D-Link®

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User Manual

VDSL2 Wireless AC1600 4-Port Gigabit Modem Router with VoIP

DVA-2800

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
Version 1.00	September 11, 2017	Initial release

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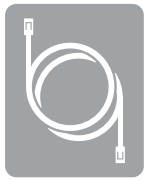
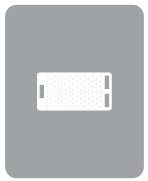
Package Contents

DVA-2800 VDSL2 Wireless AC1600 4-Port Gigabit Modem Router with VoIP

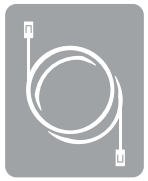
Power Adapter



Ethernet Cable



DSL Microsplitter



Phone Cable

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

Note: *Using a power supply other than the one included with the DVA-2800 may cause damage and void the warranty for this product.*

System Requirements

Network Requirements	• An active account with an Internet Service Provider using one of the following connection types: • A VDSL/ADSL connection to a telephone line using the DSL port • A broadband device connected using the WAN port • A mobile broadband 3G/4G/LTE connection using a compatible USB modem. A list of compatible USB dongles is available at **www.dlink.com**. • 802.11ac/n/g/b/a wireless or Ethernet port
Web-based Configuration Utility Requirements	**Computer with the following:** • Windows®, Macintosh, or Linux-based operating system • An installed wired or wireless Ethernet adapter **Browser Requirements:** • Internet Explorer 10 or higher • EDGE Browser 20 or higher • Firefox 11 or higher • Safari 5 or higher • Chrome 17 or higher **Windows® Users:** Make sure you have the latest version of Java installed. Visit www.java.com to download the latest version.

Introduction

The D-Link DVA-2800 VDSL2 Wireless AC1600 4-Port Gigabit Modem Router with VoIP shares your DSL Internet connection over blazing-fast Wireless AC of up to 1600 Mbps (Up to 1300 Mbps 5 GHz Wireless AC and up to 300 Mbps 2.4 GHz Wireless N)[1], and uses advanced AC beamforming technology to maximize the speed and range of your wireless signal to significantly outperform 802.11n and other older, non-beamforming capable 802.11ac devices. It also comes equipped with a Gigabit WAN port, two USB ports, and four Gigabit ports to provide speeds up to 10 times faster than standard 10/100 ports. Multiple WAN ports provide uninterrupted Internet service thanks to failover protection, allowing you to use the DSL port to connect to your VDSL/ADSL service, the WAN port to connect to Ethernet based networks, or a supported mobile broadband USB dongle to connect to the Internet using your mobile provider.

The DVA-2800 supports the latest wireless security features to help prevent unauthorized access, be it from over a wireless network or the Internet. Support for WPA™ and WPA2™ standards ensure that you will be able to use the best possible encryption regardless of your client devices. In addition, this router is equipped with a dual-active firewall (SPI and NAT) to help prevent potential attacks over the Internet.

The DVA-2800 provides Voice over IP technology with advanced communication features and is compatible with industry-wide phone services so you can make and receive calls reliably. Use the FXS phone port on the DVA-2800 to connect an ordinary phone set for your VoIP phone calls, and use the router functions to connect all of your family members or personnel to the Internet for a fast and secure online experience throughout your home or office.

The DVA-2800's Storage Service technology lets you take advantage of file sharing. Simply plug in a USB storage drive into a USB port on the back or side of your DVA-2800 and you can access files, stream videos, view photos, or listen to music on your laptop or mobile devices.

The DVA-2800 VDSL2 Wireless AC1600 4-Port Gigabit Modem Router with VoIP provides incredible speeds, smart antenna technology, fast ports, cloud features, and terrific security features. It also features an innovative design and easy installation options.

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.

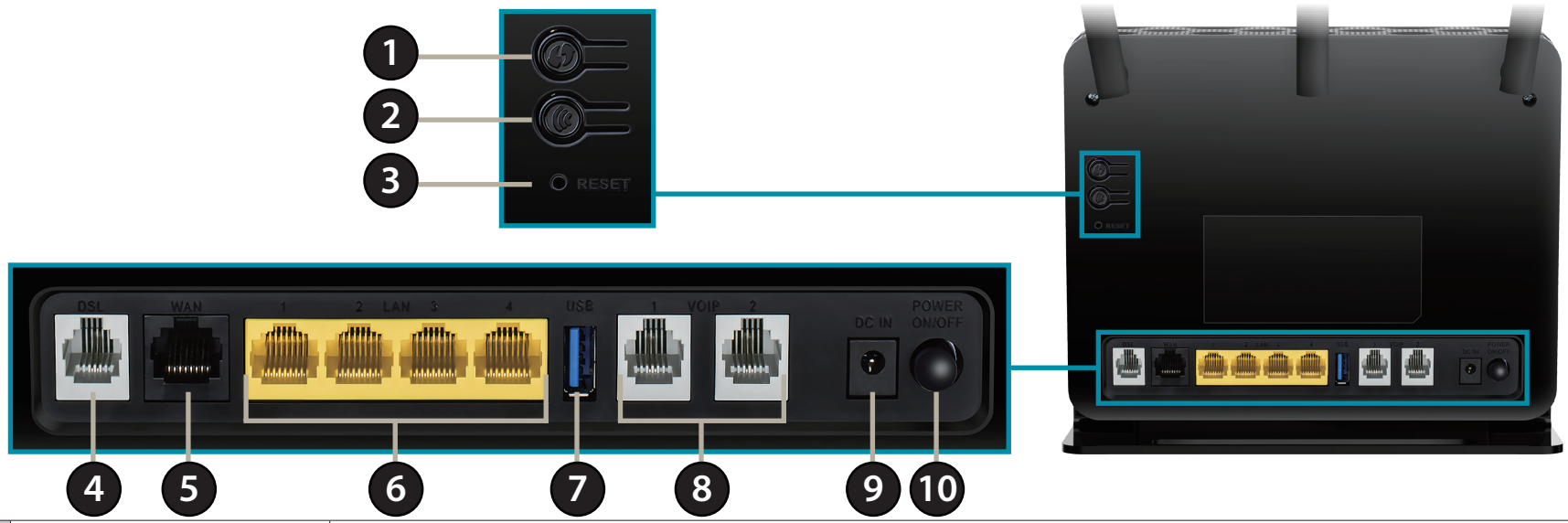
Features

- **Superior Wireless Networking** - The DVA-2800 provides Gigabit wireless speeds of up to a combined 1600 Mbps (1300 Mbps 802.11ac 5 GHz, plus 300 Mbps 802.11n 2.4 GHz)[1]. This capability rivals wired connections, allowing users to participate in real-time activities online, such as HD video communication, online gaming, and use mobile devices 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, the DVA-2800 has an enormous amount of bandwidth to take full advantage of the highest speed broadband connections available.
- **Superior Internet Connectivity** - With a 10/100/1000 Gigabit Ethernet WAN port, DSL modem supporting up to 100 Mbps downloads, and USB ports that support mobile 3G/4G broadband dongles, the DVA-2800 has several options available to connect you the Internet.
- **Voice over IP (VoIP) Support -** Equipped with two standard FXP VoIP ports to connect phones to the Internet.
- **IPv6 Support** - The DVA-2800 supports IPv6 connectivity.
- **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.
- **Multiple/Concurrent VPN Sessions** - The DVA-2800 can pass through VPN sessions. It supports multiple and concurrent IPSec and PPTP sessions, so users behind the DVA-2800 can securely access corporate networks.
- **User-friendly Setup Wizard** - Through its easy-to-use web-based user interface, the DVA-2800 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

Back Panel



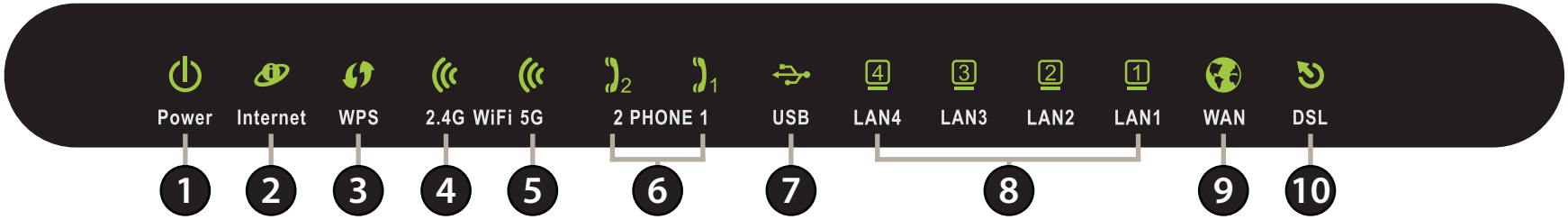
1	**WPS Button**	Press to start the WPS process and automatically create a secure connection to a WPS client.
2	**Wi-Fi Button**	Press to enable or disable Wi-Fi.
3	**Reset Button**	To reset the device to factory defaults, use a paper clip to press and hold the reset button for 3 seconds.
4	**DSL Port**	Connects to a DSL-enabled telephone line and with the supplied microsplitter.
5	**Gigabit WAN Port**	Connects to Ethernet WAN devices.
6	**Gigabit LAN Ports (1-4)**	Connects to Ethernet devices such as computers, switches, storage (NAS) devices and game consoles.
7	**USB 2.0 Port**	Connects to USB flash drives to share content or USB mobile dongles for Internet connectivity.
8	**2 FXP (VoIP) Ports**	Connect telephones or fax devices for VoIP server.
9	**Power Connector**	Connector for the supplied power adapter.
10	**Power Button**	Press the power button to power the DVA-2800 on and off.

Side Panel

1	**USB 2.0 Port**	Connects to USB flash drives to share content or USB mobile dongles for Internet connectivity.

Hardware Overview

LEDs



1		**Power**	Solid Green	A solid green light indicates the device is powered on and working properly.
			Solid Red	A solid red light indicates that the device is booting or an error has occurred.
			Blinking Green	A blinking green light indicates that backup mode is active.
			Blinking Red	A blinking red light indicates that the device is resetting to the factory defaults or that the firmware is being updated.
2		**Internet**	Solid Green	A solid green light indicates an Internet connection.
			Solid Red	A solid red light indicates no Internet connection is available.
3		**WPS**	Solid Green	A solid green light indicates the WPS process is active.
4		**Wireless 2.4**	Solid Green	A solid green light indicates that the 2.4 GHz wireless network is enabled.
5		**Wireless 5G**	Solid Green	A solid green light indicates that the 5 GHz wireless network is enabled.
6		**VoIP**	Solid Green	A solid green light indicates that a VoIP phone connection is configured.
7		**USB**	Solid Green	A solid green light indicates that a USB device is detected on a USB port.
8		**LAN Ports 1-4**	Solid Green	A solid green light indicates a device is connected to the respective LAN port.
			Blinking Green	A blinking green light indicates LAN port activity.
9		**WAN**	Solid Green	A solid green light indicates an Ethernet WAN port connection.
			Blinking Green	A blinking green light indicates Ethernet WAN port activity.
10		**DSL**	Solid Green	A solid green light indicates a proper connection to a DSL enabled telephone line.
			Blinking Green	A blinking green light indicates the DSL port is negotiating a connection.

Installation

This section will walk you through the installation process. Placement of the router is very important for proper operation and best performance.

Note: This installation section is written for users who are setting up their home Internet service with the DVA-2800 VDSL2 Wireless AC1600 4-Port Gigabit Modem Router with VoIP for the first time. If you are replacing an existing DSL modem and/or router, you may need to modify these steps.

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.
- 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 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 Internet Service Provider (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:

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

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

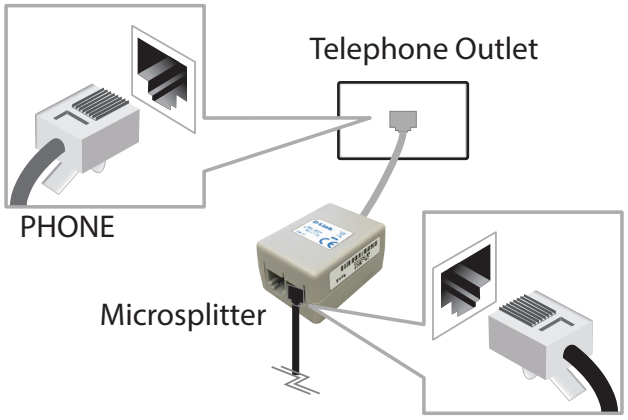
3. Building materials make a difference. A solid metal door or aluminum studs may have a negative effect on range. Try to position access points, wireless routers, and computers so that the signal passes through drywall or open doorways. Materials and objects such as glass, steel, metal, walls with insulation,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

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

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

Manual Setup

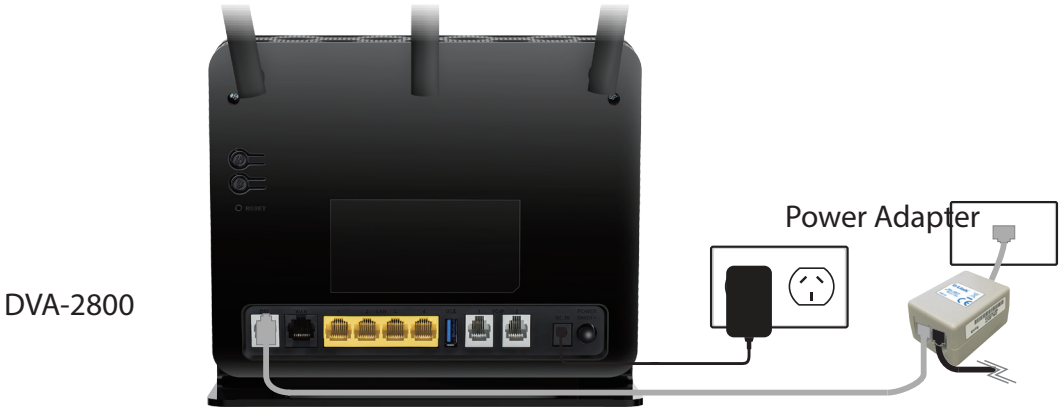
1. Connect the supplied microsplitter to the telephone outlet. If you are using a telephone handset on the same outlet, connect it to the PHONE port on the microsplitter.



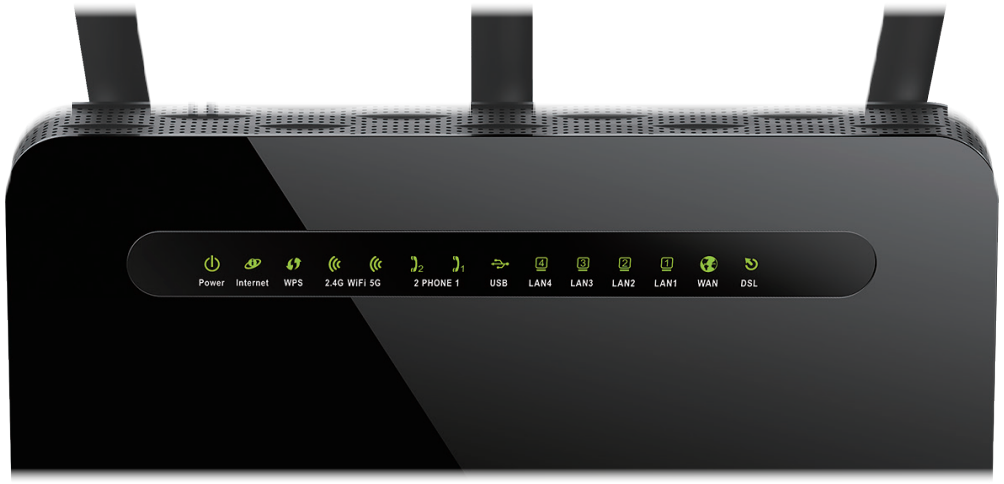
2. Connect the phone cable from the DSL port on the microsplitter to the DSL port of the DVA-2800.
Caution: *To reduce the risk of fire, use only No. 26 AWG or larger telecommunication line cord.*

3 Plug the power adapter into your modem router and connect to an available power outlet or surge protector.

Caution: *Use only the included power adapter with this product.*

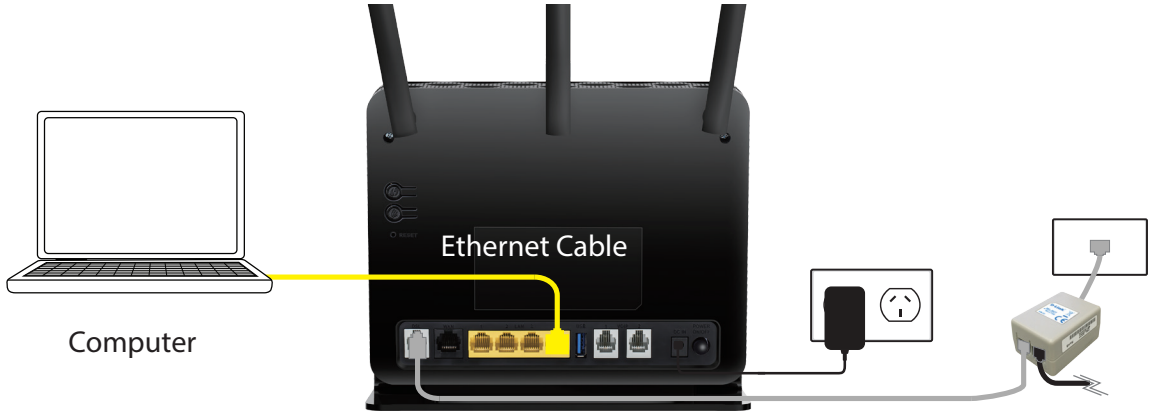


4 Press the power button and verify that the power LED is lit. Allow one minute for the DVA-2800 to boot up. After it has powered up, verify that the Power and DSL LEDs are both lit.



1		**Power**
2		**Internet**
3		**WPS**
4	2.4G	**Wireless 2.4**
5	5G	**Wireless 5G**
6		**USB 1**
7		**WAN**
8		**LAN Ports 1-4**
9		**DSL**

5 If you wish to use a wired connection, connect the Ethernet cable from a LAN port of the DVA-2800 to the Ethernet port on your computer.



If you wish to use a wireless connection, connect to either one of the wireless networks listed on the product label attached to the bottom of the DVA-2800 from your computer's wireless utility. Enter the default Wi-Fi password which is also printed on the product label.

Getting Started

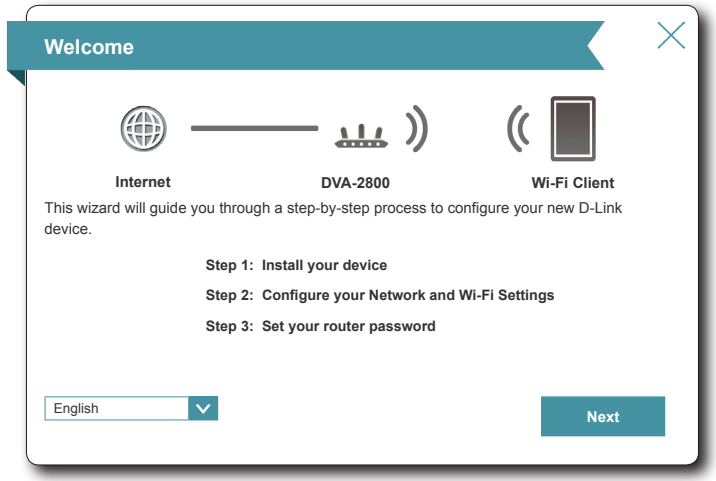
There are two ways you can configure your router to connect to the Internet and connect to your devices:

- **D-Link Setup Wizard** - This wizard allows you to quickly set up your router. Refer to **Setup Wizard** on page **14**.
- **Manual Setup** - Log into the router and manually configure your router. Refer to **Configuration** on page **19**.

Setup Wizard

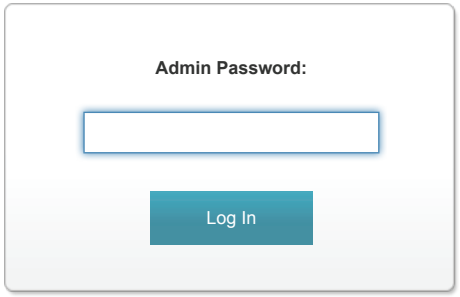
If this is your first time installing the router, open your web browser and enter **http://192.168.1.1** in the address bar.

The setup wizard should automatically appear.



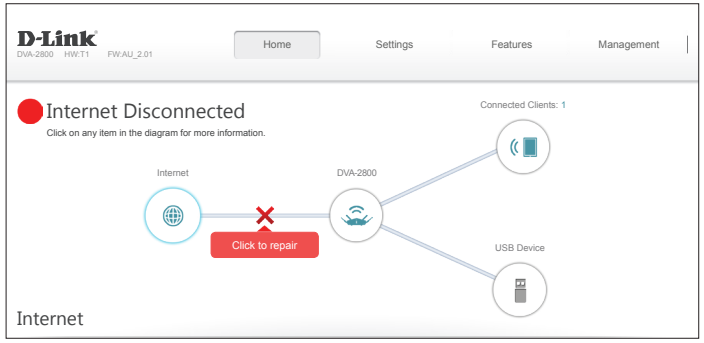
If prompted with a log in screen, click **Log In** to proceed. No password is enabled by default.

If you are having trouble logging in or experiencing trouble with the configuration utility, try clearing your browser cache or try using your web browsers 'private browser' or incognito mode.



The router's home page will open displaying the current connection status. Click the **Click to Repair** button to run the **Setup Wizard**.

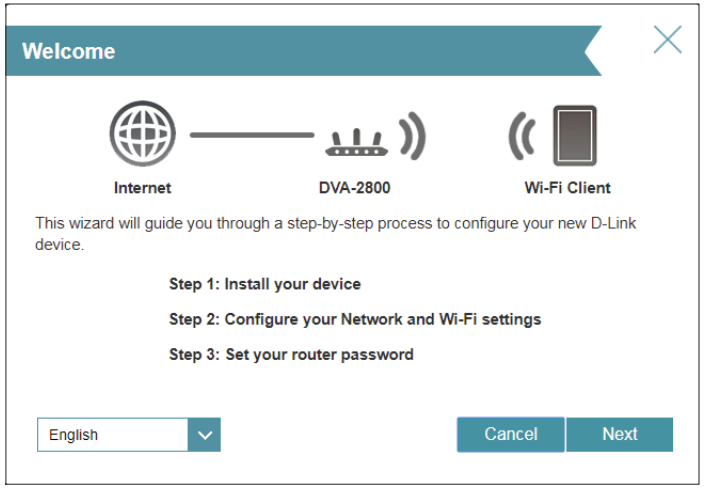
Note: *The system will automatically log out after a period of inactivity.*



Setup Wizard (continued)

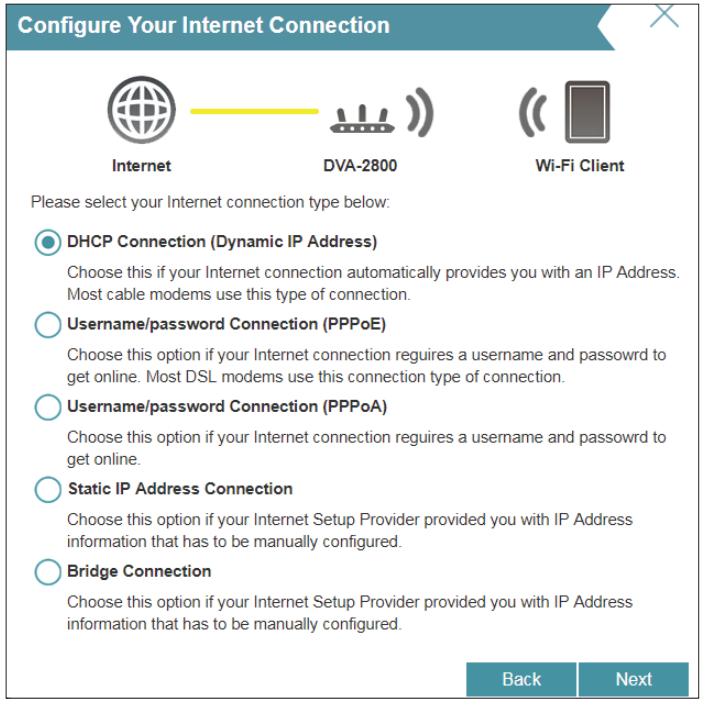
The wizard is designed to guide you through a step-by-step process to configure your new D-Link router and connect to the Internet.

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.

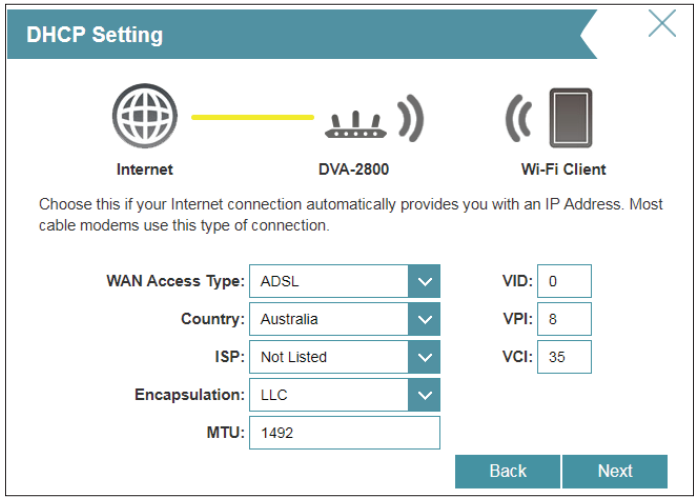
If the router has successfully detected your internet connection type, skip to the next page. If your connection type could not be detected, select your internet connection type. Choose **DHCP Connection (Dynamic IP Address)**, **Username/password Connection (PPPoE)**, **Username/password Connection (PPPoA)**, **Static IP Address Connection**, or **Bridge Connection**. This information should be provided by your ISP.



Setup Wizard (continued)

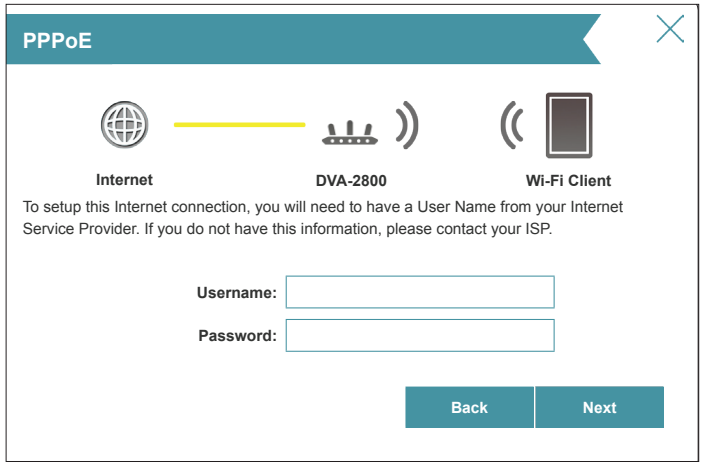
Configure your Internet connection using the drop-down menus. Select either **ADSL** or **VDSL** from **WAN Access Type**. Use the **Country** and **ISP** drop-down menus to quickly configure the **VPI**, and **VCI** settings. To manually configure these settings, select **Not Listed**.

Select your ISP's **Encapsulation** type and **MTU**, and click **Next** to continue.



If the router detected that a username and password is required, enter your ISP's PPPoE username and password and click **Next** to continue.

