

verizon✓

**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 Wi-Fi 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 Wi-Fi protection featuring WPA2/WPA Mixed Mode and MAC address filtering
 - Wi-Fi Multimedia (WMM) for Wi-Fi 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

Please refer to section 5.0 for details on the rear LEDs.

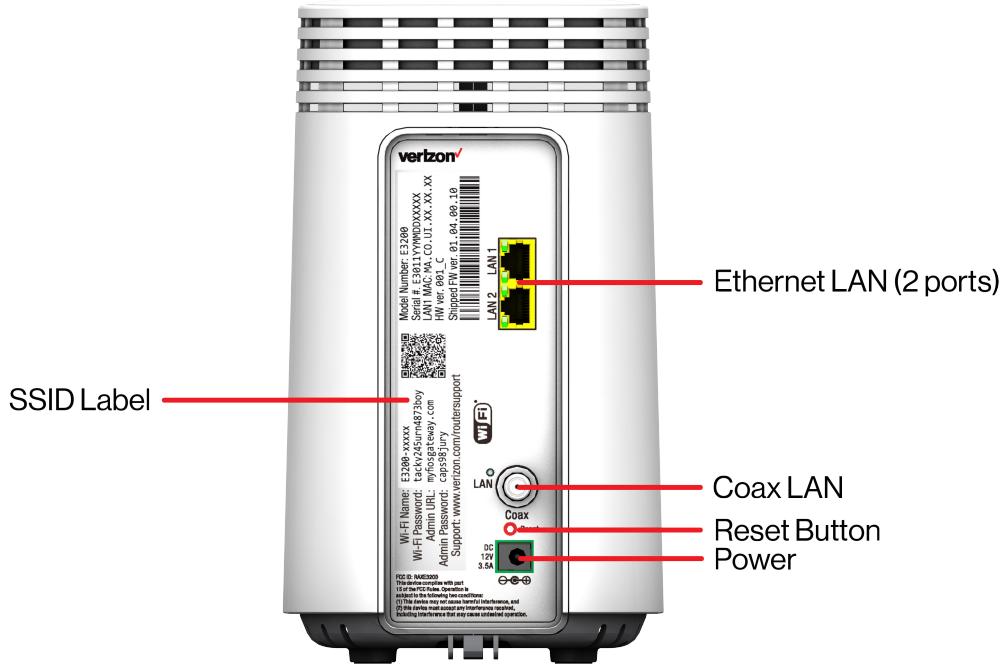
1.3b/ REAR PANEL

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 Wi-Fi network name (SSID), Wi-Fi password (WPA2 key), local URL for accessing the Fios Home Wi-Fi Extender's administrative pages, 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.

GETTING TO KNOW YOUR FIOS HOME WI-FI EXTENDER



- **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

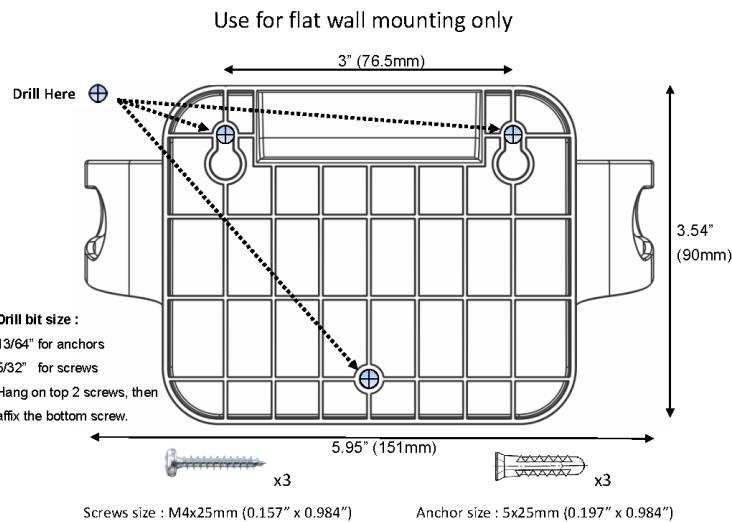
For optimum performance, the Fios Home Wi-Fi Extender is designed to stand in a vertical upright position. Verizon does not recommend wall mounting the Fios Home Wi-Fi Extender. However, if you wish to mount your Fios Home Wi-Fi Extender, you can purchase a wall mount bracket from the Verizon Fios Accessories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

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.

