



User Manual

BE9500 Wi-Fi 7 Smart Router

Preface

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

Manual Revisions

Revision	Date	Description	
1.00	December 03, 2024	First Release	

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Power Usage

ErP Power Usage

This device is an Energy Related Product (ErP) with High Network Availability (HiNA) that automatically switches to a power-saving Network Standby mode within 1 minute of no packets being transmitted. If it is not needed during certain periods of time, it can be unplugged to save energy.

Network Standby: TBD watts

Switched Off: TBD watts

D-Link R95 BE9500 Wi-Fi 7 Smart Router User Manual

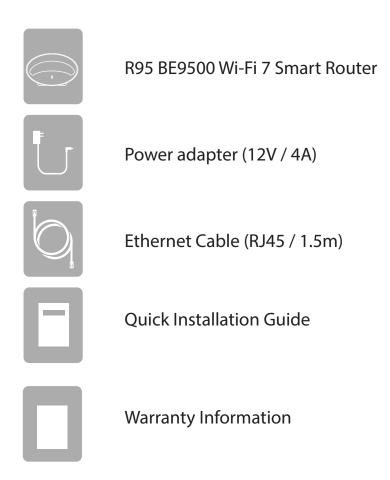
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Package Contents



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

Note: Using a power supply with a different voltage rating from the one included with the device may cause damage and void the warranty for this product.

System Requirements

Network Requirements	 An Ethernet-based cable, DSL or fiber modem IEEE 802.11be/ax/ac/n/g/b/a wireless clients 10/100/1000/2500 Mbps Ethernet
Web-based Configuration Utility Requirements	Computer with the following: • Windows, Macintosh, or Linux-based operating system • An installed Ethernet adapter or Wi-Fi interface Browser requirements: • Microsoft Edge • Mozilla Firefox 28 or higher • Apple Safari 6 or higher • Google Chrome 28 or higher
AQUILA PRO AI App Requirements	• iOS® or Android™ device (Please refer to the app's store page to check whether your device is compatible.)

Introduction

D-Link introduces the high-performance BE9500 Wi-Fi 7 Smart Router with Next-Gen Wi-Fi 7 technology. The advanced BE9500 Wi-Fi 7 Smart Router blankets every square inch of your home, fast and reliably, making it perfect for large homes with lots of connected devices for seamless integration with the existing Wi-Fi infrastructure. With R95, you can enjoy Wi-Fi that's stable, consistent, and truly intelligent.

Features

High-speed Wireless Performance with Wireless 802.11be Technology

Thanks to the latest wireless 802.11be technology, R95 supports bi-directional MU-MIMO technology as well as Multi-Link Operation (MLO) technology to handle devices more efficiently while capable of reducing network latency, further allowing users to participate in real-time online activities, such as video streaming, online gaming, and more with smooth performance.

IoT and MLO Zones to Separate Devices to Wireless Zones Based on Usage

The rise of IoT has prompted more wearable and home appliances to get online. The router has engraved with the smart and connected home design concept to accommodate IoT devices by restricting them to wireless zones that are separate from major Wi-Fi zones and guest access. Similarly, the MLO zone can accommodate devices supporting Multi-Link Operation (MLO) technology to reap the benefits of using multiple wireless channels simultaneously for higher throughput and latency-free connections.

Intelligent Quality of Service Features

The Quality of Service (QoS) allows you to prioritize important traffic to ensure that your real-time applications are receiving the optimal bandwidth. Moreover, the built-in Al engine also collects and analyzes traffic data to notify administrators of high bandwidth consumption for them to take prompt actions.

Smooth Wireless Connectivity with Maximized Bandwidth

The innovative Al Traffic Optimizer provides weekly usage reports to administrators for network bandwidth consumption along with heavy-consumption users. It also rates the overall wireless network condition and shows the number of times the engine has automatically optimized the network based on the network's conditions and usage data.

Always Up-to-Date with the Latest Features

R95 will automatically check for daily updates to make sure that the device is always with the latest features and the most secure firmware. For users' extra peace of mind, the router will store a backup system image in its memory before proceeding with any update in the event that a failure occurs during a firmware update.

Easy Setup and Flexible Management

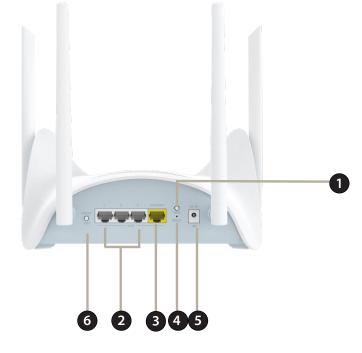
Managing your Internet network could never be easier; just download D-Link's AQUILA PRO AI app for your mobile device and follow the on-screen step-by-step instructions to add your device to the app. You could also use a web browser to access the setup wizard for basic configuration and advanced features. In support of industry-standard Wi-Fi Protected Setup (WPS), R95 lets you create encrypted connections to new devices by simply pressing on a button.

Hardware Overview BE9500 Wi-Fi 7 Smart Router LED Indicator



	Indicator	Color	Status	Router Mode	Extender Mode	Bridge Mode
1	Power/Status	White	Solid	Connected to the Internet with strong signal	Connected to the network with strong signal	Connected to the Internet with strong signal
			Breathing	Establishing a WPS connection	Uplink to your gateway is weak, or R95 is establishing a WPS connection	Establishing a WPS connection
		Orange	Breathing	Ready for connection or Internet connection is lost.	Not connected to an uplink gateway	Not connected to an exiting router
		White/ Orange	Interleaving	Firmware updating	Firmware updating	Firmware updating
		Red	Breathing	Resetting to factory default	Resetting to factory default	Resetting to factory default
			Solid	Powering on	Powering on	Powering on

BE9500 Wi-Fi 7 Smart Router Rear Panel



1	WPS Button	Press this button to establish an instant connection to a wireless client using Wi-Fi Protected Setup (WPS).
2	2.5 Gigabit LAN Ports (1-3)	Connect Ethernet devices such as computers, switches, storage (NAS) devices, and game consoles.
3	2.5 Gigabit WAN Port	Connect your broadband modem to this port using an Ethernet cable.
4	Reset Button	The reset button turns the gateway to default settings. Insert a paperclip into the hole, wait for the LED to turn solid red, and then release.
5	Power Connector	Connect the included power adapter here to power on the device.
6	LED ON/OFF Button	Press and hold the LED ON/OFF Button for 2 seconds for the LED light on the front of the device.

Installation

This section will guide you through the installation of your R95.

Before You Begin

- Placement of a router/gateway is very important. Do not place the router in an enclosed area such as a closet, cabinet, attic, or garage.
- Configure the router with a computer that was last connected directly to your Internet connection. Verify that it is connected to the Internet before connecting additional devices.
- If your Internet Service Provider (ISP) provided you with a modem/router combo, you will need to set it to "bridge" mode so that the router can work properly. Please contact your ISP or refer to the user manual of your modem/router device.
- You can only use the Ethernet port on your modem. If you were using the USB connection before using the router, then
 you must turn off your modem, disconnect the USB cable and connect an Ethernet cable to the Internet port on the
 router, and then turn the modem back on. In some cases, you may need to call your ISP to change your connection types
 (USB to Ethernet).
- If connecting to a DSL modem, make sure to have your DSL service information provided by your ISP 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 your time to label each cable first 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/gateway 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 radio frequency (RF) noise in your home or business. The key to maximizing wireless range is to follow the following basic guidelines:

- 1. Keep the number of walls and ceilings between a D-Link router and other network devices to a minimum each wall or ceiling can reduce your router's range from 3-90 feet (1-30 meters). Minimize the number of walls or ceilings your router and devices are positioned within.
- 2. Be aware of the direct line between network devices. A wall that is 1.5 feet thick (0.5 meters) appears to be almost 3 feet (1 meter) thick at a 45-degree angle. At a 2-degree angle, the wall appears to be over 42 feet (14 meters) thick. Position devices for their signals to travel straight through a wall or ceiling (instead of from a certain angle) for better signal reception.
- 3. Building materials make a difference. A solid metal door or aluminum studs may have a negative effect on range. Try to position extenders, access points, wireless routers, and computers for their signal to directly pass through drywall or open doorways. Materials and objects such as glass, steel, metal, walls with insulation, water (fish tanks), mirrors, file cabinets, brick, and concrete will degrade your wireless signal.
- 4. Keep your product away (at least 3-6 feet or 1-2 meters) from electrical devices or appliances that generate RF noise.
- 5. If you are using 2.4 GHz cordless phones or X-10 (wireless products such as ceiling fans, lights, and home security systems), your wireless connection may degrade dramatically or drop completely. Make sure your 2.4 GHz phone base is as far away from your wireless devices as possible. The base transmits a signal even if the phone is not in use.

Setup

There are several different ways you can use to configure your gateway to connect to the Internet.

- AQUILA PRO Al app Use your compatible iOS or Android device to install and configure your gateway. Refer to AQUILA PRO Al App Setup on page 10.
- Hardware Setup This section explains how to set up your R95. Refer to Hardware Setup on page 12.
- **D-Link Setup Wizard** The wizard will launch when you log in to the gateway by using your PC for the first time. Refer to **Setup Wizard** on **page 14**.
- Manual Setup Log in to the gateway for manual configuration of your gateway. Refer to Configuration on page 22.

AQUILA PRO AI App Setup

The AQUILA PRO AI app allows you to install and configure your device from your compatible Android or iOS devices.

Note: The screenshots may be different depending on your mobile device's OS version or platform.

Step 1

Search and install the free **AQUILA PRO Al app** available on the App Store or on Google Play.

NOTE: Please activate your newly registered account within 7 days, and if the verification email landed in your Spam folder, first move the email to your Inbox folder so that you can click on the activation button for account activation.

Step 2

Launch the AQUILA PRO Al app from the home screen of your device.

Step 3

Sign in on the app using an email account. If you already have a D-Link account, you can tap **Sign In** to be redirected to the login page. It allows you to use cloud services to control and manage your device including third-party voice control apps.

Step 4

Tap **Add Device** or + icon in the middle. Scan the Setup code on the device label located on the bottom of the router. Follow the on-screen instructions to complete the setup.