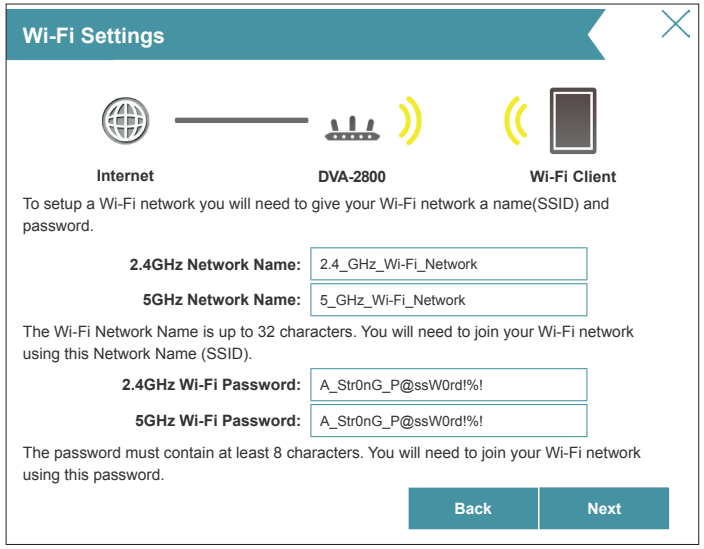
Note: *Make sure to remove your PPPoE software from your computer. The software is no longer needed and will not work through a router.*

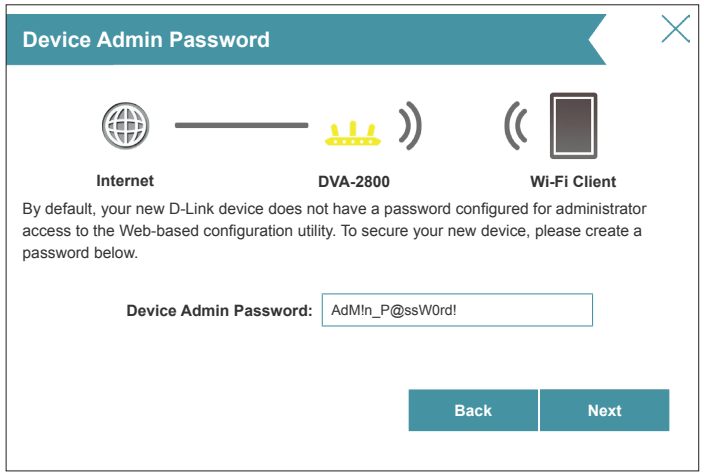


Setup Wizard (continued)

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.

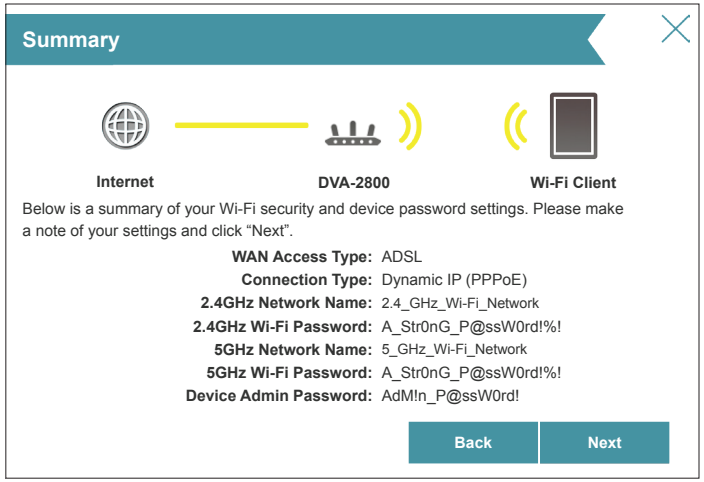
Click **Next** to continue.





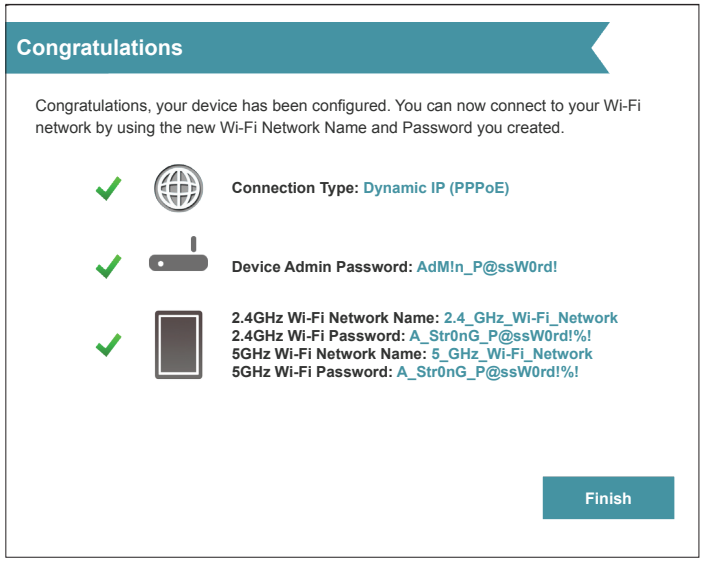
Setup Wizard (continued)

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. The device will reboot.

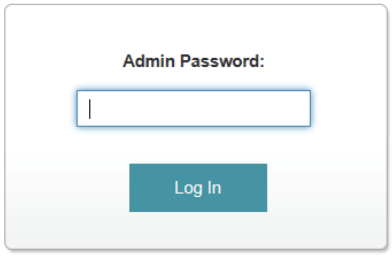
Congratulations, your device has been successfully configured!



Configuration

To access the configuration utility, open a web-browser such as Internet Explorer and enter **http://192.168.1.1** in the address bar.

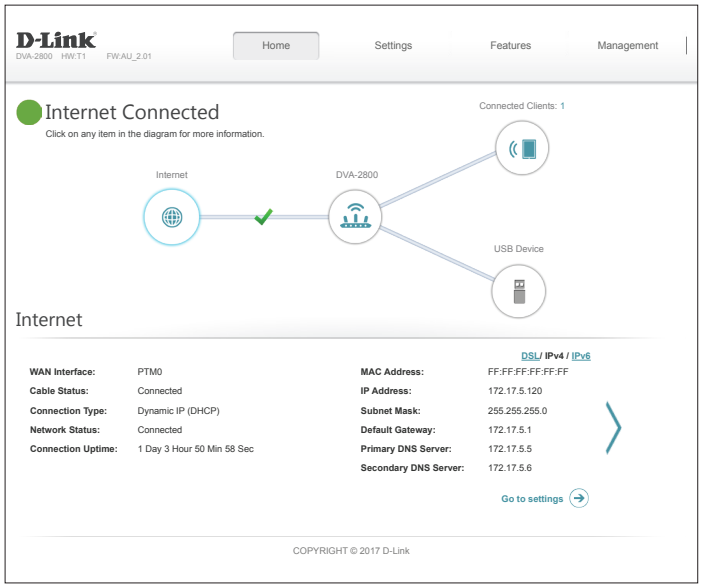
Enter your password. If you previously followed the Setup Wizard (see page 14), please use the admin password you entered during the wizard. Otherwise, leave the password blank. Click **Log In** to proceed.



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

Home

The Home page displays the current status of the router in the form of an interactive diagram. There are four main sections: Internet, DVA-2800, Connected Clients, and USB Device. You can click each icon to display information about each section at the bottom of the screen. The menu bar at the top of the page will allow you to quickly navigate to the 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.*

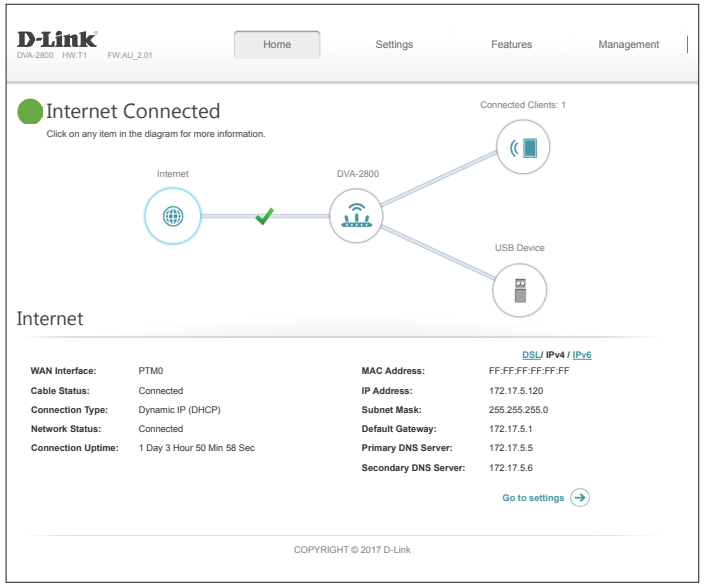
Internet

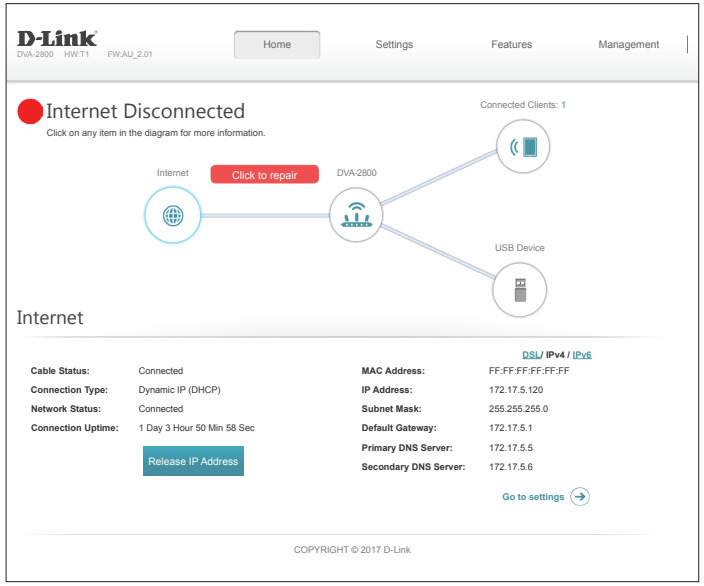
To bring up more details about your Internet connection, click on the **Internet** icon. You may cycle through the WAN interfaces at the bottom of the page by clicking on the arrows on the left and right sides of the screen. The Internet Connection status at the top of the diagram will reflect the status of the currently selected WAN interface.

If your Internet is disconnected, you can click **Click to repair** to bring up the Setup Wizard.

Note: The Wizard will only configure the VDSL/ADSL WAN connections. Refer to page 14 for more information.

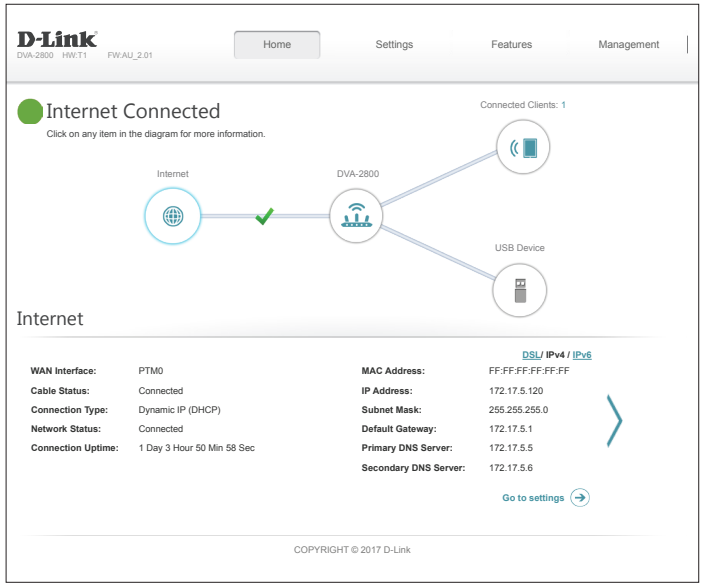
For each of the WAN interfaces, you can see the connection status, IPv4, and IPv6 information. Clicking the DSL button will display DSL port information.





IPv4

Click the **IPv4** button to see the IPv4 information for each WAN interface. Click the green arrows to select different interfaces.



WAN Interface: Displays the currently selected interface: Ethernet, DSL, or USB.

Cable Status: Displays the current cable connection status.

Connection Type: Displays the network protocol used to obtain an IP address.

Network Status: Displays the current network connection status.

Connection Uptime: Displays the amount of time the connection has been connected.

MAC Address: The WAN interface's MAC address is listed here.

IP Address: The WAN IP address is listed here.

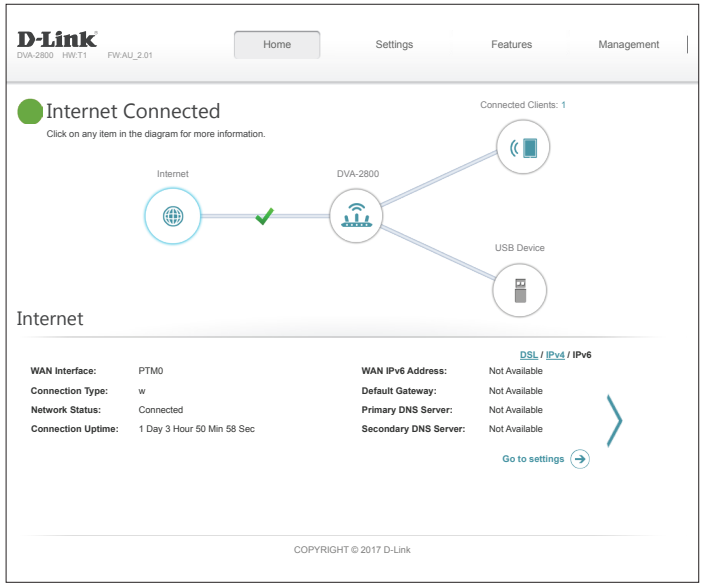
Default Gateway: The default gateway IP address is listed here.

Primary DNS Server: Displays the current primary DNS server.

Secondary DNS Server: Displays the current secondary DNS server.

IPv6

Click the **IPv6** button to see the IPv6 information for each WAN interface. Click the green arrows to select different interfaces.



WAN Interface: Displays the currently selected interface: Ethernet, DSL, or USB.

Connection Type: Displays the network protocol used to obtain an IP address.

Network Status: Displays the current network connection status.

Connection Uptime: Displays the amount of time the connection has been connected.

WAN IPv6 Address: The WAN IPv6 address is listed here.

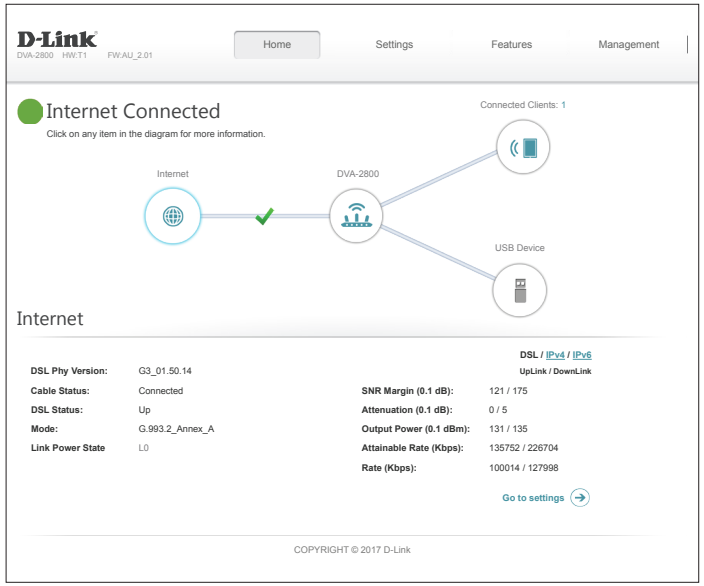
Default Gateway: The default gateway IP address is listed here.

Primary DNS Server: The primary DNS server IP address is listed here.

Secondary DNS Server: The secondary DNS server IP address is listed here.

DSL

Click the **DSL** button to see the DSL hardware connection information.



DSL Phy Version: Displays the DSL Phy version.

Cable Status: Displays the current cable status.

DSL Status: Displays the current negotiation state of the DSL port.

Mode: Displays the current DSL mode.

Link Power State: Displays the current link power state.

SNR Margin (0.1 dB): The DSL connection's signal to noise ratio is listed here.

Attenuation (0.1 dB): The DSL connection's attenuation is listed here.

Output Power (0.1 dBm): The DSL connection's power output is listed here.

Attainable Rate (Kbps): The measured maximum attainable rate is listed here.

Rate (Kbps): The negotiated connection speed is listed here.

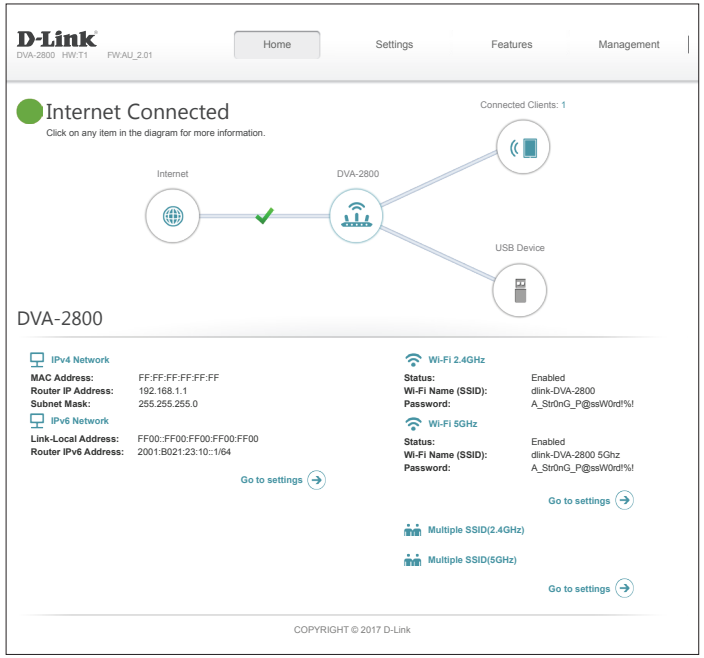
DVA-2800

Click on the **DVA-2800** icon to view details about the router and its wireless settings.

Here you can see the router's current wireless networks and passwords, as well as the local area network MAC, IPv4, and IPv6 addresses.

To reconfigure the network settings, click the **Go to settings** link, from the **Settings** menu at the top of the page, select **Network**. Refer to page 46 for more information.

To reconfigure the wireless settings, click the **Go to settings** link, from the **Settings** menu at the top of the page, select **Wireless**. Refer to page 43 for more information.

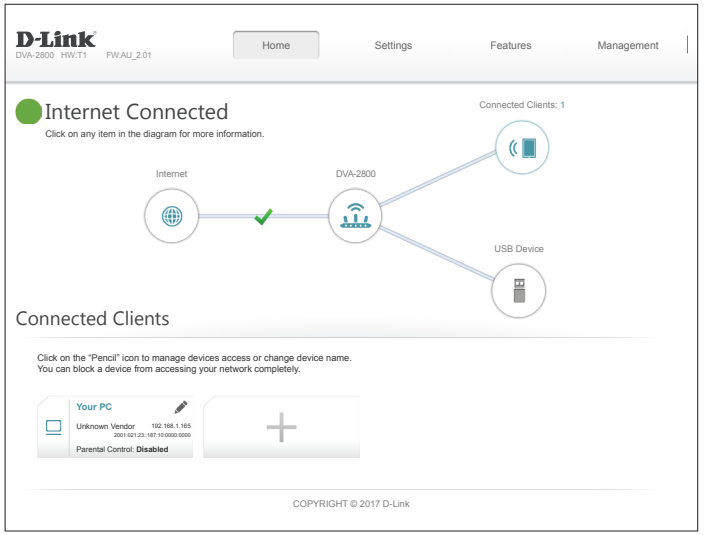


Connected Clients

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.



Edit Rule

Name: Enter a custom name for this client.

Vendor: Displays the vendor of the device.

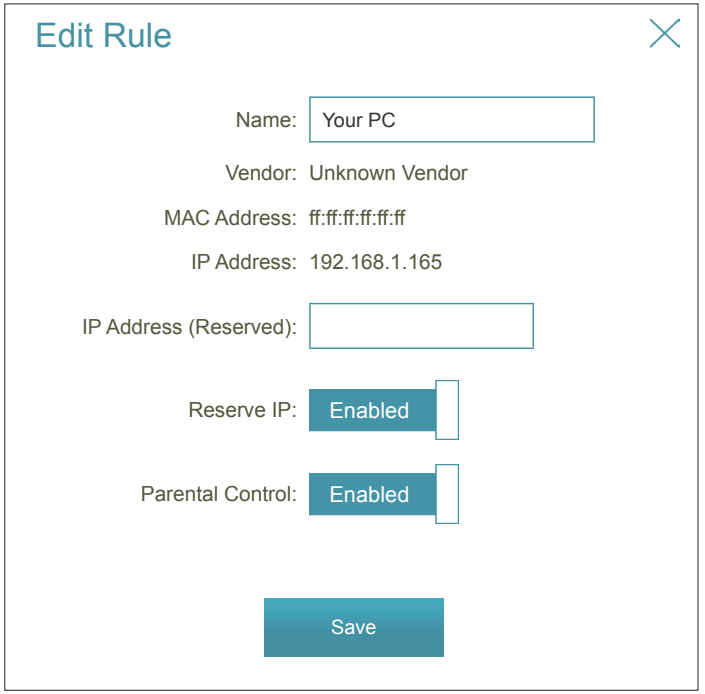
MAC Address: Displays the MAC address of the device.

IP Address: Enter a specific IP address for this client if **Reserve IP** is enabled.

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

Parental Control: Allow or Block access to the router.

Click **Save** when you are done.

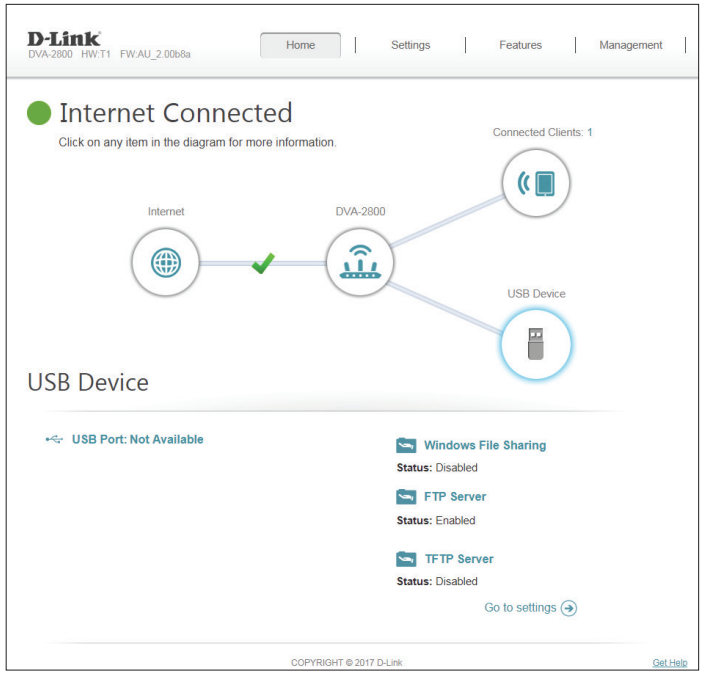


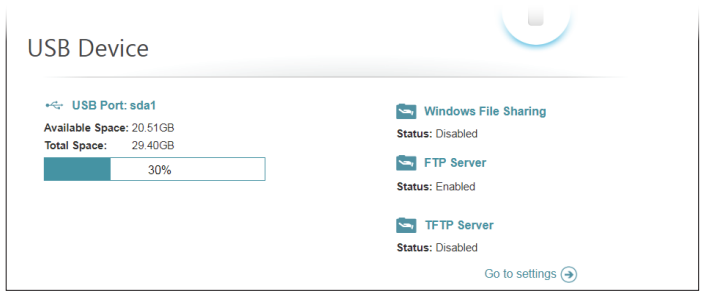
USB Device

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

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

To configure your Storage Service settings, click **Go to settings** and refer to page 32 for more information.





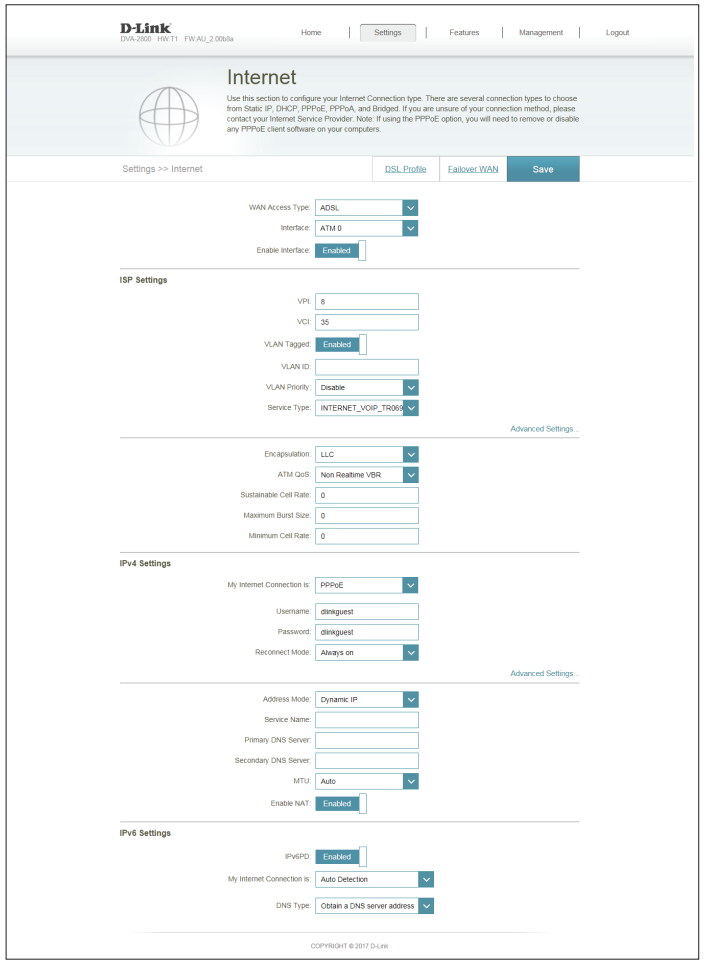
Settings

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 14** for more information.

Internet

The following pages will describe how to manually configure how your DVA-2800 connects to the Internet. The DVA-2800 supports multiple WAN connection types and WAN failover. We recommend setting up Internet WAN connections one at a time, **Save** the configuration, and confirm the connection works before returning to this section to add additional WAN connections.
The following configuration pages are divided by WAN Access Type.



WAN Access Type: Select WAN interface to configure. The options are **ADSL, VDSL, Ethernet**, or **USB.**

Select a WAN interface and refer to its configuration page for setup information.

For ADSL, refer to **ADSL** on page 28.

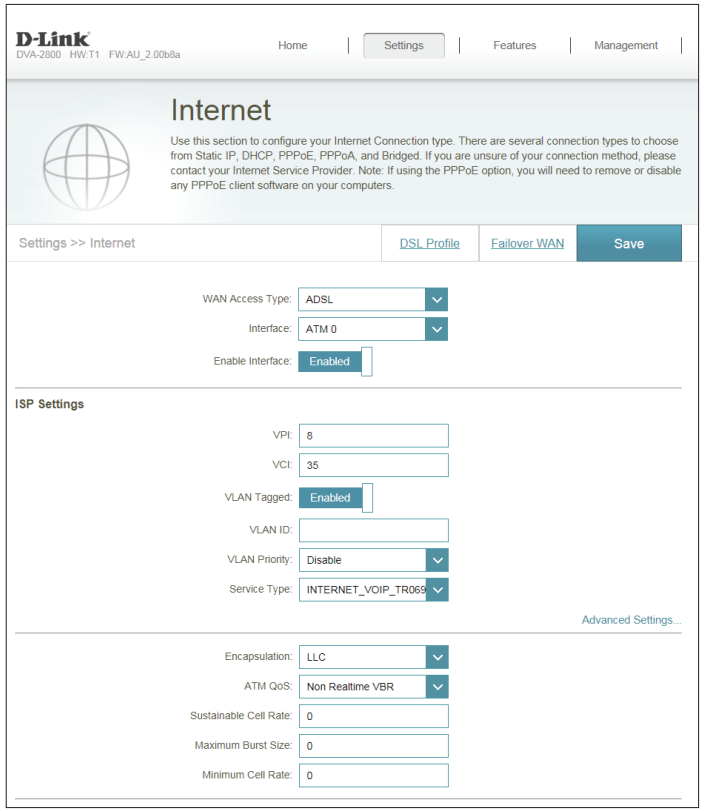
For VDSL, refer to **VDSL** on page 30.

For Ethernet, refer to **Ethernet** on page 31

For USB, refer to **USB** on page 32.

ADSL

ADSL is one of the first home broadband technologies introduced. ADSL uses the DSL port on your DVA-2800 to connect to the Internet. In order for your DVA-2800 to use ADSL, you must configure the ADSL Settings, your **ISP Settings**, and your **IPv4**/**IPv6 Settings**.



WAN Access Type: Select **ADSL** to configure ADSL connection settings.

Interface: Select the interface from the drop-down menu. **ATM0**-**ATM7** are available. The default is **ATM0**.

Enable Interface: Select whether to enable or disable this interface.

ISP Settings

VPI: Enter the Virtual Path Indicator (0 - 255).

VCI: Enter the Virtual Channel Indicator (32 - 65535).

VLAN Tagged: Enable or disable VLAN tagging.

If you enabled **VLAN Tagged**, the following options are available:

VLAN ID: Enter the VLAN ID. The value should be 0, or 0-4079.

VLAN Priority: Enter the VLAN Priority from the default 0 (lowest) to 7 (highest).