GETTING TO KNOW YOUR 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

Note: Using a wired backhaul, the Fios Home Wi-Fi Extender can be placed at a location distant from the Fios Home Router, and positioned for optimum coverage. Using Wi-Fi backhaul, performance can be slower and the distance from the router will be determined by the reach of Wi-Fi from the Fios Home Router, the materials in the home, and neighboring Wi-Fi traffic. Wi-Fi backhaul is an effective and convenient in home Wi-Fi configuration, but based on Wi-Fi interference characteristics, does not perform as well as a wired connection.

2.0a/ WIRED INSTALLATION

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



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.

2.0b/ WI-FI 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 front buttons on both the router and extender for about 5 seconds. The lights on the router and extender should turn solid blue while the Wi-Fi connection is initiating.

SETTING UP YOUR FIOS HOME WI-FI EXTENDER

4. When the Wi-Fi connection is established, extender will start firmware update. It will take approximately 6 minutes to complete the firmware update. Do NOT unplug extender during the firmware upgrade (blinking white).
5. Once the firmware update is complete and the extender starts fast blinking yellow, you can now unplug and move the extender to an area between the router and an area with spotty Wi-Fi coverage. Once plugged in, 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.

Note: *The Fios Home Wi-Fi Extender has a Wi-Fi Name/Password that is different from the Fios Home Router. When the Extender connects to the router via Coax, Ethernet, or Wi-Fi, the extender is assigned the Wi-Fi Name/Password of the Router. At this time, the extender doesn't have the ability to use the Wi-Fi Name/Password on the rear label and only uses the same Wi-Fi Name/Password as the router.*

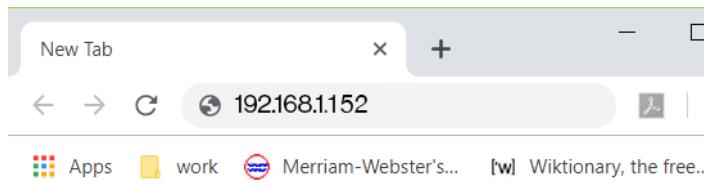


2.1/ MAIN SCREEN

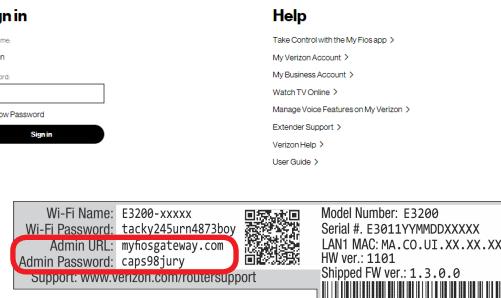
2.1a/ Login

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 the Wi-Fi Extender's IP address found in the GUI of the Fios Home Router, then press the **Enter** key on your keyboard.

Note: The IP address of the Fios Home Wi-Fi Extender was assigned by the Fios Home Router if the Extender connects to the Router.