Step 5

You will see the registered device in the Home screen of the App. You can add the device in your **Favorites** for quick access with a long-press on the device icon. When you select the **Favorites** tab at the bottom of the Home screen, you can see all your favorites.



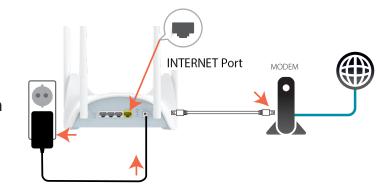
If you have placed the device in the designated room of your home during device setup, you will see it listed under the room. You can relocate the device or add it to a new room by simply long-pressing the device icon and choose **Move to another room**.



Hardware Setup

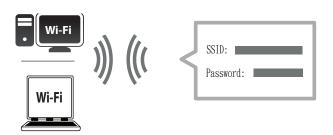
Step 1

Position the R95 close to your Internet-connected modem. Turn off and unplug the power to your cable or DSL broadband modem. This is required. In some cases, you may need to turn it off for up to five minutes. Connect an Ethernet cable to the modem and to the Internet port of R95. Next, connect the power adapter and plug R95 into a power outlet.



Step 2

Wait for the R95 to boot up. When the gateway's LED light starts breathing orange, wirelessly connect your computer to the Wi-Fi name (SSID) printed on the device label.

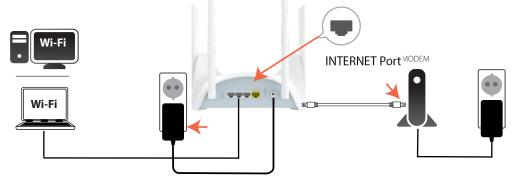


Step 3

Type **https://xxxx.devicesetup.net/** into a web browser and follow the on-screen instructions to complete the setup. (xxxx represents the last 4 characters of the MAC address)



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



If you are connecting to a broadband service that uses a dynamic connection (not PPPoE), you may be online already. Try opening a web browser and connecting to a website. If the website does not load, proceed to **Setup Wizard** on **page 14**.

Setup Wizard

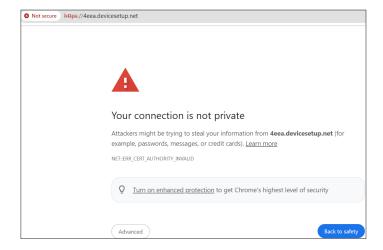
The setup wizard is designed to guide you through a step-by-step process to configure your new R95 for Internet connection.

If this is your first time configuring the gateway, open your web browser and enter https://xxxx.devicesetup.net/ into the browser (xxxx represents the last 4 characters of the MAC address). Enter the Admin Password and click Log In to start the configuration process. The web address and default admin password are printed on the device label on the bottom of the device. The default HTTPS version of the Web management page will display a security warning message alerting you of possible data breach. Refer to the below steps for additional instructions when you see such warning.



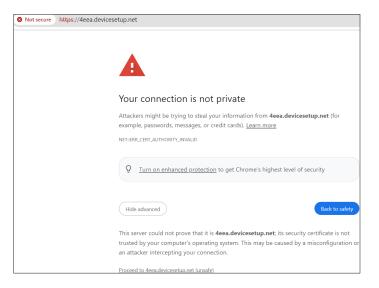
When your browser may display a security warning stating, "Your connection isn't private." You will also see Not Secure in the address bar, along with HTTPS crossed out with red lines. This is because the device's default management URL is not an actual Internet website with valid certificates. You can proceed with the setup by following these steps:

1. Click the "Advanced" button.

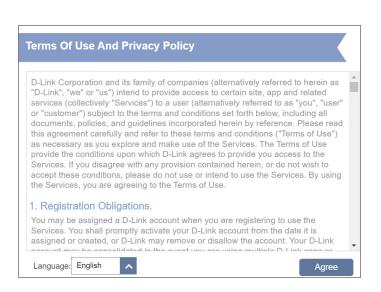


2. Click "Proceed to the default management URL".

Now you will be able to log in to your device.

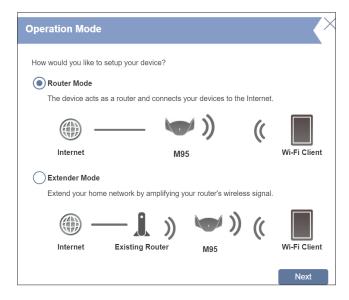


Agree to the **Terms of Use and Privacy Policy** before proceeding.



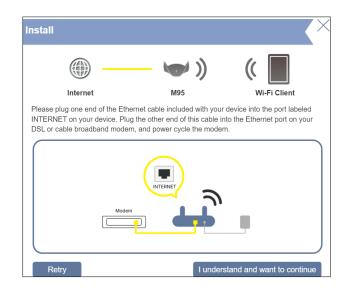
You will be prompted with the **Operation Mode** page to set up your gateway's mode. Select **Router Mode** to configure R95 as a standalone router. Select **Extender Mode** to configure R95 as an extender.

Click **Next** to continue



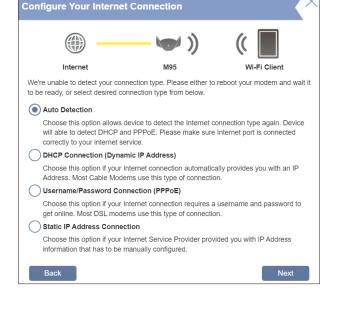
Connect the gateway and the modem with an Ethernet cable.

Click I understand and want to continue



If the gateway does not detect a valid Internet connection, a list of connection types to choose from will be displayed. Select your Internet connection type (this information can be obtained from your ISP).

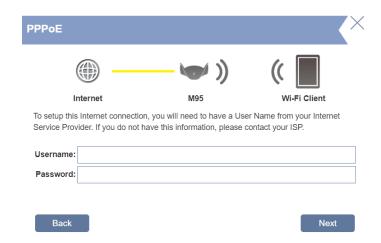
Click **Next** to continue.



If the gateway detected a connection or you manually selected **PPPoE**, enter your PPPoE username and password. If you do not have this information, please contact your ISP.

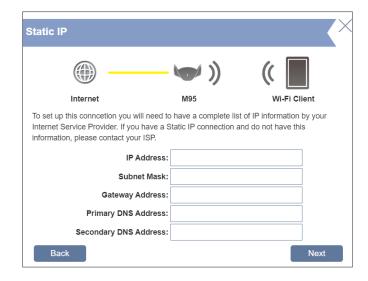
Click **Next** to continue.

Note: Make sure to remove all other existing PPPoE software from your computer. The software is no longer needed and will not work compatible with your gateway.



If the gateway detected a connection or you manually selected **Static IP**, enter the IP and DNS settings supplied by your ISP. If you do not have this information, please contact your ISP.

Click **Next** to continue.



If the gateway detected a connection or you manually selected **DHCP connection**, enter a **Wi-Fi Network Name** and **Wi-Fi Password** to set up your Wi-Fi network. The **Wi-Fi Password** must be 10 to 63 characters containing both letters and numbers and having no identical characters next to each other. Your wireless clients will need to have this passphrase to be able to connect to your wireless network.

Click **Next** to continue.

Notes:

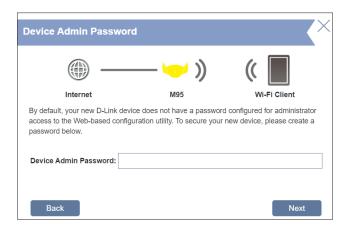
- 1. The gateway's Smart Connect feature presents a single wireless network. When connecting clients to an extension network, they will be automatically added to the best band, either 2.4 GHz, 5 GHz, or 6 GHz. To disable the Smart Connect feature and individually configure 2.4 GHz, 5 GHz, and 6 GHz networks, refer to Wireless on page 61.
- 2. The 6GHz requires WPA3 security; therefore, using Smart Connect on all 3 bands will disallow the use of weaker security methods such as WPA and WPA2 on 2.4 GHz and 5GHz bands.



To better protect the gateway's configuration access, please enter a password. You will be prompted for this password every time you want to use the gateway's web management interface.

Note: It is strongly recommended that you change the default device password. The password must contain 10 to 15 characters and include both numbers and letters that are not identical next to each other.

Click **Next** to continue.



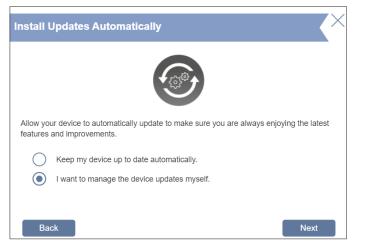
Select your time zone from the drop-down menu.

Click **Next** to continue.



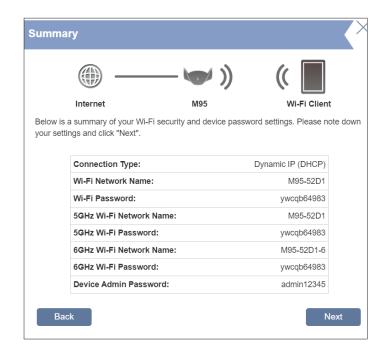
Keeping your gateway's firmware up-to-date can ensure you're always getting the latest security update and new features over the air. Choose whether to keep your device up-to-date automatically or to manage the device updates by yourself.

Click **Next** to continue.



You will be presented with a summary of your settings.

Click **Next** to finalize the settings or **Back** to make changes.

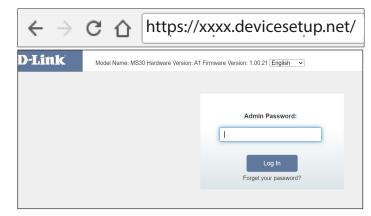


Please wait while the device settings are being saved. Do not turn off or unplug your gateway during this time. 179 Sec When reconnecting to this device, please use the new Wi-Fi name and password you created. Your new settings have been saved and your gateway is now configured. Click **OK** to close the Setup Wizard. You can log in to the configuration utility by entering your saved Admin Password. The new settings have been saved.