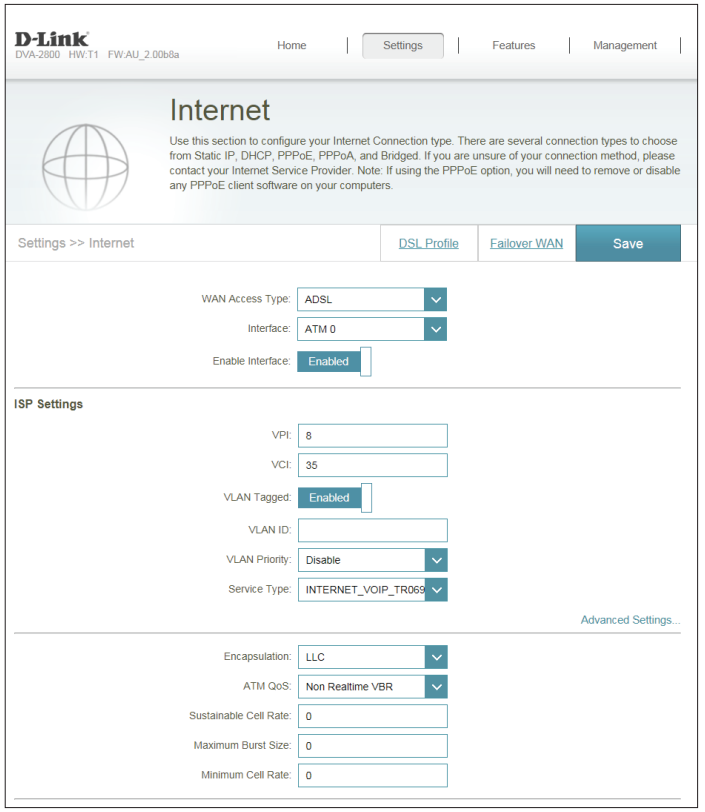
Service Type: Select a service type from the list. Choose from **INTERNET**, **VOIP**, **INTERNET_VOIP**, **TR069**, **TR069_INTERNET**, or **INTERNET_VOIP_TR069**. This information should be provided by your ISP. If you are configuring your connection manually and your ISP has not specified this setting, selecting **INTERNET** is recommended.

ADSL (Cont)

Advanced Settings

Encapsulation: Select the method of encapsulation provided by your ISP. You can select **LLC** or **VCMUX**.

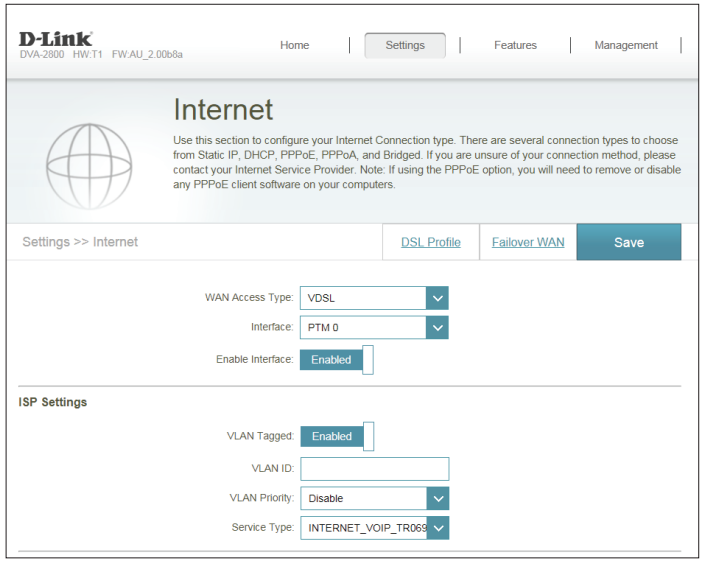
ATM QoS: Select the Quality of Service type from the drop-down menu. Configure the associated settings



Proceed to **IPv4 Settings** on page **33** or **IPv6 Settings** on page **38.**

VDSL

VDSL is one of the latest and fastest home broadband technologies. VDSL uses the DSL port on your DVA-2800 to connect to the Internet. In order for your DVA-2800 to use VDSL, you must configure the VDSL Settings, your **ISP Settings**, and your **IPv4**/**IPv6 Settings**.



WAN Access Type: Select **VDSL** to configure ADSL connection settings.

Interface: Select the interface from the drop-down menu. **PTM0**-**PTM7** are available. The default is **PTM0**.

Enable Interface: Select whether to enable or disable this interface.

ISP Settings

VLAN Tagged: Enable or disable VLAN tagging.

If you enabled **VLAN Tagged**, the following options are available:

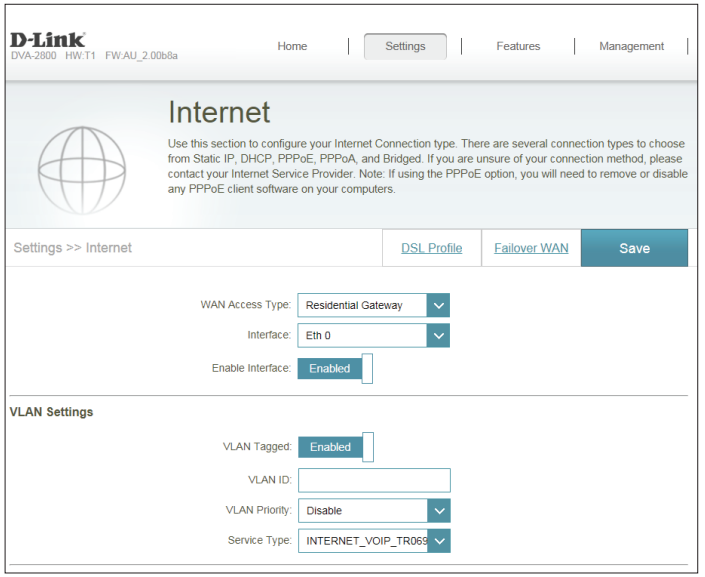
VLAN ID: Enter the VLAN ID. The value should be 0, or 0-4079.

VLAN Priority: Enter the VLAN Priority from the default 0 (lowest) to 7 (highest).

Service Type: Select a service type from the list. Choose from **INTERNET**, **VOIP**, **INTERNET_VOIP**, **TR069**, **TR069_INTERNET**, or **INTERNET_VOIP_TR069**. This information should be provided by your ISP. If you are configuring your connection manually and your ISP has not specified this setting, selecting **INTERNET** is recommended.

Proceed to **IPv4 Settings** on page **33 or IPv6 Settings** on page **38.**

Residential Gateway



Your DVA-2800 is equipped with a Gigabit Ethernet WAN port which can be used to connect to the Internet. This port may be used to connect to other Ethernet based networks. In order for your DVA-2800 to use Ethernet, you must configure the Ethernet Settings, **VLAN Settings**, and your **IPv4/IPv6 Settings**.

WAN Access Type: Select **Residential Gateway** to configure Ethernet connection settings.

Interface: Select the interface from the drop-down menu. **ETH0**-**ETH5** are available. The default is **ETH0**.

Enable Interface: Select whether to enable or disable this interface.

VLAN Settings

VLAN Tagged: Enable or disable VLAN tagging.

If you enabled **VLAN Tagged**, the following options are available:

VLAN ID: Enter the VLAN ID. The value should be 0, or 0-4079.

VLAN Priority: Enter the VLAN Priority from the default 0 (lowest) to 7 (highest).

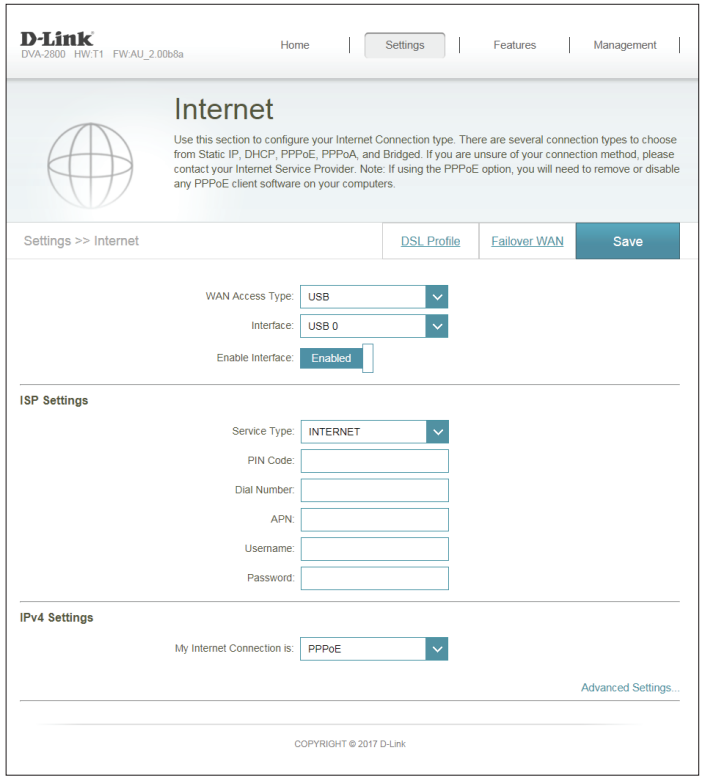
Service Type: Select a service type from the list. Choose from **INTERNET**, **VOIP**, **INTERNET_VOIP**, **TR069**, **TR069_INTERNET**, or **INTERNET_VOIP_TR069**. This information should be provided by your ISP. If you are configuring your connection manually and your ISP has not specified this setting, selecting **INTERNET** is recommended.

Proceed to **IPv4 Settings** on page **33** or **IPv6 Settings** on page **38.**

USB

The DVA-2800 supports USB mobile broadband adapters. You can connect a mobile broadband adapter and share your cellular network connection with your home network. For a list of supported adapters, visit **www.dlink.com**.

This page provides configuration settings for your USB mobile broadband connection. Refer to your mobile broadband adapter's documentation for setup instructions and ISP for configuration information. In most cases, the process is plug and play and requires no further configuration.



WAN Access Type: Select **USB** to configure USB connection settings.

Interface: Select the interface from the drop-down menu.

Enable Interface: Select whether to enable or disable this interface.

ISP Settings

Country: Select your country.

ISP: Select your ISP. A number of ISP configuration settings are pre-programmed into the DVA-2800 for convenience. If you don't see your ISP or wish to use manual settings, choose **Not Listed.**

PIN Code: Enter your PIN code.

Dial Number: Enter the Dial Number.

APN: Enter the APN.

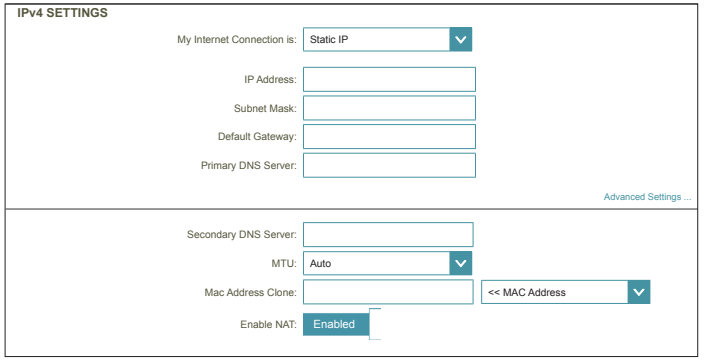
Username: Enter your username.

Password: Enter your password.

If you need to configure DHCP, see **Dynamic IP (DHCP) on page 34**. Click **Save** when you are done.

IPv4 Settings

Static IP



Select **Static IP** if your ISP provides you with a specific IP address.

IPv4 Settings:

My Internet Connection is: Select **Static IP**.

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. This address is usually obtained automatically from your ISP.

Advanced Settings

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

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

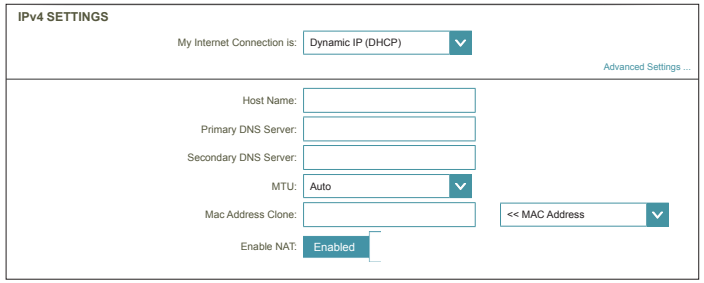
MAC Address Clone: The default MAC address is set to the Internet port's physical interface MAC address on the router. You can use the drop-down menu to replace the Internet port's MAC address with the MAC address of a connected client.

Enable NAT: Enable or disable Network Address Translation.

Proceed to **IPv6 Settings** on page **38** or click **Save** when you are done.

Dynamic IP (DHCP)

Select **Dynamic IP (DHCP)** to obtain an IP address automatically from your ISP. Select this option if your ISP does not provide you with a specific IP address.



IPv4 Settings:

My Internet Connection is: Select **Dynamic IP (DHCP)**.

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.

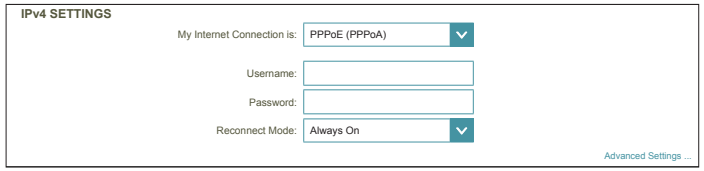
MAC Address Clone: The default MAC address is set to the Internet port's physical interface MAC address on the router. You can use the drop-down menu to replace the Internet port's MAC address with the MAC address of a connected client.

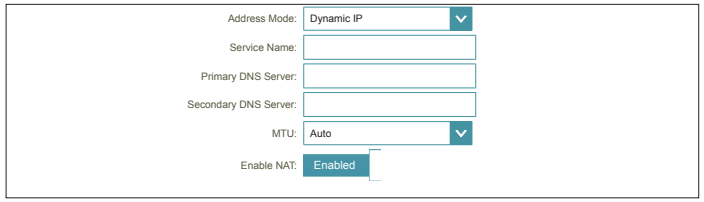
Enable NAT: Enable or disable Network Address Translation.

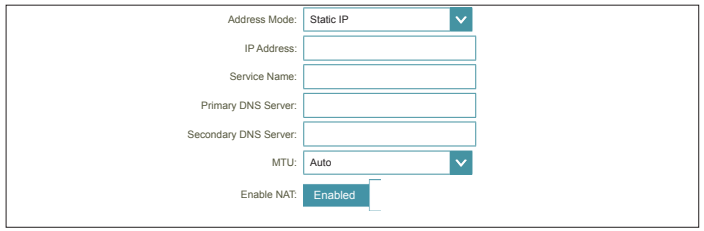
Proceed to **IPv6 Settings** on page **38** or click **Save** when you are done.

PPPoE/PPPoA

Select **PPPoE** or **PPPoA** if your ISP provides and requires you to enter a PPPoE/PPPoA username and password in order to connect to the Internet. PPPoE and PPPoA use the same configuration options.







IPv4 Settings:

My Internet Connection is: Select **PPPoE** or **PPPoA**, as appropriate.

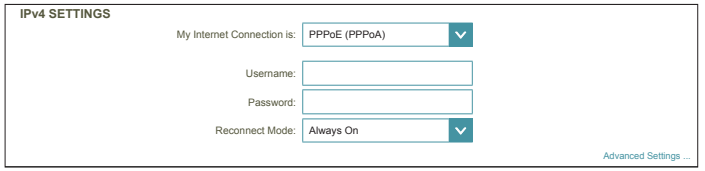
Username: Enter the username provided by your ISP.

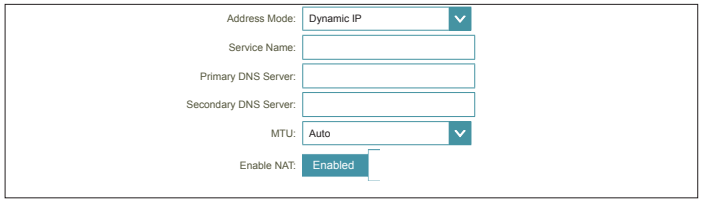
Password: Enter the password provided by your ISP.

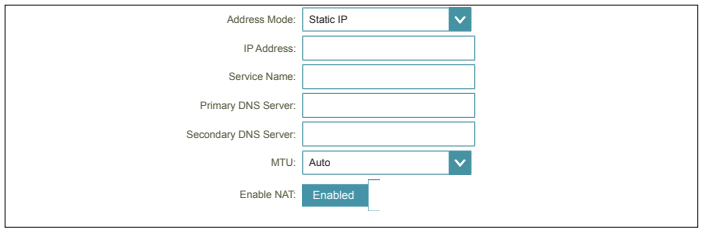
Reconnect Mode: Select either **Always-on**, **On-Demand**, or **Manual**.

PPPoE/PPPoA (Cont)

Advanced Settings







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

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

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

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

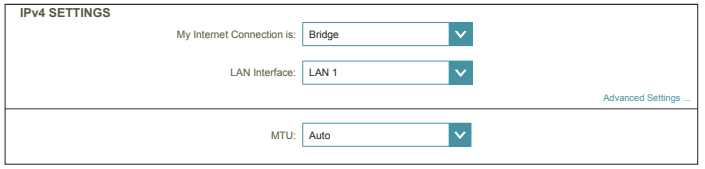
Secondary DNS Server: Enter the secondary DNS server IP address assigned by your ISP. This address is usually obtained automatically from your ISP.

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

Enable NAT: Enable or disable Network Address Translation.

Proceed to **IPv6 Settings** on page **38** or click **Save** when you are done.

Bridged



Select **Bridge** to configure the device as a network bridge.

IPv4 Settings:

My Internet Connection is: Select **Bridged**.

LAN Interface: Choose the interface to bridge.

Advanced Settings

MTU Maximum Transmission Unit - you may need to change the MTU for optimal performance with your ISP. Select either **Auto** or **Manual**.

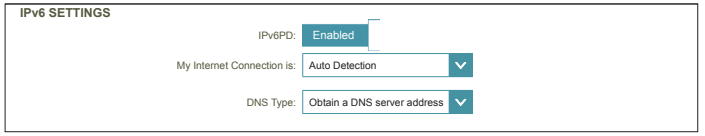
Secondary DNS Server: Enter the secondary DNS server IP address assigned by your ISP. This address is usually obtained automatically from your ISP.

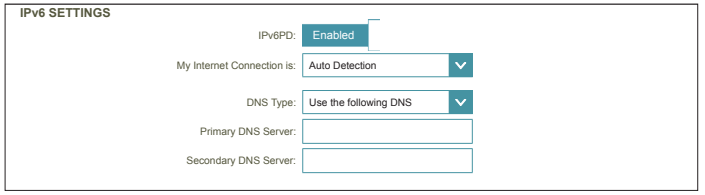
Enable NAT: Enable or disable Network Address Translation.

Bridged Mode does not support IPv6 configuration. Click **Save** when you are done.

IPv6 Settings

Auto Detection





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

IPv6 Settings:

IPv6PD: Enable or disable IPv6 prefix delegation.

My Internet Connection is: Select **Auto Detection**.

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

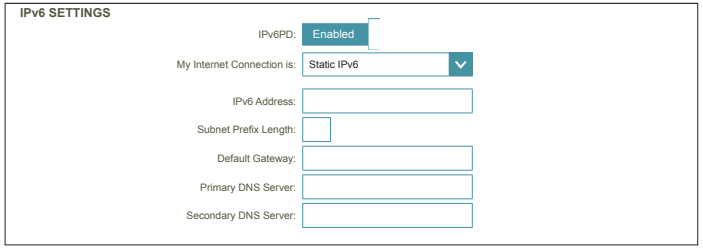
If you selected **Use the following DNS address**, the following options are available:

Primary DNS Server: Enter the primary DNS server address.

Secondary DNS Server: Enter the secondary DNS server address.

Click **Save** when you are done.

Static IPv6



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

IPv6 Settings:

IPv6PD: Enable or disable IPv6 prefix delegation.

My Internet Connection is: Select **Static IPv6**.

IPv6 Address: Enter the address supplied by your ISP.

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

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

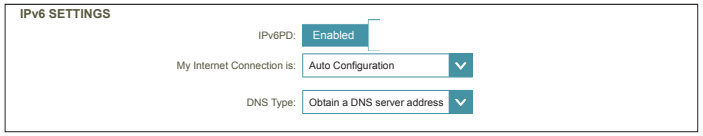
Primary DNS Server: Enter the primary DNS server address.

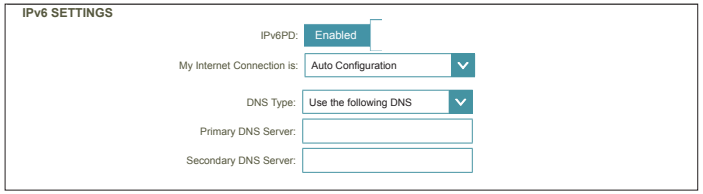
Secondary DNS Server: Enter the secondary DNS server address.

Click **Save** when you are done.

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 Settings:

IPv6PD: Enable or disable IPv6 prefix delegation.

My Internet Connection is: Select **Auto Configuration**.

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

If you selected **Use the following DNS address**, the following options are available:

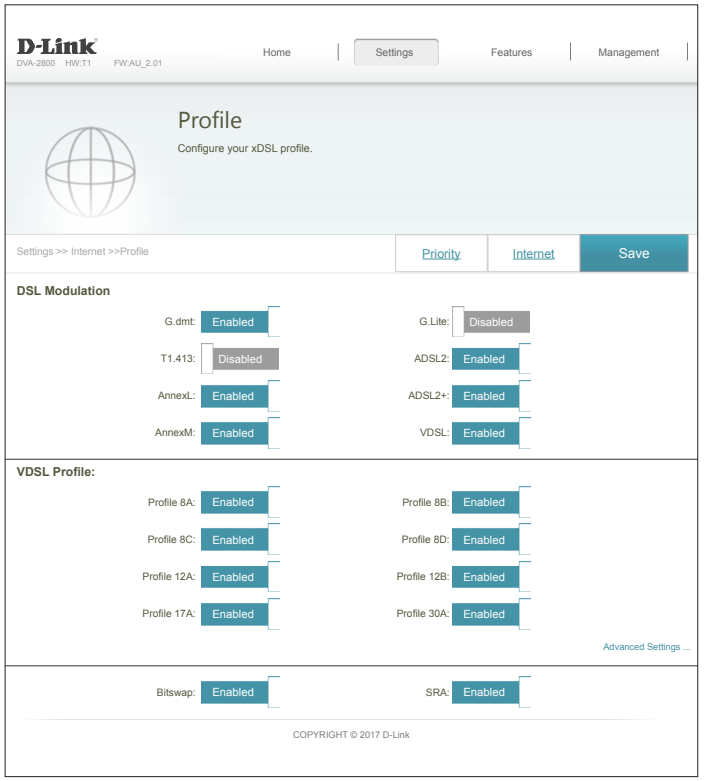
Primary DNS Server: Enter the primary DNS server address.

Secondary DNS Server: Enter the secondary DNS server address.

Click **Save** when you are done.

DSL Profile

On this page, you can configure your DSL settings. If you are unsure, you can obtain these settings from your ISP.



DSL Modulation

DSL Modulation Options: Select whether to enable or disable each DSL modulation option. Usually, it is best to leave these at their defaults, unless otherwise instructed by your ISP.

If you enabled **VDSL Modulation**, choose the VDSL Profile Options:

VDSL Profile

VDSL Profile Options: Select the VDSL Profiles to enable. It is best to leave these at their defaults unless otherwise instructed by your ISP.

Advanced Settings

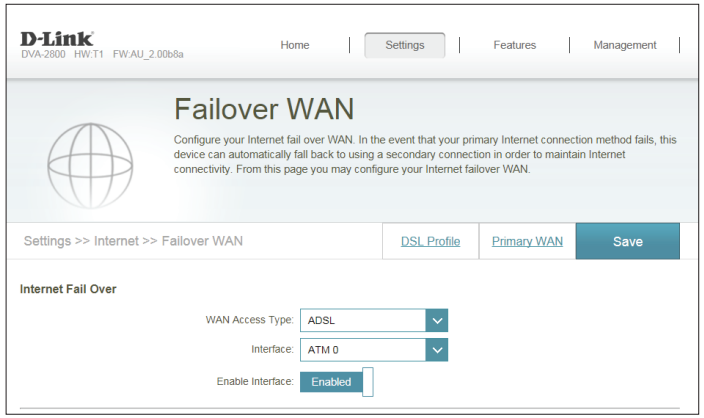
Bitswap: Select whether to enable Bitswap.

SRA: Select whether to enable SRA.

Click **Save** when you are done.

Failover WAN

From this page, you may configure your Internet failover WAN. In the event that your primary Internet connection method fails, this device can automatically fall back to using a backup connection in order to maintain Internet connectivity. This connection method must be properly configured and available to provide a reliable backup.



Internet Fail Over

WAN Access Type: Select the primary Internet connection to use. The options are **ADSL**, **Residential Gateway**, and **USB**. Note that VDSL is not available as a failover interface. Failover WAN interfaces are configured like their primary WAN counterparts, described in **Internet** on page 42.

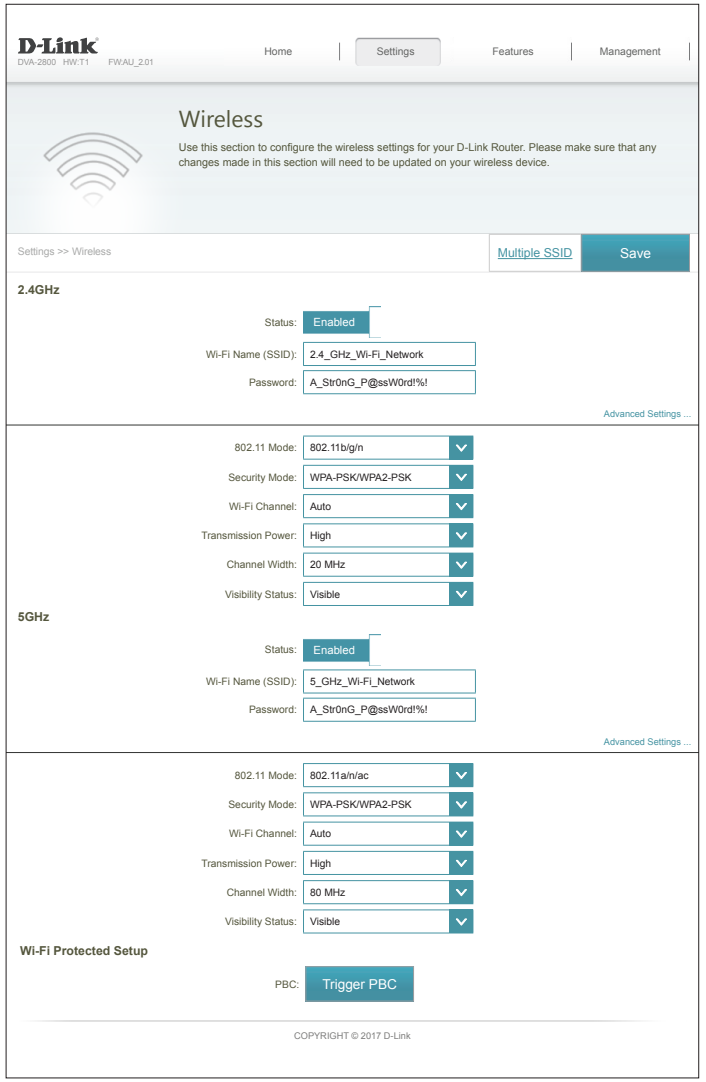
Interface: Select an interface for your chosen failover mode. Refer to **Internet** on page 42 to check available options.

Enable Interface: Select **Enable** to activate and configure the failover interface. Once saved, this interface will be used whenever the primary WAN is unavailable.

Click **Save** when you are done.

Wireless

From this page, you can configure your wireless network settings.



2.4 GHz

Status: Enable or disable the 2.4 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

802.11 Mode: Select the desired wireless networking standards to use. The available options are **802.11b/g/n**, **802.11n/g**, **802.11n**, **802.11b/g**, **802.11g**, or **802.11b**.

Security Mode: Choose **None**, **WEP**, **WPA-PSK**, **WPA2-PSK** or **WPA-PSK/WPA2-PSK**.

Wi-Fi Channel: Select the desired channel for your wireless network to use. The default and recommended setting is **Auto**.

Transmission Power: Select the desired wireless transmission power. The available options are **High**, **Medium**, and **Low**. The default is **High**.

Channel Width: Select **Auto 20/40** if you are using both 802.11n and non-802.11n devices, or select **20 MHz** if you want to disable 40 MHz bandwidth communication. The default setting is **20 MHz** for maximum compatibility.