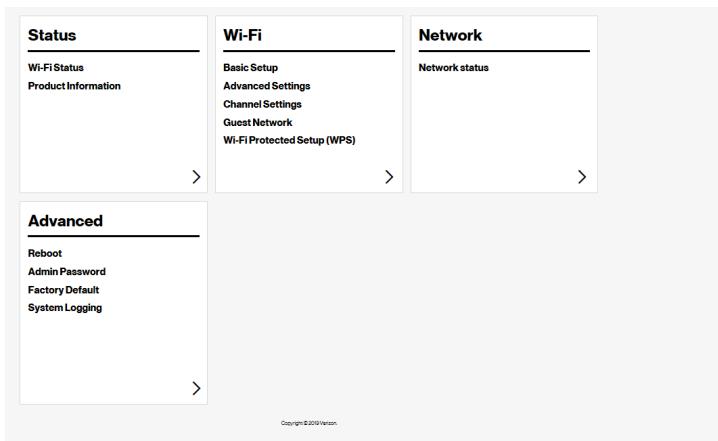
3. Enter the password that is printed next to the Admin Password on the label on the rear of your Fios Home Wi-Fi Extender.



MAIN SCREEN

Note: The Fios Home Wi-Fi Extender has an admin password that is different from the Fios Home Router. When the Extender connects to the router via Coax, Ethernet, or Wi-Fi, the extender is assigned the password of the Router. At this time, the extender doesn't have the ability to use the admin password on the rear label and only uses the same password as the router.

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.



2.1b/ MENU

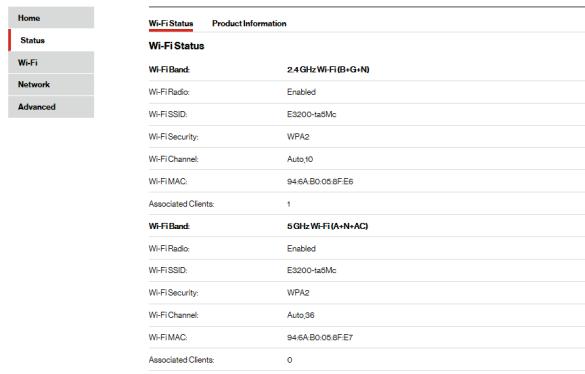
The main menu contains the following configuration options and chapters:

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

2.1c/ STATUS

Fios Home Wi-Fi Extender Status

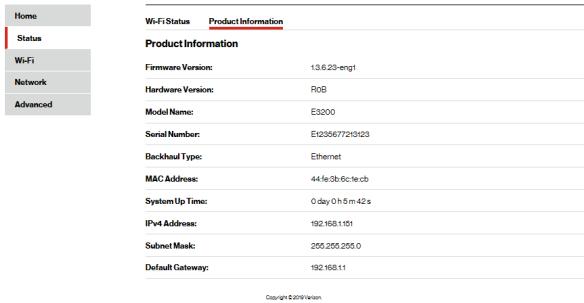
This section displays product model number, device FCC ID, firmware version number, device IP information, and the status of your Fios Home Wi-Fi Extender's Wi-Fi connection.



Home	Status	Product Information
Home	Wi-Fi Status	Product Information
Status	Wi-Fi Status	
Wi-Fi	Wi-Fi Band:	2.4 GHz Wi-Fi(B+G+N)
Network	Wi-Fi Radio:	Enabled
Advanced	Wi-Fi SSID:	E3200-ta5Mc
	Wi-Fi Security:	WPA2
	Wi-Fi Channel:	Auto 10
	Wi-Fi MAC:	94:6A:B0:05:6F:E6
	Associated Clients:	1
	Wi-Fi Band:	5 GHz Wi-Fi(A+N+AC)
	Wi-Fi Radio:	Enabled
	Wi-Fi SSID:	E3200-ta5Mc
	Wi-Fi Security:	WPA2
	Wi-Fi Channel:	Auto 36
	Wi-Fi MAC:	94:6A:B0:05:6F:E7
	Associated Clients:	0

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MAIN SCREEN



Wi-Fi Status	Product Information
Product Information	
Firmware Version:	1.0.6.20-eng1
Hardware Version:	R0B
Model Name:	E3200
Serial Number:	E12356772H3123
Backhaul Type:	Ethernet
MAC Address:	44:fe:36:6c:fe:cb
System Up Time:	0 day 0h 5m 42s
IPv4 Address:	192.168.1.151
Subnet Mask:	255.255.255.0
Default Gateway:	192.168.1.1

