows the 'Address Autoconfiguration Settings' interface. The 'Enable Automatic IPv6 Address Assignment' toggle is set to 'Enabled'. The 'Autoconfiguration Type' dropdown menu is set to 'SLAAC+Stateless DHCP'. The 'Router Advertisement Lifetime' is set to '30 minutes'.

The screenshot shows the 'Address Autoconfiguration Settings' interface. The 'Enable Automatic IPv6 Address Assignment' toggle is set to 'Enabled'. The 'Autoconfiguration Type' dropdown menu is set to 'Stateful DHCPv6'. The 'IPv6 Address Range (Start)' is set to 'fff::00', the 'IPv6 Address Range (End)' is set to 'fff::00', and the 'IPv6 Address Lifetime' is set to '10080 minutes'.

Auto Configuration (SLAAC/DHCPv6)

Select **Auto Configuration** if your ISP assigns your IPv6 address when your router requests one from the ISP's server. Some ISPs require you to adjust settings on your side before your router can connect to the IPv6 Internet.

IPv6 DNS Settings

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

If **Use the following DNS address** is selected:

Primary DNS Server: Enter the primary DNS server address.

Secondary DNS Server: Enter the secondary DNS server address.

LAN IPv6 Address Settings

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

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

If **Enable DHCP-PD** is disabled, these additional parameters are available for configuration:

LAN IPv6 Address: Enter a valid LAN IPv6 address.

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

IPv6 DNS Settings

DNS Type: Obtain a DNS server address automatically

IPv6 DNS Settings

DNS Type: Use the following DNS address

Primary DNS Server:

Secondary DNS Server:

LAN IPv6 Address Settings

Enable DHCP-PD: Enabled

LAN IPv6 Link-Local Address: fe80::8226:89ff:fe5f:fe6a

[Advanced Settings...](#)

LAN IPv6 Address Settings

Enable DHCP-PD: Disabled

LAN IPv6 Address: /64

LAN IPv6 Link-Local Address: fe80::8226:89ff:fe5f:fe6a

[Advanced Settings...](#)

Auto Configuration (SLAAC/DHCPv6) (continued)

Advanced Settings - Address Autoconfiguration Settings

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

If **DHCP-PD** is enabled in LAN IPv6 Address Settings:

Enable Automatic DHCP-PD in LAN: Enable or disable DHCP-PD for other IPv6 routers connected to the LAN interface.
Note: This feature requires a smaller subnet prefix than /64 (i.e. allowing for a larger address allocation), such as /63. Contact your ISP for more information.

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

If you selected **SLAAC+RDNSS** or **SLAAC+Stateless DHCP** as the Autoconfiguration Type:

Router Advertisement Lifetime: Enter the router advertisement lifetime (in minutes).

If you selected **Stateful DHCPv6** as the Autoconfiguration Type:

IPv6 Address Range (Start): Enter the starting IPv6 address for the DHCP server's IPv6 assignment.

IPv6 Address Range (End): Enter the ending IPv6 address for the DHCP server's IPv6 assignment.

ADDRESS AUTOCONFIGURATION SETTINGS

Enable Automatic IPv6 Address Assignment: Enabled

Enable Automatic DHCP-PD in LAN: Enabled

Autoconfiguration Type: SLAAC+Stateless DHCP

Router Advertisement Lifetime: minutes

ADDRESS AUTOCONFIGURATION SETTINGS

Enable Automatic IPv6 Address Assignment: Enabled

Enable Automatic DHCP-PD in LAN: Enabled

Autoconfiguration Type: SLAAC+RDNSS

Router Advertisement Lifetime: minutes

Address Autoconfiguration Settings

Enable Automatic IPv6 Address Assignment: Enabled

Enable Automatic DHCP-PD in LAN: Enabled

Autoconfiguration Type: Stateful DHCPv6

IPv6 Address Range (Start): ffff:00:01

IPv6 Address Range (End): ffff:00:99

Auto Configuration (SLAAC/DHCPv6) (continued)

If **DHCP-PD** is disabled in LAN IPv6 Address Settings and **SLAAC+Stateless DHCP** or **SLAAC+RDNSS** is chosen as the Autoconfiguration Type:

Router Advertisement Lifetime: Enter the router advertisement lifetime (in minutes).

The screenshot shows the 'Address Autoconfiguration Settings' window. The 'Enable Automatic IPv6 Address Assignment' checkbox is checked and labeled 'Enabled'. The 'Autoconfiguration Type' dropdown menu is set to 'SLAAC+Stateless DHCP'. The 'Router Advertisement Lifetime' is set to '30 minutes'.

If **DHCP-PD** is disabled in LAN IPv6 Address Settings and **Stateful DHCPv6** is chosen as the Autoconfiguration Type:

IPv6 Address Range (Start): Enter the starting IPv6 address for the DHCP server's IPv6 assignment.

IPv6 Address Range (End): Enter the ending IPv6 address for the DHCP server's IPv6 assignment.

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

The screenshot shows the 'Address Autoconfiguration Settings' window. The 'Enable Automatic IPv6 Address Assignment' checkbox is checked and labeled 'Enabled'. The 'Autoconfiguration Type' dropdown menu is set to 'Stateful DHCPv6'. The 'IPv6 Address Range (Start)' and 'IPv6 Address Range (End)' fields are both set to '::: 00'. The 'IPv6 Address Lifetime' is set to '10000 minutes'.

Click **Save** when you are done.

PPPoE

Select **PPPoE** if your ISP provides and requires you to enter a PPPoE username and password in order to connect to the Internet.

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

Address Mode: Select **Static IP** if your ISP assigned you an IP address. In most cases, select **Dynamic IP**.

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

If you selected **Static IP** as the Address Mode and **Share with IPv4** as the PPPoE Session:

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

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

If you selected **Create a new session** as the PPPoE Session:

Username: Enter the username provided by your ISP.

Password: Enter the password provided by your ISP.

Address Mode: Select either **Dynamic IP** or **Static IP**.

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

Reconnect Mode: Select either **Always On** or **Manual**.

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

PPPoE (continued)

If you selected **Static IP** as the Address Mode and **Create a new session** as the PPPoE Session:

IP Address: Enter the IP address provided by your ISP

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

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

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

A screenshot of a configuration form for PPPoE. It includes the following fields: 'Address Mode' set to 'Static IP', 'IP Address' (empty), 'Service Name' (empty), 'Reconnect Mode' set to 'Always on', and 'MTU' set to '1492 bytes'.

IPv6 DNS Settings

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

A screenshot of the 'IPv6 DNS Settings' form. The 'DNS Type' dropdown menu is set to 'Obtain a DNS server address automatically'.

If **Use the following DNS address** is selected:

Primary DNS Server: Enter the primary DNS server address.

Secondary DNS Server: Enter the secondary DNS server address.

A screenshot of the 'IPv6 DNS Settings' form. The 'DNS Type' dropdown menu is set to 'Use the following DNS address'. Below it are two empty input fields for 'Primary DNS Server' and 'Secondary DNS Server'.

LAN IPv6 Address Settings

Enable DHCP-PD: Enable or disable prefix delegation services. This option is only available if you selected **Dynamic IP** for address mode.

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

A screenshot of the 'LAN IPv6 Address Settings' form. The 'Enable DHCP-PD' checkbox is checked and labeled 'Enabled'. Below it, the 'LAN IPv6 Link-Local Address' is displayed as 'fe80::9226:89ff:fe5f:fe7a'. A link for 'Advanced Settings' is visible at the bottom right.

PPPoE (continued)

If **Enable DHCP-PD** is disabled these additional parameters are available for configuration:

LAN IPv6 Address: If DHCP-PD disabled or static address mode is selected, enter the LAN (local) IPv6 address for the router.

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

Advanced Settings - Address Autoconfiguration Settings

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

If **DHCP-PD** is enabled in LAN IPv6 Address Settings:

Enable Automatic DHCP-PD in LAN: Enable or disable DHCP-PD for other IPv6 routers connected to the LAN interface.

Note: This feature requires a smaller subnet prefix than /64 (i.e. allowing for a larger address allocation), such as /63. Contact your ISP for more information.

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

If you selected **SLAAC+RDNSS** or **SLAAC+Stateless DHCP** as the Autoconfiguration Type:

Router Advertisement Lifetime: Enter the router advertisement lifetime (in minutes).

PPPoE (continued)

If you selected **Stateful DHCPv6** as the Autoconfiguration Type:

IPv6 Address Range (Start): Enter the starting IPv6 address for the DHCP server's IPv6 assignment.

IPv6 Address Range (End): Enter the ending IPv6 address for the DHCP server's IPv6 assignment.

The screenshot shows the 'Address Autoconfiguration Settings' interface. It includes two toggle switches for 'Enable Automatic IPv6 Address Assignment' and 'Enable Automatic DHCP-PD in LAN', both set to 'Enabled'. The 'Autoconfiguration Type' is set to 'Stateful DHCPv6'. The 'IPv6 Address Range (Start)' is set to 'ffff:00:1' and the 'IPv6 Address Range (End)' is set to 'ffff:00:99'.

If **DHCP-PD** is disabled in LAN IPv6 Address Settings:

IPv6 Address Range (Start): Enter the starting IPv6 address for the DHCP server's IPv6 assignment.

IPv6 Address Range (End): Enter the ending IPv6 address for the DHCP server's IPv6 assignment.

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

The screenshot shows the 'Address Autoconfiguration Settings' interface. The 'Enable Automatic IPv6 Address Assignment' and 'Enable Automatic DHCP-PD in LAN' toggle switches are both set to 'Disabled'. The 'Autoconfiguration Type' is set to 'Stateful DHCPv6'. The 'IPv6 Address Range (Start)' and 'IPv6 Address Range (End)' are both set to 'ffff:00'. The 'IPv6 Address Lifetime' is set to '10080' 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 tunnelling 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: Displays the current local IPv4 address.

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

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

IPv6 DNS Settings

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

If **Use the following DNS address** is selected:

Primary DNS Server: Enter the primary DNS server address.

Secondary DNS Server: Enter the secondary DNS server address.

The screenshot shows the D-Link IPv6 configuration interface. At the top, there are navigation tabs for Home, Settings, Features, and Management. The main heading is 'IPv6' with a sub-note: 'All of your IPv6 Internet and network connection details are displayed on this page.' Below this, there is a breadcrumb trail: 'Settings >> Internet >> IPv6'. There are three tabs: 'VLAN', 'IPv4', and 'Save'. The 'My Internet Connection is:' dropdown menu is set to 'IPv6 in IPv4 tunnel'. Below this, there are input fields for 'Remote IPv4 Address', 'Remote IPv6 Address', 'Local IPv4 Address' (pre-filled with '172.17.0.49'), 'Local IPv6 Address', and 'Subnet Prefix Length'.