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

Wireless (continued)

5 GHz

Status: Enable or disable the 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

802.11 Mode: Select the desired wireless networking standards to use. The available options are **802.11a/n/ac** or **802.11a**.

Security Mode: Choose **None**, **WEP**, **WPA-PSK**, **WPA2-PSK** or **WPA-PSK/WPA2-PSK**.

Wi-Fi Channel: Select the desired channel for your wireless network to use. The default and recommended setting is **Auto**.

Transmission Power: Select the desired wireless transmission power. The available options are **High**, **Medium**, and **Low**. The default is **High**.

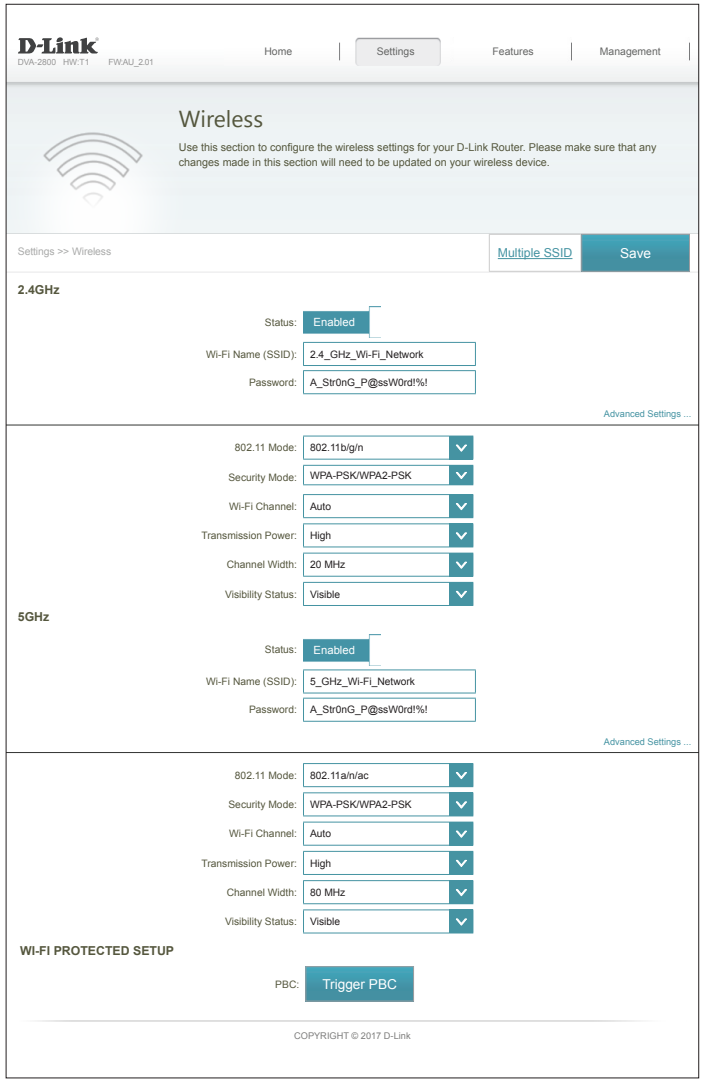
Channel Width: Select **Auto 20/40 MHz** if you want to disable 80 MHz bandwidth communication for 5 GHz wireless compatibility.

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

Wi-Fi Protected Setup

PBC: Press the **Trigger PBC** button to trigger WPS-PBC mode. This virtual WPS button replicates the physical WPS button functionality.

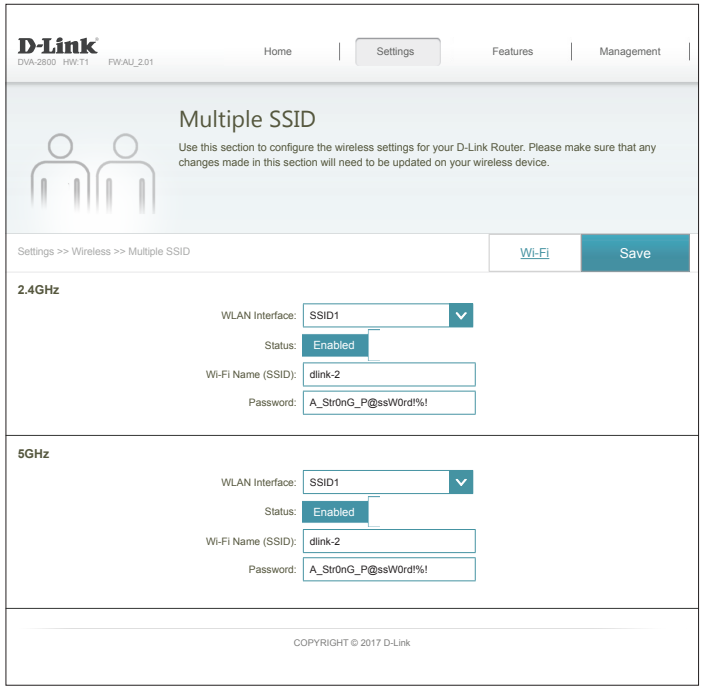
Click **Save** when you are done.



Multiple SSID

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

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



2.4 GHz / 5 GHz

WLAN Interface: Select the SSID.

Status: Enable or disable the selected SSID.

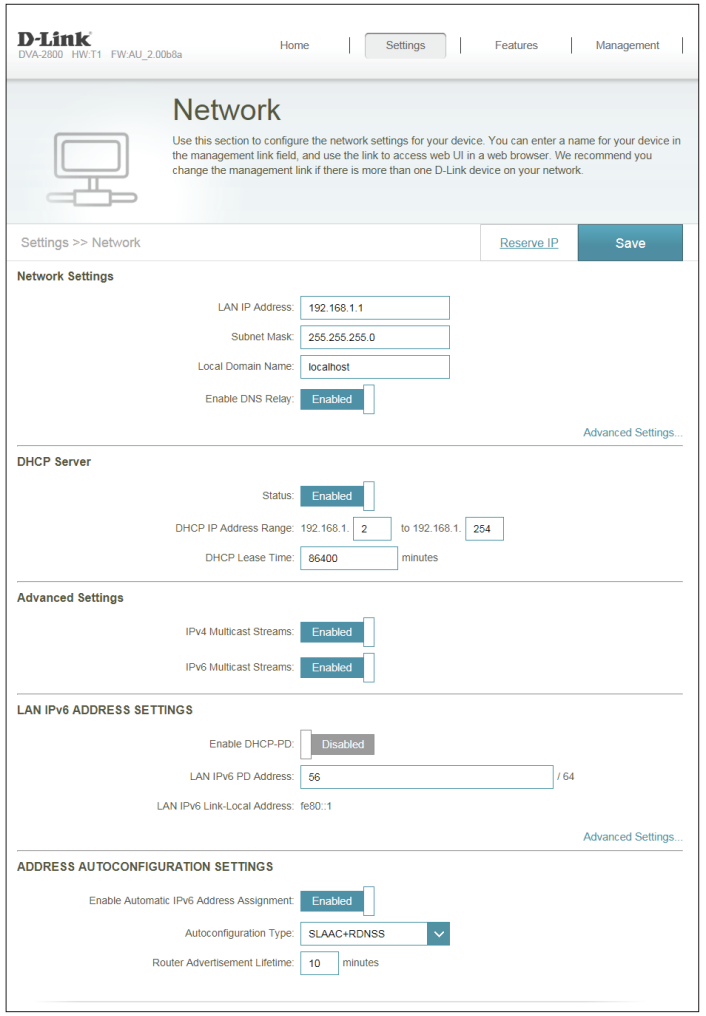
Wi-Fi Name (SSID): Create a name for your wireless network using up to 32 characters.

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

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 for this interface. The default IP address is **192.168.1.1**.

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 this interface. The default subnet mask is **255.255.255.0**.

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

Enable DNS Relay: Disable for devices on your network to perform DNS lookups directly with your ISP. If enabled, your computers will use the router as a DNS server.

Advanced Settings - 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.*

Network (continued)

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

Advanced Settings

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.

LAN IPv6 Address Settings

Enable DHCP-PD: Enable or disable DHCP-PD (Dynamic Host Configuration Protocol - Prefix Delegation).

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.*

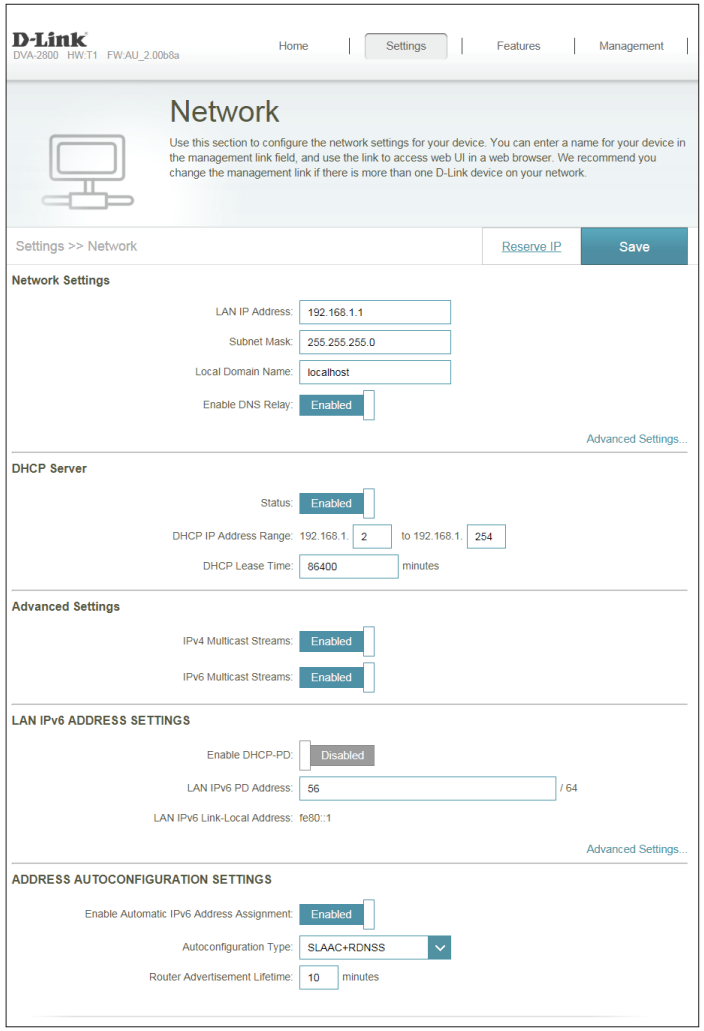
If you disabled **DHCP-PD**, enter the LAN IPv6 PD Address subnet prefix:

LAN IPv6 PD Address: Enter the LAN IPv6 PD Address subnet prefix.

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

Advanced Settings - Address Autoconfiguration Settings

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



Network (continued)

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

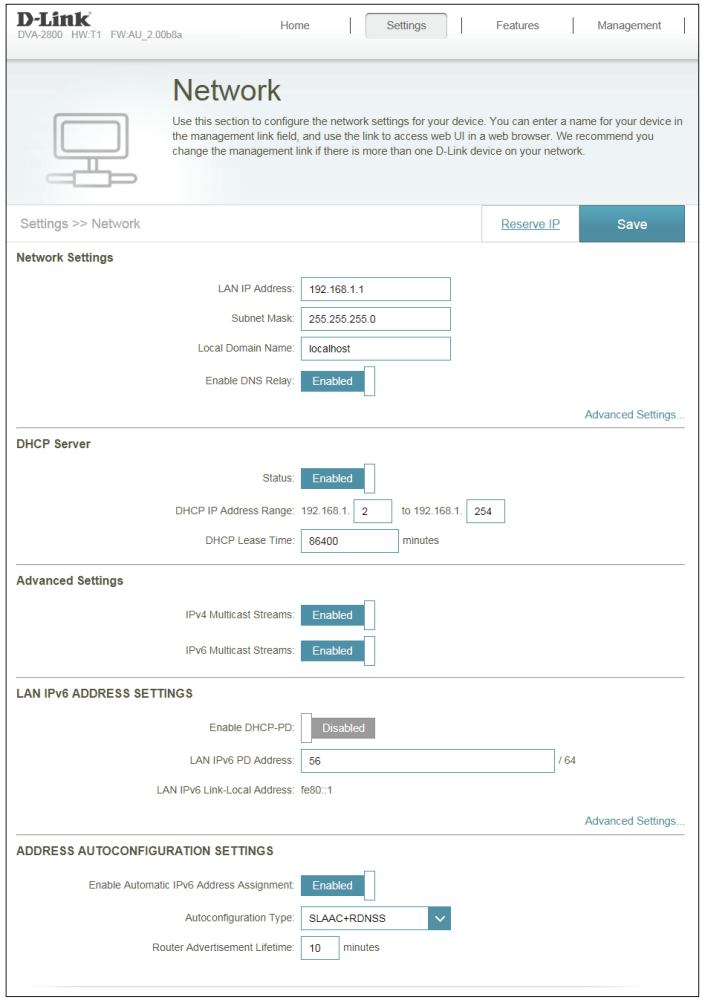
If you selected **SLAAC+RDNSS** or **Stateless DHCP** as the Autoconfiguration Type:

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

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

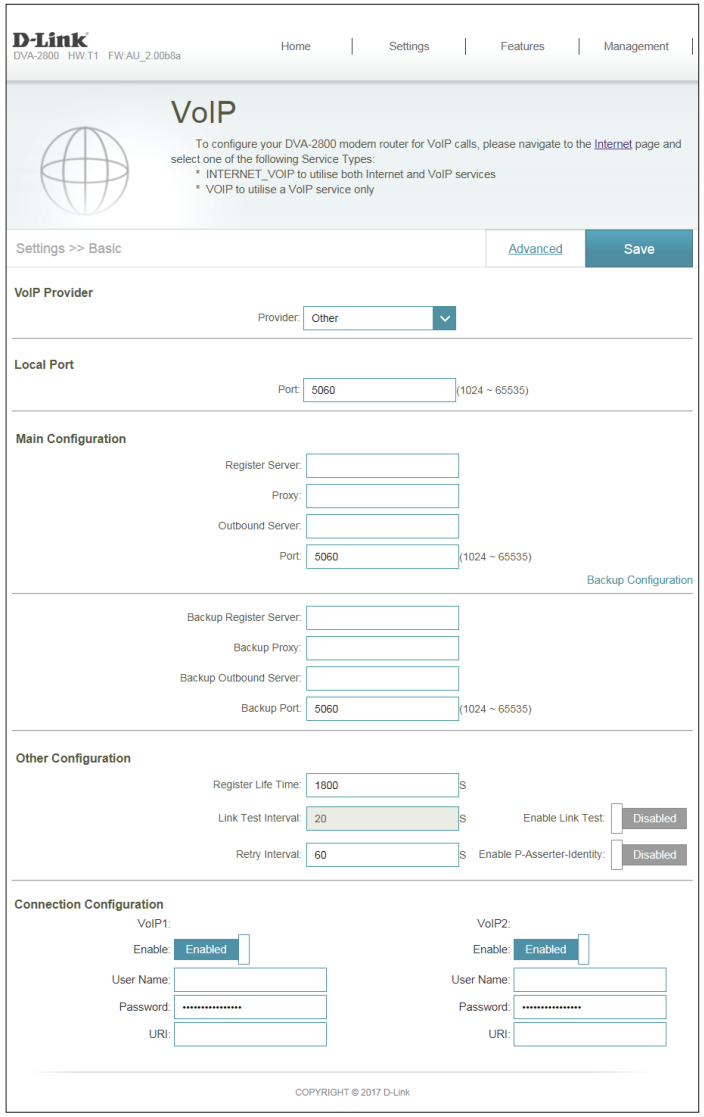
IPv6 Advertisement Lifetime: Enter the IPv6 address lifetime (in minutes).

Click **Save** when you are done.



VoIP

This section will allow you to configure VoIP (Voice over Internet Protocol) to make calls over the Internet. Your ISP or VoIP service should provide you with this information.



VoIP Provider

VoIP Provider: Select your VoIP provider from the list. If your provider isn't listed, select **Other** to enter the settings manually. Be sure to have your ISP's settings on-hand when you configure this information.

Local Port

Local Port: Specify the local SIP initiation port. The default port is 5060.

Main Configuration

Register Server: Enter the IP address or domain name of the primary VoIP registration server. This information should be provided by your VoIP provider.

Proxy: If your VoIP provider uses a proxy server, enter it here.

Outbound Server: If your VoIP provider uses an outbound proxy server, enter it here.

Port: Enter the port number provided by your VoIP provider. The default port used by SIP (Session Initiation Protocol) is 5060. Note that the external port may be different from the local port used in the previous section.

Backup Configuration: Click this button if you wish to input backup parameters.

Backup Register Server: Enter the IP address or domain name of the backup VoIP registration server. This information should be provided by your VoIP provider.

Backup Outbound Server If your backup VoIP provider uses an outbound proxy server, enter it here.

VoIP (Cont)

Backup Proxy If your VoIP provider uses a backup proxy server, enter it here.

Backup Port: Enter the port number provided by your VoIP provider. The default port used by SIP (Session Initiation Protocol) is 5060.

Other Configuration

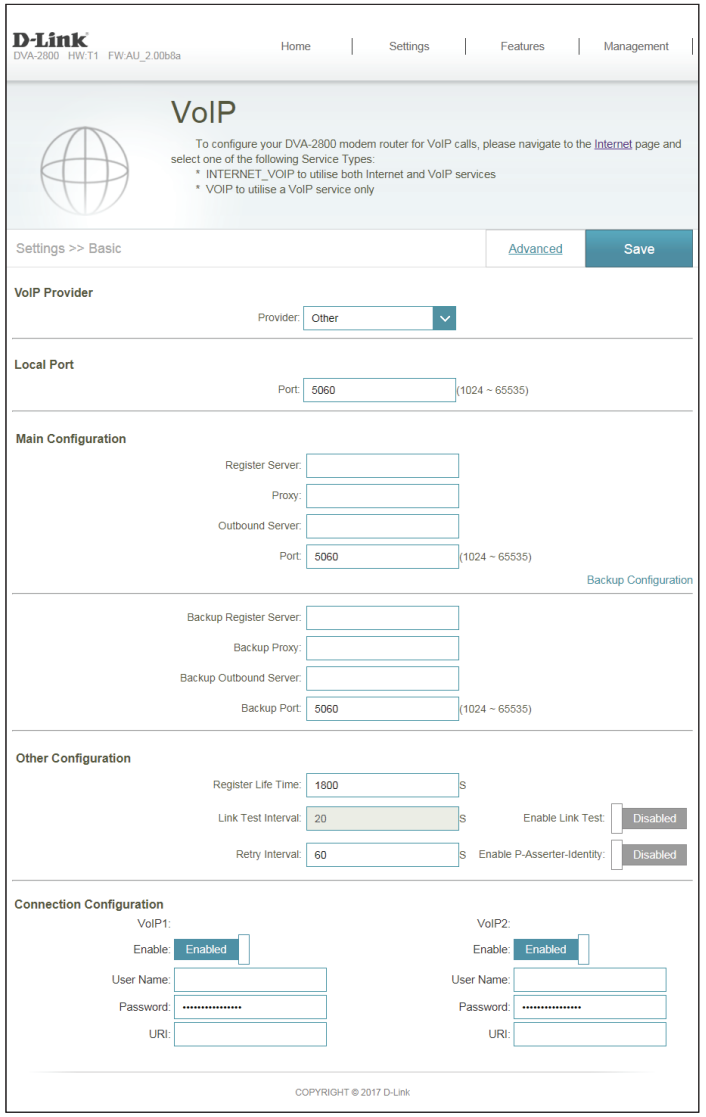
Register Life Time: Enter the amount of time in seconds for registration to expire with the VoIP server. The default for **Other** providers is 1800 seconds.

Link Test Interval: This is a proprietary setting used by some operators for troubleshooting. The default and recommended setting is **Disabled**.

Retry Interval: Enter the number of seconds between connection retries.

Enable Link Test: This is a proprietary setting used by some operators for troubleshooting. The default and recommended setting is **Disabled**.

Enable P-Asserter Identity P-Asserted-Identity is used by some VoIP to authenticate users. If your provider uses this setting, enable it here.



VoIP (Cont)

Connection Configuration

Configure your VoIP1 and VoIP2 ports with the settings below. You can configure each line separately.

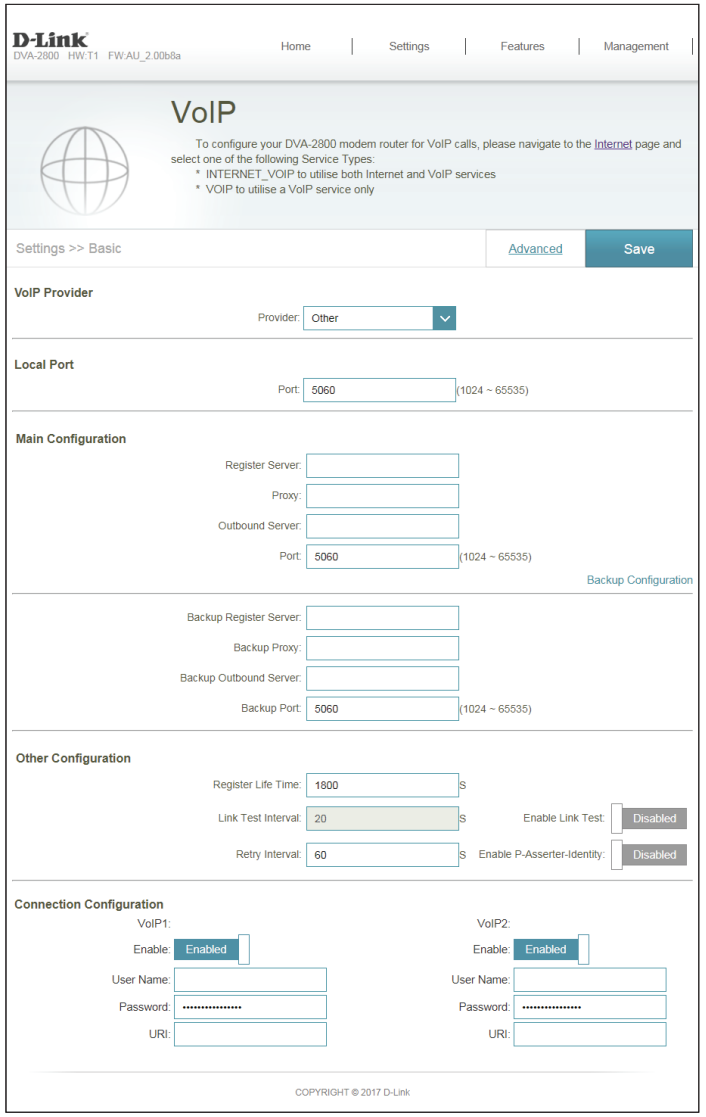
Enable: Enable the VoIP port and line.

User Name: Enter the user name for your VoIP account

Password: Enter the password for your VoIP account

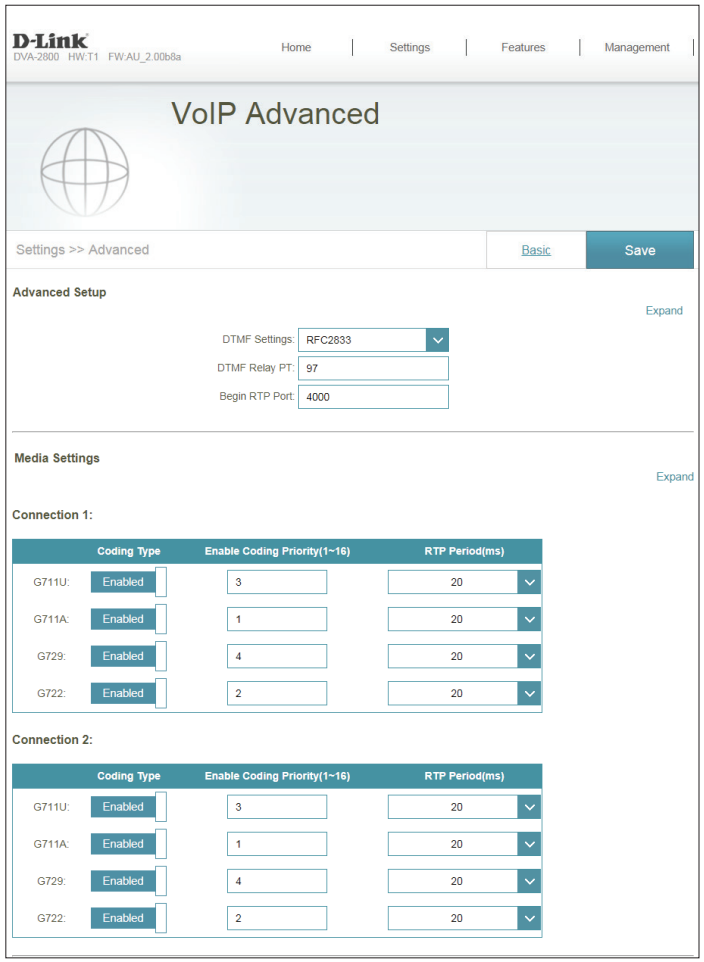
URI: Enter the Uniform Resource Identifier (URI) here. That may take the form of a web address and a port number. For example: www.yourvoipprovider.com:5060

Click **Save** when you are done.



VoIP Advanced

This section will allow you to configure advanced VoIP (Voice over Internet Protocol) settings. Most users can safely ignore this section. Your ISP or VoIP service should provide you with this information.



Advanced Setup

DTMF Settings: Dual-tone multi-frequency signaling (DTMF or "touch tones") are used for dialing numbers. Choose **in-band** to have DTMF tones mixed with the user's voice in RTP packets - similar to a convention phone. Choose **RFC2833** to encapsulate DTMF tones in separate RTP packets as specified in RFC 2833.

DTMF Relay PT: If you have selected **RFC2833**, select the DTMF Payload Type (encoding) according to RFC 3551.

Begin RTP Port: Select a port number to begin searching for an open RTP port. The router will increment from this port number until it finds a connection.

Media Settings

Configure your VoIP1 and VoIP2 ports with the settings below. You can configure each line separately.

Coding Type: Enable or disable different coding schemes. This information should be provided by your VoIP provider. All are enabled by default.

Enable Coding Priority(1-16): Select a preference order for the different encoding schemes. The lower the number, the higher the priority.

RTP Period(ms): Indicates the time out (in milliseconds) for RTP packets. The default setting is 20 ms.

VoIP Advanced (Cont)

Qos

QoS (quality of service) allows you to prioritize traffic to optimize your connection. Configure **DSCP** (Differentiated Services Code Points) below.

RTP: Select the DSCP for RTP connections.

SIP: Select the DSCP for RTP connections.

Fax settings

T38: Select **Enable** to enable T.38 for fax over IP.

Dial Plan

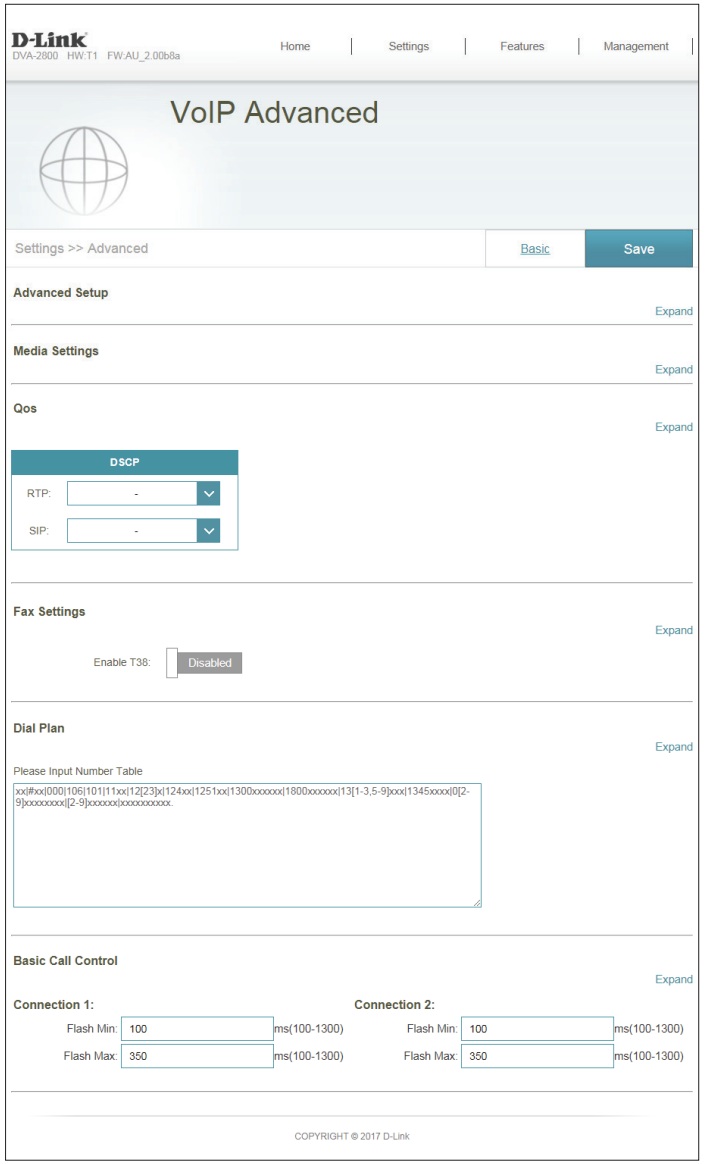
Please Input Number Table: Input the dial plan number table in Asterix syntax. The dial plan tells your router how to interpret numbers dialed by the user and relay them to your VoIP provider. This is pre-configured with your region's dial plan. Your VoIP provider should provide you with this information.