CONNECTING A WI-FI DEVICE USING WPS

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

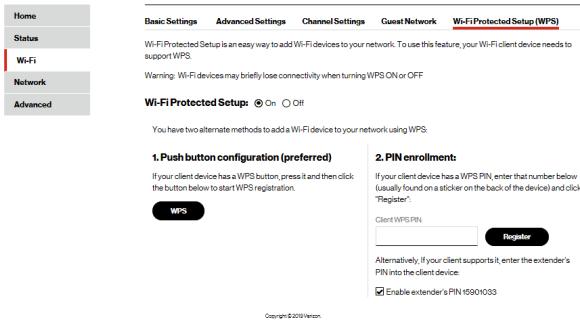
In most cases, this only requires the pressing of two buttons – one on your Fios Home Wi-Fi Extender and one on the Wi-Fi client. This could be either a built-in button or one on a compatible Wi-Fi adapter/card, or a virtual button in software. Once completed, this allows Wi-Fi clients to join your Wi-Fi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

You can easily add Wi-Fi devices to your Wi-Fi network using the WPS option if your Wi-Fi 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 Wi-Fi 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 Wi-Fi 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**.

MAIN SCREEN

- 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 Wi-Fi 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 Wi-Fi 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.

03 /

WI-FI SETTINGS

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

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

You can create a Wi-Fi network, including accessing and configuring Wi-Fi security options.

OVERVIEW

3.0/ OVERVIEW

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

The Wi-Fi service and Wi-Fi 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/ WI-FI STATUS

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

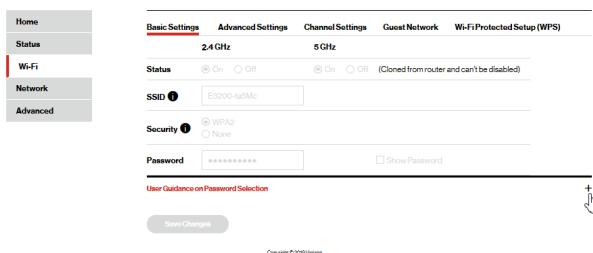
To view the status:

1. Access the dashboard main page. You can quickly view your Fios Home Wi-Fi Extender's Wi-Fi 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 Wi-Fi radio is active. When the radio is not enabled, no Wi-Fi 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 Wi-Fi 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 Wi-Fi network.

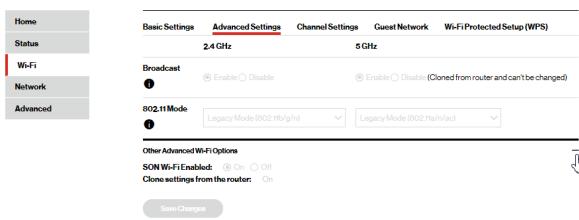


To view the basic security radio, SSID and security settings:

Select Wi-Fi from the left pane, and then click **Basic Settings**.

3.3/ ADVANCED SETTINGS

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



To view the advanced Wi-Fi security settings:

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

BROADCAST

You can view the Wi-Fi Extender's SSID broadcast capabilities to allow or disallow Wi-Fi devices from automatically using a broadcast SSID name to detect your Wi-Fi network.

802.11 MODE

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

The Wi-Fi mode:

- **Compatibility** – This is the default mode setting, providing a good balance of performance and compatibility with existing Wi-Fi devices. 802.11a,b,g,n,ac and ax devices can connect.
- **Legacy** – For older Wi-Fi 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 Wi-Fi network to slow and is not recommended.

ADVANCED SETTINGS

- **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 WI-FI OPTIONS

You can view additional Wi-Fi options.

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

View the following options:

- **SON Wi-Fi Enabled** - allows for smart roaming to provide reliable Wi-Fi network with full signal strength in all areas.
- **Clone settings from the router** - allows for synchronization of network settings from the router when the Extender connects to the router.