OK

Configuration Accessing the Web Management Interface

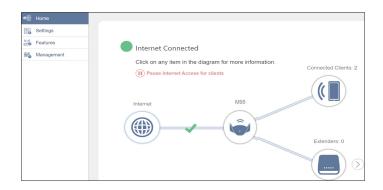
- 1. Type **https://xxxx.devicesetup.net/** in the address bar. (xxxx represents the last 4 characters of the MAC address)
- 2. Enter the admin password.
 - If this is your first time logging in, please enter the password specified on the device label located on the bottom of the device.
 - If you have previously completed the Setup Wizard, enter the password you created during initial setup.
 - If you can't remember your password for login, press the Reset button to restore the gateway to its default settings.



The gateway's home page will display its current connection status.

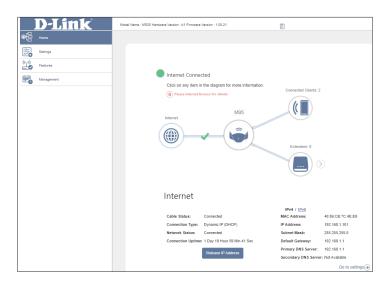
The left panel has quick access to **Settings**, **Features** and **Management**.

Note: The system will automatically log out after a period (180 seconds) of inactivity.



Home

The **Home** page displays the current status of your network in the form of an interactive diagram. You can click on each icon to display information about each node of the network in the middle of the screen. The menu bar at the top-left corner of the page will allow you to quickly navigate to other pages. Refer to the following pages for a description of each section.



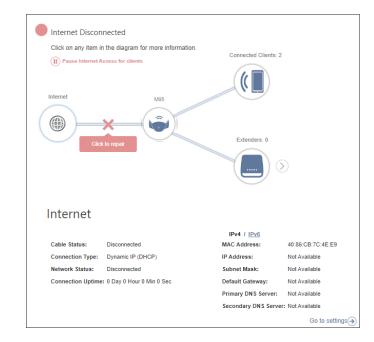
Internet

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

The **Home** page displays whether or not the gateway is currently connected to the Internet. If it is disconnected, click **Click to repair** to bring up the setup wizard, refer to **Setup Wizard** on **page 14** for more information.

Click **Release IP Address** to release the current IP address and disconnect from the Internet. If you wish to reconnect to the Internet, click **Renew IP Address**.





Internet

Click **Pause Internet Access for clients** to temporarily disconnect the Internet connection; alternatively, click **Resume Internet Access** to resume the Internet access if previously paused.

To reconfigure the Internet settings, click **Go to settings** at the bottom right.

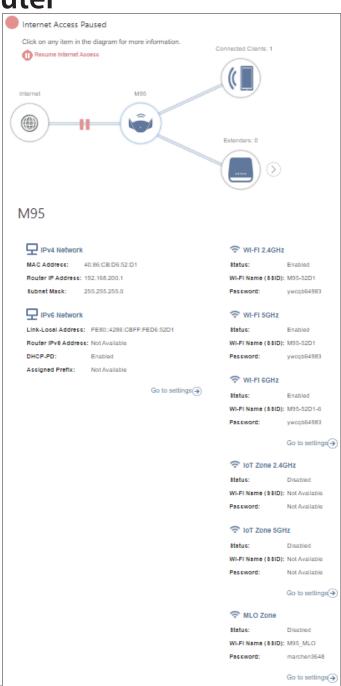


BE9500 Wi-Fi 7 Smart Router

Click on the **R95** icon to view details about the wireless and local network settings. This includes IPv4 and IPv6 local networks, and Wi-Fi information.

To reconfigure network settings, either click **Go to settings** at the bottom of the page, or click **Settings** on the left panel and select **Network**. Refer to **Network** on **page 73** for more information.

To reconfigure wireless settings, either click **Go to settings**, on the lower right, or click **Settings** on the left pane and select **Wireless**. Refer to **Wireless** on **page 61** for more information.



Connected Clients

Click on the **Connected Clients** icon to view details about the clients currently connected to the gateway.

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

Edit Rule

Name: Displays the name of this client. You can edit the client's name here.

Vendor: Displays the vendor of the device.

MAC Address: Displays the MAC address of the device.

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

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

IP Address Specify an IP address for the DHCP server to assign to this client.

(Reserved):

Parental Control: Enable or disable parental control to allow or block this user's access

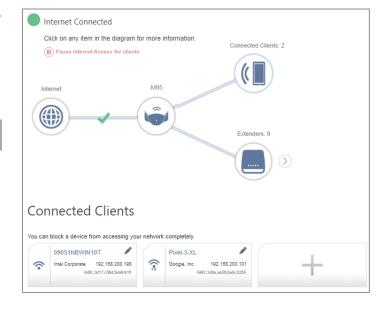
to the network.

Profile: If **Parental Control** is enabled, use the drop-down menu to select

a time schedule that the rule will be enabled on. The schedule may be set to **Always Block**, or you can create your own schedules in the **Schedule** section. Refer to **Time & Schedule** - **Schedule** on **page**

97 for more information.

Click Save when you are done.





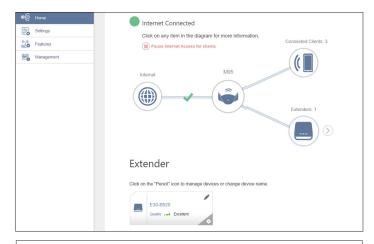
Extenders

Click on the **Extenders** icon to view details about all additional devices in your Mesh Wi-Fi network.

To edit the Extender name, click on the pencil icon in the top-right of the box of the Extender that you want to rename.

To reboot an Extender, click the settings icon in the bottom-right of the Extenders's box and click **Reboot**.

To remove an Extender from your Mesh Wi-Fi network, click the settings icon in the bottom-right of the Extender's box and click **Remove**.





Edit Name

Name: Enter a name for the Mesh Point.

MAC Address: Displays the MAC address of the Mesh Point.

Click Flash LED to visually identify the Extender.

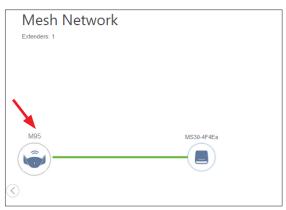
Click Save when you are done.



Mesh Network

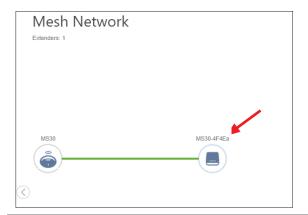
To access the **Mesh Network** page, click the arrow next to the extender icon. Under the **Mesh Network** page, you can view details of the master device and every extender within the network. Click **R95** to view the status of the main gateway. Click the pencil icon on the connected client(s) to edit configuration. Configuration details are explained on the next page. Click **Identify this Extender** to visually confirm the location of your gateway. The gateway's LED should breathe white several times.







Click the **Extender** icon to view details of the extender and list of connected clients. Click the pencil icon on the connected client(s) to edit configuration. Configuration details are explained on the next page. Click **Identify this Extender** to visually confirm the location of your extender. The gateway's LED should breathe white several times.







Edit Rule

Name: Displays the name of this client. You can edit the client's name here.

Vendor: Displays the vendor of the device.

MAC Address: Displays the MAC address of the device.

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

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

IP Address Specify an IP address for the DHCP server to assign to this client.

(Reserved):

Parental Control: Enable or disable parental control to allow or block this user's access

to the network.

Profile: If **Parental Control** is enabled, use the drop-down menu to select

a time schedule that the rule will be enabled on. The schedule may be set to **Always Block**, or you can create your own schedules in the **Schedule** section. Refer to **Time & Schedule** - **Schedule** on **page**

97 for more information.

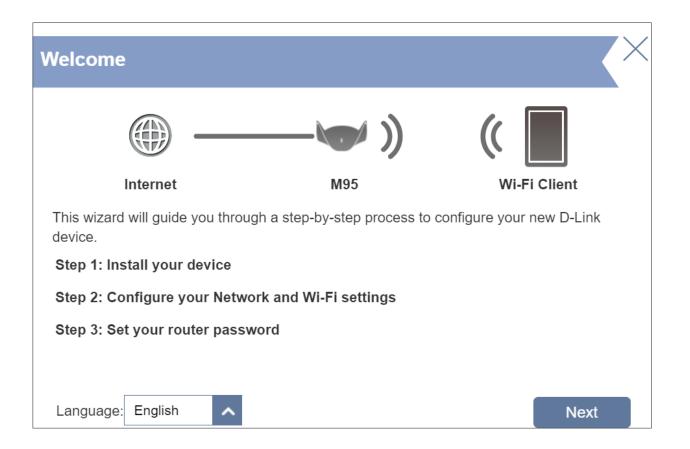
Click **Save** when you are done.



Settings Wizard

Go to **Settings** > **Wizard** to open the setup wizard. This is the same wizard that appears when you start configuring the gateway for the first time. Refer to **Setup Wizard** on **page 13** for details.

Note: When the Wizard is opened, the gateway will be disconnected from the Internet.



Internet IPv4

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

To configure IPv6 Internet and view the network's connection details, click on the IPv6 tab. Refer to IPv6 on page 46. To configure VLAN connection details, click on the VLAN link. Refer to Internet - VLAN on page 59.

Click **Save** at any time to save the changes you have made on this page.

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

Secure DNS: Enable **Secure DNS** to use public DNS with encryption via DNS-over-

HTTPS (DoH).

DNS over HTTPS Select the DNS-over-HTTPS (DoH) service provider: Google or

Provider: Cloudflare.

Allow Fall-back: Use your primary or secondary DNS server as an alternative if the

configured provider is not working.

For **Static IP**, refer to **IPv4 - Static IP** on **page 33**.

For **Dynamic IP (DHCP)**, refer to **IPv4 - Dynamic IP (DHCP)** on **page 34**.

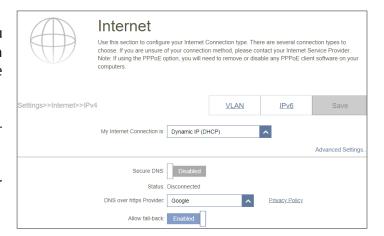
For **PPPoE**, refer to **IPv4 - PPPoE** on **page 35**.

For **PPTP**, refer to **IPv4 - PPTP** on **page 37**.

For L2TP, refer to IPv4 - L2TP on page 39.

For IPv4 as a Service, refer to IPv4 as a Service on page 41.

To configure an **IPv6** connection, click the **IPv6** link. Refer to **page 46**.



