



Fios Home Wi-Fi Extender **USER GUIDE**



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01 /

INTRODUCTION

- 1.0** Package Contents
- 1.1** System Requirements
- 1.2** Features
- 1.3** Getting to Know Your Fios Home Wi-Fi Extender

Verizon Fios Home Wi-Fi Extender lets you transmit and distribute digital entertainment and information to multiple devices in your home/office.

Your Wi-Fi Extender supports networking using coaxial cables, Ethernet, or Wi-Fi, making it one of the most versatile and powerful Wi-Fi extenders available.

PACKAGE CONTENTS, SYSTEM REQUIREMENTS AND FEATURES

1.0/ PACKAGE CONTENTS

Your package contains:

- Fios Home Wi-Fi Extender
- Power adapter
- OSS (Open Source Software) insert guide

1.1/ SYSTEM REQUIREMENTS

System and software requirements are:

- A computer or other network device supporting Wi-Fi or wired Ethernet
- A web browser, such as Chrome™, Firefox®, Internet Explorer 8® or higher, or Safari® 5.1 or higher

1.2/ FEATURES

Your Fios Home Wi-Fi Extender features include:

- Support for multiple networking standards, including
 - LAN – 802.11 a/b/g/n/ac/ax, Gigabit Ethernet and MoCA 2.5 interfaces
- Integrated wired networking with 2-port Ethernet switch and Coax (MoCA LAN)

-
- Ethernet supports speeds up to 1000 Mbps
 - MoCA 2.5 LAN enabled to support speed up to 2500 Mbps over coaxial cable
 - Self-organizing Network (SON) offers seamless roaming, band steering, and AP steering to improve the performance of your Wi-Fi network
 - Integrated wireless networking with 802.11a/b/g/n/ac/ax access point featuring:
 - backward compatible to 802.11a/b/g/n/ac
 - 2.4G 11ax 4x4
 - two 5G 11ax 4x4
 - Enterprise-level security, including:
 - Advanced wireless protection featuring WPA2/WPA Mixed Mode and MAC address filtering
 - Wi-Fi Multimedia (WMM) for wireless QoS (quality-of-service)
 - Compatible with Wi-Fi Mesh system
 - Secure remote management using HTTPS or My Fios app

GETTING TO KNOW YOUR FIOS HOME WI-FI EXTENDER

1.3/ GETTING TO KNOW YOUR FIOS HOME WI-FI EXTENDER

1.3a/ FRONT PANEL

The front panel's unified button allows quick access to the Wi-Fi Protected Setup (WPS) feature and pairing mode.

The Status LED will be on white and solid when your Fios Home Wi-Fi Extender is turned on, connected to the internet, and functioning normally.



Status LED

Condition Status	LED Color	Fios Home Wi-Fi Extender
Normal	WHITE	Normal operation (solid) Fios Home Wi-Fi Extender is booting (fast blink)
	BLUE	Pairing mode (slow blink) Pairing successful (solid)
	GREEN	Wi-Fi has been turned off (solid)
Issue(s)	YELLOW	No internet connection (solid) Wi-Fi Extender is too far from the Router. Poor backhaul signal (slow blink) Wi-Fi Extender is too close to the Router. Poor Wi-Fi coverage (fast blink)
	RED	Hardware/System failure detected (solid) Overheating (fast blink) Pairing Failure (slow blink)
Power	OFF	Power off

The WPS button is used to initiate Wi-Fi Protected Setup. This is an easy way to add WPS capable devices to your wireless network. To activate the WPS function, press and hold the unified button located on the front of your Fios Home Wi-Fi Extender for more than 2 seconds. When WPS is initiated from your Fios Home Wi-Fi Extender, the Status LED slowly flashes blue for up to two minutes, allowing time to complete the WPS pairing process on your wireless device (also known as a wireless client). When a device begins connecting to your Fios Home Wi-Fi Extender using WPS, the Status LED rapidly flashes blue for a few seconds, and turns solid blue and then solid white as the connection completes.

If there is an error during the WPS pairing process, the Status LED slowly flashes red for two minutes after the error occurs.

Refer to the “Connecting A Wi-Fi Device Using WPS” for more details. In addition, the unified button also provides a quick view of the operational state of the Fios Home Wi-Fi Extender using various colors as indicated in the chart of “Status LED” on page 8. Please refer to section 5.0h for details on the rear LEDs.

1.3b/ REAR PANEL

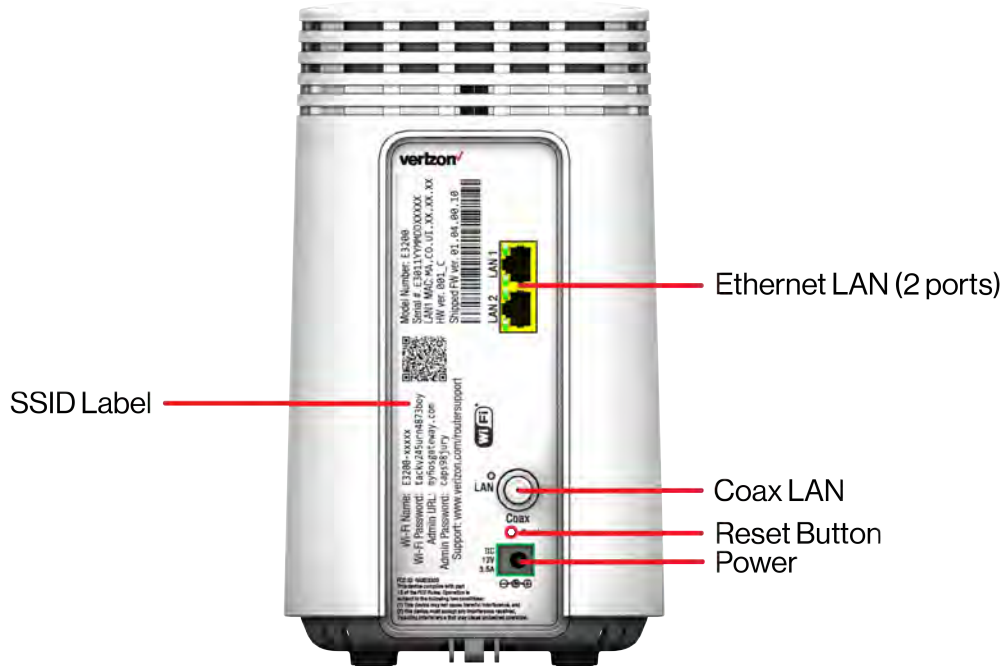
The rear panel of your Fios Home Wi-Fi Extender has a label that contains important information about your device, including the default settings for the Fios Home Wi-Fi Extender’s wireless network name (SSID), wireless password (WPA2 key), local URL for accessing the Fios Home Wi-Fi Extender’s administrative pages,

GETTING TO KNOW YOUR FIOS HOME WI-FI EXTENDER

and administrator password. The label also contains a QR code that you can scan with your smartphone, tablet, or other camera-equipped Wi-Fi device to allow you to automatically connect your device to your Wi-Fi network without typing in a password (requires a QR code reading app with support for Wi-Fi QR codes).



The rear panel has three ports; F-type coax and Ethernet LAN [two]. The rear panel also includes a DC power jack and a reset button.



- **Ethernet LAN** - connects devices to your Fios Home Wi-Fi Extender using Ethernet cables to join the local area network (LAN). The two Ethernet LAN ports are 10/100/1000 Mbps auto-sensing and can be used with either straight-through or crossover Ethernet cables.
- **Coax LAN** - connects your Fios Home Wi-Fi Extender to the LAN and/or to other MoCA devices using a coaxial cable.
- **Reset Button** - allows you to reset your Fios Home Wi-Fi Extender to the factory default settings. To perform a soft reboot, press and hold the button for at least three seconds. To reset your Fios Home Wi-Fi Extender to the factory default settings, press and hold the button for at least ten seconds.
- **Power** - connects your Fios Home Wi-Fi Extender to an electrical wall outlet using the supplied power adapter.

