NETGEAR® User Manual

AX1800 4-Stream WiFi Mesh Extender Model EAX20

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Overview

The WiFi Range Extender boosts your existing network range and speed, delivering tri-band WiFi.

This chapter covers the following topics:

- <u>Unpack Your Extender</u>
- <u>LEDs</u>
- <u>Back Panel</u>
- <u>System Requirements</u>
- How the Extender Works

Note: For more information about the topics covered in this manual, visit the support website at <u>support.netgear.com</u>.

Unpack Your Extender

Your package contains an extender and power adapter.



Figure 1. Extender package contents

LEDs

The following table describes the LEDs.



Figure 2. Front panel

Table 1. LED descriptions

LED	Description	
Ethernet LED	• Solid white . An Ethernet device is connected to an Ethernet port.	
-	• Off . An Ethernet device is not connected to the extender.	
Ŧ		
5 GHz LED	• Solid white . The extender's 5 GHz WiFi radio is operating.	
	• Off . The extender's 5 GHz WiFi radio is off.	
5 GHz		
2.4 GHz LED	• Solid white . The extender's 2.4 GHz WiFi radio is operating.	
	• Off . The extender's 2.4 GHz WiFi radio is off.	
2. 4GHz		
Connection Link LED	This LED indicates the WiFi connection between the extender and the router. • Solid white. Best connection.	
all	Solid amber. Good connection.	
	Solid red. Poor connection.	
	• Off. No connection.	
WPS LED	• Blinking white. A WPS connection is being established.	
(CLO)	• Solid white . The extender network is enabled with WiFi security (either WPA, WPA2, or WPA3 WiFi security).	
V	• Off . The extender network is enabled without WiFi security.	
Power LED	• Solid amber . The extender is booting.	
	• Solid white . The extender is powered on.	
Ċ	• Blinking amber. The extender is resetting to its factory default settings.	
	• Blinking white. The firmware is corrupted.	
	• Off . The extender is powered off.	

Back Panel

The back panel of the extender provides a Reset button, Ethernet ports, and a DC power connector.

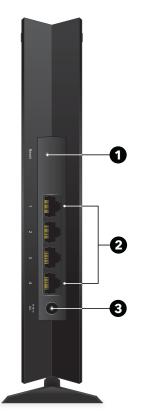


Figure 3. Back panel

The back panel contains the following components:

- 1. **Reset button**. Pressing this button resets the extender. If the **Reset** button is pressed for at least seven seconds, the Power LED blinks amber, and the extender returns to its factory settings.
- 2. **Ethernet ports**. Use the four Gigabit Ethernet RJ-45 LAN ports to connect the extender to LAN devices.
- 3. **DC power connector**. Connect the power adapter that came in the product package to the DC power connector.

System Requirements

You need the following to install your extender:

- 2.4 GHz or 5 GHz 802.11 a/b/g/n/ac/ax wireless router or gateway
- Compatible web browser:
 - Microsoft Internet Explorer[®] 8.0 or higher
 - Firefox 2.0 or higher
 - Safari 5.1 or higher
 - Google Chrome 25.0 or higher

How the Extender Works

The extender works like a bridge between a WiFi router (or a WiFi access point) and a WiFi device outside the range of the WiFi router. The extender performs two main jobs:

- The extender connects to a working WiFi network.
 When the extender connects over WiFi to an existing network, it functions as a network client, similar to how a WiFi device connects to a network.
- The extender acts as an access point for WiFi devices. The extender broadcasts its own WiFi network that WiFi devices can join. In its role as an access point, the extender performs tasks that WiFi routers do, such as broadcasting its network name (SSID).

The extender must do each of these jobs so that both ends of the bridge are in place.

2 Get started

This chapter covers the following topics:

- Install the WiFi extender
- <u>Place the extender and apply power</u>
- <u>Connect to an existing WiFi network</u>
- <u>Use the extender in access point mode</u>
- Connect a device to the extender network
- Log in to the extender after installation
- Run the Smart Setup installation

Install the WiFi extender

Place the extender, apply power, and connect the extender to your existing WiFi network.