IPv4 - Static IP

Select **Static IP** if your IP information is provided by your Internet Service Provider (ISP). Click **Save** at any time to save the changes you have made on this page.

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

Server:

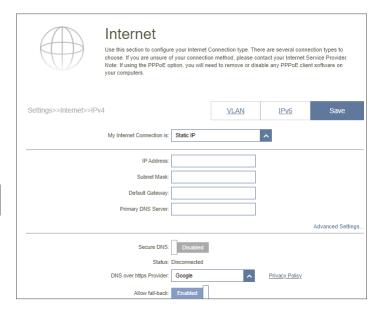
Advanced Settings...

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

MTU: The default Maximum Transmission Unit is 1500 - you may need to change the MTU for optimal performance with your ISP.

MAC Address
The default MAC address is set as the physical interface MAC address
of port 1 on the gateway. You can use the drop-down menu to replace
the Internet port's MAC address with the MAC address of a connected

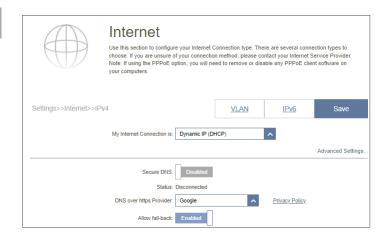
client.



IPv4 - Dynamic IP (DHCP)

Select **Dynamic IP (DHCP)** to automatically obtain IP address information from your ISP. Select this option if your ISP does not specify an IP address for use. Click **Save** at any time to save the changes you have made on this page.

Advanced Settings		
Host Name:	The host name is optional but may be required by some ISPs. Leave it blank if you are not sure.	
	Enter the primary DNS server IP address assigned by your ISP. This address is usually automatically obtained from your ISP.	
	Enter the secondary DNS server IP address assigned by your ISP. This address is usually automatically obtained from your ISP.	
MTU:	Maximum Transmission Unit - The default is 1500. You may need to change the MTU for optimal performance with your ISP.	
	The default MAC address is set as the physical interface MAC address of port 1 on the gateway. You can use the drop-down menu to replace the Internet port's MAC address with the MAC address of a connected client.	



IPv4 - PPPoE

Select **PPPoE** if your ISP provides and requires you to enter a PPPoE username and password in order to connect to the Internet. Click **Save** at any time to save the changes you have made on this page.

Username: Enter the username provided by your ISP.

Password: Enter the password provided by your ISP.

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

Maximum Idle Configurable when On Demand is selected. Enter a maximum

Time: idle time for the Internet connection to be maintained

during inactivity. To disable this feature, select **Always on** or **Manual** as the reconnect mode. The default time is 5 minutes.

Advanced Settings...

Address Mode: Select Static IP if your ISP assigned you the IP address, subnet

mask, gateway, and DNS server addresses. In most cases, select

Dynamic IP.

If you select **Dynamic IP** as the Address Mode:

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

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

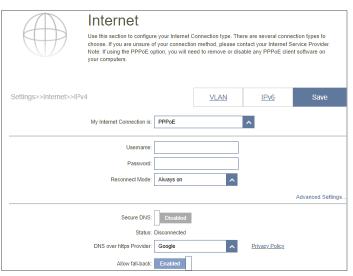
Server: address is usually automatically obtained from your ISP.

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

Server: This address is usually automatically obtained from your ISP.

MTU: Maximum Transmission Unit (1280~1500)-The default is 1492. You

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





IPv4 - PPPoE (continued)

MAC Address The default MAC address is set as the Internet port's physical **Clone:** interface MAC address on the gateway. You can replace the

Internet port's MAC address with the MAC address of a

connected client.

If you select **Static IP** as the Address Mode:

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

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

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

Server:

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

Server:

MTU: Maximum Transmission Unit - you may need to change the MTU

for optimal performance with your ISP.

MAC Address The default MAC address is set as the Internet port's physical

Clone: interface MAC address on the gateway. You can replace the

Internet port's MAC address with the MAC address of a

connected client.



IPv4 - PPTP

Choose **PPTP** (Point-to-Point-Tunneling Protocol) if your Internet Service Provider (ISP) uses a PPTP connection. Your ISP will provide you with a username and password. Click **Save** at any time to save the changes you have made on this page.

PPTP Server: Enter the PPTP server's IP address provided by your ISP.

Username: Enter the username provided by your ISP.

Password: Enter the password provided by your ISP.

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

Maximum Idle Configurable when **On Demand** is selected. Enter a maximum

Time: idle time for the Internet connection to be maintained

during inactivity. To disable this feature, select **Always on** or **Manual**

as the reconnect mode.

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**.

If you select **Dynamic IP** as the Address Mode:

Primary DNS Enter the primary DNS server's IP address assigned by your ISP. This

Server: address is usually automatically obtained from your ISP.

Secondary DNS Enter the secondary DNS server's IP address assigned by your ISP. This

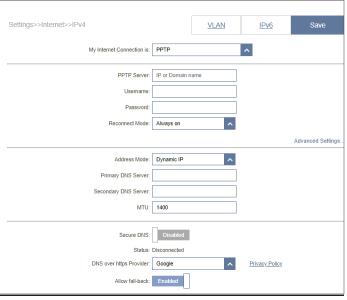
Server: address is usually automatically obtained from your ISP.

MTU: Maximum Transmission Unit (1280~1460) - The default MTU is 1400.

You may need to change the MTU for optimal performance with your

ISP.





IPv4 - PPTP (continued)

If you select **Static IP** as the Address Mode:

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

PPTP Subnet Enter the subnet mask provided by your ISP.

Mask:

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

Address:

Primary DNS Enter the primary DNS server's IP address assigned by your ISP.

Server:

Secondary DNS Enter the secondary DNS server's IP address assigned by your ISP.

Server:

MTU: The default Maximum Transmission Unit is 1400 - you may need

to change the MTU for optimal performance with your ISP.



IPv4 - L2TP

Choose Layer 2 Tunneling Protocol (**L2TP**) if your ISP uses a L2TP connection. Your ISP will provide you with a username and password. Click **Save** at any time to save the changes you have made on this page.

L2TP Server: Enter the L2TP server's IP address provided by your ISP.

Username: Enter the username provided by your ISP.

Password: Enter the password provided by your ISP.

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

Maximum Idle Configurable when On Demand is selected. Enter a maximum idle

Time: time (in minutes) for the Internet connection to be maintained during

inactivity. To disable this feature, select ${\bf Always\ on}$ or ${\bf Manual}$ as the

reconnect mode.

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, however, select

Dynamic IP.

If you select **Dynamic IP** as the Address Mode:

Primary DNS Enter the primary DNS server's IP address assigned by your ISP. This

Server: address is usually automatically obtained from your ISP.

Secondary DNS Enter the secondary DNS server's IP address assigned by your ISP. This

Server: address is usually automatically obtained from your ISP.

MTU: Maximum Transmission Unit (1280~1460) - you may need to

change the MTU for optimal performance with your ISP. The

default is 1400





IPv4 - L2TP (continued)

If you select **Static IP** as the Address Mode:

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

L2TP Subnet Enter the subnet mask provided by your ISP.

Mask:

L2TP Gateway IP Enter the gateway IP address provided by your ISP.

Address:

Primary DNS Enter the primary DNS server's IP address assigned by your ISP.

Server:

Secondary DNS Enter the secondary DNS server's IP address assigned by your ISP.

Server:

MTU: Maximum Transmission Unit (1280~1460) - The default MTU is 1400.

You may need to change the MTU for optimal performance with

your ISP.



IPv4 as a Service

IPv4 as a Service allows local IPv4 packets to travel through an IPv6 network. After selecting this connection method, the following parameters will be available for configuration. Click **Save** at any time to save the changes you have made on this

page.

Transition Protocol:

Select DS-Lite, Lightweight 4 over 6, Mapping of Address and Port with Encapsulation (MAP-E), Mapping of Address and Port using Translation (MAP-T), or 464XLAT (CLAT) as the protocol for transition between IPv4 and IPv6 packets. The 464XLAT address translation employs CLAT (Customer-side transLATor) and allows LAN IPv4 hosts to communicate with other IPv4 hosts on another network over an IPv6 network and also the IPv6 clients to access IPv4 hosts. The MAP methods consists of MAP rules that dictate the IP and port range mapping and forwarding operation between the WAN IPv6 interface and LAN IPv4 interfaces.

Advanced Settings...DS-Lite

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

Manual Configuration

B4 IPv4 Address: Enter the Basic Bridging Broadband (B4) IPv4 address that

will be encapsulated into IPv6 packets to transmit over an

IPv6 network.

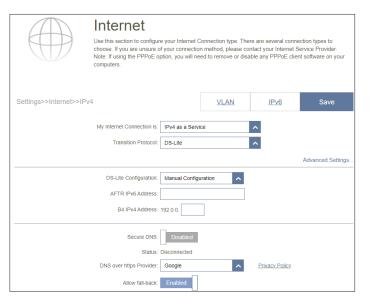
AFTR IPv6 Address: Enter the Address Family Transition Router (AFTR) IPv6 address.

This is where an IPv6 packet will be decapsulated.

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

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

IPv6 WAN Default Once connected, the IPv6 WAN default gateway address will be



Advanced Settings...Lightweight 4 over 6

Configuration: Select **Lightweight 4 over 6 Option** to let the gateway allocate

the AFTR IPv6 address automatically. Select ${\bf Manual\,Configuration}$

to enter the AFTR IPv6 address manually.

Manual Configuration

AFTR IPv6 Address: Enter the Address Family Transition Router (AFTR) IPv6 address.

This is where an IPv6 packet will be decapsulated.

IPv6 Prefix/ The defined IPv6 prefix here is used to identify the subnet of the

Prefix Length: IPv6 network.

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

PSID Offset: A non-zero number that defines that ports that are omitted from

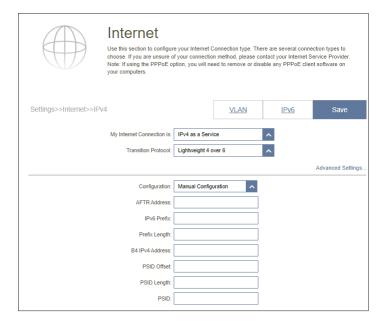
the address mapping.