***Warning:** The included power adapter is for home use only, supporting voltages from 105-125 voltage in AC. Do not use in environments with greater than 125 voltage in AC.*

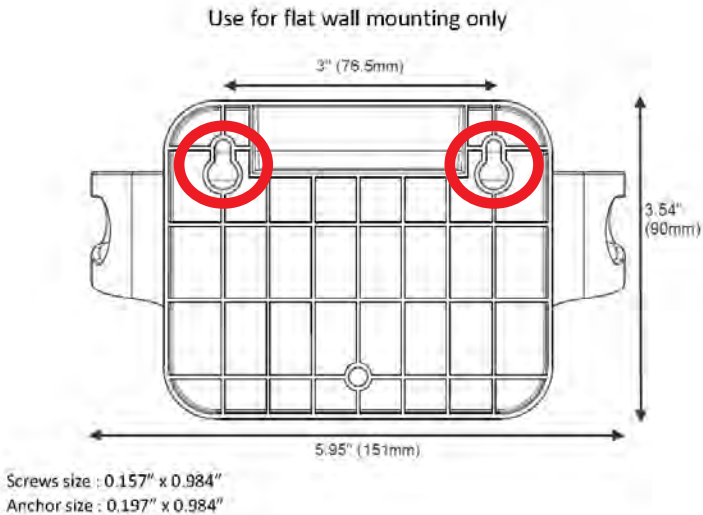
1.3c/ MOUNTING THE FIOS HOME WI-FI EXTENDER TO A WALL

For optimum performance, the Fios Home Wi-Fi Extender is designed to stand in a vertical upright position. Verizon does not recommend wall mounting the Fios Home Wi-Fi Extender. However, if you wish to mount your Fios Home Wi-Fi Extender, you can purchase a wall mount bracket from the Verizon Fios Accessories Store at verizon.com/home/accessories/networking-wifi

GETTING TO KNOW YOUR FIOS HOME WI-FI EXTENDER

To mount your Fios Home Wi-Fi Extender to a wall:

1. You may use the wall-mount template sheet for positioning the Fios Home Wi-Fi Extender.
2. Mark the mounting holes using the template sheet as shown below.



3. Drive two screws into the wall. Leave the screws extended about 0.2 inches from the wall.
4. Verify the screws are positioned correctly by placing the wall bracket on the screws. Then remove the wall bracket from the wall.



5. There are two mounting slots located on the bottom of the Fios Home Wi-Fi Extender. It allows you to securely attach your Wi-Fi Extender to the wall. Align the slots with the wall mount bracket.



GETTING TO KNOW YOUR FIOS HOME WI-FI EXTENDER

6. Attach the Wi-Fi Extender to the wall mount bracket through an easy twist and lock action.



7. Align the wall mount bracket with the attached Wi-Fi Extender to the screws, then slide the bracket down until it locks in place.



8. To secure the bracket, place one screw into the small hole of the bracket and tighten the screw into your wall.



Note: To release the lock, twist the Fios Home Wi-Fi Extender counter-clockwise and press down on the small clip on the bottom of the bracket.



02 /

CONNECTING YOUR FIOS HOME WI-FI EXTENDER

2.0 Setting up Your
Fios Home Wi-Fi Extender

2.1 Main Screen

Connecting your Fios Home Wi-Fi Extender and accessing its web-based Graphical User Interface (GUI) are both simple procedures.

Accessing the GUI may vary slightly, depending on your device's operating system and web browser.

SETTING UP YOUR FIOS HOME WI-FI EXTENDER

2.0/ SETTING UP YOUR FIOS HOME WI-FI EXTENDER

2.0a/ WIRELESS INSTALLATION

1. Place the Fios Home Wi-Fi Extender directly next to the Fios Home Router.
2. Connect the power cord from the extender to an electrical outlet.



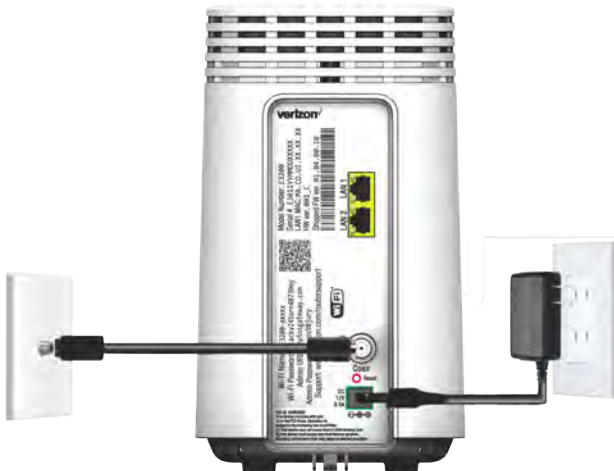
3. When the light on the extender is solid yellow, press and hold the buttons on your router and extender for 2+ seconds until they slowly begin to blink blue.
4. The lights on the router and extender should turn solid blue while the wireless connection is initiating and solid white when the connection is complete.
5. Once the wireless connection is complete, you can unplug and move the extender to an area between your router and

an area with spotty Wi-Fi coverage. Once plugged in again, the light should turn solid white again within a few minutes.

You're all set! Your devices will connect automatically with the same Wi-Fi network name and password as your Fios Home Router.

2.0b/ WIRED INSTALLATION

1. Place the Fios Home Wi-Fi Extender and Fios Home Router near a coax outlet – ideally in an area with spotty Wi-Fi coverage.
2. Connect the coax cable from the extender to a coax outlet. (If the coax outlet is already in use, you can use the coax splitter included in the shipping box.)
3. Connect the power cord from the extender to an electrical outlet.



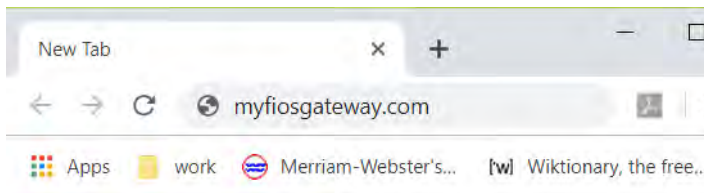
SETTING UP YOUR FIOS HOME WI-FI EXTENDER

4. The light on the extender should turn solid white within a few minutes, indicating the connection is complete.

You're all set! Your devices will connect automatically with the same Wi-Fi network name and password as your Fios Home Router.

2.0c/ CONFIGURATION ACCESS TO YOUR FIOS HOME WI-FI EXTENDER

1. Open a web browser on the device connected to your Fios Home Wi-Fi Extender network.
2. In the browser address field (URL), enter: myfiogateway.com, then press the **Enter** key on your keyboard.



The first time you access your Fios Home Wi-Fi Extender, an Easy Setup Wizard displays to help step you through the setup process.

3. On the **Step 1: Please log in to your extender** screen, enter the password that is printed next to the Admin Password on the label on the rear of your Fios Home Wi-Fi Extender.

Let's get started with Wi-Fi setup in 3 easy steps!**Step 1: Please log in to your extender.**

Enter the Admin Password located on the side of your extender.

Admin Password:

☐ Show Password

Next

Cancel and perform later

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4. Click **Next**. The **Step 2: Personalize Your Wi-Fi Settings** screen displays. Click on the check box next to **Setup and Enable Your Guest Wi-Fi (Optional)** to personalize your Guest Wi-Fi Name and Password.

Step 2: Personalize Your Wi-Fi Settings

Your extender is pre-configured with the Wi-Fi settings below. You may use the defaults or change the name and password to something easier to remember.