Place the extender and apply power

To place the extender and apply power:

- Place your extender in the same room as your WiFi router.
 Proximity to the WiFi router is required only during the initial setup process.
- 2. Plug the extender into an electrical outlet.
- 3. Wait for the Power LED to light solid white.

Connect to an existing WiFi network

To extend the range of your WiFi network, you must connect the extender to your existing router's WiFi network.

Note: If your router's WiFi security is set to WPA enterprise, WPA2 enterprise, or WEP, your extender can't connect to your router. You must change your router's WiFi security setting.

You can connect your extender to your router's WiFi netowrk using one of these methods:

- **Connect with the Nighthawk app**. The Nighthawk app guides you through the connection process. For more information, see <u>Connect with the Nighthawk app</u> on page 13.
- **Connect with WPS**. If your router supportsWi-Fi Protected Setup (WPS), use WPS to connect your extender to your router's WiFi network. For more information, see <u>Connect with WPS</u> on page 14.
- **Connect with the web browser setup**. You can use the extender's web browser setup, called the NETGEAR installation assistant. and For more information, see <u>Connect with the NETGEAR installation assistant</u> on page 17.

Connect with the Nighthawk app

You can connect your extender to your router using the NETGEAR Nighthawk app.

To connect with the Nighthawk app:

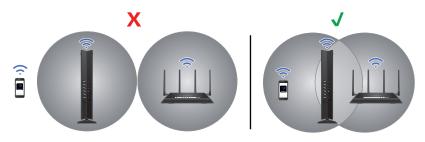
1. Download the Nighthawk app on your mobile device.



For more information about the Nighthawk app, visit Nighthawk-app.com.

- 2. On your mobile device, open the WiFi connection manager, then locate and connect to the extender network called NETGEAR_EXT.
- 3. Launch the Nighthawk app.
- 4. Follow the prompts to connect your extender to your existing router WiFi network.
- 5. Unplug your extender and move it to a new location.

We recommend that the new location be about halfway between your router and the area with a poor WiFi signal.



- 6. Power on your extender.
- 7. Use the Connection Link LED to help you choose a spot where the extender-to-router connection is optimal.
- 8. If the Connection Link LED doesn't light white, plug the extender into an outlet closer to the router and try again.

Keep moving the extender to outlets closer to the router until the Connection Link LED lights white.

9. Reconnect your computer or mobile device to the new extended WiFi network.

The following tables show an example of what your 2.4 and 5 GHz extender WiFi names might look like if your extender connects to both 2.4 GHz and 5 GHz WiFi networks from a dual-band router:

Table 2. Existing dual-band router WiFi names example

Dual-band router WiFi networks	Example router WiFi names
2.4 GHz router WiFi network	MyWiFiexample
5 GHz router WiFi network	MyWiFiExample-5G

Table 3. New extender WiFi names example

Extender WiFi networks	Example extender WiFi names (if the extender connects to both the 2.4 GHz and 5 GHz router WiFi networks)
2.4 GHz extender WiFi network	MyWiFiExample
5 GHz extender WiFi network	MyWiFiExample-5G

Connect with WPS

Wi-Fi Protected Setup (WPS) lets you join a secure WiFi network without typing the network name and password. For help with the **WPS** button on your WPS-enabled device, check the instructions or online help that came with that device. Some older equipment cannot use WPS.

Note: WPS does not support WEP network security or a hidden SSID network. If your existing WiFi network uses WEP security or its SSID is hidden, follow the instructions in <u>Connect with the NETGEAR installation assistant</u> on page 17.

To use WPS to connect the extender to your WiFi router:

- 1. Press the **WPS** button on the extender until the WPS LED blinks.
- 2. Within two minutes, press the **WPS** button on your router.

When the extender connects to your existing WiFi network, the WPS LED on the extender lights.

If the Connection Link LED lights white, the connection between the router and extender is good. If the Connection Link LED lights amber or red, move the extender closer to the router and try again.

If the Connection Link LED lights white, the connection between your router and extender is good. If the Connection Link LED lights amber or red, move the extender closer to the router and try again.

Note: If your router supports the 5 GHz band and your extender didn't connect to that band, repeat the WPS process.

3. Unplug your extender and move it to a new location.

We recommend that the new location be about halfway between your router and the area with a poor WiFi signal.