Basic Call Control

Flash Min: Set the minimum amount of time in ms the link should go "on the hook" before being considered a flash command.

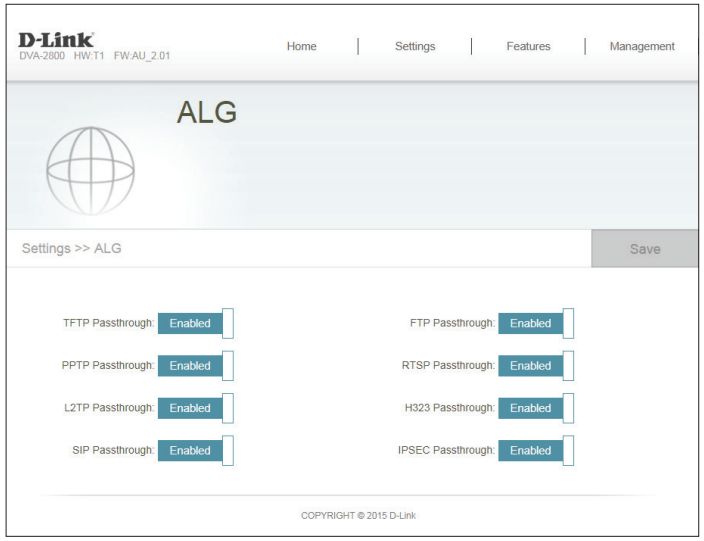
Flash Max: Set the maximum amount of time in ms the link should go "on the hook" before being considered a flash command.

Click **Save** when you are done.



ALG

Application Level Gateways (ALGs) are security components that enhance the firewall and NAT support of this router to seamlessly support application layer protocols. In some cases enabling the ALG will allow the firewall to use dynamic ephemeral TCP/ UDP ports to communicate with the known ports a particular client application (such as H.323 or RTSP) requires, without which the admin would have to a open large number of ports to accomplish the same support. Because the ALG understands the protocol used by the specific application that it supports, it is a very secure and efficient way of introducing support for client applications through the router's firewall.



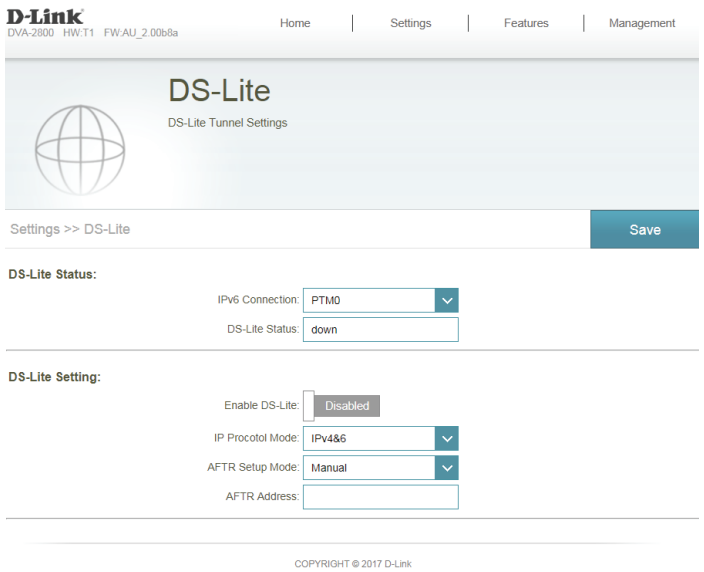
ALG Configuration

Select **Enable** next to each ALG type to enable them.

Click **Save** when you are done.

DS-Lite

Some ISPs use Dual Stack Lite (DS-Lite) to manage IPv6 connections. DS-Lite is a transitional technology between IPv4 and IPv6. If DS-Lite is required for your connection, your ISP will provide you with the required information.



DS-Lite Status

IPv6 Connection: If your internet connection uses IPv6 over DS-Lite, select which interface

DS-Lite Status: Indicates whether DS-Lite is **up** or **down**.

DS-Lite Setting

Enable DS-Lite: Select **Enable** to enable DS-Lite.

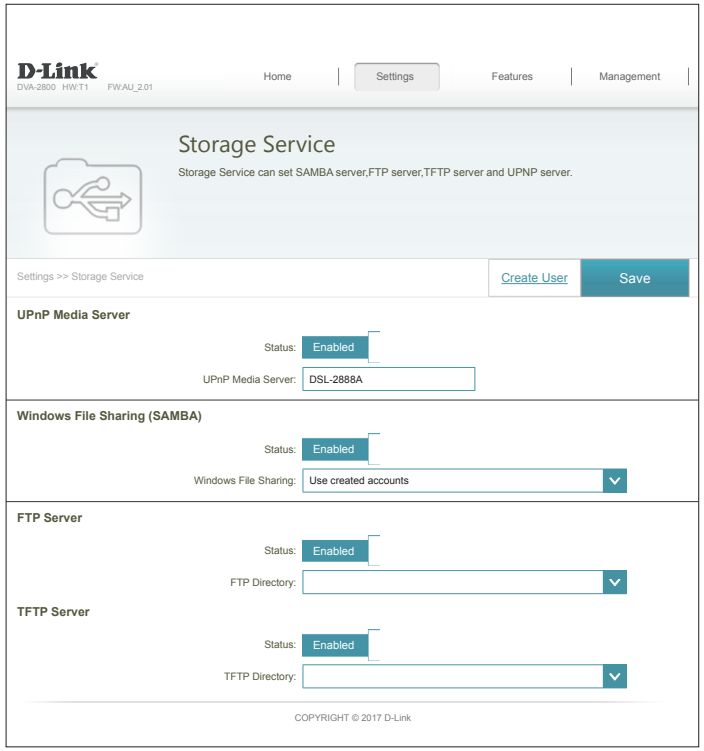
IP Protocol Mode: Select whether your router should **IPv4**, **IPv6**, or **IPv4&IPv6** protocol stacks. The default and recommended setting is **IPv4&IPv6**

AFTR Setup Mode: Select if the Address Family Transition Router (AFTR) setup mode is **Auto** or **Manual**. If **Manual**, enter the AFTR Address below.

AFTR Address: If **AFTR** setup mode is set to **Manual**, enter the AFTR address proved to you by your ISP.

Storage Service

This page will allow you to set up access to files on an external USB device plugged into the router. You can do this through the local network or from the Internet using either a web browser or an app on your smartphone or tablet. In the Settings menu on the bar on the top of the page, click **Storage Service**.



UPnP Media Server

Status: Enable or disable the Universal Plug and Play (UPnP) media server function, allowing connected clients access to media files over the network.

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

Windows File Sharing (SAMBA)

Status: Enable or disable the Windows File Sharing function, allowing connected clients access to media files over the network.

Windows File Sharing: Choose either **Require router's admin password** to specify whether the router's password will be required for access, **Allow all users to access (no password)**, or **Use created accounts** to use accounts created by the **Create User** menu.

FTP Server

Status Enable or disable File Transfer Protocol (FTP) access to files stored on a USB device plugged into the router.

FTP Directory: Select the device, file system, or drive to be accessible from the FTP server.

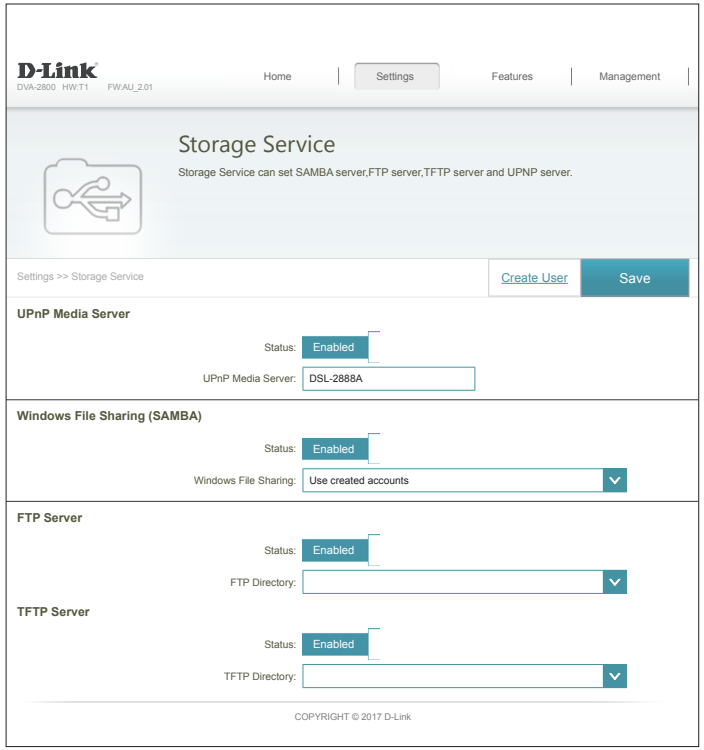
TFTP Server

Status: Enable or disable the Trivial File Transfer Protocol (TFTP) server function, allowing connected transfer files over the network

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

Note: TFTP does not support usernames or passwords. Use this feature with caution.

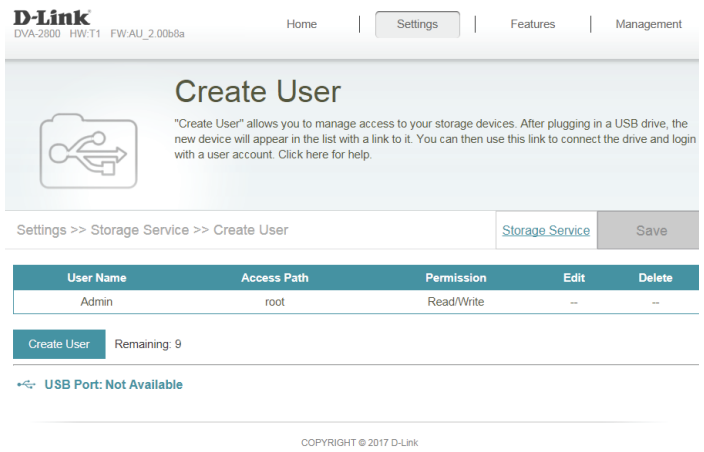
Click **Save** when you are done.



Create User

The Create User page allows you to manage Storage Service user accounts. This page lists active user accounts, their current permissions, and access paths. Users without accounts are restricted to guest access, which only has access to the “Guest” folder on the media server. A maximum of ten accounts (including "Admin" can be registered at any given time.

If you wish to remove an account, click on the corresponding trash can icon in the Delete column. If you wish to edit an account, click on the corresponding pencil icon in the Edit column. If you wish to create a new account, click the **Create User** button. If you edit or create a user, the following options appear:



Create New User

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

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

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

Folder: Choose the parent folder for the user. Files and folders on a higher level will be unavailable. Giving a user “root” allows access to all files on the device. To change the selected folder, click **Browse** and browse to the desired folder.

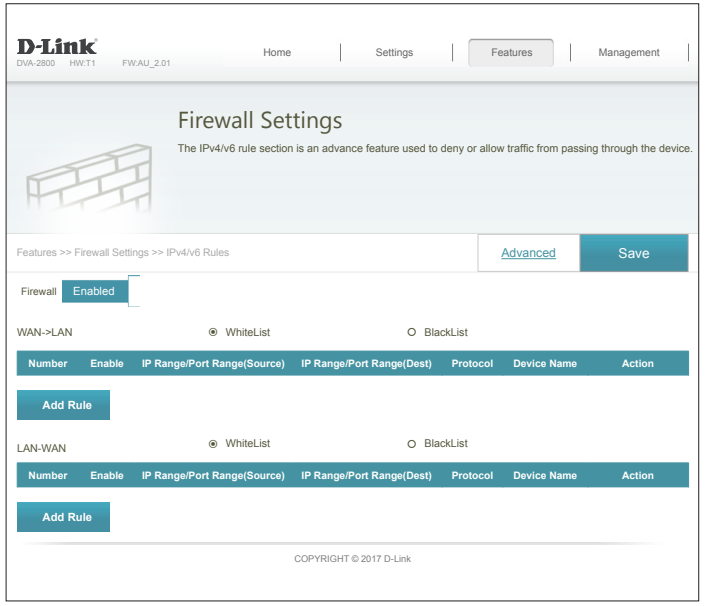
Click **OK** when you are done. The new user should be added to the list of user accounts. To save the new list, click **Save**. To return to the SharePort page, click **SharePort**.

Features
Firewall
IPv4/IPv6 Rules

The IPv4/IPv6 Rules page contains advanced options that let you set rules to restrict IP traffic across your network or from your network to the Internet. Click the **Enable/Disable** button to enable or disable the firewall. Disabling the firewall is not recommended.

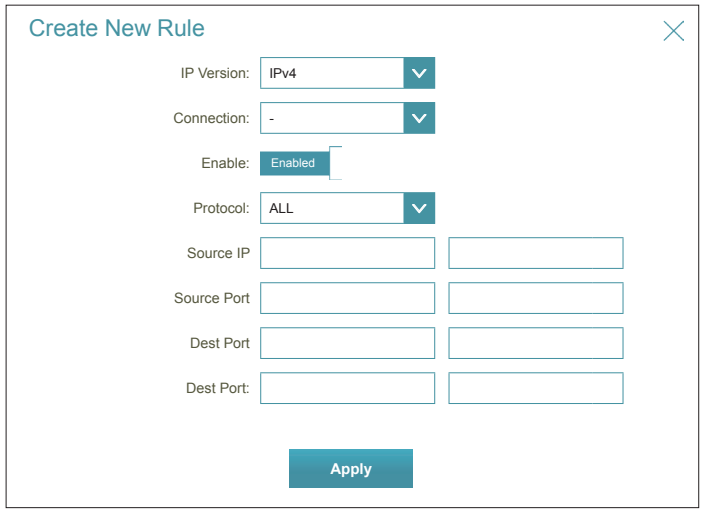
Use the drop-down menu to select whether you want to **WhiteList** to allow only the traffic specified on the White List, or **BlackList** to block traffic based on rules you create.

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 the corresponding 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:



Firewall: Select **Enable** to enable firewall features

Create New Rule



IP Version: Select either IPv4 or IPv6.

Connection: Select the interface to apply the firewall rule to.

Enable: Enable or disable this rule.

Source IP: Enter the source IP address range that the rule will apply to.

Source Port: Enter the source port to apply the rule to.

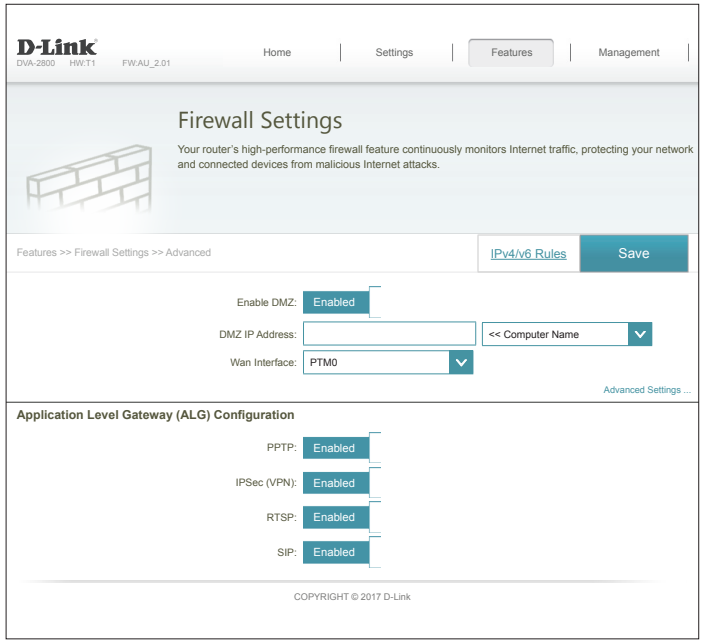
Dest IP: Enter the destination IP address range that the rule will apply to.

Dest Port: Enter the destination port to apply the rule to.

Click **Save** when you are done.

Advanced

Click **Advanced** from the **Firewall Settings** page to configure advanced firewall settings.



Enable DMZ: Enable or disable the Demilitarized Zone (DMZ). The DMZ directly exposes a single client directly to the Internet. Enabling DMZ is not recommended.

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

Wan Interface: Select an interface to which to apply the DMZ.

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 to 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 use Real Time Streaming Protocol (RTSP)to receive streaming media from the Internet.

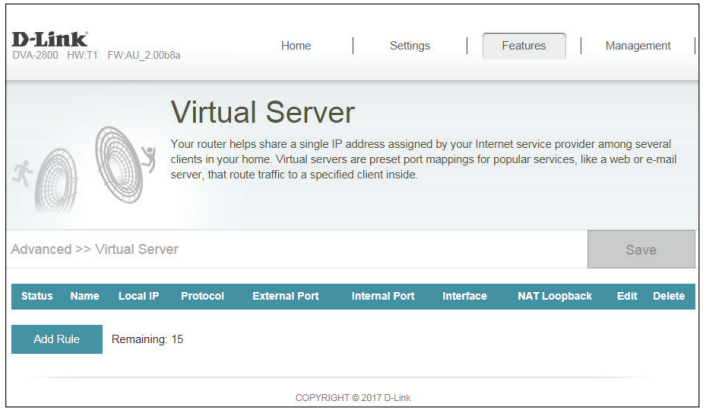
SIP: Allows devices and applications using VoIP (Voice over IP) to communicate across NAT. Some VoIP applications and devices have the ability to discover NAT devices and work around them. This ALG may interfere with the operation of such devices. If you are having trouble making VoIP calls, try turning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

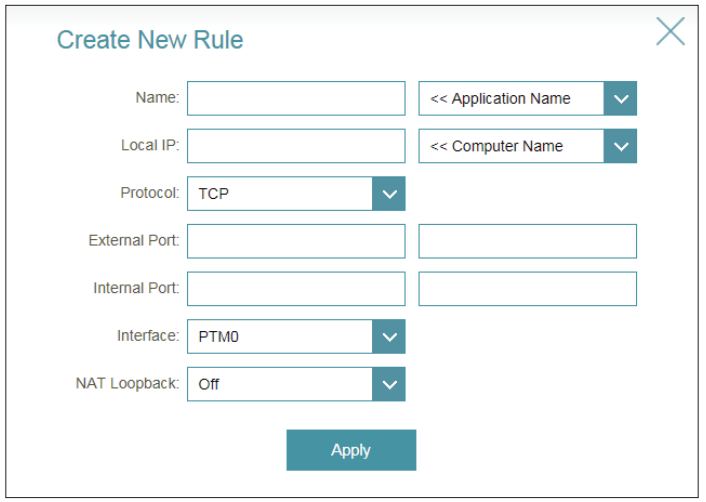
Click **Save** when you are done.

Virtual Server

In some cases, you may have two applications running on different devices which require the same public port. Virtual server allows you to remap a different external port to each device. To configure the virtual server, click **Virtual Server**.

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:





Create New Rule

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. If you wish to specify a port range, enter the end port in the second box.

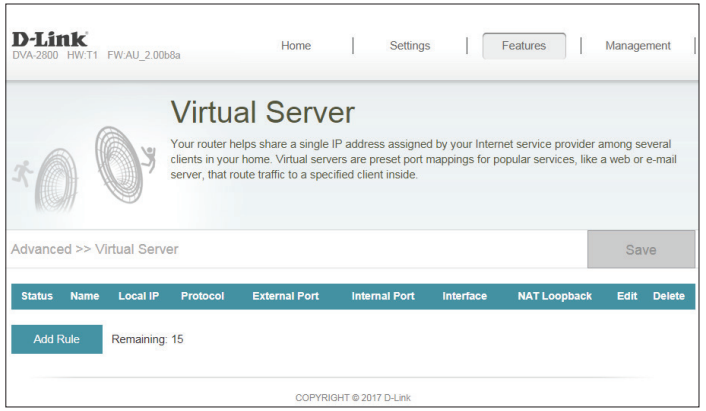
Internal Port: Enter the private port you want to open. If you wish to specify a port range, enter the end port in the second box.

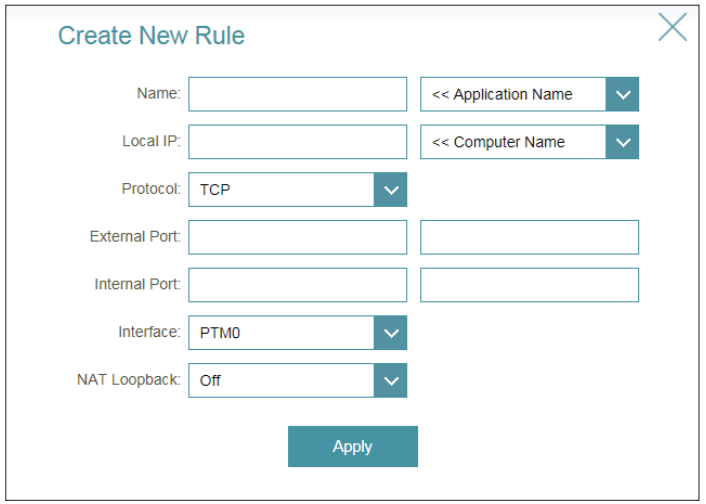
Interface Select an interface to apply your rule to or select **ALL**. If you select a PTM, ATM, or ETH interface, you will be prompted to configure NAT Loopback.

Virtual Server (Cont)

NAT Loopback: If you Select **On** to enable NAT Loopback. This feature allows you to access LAN clients, such as servers, using the router's public IP address and applies normal port-forwarding and filter rules. The default and recommended setting is **Off**.

Click **Save** when you are done.





Website Filter

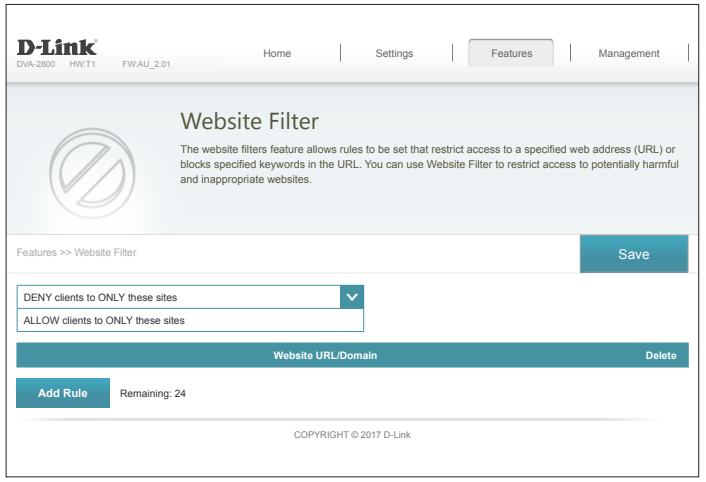
The website filter settings allow you to block access to certain web sites. You can either create a list of sites to block, or create a list of sites to allow (with all other sites being blocked).

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 computers 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 computers access to ONLY these sites** from the drop-down menu. All other sites will be blocked.

You may specify a maximum of fifteen web sites. To add a new site to the list, click **Create New Rule**. Next, under Website URL/Domain enter the URL or domain. If you wish to remove a rule, click on its trash can icon in the Delete column. If you wish to edit a rule, simply replace the URL or domain.

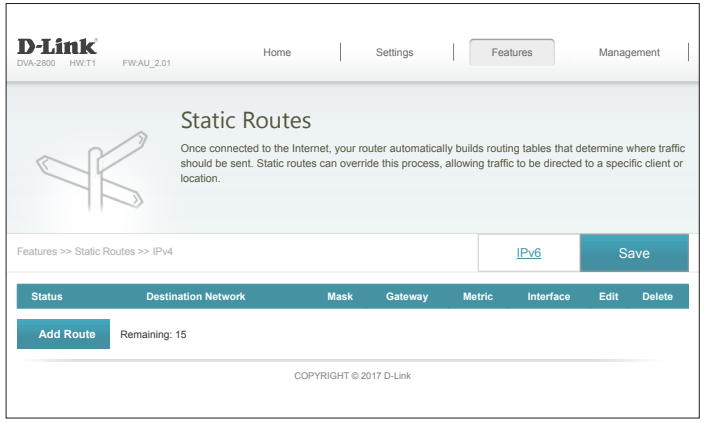
Click **Save** when you are done.



Static Route

IPv4

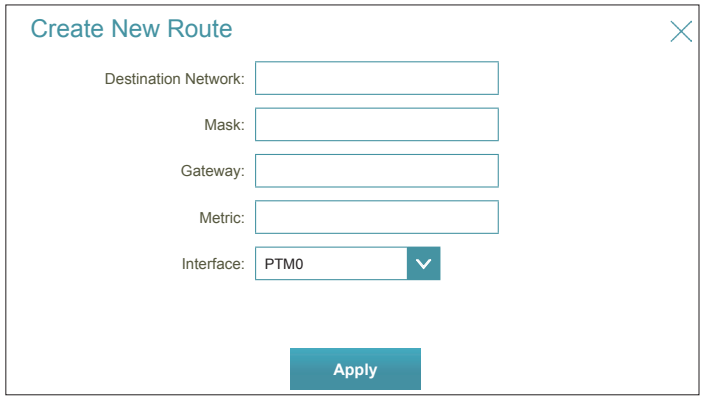
The Static Routes section allows you to define custom routes to control how data traffic is moved around your network.



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 **IPv4 on page 64**. 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:

Create New Rule



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

Mask: Enter the netmask of the route.

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

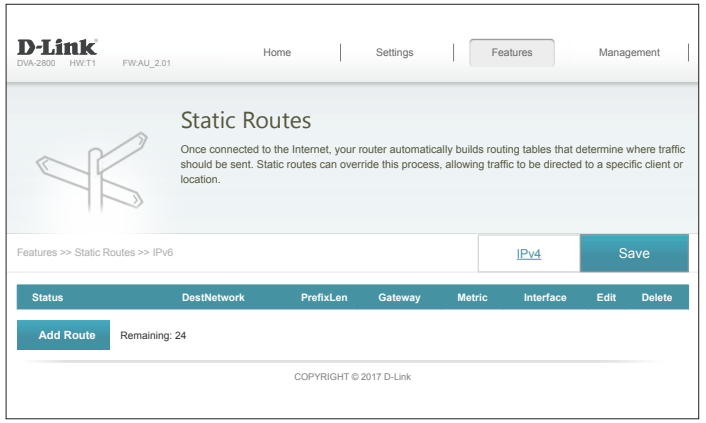
Metric: The route metric is a value from 1 to 16 that indicates the cost of using this route. A value 1 is the lowest cost and 16 is the highest cost.

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

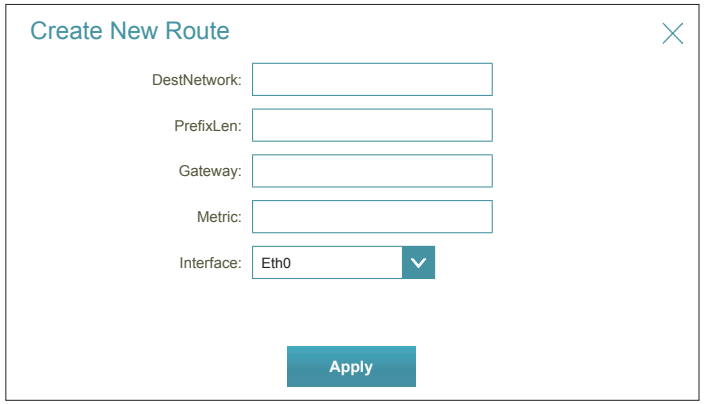
Click **Apply** and **Save** when you are done.