PSID Length: The length of the port-set ID (PSID).

PSID: The port range assigned to the device.

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

IPv6 WAN Default Once connected, the IPv6 WAN default gateway address will be



Advanced Settings...MAP-T

Configuration: Select **DS-Lite DHCPv6 Option** to let the gateway allocate the

rule IPv6 address automatically. Select Manual Configuration to

enter the rule IPv6 address manually.

Manual Configuration

DMR IPv6 Prefix/ **Prefix Length:**

Default Mapping Rule (DMR) uses the defined IPv6 prefix/prefix-length in the MAP-T domain to

forward traffic outside the MAP domain.

Prefix Length:

IPv6 Prefix/ The defined IPv6 prefix here is used to identify the subnet of the

IPv6 network.

IPv4 Prefix/Prefix Enter a a unique IPv4 address and an IPv4 prefix for the device.

Length:

EA Length: The length of Embedded Address bits (EA bits), which defines the

portion of the Identity Association for Prefix Delegation (IA-PD)

that contains the Ipv4 suffix and port range.

A non-zero number that defines that ports that are omitted from **PSID Offset:**

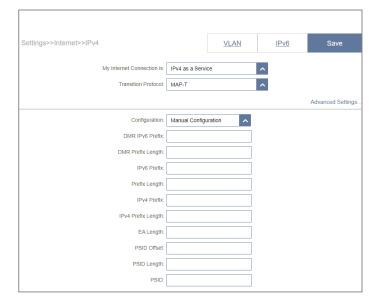
the address mapping.

PSID Length: The length of the port-set ID (PSID).

PSID: The port range assigned to the device.

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

IPv6 WAN Default Once connected, the IPv6 WAN default gateway address will be



Advanced Settings...MAP-E

Configuration: Select DS-Lite DHCPv6 Option to let the gateway allocate the

rule IPv6 address automatically. Select **Manual Configuration** to

enter the rule IPv6 address manually.

Manual Configuration

BR IPv6 Address: Enter the Border Router (BR)'s IPv6 address.

IPv6 Prefix/ The defined IPv6 prefix here is used to identify the subnet of the

Prefix Length: IPv6 network.

IPv4 Prefix/Prefix Enter a a unique IPv4 address and an IPv4 prefix for the device.

Length:

EA Length: The length of Embedded Address bits (EA bits), which defines the

portion of the Identity Association for Prefix Delegation (IA-PD)

that contains the Ipv4 suffix and port range.

PSID Offset: A non-zero number that defines ports that are omitted from the

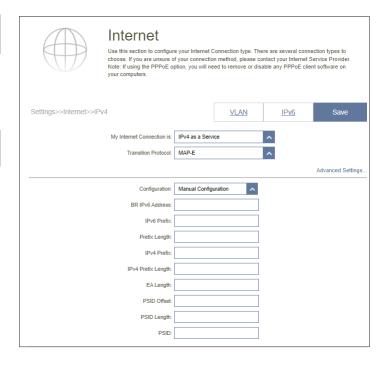
address mapping.

PSID Length: The length of the port-set ID (PSID).

PSID: The port range assigned to the device.

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

IPv6 WAN Default Once connected, the IPv6 WAN default gateway address will be



	Advanced Settings464XLAT(CLAT)	
464XLAT (CLAT) Configuration:	Select DS-Lite DHCPv6 Option to let the gateway allocate the an IPv6 address automatically. Select Manual Configuration to enter the IPv6 prefix manually.	
Manual Configuration		
Prefix64	Enter a unique source IPv6 prefix (e.g. 2024:db9:abcd::0)to be embedded in the IPv4 source and destination addresses.	
WAN IPv6 Address:	Once connected, the WAN IPv6 address will be displayed here.	
IPv6 WAN Default Gateway:	Once connected, the IPv6 WAN default gateway address will be displayed here.	



IPv₆

Go to **Settings** > **Internet** to see the Internet configuration options for IPv4, then click the **IPv6** tab to access the configuration options for IPv6.

To configure the IPv4 Internet and view the network connection details, click the IPv4 tab. Refer to Internet - IPv4 on page 30. To configure the **VLAN** connection details, click the VLAN tab. Refer to **Internet - VLAN** on **page 59**.

Click **Save** at any time to save the changes you have made on this page.

My Internet Choose your IPv6 connection type from the drop-down menu. You will **Connection Is:** be presented with appropriate options for your connection type. Click **Advanced Settings...** to expand the list and see all of the options.

For **IPv6** - **Auto Detection**, refer to **page 47**.

For **IPv6 - Static**, refer to **page 49**.

For IPv6 - Auto Configuration (SLAAC/DHCPv6), refer to page 51.

For **IPv6 - PPPoE**, refer to **page 53**.

For **IPv6 - 6rd**, refer to page 56.

For IPv6 - Local Connectivity Only, refer to page 58.



IPv6 - Auto Detection

Select **Auto Detection** to automatically detect the IPv6 connection method used by your ISP. If Auto Detection fails, you can manually select another IPv6 connection type. Click **Save** at any time to save the changes you have made on this page.

IPv6 DNS Settings

DNS Type: Select either **Obtain DNS server address automatically** or

Use the following DNS address.

Primary DNS Server: If you select Use the following DNS address, enter the

primary DNS server address.

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

secondary DNS server address.

LAN IPv6 Address Settings

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

LAN IPv6 Link-Local Displays the gateway's LAN link-local address.

Address:

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

LAN IPv6 Address: Enter a valid LAN IPv6 address.

LAN IPv6 Link-Local Displays the gateway's LAN link-local address.

Address:



Advanced Settings... - Address Autoconfiguration Settings

Enable Automatic IPv6 Address

Enable or disable the Automatic IPv6 Address Assignment

feature.

Assignment:

Eable Automatic DHCP-PD in LAN:

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

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

your ISP for more information.

Autoconfiguration

Select SLAAC+RDNSS, SLAAC+Stateless DHCP, or Stateful

Type: DHCPv6.

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

Router Advertisement

Lifetime:

Enter the router advertisement lifetime (in minutes).

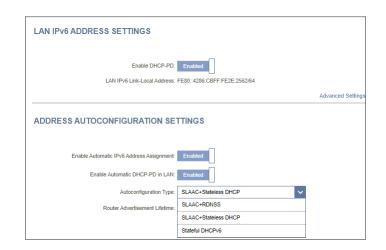
If you select **Stateful DHCPv6** as the Autoconfiguration Type:

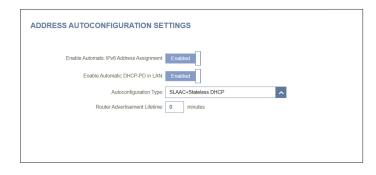
IPv6 Address Enter the starting IPv6 address for the DHCP server's IPv6

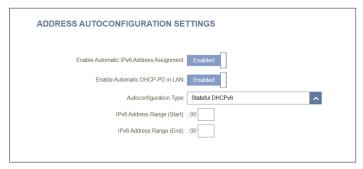
Range (Start) assignment.

IPv6 Address Enter the ending IPv6 address for the DHCP server's IPv6

Range (End) assignment.







IPv6 - Static

Select **Static IP** if your IPv6 information is provided by your ISP. Click **Save** at any time to save the changes you have made on this page.

Use Link-Local Enable or disable link-local address use. Enabling this feature will

Address: use your local IPv6 address as the static IP. Disable this feature to

manually enter your static IPv6 address and subnet prefix length.

IPv6 Address: If Use Link-Local Address is disabled, enter the address supplied

by your ISP.

Subnet Prefix If **Use Link-Local Address** is disabled, enter the subnet prefix

Length: 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 Enter the secondary DNS server address.

Server:

LAN IPv6 Address Settings

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





IPv6 - Static (Continued)

Advanced Settings... - Address Autoconfiguration Settings

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

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

IPv6 Address

Assignment:

Autoconfiguration Select SLAAC+RDNSS, SLAAC+Stateless DHCP, or Stateful

Type: DHCPv6.

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

Router Enter the router advertisement lifetime (in minutes). The **Advertisement** default is 30 minutes.

Lifetime:

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

IPv6 Address Range Enter the starting IPv6 address for the DHCP server's IPv6

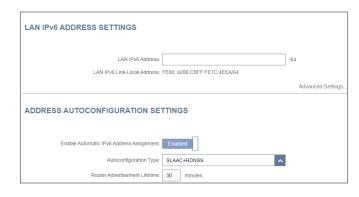
(Start): assignment.

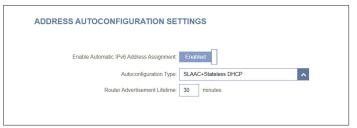
IPv6 Address Range Enter the ending IPv6 address for the DHCP server's IPv6

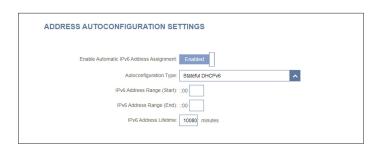
(End): assignment.

IPv6 Address Enter the IPv6 address lifetime (in minutes). The default is 10080

Lifetime: minutes.







IPv6 - Auto Configuration (SLAAC/DHCPv6)

Select **Auto Configuration (SLAAC/DHCPv6)** if your ISP assigns your IPv6 address when your gateway requests one from the ISP's server. Some ISPs require you to adjust these settings before your gateway can connect to the IPv6 Internet. Click **Save** when you are done.

IPv6 DNS Settings

DNS Type: Select either **Obtain DNS server address automatically** or

Use the following DNS address.

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

primary DNS server address

Secondary DNS If you select **Use the following DNS address**, enter the

Server: secondary DNS server address.

LAN IPv6 Address Settings

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

LAN IPv6 Link-Local Displays the gateway's LAN link-local address.

Address:

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

LAN IPv6 Address: Enter a valid LAN IPv6 address.

LAN IPv6 Link-Local Displays the gateway's LAN link-local address.

Address:



IPv6 - Auto Configuration (SLAAC/DHCPv6)

Advanced Settings... - Address Autoconfiguration Settings

Enable Automatic Enable or disable the Automatic IPv6 Address Assignment IPv6 Address feature. Enabling this feature will present additional **Assignment:** configuration options.