The screenshot shows the 'IPv6 DNS Settings' section. The 'DNS Type:' dropdown menu is set to 'Obtain a DNS server address automatically'.

The screenshot shows the 'IPv6 DNS Settings' section. The 'DNS Type:' dropdown menu is set to 'Use the following DNS address'. Below this, there are input fields for 'Primary DNS Server' and 'Secondary DNS Server'.

IPv6 in IPv4 Tunnel (continued)

LAN IPv6 Address Settings

Enable DHCP-PD: Enable or disable prefix delegation services. This option is only available if you selected **Dynamic IP** for address mode.

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

If **Enable DHCP-PD** is disabled, these additional parameters are available for configuration:

LAN IPv6 Address: If DHCP-PD disabled or static address mode is selected, enter the LAN (local) IPv6 address for the router.

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



Advanced Settings - Address Autoconfiguration Settings

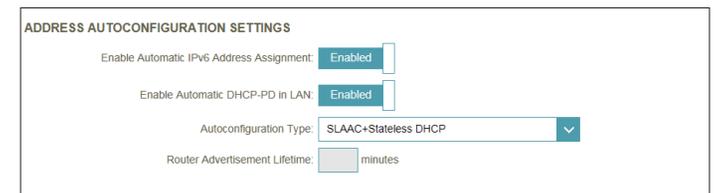
Enable Automatic IPv6 Address Assignment: Enable or disable the Automatic IPv6 Address Assignment feature.

If **DHCP-PD** is enabled in LAN IPv6 Address Settings:

Enable Automatic DHCP-PD in LAN: Enable or disable DHCP-PD for other IPv6 routers connected to the LAN interface.

Note: This feature requires a smaller subnet prefix than /64 (i.e. allowing for a larger address allocation), such as /63. Contact your ISP for more information.

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



IPv6 in IPv4 Tunnel (continued)

If you selected **SLAAC+RDNSS** or **SLAAC+Stateless DHCP** as the Autoconfiguration Type:

Router Advertisement Lifetime: Enter the router advertisement lifetime (in minutes).

If you selected **Stateful DHCPv6** as the Autoconfiguration Type:

IPv6 Address Range (Start): Enter the starting IPv6 address for the DHCP server's IPv6 assignment.

IPv6 Address Range (End): Enter the ending IPv6 address for the DHCP server's IPv6 assignment.

If **DHCP-PD** is disabled in LAN IPv6 Address Settings and **SLAAC+Stateless DHCP** or **SLAAC+RDNSS** is chosen as the Autoconfiguration Type:

Router Advertisement Lifetime: Enter the router advertisement lifetime (in minutes).

If **DHCP-PD** is disabled in LAN IPv6 Address Settings and **Stateful DHCPv6** is chosen as the Autoconfiguration Type:

IPv6 Address Range (Start): Enter the starting IPv6 address for the DHCP server's IPv6 assignment.

IPv6 Address Range (End): Enter the ending IPv6 address for the DHCP server's IPv6 assignment.

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

Click **Save** when you are done.

6to4

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.

6to4 Address: Displays the 6 to 4 address.

6to4 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 Settings

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.

The screenshot shows the D-Link IPv6 configuration interface. At the top, there are navigation tabs for Home, Settings, Features, and Management. The main heading is 'IPv6' with a sub-note: 'All of your IPv6 Internet and network connection details are displayed on this page.' Below this, there are tabs for 'Settings >> Internet >> IPv6', 'VLAN', 'IPv4', and a 'Save' button. The configuration fields include:

- My Internet Connection is:** A dropdown menu set to '6to4'.
- 6to4 Address:** A text field containing '2002:ac11:631:1'.
- 6to4 Relay:** A text field containing '192.88.99.1' with a clear button (X).
- Primary DNS Server:** An empty text field.
- Secondary DNS Server:** An empty text field.

 At the bottom, there are two summary lines:

- LAN IPv6 Address:** '2002:ac11:631:1: [] :1:64'.
- LAN IPv6 Link-Local Address:** 'FE80:20C:43FF:FE2B:548'.

 A link for 'Advanced Settings...' is located in the bottom right corner.

6to4 (continued)

Advanced Settings - Address Autoconfiguration Settings

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

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

If you selected **SLAAC+RDNSS** or **SLAAC+Stateless DHCP** as the Autoconfiguration Type:

Router Advertisement Lifetime: Enter the router advertisement lifetime (in minutes).

If you selected **Stateful DHCPv6** as the Autoconfiguration Type:

IPv6 Address Range (Start): Enter the starting IPv6 address for the DHCP server's IPv6 assignment.

IPv6 Address Range (End): Enter the ending IPv6 address for the DHCP server's IPv6 assignment.

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

Click **Save** when you are done.

Address Autoconfiguration Settings

Enable Automatic IPv6 Address Assignment: Enabled

Autoconfiguration Type: SLAAC+RDNSS

Router Advertisement Lifetime: 30 minutes

Address Autoconfiguration Settings

Enable Automatic IPv6 Address Assignment: Enabled

Autoconfiguration Type: SLAAC+Stateless DHCP

Router Advertisement Lifetime: 30 minutes

Address Autoconfiguration Settings

Enable Automatic IPv6 Address Assignment: Enabled

Autoconfiguration Type: Stateful DHCPv6

IPv6 Address Range (Start): mm: 00

IPv6 Address Range (End): mm: 00

IPv6 Address Lifetime: 10800 minutes

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.

6rd Manual Configuration

Enable Hub and Spoke Mode: Enable this option 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.

If you selected **Manual configuration**

6rd IPv6 Prefix: Enter the 6rd IPv6 prefix and mask length supplied by your ISP.

WAN IPv4 Address Displays the router's IPv4 address.

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

LAN IPv6 Address Settings

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

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

6rd (continued)

Advanced Settings - Address Autoconfiguration Settings

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

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

If you selected **SLAAC+RDNSS** or **SLAAC+Stateless DHCP** as the Autoconfiguration Type:

Router Advertisement Lifetime: Enter the router advertisement lifetime (in minutes).

If you selected **Stateful DHCPv6** as the Autoconfiguration Type:

IPv6 Address Range (Start): Enter the starting IPv6 address for the DHCP server's IPv6 assignment.

IPv6 Address Range (End): Enter the ending IPv6 address for the DHCP server's IPv6 assignment.

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

Click **Save** when you are done.

Address Autoconfiguration Settings

Enable Automatic IPv6 Address Assignment: Enabled

Autoconfiguration Type: SLAAC+RDNSS

Router Advertisement Lifetime: 30 minutes

Address Autoconfiguration Settings

Enable Automatic IPv6 Address Assignment: Enabled

Autoconfiguration Type: SLAAC+Stateless DHCP

Router Advertisement Lifetime: 30 minutes

Address Autoconfiguration Settings

Enable Automatic IPv6 Address Assignment: Enabled

Autoconfiguration Type: Stateful DHCPv6

IPv6 Address Range (Start): mm: 00

IPv6 Address Range (End): mm: 00

IPv6 Address Lifetime: 10800 minutes

Local Connectivity Only

Local Connectivity Only allows you to set up an IPv6 connection that will not connect to the Internet.

Advanced Settings

IPv6 ULA Settings

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

Use Default ULA Prefix: Enable this option to use the default ULA prefix.

If you selected **Enable ULA** and disabled **Default ULA Prefix**:

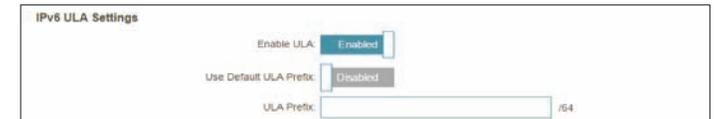
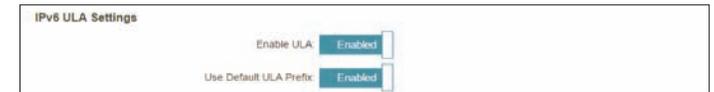
ULA Prefix: Enter your own ULA prefix.

Current IPv6 ULA Settings

Current ULA Prefix: Displays the current ULA prefix.

LAN IPv6 ULA: Displays the LAN's IPv6 ULA.

Click **Save** when you are done.



VLAN

VLAN allows for services such as Triple-Play to be used, and divides a network into segments that can only be accessed by other devices in the same VLAN.

In the Settings menu on the bar on the top of the page, click **Internet**, then click the **VLAN** link.

Triple-Play

Status: Click to enable or disable the Triple-Play VLAN feature.

If **Status** is enabled:

Internet VLAN ID Enter the VLAN ID for your Internet connection, as provided by your ISP.

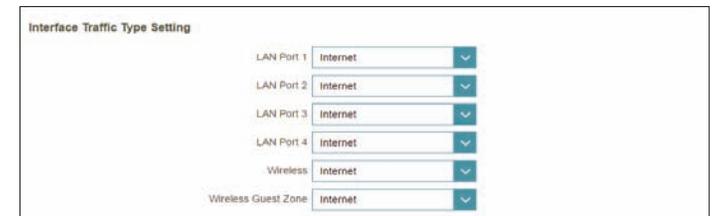
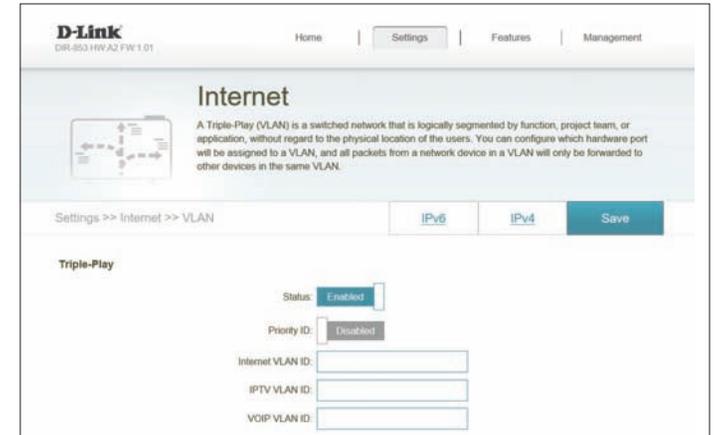
IPTV VLAN ID Enter the VLAN ID for your IPTV service, as provided by your ISP.