Wi-Fi Name:

E3200-VLWMP

Wi-Fi Password:

mlk95Gnto4top

Wi-Fi Password must be at least 8 characters.

Restore defaults >

☒ Setup and Enable Your Guest Wi-Fi (Optional)

A Guest Wi-Fi network is a simple and secure (encrypted) secondary network. Users on this network have "Internet Only" access and will not be able to connect to devices running on your Primary "Home" network.

Keep your Primary "Home" network secure by creating a Guest Network just for your guests!

Guest Wi-Fi Name:

E3200-VLWMP-Guest

Guest Wi-Fi Password:

Guest Wi-Fi Password must be at least 8 characters.

☐ Create a guest network without a password (not recommended)

Next

Cancel and perform later

Back >

CONFIGURATION ACCESS TO YOUR FIOS HOME WI-FI EXTENDER

For your protection, your Fios Home Wi-Fi Extender is pre-set at the factory to use WPA2 (Wi-Fi Protected Access) encryption for your wireless network. This is the best setting for most users and provides maximum security.

5. Click **Next**. The **Step 3: Click Apply to Save Your Wi-Fi Settings** screen appears. You have an option of saving the Wi-Fi settings as an image on your device by clicking the **Save as picture** button. After you click **Save as picture** to save your Wi-Fi settings as an image, click **Apply** to save the Wi-Fi changes to your Fios Home Wi-Fi Extender.

***Important:** If you are on a Wi-Fi device when setting up your Fios Home Wi-Fi Extender, you will be disconnected from the Wi-Fi network when you change the Wi-Fi name or Wi-Fi password. When this occurs, your Fios Home Wi-Fi Extender will detect this situation and prompt you to reconnect using the new settings.*



The **Congratulations! You're all set up.** screen displays once your Fios Home Wi-Fi Extender verifies the final settings and has successfully connected to the internet and is ready for use. You can click on main Wi-Fi settings to access the main screen of the Fios Home Wi-Fi Extender or click on Start browsing and you will be directed to the Verizon.com website.



If your Fios Home Wi-Fi Extender is subsequently reset to the factory default settings, the settings printed on the label will again be in effect.

If your Fios Home Wi-Fi Extender fails to connect, follow the troubleshooting steps in the Troubleshooting section of this guide.

CONNECTING A WI-FI DEVICE USING WPS

Wi-Fi Protected Setup (WPS) is an easier way for many devices to set up a secure wireless network connection. Instead of manually entering passwords or multiple keys on each wireless client, such as a laptop, printer, or external hard drive, your Fios Home Wi-Fi Extender creates a secure wireless network.

In most cases, this only requires the pressing of two buttons – one on your Fios Home Wi-Fi Extender and one on the wireless client. This could be either a built-in button or one on a compatible wireless adapter/card, or a virtual button in software. Once completed, this allows wireless clients to join your wireless network.

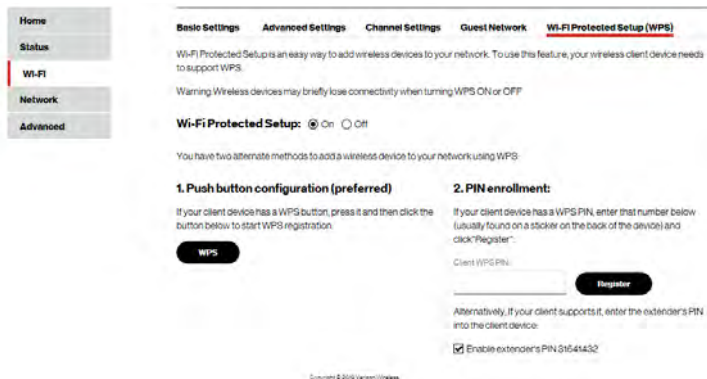
To initialize the WPS process, you can either press and hold the unified button located on the front of your Fios Home Wi-Fi Extender for more than two seconds or use the GUI and press the on-screen button.

CONFIGURATION ACCESS TO YOUR FIOS HOME WI-FI EXTENDER

You can easily add wireless devices to your wireless network using the WPS option if your wireless device supports the WPS feature.

To access WPS using the user interface:

1. From the main menu, select **Wi-Fi** settings, then select **Wi-Fi Protected Setup (WPS)**.



2. Enable the protected setup by moving the selector to **On**.
3. Use one of the following methods:
 - If your wireless client device has a WPS button, press the unified button on your Fios Home Wi-Fi Extender for more than two seconds, then click the WPS button on your wireless device (client) to start the WPS registration process.
 - If your client device has a WPS PIN, locate the PIN printed on the client's label or in the client documentation. Enter the PIN number in the **Client WPS PIN** field. The

Client WPS PIN field is located in the section **2 - PIN enrollment** on the user interface.

- Click **Register**.
- Alternatively, you can enter the Fios Home Wi-Fi Extender's PIN shown on this screen into the WPS user interface of your device, if this PIN mode is supported by your wireless device.

4. After pressing the unified button (WPS) on your Fios Home Wi-Fi Extender, you have two minutes to press the WPS button on the client device before the WPS session times out.

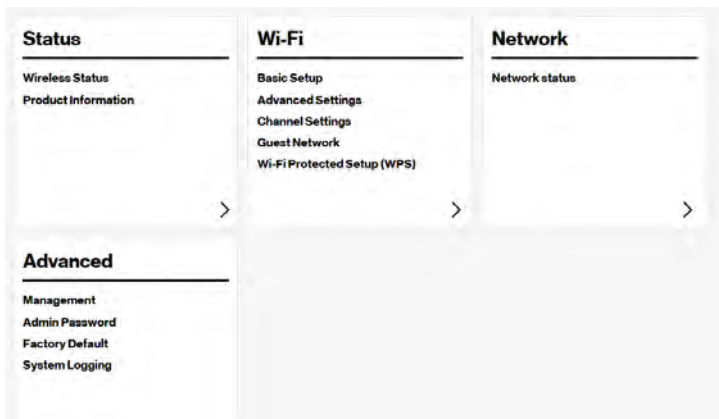
When the unified button (WPS) on your Fios Home Wi-Fi Extender is pressed, the Status LED on the front of your Fios Home Wi-Fi Extender begins flashing blue. The flashing continues until WPS pairing to the client device completes successfully. At this time, the Status LED turns solid blue.

If WPS fails to establish a connection to a wireless client device within two minutes, the Status LED on your Fios Home Wi-Fi Extender flashes red for two minutes to indicate the WPS pairing process was unsuccessful. After flashing red, the light returns to solid white to indicate that Wi-Fi is on.

CONFIGURATION ACCESS TO YOUR FIOS HOME WI-FI EXTENDER

2.1/ MAIN SCREEN

When you log into your Fios Home Wi-Fi Extender, the dashboard main page displays the main navigation menu of connection status, Wi-Fi settings, network settings and advanced quick links.



2.1a/ MENU

The main menu contains the following configuration options and chapters:

- Status - this chapter
- Wi-Fi - Chapter 3
- Network status - displayed on the graphical user interface (GUI) of the Fios Home Router
- Advanced - Chapter 4

2.1b/ STATUS

Fios Home Wi-Fi Extender Status

This section displays product model number, device FCC ID, firmware version number, device IP information, and the status of your Fios Home Wi-Fi Extender's Wi-Fi connection.