The extender must be within the range of your router WiFi network.

- 4. Power on your extender.
- 5. Use the Connection Link LED to help you choose a spot where the extender-to-router connection is optimal.

Keep moving the extender to outlets closer to the router until the Connection Link LED lights white.

6. If the Connection Link LED doesn't light white, plug the extender into an outlet closer to the router and try again.

Keep moving the extender to outlets closer to the router until the Connection Link LED lights white.

- 7. Reconnect your computer or mobile device to the new extender WiFi network. After the setup, the One WiFi Name feature is enabled, which allows your extender to use the same WiFi network settings as your router.
- 8. Connect your WiFi-enabled computer or mobile device to the extended network. Your extender uses the same WiFi network settings as your router for its 2.4 GHz and 5 GHz extended networks.

For example, if your extender connects to the router's 2.4 GHz WiFi band only, your extender uses your router's 2.4 GHz WiFi settings for both its networks. The following tables show an example of what your extender WiFi network names might look like:

Table 4. Existing dual-band router WiFi names example

Dual-band router WiFi networks	Example router WiFi names
2.4 GHz router WiFi network	MyWiFiexample
5 GHz router WiFi network	MyWiFiExample-5G

Table 5. New extender WiFi names example

Extender WiFi networks	Example extender WiFi names (if the extender connects to the 2.4 GHz router WiFi network only)
2.4 GHz extender WiFi network	MyWiFiExample
5 GHz extender WiFi network	MyWiFiExample

If your extender connects to the router's 5 GHz WiFi band, your extender uses your router's 5 GHz WiFi settings for both its networks. The following tables show an example of what your extender WiFi network names might look like:

Table 6. Existing dual-band router WiFi names example

Dual-band router WiFi networks	Example router WiFi names	
2.4 GHz router WiFi network	MyWiFiexample	
5 GHz router WiFi network	MyWiFiExample-5G	

Table 7. New extender WiFi names example

Extender WiFi networks	Example extender WiFi names (if the extender connects to the 5 GHz router WiFi network only)
2.4 GHz extender WiFi network	MyWiFiExample-5G
5 GHz extender WiFi network	MyWiFiExample-5G

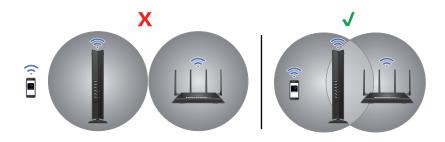
Note: Since your router and extender networks share the same WiFi network name, only one WiFi network name is broadcast.

Connect with the NETGEAR installation assistant

You can use the NETGEAR installation assistant to connect your extender to your existing WiFi router network. To use the NETGEAR installation assistant, you must launch a web browser on your computer or mobile device.

To use the NETGEAR installation assistant to connect the extender to your WiFi router:

- 1. On your WiFi-enabled computer or mobile device, open the WiFi connection manager and locate and connect to the extender network called NETGEAR_EXT.
- 2. Launch web browser.
- 3. Enter **http://www.mywifiext.net/**. The NETGEAR installation assistant displays.
- 4. Follow the prompts to connect your extender to your existing router WiFi network.
- Unplug your extender and move it to a new location.
 We recommend that the new location be about halfway between your router and the area with a poor WiFi signal.



- 6. Power on your extender.
- 7. Use the Connection Link LED to help you choose a spot where the extender-to-router connection is optimal.
- 8. If the Connection Link LED doesn't light white, plug the extender into an outlet closer to the router and try again.

Keep moving the extender to outlets closer to the router until the Connection Link LED lights white.

9. Reconnect your computer or mobile device to the new extended WiFi network.

Use the extender in access point mode

You can use the extender as a WiFi access point, which creates a new WiFi hotspot by using a wired Ethernet connection.



Figure 4. Extender in access point mode

To use the extender in access point mode:

- 1. Plug the extender into an electrical outlet.
- Wait for the Power LED to light amber and then turn white.
 If the Power LED does not light, press the **Power On/Off** button on the side of the extender.
- 3. Connect a computer or mobile device to the extender using a WiFi or Ethernet connection:
 - **WiFi**. On your WiFi-enabled computer or mobile device, open the WiFi connection manager and connect to the extender network called NETGEAR_EXT.
 - **Ethernet**. Connect the Ethernet cable to the Ethernet port on your computer and extender.