VOIP VLAN ID: Enter the VLAN ID for your VoIP network, as provided by your ISP.

Interface Traffic Type Setting

LAN 1-4, Wireless, Guest Zone: From the drop-down menu, you can select the type of connection (Internet, IPTV, or Voice over IP) coming from the WAN connection to each interface on the DIR-1360.

Click **Save** when you are done.



Wireless

From this page you can configure your wireless network settings.

Smart Connect

Smart Connect: Enable or disable the Smart Connect Feature. When enabled, only a few configuration options are available to simplify configuration.

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.

Advanced Settings

Security Mode: Choose **None** or **WPA/WPA2-Personal** (recommended).

Transmission Power: Select the desired wireless transmission power.

Schedule: Use the drop-down menu to select the time schedule that the rule will be enabled for. The schedule may be set to **Always Enable**, or you can create your own schedules in the **Schedules** section. Refer to **Schedule** on page **72** for more information.

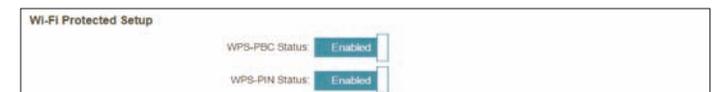
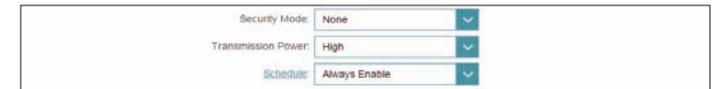
Wi-Fi Protected Setup

The easiest way to connect your wireless devices to the router is with Wi-Fi Protected Setup (WPS). Using WPS-PIN is disabled by default due to security vulnerabilities.

WPS-PBC Status: Enable or disable WPS-PBC (Push Button Configuration) functionality.

WPS-PIN Status: Enable or disable WPS-PIN functionality.

Refer to the next page if you wish to disable Smart Connect or click **Save** when you are done.



Wireless - Smart Connect Disabled

If **Smart Connect** is disabled the following options are available:

2.4GHz / 5GHz

Status: Enable or disable the 2.4 GHz / 5 GHz wireless network.

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.

Advanced Settings

Security Mode: Choose **None** or **WPA/WPA2-Personal** (recommended).

802.11 Mode (2.4 GHz): Select the desired wireless networking standards to use. The available options for the 2.4 GHz wireless network are **Mixed 802.11b/g/n, Mixed 802.11g/n, 802.11n only**.

802.11 Mode (5 GHz): Select the desired wireless networking standards to use. The available options for the 5 GHz wireless network are **Mixed 802.11a/n/ac, Mixed 802.11n/ac, 802.11ac only, Mixed 802.11a/n, Mixed 802.11n only, or 802.11a only**.

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

Transmission Power: Select the desired wireless transmission power.

Channel Width (2.4 GHz): Select **Auto 20/40** if you are using both 802.11n and non-802.11n devices, or select **20 MHz** if you are not using any 802.11n devices.

Channel Width (5 GHz): Select **Auto 20/40/80** if you are using 802.11ac, 802.11n, and 802.11a devices, select **Auto 20/40** if you are using 802.11n and 802.11a devices, or select **20 MHz** if you are only using 802.11a devices.

The screenshot shows the 'Smart Connect' configuration page. At the top, the 'Smart Connect' status is set to 'Disabled'. Below this, there are two sections: '2.4GHz' and '5GHz'. In the '2.4GHz' section, the status is 'Enabled', the Wi-Fi Name (SSID) is 'DIR-853_2_4G_factory_root', and the password field is empty. In the '5GHz' section, the status is 'Enabled', the Wi-Fi Name (SSID) is 'DIR-853_5G_factory_root', and the password is '88888888'. Both sections have an 'Advanced Settings...' link to the right.

The screenshot shows the '2.4GHz' Advanced Settings page. The status is 'Enabled'. The Wi-Fi Name (SSID) is 'DIR-853 Wi-Fi' and the password is 'testpass'. Below these are several dropdown menus: 'Security Mode' is set to 'WPA/WPA2-Personal', '802.11 Mode' is 'Mixed 802.11b/g/n', 'Wi-Fi Channel' is 'Auto', 'Transmission Power' is 'High', 'Channel Width' is 'Auto 20/40 MHz', 'HT20/40 Coexistence' is 'Enabled', 'Visibility Status' is 'Visible', and 'Schedule' is 'Always Enable'. Each dropdown menu has a downward arrow icon.

HT20/40 Coexistence: (2.4 GHz): Enable or disable HT20/40 Coexistence.

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 for. The schedule may be set to **Always Enable**, or you can create your own schedules in the **Schedules** section. Refer to **Schedule** on page **72** for more information.

Wi-Fi Protected Setup

The easiest way to connect your wireless devices to the router is with Wi-Fi Protected Setup (WPS). Using WPS-PIN disabled by default due to security vulnerabilities.

WPS-PBC Status: Enable or disable WPS-PBC (Push Button Configuration) functionality.

WPS-PIN Status: Enable or disable WPS-PIN functionality.

Click **Save** when you are done.

The screenshot shows the configuration interface for the 2.4GHz Wi-Fi network. The 'Status' is set to 'Enabled'. The 'Wi-Fi Name (SSID)' is 'DIR-853 Wi-Fi' and the 'Password' is 'testpass'. There is an 'Advanced Settings...' link. Below this, several settings are shown as dropdown menus: 'Security Mode' is 'WPA/WPA2-Personal', '802.11 Mode' is 'Mixed 802.11b/g/n', 'Wi-Fi Channel' is 'Auto', 'Transmission Power' is 'High', and 'Channel Width' is 'Auto 20/40 MHz'. At the bottom, 'HT20/40 Coexistence' is 'Enabled', 'Visibility Status' is 'Visible', and 'Schedule' is 'Always Enable'.

The screenshot shows the 'Wi-Fi Protected Setup' configuration page. Both 'WPS-PBC Status' and 'WPS-PIN Status' are set to 'Enabled'.

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.

Note: If Smart Connect is enabled, Guest Zone is unavailable.

In the Settings menu on the bar on the top of the page, click **Wireless**, then click the **Guest Zone** link.

2.4 GHz / 5 GHz

Status: Enable or disable the 2.4 GHz / 5 GHz wireless network.

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.

Home Network Access

Internet Access Only: Enabling this option will confine connectivity to the Internet, preventing 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.

Network Settings

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.

The screenshot shows the D-Link web interface for the DIR-803 HW v2 FW 1.01. The top navigation bar includes Home, Settings, Features, and Management. The main heading is "Network". Below the heading is a brief instruction: "Use this section to configure the network settings for your device. You can enter a name for your device in the management link field, and use the link to access web UI in a web browser. We recommend you change the management link if there are more than one D-Link devices within the network." The "Settings >> Network" breadcrumb is shown, along with a "Save" button. The "Network Settings" section contains the following fields:

- LAN IP Address: 192.168.0.1
- Subnet Mask: 255.255.255.0
- Management Link: http://dlinkrouter.local/
- Local Domain Name: (empty)
- Enable DNS Relay: Enabled

An "Advanced Settings..." link is located at the bottom right of the form.

Network (continued)

DHCP 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 network's DHCP server to LAN/WLAN clients.

DHCP Server

Status: Enabled

DHCP IP Address Range: 192.168.0.100 to 192.168.0.199

DHCP Lease Time: 10000 minutes

Always Broadcast: Disabled
(compatibility for some DHCP Clients)

Advanced Settings

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

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

IPv4 Multicast 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.

Advanced Settings

WAN Port Speed:

UPnP: Disabled

IPv4 Multicast Streams: Disabled

IPv6 Multicast Streams: Disabled

Features

QoS Engine

This **Quality of Service (QoS) Engine** 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 Features menu on the bar on the top of the page, click **QoS Engine**.

Under **Connected Clients**, 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.

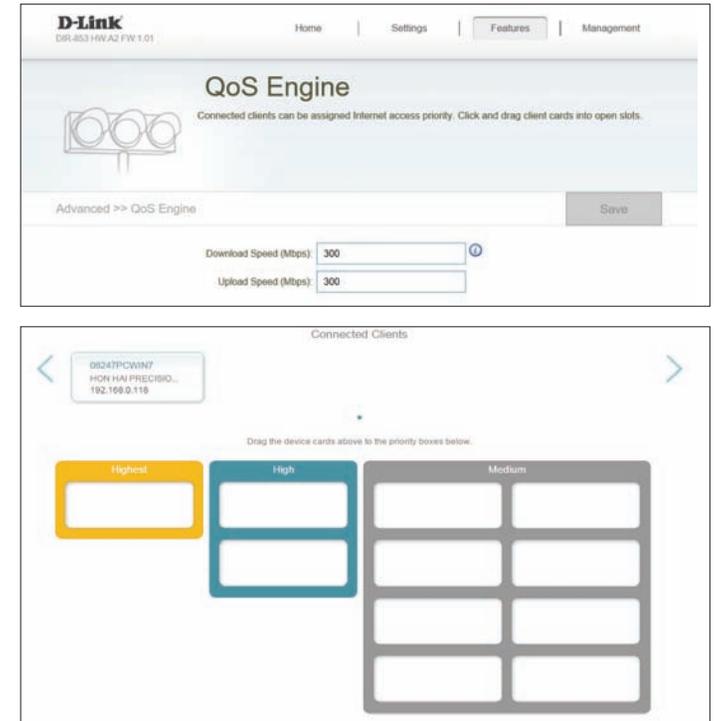
A maximum of **two** devices can be assigned **High** priority.

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.

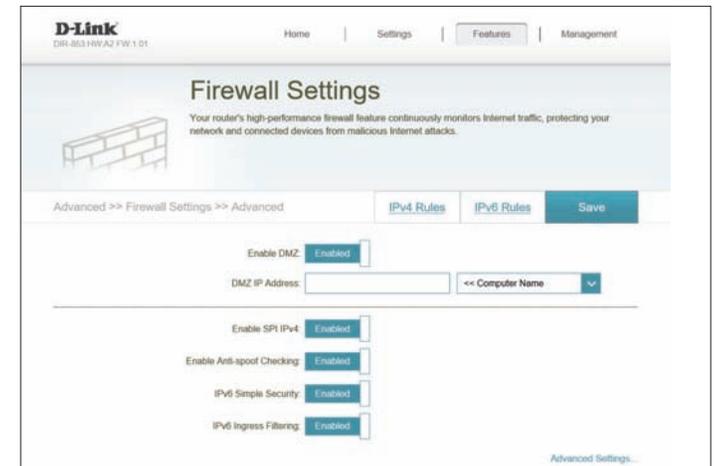
Click **Save** when you are done.