Home	Wireless Status	Product Information
Status	Wireless Status	
Wi-Fi	Wireless Band:	
Network	Wireless Radio:	Enabled
Advanced	Wireless SSID:	Fios-7zEK4
	Wireless Security:	AES
	Wireless MAC:	64 CC 22 15 65 45
	Associated Clients:	0
	Wireless Band:	5G (B+G+N)
	Wireless Radio:	Enabled
	Wireless SSID:	Fios-7zEK4
	Wireless Security:	AES
	Wireless MAC:	64 CC 22 15 65 45
	Associated Clients:	0

Home	Wireless Status	Product Information
Status	Product Information	
Wi-Fi	Model Number:	E3200
Network	Firmware Version:	1.3.8.0a
Advanced	System Up Time:	0 day 4 h 53 m 32 s
	IP Address:	192.168.1.153
	Subnet Mask:	255.255.255.0
	Default Gateway:	

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03 /

WIRELESS SETTINGS

- 3.0** Overview
- 3.1** Wireless Status
- 3.2** Basic Settings
- 3.3** Advanced Settings
- 3.4** Channel Settings
- 3.5** Guest Network

Wireless networking enables you to free yourself from wires, making your devices more accessible and easier to use.

You can create a wireless network, including accessing and configuring wireless security options.

OVERVIEW

3.0/ OVERVIEW

Your Fios Home Wi-Fi Extender provides you with wireless connectivity using the 802.11b, g, n, ac or ax standards. These are the most common wireless standards.

802.11b has a maximum data rate of 11 Mbps, 802.11g has a maximum data rate of 54 Mbps, 802.11n has a maximum data rate of 600 Mbps, 802.11ac has a maximum data rate of 1.73 Gbps, and 802.11ax has a maximum data rate of 4.8 Gbps.

802.11b and g standards operate in the 2.4 GHz range. 802.11ac operates in the 5 GHz range. 802.11n and ax operates in both the 2.4 GHz and 5 GHz ranges.

***Note:** 802.11 b is a legacy mode and is not recommended. Even one 802.11b device connected to the network will slow your entire wireless network.*

The wireless service and wireless security are activated by default. The level of security is preset to WPA2 encryption using a unique default WPA2 key (also referred to as a passphrase or password) pre-configured at the factory. This information is displayed on a sticker located on the rear of your router.

3.1/ WIRELESS STATUS

Use the Wi-Fi status feature to view the status of your Wi-Fi Extender's wireless network.

To view the status:

1. Access the dashboard main page. You can quickly view your Fios Home Wi-Fi Extender's wireless status in the **Wi-Fi** column.
2. In the **Wi-Fi** column for **Primary Network** and **Guest Network**, the following information displays:
 - **ON/OFF** - displays whether the wireless radio is active. When the radio is not enabled, no wireless devices will be able to connect to the home network.
 - **Wi-Fi Name (SSID)** - displays the SSID (Service Set Identifier) shared among all devices on a wireless network. The SSID is the network name. All devices must use the same SSID.
 - **Wi-Fi Password** - displays the Pre-Shared Key of the Wi-Fi security.

BASIC SETTINGS

3.2/ BASIC SETTINGS

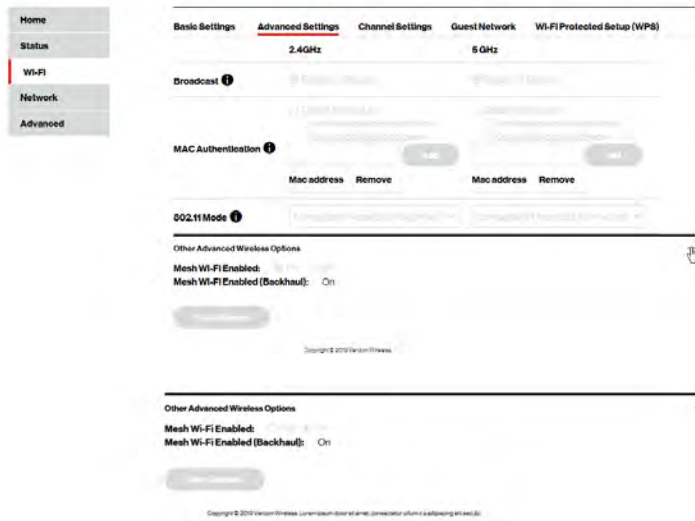
You can view the basic security settings for either 2.4 GHz or 5 GHz of your wireless network.



To view the basic security radio, SSID and security settings:
Select Wi-Fi from the left pane, and then click **Basic Settings**.

3.3/ ADVANCED SETTINGS

You can view your advanced wireless security settings, such as SSID broadcast, wireless MAC authentication or limiting access to specific wireless devices, advanced mesh Wi-Fi options, and the wireless mode for limiting or allowing access to your wireless network based on the type of technology.



To view the advanced wireless security settings:

1. Select Wi-Fi from the left pane.
2. Click **Advanced Settings** to view the advanced wireless security settings of your Fios Home Wi-Fi Extender.

MAC AUTHENTICATION

You can view the access to your wireless network allowing access only to those devices with specific MAC addresses.

ADVANCED SETTINGS

802.11 MODE

From the 802.11 Mode section, you can view the wireless access to your network of the 2.4 GHz and 5 GHz wireless communication standard (mode) best suited or compatible with the devices you allow access to your wireless network.

The wireless mode:

- **Compatibility** – This is the default mode setting, providing a good balance of performance and compatibility with existing wireless devices. 802.11a,b,g,n,ac and ax devices can connect.
- **Legacy** – For older wireless devices. Only 802.11a,n and ac devices can connect. Both 802.11n and 802.11ac are available on the 5 GHz frequencies. 802.11a (legacy mode) will cause your wireless network to slow and is not recommended.
- **Wi-Fi 5 Mode** – This provides maximum performance. 802.11ac devices will have exclusive use of the 5 GHz frequencies and 802.11n devices will not be able to connect at 5 GHz.
- When all changes are complete, click **Save Changes** to save the changes.

OTHER ADVANCED WIRELESS OPTIONS

You can view additional wireless options.

***Comment:** Recommend leaving defaults as is unless otherwise directed.*

View the following options:

- **Mesh Wi-Fi Enabled** - allows for smart roaming to provide reliable Wi-Fi network with full signal strength in all areas.
- **Mesh Wi-Fi Enabled (backhaul)** - allows to improve overall network performance by providing wireless or wired backhaul to the Wi-Fi Extender.

3.4/ CHANNEL SETTINGS

You can configure the channel settings for either 2.4 GHz or 5 GHz of your wireless network.

Home
Status
Wi-Fi
Network
Advanced

Basic Settings Advanced Settings **Channel Settings** Guest Network Wi-Fi Protected Setup (WPS)

1. Channel

To change the channel of the frequency band at which the Extender communicates, please enter it below. Then click save changes to save your settings. On 5GHz, the range of x to y is excluded from manual selection.

2.4 GHz Channel: Automatic ▼ Current Channel: 6 **5 GHz Channel:** Automatic ▼ Current Channel: 40

☒ Keep my channel selection during power cycle.

[View Channel History >](#)

2. Channel Width

2.4 GHz Channel Width: 20 MHz **5 GHz Channel Width:** 20 MHz

3. Channel Analyzer:

Perform an analysis of the available channels for each band. Upon completion, the best channel will be automatically selected.
[https://manual.channelselection.mobi/removed.](#)

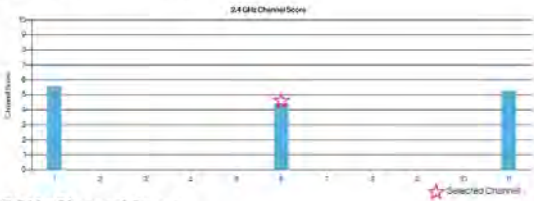
[Perform New Scan >](#)

4. Channel Score:

The extender scans all available channels for a number of factors, such as the number of nearby Wi-Fi access points, their signal strength, and the interference these may cause. The extender then uses these to rank and select the best available channel on each band at the time.