Note: If you want to use an Ethernet connection, you must do this before you connect your extender to your modem router or router.

- 4. Launch a web browser and visit <u>http://www.mywifiext.net/</u>. The NETGEAR installation assistant displays.
- 5. Use an Ethernet cable to connect your router to an Ethernet port on the extender.

Note: Do not connect your extender directly to your DSL or cable modem. The extender does not function as a router. If your network includes a DHCP server, you can connect the extender to a switch or hub that is connected to the DHCP server.

6. Return to the NETGEAR installation assistant and follow the prompts to finish setting up your extender as an access point.

Connect a device to the extender network

After you complete the setup process, you can connect all your devices to the new extender network using a WiFi or WPS connection.

Connect a device to the extender network using WiFi

If you enabled the One WiFi Name feature, your extender uses the the same WiFi network name and password as your router.

To connect to the extender WiFi network:

- On your WiFi-enabled computer or mobile device, open the WiFi connection manager that manages your WiFi connections. The WiFi connection manager scans for WiFi networks in your area.
- 2. Find and select your extender's WiFi network name (SSID) and enter your extender's WiFi password.

This is the SSID and password that you set up during the installation process. If you enabled the One WiFi Name feature, use your router's SSID and password.

Connect a device to the extender network using WPS

For help with the **WPS** button on your WPS-enabled device, check the instructions or online help that came with that device. Some older equipment cannot use WPS.

To connect to the extender using a WPS connection:

- 1. Press the **WPS** button on the extender until the WPS LED blinks white.
- Within two minutes, press the WPS button on your WPS-enabled device. When the extender connects to your WPS-enabled device, the WPS LED lights solid white.

Log in to the extender after installation

After installation, you can log in to the extender to view or change the extender's settings.

To log in to the extender:

- 1. Launch a web browser from a computer or mobile device that is connected to your extender network.
- 2. Log in to your extender:
 - If you did not enable the One WiFi Name feature, enter http://www.mywifiext.net/ in the address field of the browser.
 - If you enabled the One WiFi Name feature, enter one of the following URLs:
 - Windows-based computers. <u>http://mywifiext.local/</u> or <u>http://mywifiext/</u>
 - Mac computers and iOS devices. <u>http://mywifiext.local/</u>
 - Android devices. http://<extender's IP address> (for example, http://192.168.1.3)
 For more information about how to find your extender's IP address, see <u>Find</u> the Extender's IP address on page 59.

Run the Smart Setup installation

You can use the Smart Setup to change the extender settings. This is an easy way to connect the extender to a different router or to change the extender WiFi network name (SSID) or WiFi password.

To run the Smart Setup:

- 1. Launch a web browser from a computer or mobile device that is connected to your extender network.
- 2. Log in to your extender:
 - If you did not enable the One WiFi Name feature, enter http://www.mywifiext.net/ in the address field of the browser.
 - If you enabled the One WiFi Name feature, enter one of the following URLs:
 - Windows-based computers. <u>http://mywifiext.local/</u> or <u>http://mywifiext/</u>
 - Mac computers and iOS devices. <u>http://mywifiext.local/</u>
 - **Android devices**. http://<*extender's IP address*> (for example, http://192.168.1.3)
 - For more information about how to find your extender's IP address, see <u>Find</u> the <u>Extender's IP address</u> on page 59.

- 3. Enter your admin user name and password and click the **LOG IN** button. The Status page displays.
- 4. Click the **SMART SETUP** button.
- 5. Follow the prompts.

3

Extender Network Settings

This chapter covers the following topics:

- Enable or disable the One WiFi Name feature
- Enable or disable Smart Connect
- <u>View connected devices</u>
- <u>View WiFi settings</u>
- Change the WiFi network name
- Turn off the SSID broadcast to create a hidden network
- Disable or enable the WiFi radios
- <u>Change the WiFi speed</u>
- Use WPS to add a computer to the extender's WiFi network
- Deny access to a computer or WiFi device
- <u>Set up an access schedule</u>
- Change the extender's device name
- <u>Set up the extender to use a static IP address</u>
- Adjust the WiFi coverage
- Enable FastLane technology
- Configure a router with advanced MAC settings to work with your extender

Enable or disable the One WiFi Name feature

The One WiFi Name feature enables your extender to use the same WiFi network settings as your router.