Firewall

The router's firewall protects your network from malicious attacks over the Internet. In the Features menu on the bar on the top of the page, click **Firewall**. 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 help 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.



Firewall Settings (continued)

Advanced Settings - Application Level Gateway (ALG) Configuration

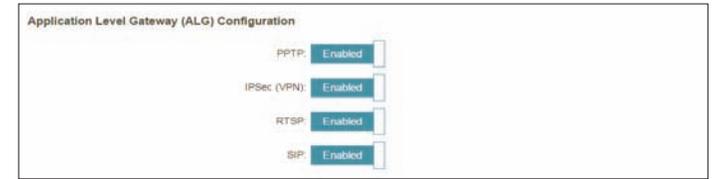
PPTP: Allows multiple machines on the LAN to connect to their corporate network using the PPTP protocol.

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 **Advanced**.

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.

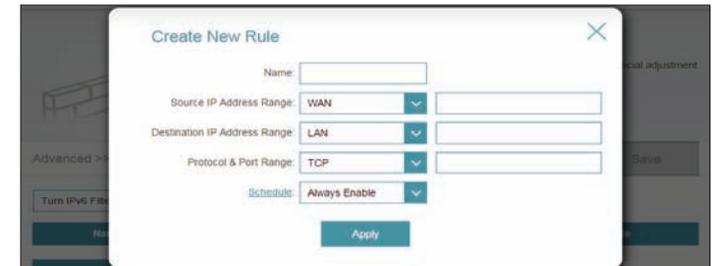
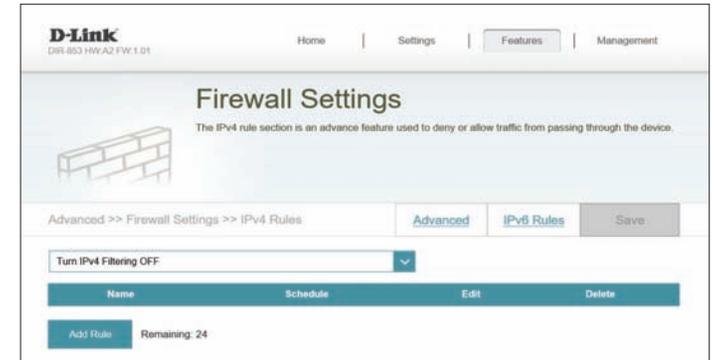
Source IP Address Range: Enter the source IP address range that the rule will apply to, and using the drop-down menu, specify whether it is a **WAN** or **LAN** IP address.

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.

Protocol & 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 for. The schedule may be set to **Always Enable**, or you can create your own schedules in the **Schedules** section. Refer to Refer to **Schedule** on page **72** for more information.

Click **Save** when you are done.



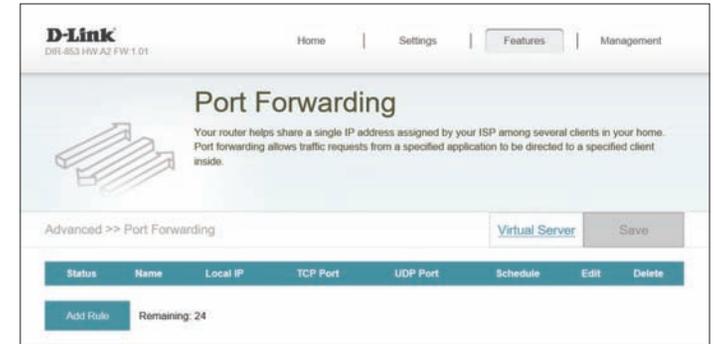
Port Forwarding

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 Features 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 for. The schedule may be set to **Always Enable**, or you can create your own schedules in the **Schedules** section. Refer to **Schedule** on page **72** for more information.

Click **Save** 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 Rules** 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. Alternatively, select the protocol/Application from the drop-down menu.

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**).

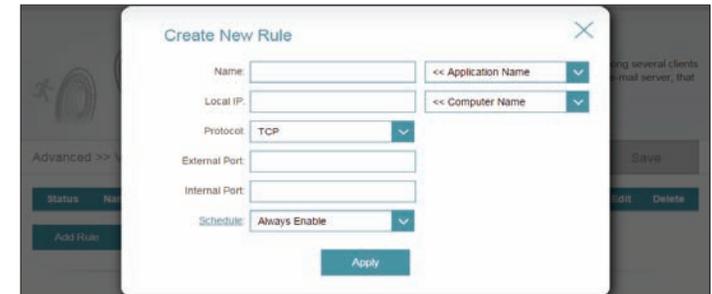
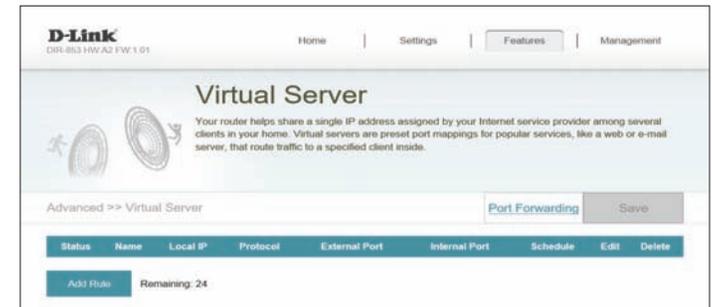
Protocol Number: If you entered **Other** above, enter the protocol number.

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 for. The schedule may be set to **Always Enable**, or you can create your own schedules in the **Schedules** section. Refer to **Schedule** on page **72** for more information.

Click **Save** when you are done.



Website Filter

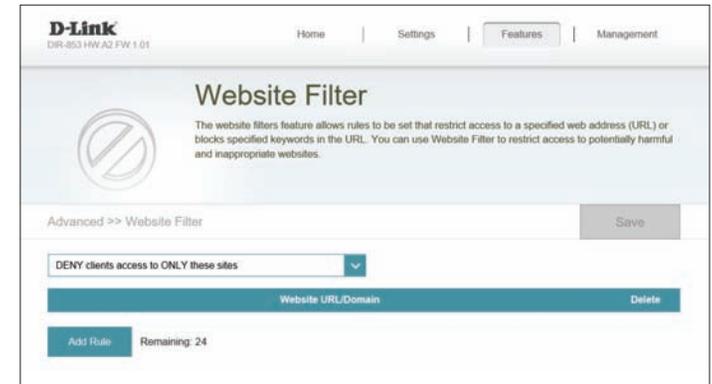
The website filter settings allow you to block access to certain web sites. You can either create a list of sites to block, or create a list of sites to allow (with all other sites being blocked).

In the **Features** 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 client 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 twenty-four 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 the corresponding 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 Routes

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

In the Features menu on the bar on the top of the page, click **Static Route**. To configure IPv6 rules, click **IPv6** and refer to **IPv6** on page **68**. To return to the main IPv4 static routes page, click **IPv4**.

If you wish to remove a rule, click on the corresponding 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 Route** 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 Network: Enter the IP address of packets that will take this route.

Mask: Enter the subnet mask of the route.

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

Metric: Enter a route metric value ranging from **0** to **15**. This value indicates the cost of using this route.

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

Click **Save** 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 Rules** 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.

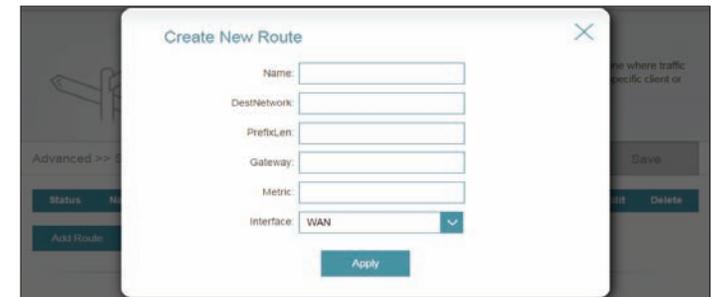
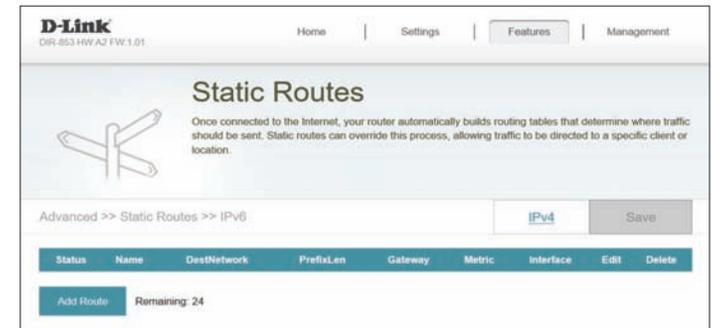
PrefixLen: Enter the IPv6 address prefix length of the packets that will take this route.

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

Metric: Enter a route metric value ranging from **0** to **15**. This value indicates the cost of using this route.

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

Click **Save** 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 Features menu on the bar on the top of the page, click **Dynamic DNS**.

Enable Dynamic DNS: Enable or disable dynamic DNS. Enabling this feature 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 time out 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 **IPv6 Host** on page **70**.

The screenshot shows the D-Link Dynamic DNS configuration interface. At the top, there are navigation links for Home, Settings, Features, and Management. The main heading is 'Dynamic DNS'. Below this, there is a brief description of the service. The configuration area includes a 'Save' button in the top right. The 'Enable Dynamic DNS' checkbox is checked. The status is 'Disconnected'. The 'Server Address' is 'dynamics.com' and the 'Server' is 'dlinkdns.com'. The 'Host Name', 'User Name', and 'Password' fields are empty. The 'Time Out' is set to '24' hours. Below the form is a table with columns for 'Status', 'Host Name', 'IPv6 Address', 'Edit', and 'Delete'. There is an 'Add Record' button and a 'Remaining: 10' indicator.

IPv6 Host

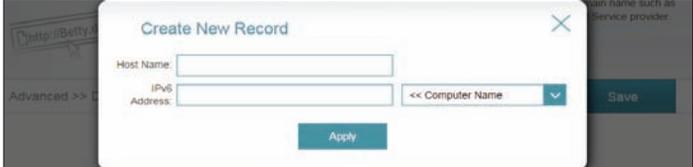
The IPv6 host settings are found at the bottom of the Dynamic DNS page.