CHANNEL SETTINGS

2.4GHz Channel Score



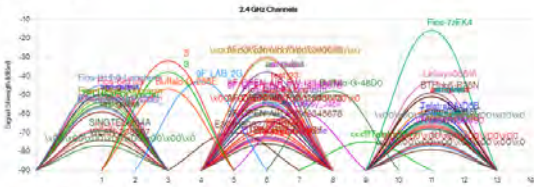
5GHz Channel Score



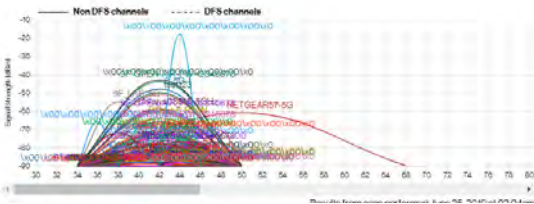
5. Channel Analysis:

The extender scans all available channels for Access Points which are broadcasting on a channel(s) and their signal strength. Below is the most recent scan report.

2.4GHz Channel



5GHz Channel



On the **Channel Settings** page for either 2.4 GHz or 5 GHz, the following information displays:

- **Channel** - this is the radio channel used by the Wi-Fi Extender and its clients to communicate with each other. The channel must be the same on the router/extender and all of its wireless clients.
 - Select the channel you want the wireless radio to use to communicate, or accept the default **Automatic** channel selection. Then the Wi-Fi Extender will automatically assign itself a radio channel.
 - Select the **Keep my channel selection during power cycle** check box to save your channel selection when your Fios Home Wi-Fi Extender is rebooted.
- **Channel Width** - scans and displays the channel the wireless connection is currently using.
- **Channel Analyzer** - displays the analysis of channel availability. Click **Perform New Scan** to perform channel availability scan for the Fios Home Wi-Fi Extender accommodating the best radio channel and providing the best Wi-Fi performance.
- **Channel Score** - scans and displays a network congestion score of one to ten in each wireless channel. It can be used to determine which channels to use or to avoid. The higher score indicates less congestion in a channel.
- **Channel Analysis** - scans and displays channel bandwidth and signal strength of available APs.

GUEST NETWORK

3.5/ GUEST NETWORK

3.5a/ GUEST WI-FI

The **Guest Network** is designed to provide internet connectivity to your guests but restricts access to your primary network and shared files. The primary network and the guest network are separated from each other through firewalls of your router.



To view Guest Wi-Fi:

From the main menu, select **Wi-Fi**, then select **Guest Network**.

3.5b/ GUEST WI-FI DEVICE LIST

The devices on the **Guest Network** can be viewed on the **Guest Wi-Fi device list**. If the admin toggles the button next to a device to **Off**, that device will be blocked from accessing the internet.

Refer to “Connecting A Wi-Fi Device Using WPS” on page 23 for the Wi-Fi Protected Setup (WPS) setup.

04 /

CONFIGURING ADVANCED SETTINGS

- 4.0** Using Advanced Settings
 - 4.1** Management
 - 4.2** Admin Password
 - 4.3** Factory Default
 - 4.4** System Log
 - 4.5** Advanced Log
 - 4.6** DHCP Log
 - 4.7** BHM Log

Advanced settings cover a wide range of sophisticated configurations for your Fios Home Wi-Fi Extender's security and system logs.

USING ADVANCED SETTINGS

***Caution:** Many of the settings described in this section should only be configured by experienced network technicians. Changes could adversely affect the operation of your Fios Home Wi-Fi Extender and local network.*

4.0/ USING ADVANCED SETTINGS

You can access the following advanced settings:

- Management
 - obtains an IP address from the network DHCP server.
 - restarts your Fios Home Wi-Fi Extender.
- Admin Password - sets the password for administrator access.
- Factory Default - resets your Fios Home Wi-Fi Extender to its default settings.
- Firmware Upgrade - allows you to upgrade firmware version.
- System Log - view the most recent activity of your Fios Home Wi-Fi Extender.
- Advanced Log - view a summary of the monitored data collected for Fios Home Wi-Fi Extender.
- DHCP Log - view a list of all DHCP clients connected to your Fios Home Router.
- BHM Log - view a summary of the monitored backhaul modes of Fios Home Wi-Fi Extender.

4.1/ MANAGEMENT

4.1a/ REBOOT FIOS HOME WI-FI EXTENDER

Warning: Only select Reboot Router if instructed to do so by Verizon support.

You can reboot your Fios Home Wi-Fi Extender using the Reboot feature. Refer to 1.3b/ REAR PANEL for power reset button option.

To reboot your Fios Home Wi-Fi Extender using the user interface:

1. Select **Management** in the **Advanced** section.



2. Click **Reboot** button on the screen. Your Wi-Fi Extender will reboot. This may take up to a minute.
3. To access your Fios Home Wi-Fi Extender user interface, refresh your web browser.
4. After the front panel Status LED turns solid white, you will automatically be sent to the web browser login page.

ADMIN PASSWORD

4.2/ ADMIN PASSWORD

Use the **Admin Password** screen to set the password for management security of your Fios Home Wi-Fi Extender.

To set the password of administration:

1. Select **Admin Password** in the **Advanced** section.

Home
Status
Wi-Fi
Network
Advanced

Management **Admin Password** Factory Default NEXT >

Admin Password

An admin password prevents outsiders from accessing the WECD's firmware settings. After creating a password, you will need to enter every time you access the WECD's firmware GUI.

1. Enter the admin username and password

Admin Username: admin

Admin Password: _____

Re-Type Admin Password: _____

2. Click "Save Changes" to save your changes.

Save Changes

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2. Enter the user name and password on the screen.
3. Enter the password again in the **Re-Type Admin Password** field. The password entered in this field must match the one above for the password to be set.
4. Click **Save Changes** to save your settings.

4.3/ FACTORY DEFAULT

You can restore the configuration settings to the factory default settings for your Fios Home Wi-Fi Extender. Restoring the default settings erases the current configuration, including user defined settings and network connections.

To restore your Fios Home Wi-Fi Extender's factory default settings:

1. Select **Factory Default** in the **Advanced** section.



2. Click **Restore Default Settings** button. The factory default settings are applied and your Fios Home Wi-Fi Extender restarts. Once complete, the Login page for the First Time Easy Setup Wizard displays.

4.4/ SYSTEM LOG

System Log provides a view of the most recent activity of your Fios Home Wi-Fi Extender.

To view the system log:

1. Click **NEXT** on the **Advanced** page and select **System Log**.

SYSTEM LOG

Home

Status

Wi-Fi

Network

Advanced

PREV >

System Log

Advanced Log

DHCP Log

BHM Log

View options

Close >

Clear log >

Save log >

Refresh >

Time	Event-Type	Log-Level	Details
2019 Jun 24 22:13:37	arc_ntpdaemon	info	[NTP 6][SYS] Failed got the time, would retry after 30 sec
2019 Jun 24 22:13:07	arc_ntpdaemon	info	[NTP 6][SYS] Failed got the time, would retry after 30 sec
2019 Jun 24 22:12:37	arc_ntpdaemon	info	[NTP 6][SYS] Failed got the time, would retry after 30 sec
2019 Jun 24 22:12:07	arc_ntpdaemon	info	[NTP 6][SYS] Failed got the time, would retry after 30 sec
2019 Jun 24 22:11:37	arc_ntpdaemon	info	[NTP 6][SYS] Failed got the time, would retry after 30 sec
2019 Jun 24 22:11:07	arc_ntpdaemon	info	[NTP 6][SYS] Failed got the time, would retry after 30 sec
2019 Jun 24 22:10:37	arc_ntpdaemon	info	[NTP 6][SYS] Failed got the time, would retry after 30 sec
2019 Jun 24 22:10:07	arc_ntpdaemon	info	[NTP 6][SYS] Failed got the time, would retry after 30 sec