If you enabled the One WiFi Name feature, your extender uses the same WiFi network name and password as your router.

The following is an example of what your WiFi network names might look like if One WiFi Name is enabled:

- Router 2.4 GHz WiFi network name. MyWiFiExample
- Router 5 GHz WiFi network name. MyWiFiExample-5G
- Extender 2.4 GHz WiFi network name. MyWiFiExample
- Extender 5 GHz WiFi network name. MyWiFiExample-5G

Note: If you enable the One WiFi Name feature and your router's 2.4 GHz and 5 GHz networks use different network names, you cannot enable the Smart Connect feature.

To enable or disable the One WiFi Name feature:

- 1. Launch a web browser from a computer or mobile device that is connected to your extender network.
- 2. Log in to your extender:
 - If you did not enable the One WiFi Name feature, enter http://www.mywifiext.net/ in the address field of the browser.
 - If you enabled the One WiFi Name feature, enter one of the following URLs:
 - Windows-based computers. <u>http://mywifiext/</u> or <u>http://mywifiext.local/</u>
 - Mac computers, iOS devices, and Linux devices. <u>http://mywifiext.local/</u>
 - Android devices. http://<extender's IP address>/ (for example, http://192.168.1.3/)
 For more information about how to find your extender's IP address, see <u>Find</u> the Extender's IP address on page 59.

A login page displays.

3. Enter your admin user name and password and click the **LOG IN** button. The Status page displays.

- 5. Select **Settings > Wireless**.

The WiFi Settings page displays.

- 6. Enable or disable the One WiFi Name feature:
 - Enable the One WiFi Name feature. To enable the One WiFi name feature, select the Yes radio button.
 If this is the first time you're enabling the One WiFi Name feature, you must run the Smart Setup. Go to the Status page and click the SMART SETUP button to run the Smart Setup.
 - Disable the One WiFi Name feature. To disable the One WiFi Name feature, select the No radio button.
 If you disable this feature, you can set a new SSID and password for the extender's 2.4 GHz and 5 GHz networks in the Network Name (SSID) and WiFi Password fields on this page.
- 7. Click the **SAVE** button. Your settings are saved.

Enable or disable Smart Connect

The Smart Connect feature selects the fastest WiFi band for your WiFi devices to connect to. To enable the Smart Connect feature, your extender's 2.4 GHz and 5 Ghz networks must use the same network name and password.

Note: If you enabled the One WiFi Name feature and your router's 2.4 GHz and 5 GHz networks use different network names, you cannot enable Smart Connect. You can only enable Smart Connect if your extender's 2.4 GHz and 5 GHz WiFi networks use the same network name.

To enable or disable the Smart Connect feature:

- 1. Launch a web browser from a computer or mobile device that is connected to your extender network.
- 2. Log in to your extender:
 - If you did not enable the One WiFi Name feature, enter http://www.mywifiext.net/ in the address field of the browser.

- If you enabled the One WiFi Name feature, enter one of the following URLs:
 - Windows-based computers. <u>http://mywifiext/</u> or <u>http://mywifiext.local/</u>
 - Mac computers, iOS devices, and Linux devices. http://mywifiext.local/
 - Android devices. http://<extender's IP address>/ (for example, http://192.168.1.3/)
 For more information about how to find your extender's IP address, see <u>Find</u> the Extender's IP address on page 59.

A login page displays.

- 3. Enter your admin user name and password and click the **LOG IN** button. The Status page displays.
- If your browser displays the Menu icon ≡, click it. The extender menu displays.
- Select Settings > Wireless.
 The WiFi Settings page displays.
- 6. Enable or Disable the Smart Connect feature:
 - Enable the Smart Connect feature. To enable the Smart Connect feature, select the **Yes** radio button.

Note: To use this feature, the 2.4 GHz and 5 GHz networks must use the same SSID and password.