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:



Create New Rule

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

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

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

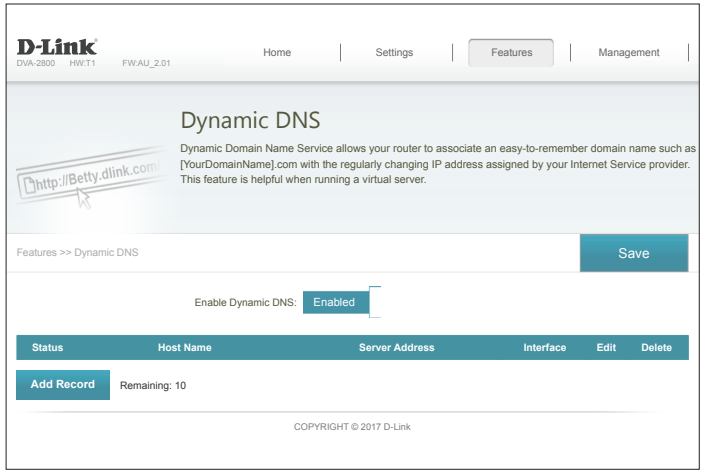
Metric: The route metric is a value from 1 to 16 that indicates the cost of using this route. A value 1 is the lowest cost and 16 is the highest cost.

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

Click **Apply** and **Save** when you are done.

Dynamic DNS

Most Internet Service Providers (ISPs) assign dynamic (changing) IP addresses. Using a Dynamic Domain Name Server (DDNS) service provider, people can enter your domain name in their web browser to connect to your server no matter what your IP address is. Owners of D-Link routers can use the dlinkdns service. In the Features menu on the bar on the top of the page, click **Dynamic DNS**.



Enable Dynamic DNS: Enabling dynamic DNS reveals further configuration options.

If you **Enabled Dynamic DNS**, click **Add Record** and configure the following options are available:

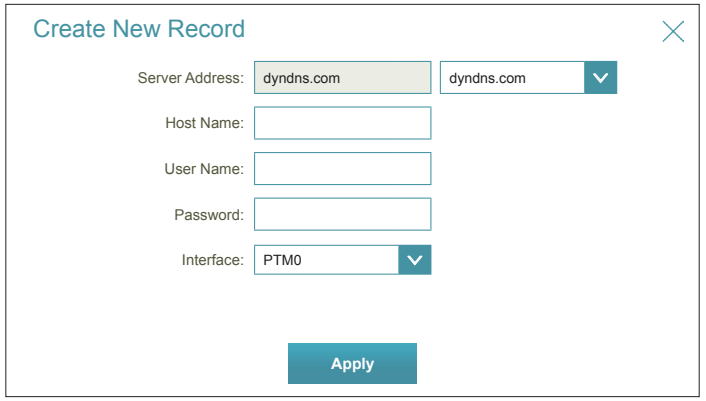
Server Address: Enter the address of your DDNS server, or select one from the drop-down menu.

Host Name: Enter the host name that you registered with your DDNS service provider.

User Name: Enter your DDNS username.

Password: Enter your DDNS password.

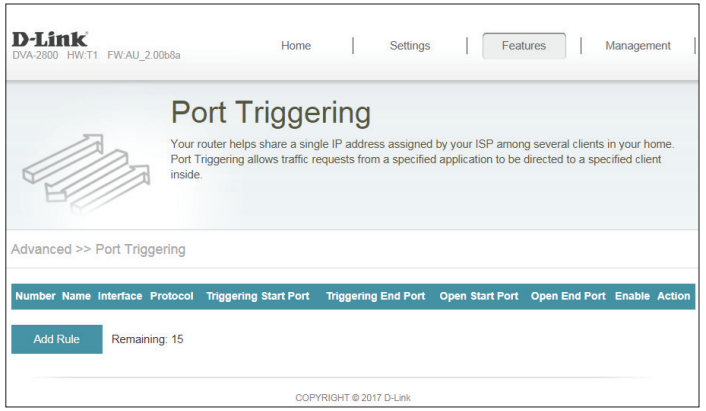
Interface: Select an interface from the drop-down menu to which to the DDNS rule will be applied.



Click **Apply** and **Save** when you are done.

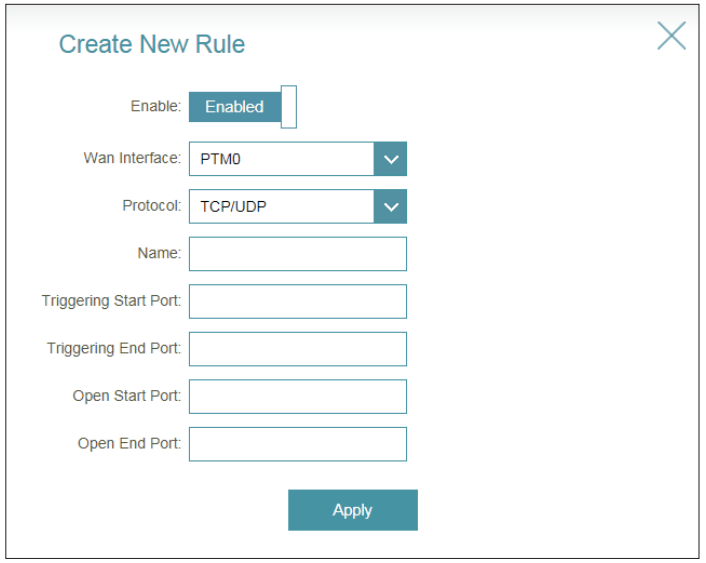
Port Triggering

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 Triggering**.



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

Create New Rule



Enable: Enable or disable the rule.

Name: Enter a name for the rule.

Wan Interface: Select the interface to apply the rule to.

Protocol: Select either **TCP**, **UDP**, or **TCP/UDP**.

Start Port: Enter the starting port range to forward to.

End Port: Enter the ending port range to forward to.

Open Start Port: Enter the starting port range to open.

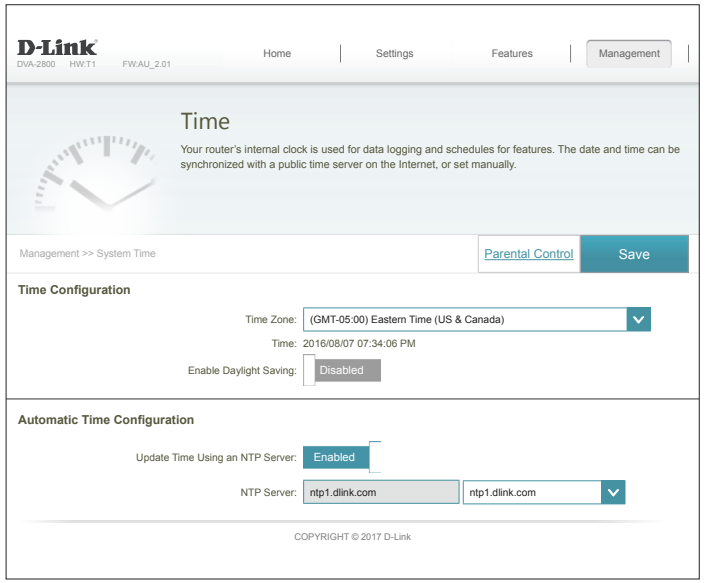
Open End Port: Enter the ending port range to open.

Click **Apply** when you are done.

Management
Time & Schedule
Time

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

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



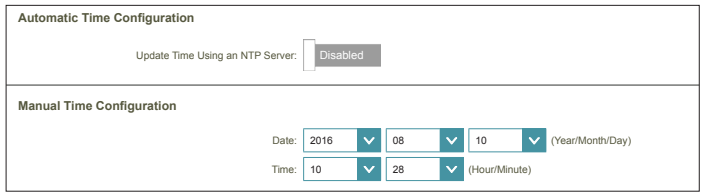
Time Configuration

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

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

Daylight Saving: Enable or disable daylight saving time.

Automatic Time Configuration



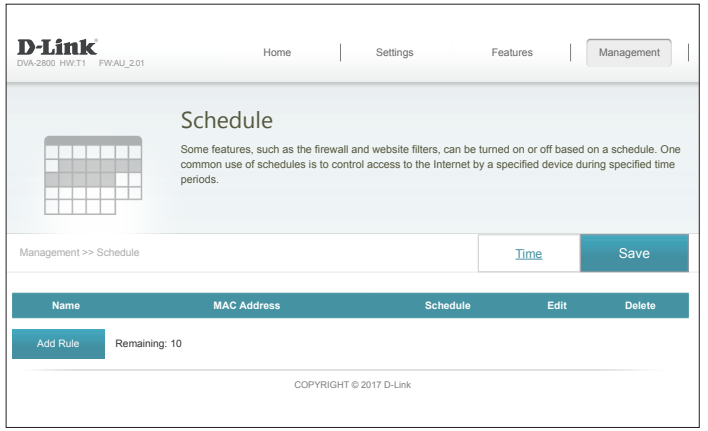
Update Time Using an NTP Server: Enable or disable to allow an NTP server on the Internet to synchronize the time and date with your router. If you enable this option, select an NTP server from the drop-down menu. To configure the router's time and date manually, disable this option and use the drop-down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

Click **Save** when you are done.

To configure and manage your schedules, click **Parental Control** and refer to **Parental Control / Schedule** on page **69**.

Parental Control / Schedule

Some router functions can are controlled by can be set according to a pre-configured schedule. To create, edit, or delete schedules click **Parental Control / Schedule**, from the **Time** page. To return to the Time page, click **Time**.



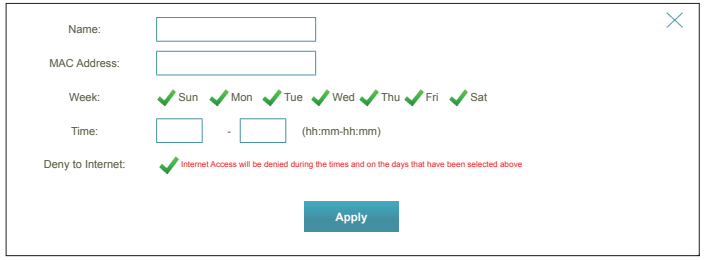
If you wish to create a new rule, click the **Add Rules** button. If you wish to edit a rule, click on the corresponding pencil icon in the Edit column. If you wish to remove a rule, click on the corresponding trash can icon in the Delete column. Click **Save** when you are done. If you edit or create a rule, the following screen will appear:

Enter the name of your schedule in the **Name** field.

Enter the **MAC address** of the PC you which to apply the rule to.

Select the days of the **Week** to apply the rule to.

Enter the **Time** to begin and start the rul.



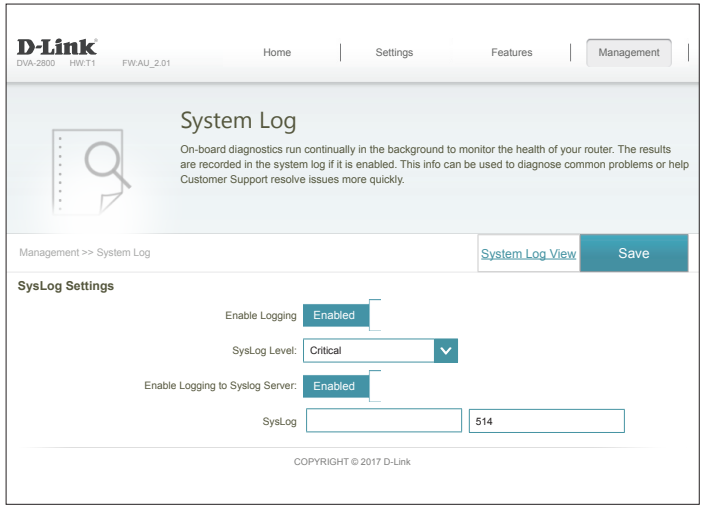
Select **Deny to Internet** if you wish to disable Internet access for this device at the specified times.

Click **Apply** and **Save** when you are done.

System Log

System Log

The router can keep 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**. To view the system log, click **System Log View**.



SysLog Settings

Enable Logging: Check this box to enable logging.

If Logging is **Enabled**:

SysLog Level: Select the level of logs to send to the SysLog.

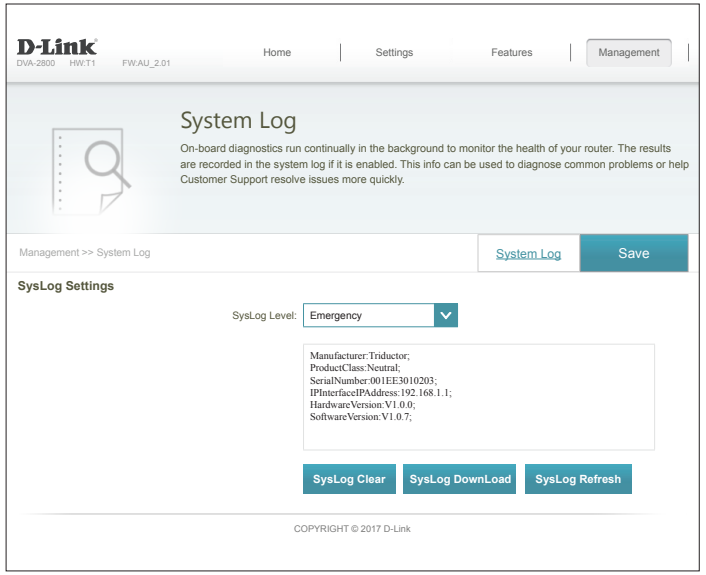
Enable Logging to Syslog Server: Check this box to send the router logs to a SysLog Server.

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

Syslog Server IP Address: Enter the IP address and port number of the SysLog server.

System Log View

The router can keep 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**. To view the system log, click **System Log View**.



SysLog Settings

SysLog Level: Select the level of logs to display.

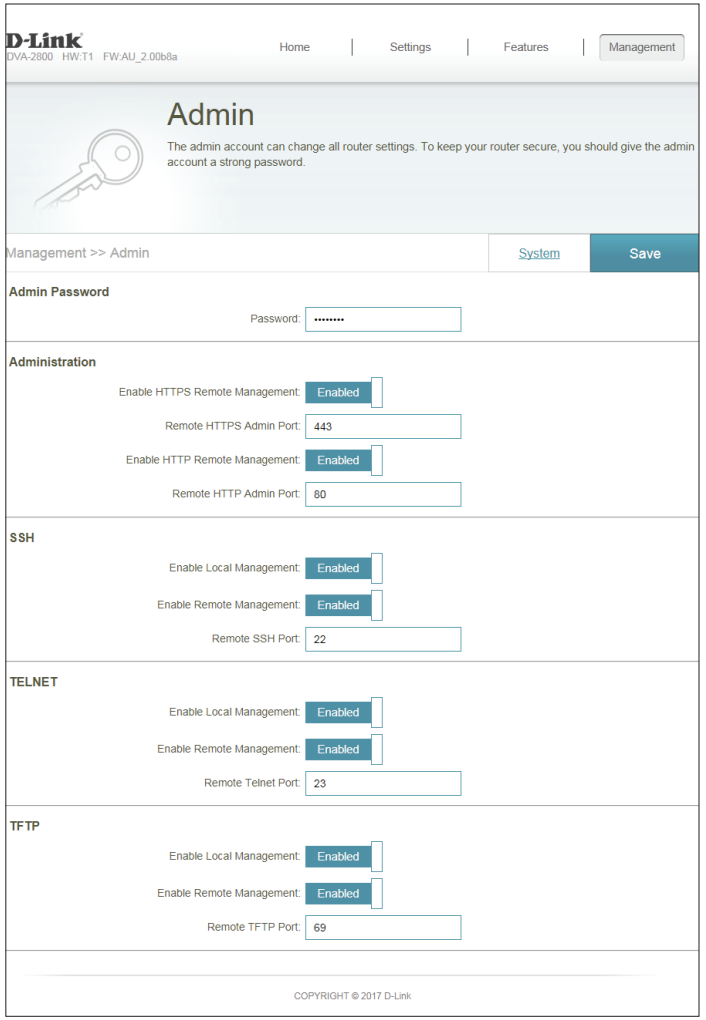
SysLog Clear: Click this button to clear the system log.

SysLog DownLoad: Click this button to download the system log.

SysLog Refresh: Click this button to refresh the system log.

Admin

This page will allow you to change the administrator (Admin) password and enable remote management. In the Management menu on the bar on the top of the page, click **Admin**. To load, save, reset settings, or reboot the router, click **System** and refer to **Parental Control / Schedule** on page **69.**



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.

Administration

Enable HTTPS Remote Management: Remote management allows the router to be configured from the Internet by a web browser. A password is still required to access the web management interface. Check to enable HTTPS to have your connection to the router encrypted with SSL.

Remote HTTPS Admin Port: The port number used to access the router is used in the URL. Example: https://x.x.x.x:8080 where x.x.x.x is the Internet IP address of the DSL-3590L and 8080 is the port used for the web management interface.

Enable HTTP Remote Management: Remote management allows the router to be configured from the Internet by a web browser. A password is still required to access the web management interface. With this setting off, the UI is only available from the local network.

Remote HTTP Admin Port: The port number used to access the router is used in the URL. Example: http://x.x.x.x:8080 where x.x.x.x is the Internet IP address of the DSL-3590L and 8080 is the port used for the web management interface.

Note: *If you enabled HTTPS Server and wish to access the router remotely over an encrypted connection, you must enter https:// at the beginning of the address.*

Admin (cont)

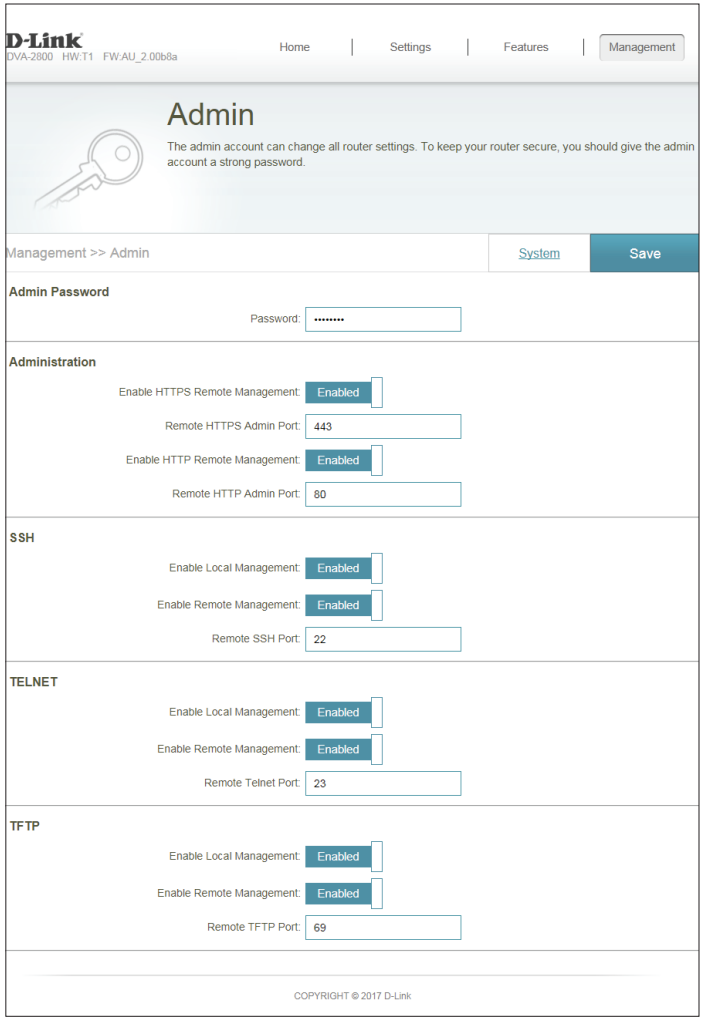
SSH / Telnet / TFTP

If you want to allow router setup via the SSH, telnet, or TFTP protocols, you can configure it here.

For each protocol, click **Enable Local Management** to allow administrators to configure the network from within, and/or **Enable Remote Management** to allow administrators to configure the network from outside.

If you enabled remote management, enter the remote port number that the router will use for that protocol.

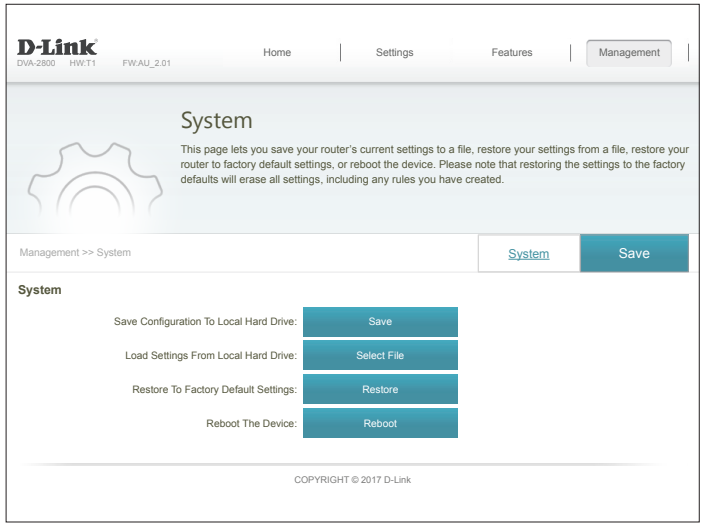
Click **Save** when you are done.



System

This page allows you to save the DVA-2800's current configuration, load a previously saved configuration, reset the router to its factory default settings, or reboot the DVA-2800.

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



System

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

Load Settings From Local Hard Drive: This option allows you to load a previously saved router configuration file. This will overwrite the router's current configuration.

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

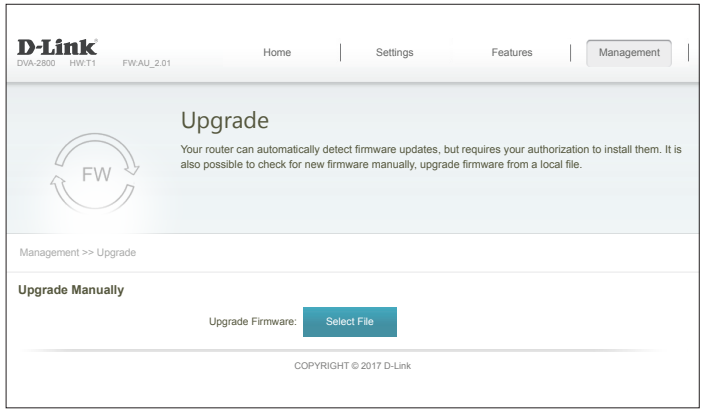
Reboot The Device: Click to reboot the router immediately.

Click **Save** when you are done.

Upgrade

This page allows you to upgrade the DVA-2800's firmware or language pack, either automatically or manually. To manually upgrade the firmware or language pack, you must first download the relevant file from **http://support.dlink.com**.

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



Upgrade Manually

Upgrade Firmware: If you wish to upgrade the firmware 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.

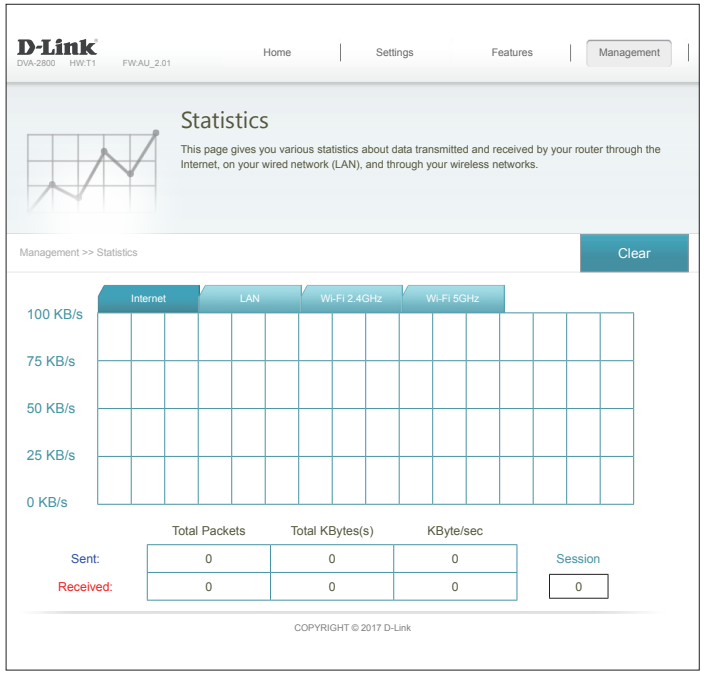
Statistics

On the **Statistics** page, you can view the amount of traffic that has passed 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** statistics by clicking on the respective tabs at the top. The graph will update in real time. To clear the information on the graph, click **Clear**.

The traffic counter will reset if the device is rebooted.



Connect a Wireless Client to your Router

WPS Button

The easiest 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, printers, and cameras will have a WPS button (or a software utility with WPS) that you can press to connect to the DVA-2800 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 DVA-2800 for about 1 second. The WPS LED on the front will start to blink.

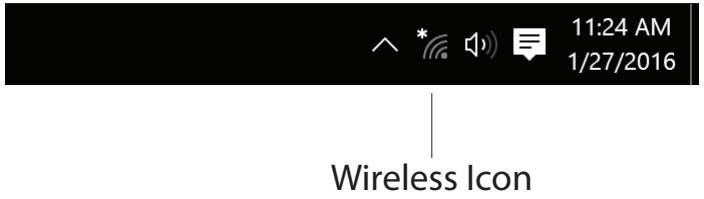
Step 2 - Within 2 minutes, press the WPS button on your wireless device (or launch the software utility and start the WPS process).

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

Windows® 10

When connecting to the DVA-2800 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.

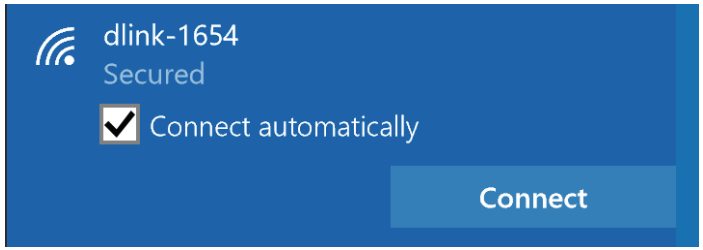
To join an existing network, locate the wireless network icon in the taskbar, next to the time display, and click on it.



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.

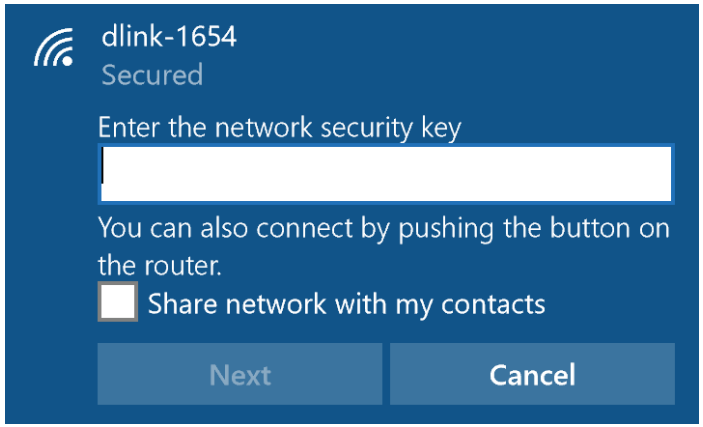
To connect to the SSID, click **Connect.**

To automatically connect to the router when your device 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.

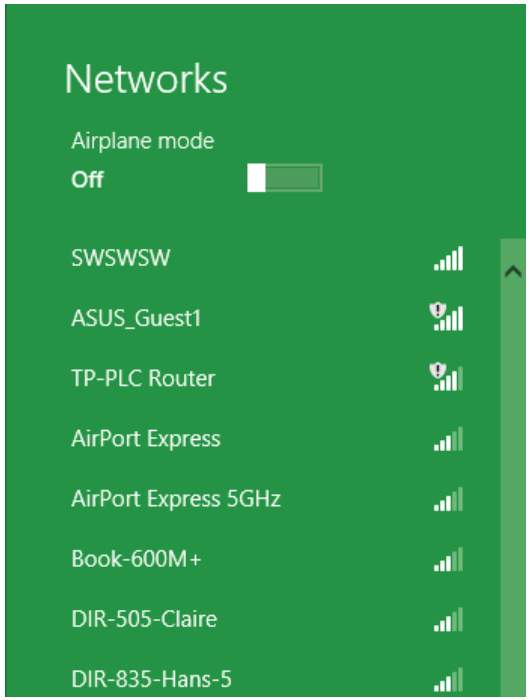


Windows® 8
WPA/WPA2

It is recommended that you enable wireless encryption (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.