Enable Automatic Enable or disable Automatic DHCP-PD in LAN for other IPv6 **DHCP-PD in LAN:** routers/gateways to be connected to the LAN interface. This option is only available if Enable Automatic DHCP-PD in LAN is enabled.

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

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

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

Advertisement default is 30 minutes. Lifetime:

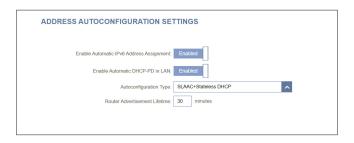
Router Enter the router advertisement lifetime (in minutes). The

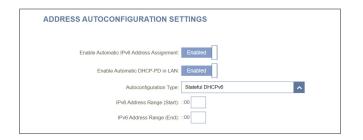
If **Stateful DHCPv6** is selected as the Autoconfiguration Type:

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

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







IPv6 - PPPoE

Select **PPPoE** if your ISP provides and requires you to enter a PPPoE username and password in order to connect to the Internet. Click **Save** at any time to save the changes you have made on this page.

PPPoE Session: Select **Create a new session** to start a new PPPoE session.

Username: Enter the username provided by your ISP.

Password: Enter the password provided by your ISP.

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

select **Dynamic IP**.

IP Address: If you select **Static IP** as the Address Mode, enter the IP address

provided by your ISP.

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

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

MTU: The default Maximum Transmission Unit is 1492- you may need to

change the MTU for optimal performance with your ISP.



IPv6 - PPPoE

IPv6 DNS Settings

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

following DNS address.

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

Primary DNS Enter the primary DNS server address.

Server:

Secondary DNS Enter the secondary DNS server address.

Server:

LAN IPv6 Address Settings

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

LAN IPv6 Link- Displays the gateway's LAN link-local address.

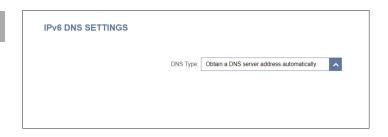
Local Address:

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

LAN IPv6 Address: Enter a valid LAN IPv6 address.

LAN IPv6 Link- Displays the gateway's LAN link-local address.

Local Address:





IPv6 - PPPoE (Continued)

Advanced Settings... - Address Autoconfiguration Settings

Assignment:

Enable Automatic Enable or disable the Automatic IPv6 Address Assignment feature. **IPv6 Address** Enabling this feature will present additional configuration options.

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

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

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

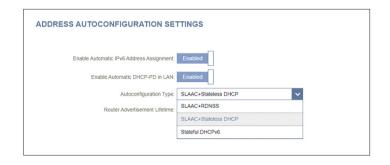
If you select **SLAAC+RDNSS** or **SLAAC+Stateless DHCP** as the Autoconfiguration Type:

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

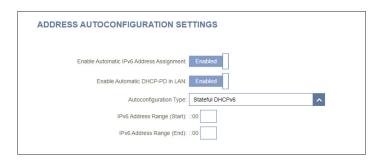
If you select **Stateful DHCPv6** as the Autoconfiguration Type:

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

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







IPv6 - 6rd

IPv6 rapid deployment (6rd) allows IPv6 packets to be transmitted over an IPv4 network. Click **Save** at any time to save the changes you have made on this page.

Assign IPv6 Prefix: Currently unsupported.

Primary DNS Server: Enter the primary DNS server address.

Secondary DNS Enter the secondary DNS server address.

Server:

6rd Manual Configuration

Enable Hub and Enable this feature to minimize the number of routes to the **Spoke Mode:** destination by using a hub and spoke method of networking.

6rd Configuration: Choose the **6rd DHCPv4 Option** to automatically discover and

populate the data values, or choose Manual Configuration to

enter the settings yourself.

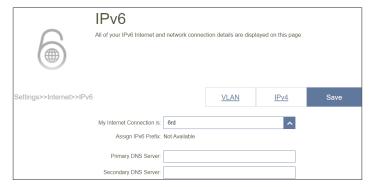
If you select **Manual Configuration** as the 6rd Configuration:

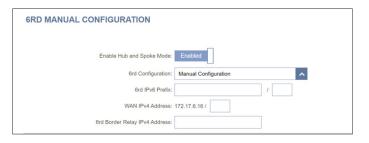
6rd IPv6 Prefix: Enter the 6rd IPv6 prefix and mask length supplied by your ISP.

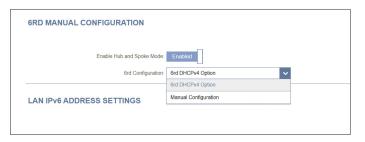
WAN IPv4 Address: Displays the gateway's IPv4 address.

6rd Border Relay IPv4 Enter the 6rd border relay IPv4 address settings supplied by your

Address: ISP.







IPv6 - 6rd

LAN IPv6 Address Settings

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

Advanced Settings... - Address Autoconfiguration Settings

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

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

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

Router Advertisement Enter the router advertisement lifetime (in minutes). The **Lifetime:** default is 30 minutes.

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

IPv6 Address Range Enter the starting IPv6 address for the DHCP server's IPv6

(Start): assignment.

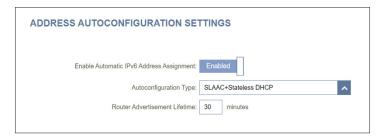
IPv6 Address Range Enter the ending IPv6 address for the DHCP server's IPv6

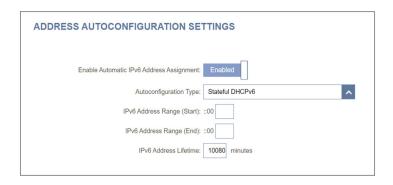
(End): assignment.

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

10080 minutes







IPv6 - Local Connectivity Only

Local Connectivity Only allows you to set up an IPv6 connection that will not connect to the Internet. Click **Save** at any time to save the changes you have made on this page.

Advanced Settings - IPv6 ULA Settings

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

settings.

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

Prefix:

If you select **Enable ULA** and disable **Default ULA Prefix**:

ULA Prefix: Enter your own ULA prefix.

Advanced Settings - Current IPv6 ULA Settings

Current ULA Prefix: Displays the current ULA prefix.

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



Internet - VLAN

In the Settings menu on the bar at the top-left of the page, click **Internet** to see the Internet configuration options for the IPv4 connection details, then click the **VLAN** link to access the configuration options for the VLAN connection details.

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

To configure the IPv4 Internet and view network connection details, click the **IPv4** link. Refer to **IPv4** on **page 32** To configure the IPv6 Internet and view network connection details, click the **IPv6** link. Refer to **IPv6** on **page 46**

Click **Save** at any time to save the changes you have made on this page.

Status: Displays the current ULA prefix. lick to enable or disable the Triple-Play VLAN feature. More configuration options will be available if the Status is enabled.



Internet - VLAN

If Triple-Play Status is **Enabled**:

VLAN TAG: Enable VLAN TAG to enter VLAN ID, as provided by your ISP

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

your ISP.

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

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

VoIP VLAN ID:

Priority ID:

 $Enable\ or\ disable\ traffic\ priority\ ID\ for\ the\ Internet,\ IPTV,\ and\ VoIP$

VLANs. Select a priority ID from the drop-down menu to assign to the corresponding VLAN (0-7). Traffic with a higher priority ID

(0 represents best effort and 7 represents the highest priority)

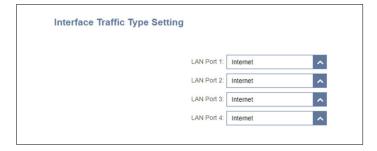
takes precedence over traffic with a low priority ID tag.

Interface Traffic Type Setting

LAN Port 1-4: From the drop-down menu, you can select the type of connection (Internet, IPTV, or Voice over IP) coming from the WAN connection

to each interface on the gateway.





Wireless

From this page you can configure your Wi-Fi settings. Click **Save** at any time to save the changes you have made on this page.

Wi-Fi Mesh

Status: Enable Wi-Fi Mesh if you plan to build a mesh network in your environment. The Mesh network is able to find the shortest and fastest path to your gateway/router in a mesh network topology. Hence, it enhances efficiency and reliability. The default is enabled.

Smart Connect

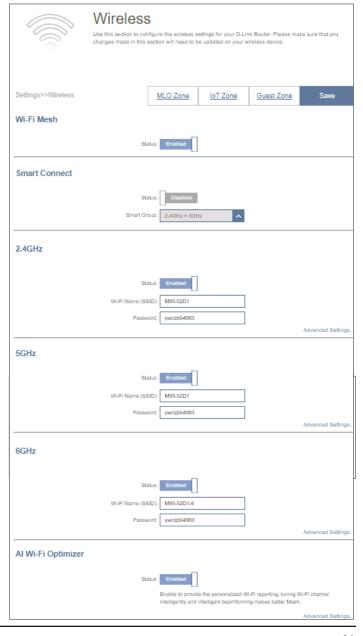
Status: Enable or disable the Smart Connect Feature. The Smart Connect feature presents a single wireless network. When connecting clients to the extended network, the clients will be automatically added to the best band, 2.4 GHz, 5 GHz, or 6 GHz.

If Smart Connect Status is Enabled:

Wireless

Wi-Fi Name Enter a name for your Wi-Fi network. Up to 32 characters are allowed. **(SSID):**

Password: Create a password for your Wi-Fi network. Wireless clients will need to enter this password to successfully connect to the network.



Wireless

Wireless - Advanced Settings

Security Mode: Choose None, Enhance Open (AES), Enhance Open (AES/None)

WPA/WPA2-Personal, WPA2-Personal, WPA3-Persoanl, or WPA3-Personal. WPA3 provides the highest level of encryption among these and previous versions of WPA as well as the None security will be disabled if the Smart Connect group contains 6GHz. Note that WPS will be disabled if WPA3 or Enhance Open is used.

DFS Channel: DFS enables you to use more channels to help find one with the

least interference.

Transmission Select a desired wireless transmission power: High, Medium, Low.

Power:

Schedule: Select the time during which the wireless network will be available. The schedule may be set to **Always Enable** or you can add your

own schedule.

To add a schedule: Each box represents half an hour, with the clock

time (0~23) at the top of each column.