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 **Save** 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 Configuration

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

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

Enable Daylight Saving: Enable or disable daylight saving time.

Automatic Time Configuration

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 **Schedule** on page **72**.

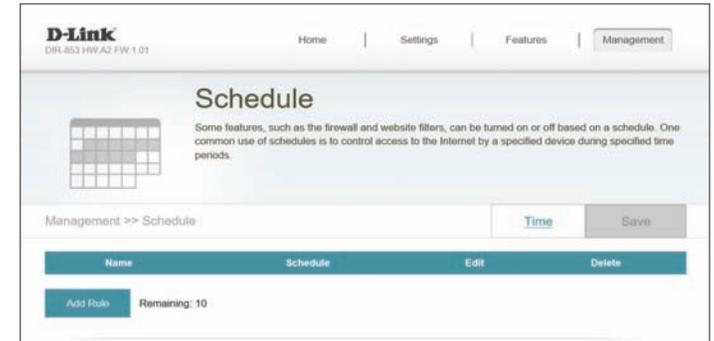
The screenshot shows the 'Time' configuration page in a D-Link router's web interface. At the top, there's a navigation bar with 'Home', 'Settings', 'Features', and 'Management'. The main heading is 'Time', with a sub-note: 'Your router's internal clock is used for data logging and schedules for features. The date and time can be synchronized with a public time server on the Internet, or set manually.' Below this, there are 'Schedule' and 'Save' buttons. The 'Time Configuration' section includes a 'Time Zone' dropdown menu set to '(GMT) Greenwich Mean Time - Dublin, Edinburgh, Lisbon', a 'Time' display showing '2018/01/16 07:08:21 AM', and an 'Enable Daylight Saving' toggle set to 'Enabled'. The 'Automatic Time Configuration' section has an 'Update Time Using an NTP Server' toggle set to 'Enabled' and an 'NTP Server' dropdown menu set to 'D-Link NTP Server'.

The top screenshot shows the 'Automatic Time Configuration' section with 'Update Time Using an NTP Server' set to 'Enabled' and 'NTP Server' set to 'D-Link NTP Server'. The bottom screenshot shows the same section with 'Update Time Using an NTP Server' set to 'Disabled', revealing the 'Manual Time Configuration' section. This section has 'Date' input fields for Year (2017), Month (03), and Day (15), and 'Time' input fields for Hour (11) and Minute (00). The date is labeled '(Year/ Month/ Day)' and the time is labeled '(Hour/ Minute)'.

Schedule

Some router functions can be controlled through 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:

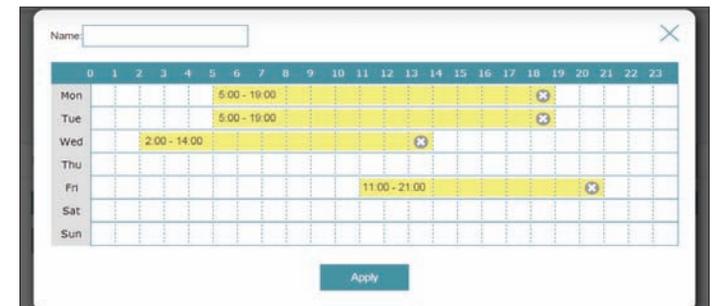
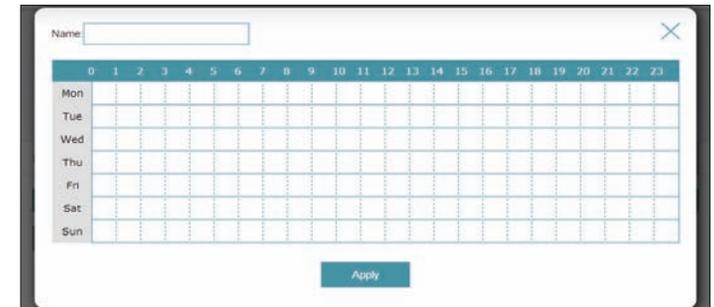


First, enter the name of your schedule in the **Name** field.

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 starting hour and drag to the ending hour. You can add multiple days to the schedule.

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

Click **Save** when you are done.



System Log

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

Log Settings

System Log Click the **Check System Log** button to download a text file containing the system log.

SysLog Settings

Enable Logging to Syslog Server: Check this box to send the router logs to a SysLog Server.

If Logging to the Syslog Server is **Enabled**:

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

Email Settings

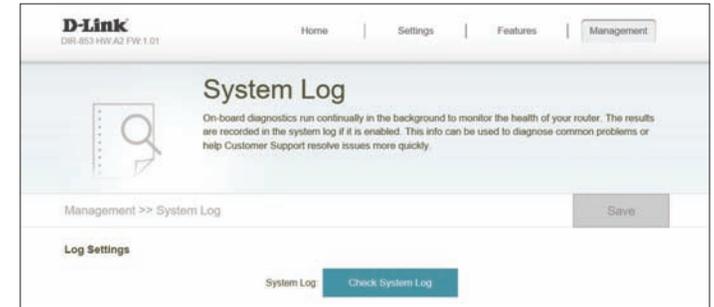
Enable E-mail Notification: Enable this option if you want the logs to be automatically sent to an email address.

If E-mail notification is **Enabled**:

From E-mail Address: Enter the email address your SysLog messages will be sent from.

To E-mail Address: Enter the email address your SysLog messages will be sent to.

SMTP Server Address: Enter your SMTP server address.



System Log (continued)

SMTP Server Port: Enter your SMTP server port.

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

Account Name: Enter your SMTP account name.

Password: Enter your SMTP account's password

E-mail Log When Full or On Schedule

Send When Log Full: If enabled, this option will set the router to send the log when it is full.

Send on Schedule: If enabled, this option will set the router to send according to a set schedule.

Schedule: If you enable **Send On Schedule**, use the drop-down menu to select a schedule to apply. The schedule may be set to **Always Enable**, or you can create your own schedules in the **Schedules** section. Refer to **Schedule** on page **72** for more information.

Click **Save** when you are done.

The screenshot shows the configuration interface for System Log. It is divided into three main sections:

- SysLog Settings:**
 - Enable Logging to Syslog Server: Enabled
 - SysLog Server IP Address: << Computer Name
- E-mail Settings:**
 - Enable E-mail Notification: Enabled
 - From E-mail Address:
 - To E-mail Address:
 - SMTP Server Address:
 - SMTP Server Port:
 - Enable Authentication: Enabled
 - Account Name:
 - Password:
- E-mail Log When Full or On Schedule:**
 - Send When Log Full: Enabled
 - Send on Schedule: Enabled
 - Schedule:

System 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 **System Admin**. To load, save, reset settings, or reboot the router, click **System** and refer to **Schedule** on page 72.

Admin Password

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.

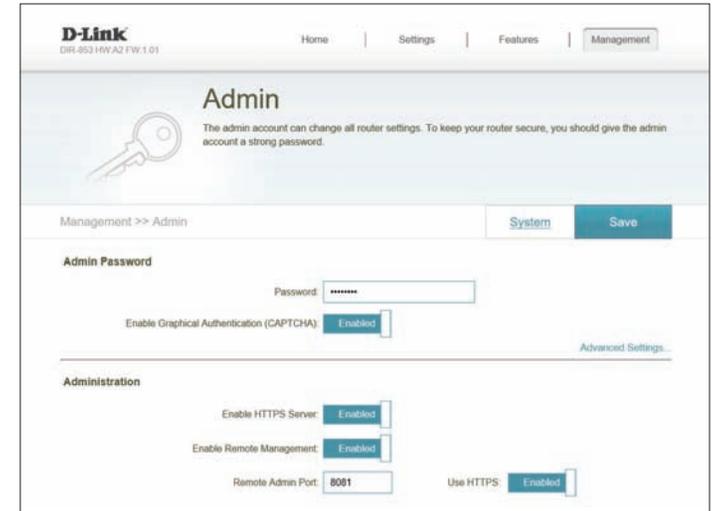
Advanced Settings - Administration

Enable HTTPS Server: Check to enable HTTPS to connect to the router securely. Instead of using **http://dlinkrouter.local./**, you must use **https://dlinkrouter.local./** in order to connect to the router.

Enable Remote Management: Remote management allows the DIR-1360 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-1360 is used in the URL. Example: **http://x.x.x.x:8080** where x.x.x.x is the WAN IP address of the DIR-1360 and 8080 is the port used for the web management interface.
Note: If you enabled **Use HTTPS** and wish to access the router remotely and securely, you must enter **https://** at the beginning of the address.

Click **Save** when you are done.



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**.

System

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 a previously saved router configuration file. This will overwrite the router's current configuration.

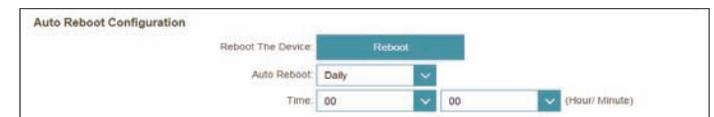
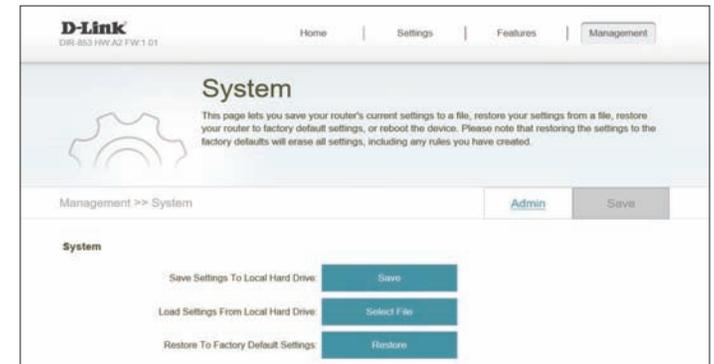
Restore To Factory Default Settings: This option will restore all configuration settings back to the settings that were in effect at the time the router was shipped from the factory. Any settings that have not been saved will be lost, including any rules that you have created. If you want to save the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

Auto Reboot Configuration

Reboot The Device: Click to reboot the router immediately.

Auto Reboot: You may set the DIR-1360 to automatically reboot at a set time. The options are **Never**, **Daily**, **Weekly**. You may set the hour using a 24 hour format, the minute, and the day you wish to have the DIR-1360 automatically reboot.

Click **Save** when you are done.