 Disable the Smart Connect feature. To disable the Smart Connect feature, select the No radio button.
 If you disable this feature, you can set a new SSID and password for the extender's 2.4 GHz and 5 GHz networks in the Network Name (SSID) and WiFi Password

fields on this page.

7. Click the **SAVE** button. Your settings are saved.

View connected devices

You can view a list of devices that are connected to the extender network.

Extender Network Settings

To view connected devices:

- 1. Launch a web browser from a computer or mobile device that is connected to your extender network.
- 2. Log in to your extender:
 - If you did not enable the One WiFi Name feature, enter http://www.mywifiext.net/ in the address field of the browser.
 - If you enabled the One WiFi Name feature, enter one of the following URLs:
 - Windows-based computers. <u>http://mywifiext/</u> or <u>http://mywifiext.local/</u>
 - Mac computers, iOS devices, and Linux devices. <u>http://mywifiext.local/</u>
 - Android devices. http://<extender's IP address>/ (for example, http://192.168.1.3/)
 For more information about how to find your extender's IP address, see <u>Find</u> the Extender's IP address on page 59.

A login page displays.

- 3. Enter your admin user name and password and click the **LOG IN** button. The Status page displays.
- If your browser displays the Menu icon ≡, click it. The extender menu displays.
- 5. Select Settings > Connected Devices.

The Connected Devices page displays. The devices connected to the extender displays on the page.

View WiFi settings

To view the WiFi settings:

- 1. Launch a web browser from a computer or mobile device that is connected to your extender network.
- 2. Log in to your extender:
 - If you did not enable the One WiFi Name feature, enter http://www.mywifiext.net/ in the address field of the browser.

- If you enabled the One WiFi Name feature, enter one of the following URLs:
 - Windows-based computers. <u>http://mywifiext/</u> or <u>http://mywifiext.local/</u>
 - Mac computers, iOS devices, and Linux devices. http://mywifiext.local/
 - Android devices. http://<extender's IP address>/ (for example, http://192.168.1.3/)
 For more information about how to find your extender's IP address, see <u>Find</u> the Extender's IP address on page 59.

A login page displays.

- 3. Enter your admin user name and password and click the **LOG IN** button. The Status page displays.
- If your browser displays the Menu icon ≡, click it. The extender menu displays.
- Select Settings > Wireless.

The WiFi Settings page displays the WiFi settings.

Change the WiFi network name

To change the WiFi network name:

- 1. Launch a web browser from a computer or mobile device that is connected to your extender network.
- 2. Log in to your extender:
 - If you did not enable the One WiFi Name feature, enter
 http://www.mywifiext.net/ in the address field of the browser.
 - If you enabled the One WiFi Name feature, enter one of the following URLs:
 - Windows-based computers. <u>http://mywifiext/</u> or <u>http://mywifiext.local/</u>
 - Mac computers, iOS devices, and Linux devices. <u>http://mywifiext.local/</u>
 - Android devices. http://<extender's IP address>/ (for example, http://192.168.1.3/)
 For more information about how to find your extender's IP address, see <u>Find</u> the Extender's IP address on page 59.

- 3. Enter your admin user name and password and click the **LOG IN** button. The Status page displays.
- If your browser displays the Menu icon ≡, click it. The extender menu displays.
- Select Settings > Wireless. The WiFi Settings page displays.
- 6. In the 2.4 GHz or 5 GHz **Network Name (SSID)** field, type a new network name.
- 7. Click the **SAVE** button. Your settings are saved.

Turn off the SSID broadcast to create a hidden network

By default, the extender broadcasts its WiFi signal so that its WiFi network names (SSIDs) are easy for you to find and connect to from your computer, tablet, or smartphone. You can turn off the SSID broadcast to create a hidden WiFi network. To connect to a hidden network you must know its SSID and password and manually enter them.

To turn off the SSID broadcast to create a hidden network:

- 1. Launch a web browser from a computer or mobile device that is connected to your extender network.
- 2. Log in to your extender:
 - If you did not enable the One WiFi Name feature, enter http://www.mywifiext.net/ in the address field of the browser.
 - If you enabled the One WiFi Name feature, enter one of the following URLs:
 - Windows-based computers. <u>http://mywifiext/</u> or <u>http://mywifiext.local/</u>
 - Mac computers, iOS devices, and Linux devices. <u>http://mywifiext.local/</u>
 - Android devices. http://<extender's IP address>/ (for example, http://192.168.1.3/)
 For more information about how to find your extender's IP address, see <u>Find</u> the Extender's IP address on page 59.