2. To view a specific time of log event, click on the **View options** button.

Home

Status

Wi-Fi

Network

Advanced

PREV >

System Log

Advanced Log

DHCP Log

BHM Log

Log Viewing Options

☐ Past Day

☐ Past Week

☒ Custom Range

Start:

Jan

2019

1

01

00

AM

End:

Jan

2019

1

01

00

AM

OK

Cancel

Copyright © 2019 Wavium Wireless

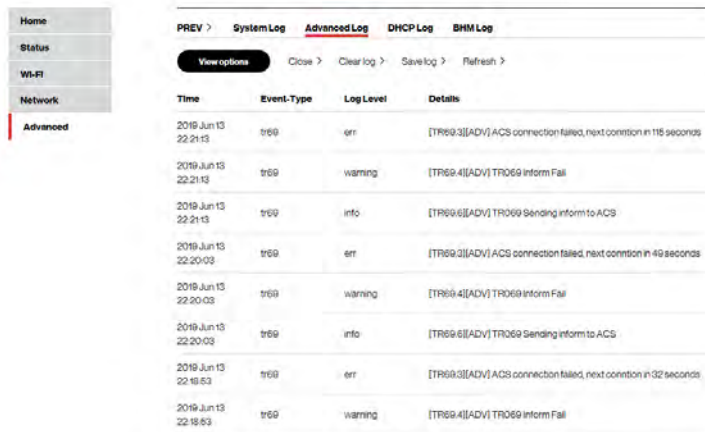
3. To refresh the page, click **Refresh**.
4. To save the log information, click **Save log**.

4.5/ ADVANCED LOG

You can view a summary of the monitored data collected for your Fios Home Wi-Fi Extender.

To view your Fios Home Wi-Fi Extender's full system status and traffic monitoring data:

1. Select **Advanced Log** in the **Advanced** section.



PREV > System Log <u>Advanced Log</u> DHCP Log BHM Log				
View options Close > Clear log > Save log > Refresh >				
Time	Event-Type	Log Level	Details	
2019 Jun 13 22:21:13	tr69	err	[TR69:3][ADV] ACS connection failed, next connction in 115 seconds	
2019 Jun 13 22:21:13	tr69	warning	[TR69:4][ADV] TR69 Inform Fail	
2019 Jun 13 22:21:13	tr69	info	[TR69:6][ADV] TR69 Sending inform to ACS	
2019 Jun 13 22:20:03	tr69	err	[TR69:3][ADV] ACS connection failed, next connction in 49 seconds	
2019 Jun 13 22:20:03	tr69	warning	[TR69:4][ADV] TR69 Inform Fail	
2019 Jun 13 22:20:03	tr69	info	[TR69:6][ADV] TR69 Sending inform to ACS	
2019 Jun 13 22:19:53	tr69	err	[TR69:3][ADV] ACS connection failed, next connction in 32 seconds	
2019 Jun 13 22:19:53	tr69	warning	[TR69:4][ADV] TR69 Inform Fail	

2. To view a specific time of log event, click on the **View options** button.
3. To refresh the page, click **Refresh**.
4. To save the log information, click **Save log**.

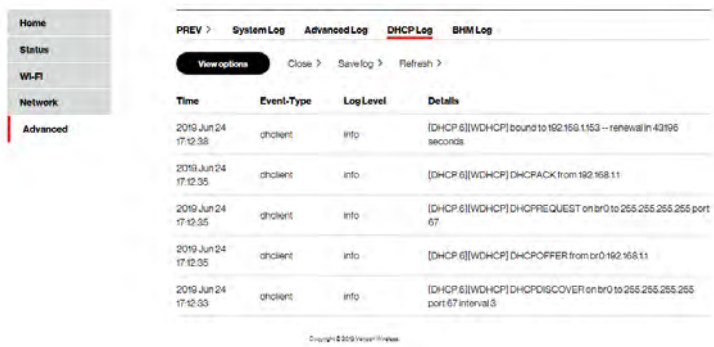
DHCP LOG

4.6/ DHCP LOG

You can view a list of the connected DHCP clients on your network.

To view a list of the connected DHCP clients *status*:

1. Select **DHCP Log** in the **Advanced** section.



The screenshot shows a web interface for viewing DHCP logs. On the left is a sidebar with navigation links: Home, Status, Wi-Fi, Network, and Advanced (which is highlighted with a red vertical bar). The main content area has a breadcrumb trail: PREV > System Log > Advanced Log > DHCP Log > BMM Log. Below the breadcrumb is a row of buttons: View options (highlighted in black), Close, Save log, and Refresh. A table displays the log entries with columns for Time, Event-Type, Log Level, and Details. The table contains five entries, all dated 2019 Jun 24 17:12:55, showing DHCP client events like bound, DHCPACK, DHCPREQUEST, and DHCP OFFER. At the bottom of the table is a 'Copyright © 2019 Huawei Technologies Co., Ltd.' notice.

Time	Event-Type	Log Level	Details
2019 Jun 24 17:12:55	dhcpclient	info	[DHCP 6][WDHCP] bound to 192.168.1.153 -- renewal in 43196 seconds
2019 Jun 24 17:12:55	dhcpclient	info	[DHCP 6][WDHCP] DHCPACK from 192.168.1.1
2019 Jun 24 17:12:55	dhcpclient	info	[DHCP 6][WDHCP] DHCPREQUEST on br0 to 255.255.255.255 port 67
2019 Jun 24 17:12:55	dhcpclient	info	[DHCP 6][WDHCP] DHCP OFFER from br0 192.168.1.1
2019 Jun 24 17:12:55	dhcpclient	info	[DHCP 6][WDHCP] DHCPDISCOVER on br0 to 255.255.255.255 port 67 interval 5

2. To view a specific time of log event, click on the **View options** button.
3. To refresh the page, click **Refresh**.
4. To save the log information, click **Save log**.

05 /

TROUBLE SHOOTING

5.0 Troubleshooting Tips

5.1 Frequently Asked Questions

This chapter lists solutions for issues that may be encountered while using your Fios Home Wi-Fi Extender as well as frequently asked questions.

Although the majority of the Fios Home Wi-Fi Extender's LAN and internet connectivity is automatic and transparent, if an issue does occur accessing the internet (e.g. complete loss of connectivity, inability to access services, etc.), you may need to take additional steps to resolve the problem.

TROUBLESHOOTING TIPS

***Note:** The advanced settings should only be configured by experienced network technicians to avoid adversely affecting the operation of your Fios Home Wi-Fi Extender and your local network.*

5.0/ TROUBLESHOOTING TIPS

5.0a/ IF YOU ARE UNABLE TO CONNECT TO THE INTERNET:

- The first thing to check is whether your Fios Home Wi-Fi Extender is powered on and is connected to the Fios Home Router. Check the Status LED on the front of the Fios Home Wi-Fi Extender. Be sure to refer to the “1.3a/ FRONT PANEL” on page 10 to determine status of the Fios Home Wi-Fi Extender. Check the WAN cable (Ethernet or coaxial) connecting your Fios Home Router to the internet to make sure it is properly connected on both ends.
- If the prior tips do not resolve your connection issue, try restarting (rebooting) the Fios Home Wi-Fi Extender by manually pressing the protruding ‘red’ reset button on the rear panel of the Fios Home Wi-Fi Extender for 2-4 seconds (the Status LED should go off) to begin rebooting your Fios Home Wi-Fi Extender. Your Fios Home Wi-Fi Extender will begin rebooting and will return to service in 3 - 5 minutes depending on your network connection. Check Status LED and if it is solid white, try again to access the internet.
- If rebooting your Fios Home Wi-Fi Extender does not resolve your connection issue, try power cycling the Wi-Fi Extender by unplugging the power cable from the adapter or the wall and wait 2 minutes. During the 2 min. wait period, also power cycle

the network device (e.g. the computer, tablet, etc.) and then plug the power cable back into the Fios Home Wi-Fi Extender. After 3-5 minutes, recheck the Status LED and try again to access the internet.