3.4/ CHANNEL SETTINGS

You can configure the channel settings for either 2.4 GHz or 5 GHz of your Wi-Fi 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 the 5GHz, the range of channels from 62-140 is excluded from manual selection.
2.4 GHz Channel: Automatic **Current Channel:** 10 **5 GHz Channel:** Automatic **Current Channel:** 36
 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.
Note: Manual channel selection will be 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.

2.4 GHz Channel Score

Channel	Score
1	7
5	10
6	10

5 GHz Channel Score

Channel	Score
36	7
40	7
44	7
48	7
52	7
56	7
60	7
64	10
68	7
72	7
76	7
80	7
84	7
88	7
92	7
96	7
100	7
104	7
108	7
112	7
116	7
120	7
124	7
128	7
132	7
136	7
140	7
144	7
148	7
152	7
156	7
160	7
164	7
168	7

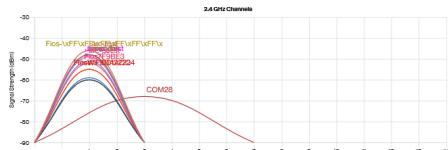
Results from scan performed January 1, 1970 at 08:00am

CHANNEL SETTINGS

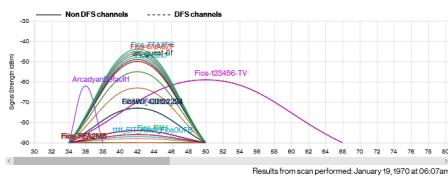
5. Channel Analysis:

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.

2.4 GHz Channel



5 GHz 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 Wi-Fi clients.
 - Select the channel you want the Wi-Fi radio to use to communicate, or accept the default **Automatic** channel selection. Then the Wi-Fi Extender will automatically assign itself a radio channel.

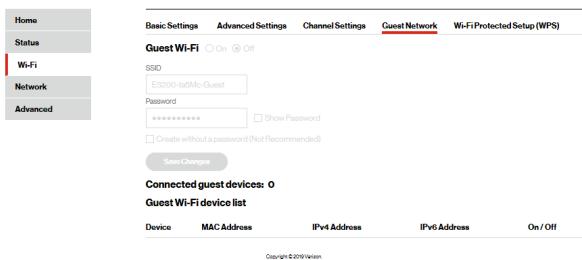
- Select the **Keep my channel selection during power cycle** check box to save your channel selection when your Fios Home Wi-Fi Extender is rebooted.
- **Channel Width** - scans and displays the channel the Wi-Fi connection is currently using.
- **Channel Analyzer** - displays the analysis of channel 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 Wi-Fi 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 24 for the Wi-Fi Protected Setup (WPS) setup.

04 /

CONFIGURING ADVANCED SETTINGS

- 4.0** Using Advanced Settings
- 4.1** Reboot
- 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:

- Reboot - 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.
- 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.

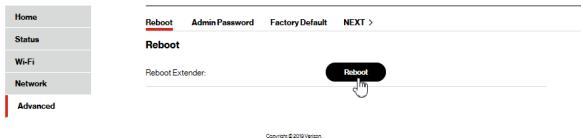
4.1/ REBOOT

Warning: Only select Reboot Wi-Fi Extender 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 Reboot 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

Reboot Admin Password Factory Default NEXT >

Admin Password

An admin password prevents outsiders from accessing the Fios Home Wi-Fi Extender firmware settings. After creating a password, you will need to enter every time you access the Fios Home Wi-Fi Extender.

● Tips for creating secure passwords

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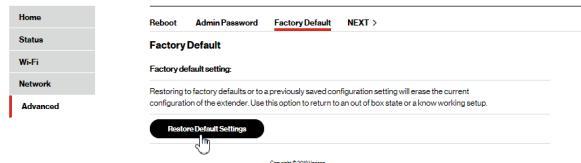
2. Enter the user name and password on the screen.
3. Enter the password again in the **Re-Type Admin Password** field. The password entered in this field must match the one above for the password to be set.
4. Click **Save Changes** to save your settings.