A login page displays.

3. Enter your admin user name and password and click the **LOG IN** button.

The Status page displays.

- If your browser displays the Menu icon ≡, click it. The extender menu displays.
- Select Settings > Wireless. The WiFi Settings page displays.
- 6. In the 2.4 GHz or 5 GHz Network section, clear the **Broadcast the Network Name (SSID)** check box.
- 7. Click the **SAVE** button. Your settings are saved.

Disable or enable the WiFi radios

By default, the extender's WiFi radios broadcast signals in the 2.4 GHz and 5 GHz bands. If you disable the WiFi radios, then no one can connect with WiFi to the extender.

To enable or disable the WiFi radios:

- 1. Launch a web browser from a computer or mobile device that is connected to your extender network.
- 2. Log in to your extender:
 - If you did not enable the One WiFi Name feature, enter http://www.mywifiext.net/ in the address field of the browser.
 - If you enabled the One WiFi Name feature, enter one of the following URLs:
 - Windows-based computers. <u>http://mywifiext/</u> or <u>http://mywifiext.local/</u>
 - Mac computers, iOS devices, and Linux devices. <u>http://mywifiext.local/</u>
 - Android devices. http://<extender's IP address>/ (for example, http://192.168.1.3/)
 For more information about how to find your extender's IP address, see <u>Find</u> the Extender's IP address on page 59.

- 3. Enter your admin user name and password and click the **LOG IN** button. The Status page displays.
- If your browser displays the Menu icon ≡, click it. The extender menu displays.

5. Select **Settings > Wireless**.

The WiFi Settings page displays.

- 6. Select or clear the **Enable 2.4 GHz WiFi** check box.
- 7. Select or clear the **Enable 5 GHz WiFi** check box.
- 8. Click the **SAVE** button. Your settings are saved.

Change the WiFi speed

When the extender's 2.4 GHz WiFi backhaul is connected to the root access point (root AP), the extender's 2.4 GHz fronthaul WiFi speed is the same as the root AP's 2.4 GHz WiFi speed. The extender cannot change its 2.4 GHz WiFi speed.

This also applies to the extender's 5 GHz WiFi speed. When the extender's 5 GHz WiFi backhaul is connected to the root AP, the extender's 5 GHz fronthaul WiFi speed is the same as the root AP's 5 GHz WiFi speed. The extender cannot change its 5 GHz WiFi speed.

The following table further explains whether if the extender's 2.4 GHz or 5 GHz WiFi speed is changeable based on which extender backhaul connection is used to connect to the root AP.

Which extender WiFi backhaul is connected to the root AP?	ls the extender's 2.4 GHz fronthaul WiFi speed changeable?	ls the extender's 5 GHz fronthaul WiFi speed changeable?
Both 2.4 GHz and 5 GHz	No	No
2.4 GHz only	No	Yes
5 GHz only	Yes	No
No connection	Yes	Yes

Table 8. Extender backhaul and fronthaul WiFi connection

To change the extender's WiFi speed:

- 1. Launch a web browser from a computer or mobile device that is connected to your extender network.
- 2. Log in to your extender:
 - If you did not enable the One WiFi Name feature, enter http://www.mywifiext.net/ in the address field of the browser.

- If you enabled the One WiFi Name feature, enter one of the following URLs:
 - Windows-based computers. <u>http://mywifiext/</u> or <u>http://mywifiext.local/</u>
 - Mac computers, iOS devices, and Linux devices. <u>http://mywifiext.local/</u>
 - Android devices. http://<extender's IP address>/ (for example, http://192.168.1.3/)
 For more information about how to find your extender's IP address, see <u>Find</u> the Extender's IP address on page 59.

A login page displays.

- 3. Enter your admin user name and password and click the **LOG IN** button. The Status page displays.
- If your browser displays the Menu icon ≡, click it. The extender menu displays.
- Select Settings > Wireless. The WiFi Settings page displays.
- 6. From the 2.4 GHz Network or 5 GHz Network **WiFi Speed** menu, select a speed.
- 7. Click the **SAVE** button. Your settings are saved.