5.0b/ IF YOU ARE UNABLE TO CONNECT TO YOUR FIOS HOME WI-FI EXTENDER USING WI-FI:

- Be sure your wireless device is within range of your Fios Home Wi-Fi Extender; move it closer to see if your connection improves.
- Check your network device's Wi-Fi settings to be sure your device's Wi-Fi is on (enabled) and that you have the correct Wi-Fi network and password (if using a Wi-Fi password) as configured on your Fios Home Wi-Fi Extender.
- Be sure you are connecting to the correct Wi-Fi network; check to be sure you are using your Fios Home Wi-Fi Extender's SSID. In some cases, if using a wireless password, you may need to enter the Wi-Fi password into your network device again to be sure your device accepts the password.
- Check to be sure you are running the latest software for your network device.
- Try turning your network device's Wi-Fi off and on, and try to connect.
- If you have made any changes in your network settings and turning your network device's Wi-Fi off and on does not help, try to restart your network device.

TROUBLESHOOTING TIPS

- You may need to turn the Wi-Fi settings from on to off, and back to on again and apply the changes.
- If you are still unable to access your Fios Home Wi-Fi Extender, you may need to try connecting to the Wi-Fi Extender using another network device. If the issue goes away with another network device, the issue is likely with that individual network device's configuration.

5.0c/ ACCESSING YOUR FIOS HOME WI-FI EXTENDER IF YOU ARE LOCKED OUT

- If your Fios Home Wi-Fi Extender connection is lost while making configuration changes, a setting that locks access to your Fios Home Wi-Fi Extender's GUI may have inadvertently been activated.

The common ways to lock access to your Fios Home Wi-Fi Extender are:

- Scheduler - If a schedule has been created that applies to the computer over the connection being used, your Fios Home Wi-Fi Extender will not be accessible during the times set in the schedule.
- Access Control - If the access control setting for the computer is set to block the computer, access to your Fios Home Wi-Fi Extender is denied.

To gain access, restore the default settings to your Wi-Fi Extender.

5.0d/ RESTORING YOUR FIOS HOME WI-FI EXTENDER'S DEFAULT SETTINGS

There are two ways to restore your Fios Home Wi-Fi Extender's default settings. It is important to note that after performing either procedure, all previously saved settings on your Fios Home Wi-Fi Extender will be lost.

- Using the tip of a ballpoint pen or pencil, press and hold the Reset button on the back of your Fios Home Wi-Fi Extender for three seconds.
- Access the GUI and navigate to the Advanced Settings page. Select Factory Default option. Click the Restore Default Settings button. For additional details, refer to the section 4.3/ Factory Default section of this guide.

Note: *If you reset or reboot your Fios Home Wi-Fi Extender, you may also need to disconnect your Fios Home Wi-Fi Extender's power supply for a few minutes (3 or more) and then reconnect the power cable. However, in order to provide full synchronization to the coaxial network, disconnecting and reconnecting the power may be required.*

TROUBLESHOOTING TIPS

5.0e/ LAN CONNECTION FAILURE

To troubleshoot a LAN connection failure:

- Verify your Fios Home Wi-Fi Extender is properly installed, LAN connections are correct, and that the Fios Home Wi-Fi Extender and communicating network devices are all powered on.
- Confirm that the computer and Fios Home Wi-Fi Extender are both on the same network segment.

If unsure, let the computer get the IP address automatically by initiating the DHCP function, then verify the computer is using an IP address within the default range of 192.168.1.2 through 192.168.1.254. If the computer is not using an IP address within the correct IP range, it will not connect to your Fios Home Wi-Fi Extender.

- Verify the subnet mask address is set to 255.255.255.0.

5.0f/ TIMEOUT ERROR OCCURS WHEN ENTERING THE URL OR IP ADDRESS

Verify the following:

- All computers are working properly.
- IP settings are correct.
- Fios Home Wi-Fi Extender is on and connected properly.
- Fios Home Wi-Fi Extender settings are the same as the computer.

For connections experiencing lag or a slow response:

- Check for other devices on the network utilizing large portions of the bandwidth and if possible temporarily stop their current utilization and recheck the connection.
- If lag still exists, clear the cache on the computer and if still needed, unplug the Ethernet cable or disable the wireless connection to the computer experiencing the slow connection and then reconnect or enable the wireless connection and try the connection again.

In rare cases you may also need to:

- Unplug the Ethernet cable to Fios Home Wi-Fi Extender and restart the Fios Home Wi-Fi Extender, wait 1-2 mins. and insert the Ethernet cable again.
- Under limited circumstances you may use a port forwarding configuration on the Fios Home Router, based on the application you are using (refer to Verizon's support online help for more details).

TROUBLESHOOTING TIPS

5.0g/ FRONT UNIFIED BUTTON

The front panel’s Unified Button allows quick access to the Wi-Fi Protected Setup (WPS) feature and handset paging/pairing mode. In addition, the Unified Button provides a visual display of the Fios Home Wi-Fi Extender’s current condition. Refer to the chart below for details.

Condition Status	LED Color	Fios Home Wi-Fi Extender
Normal	WHITE	Normal operation (solid) Router is booting. (fast blink)
	BLUE	Pairing mode (slow blink) Pairing successful (solid)
	GREEN	Wi-Fi has been turned off. (solid)
Issue(s)	YELLOW	No internet connection (solid) Wi-Fi Extender is too far from the Router. Poor backhaul signal (slow blink) Wi-Fi Extender is too close to the Router. Poor Wi-Fi coverage (fast blink)
	RED	Hardware/System failure detected (solid) Overheating (fast blink) Pairing Failure (slow blink)
Power	OFF	Power off

5.0h/ REAR LIGHTED INDICATORS

Flash Speed

- Slow flash – Two times per second
- Fast flash – Four times per second

LAN Ethernet – Upper LED

- Unlit – Indicates no 1 Gbps link
- Solid green – Indicates 1 Gbps link
- Fast flash green – Indicates LAN activity. The traffic can be in either direction.

LAN Ethernet – Lower LED

- Unlit – Indicates no 10/100/1000 Mbps link
- Solid green – Indicates 10/100/1000 Mbps link

LAN Coax

- Unlit – Indicates no MoCA network connection to the device
- Solid green – Indicates network link

FREQUENTLY ASKED QUESTIONS

5.1/ FREQUENTLY ASKED QUESTIONS

5.1a/ I'VE RUN OUT OF ETHERNET PORTS ON MY FIOS HOME WI-FI EXTENDER. HOW DO I ADD MORE COMPUTERS OR DEVICES?

Plugging in an Ethernet hub or switch expands the number of ports on your Fios Home Wi-Fi Extender.

- Run a straight-through Ethernet cable from the Uplink port of the new hub to the Fios Home Wi-Fi Extender.

Use a crossover cable if there is no Uplink port/switch on your hub, to connect to the Fios Home Wi-Fi Extender.

- Remove an existing device from the yellow Ethernet port on your Fios Home Wi-Fi Extender and use that port.

5.1b/ HOW DO I CHANGE THE PASSWORD ON MY FIOS HOME WI-FI EXTENDER GUI?

To change the password:

1. On the main screen, select **Advanced**, then select **Admin Password**.
2. Enter the user name and set a new password.

5.1c/ IS THE WIRELESS OPTION ON BY DEFAULT ON MY FIOS HOME WI-FI EXTENDER?