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

PREV > **System Log** Advanced Log DHCP Log BHM Log

View options Close > Clear log > Save log > Refresh >

Time	Event-Type	LogLevel	Details
2019-Jun-17 17:47:36	httpd	info	[WIFI 6][SYS] 5G channel loading: 45%
2019-Jun-17 17:47:36	httpd	info	[WIFI 6][SYS] 2.4G channel loading: 98%
2019-Jun-17 17:45:59	httpd	info	[GUI][SYS] httpd start up
2019-Jun-18 13:23:48	httpd	info	[GUI][SYS] Firmware upgrade success
2019-Jun-18 13:23:31	httpd	info	[GUI][SYS] Start to firmware upgrade
2019-Jun-18 13:12:52	httpd	info	[WIFI 6][SYS] 5G channel loading: 47%
2019-Jun-18 13:12:52	httpd	info	[WIFI 6][SYS] 2.4G channel loading: 100%
2019-Jun-18 13:12:33	httpd	info	[WIFI 6][SYS] 5G channel loading: 1%
2019-Jun-18 13:12:33	httpd	info	[WIFI 6][SYS] 2.4G channel loading: 100%
2019-Jun-18 13:10:26	httpd	info	[WIFI 6][SYS] 5G channel loading: 1%

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

PREV > **System Log** Advanced Log DHCP Log BHM Log

Log Viewing Options

Past Day
 Past Week
 Custom Range

Start

Jan	▼	1	▼	01	▼	00	▼	AM	▼
-----	---	---	---	----	---	----	---	----	---

End

Jan	▼	1	▼	01	▼	00	▼	AM	▼
-----	---	---	---	----	---	----	---	----	---

OK Cancel

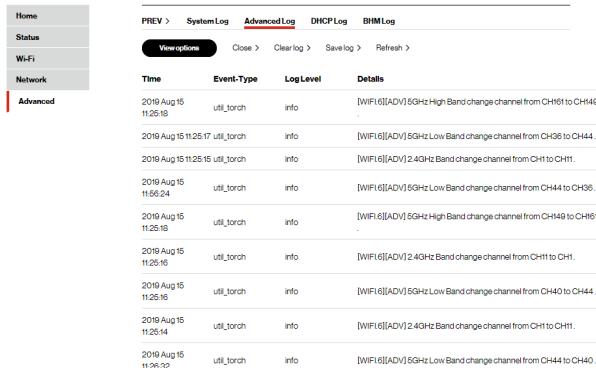
3. To refresh the page, click **Refresh**.
4. To save the log information, click **Save log**.

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.



Time	Event-Type	Log Level	Details
2019 Aug 15 11:26:18	util_torch	info	[WIFI6][ADV] 5GHz High Band change channel from CH61 to CH49
2019 Aug 15 11:26:17	util_torch	info	[WIFI6][ADV] 5GHz Low Band change channel from CH36 to CH44
2019 Aug 15 11:25:15	util_torch	info	[WIFI6][ADV] 2.4GHz Band change channel from CH1 to CH11
2019 Aug 15 11:26:24	util_torch	info	[WIFI6][ADV] 5GHz Low Band change channel from CH44 to CH36
2019 Aug 15 11:26:18	util_torch	info	[WIFI6][ADV] 5GHz High Band change channel from CH49 to CH61
2019 Aug 15 11:26:16	util_torch	info	[WIFI6][ADV] 2.4GHz Band change channel from CH11 to CH1
2019 Aug 15 11:26:16	util_torch	info	[WIFI6][ADV] 5GHz Low Band change channel from CH40 to CH44
2019 Aug 15 11:26:14	util_torch	info	[WIFI6][ADV] 2.4GHz Band change channel from CH1 to CH11
2019 Aug 15 11:26:32	util_torch	info	[WIFI6][ADV] 5GHz Low Band change channel from CH44 to CH40

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**.