To add a time period to the schedule, simply click on the start time and drag to the end time. You can add multiple days and multiple

periods per day to the schedule.

When Smart Connect Status is disabled, 2.4 GHz and 5 GHz configuration options become available. Please configure each band separately as instructed below.

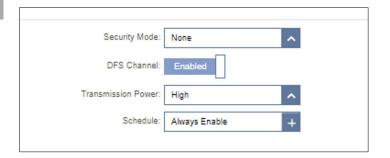
2.4 GHz / 5 GHz / 6 GHz

Status: Enable or disable the 2.4 GHz / 5 GHz / 6 GHz wireless network.

Wi-Fi Name Create a name for your wireless network. Up to 32 characters are allowed. **(SSID):**

Password: Create a Wi-Fi password. Wireless clients will need to enter this password

to successfully connect to the network.







2.4 GHz - Advanced Settings...

Security Mode: Choose None, Enhance Open (AES), Enhance Open (AES/ NONE), WPA/WPA2-Personal, WPA2-Personal, WPA2/WPA3-**Persoanl,** or **WPA3-Personal**. WPA3 provides the highest level of encrytion among these. Note that WPS will be disabled if WPA3 is used. For Enhance Open, you can choose whether or not encryption using Advanced Encryption Standard (AES) will be used for data communication between the client and the router.

802.11 Mode Select a desired wireless networking standard to use. The

(2.4GHz): available options for the 2.4 GHz wireless network are Mixed 802.11b/g/n/ax/be, Mixed 802.11b/g/n/ax, Mixed 802.11b/

g/n, Mix 802.11b/g, or 802.11b only only.

Wi-Fi Channel: Select a desired channel: 1-11. The default is Auto

(recommended).

Transmission Power: Select a desired wireless transmission power: High, Medium, or

Low.

Channel Width Select Auto 20/40 MHz if you are using 802.11n and above

(2.4GHz): (802.11b/g/n/ax/be) devices, or select 20 MHz if you are using a

mixed of 802.11b/g devices.

HT20/40 Enable or disable coexistence of 20/40 MHz.

Coexistence:

Visibility Status: The default setting is Visible. Select Invisible if you do not

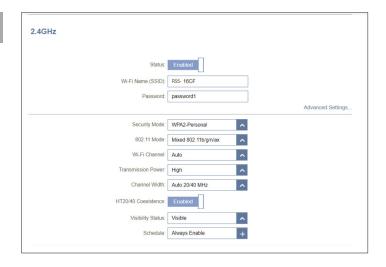
want to broadcast the SSID of your wireless network.

Schedule: Select the time during which the wireless network will be available. The schedule may be set to Always Enable or you can

add your own schedule.

To add a schedule:

Each box represents half an hour, with the clock time (0~23) at the top of each column. To add a time period to the schedule, simply click on the start time and drag to the end time. You can add multiple days and multiple periods per day to the schedule.



5 GHz - Advanced Settings...

Security Mode: Choose None, WPA/WPA2-Personal, WPA2-Personal, WPA2/

WPA3-Persoanl, or **WPA3-Personal**. WPA3 provides the highest level of encryption among these. Note that WPS will be disabled if

WPA3 is used.

802.11 Mode Select a desired wireless networking standard to use. The available

(5 GHz): options for the 5 GHz wireless network are Mixed 802.11a/n/ac/

ax/be, Mixed 802.11a/n/ac/ax, Mixed 802.11a/n/ac, 802.11a/n,

or **802.11a** only.

Wi-Fi Channel: Select a desired channel: 36, 40, 44, 48, 149, 153, 157, 161, or 165.

The default is **Auto** (recommended).

DFS Channel: Enable Dynamic Frequency Selection (DFS) channels to use

additional channel options if the gateway is not in an area close by an airport or a radar station. If enabled, the gateway will listen for radar signals, and if radar signals are detected, it will automatically

switch to a new channel. The default is disabled.

Transmission Select a desired wireless transmission power: High, Medium, or

Power: Low.

Channel Width Select Auto 20/40/80/160MHz if you are using a mix of 802.11ac

(5 GHz): and other devices such as 802.11be, 802.11ax, 802.11n, and 802.11a

devices, select 20/40 MHz if you are using 802.11n/a devices, or

select 20 MHz if you are using 802.11a devices only.

Visibility Status: The default setting is Visible. Select Invisible if you do not want to

broadcast the SSID of your wireless network.

Schedule: Select the time during which the wireless network will be available.

The schedule may be set to Always Enable or you can add your

own schedule. To add a schedule:

Each box represents half an hour, with the clock time $(0\sim23)$ at the top of each column. To add a time period to the schedule, simply click on the start time and drag to the end time. You can add

multiple days and multiple periods per day to the schedule.



6 GHz - Advanced Settings...

Security Mode: Choose Enhance Open (AES) or WPA3-Personal. WPA3 provides

the highest level of encryption among these. Note that WPS will be disabled for both methods. The Enhance Open provides access without requiring authentication but will encrypt data transmitted

beteween the client and the router.

802.11 Mode Select a desired wireless networking standard to use. The available

(6 GHz): options for the 6 GHz wireless network are Mixed 802.11ax/be, or

802.11ax only.

Wi-Fi Channel: Select a desired channel: 5, 21, 37, 53, 69, 85, 101, 117, 133, 149,

165, 181, 197, 213, or 229. The default is **Auto** (recommended).

DFS Channel: Enable Dynamic Frequency Selection (DFS) channels to use

additional channel options if the gateway is not in an area close by an airport or a radar station. If enabled, the gateway will listen for radar signals, and if radar signals are detected, it will automatically

switch to a new channel. The default is disabled.

Transmission Select a desired wireless transmission power: High, Medium, or

Power: Low.

Channel Width Select Auto 20/40/80/160/320MHz or other combinations such as

(5 GHz): Auto 20/40/80/160MHz, Auto 20/40/80MHz, Auto 20/40MHz, or

20MHz.

Visibility Status: The default setting is Visible. Select Invisible if you do not want to

broadcast the SSID of your wireless network.

Schedule: Select the time during which the wireless network will be available.

The schedule may be set to Always Enable or you can add your

own schedule. To add a schedule:

Each box represents half an hour, with the clock time (0~23) at the top of each column. To add a time period to the schedule, simply click on the start time and drag to the end time. You can add multiple days and multiple periods per day to the schedule.

Status: Enabled

Wi-Fi Name (SSID): M95-52D1

Password: ywcqb64983

Advanced Settings.

Security Mode: Enhance Open (AES)

802.11 Mode: 802.11ax only

Wi-Fi Channel: Auto

Transmission Power: High

Channel Width: Auto 20/40/80/160/320 MHz

Visibility Status: Visible

Schedule: Wireless Schedule

+

Al Wi-Fi Optimizer

Al-assisted Wi-Fi Optimizer intelligently assists with bandwidth optimization for your home or office network. It automatically adopts the "cleanest" channel using the mesh beamforming technology, which in turn optimizes the overall mesh network.

Al Wi-Fi Optimizer nable to provide the personalized Wi-Fi reporting, tuning Wi-Fi channel

Al Wi-Fi Enable or disable Al Wi-Fi Optimizer functionality. **Optimizer:**

Choose Optimization Enable or disable scheduled optimization. Select the time at **Time:** which the Al Wi-Fi Optimizer will start.

Once the AI Wi-Fi optimizer is turned on, you will begin to receive weekly reports on Wi-Fi conditions through AI Assistant.

Wi-Fi Protected Setup

The easiest way to connect your wireless devices to your gateway is with Wi-Fi Protected Setup (WPS).

WPS-PBC Status: Enable or disable WPS Push Button Configuration (PBC) functionality. Enabling this feature will allow wireless clients to connect to the Wi-Fi through an encrypted connection established through pressing the WPS button.



Guest Zone

The **Guest Zone** feature will allow you to create a temporary wireless network for guests to access the Internet. This zone will be separate from your main Wi-Fi network.

In the **Settings** menu on the left side of the page, click **Wireless**, then click the **Guest Zone** link. Click **Save** at any time to save the changes you have made on this page.

If Smart Connect Status is **Enabled** in the previous Wireless settings, configure the following for both radio frequencies. If it is **Disabled**, configure the following for 2.4 GHz, 5 GHz, and 6 GHz individually.

Wireless

Status: Enable or disable the Guest Wi-Fi network.

Wi-Fi Name Enter a name for your guest wireless network. **(SSID):**

Password: Create a password for your guest Wi-Fi network. Wireless clients will need to enter this password to successfully connect to the network.

Schedule: Select the time during which the wireless network will be available. The schedule may be set to Always Enable or you can add your own schedule.

To add a schedule:

Each box represents half an hour, with the clock time $(0\sim23)$ at the top of each column. To add a time period to the schedule, simply click on the start time and drag to the end time. You can add multiple days and multiple periods per day to the schedule.



Advanced Settings

Security Mode Choose None, WPA/WPA2-Personal, WPA2-Personal, WPA2/

(2.4GHz): WPA3-Persoanl, or WPA3-Personal. WPA3 provides the highest

level of encryption among these.

Security Mode Choose None, WPA/WPA2-Personal, WPA2-Personal, WPA2/

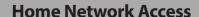
(5GHz): WPA3-Persoanl, or WPA3-Personal. WPA3 provides the highest

level of encryption among these.

Security Mode Choose Enhance Open (AES) or WPA3-Personal. Enhance Open

(6GHz): does not require password authentication from clients trying to connect to the router; however, the communication between the client and ther router is encrypted. On the other hand, WPA3

authenticate and encrypt every connection attempt.



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



IoT Zone

The **IoT Zone** feature will allow you to create a wireless network for interconnection of IoT devices. This zone will be separate from your main Wi-Fi network.

In the **Settings** menu on the left side of the page, click **Wireless**, then click the **IoT Zone** link. Click **Save** at any time to save the changes you have made on this page.

If Smart Connect Status is **Enabled**, configure the following for both radio frequencies. If it is **Disabled**, configure the following for 2.4 GHz and 5 GHz individually.

Wireless

Status: Enable or disable the IoT Wi-Fi network.

Wi-Fi Name Enter a name for your IoT wireless network.