Upgrade

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

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

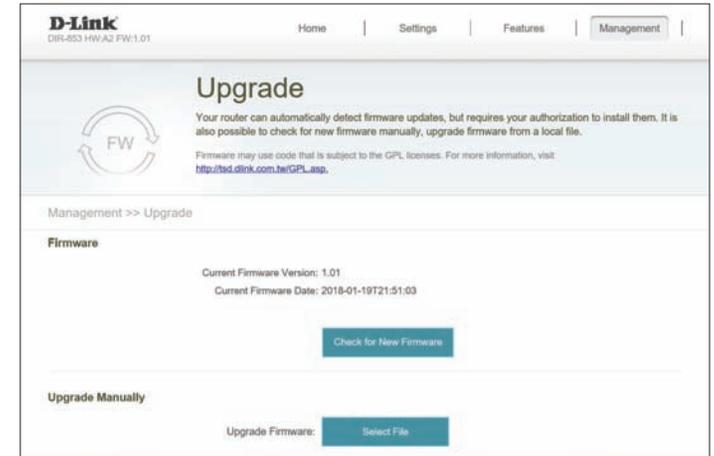
Firmware Information

Current Firmware Version/Date : 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 Manually

Upgrade Firmware: If you wish to upgrade manually, first download the firmware file you wish to upgrade to. Next, click the **Upgrade Firmware** 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.



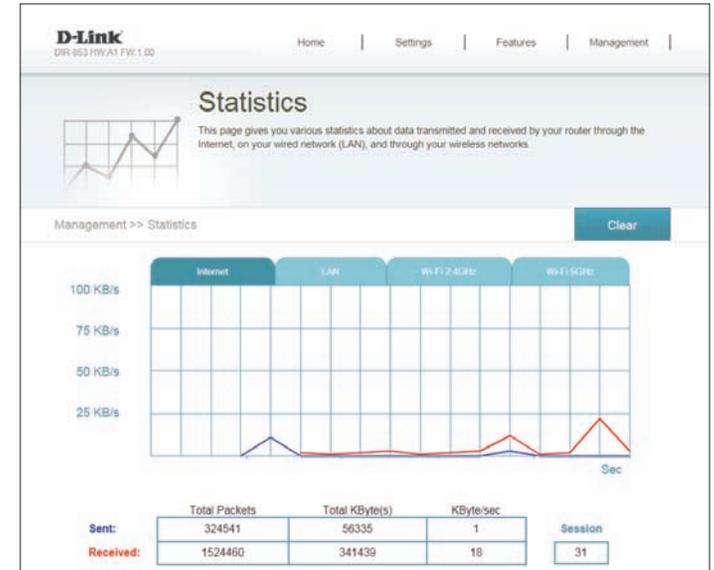
Statistics

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 2.4 GHz**, or **Wi-Fi 5 GHz** 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.

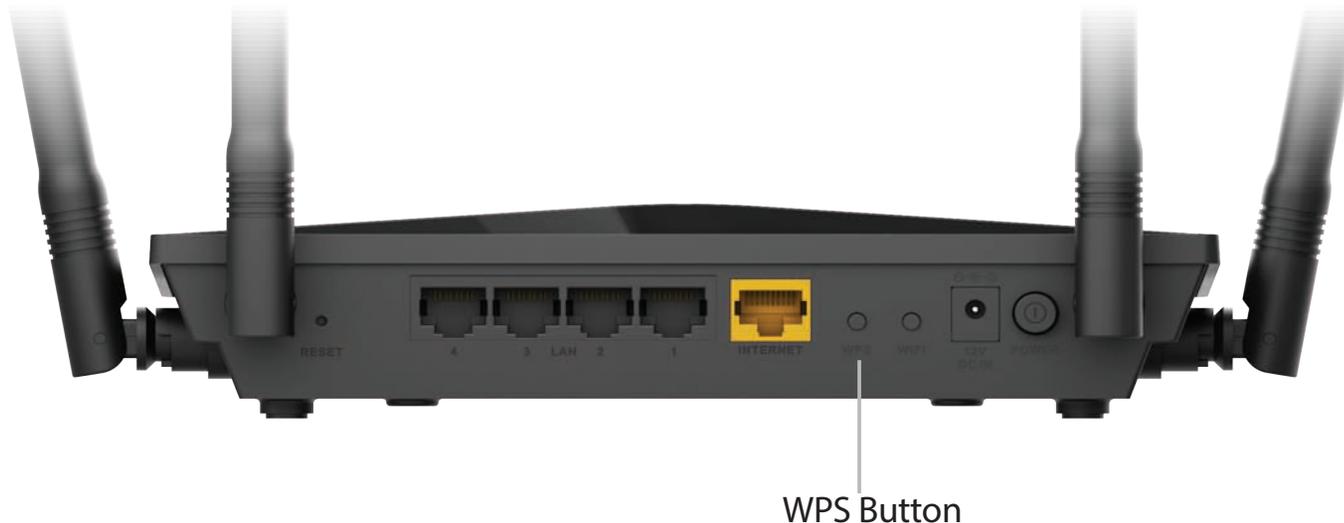


Connect a Wireless Client to your Router

WPS Button

The easiest and most secure way to connect your wireless devices to the router is with WPS (Wi-Fi Protected Setup). Most wireless devices such as wireless adapters, media players, Blu-ray DVD players, wireless printers and cameras will have a WPS button (or a software utility with WPS) that you can press to connect to the DIR-1360 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-1360 for about 1 second. The LED on the front will start to blink.



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

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

Windows® 10

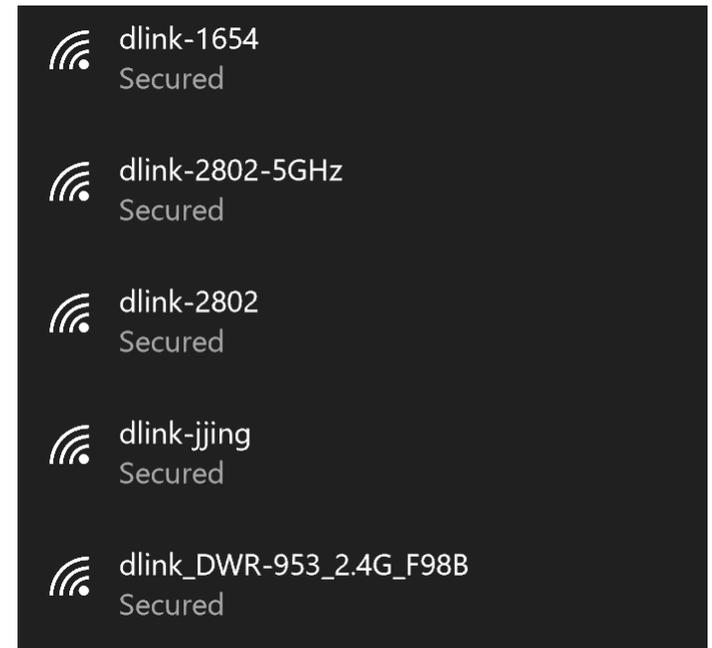
When connecting to the DIR-1360 wirelessly for the first time, you will need to input the wireless network name (SSID) and Wi-Fi password (security key) of the device you are connecting to. If your product has a Wi-Fi configuration card, you can find the default network name and Wi-Fi password here. Otherwise refer to the product label for the default Wi-Fi network SSID and password, or enter the Wi-Fi credentials set during the product configuration.

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

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

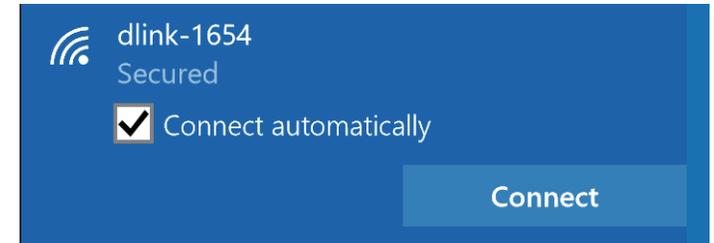


Wireless Icon



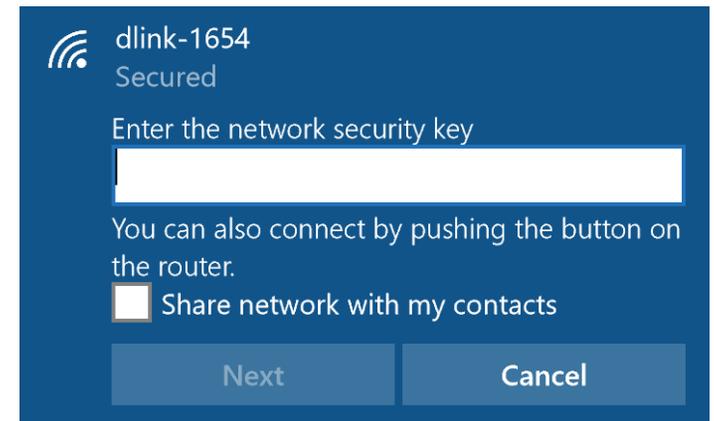
To connect to the SSID, click **Connect**.

To automatically connect with the router when your device next detects the SSID, click the **Connect Automatically** check box.



You will then be prompted to enter the Wi-Fi password (network security key) for the wireless network. Enter the password into the box and click **Next** to connect to the network. Your computer will now automatically connect to this wireless network when it is detected.

You can also use Wi-Fi Protected Setup (WPS) to connect to the router. Press the WPS button on your D-Link device and you will be automatically connected.