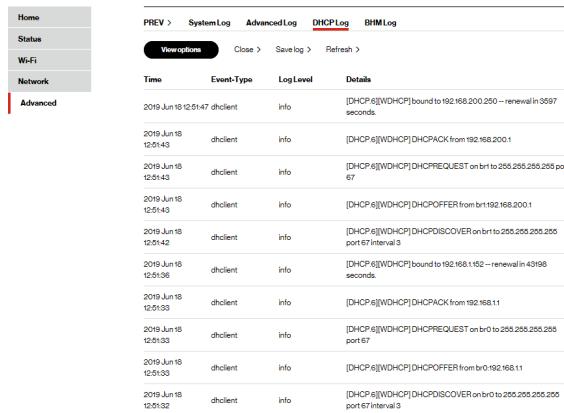
DHCP LOG

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-based log viewer for DHCP. On the left, a vertical navigation bar has 'Advanced' selected. The main area has a header with tabs: 'PREV >', 'System Log', 'Advanced Log', 'DHCP Log' (which is underlined and highlighted in red), and 'BWM Log'. Below the header are buttons for 'View options', 'Close', 'Save log', and 'Refresh'. The main content area is a table with columns: 'Time', 'Event-Type', 'Log Level', and 'Details'. The table lists 14 log entries from June 18, 2019, at 12:51:47 to 12:53:33. Each entry shows a client (dhclient) sending an info-level log message related to DHCP interactions like binding, renewals, and offers.

Time	Event-Type	Log Level	Details
2019 Jun 18 12:51:47	dhclient	info	[DHCP:6][WDHCP]bound to 192.168.200.250 -- renewal in 3597 seconds.
2019 Jun 18 12:51:49	dhclient	info	[DHCP:6][WDHCP]DHCPACK from 192.168.200.1
2019 Jun 18 12:51:49	dhclient	info	[DHCP:6][WDHCP]DHCPREQUEST on br1 to 255.255.255.255 port 67
2019 Jun 18 12:51:49	dhclient	info	[DHCP:6][WDHCP]DHCPoffer from br1 192.168.200.1
2019 Jun 18 12:51:49	dhclient	info	[DHCP:6][WDHCP]DHCPdiscover on br1 to 255.255.255.255 port 67 interval 3
2019 Jun 18 12:51:56	dhclient	info	[DHCP:6][WDHCP]bound to 192.168.1.152 -- renewal in 43198 seconds.
2019 Jun 18 12:51:59	dhclient	info	[DHCP:6][WDHCP]DHCPACK from 192.168.1.1
2019 Jun 18 12:51:59	dhclient	info	[DHCP:6][WDHCP]DHCPREQUEST on br0 to 255.255.255.255 port 67
2019 Jun 18 12:51:59	dhclient	info	[DHCP:6][WDHCP]DHCPoffer from br0 192.168.1.1
2019 Jun 18 12:51:59	dhclient	info	[DHCP:6][WDHCP]DHCPdiscover on br0 to 255.255.255.255 port 67 interval 3

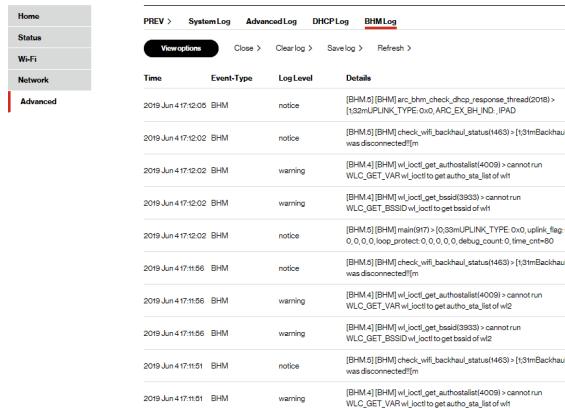
2. To view a specific time of log event, click on the **View options** button.
3. To refresh the page, click **Refresh**.
4. To save the log information, click **Save log**.