(SSID):

Password: Create a password for your IoT Wi-Fi network. Wireless clients will need

to enter this password to successfully connect to the network.

Schedule: Select the time during which the wireless network will be available.

The schedule may be set to Always Enable or you can add your own

schedule.

To add a schedule:

Each box represents half an hour, with the clock time $(0\sim23)$ at the top of each column. To add a time period to the schedule, simply click on the start time and drag to the end time. You can add multiple days and multiple periods per day to the schedule.



Advanced Settings

Security Mode Choose None, WPA/WPA2-Personal, WPA2-Personal, WPA2/ (2.4GHz):

WPA3-Persoanl, or WPA3-Personal. WPA3 provides the highest

level of encryption among these.

Security Mode Choose None, WPA/WPA2-Personal, WPA2-Personal, WPA2/ (5GHz):

WPA3-Persoanl, or WPA3-Personal. WPA3 provides the highest

level of encryption among these.



Home Network Access

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

MLO Zone

The **MLO Zone** feature will allow you to create a wireless network for Multi-link Operation (MLO). This zone allows for bandwidth aggregation from different bands to reduce interference and latency. It will be separate from your main Wi-Fi network.

In the **Settings** menu on the left side of the page, click **Wireless**, then click the **MLO Zone** link. Click **Save** at any time to save the changes you have made on this page.

If Smart Connect Status is **Enabled** in the previous Wireless settings, configure the following for both radio frequencies. If it is **Disabled**, configure the following for 2.4 GHz and 5 GHz individually.

Wireless

Status: Enable or disable the Guest Wi-Fi network.

Wi-Fi Name Enter a name for your guest wireless network. **(SSID):**

Password: Create a password for your guest Wi-Fi network. Wireless clients will need to enter this password to successfully connect to the network.

Schedule: Select the time during which the wireless network will be available. The schedule may be set to Always Enable or you can add your own schedule.

To add a schedule:

Each box represents half an hour, with the clock time $(0\sim23)$ at the top of each column. To add a time period to the schedule, simply click on the start time and drag to the end time. You can add multiple days and multiple periods per day to the schedule.



Advanced Settings

Security Mode: Choose **Enhance Open (AES)** or **WPA3-Personal**. The Enhance Open provides access without requiring authentication but will encrypt data transmitted beteween the client and the router. On the other hand, WPA3 will authenticate and encrypt every connection attempt.



Home Network Access

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

Network

This section allows you to change the local network settings of the gateway and configure the DHCP settings. In the Settings menu on the left side of the page, click **Network**. Click **Save** at any time to save the changes you have made on this page.

Network Settings

LAN IP Address: Enter the IP address of the gateway. The default IP address

is **192.168.200.1**.

If you change the IP address, you will need to enter the new IP address in your browser to get back into the configuration

utility.

Subnet Mask: Enter the subnet mask of the gateway. The default subnet

mask is **255.255.255.0**.

Management Link: The default address to access the gateway's configuration is

http://R95-xxxx.local/ (where xxxx represents the last 4 digits of your gateway's MAC address). You can replace

R95-xxxx with a name of your choice.

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

Enable DNS Relay: Disable to transfer the DNS server information from your

ISP to your computers. If enabled, your computers will use

the gateway's setting for a DNS server.

Status: Enable or disable the DHCP server.



Network

DHCP Server

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

Note: If you have reserved static IP addresses for client devices, make sure the IP addresses are outside of this range or you might have an IP conflict.

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

The default is 10,800 minutes.

Always Broadcast: Enable this feature to broadcast your network's DHCP server

to LAN/WLAN clients.

Advanced Settings...

WAN Port Speed: You may set the port speed of the Internet port to **10 Mbps**,

100 Mbps, 1000 Mbps, or Auto (recommended).

UPnP: Enable or disable Universal Plug and Play (UPnP). UPnP

provides compatibility with networking equipment, software,

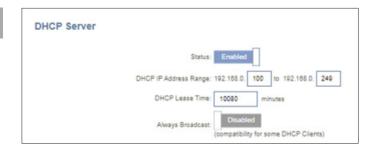
and peripherals. This is enabled by default.

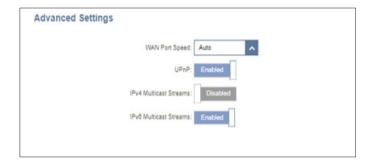
IPv4 Multicast Enable to allow IPv4 multicast traffic to pass through the

Streams: gateway from the Internet. This is enabled by default.

IPv6 Multicast Enable to allow IPv6 multicast traffic to pass through the

Streams: gateway from the Internet. This is enabled by default.





D-Link Cloud

In the **Settings** menu on the left side of the page, click **D-Link Cloud** to see your D-Link Cloud Service details. This page shows whether you are registered with D-Link Cloud Service and your email address associated with the account. Use the AQUILA PRO AI app to find out more about D-Link Cloud's features.



D-Link Cloud

D-Link Cloud Service enables third-party service integration for your device through the cloud. Please view your account information that is currently associated with your device's D-Link Cloud account. To find out more about D-Link Cloud's features, simply download the EAGLE PRO AI App from the App Store or Google PlayTM to your mobile device.

Settings>>D-Link Cloud

D-Link Cloud Registration

D-Link Cloud Service: Registered

D-Link Cloud Account: cspmd2023+hqqa+writer@gmail.com

Operation Mode

In the **Settings** menu on the left side of the page, click **Network** to change the local network settings of the gateway and to configure the DHCP settings. Click **Save** at any time to save the changes you have made on this page.

Operation Mode Settings

Router Mode: Select Router Mode to run this device as a router.

Extender Mode: Select Extender Mode to run this device as an extender

Bridge Mode: Select Bridge Mode to extend your existing network and improves

overall Wi-Fi coverage. Under this mode, the DHCP Server, Parental Control, QoS, and Firewall settings rely on the existing gateway.



Features Parental Control

Go to **Features** > **Parental Control** to configure parental control policies. You can configure schedules that restrict online hours and prevent access to certain websites. Click **Save** at any time to save the changes you have made on this page. This page displays a list of profiles with the following information:

Profile Name The name describes this profile.

Device Count The number of devices that this policy will be applied to.

State Displays the current status of Internet accessibility, I.e. Normal, Schedule Paused, or Paused on Demand.

Edit Edit the access profile.

Delete Remove this access profile.

A maximum of 12 profiles can be defined. Once a profile has been set, you will start receiving weekly reports on Internet access activity of the clients through AI Assistant. To add a profile, configure the following:

Schedule

Profile Name: Enter a profile name for the schedule.

Allow Scheduled Internet Access:

Set a time period for the devices to be *blocked* (or alllowed) Internet access.

To add a schedule:

Each box represents half an hour, with the clock time $(0\sim23)$ at the top of each column. To add a time period to the schedule, simply click on the start time and drag to the end time. You can add multiple days and multiple periods per day to the schedule.







Block Internet Access During Bedtime

Click **Enabled** and define a schedule to block Internet access during bedtime.

To add a bedtime schedule:

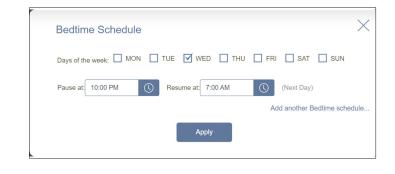
Select the time during which bedtime schedule will be active. Select the days of the week, then select the pause time and the resume time for the period during which Internet access will be blocked. To specify different time periods for days of the week, click **Add another Bedtime schedule...** A maximum of 2 schedules can be defined.

Note that the Bedtime schedule takes precedence over Scheduled Internet Access.

Allow Limited Access

Enable this option to allow slow Internet access with reduced speed during restricted hours set above.

Click **Apply** when you are done.



Website Filter

Click **Add Rule** to add a new website to be blocked:

Website Name Enter a name for the website. This blocks access to websites

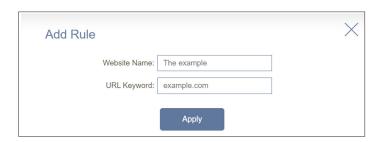
based on the domain names. For example, use "ABC.com" to

block both "ABC.com" and "www.ABC.com".

URL Keyword This blocks access to websites based on the keywords

with matching URLs. For example, use "ABC" to block "www. ABC.com" and "xxx.ABC.com" and other URLs containing ABC.

You can also modify or delete an existing rule by clicking **Edit** or **Delete** respectively.



Device

Click **Add Device** to add devices to be in a defined profile. Select devices from the list of connected devices to which you want to apply the access policy to, then click **Apply** to close the screen. Click **Save** to save your profile settings and the new profile will be added to the profile list. You can also modify or delete an existing profile by clicking **Edit** or **Delete** respectively. On the **Edit** page for a selected profile, you can immediately **Pause for Internet Access** to specified devices of the profile.

Click **Settings** to view the messages displayed to the Internet access restricted users.



Blocked Webpage Message

You can view and customize displayed messages and titles in **Settings** when **Manual Pause Control**, **Website Filter**, **Custom Schedule**, and **Bedtime Schedule** is enabled. Edit Blocked Webpage Message and click **Save** to save the modified messages immediately.

Title: Enter a title for the message in the text box.

Description: Enter a message to inform users about the restricted Internet

access.

Reset this Click this button to reset the modified message to factory default.

message:

Preview this Displays the message on a new page.

message:



QoS Engine

The Quality of Service (QoS) Engine allows you to prioritize particular clients over others, so that certain clients receive higher bandwidth.

In the **Features** tab on the left side of the page, click **QoS Engine**.

The intelligent QoS Engine lists devices consuming comparatively large resources and will intelligently adjust bandwidth to these devices by assigning a low priorty.

> **QoS:** Once this is turned on, you will start receiving weekly reports on bandwidth usage through AI Assistant.

Download Speed Enter the maximum download speed (in Mbps) for all connected (Mbps): clients. If QoS is enabled, clients will not be able to exceed this value.

Upload Speed Enter the maximum upload speed (in Mbps) for all connected clients. (Mbps): If QoS is enabled, once this threshold is reached, traffic from higherpriority clients will be processed first, while traffic from lower-priority clients will wait until enough bandwidth becomes available.

> Upload/download speeds can be obtained from your Internet Service Provider.

Click **Save** after filling in the above information.