Yes, your Fios Home Wi-Fi Extender's wireless option is activated out of the box.

5.1d/ IS THE WIRELESS SECURITY ON BY DEFAULT WHEN THE WIRELESS OPTION IS ACTIVATED?

Yes, with the unique WPA2 (Wi-Fi Protected Access II) key that is printed on the sticker on the rear panel of your Fios Home Wi-Fi Extender.

5.1e/ WHICH CONNECTION SPEEDS DOES MY FIOS HOME WI-FI EXTENDER SUPPORT?

The Ethernet LAN Ethernet connections support 10/100/1000 Mbps. The 802.11ax wireless connection supports up to 4800 Mbps. The 802.11ac wireless connection supports up to 1733 Mbps and the 802.11n supports up to 600 Mbps, depending on signal quality.

5.1f/ ARE MY FIOS HOME WI-FI EXTENDER'S ETHERNET PORTS AUTO-SENSING?

Yes. Either a straight-through or crossover Ethernet cable can be used.

5.1g/ CAN I USE AN OLDER WIRELESS DEVICE TO CONNECT TO MY FIOS HOME WI-FI EXTENDER?

Yes, your Fios Home Wi-Fi Extender can interface with 802.11b, g, n, ac or ax devices. Your Fios Home Wi-Fi Extender also can be setup to handle only n wireless cards, g wireless cards, b wireless cards, or any combination of the three.

FREQUENTLY ASKED QUESTIONS

5.1h/ CAN MY WIRELESS SIGNAL PASS THROUGH FLOORS, WALLS, AND GLASS?

The physical environment surrounding your Fios Home Wi-Fi Extender can have a varying effect on signal strength and quality. The denser the object, such as a concrete wall compared to a plaster wall, the greater the interference. Concrete or metal reinforced structures experience a higher degree of signal loss than those made of wood, plaster, or glass.

5.1i/ HOW DO I LOCATE THE IP ADDRESS THAT MY COMPUTER IS USING?

In Windows 7 or Windows 10, click the Windows button and select Control Panel, then click View Network Status and Tasks. In the next window, click Local Area Connection. In the Local Area Network Connection Status window, click Details.

On Mac OS X, open System Preferences and click the Network icon. The IP address displays near the top of the screen.

5.1j/ I USED DHCP TO CONFIGURE MY NETWORK. DO I NEED TO RESTART MY COMPUTER TO REFRESH MY IP ADDRESS?

No. In Windows 7, Windows 10 and OSX, unplug the Ethernet cable or wireless card, then plug it back in.

**5.1k/ I CANNOT ACCESS MY FIOS HOME WI-FI EXTENDER GUI.
WHAT SHOULD I DO?**

If you cannot access the GUI, verify the computer connected to your Fios Home Wi-Fi Extender is set up to dynamically receive an IP address

06 /

SPECIFICATIONS

- 6.0** General Specifications
- 6.1** LED Indicators
- 6.2** Environmental Parameters

The specifications for your Fios Home Wi-Fi Extender are as follows.

This includes standards, cabling types and environmental parameters.

GENERAL SPECIFICATIONS

Note: The specifications listed in this chapter are subject to change without notice.

6.0/ GENERAL SPECIFICATIONS

Model Number:	Model: E3200
Standards:	IEEE 802.3x, 802.3u IEEE 802.11a/b/g/n/ac/ax
IP:	IP versions 4 and 6
MoCA LAN:	1125 – 1675 MHz 2500 Mbps
Speed:	Wired LAN Ethernet: 10/100/1000 Mbps auto-sensing Wireless LAN: 802.11b – up to 11 Mbps 802.11g – up to 54 Mbps 802.11n – up to 600 Mbps 802.11ac – up to 1733 Mbps 802.11ax – up to 4800 Mbps

Cabling Type:	Ethernet 10BaseT: UTP/STP Category 3 or 5
	Ethernet 100BaseT: UTP/STP Category 5
	Ethernet 1000BaseT: UTP/STP Category 5e
Firewall:	ICSA certified

6.1/ LED INDICATORS

Front Panel:	Unified Button
Rear Panel:	LAN Coax and LAN Ethernet [2]

6.2/ ENVIRONMENTAL PARAMETERS

DIMENSIONS AND WEIGHT

Fios Home Wi-Fi Extender (unit only):	
	Size: 5.32" wide x 9.27" high x 5.94" deep
	Weight: 2.50 lbs / 1.138 kg

ENVIRONMENTAL PARAMETERS

Complete System (inc. packaging):

Size: 12.24” wide x 6.26” high x 7.09” deep

Weight: 4.00 lbs ~ 4.05 lbs / 1.81 kg ~ 1.83 kg

Power: External, 12V, 3.5A

Screws (optional): PH TP+N: 0.157” x 0.984”
Anchor PE: 0.197” x 0.984”

Certifications: FCC, UL 60950-1

Operating Temperature: 5° C to 40° C (41° F to 104° F)

Storage Temperature: -5° C to 50° C (23° F to 122° F)

Operating Humidity: 5% to 85%

Storage Humidity: 5% to 93% (non-condensing)

7/

NOTICES

7.0 Regulatory Compliance Notices

This chapter lists various compliance and modification notices, as well as the NEBS requirements and GPL.

REGULATORY COMPLIANCE NOTICES

7.0/ REGULATORY COMPLIANCE NOTICES

7.0a/ Class B Equipment

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

RF Exposure:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 31 cm between the radiator & your body.

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

2.4GHz operation of this product in the U.S.A. is firmware-limited to channels 1 through 11.

This device is restricted for indoor use.

REGULATORY COMPLIANCE NOTICES

7.0b/ Safety Warning:

1. The circuit of cable distribution system under consideration is TNV-1 circuit.
2. The common sides or earthed side of the circuit are connected to the screen of the coaxial cable through an antenna connector of tuner and to all accessible parts and circuits (SELV, LCC and accessible metal parts).
3. The screen of the coaxial cable is intended to be connected to earth in the building installation.

7.0c/ Alerte de sécurité:

1. Le circuit de distribution par câble considéré est le circuit TNV-1.
2. Les côtés communs ou côté terre du circuit sont connectés à l'écran du câble coaxial via un connecteur d'antenne du syntoniseur et à toutes les parties et circuits accessibles (SELV, LCC et parties métalliques accessibles).
3. L'écran du câble coaxial est destiné à être mis à la terre dans l'installation du bâtiment.

The cable distribution system should be grounded (earthed) in accordance with ANSI/NFPA 70, the National Electrical Code (NEC), in particular Section 820.93, Grounding of Outer Conductive Shield of a Coaxial Cable.

Le système de distribution par câble doit être mis à la terre conformément à ANSI / NFPA 70, Code national de l'électricité (NEC), en particulier à la section 820.93, Mise à la terre du blindage conducteur extérieur d'un câble coaxial.

***Caution:** The Fios Home Wi-Fi Extender must be installed inside the home. The Wi-Fi Extender is not designed for exterior installation.*

7.0d/ GENERAL PUBLIC LICENSE

This product contains certain software that is covered by open source licensing requirements. Copies of the licenses and a downloadable copy of the source code for the open source software that is used in this product are available on the following website:

<http://verizon.com/opensource/>

All open source software contained in this product is distributed WITHOUT ANY WARRANTY. All such software is subject to the copyrights of the authors and to the terms of the applicable licenses included in the download.

You may also obtain a copy of the source code for the open source software used in this product for a period of three years after your receipt of the product by sending a check for \$10, payable to VERIZON, to the address below:

Verizon
One Verizon Way
Basking Ridge, NJ 07920
Attn: Legal, Open Source Requests

***Note:** This information is provided for those who wish to edit or otherwise change such programs. You do not need a copy of any of such open source software source code to install or operate the device.*