Windows® 8

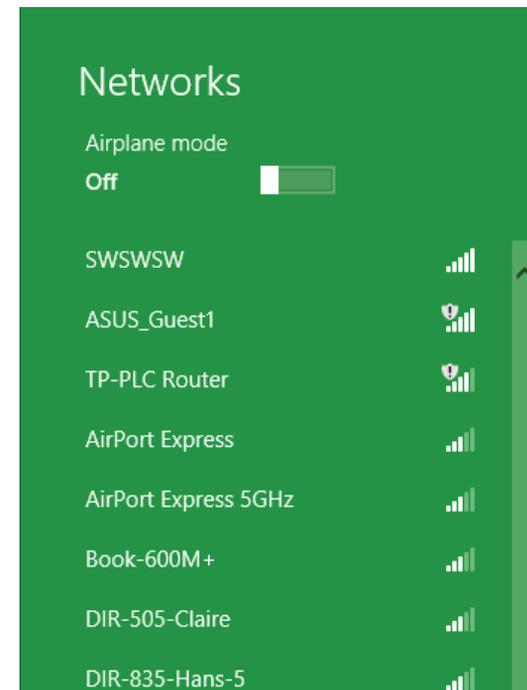
WPA/WPA2

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

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



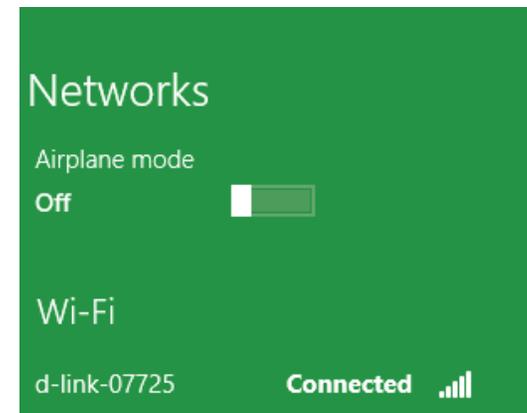
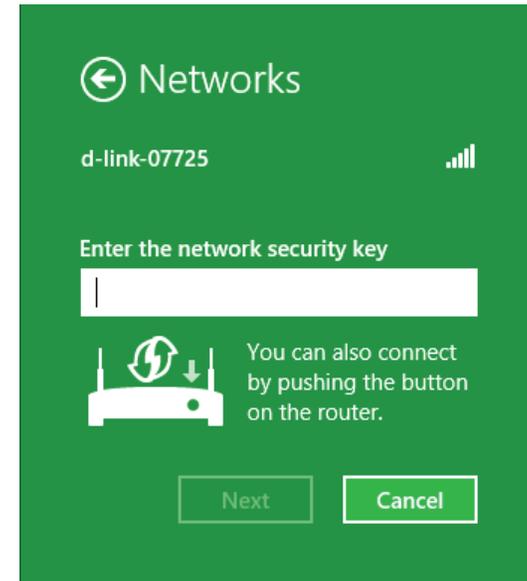
Clicking on this icon will display a list of wireless networks that are within connecting proximity of your computer. Select the desired network by clicking on the network name.



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

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

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



Windows® 7

WPA/WPA2

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

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



Wireless Icon

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



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.



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



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

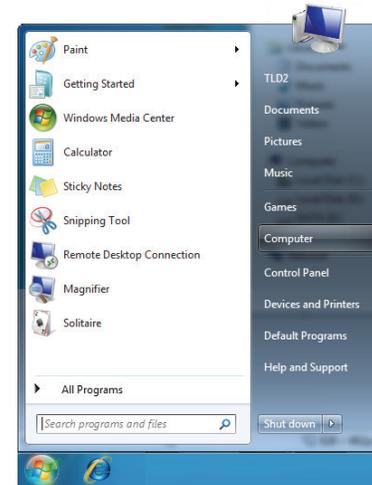
It may take 20-30 seconds to connect to the wireless network. If the connection fails, please verify that the security settings are correct. The key or passphrase must be exactly the same as the one on the wireless router.



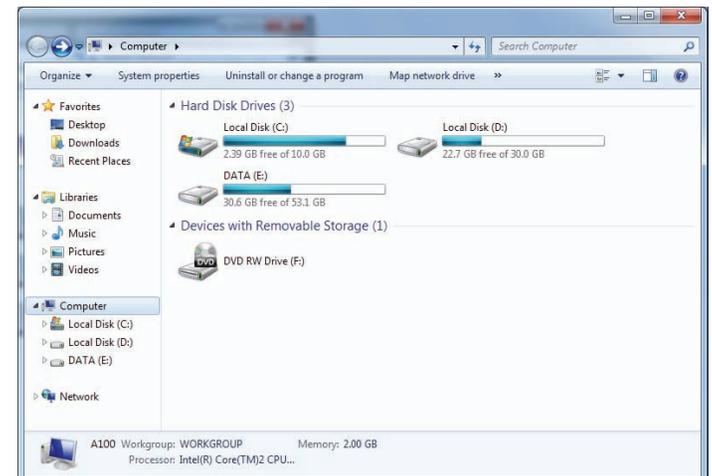
WPS

The WPS feature of the DIR-1360 can be configured using Windows® 7. Carry out the following steps to use Windows® 7 to configure the WPS feature:

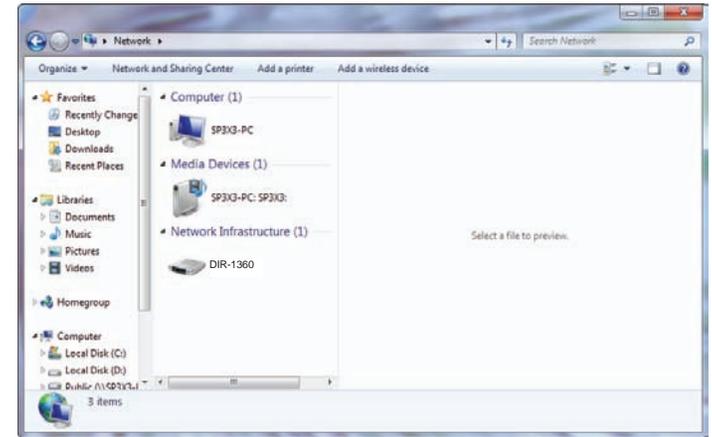
Click the **Start** button and select **Computer** from the Start menu.



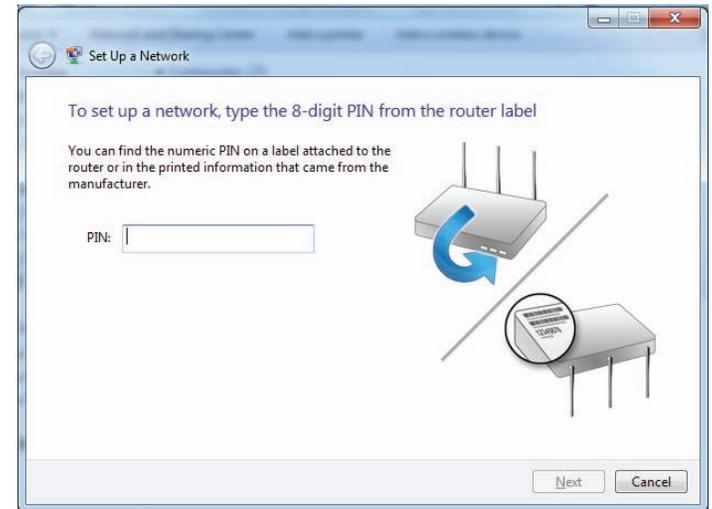
Click **Network** on the left side.



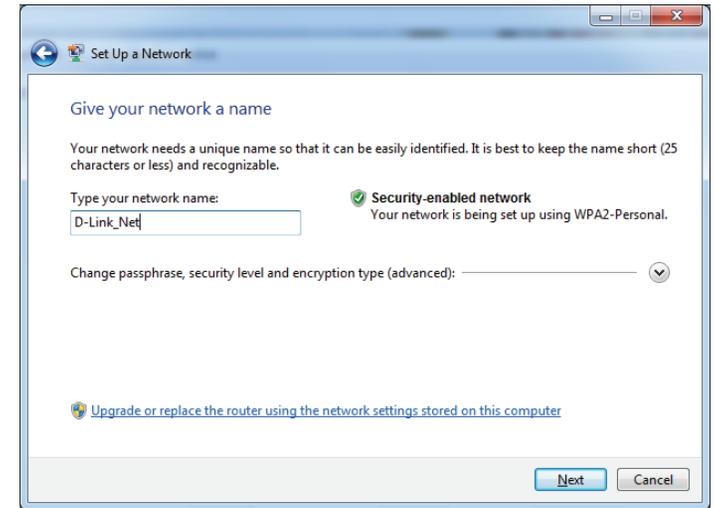
Double-click the DIR-1360.



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

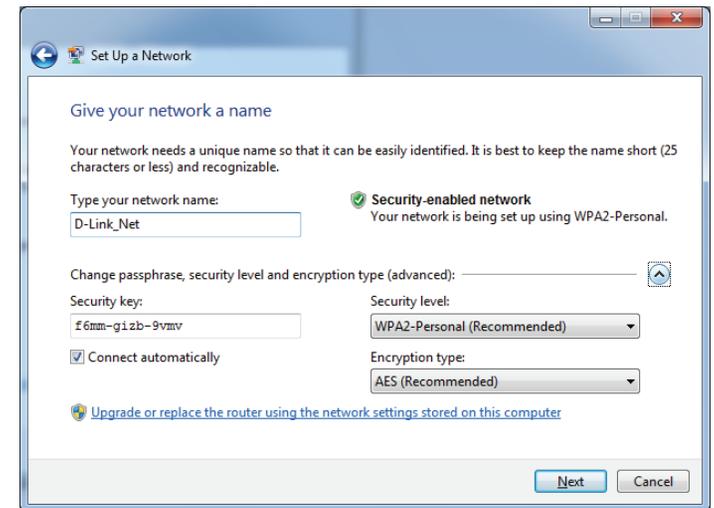


Type a name to identify the network.



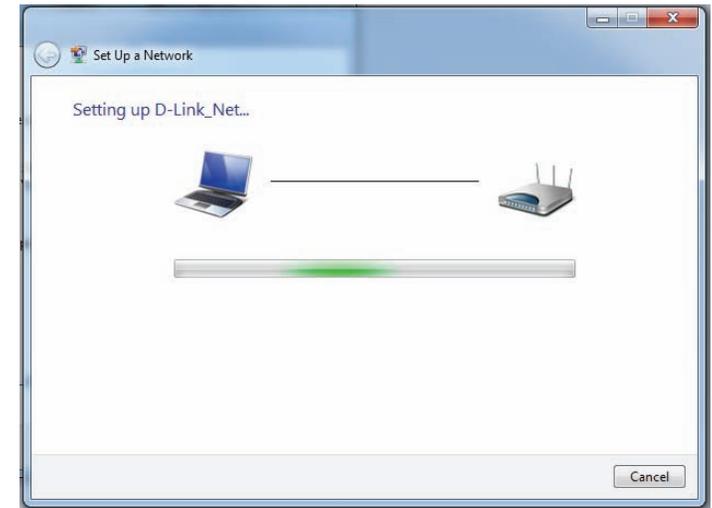
To configure advanced settings, click the  icon.

Click **Next** to continue.



The following window appears while the DIR-1360 is being configured.