4.7/ BHM LOG

You can view a summary of the BHM (backhaul modes: Ethernet, coax and Wi-Fi) status of your Fios Home Wi-Fi Extender.

To view the backhaul modes log:

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



Time	Event-Type	Log Level	Details
2019 Jun 4 17:12:05	BHM	notice	[BHM][BHM]arc_bhm_check_dhcp_response_thread(2018) > [03mPLINK,TYPE:0x0,ARC_EX_Br[ND],IPAD]
2019 Jun 4 17:12:02	BHM	notice	[BHM][BHM]check_wif_backhaul_status(1463) > [13mBackhaul was disconnected][n]
2019 Jun 4 17:12:02	BHM	warning	[BHM][BHM]wl_ioctl_get_autosta[4009] > cannot run WLC_GET_VAR wl_ioctl to get auto_sta_list of wl
2019 Jun 4 17:12:02	BHM	warning	[BHM][BHM]wl_ioctl_get_bssid(3933) > cannot run WLC_GET_BSSID wl_ioctl to get bssid of wl
2019 Jun 4 17:12:02	BHM	notice	[BHM][BHM]main(977) > [03mPLINK,TYPE:0x0,uplink_flag:0,0,0,0,0,loop_protect:0,0,0,0,0,debug_count:0,time_cnt=90]
2019 Jun 4 17:11:56	BHM	notice	[BHM][BHM]check_wif_backhaul_status(1463) > [13mBackhaul was disconnected][n]
2019 Jun 4 17:11:56	BHM	warning	[BHM][BHM]wl_ioctl_get_autosta[4009] > cannot run WLC_GET_VAR wl_ioctl to get auto_sta_list of wl2
2019 Jun 4 17:11:56	BHM	warning	[BHM][BHM]wl_ioctl_get_bssid(3933) > cannot run WLC_GET_BSSID wl_ioctl to get bssid of wl2
2019 Jun 4 17:11:51	BHM	notice	[BHM][BHM]check_wif_backhaul_status(1463) > [13mBackhaul was disconnected][n]
2019 Jun 4 17:11:51	BHM	warning	[BHM][BHM]wl_ioctl_get_autosta[4009] > cannot run WLC_GET_VAR wl_ioctl to get auto_sta_list of wl

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 8 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 Wi-Fi 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 Wi-Fi 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.Od/ 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 Wi-Fi connection to the computer experiencing the slow connection and then reconnect or enable the Wi-Fi 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 WI-FI OPTION ON BY DEFAULT ON MY FIOS HOME WI-FI EXTENDER?

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

5.1d/ IS THE WI-FI SECURITY ON BY DEFAULT WHEN THE WI-FI 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 Wi-Fi connection supports up to 4800 Mbps. The 802.11ac Wi-Fi 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 WI-FI 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 Wi-Fi cards, g Wi-Fi cards, b Wi-Fi cards, or any combination of the three.

FREQUENTLY ASKED QUESTIONS

5.1h/ CAN MY WI-FI 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 Wi-Fi 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

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

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"

ENVIRONMENTAL PARAMETERS

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)

07/

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.

7.0d/ NEBS (Network Equipment Building System) Statement

An external SPD is intended to be used with G3100/E3200.

WARNING: The intra-building ports of the equipment or subassembly is suitable for connection to intra-building or unexposed wiring or cabling only. The intra-building port(s) of the equipment or subassembly MUST NOT be metallically connected to interfaces that connect to the OSP or its wiring. These interfaces are designed for use as intra-building interfaces only (Type 4 ports as described in GR-1089) and require isolation from the exposed OSP cabling. The addition of Primary Protectors is not sufficient protection in order to connect these interfaces metallically to OSP wiring.

REGULATORY COMPLIANCE NOTICES

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

7.0e/ GENERAL PUBLIC LICENSE

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