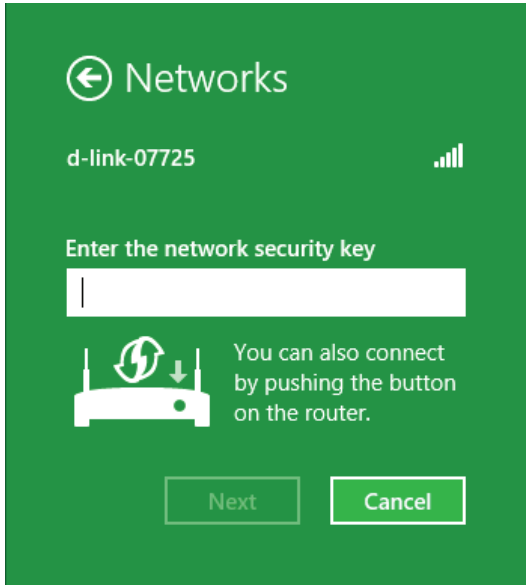
To join an existing network, locate the wireless network icon in the taskbar next to the time display.

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.

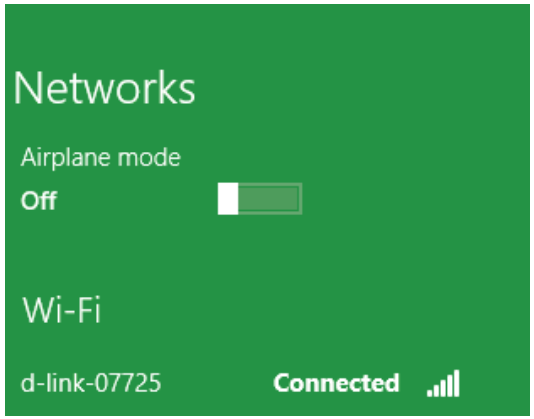


You will then be prompted to enter the network security key (Wi-Fi password) for the wireless network. Enter the password into the box and click **Next**.

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 encryption (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.

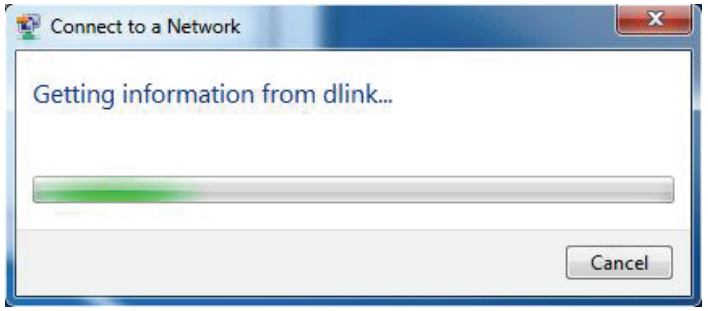
Click on the wireless icon in your system tray (lower-right corner).

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.

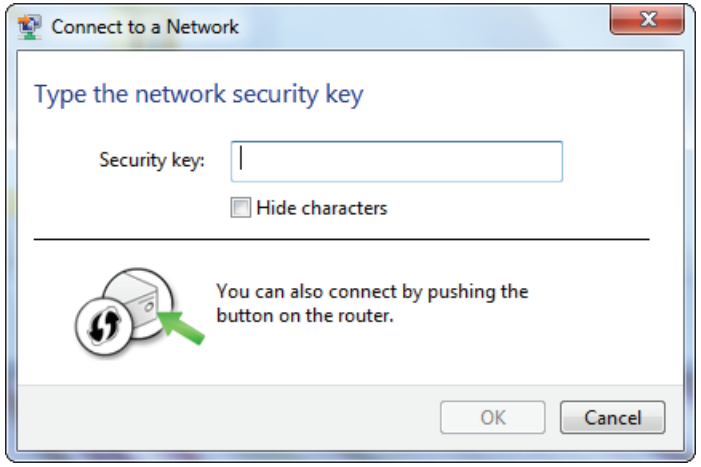
If you get a good signal but cannot access the Internet, check your TCP/IP settings for your wireless adapter. Refer to the Networking Basics section in this manual for more information.

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.



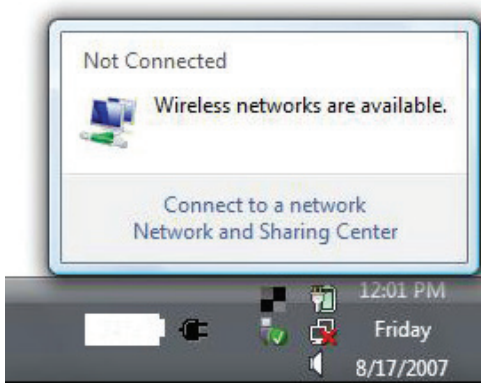
Windows Vista®

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.

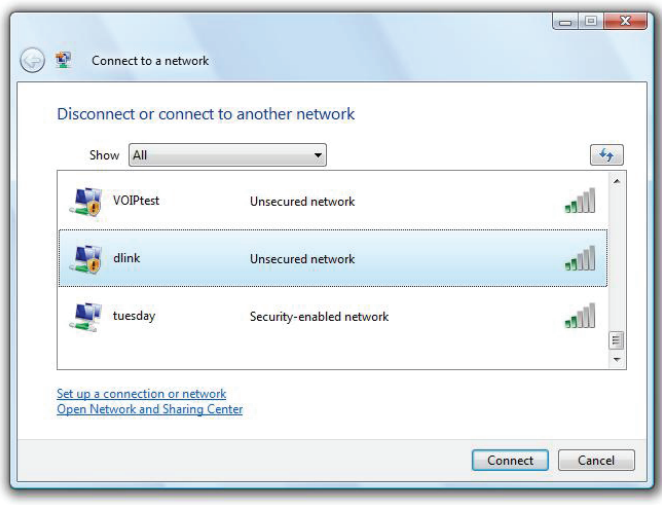
or

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.

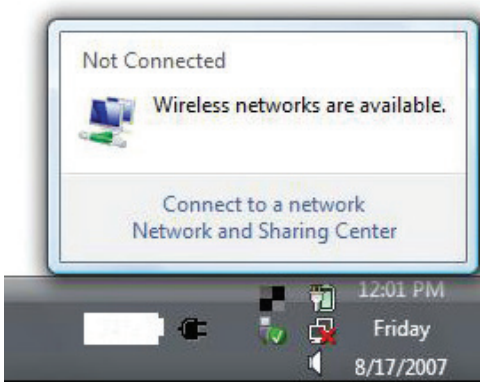
If you get a good signal but cannot access the Internet, check you TCP/IP settings for your wireless adapter. Refer to the **Networking Basics** section in this manual for more information.



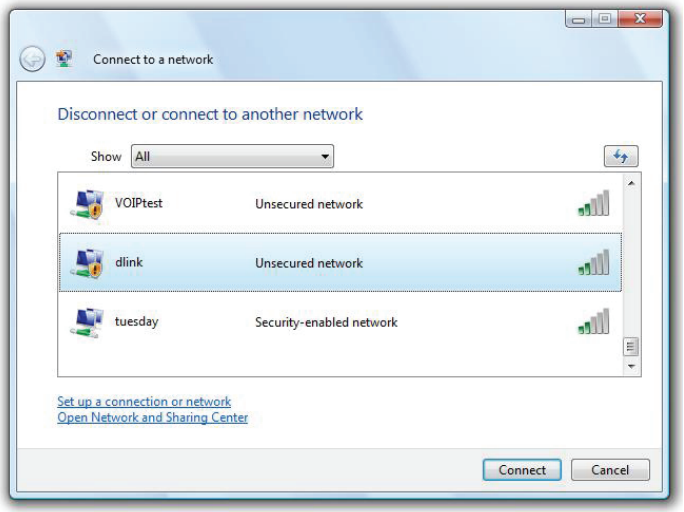
WPA/WPA2

It is recommended that you enable wireless encryption (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 DVA-2800. 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.

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

When entering the IP address of the D-Link router (**192.168.1.1** 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.

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 **192.168.1.1**. When logging in, leave the password box empty.

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

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

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

• Click on **Start** and then click **Run**.

• Windows® 95, 98, and Me users type in **command** (Windows® NT, 2000, XP, Vista®, and 7 users type in **cmd**) and press **Enter** (or click **OK**).

• Once the window opens, you'll need to do a special ping. Use the following syntax:

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

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

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

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

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

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

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

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

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

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

C:\>
```

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

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

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

• Open your browser, enter the IP address of your router (192.168.1.1) and click **OK**.

• Enter your username (admin) and password (sometimes 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 on 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 as become so popular in recent years that almost everyone is using it, whether it's for home, office, business, D-Link has a wireless solution for it.

Home Uses/Benefits

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

Small Office and Home Office Uses/Benefits

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

Where is wireless used?

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

Using a D-Link 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 DVA-2800 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

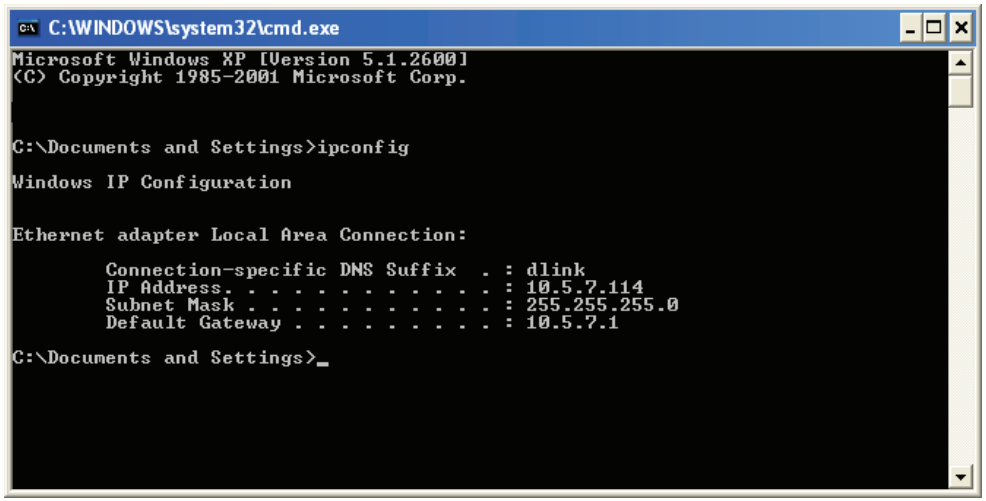
After you install your new D-Link adapter, by default, the TCP/IP settings should be set to obtain an IP address from a DHCP server (i.e. wireless router) automatically. To verify your IP address, please follow the steps below.

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

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

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

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



Statically Assign an IP address

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

Step 1

Windows® 7 - Click on **Start** > **Control Panel** > **Network and Internet** > **Network and Sharing Center**.

Windows Vista® - Click on **Start** > **Control Panel** > **Network and Internet** > **Network and Sharing Center** > **Manage Network Connections.**

Windows® XP -Click on **Start** > **Control Panel** > **Network Connections**.

Windows® 2000 - From the desktop, right-click **My Network Places** > **Properties**.

Step 2

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

Step 3

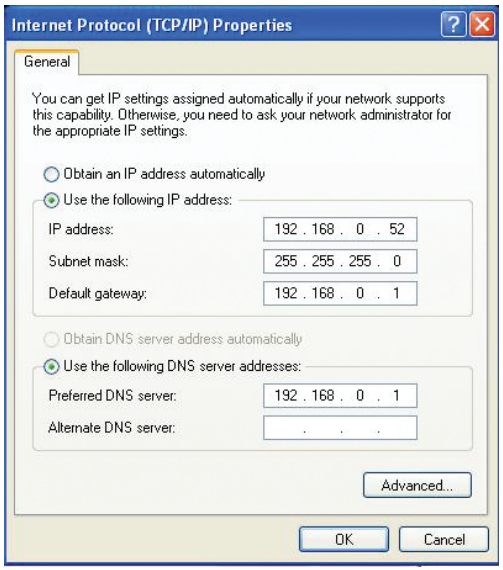
Highlight **Internet Protocol (TCP/IP)** and click **Properties**.

Step 4

Click **Use the following IP address** and enter an IP address that is on the same subnet as your network or the LAN IP address on your router.

Example: If the router´s LAN IP address is 192.168.1.1, make your IP address 192.168.1.X where X is a number between 2 and 99. Make sure that the number you choose is not in use on the network. Set the Default Gateway the same as the LAN IP address of your router (I.E. 192.168.1.1).

Set Primary DNS the same as the LAN IP address of your router (192.168.1.1). The Secondary DNS is not needed or you may enter a DNS server from your ISP.



Step 5

Click **OK** twice to save your settings.

Wireless Security

This section will show you the different levels of security you can use to protect your data from intruders. The DVA-2800 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

- One RJ-11 xDSL port
- 802.11 ac/n/g/b Wireless LAN
- One 10/100/1000 Gigabit WAN port
- Four 10/100/1000 Gigabit LAN ports
- Two USB 2.0 ports
- Two RJ-11 VoIP Ports

Antenna Types

- Three external fixed dual band MIMO antennas

Standards

- IEEE 802.11ac
- IEEE 802.11n
- IEEE 802.11g
- IEEE 802.11b
- IEEE 802.11a
- IEEE 802.3
- IEEE 802.3u
- IEEE 802.3ab
- IEEE 802.3az
- IEEE 802.3x

Security Features

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

Power

- Input: 100 to 240 V AC, 50/60 Hz
- Output: 12 V DC, 2 A

Operating Temperature

- 0 to 45 °C (32 to 113 °F)

Storage Temperature

- -20 to 70 °C (-4 to 158 °F)

Operating Humidity

- 10% to 95% maximum (non-condensing)

Certifications

- CE
- RCM

Dimensions

- 205 mm (8.07 inches)
- 176 mm (6.93 inches)
- 65 mm (2.55 inches)

Weight

- 523 grams (1.15 pounds)

Note:

- Maximum wireless signal rate derived from IEEE Standard 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.

- Frequency Range varies depending on country's regulation.

Regulatory Statements

CE

	Frequency Band(s) **Frequenzband** **Fréquence bande(s)** **Bandas de Frecuencia** **Frequenza/e** **Frequentie(s)**	**Max. Output Power (EIRP)** **Max. Output Power** **Consommation d'énergie max.** **Potencia máxima de Salida** **Potenza max. Output** **Max. Output Power**
5 G	5.15 – 5.25 GHz	200 mW
	5.25 – 5.35 GHz	200 mW
	5.47 – 5.725 GHz	1 W
2.4 G	2.4 – 2.4835 GHz	100 mW

European Community Declaration of Conformity:

Česky [Czech]	Tímto D-Link Corporation prohlašuje, že tento produkt, jeho příslušenství a software jsou v souladu se směrnicí 2014/53/EU. Celý text ES prohlášení o shodě vydaného EU a o firmwaru produktu lze stáhnout na stránkách k produktu www.dlink.com.
Dansk [Danish]	D-Link Corporation erklærer herved, at dette produkt, tilbehør og software er i overensstemmelse med direktiv 2014/53/EU. Den fulde tekst i EU-overensstemmelseserklæringen og produktfirmware kan wnloades fra produktsiden hos www.dlink.com.
Deutsch [German]	Hiermit erklärt die D-Link Corporation, dass dieses Produkt, das Zubehör und die Software der Richtlinie 2014/53/EU entsprechen. Der vollständige Text der Konformitätserklärung der Europäischen Gemeinschaft sowie die Firmware zum Produkt stehen Ihnen zum Herunterladen von der Produktseite im Internet auf www.dlink.com zur Verfügung.
Eesti [Estonian]	Käesolevaga kinnitab D-Link Corporation, et see toode, tarvikud ja tarkvara on kooskõlas direktiiviga 2014/53/EL. Euroopa Liidu vastavusdeklaratsiooni täistekst ja toote püsivara on allalaadimiseks saadaval tootelehel www.dlink.com.
English	Hereby, D-Link Corporation, declares that this product, accessories, and software are in compliance with directive 2014/53/EU. The full text of the EU Declaration of Conformity and product firmware are available for download from the product page at www.dlink.com
Español [Spanish]	Por la presente, D-Link Corporation declara que este producto, accesorios y software cumplen con las directivas 2014/53/UE. El texto completo de la declaración de conformidad de la UE y el firmware del producto están disponibles y se pueden descargar desde la página del producto en www.dlink.com.
Ελληνική [Greek]	Με την παρούσα, η D-Link Corporation δηλώνει ότι αυτό το προϊόν, τα αξεσουάρ και το λογισμικό συμμορφώνονται με την Οδηγία 2014/53/ΕΕ. Το πλήρες κείμενο της δήλωσης συμμόρφωσης της ΕΕ και το υλικολογισμικό του προϊόντος είναι διαθέσιμα για λήψη από τη σελίδα του προϊόντος στην τοποθεσία www.dlink.com.
Français [French]	Par les présentes, D-Link Corporation déclare que ce produit, ces accessoires et ce logiciel sont conformes aux directives 2014/53/UE.Le texte complet de la déclaration de conformité de l'UE et le icroprogramme du produit sont disponibles au téléchargement sur la page des produits à www.dlink.com.
Italiano [Italian]	Con la presente, D-Link Corporation dichiara che questo prodotto, i relativi accessori e il software sono conformi alla direttiva 2014/53/UE. Il testo completo della dichiarazione di conformità UE e il firmware del prodotto sono disponibili per il download dalla pagina del prodotto su www.dlink.com.

Latviski [Latvian]	Ar šo uzņēmums D-Link Corporation apliecina, ka šis produkts, piederumi un programmatūra atbilst direktīvai 2014/53/ES. ES atbilstības deklarācijas pilno tekstu un produkta aparātprogrammatūru var lejupielādēt attiecīgā produkta lapā vietnē www.dlink.com.
Lietuvių [Lithuanian]	Šiuo dokumentu „D-Link Corporation“ pareiškia, kad šis gaminys, priedai ir programinė įranga atitinka direktyvą 2014/53/ES. Visą ES atitikties deklaracijos tekstą ir gaminio programinę aparatinę įrangą galima atsisiųsti iš gaminio puslapio adresu www.dlink.com.
Nederlands [Dutch]	Hierbij verklaart D-Link Corporation dat dit product, accessoires en software voldoen aan de richtlijnen 2014/53/EU. De volledige tekst van de EU conformiteitsverklaring en productfirmware is beschikbaar voor download van de productpagina op www.dlink.com.
Malti [Maltese]	Bil-preżenti, D-Link Corporation tiddikjara li dan il-prodott, l-aċċessorji, u s-software huma konformi mad-Direttiva 2014/53/UE. Tista' tniżżel it-test sħiħ tad-dikjarazzjoni ta' konformità tal-UE u l-firmware tal-prodott mill-paġna tal-prodott fuq www.dlink.com.
Magyar [Hungarian]	Ezennel a D-Link Corporation kijelenti, hogy a jelen termék, annak tartozékai és szoftvere megfelelnek a 2014/53/EU sz. rendeletek rendelkezéseinek. Az EU Megfelelőségi nyilatkozat teljes szövege és a termék firmware a termék oldaláról tölthető le a www.dlink.com címen.
Polski [Polish]	D-Link Corporation niniejszym oświadcza, że ten produkt, akcesoria oraz oprogramowanie są zgodne z dyrektywami 2014/53/EU. Pełen tekst deklaracji zgodności UE oraz oprogramowanie sprzętowe do produktu można pobrać na stronie produktu w witrynie www.dlink.com.
Português [Portuguese]	Desta forma, a D-Link Corporation declara que este produto, os acessórios e o software estão em conformidade com a diretiva 2014/53/UE. O texto completo da declaração de conformidade da UE e do firmware
Slovensko[Slovenian]	Podjetje D-Link Corporation s tem izjavlja, da so ta izdelek, dodatna oprema in programska oprema skladni z direktivami 2014/53/EU. Celotno besedilo izjave o skladnosti EU in vdelana programska oprema sta na voljo za prenos na strani izdelka na www.dlink.com.
Slovensky [Slovak]	Spoločnosť D-Link týmto vyhlasuje, že tento produkt, príslušenstvo a softvér sú v súlade so smernicou 214/53/EÚ. Úplné znenie vyhlásenia EÚ o zhode a firmvéri produktu sú k dispozícii na prevzatie zo stránky produktu www.dlink.com.
Suomi [Finnish]	D-Link Corporation täten vakuuttaa, että tämä tuote, lisävarusteet ja ohjelmisto ovat direktiivin 2014/53/EU vaatimusten mukaisia. Täydellinen EU-vaatimustenmukaisuusvakuutus samoin kuin tuotteen laiteohjelmisto ovat ladattavissa osoitteesta www.dlink.com.
Svenska[Swedish]	D-Link Corporation försäkrar härmed att denna produkt, tillbehör och programvara överensstämmer med direktiv 2014/53/EU. Hela texten med EU-försäkran om överensstämmelse och produkt-firmware kan hämtas från produktsidan på www.dlink.com.

Íslenska [Icelandic]	Hér með lýsir D-Link Corporation því yfir að þessi vara, fylgihlutir og hugbúnaður eru í samræmi við tilskipun 2014/53/EB. Sækja má ESB-samræmisyfirlýsinguna í heild sinni og fastbúnað vörunnar af vefsíðu vörunnar á www.dlink.com.
Norsk [Norwegian]	Herved erklærer D-Link Corporation at dette produktet, tilbehøret og programvaren er i samsvar med direktivet 2014/53/EU. Den fullstendige teksten i EU-erklæring om samsvar og produktets fastvare er tilgjengelig for nedlasting fra produktsiden på www.dlink.com.

Warning Statement:

The power outlet should be near the device and easily accessible.

NOTICE OF WIRELESS RADIO LAN USAGE IN THE EUROPEAN COMMUNITY (FOR WIRELESS PRODUCT ONLY):

- This device is restricted to indoor use when operated in the European Community using channels in the 5.15-5.35 GHz band to reduce the potential for interference.
- This device is a 2.4 GHz wideband transmission system (transceiver), intended for use in all EU member states and EFTA countries. This equipment may be operated in AL, AD, BE, BG, DK, DE, FI, FR, GR, GW, IS, IT, HR, LI, LU, MT, MK, MD, MC, NL, NO, AT, PL, PT, RO, SM, SE, RS, SK, ES, CI, HU, and CY.

Usage Notes:

- To remain in conformance with European National spectrum usage regulations, frequency and channel limitations will be applied on the products according to the country where the equipment will be deployed.
- This device is restricted from functioning in Ad-hoc mode while operating in 5 GHz. Ad-hoc mode is direct peer-to-peer communication between two client devices without an Access Point.
- Access points will support DFS (Dynamic Frequency Selection) and TPC (Transmit Power Control) functionality as required when operating in 5 GHz band within the EU.
- Please refer to the product manual or datasheet to check whether your product uses 2.4 GHz and/or 5 GHz wireless.

HINWEIS ZUR VERWENDUNG VON DRAHTLOS-NETZWERK (WLAN) IN DER EUROPÄISCHEN GEMEINSCHAFT (NUR FÜR EIN DRAHTLOSES PRODUKT)

- Der Betrieb dieses Geräts in der Europäischen Gemeinschaft bei Nutzung von Kanälen im 5,15-5,35 GHz Frequenzband ist ausschließlich auf Innenräume beschränkt, um das Interferenzpotential zu reduzieren.
- Bei diesem Gerät handelt es sich um ein zum Einsatz in allen EU-Mitgliedsstaaten und in EFTA-Ländern - ausgenommen Frankreich. Der Betrieb dieses Geräts ist in den folgenden Ländern erlaubt: AL, AD, BE, BG, DK, DE, FI, FR, GR, GW, IS, IT, HR, LI, LU, MT, MK, MD, MC, NL, NO, AT, PL, PT, RO, SM, SE, RS, SK, ES, CI, HU, CY

Gebrauchshinweise:

- Um den in Europa geltenden nationalen Vorschriften zum Nutzen des Funkspektrums weiterhin zu entsprechen, werden Frequenz und Kanalbeschränkungen, dem jeweiligen Land, in dem das Gerät zum Einsatz kommt, entsprechend, auf die Produkte angewandt.
- Die Funktionalität im Ad-hoc-Modus bei Betrieb auf 5 GHz ist für dieses Gerät eingeschränkt. Bei dem Ad-hoc-Modus handelt es sich um eine Peer-to-Peer-Kommunikation zwischen zwei Client-Geräten ohneeinen Access Point.
- Access Points unterstützen die Funktionen DFS (Dynamic Frequency Selection) und TPC (Transmit Power Control) wie erforderlich bei Betrieb auf 5 GHz innerhalb der EU.
- Bitte schlagen Sie im Handbuch oder Datenblatt nach nach, ob Ihr Gerät eine 2,4 GHz und / oder 5 GHz Verbindung nutzt.

AVIS CONCERNANT L'UTILISATION DE LA RADIO SANS FIL LAN DANS LA COMMUNAUTÉ EUROPÉENNE (UNIQUEMENT POUR LES PRODUITS SANS FIL)

- Cet appareil est limité à un usage intérieur lorsqu'il est utilisé dans la Communauté européenne sur les canaux de la bande de 5,15 à 5,35 GHz afin de réduire les risques d'interférences.
- Cet appareil est un système de transmission à large bande (émetteur-récepteur) de 2,4 GHz, destiné à être utilisé dans tous les États-membres de l'UE et les pays de l'AELE. Cet équipement peut être utilisé dans les pays suivants : AL, AD, BE , BG, DK, DE, FI, FR, GR, GW, IS, IT, HR, LI, LU, MT , MK, MD, MC, NL, NO, AT, PL, PT, RO, SM, SE, RS, SK, ES, CI, HU, CY

Notes d'utilisation:

- Pour rester en conformité avec la réglementation nationale européenne en matière d'utilisation du spectre, des limites de fréquence et de canal seront appliquées aux produits selon le pays où l'équipement sera déployé.
- Cet appareil ne peut pas utiliser le mode Ad-hoc lorsqu'il fonctionne dans la bande de 5 GHz. Le mode Adhoc fournit une communication directe pair à pair entre deux périphériques clients sans point d'accès.
- Les points d'accès prendront en charge les fonctionnalités DFS (Dynamic Frequency Selection) et TPC (Transmit Power Control) au besoin lors du fonctionnement dans la bande de 5 GHz au sein de l'UE.
- Merci de vous référer au guide d'utilisation ou de la fiche technique afin de vérifier si votre produit utilise 2.4 GHz et/ou 5 GHz sans fil.

AVISO DE USO DE LA LAN DE RADIO INALÁMBRICA EN LA COMUNIDAD EUROPEA (SOLO PARA EL PRODUCTO INALÁMBRICO)

- El uso de este dispositivo está restringido a interiores cuando funciona en la Comunidad Europea utilizando canales en la banda de 5,15-5,35 GHz, para reducir la posibilidad de interferencias.
- Este dispositivo es un sistema de transmisión (transceptor) de banda ancha de 2,4 GHz, pensado para su uso en todos los estados miembros de la UE y en los países de la AELC. Este equipo se puede utilizar en AL, AD, BE, BG, DK, DE, FI, FR, GR, GW, IS, IT, HR, LI, LU, MT, MK, MD, MC, NL, NO, AT, PL, PT, RO, SM, SE, RS, SK, ES, CI, HU, CY

Notas de uso:

- Para seguir cumpliendo las normas europeas de uso del espectro nacional, se aplicarán limitaciones de frecuencia y canal en los productos en función del país en el que se pondrá en funcionamiento el equipo.
- Este dispositivo tiene restringido el funcionamiento en modo Ad-hoc mientras funcione a 5 GHz. El modo Ad-hoc es la comunicación directa de igual a igual entre dos dispositivos cliente sin un punto de acceso.
- Los puntos de acceso admitirán la funcionalidad DFS (Selección de frecuencia dinámica) y TPC (Control de la potencia de transmisión) si es necesario cuando funcionan a 5 GHz dentro de la UE.
- Por favor compruebe el manual o la ficha de producto para comprobar si el producto utiliza las bandas inalámbricas de 2.4 GHz y/o la de 5 GHz.

AVVISO PER L'USO DI LAN RADIO WIRELESS NELLA COMUNITÀ EUROPEA (SOLO PER PRODOTTI WIRELESS)

- Nella Comunità europea, l'uso di questo dispositivo è limitato esclusivamente agli ambienti interni sui canali compresi nella banda da 5,15 a 5,35 GHz al fine di ridurre potenziali interferenze. Questo dispositivo è un sistema di trasmissione a banda larga a 2,4 GHz (ricetrasmittente), destinato all'uso in tutti gli stati membri dell'Unione europea e nei paesi EFTA.
- Questo dispositivo può essere utilizzato in AL, AD, BE, BG, DK, DE, FI, FR, GR, GW, IS, IT, HR, LI, LU, MT, MK, MD, MC, NL, NO, AT, PL, PT, RO, SM, SE, RS, SK, ES, CI, HU, CY

Note per l'uso

- Al fine di mantenere la conformità alle normative nazionali europee per l'uso dello spettro di frequenze, saranno applicate limitazioni sulle frequenze e sui canali per il prodotto in conformità alle normative del paese in cui il dispositivo viene utilizzato.
- Questo dispositivo non può essere attivato in modalità Ad-hoc durante il funzionamento a 5 GHz. La modalità Ad-hoc è una comunicazione diretta peer-to-peer fra due dispositivi client senza un punto di accesso.
- I punti di accesso supportano le funzionalità DFS (Dynamic Frequency Selection) e TPC (Transmit Power Control) richieste per operare a 5 GHz nell'Unione europea.
- Ti invitiamo a fare riferimento al manuale del prodotto o alla scheda tecnica per verificare se il tuo prodotto utilizza le frequenze 2,4 GHz e/o 5 GHz.

KENNISGEVING VAN DRAADLOOS RADIO LAN-GEBRUIK IN DE EUROPESE GEMEENSCHAP (ALLEEN VOOR DRAADLOOS PRODUCT)

- Dit toestel is beperkt tot gebruik binnenshuis wanneer het wordt gebruikt in de Europese Gemeenschap gebruik makend van kanalen in de 5.15-5.35 GHz band om de kans op interferentie te beperken.
- Dit toestel is een 2.4 GHz breedband transmissiesysteem (transceiver) dat bedoeld is voor gebruik in alle EU lidstaten en EFTA landen. Deze uitrusting mag gebruikt worden in AL, AD, BE, BG, DK, DE, FI, FR, GR, GW, IS, IT, HR, LI, LU, MT, MK, MD, MC, NL, NO, AT, PL, PT, RO, SM, SE, RS, SK, ES, CI, HU, CY

Gebruiksaanwijzingen:

- Om de gebruiksvoorschriften van het Europese Nationale spectrum na te leven, zullen frequentie- en kanaalbeperkingen worden toegepast op de producten volgens het land waar de uitrusting gebruikt zal worden.
- Dit toestel kan niet functioneren in Ad-hoc mode wanneer het gebruikt wordt in 5 GHz. Ad-hoc mode is directe peer-to-peer communicatie tussen twee klantenapparaten zonder een toegangspunt.
- Toegangspunten ondersteunen DFS (Dynamic Frequency Selection) en TPC (Transmit Power Control) functionaliteit zoals vereist bij gebruik in 5 GHz binnen de EU.
- Raadpleeg de handleiding of de datasheet om te controleren of uw product gebruik maakt van 2.4 GHz en/of 5 GHz.

SAFETY INSTRUCTIONS

The following general safety guidelines are provided to help ensure your own personal safety and protect your product from potential damage. Remember to consult the product user instructions for more details.

- Static electricity can be harmful to electronic components. Discharge static electricity from your body (i.e. touching grounded bare metal) before touching the product.
- Do not attempt to service the product and never disassemble the product. For some products with a user replaceable battery, please read and follow the instructions in the user manual.
- Do not spill food or liquid on your product and never push any objects into the openings of your product.
- Do not use this product near water, areas with high humidity, or condensation unless the product is specifically rated for outdoor application.
- Keep the product away from radiators and other heat sources.
- Always unplug the product from mains power before cleaning and use a dry lint free cloth only.

SICHERHEITSVORSCHRIFTEN

Die folgenden allgemeinen Sicherheitsvorschriften dienen als Hilfe zur Gewährleistung Ihrer eigenen Sicherheit und zum Schutz Ihres Produkts. Weitere Details finden Sie in den Benutzeranleitungen zum Produkt.

- Statische Elektrizität kann elektronischen Komponenten schaden. Um Schäden durch statische Aufladung zu vermeiden, leiten Sie elektrostatische Ladungen von Ihrem Körper ab,
  (z. B. durch Berühren eines geerdeten blanken Metallteils), bevor Sie das Produkt berühren.
- Unterlassen Sie jeden Versuch, das Produkt zu warten, und versuchen Sie nicht, es in seine Bestandteile zu zerlegen. Für einige Produkte mit austauschbaren Akkus lesen Sie bitte das Benutzerhandbuch und befolgen Sie die dort beschriebenen Anleitungen.
- Vermeiden Sie, dass Speisen oder Flüssigkeiten auf Ihr Produkt gelangen, und stecken Sie keine Gegenstände in die Gehäuseschlitze oder -öffnungen Ihres Produkts.
- Verwenden Sie dieses Produkt nicht in unmittelbarer Nähe von Wasser und nicht in Bereichen mit hoher Luftfeuchtigkeit oder Kondensation, es sei denn, es ist speziell zur Nutzung in Außenbereichen vorgesehen und eingestuft.
- Halten Sie das Produkt von Heizkörpern und anderen Quellen fern, die Wärme erzeugen.
- Trennen Sie das Produkt immer von der Stromzufuhr, bevor Sie es reinigen und verwenden Sie dazu ausschließlich ein trockenes fusselfreies Tuch.

CONSIGNES DE SÉCURITÉ

Les consignes générales de sécurité ci-après sont fournies afin d'assurer votre sécurité personnelle et de protéger le produit d'éventuels dommages. Veuillez consulter les consignes d'utilisation du produit pour plus de détails.

- L'électricité statique peut endommager les composants électroniques. Déchargez l'électricité statique de votre corps (en touchant un objet en métal relié à la terre par exemple) avant de toucher le produit.
- N'essayez pas d'intervenir sur le produit et ne le démontez jamais. Pour certains produits contenant une batterie remplaçable par l'utilisateur, veuillez lire et suivre les consignes contenues dans le manuel d'utilisation.
- Ne renversez pas d'aliments ou de liquide sur le produit et n'insérez jamais d'objets dans les orifices.
- N'utilisez pas ce produit à proximité d'un point d'eau, de zones très humides ou de condensation sauf si le produit a été spécifiquement conçu pour une application extérieure.
- Éloignez le produit des radiateurs et autres sources de chaleur.
- Débranchez toujours le produit de l'alimentation avant de le nettoyer et utilisez uniquement un chiffon sec non pelucheux.

INSTRUCCIONES DE SEGURIDAD

Las siguientes directrices de seguridad general se facilitan para ayudarle a garantizar su propia seguridad personal y para proteger el producto frente a posibles daños. No olvide consultar las instrucciones del usuario del producto para obtener más información.

- La electricidad estática puede resultar nociva para los componentes electrónicos. Descargue la electricidad estática de su cuerpo (p. ej., tocando algún metal sin revestimiento conectado a tierra) antes de tocar el producto.
- No intente realizar el mantenimiento del producto ni lo desmonte nunca. Para algunos productos con batería reemplazable por el usuario, lea y siga las instrucciones del manual de usuario.
- No derrame comida o líquidos sobre el producto y nunca deje que caigan objetos en las aberturas del mismo.
- No utilice este producto cerca del agua, en zonas con humedad o condensación elevadas a menos que el producto esté clasificado específicamente para aplicación en exteriores.
- Mantenga el producto alejado de los radiadores y de otras fuentes de calor.
- Desenchufe siempre el producto de la alimentación de red antes de limpiarlo y utilice solo un paño seco sin pelusa

ISTRUZIONI PER LA SICUREZZA

Le seguenti linee guida sulla sicurezza sono fornite per contribuire a garantire la sicurezza personale degli utenti e a proteggere il prodotto da potenziali danni. Per maggiori dettagli, consultare le istruzioni per l'utente del prodotto.

- L'elettricità statica può essere pericolosa per i componenti elettronici. Scaricare l'elettricità statica dal corpo (ad esempio toccando una parte metallica collegata a terra) prima di toccare il prodotto.
- Non cercare di riparare il prodotto e non smontarlo mai. Per alcuni prodotti dotati di batteria sostituibile dall'utente, leggere e seguire le istruzioni riportate nel manuale dell'utente.
- Non versare cibi o liquidi sul prodotto e non spingere mai alcun oggetto nelle aperture del prodotto.
- Non usare questo prodotto vicino all'acqua, in aree con elevato grado di umidità o soggette a condensa a meno che il prodotto non sia specificatamente approvato per uso in ambienti esterni.
- Tenere il prodotto lontano da caloriferi e altre fonti di calore.
- Scollegare sempre il prodotto dalla presa elettrica prima di pulirlo e usare solo un panno asciutto che non lasci filacce.

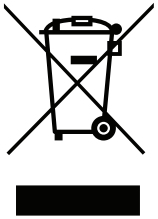
VEILIGHEIDSINFORMATIE

De volgende algemene veiligheidsinformatie werd verstrekt om uw eigen persoonlijke veiligheid te waarborgen en uw product te beschermen tegen mogelijke schade. Denk eraan om de gebruikersinstructies van het product te raadplegen voor meer informatie.

- Statische elektriciteit kan schadelijk zijn voor elektronische componenten. Ontlaad de statische elektriciteit van uw lichaam (d.w.z. het aanraken van geaard bloot metaal) voordat uhet product aanraakt.
- U mag nooit proberen het product te onderhouden en u mag het product nooit demonteren. Voor sommige producten met door de gebruiker te vervangen batterij, dient u de instructies in de gebruikershandleiding te lezen en te volgen.
- Mors geen voedsel of vloeistof op uw product en u mag nooit voorwerpen in de openingen van uw product duwen.
- Gebruik dit product niet in de buurt van water, gebieden met hoge vochtigheid of condensatie, tenzij het product specifiek geclassificeerd is voor gebruik buitenshuis.
- Houd het product uit de buurt van radiators en andere warmtebronnen.
- U dient het product steeds los te koppelen van de stroom voordat u het reinigt en gebruik uitsluitend een droge pluisvrije doek

Disposing and Recycling Your Product

ENGLISH **EN**



This symbol on the product or packaging means that according to local laws and regulations this product should be not be disposed of in household waste but sent for recycling. Please take it to a collection point designated by your local authorities once it has reached the end of its life, some will accept products for free. By recycling the product and its packaging in this manner you help to conserve the environment and protect human health.

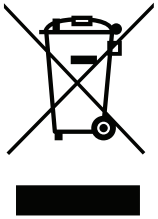
D-Link and the Environment

At D-Link, we understand and are committed to reducing any impact our operations and products may have on the environment. To minimise this impact D-Link designs and builds its products to be as environmentally friendly as possible, by using recyclable, low toxic materials in both products and packaging.

D-Link recommends that you always switch off or unplug your D-Link products when they are not in use. By doing so you will help to save energy and reduce CO2 emissions.

To learn more about our environmentally responsible products and packaging please visit **www.dlinkgreen.com**.

DEUTSCH **DE**



Dieses Symbol auf dem Produkt oder der Verpackung weist darauf hin, dass dieses Produkt gemäß bestehender örtlicher Gesetze und Vorschriften nicht über den normalen Hausmüll entsorgt werden sollte, sondern einer Wiederverwertung zuzuführen ist. Bringen Sie es bitte zu einer von Ihrer Kommunalbehörde entsprechend amtlich ausgewiesenen Sammelstelle, sobald das Produkt das Ende seiner Nutzungsdauer erreicht hat. Für die Annahme solcher Produkte erheben einige dieser Stellen keine Gebühren. Durch ein auf diese Weise durchgeführtes Recycling des Produkts und seiner Verpackung helfen Sie, die Umwelt zu schonen und die menschliche Gesundheit zu schützen.

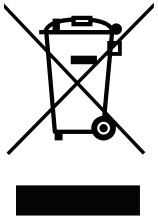
D-Link und die Umwelt

D-Link ist sich den möglichen Auswirkungen seiner Geschäftstätigkeiten und seiner Produkte auf die Umwelt bewusst und fühlt sich verpflichtet, diese entsprechend zu mindern. Zu diesem Zweck entwickelt und stellt D-Link seine Produkte mit dem Ziel größtmöglicher Umweltfreundlichkeit her und verwendet wiederverwertbare, schadstoffarme Materialien bei Produktherstellung und Verpackung.

D-Link empfiehlt, Ihre Produkte von D-Link, wenn nicht in Gebrauch, immer auszuschalten oder vom Netz zu nehmen. Auf diese Weise helfen Sie, Energie zu sparen und CO2-Emissionen zu reduzieren.

Wenn Sie mehr über unsere umweltgerechten Produkte und Verpackungen wissen möchten, finden Sie entsprechende Informationen im Internet unter **www.dlinkgreen.com**.

FRANÇAIS FR



Ce symbole apposé sur le produit ou son emballage signifie que, conformément aux lois et règlementations locales, ce produit ne doit pas être éliminé avec les déchets domestiques mais recyclé. Veuillez le rapporter à un point de collecte prévu à cet effet par les autorités locales; certains accepteront vos produits gratuitement. En recyclant le produit et son emballage de cette manière, vous aidez à préserver l'environnement et à protéger la santé de l'homme.

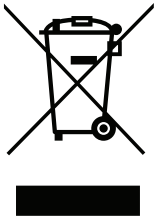
D-Link et l'environnement

Chez D-Link, nous sommes conscients de l'impact de nos opérations et produits sur l'environnement et nous engageons à le réduire. Pour limiter cet impact, D-Link conçoit et fabrique ses produits de manière aussi écologique que possible, en utilisant des matériaux recyclables et faiblement toxiques, tant dans ses produits que ses emballages.

D-Link recommande de toujours éteindre ou débrancher vos produits D-Link lorsque vous ne les utilisez pas. Vous réaliserez ainsi des économies d'énergie et réduirez vos émissions de CO2.

Pour en savoir plus sur les produits et emballages respectueux de l'environnement, veuillez consulter le **www.dlinkgreen.com**.

ESPAÑOL ES



Este símbolo en el producto o el embalaje significa que, de acuerdo con la legislación y la normativa local, este producto no se debe desechar en la basura doméstica sino que se debe reciclar. Llévelo a un punto de recogida designado por las autoridades locales una vez que ha llegado al fin de su vida útil; algunos de ellos aceptan recogerlos de forma gratuita. Al reciclar el producto y su embalaje de esta forma, contribuye a preservar el medio ambiente y a proteger la salud de los seres humanos.

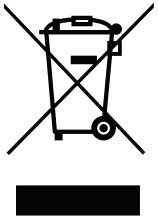
D-Link y el medio ambiente

En D-Link, comprendemos y estamos comprometidos con la reducción del impacto que puedan tener nuestras actividades y nuestros productos en el medio ambiente. Para reducir este impacto, D-Link diseña y fabrica sus productos para que sean lo más ecológicos posible, utilizando materiales reciclables y de baja toxicidad tanto en los productos como en el embalaje.

D-Link recomienda apagar o desenchufar los productos D-Link cuando no se estén utilizando. Al hacerlo, contribuirá a ahorrar energía y a reducir las emisiones de CO2.

Para obtener más información acerca de nuestros productos y embalajes ecológicos, visite el sitio **www.dlinkgreen.com**.

ITALIANO IT



La presenza di questo simbolo sul prodotto o sulla confezione del prodotto indica che, in conformità alle leggi e alle normative locali, questo prodotto non deve essere smaltito nei rifiuti domestici, ma avviato al riciclo. Una volta terminato il ciclo di vita utile, portare il prodotto presso un punto di raccolta indicato dalle autorità locali. Alcuni questi punti di raccolta accettano gratuitamente i prodotti da riciclare. Scegliendo di riciclare il prodotto e il relativo imballaggio, si contribuirà a preservare l'ambiente e a salvaguardare la salute umana.

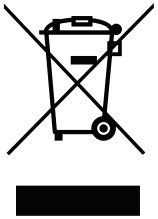
D-Link e l'ambiente

D-Link cerca da sempre di ridurre l'impatto ambientale dei propri stabilimenti e dei propri prodotti. Allo scopo di ridurre al minimo tale impatto, D-Link progetta e realizza i propri prodotti in modo che rispettino il più possibile l'ambiente, utilizzando materiali riciclabili a basso tasso di tossicità sia per i prodotti che per gli imballaggi.

D-Link raccomanda di spegnere sempre i prodotti D-Link o di scollegarne la spina quando non vengono utilizzati. In questo modo si contribuirà a risparmiare energia e a ridurre le emissioni di anidride carbonica.

Per ulteriori informazioni sui prodotti e sugli imballaggi D-Link a ridotto impatto ambientale, visitate il sito all'indirizzo **www.dlinkgreen.com**.

NEDERLANDS NL



Dit symbool op het product of de verpakking betekent dat dit product volgens de plaatselijke wetgeving niet mag worden weggegooid met het huishoudelijk afval, maar voor recyclage moeten worden ingeleverd. Zodra het product het einde van de levensduur heeft bereikt, dient u het naar een inzamelpunt te brengen dat hiertoe werd aangeduid door uw plaatselijke autoriteiten, sommige autoriteiten accepteren producten zonder dat u hiervoor dient te betalen. Door het product en de verpakking op deze manier te recyclen helpt u het milieu en de gezondheid van de mens te beschermen.

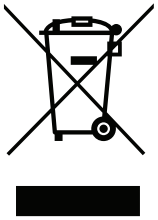
D-Link en het milieu

Bij D-Link spannen we ons in om de impact van onze handelingen en producten op het milieu te beperken. Om deze impact te beperken, ontwerpt en bouwt D-Link zijn producten zo milieuvriendelijk mogelijk, door het gebruik van recycleerbare producten met lage toxiciteit in product en verpakking.

D-Link raadt aan om steeds uw D-Link producten uit te schakelen of uit de stekker te halen wanneer u ze niet gebruikt. Door dit te doen bespaart u energie en beperkt u de CO2-emissies.

Breng een bezoek aan **www.dlinkgreen.com** voor meer informatie over onze milieuverantwoorde producten en verpakkingen.

POLSKI PL



Ten symbol umieszczony na produkcie lub opakowaniu oznacza, że zgodnie z miejscowym prawem i lokalnymi przepisami niniejszego produktu nie wolno wyrzucać jak odpady czy śmieci z gospodarstwa domowego, lecz należy go poddać procesowi recyklingu. Po zakończeniu użytkowania produktu, niektóre odpowiednie do tego celu podmioty przyjmą takie produkty nieodpłatnie, dlatego prosimy dostarczyć go do punktu zbiórki wskazanego przez lokalne władze. Poprzez proces recyklingu i dzięki takiemu postępowaniu z produktem oraz jego opakowaniem, pomogą Państwo chronić środowisko naturalne i dbać o ludzkie zdrowie.

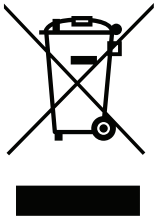
D-Link i środowisko

D-Link podchodzimy w sposób świadomy do ochrony otoczenia oraz jesteśmy zaangażowani w zmniejszanie wpływu naszych działań i produktów na środowisko naturalne. W celu zminimalizowania takiego wpływu firma D-Link konstruuje i wytwarza swoje produkty w taki sposób, aby były one jak najbardziej przyjazne środowisku, stosując do tych celów materiały nadające się do powtórnego wykorzystania, charakteryzujące się małą toksycznością zarówno w przypadku samych produktów jak i opakowań.

Firma D-Link zaleca, aby Państwo zawsze prawidłowo wyłączali z użytku swoje produkty D-Link, gdy nie są one wykorzystywane. Postępując w ten sposób pozwalają Państwo oszczędzać energię i zmniejszać emisje CO2.

Aby dowiedzieć się więcej na temat produktów i opakowań mających wpływ na środowisko prosimy zapoznać się ze stroną Internetową **www.dlinkgreen.com**.

ČESKY CZ



Tento symbol na výrobku nebo jeho obalu znamená, že podle místně platných předpisů se výrobek nesmí vyhazovat do komunálního odpadu, ale odeslat k recyklaci. Až výrobek doslouží, odneste jej prosím na sběrné místo určené místními úřady k tomuto účelu. Některá sběrná místa přijímají výrobky zdarma. Recyklací výrobku i obalu pomáháte chránit životní prostředí i lidské zdraví.

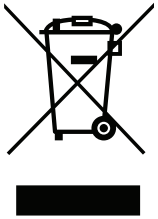
D-Link a životní prostředí

Ve společnosti D-Link jsme si vědomi vlivu našich provozů a výrobků na životní prostředí a snažíme se o minimalizaci těchto vlivů. Proto své výrobky navrhujeme a vyrábíme tak, aby byly co nejekologičtější, a ve výrobcích i obalech používáme recyklovatelné a nízkotoxické materiály.

Společnost D-Link doporučuje, abyste své výrobky značky D-Link vypnuli nebo vytáhli ze zásuvky vždy, když je nepoužíváte. Pomůžete tak šetřit energii a snížit emise CO2.

Více informací o našich ekologických výrobcích a obalech najdete na adrese **www.dlinkgreen.com**.

MAGYAR **HU**



Ez a szimbólum a terméken vagy a csomagoláson azt jelenti, hogy a helyi törvényeknek és szabályoknak megfelelően ez a termék nem semmisíthető meg a háztartási hulladékkal együtt, hanem újrahasznosításra kell küldeni. Kérjük, hogy a termék élettartamának elteltét követően vigye azt a helyi hatóság által kijelölt gyűjtőhelyre. A termékek egyes helyeken ingyen elhelyezhetők. A termék és a csomagolás újrahasznosításával segíti védeni a környezetet és az emberek egészségét.

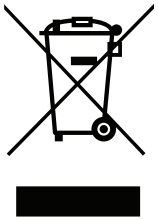
A D-Link és a környezet

A D-Linknél megértjük és elkötelezettek vagyunk a műveleteink és termékeink környezetre gyakorolt hatásainak csökkentésére. Az ezen hatás csökkentése érdekében a D-Link a lehető leginkább környezetbarát termékeket tervez és gyárt azáltal, hogy újrahasznosítható, alacsony károsanyag-tartalmú termékeket gyárt és csomagolásokat alkalmaz.

A D-Link azt javasolja, hogy mindig kapcsolja ki vagy húzza ki a D-Link termékeket a tápforrásból, ha nem használja azokat. Ezzel segít az energia megtakarításában és a széndioxid kibocsátásának csökkentésében.

Környezetbarát termékeinkről és csomagolásainkról további információkat a **www.dlinkgreen.com** weboldalon tudhat meg.

NORSK **NO**



Dette symbolet på produktet eller forpakningen betyr at dette produktet ifølge lokale lover og forskrifter ikke skal kastes sammen med husholdningsavfall, men leveres inn til gjenvinning. Vennligst ta det til et innsamlingssted anvist av lokale myndigheter når det er kommet til slutten av levetiden. Noen steder aksepteres produkter uten avgift. Ved på denne måten å gjenvinne produktet og forpakningen hjelper du å verne miljøet og beskytte folks helse.

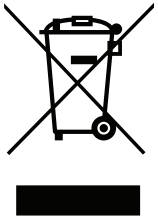
D-Link og miljøet

Hos D-Link forstår vi oss på og er forpliktet til å minske innvirkningen som vår drift og våre produkter kan ha på miljøet. For å minimalisere denne innvirkningen designer og lager D-Link produkter som er så miljøvennlig som mulig, ved å bruke resirkulerbare, lav-toksiske materialer både i produktene og forpakningen.

D-Link anbefaler at du alltid slår av eller frakobler D-Link-produkter når de ikke er i bruk. Ved å gjøre dette hjelper du å spare energi og å redusere CO2-utslipp.

For mer informasjon angående våre miljøansvarlige produkter og forpakninger kan du gå til **www.dlinkgreen.com**.

DANSK DK



Dette symbol på produktet eller emballagen betyder, at dette produkt i henhold til lokale love og regler ikke må bortskaffes som husholdningsaffald, mens skal sendes til genbrug. Indlever produktet til et indsamlingssted som angivet af de lokale myndigheder, når det er nået til slutningen af dets levetid. I nogle tilfælde vil produktet blive modtaget gratis. Ved at indlevere produktet og dets emballage til genbrug på denne måde bidrager du til at beskytte miljøet og den menneskelige sundhed.

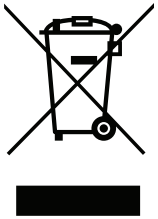
D-Link og miljøet

Hos D-Link forstår vi og bestræber os på at reducere enhver indvirkning, som vores aktiviteter og produkter kan have på miljøet. For at minimere denne indvirkning designer og producerer D-Link sine produkter, så de er så miljøvenlige som muligt, ved at bruge genanvendelige materialer med lavt giftighedsniveau i både produkter og emballage.

D-Link anbefaler, at du altid slukker eller frakobler dine D-Link-produkter, når de ikke er i brug. Ved at gøre det bidrager du til at spare energi og reducere CO2-udledningerne.

Du kan finde flere oplysninger om vores miljømæssigt ansvarlige produkter og emballage på **www.dlinkgreen.com**.

SUOMI FI



Tämä symboli tuotteen pakkauksessa tarkoittaa, että paikallisten lakien ja säännösten mukaisesti tätä tuotetta ei pidä hävittää yleisen kotitalousjätteen seassa vaan se tulee toimittaa kierrätettäväksi. Kun tuote on elinkaarensa päässä, toimita se lähimpään viranomaisten hyväksymään kierrätyspisteeseen. Kierrättämällä käytetyn tuotteen ja sen pakkauksen autat tukemaan sekä ympäristön että ihmisten terveyttä ja hyvinvointia.

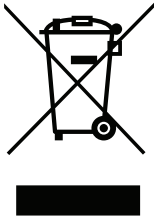
D-Link ja ympäristö

D-Link ymmärtää ympäristönsuojelun tärkeyden ja on sitoutunut vähentämään tuotteistaan ja niiden valmistuksesta ympäristölle mahdollisesti aiheutuvia haittavaikutuksia. Nämä negatiiviset vaikutukset minimoidakseen D-Link suunnittelee ja valmistaa tuotteensa mahdollisimman ympäristöystävällisiksi käyttämällä kierrätettäviä, alhaisia pitoisuuksia haitallisia aineita sisältäviä materiaaleja sekä tuotteissaan että niiden pakkauksissa.

Suosittelemme, että irrotat D-Link-tuotteesi virtalähteestä tai sammutat ne aina, kun ne eivät ole käytössä. Toimimalla näin autat säästämään energiaa ja vähentämään hiilidioksiidipäästöjä.

Lue lisää ympäristöystävällisistä D-Link-tuotteista ja pakkauksistamme osoitteesta **www.dlinkgreen.com**.

SVENSKA SE



Den här symbolen på produkten eller förpackningen betyder att produkten enligt lokala lagar och föreskrifter inte skall kastas i hushållssoporna utan i stället återvinnas. Ta den vid slutet av dess livslängd till en av din lokala myndighet utsedd uppsamlingsplats, vissa accepterar produkter utan kostnad. Genom att på detta sätt återvinna produkten och förpackningen hjälper du till att bevara miljön och skydda människors hälsa.

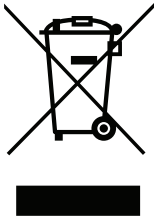
D-Link och miljön

På D-Link förstår vi och är fast beslutna att minska den påverkan våra verksamheter och produkter kan ha på miljön. För att minska denna påverkan utformar och bygger D-Link sina produkter för att de ska vara så miljövänliga som möjligt, genom att använda återvinningsbara material med låg gifthalt i både produkter och förpackningar.

D-Link rekommenderar att du alltid stänger av eller kopplar ur dina D-Link produkter när du inte använder dem. Genom att göra detta hjälper du till att spara energi och minska utsläpp av koldioxid.

För mer information om våra miljöansvariga produkter och förpackningar **www.dlinkgreen.com**.

PORTUGUÊS PT



Este símbolo no produto ou embalagem significa que, de acordo com as leis e regulamentações locais, este produto não deverá ser eliminado juntamente com o lixo doméstico mas enviado para a reciclagem. Transporte-o para um ponto de recolha designado pelas suas autoridades locais quando este tiver atingido o fim da sua vida útil, alguns destes pontos aceitam produtos gratuitamente. Ao reciclar o produto e respectiva embalagem desta forma, ajuda a preservar o ambiente e protege a saúde humana.

A D-Link e o ambiente

Na D-Link compreendemos e comprometemo-nos com a redução do impacto que as nossas operações e produtos possam ter no ambiente. Para minimizar este impacto a D-Link concebe e constrói os seus produtos para que estes sejam o mais inofensivos para o ambiente possível, utilizando meteriais recicláveis e não tóxicos tanto nos produtos como nas embalagens.

A D-Link recomenda que desligue os seus produtos D-Link quando estes não se encontrarem em utilização. Com esta acção ajudará a poupar energia e reduzir as emissões de CO2.

Para saber mais sobre os nossos produtos e embalagens responsáveis a nível ambiental visite **www.dlinkgreen.com**.