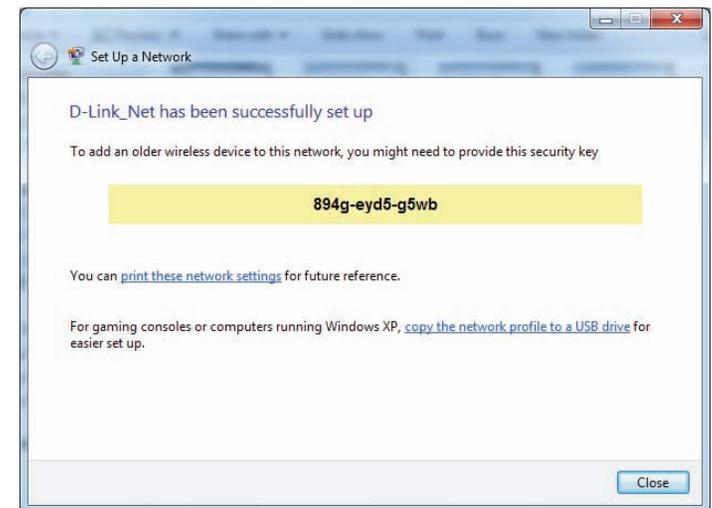
Wait for the configuration to complete.



The following window informs you that WPS on the DIR-1360 has been set up successfully.

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

Click **Close** to complete WPS setup.



Windows Vista®

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

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

or

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

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

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



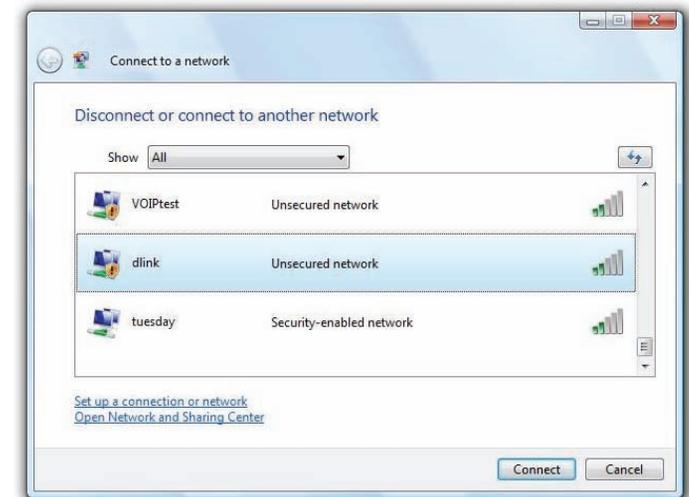
WPA/WPA2

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

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**.



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



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

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



Troubleshooting

This chapter provides solutions to problems that can occur during the installation and operation of the DIR-1360. 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 these 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® 10 or higher
 - Mozilla Firefox 28 or higher
 - Google™ Chrome 28 or higher
 - Apple Safari 6 or higher
- Verify physical connectivity by checking for solid link lights on the device. If you do not get a solid link light, try using a different cable, or connect to a different port on the device if possible. If the computer is turned off, the link light may not be on.
- Disable any Internet security software running on the computer. Software firewalls such as ZoneAlarm, BlackICE, Sygate, Norton Personal Firewall, and Windows® XP firewall may block access to the configuration pages. Check the help files included with your firewall software for more information on disabling or configuring it.

- Configure your Internet settings:
 - Go to **Start > Settings > Control Panel**. Double-click the **Internet Options** icon. From the **Security** tab, click the button to restore the settings to their defaults.
 - Click the **Connection** tab and set the dial-up option to Never Dial a Connection. Click the LAN Settings button. Make sure nothing is checked. Click **OK**.
 - Go to the **Advanced** tab and click the button to restore these settings to their defaults. Click **OK** three times.
 - Close your web browser (if open) and open it.
- Access the web management. Open your web browser and enter the IP address of your D-Link router in the address bar. This should open the login page for your 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. 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, 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.
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 work, and communicate more efficiently. Increased mobility and the absence of cabling and other fixed infrastructure have proven to be beneficial for many users.

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

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

What is Wireless?

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

Why D-Link Wireless?

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

How does wireless work?

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

Wireless Local Area Network (WLAN)

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

Wireless Personal Area Network (WPAN)

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

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

Who uses wireless?

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

Home Uses/Benefits

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

Small Office and Home Office Uses/Benefits

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

Where is wireless used?

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

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

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

Tips

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

Centralize your router or access point

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

Eliminate Interference

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

Security

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

Wireless Modes

There are basically two modes of networking:

- **Infrastructure** – All wireless clients will connect to an access point or wireless router.
- **Ad-hoc** – Directly connecting to another computer for peer-to-peer communication using wireless network adapters on each computer, such as two or more DIR-1360 wireless network USB 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 USB adapters. All the adapters must be in ad-hoc mode to communicate.

Networking Basics

Check your IP address

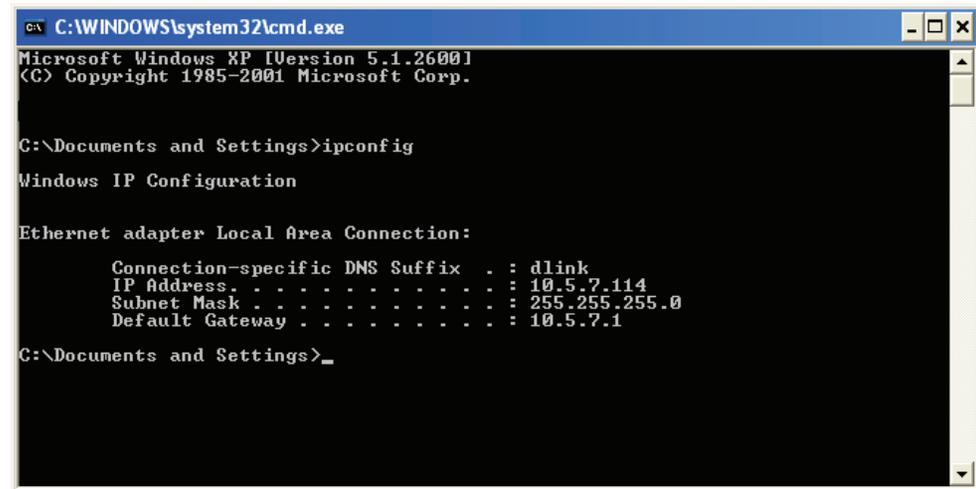
After you install your new D-Link adapter, by default, the TCP/IP settings should be set to obtain an IP address from a DHCP server (i.e. wireless router) automatically. To verify your IP address, please follow the steps below.

In Windows, type *cmd* in the **Start Search** box and click **OK**.

At the prompt, type *ipconfig* and press **Enter**.

This will display the IP address, subnet mask, and the default gateway of your adapter.

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



```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings>ipconfig

Windows IP Configuration

Ethernet adapter Local Area Connection:

    Connection-specific DNS Suffix  . : dlink
    IP Address . . . . . : 10.5.7.114
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 10.5.7.1

C:\Documents and Settings>_
```

Wireless Security

This section will show you the different levels of security you can use to protect your data from intruders. The DIR-1360 offers the following types of security:

- WPA2 (Wi-Fi Protected Access 2)
- WPA (Wi-Fi Protected Access)
- WPA2-PSK (Pre-Shared Key)
- WPA-PSK (Pre-Shared Key)

What is WPA?

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

The 2 major improvements over WEP:

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

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

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

Technical Specifications

Device Interfaces

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

Antenna Types

- Four fixed external antennas

Standards

- IEEE 802.11ac^{1,2,3}
- IEEE 802.11n
- IEEE 802.11g
- IEEE 802.11b
- IEEE 802.11a
- IEEE 802.11d
- IEEE 802.3u
- IEEE 802.3ab

Security

- WPA™ - Personal
- WPA2™ - Personal
- Wi-Fi Protected Setup (WPS) PIN/PBC

Power

- Input: 100 to 240 V AC, 50/60 Hz
- Output: 12 V DC, 1 A

Temperature

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

Humidity

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

Certifications

- NCC
- BSMI
- IPv6
- Wi-Fi Protected Setup (WPS)
- Wi-Fi Multimedia (WMM)

Dimensions & Weight

- L x W x H: 250 x 235 x 36 mm (9.8 x 9.25 x 1.4 in)
- 253 g (0.51 lbs)

1 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 factors will adversely affect wireless signal range.

2 Frequency Range varies depending on country's regulation.

3 The DIR-1360 does not include 5.25-5.35 GHz & 5.47-5.725 GHz in some regions.

Regulatory Information

Industry Canada statement:

This device complies with ISED's licence-exempt RSSs. 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.

Le présent appareil est conforme aux CNR d'ISED applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) le dispositif ne doit pas produire de brouillage préjudiciable, et (2) ce dispositif doit accepter tout brouillage reçu, y compris un brouillage susceptible de provoquer un fonctionnement indésirable.

Caution :

(i) the device for operation in the band 5150-5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;

(ii) where applicable, antenna type(s), antenna model(s), and worst-case tilt angle(s) necessary to remain compliant with the e.i.r.p. elevation mask requirement set forth in section 6.2.2.3 shall be clearly indicated.

Avertissement:

(i) 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;

(ii) lorsqu'il y a lieu, les types d'antennes (s'il y en a plusieurs), les numéros de modèle de l'antenne et les pires angles d'inclinaison nécessaires pour rester conforme à l'exigence de la p.i.r.e. applicable au masque d'élévation, énoncée à la section 6.2.2.3, doivent être clairement indiqués.

Radiation Exposure Statement:

This equipment complies with ISED radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with greater than 33cm between the radiator & your body.

Déclaration d'exposition aux radiations:

Cet équipement est conforme aux limites d'exposition aux rayonnements ISED établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé à plus de 33 cm entre le radiateur et votre corps.

Federal Communication Commission Interference Statement

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.

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 transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Operations in the 5.15-5.25GHz band are restricted to indoor usage only.

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 29cm between the radiator & your body.

NCC 警語：

以下警語適用台灣地區

依據 低功率電波輻射性電機管理辦法

第十二條: 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。

第十四條: 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。

無線傳輸設備 (UNII)

在 5.25-5.35 兆赫頻帶內操作之無線資訊傳輸設備，限於室內使用。無線資訊傳輸設備忍受合法通信之干擾且不得干擾合法通信；如造成干擾，應立即停用，俟無干擾之虞，始得繼續使用。無線資訊傳輸設備的製造廠商應確保頻率穩定性，如依製造廠商使用手冊上所述正常操作，發射的信號應維持於操作頻帶中。

電磁波曝露量MPE標準值(MPE) 1 mW/cm²，送測產品實值為 0 mW/cm²