Use WPS to add a computer to the extender's WiFi network

WPS (WiFi Protected Setup) lets you connect a computer or WiFi device to the extender's network without entering the WiFi network passphrase or key. Instead, you use a **WPS** button or enter a PIN to connect.

If you use the push button method, the WiFi device that you are trying to connect must include a physical button or a software button. If you use the PIN method, you must know the PIN of the WiFi device that you are trying to connect.

WPS supports WPA and WPA2 WiFi security. If your extender network is open (no WiFi security is set), connecting with WPS automatically sets WPA + WPA2 WiFi security on the extender network and generates a random passphrase. You can view this passphrase on the WiFi Settings page (for more information, see <u>View WiFi settings</u> on page 26).

Extender Network Settings

Use WPS with the push button method

For you to use the push button method to connect a WiFi device to the extender's WiFi network, the WiFi device that you are trying to connect must include a physical **WPS** button or an onscreen **WPS** button that you can click.

To use WPS to add a WPS-enabled device to the extender's WiFi network:

- 1. Launch a web browser from a computer or mobile device that is connected to your extender network.
- 2. Log in to your extender:
 - If you did not enable the One WiFi Name feature, enter http://www.mywifiext.net/ in the address field of the browser.
 - If you enabled the One WiFi Name feature, enter one of the following URLs:
 - Windows-based computers. <u>http://mywifiext/</u> or <u>http://mywifiext.local/</u>
 - Mac computers, iOS devices, and Linux devices. <u>http://mywifiext.local/</u>
 - Android devices. http://<extender's IP address>/ (for example, http://192.168.1.3/)
 For more information about how to find your extender's IP address, see <u>Find</u> the Extender's IP address on page 59.

A login page displays.

- 3. Enter your admin user name and password and click the **LOG IN** button. The Status page displays.
- 4. If your browser displays the **Menu** icon \equiv , click it. The extender menu displays.
- 5. Select **Settings > Do More > Connect Devices (WPS)**. The Connected Devices (WPS) page displays.
- 6. Leave the **Push Button (recommended)** radio button selected.
- Click the WPS button.
 For two minutes, the extender attempts to add the computer or WiFi device to its WiFi network.
- 8. Within two minutes, go to the computer WiFi device and press or click its **WPS** button.
- 9. To verify that the WiFi device is connected to the extender's WiFi network, select **Settings > Connected Devices**.

The WiFi device displays onscreen.

Use WPS with the PIN method

To use the PIN method to connect a WiFi device to the extender's WiFi network, you must know the PIN of the WiFi device that you are trying to connect.

To add a computer or WiFi device to the extender's WiFi network:

- 1. Launch a web browser from a computer or mobile device that is connected to your extender network.
- 2. Log in to your extender:
 - If you did not enable the One WiFi Name feature, enter http://www.mywifiext.net/ in the address field of the browser.
 - If you enabled the One WiFi Name feature, enter one of the following URLs:
 - Windows-based computers. <u>http://mywifiext/</u> or <u>http://mywifiext.local/</u>
 - Mac computers, iOS devices, and Linux devices. <u>http://mywifiext.local/</u>
 - Android devices. http://<extender's IP address>/ (for example, http://192.168.1.3/)
 For more information about how to find your extender's IP address, see <u>Find</u> the Extender's IP address on page 59.

A login page displays.

- 3. Enter your admin user name and password and click the **LOG IN** button. The Status page displays.
- If your browser displays the Menu icon ≡, click it. The extender menu displays.
- Select Settings > Do More > Connect Devices (WPS). The Connect Devices (WPS) page displays.
- 6. Select the **PIN Number** radio button. The page adjusts.
- 7. Type the PIN of the WiFi device in the field.
- Click the NEXT button.
 For four minutes, the extender attempts to find the computer or WiFi device.
- 9. Within four minutes, go to the WiFi device and use its WPS software to join the WiFi network.

Extender Network Settings

10. To verify that the WiFi device is connected to the extender's WiFi network, select **Settings > Connected Devices**.

The WiFi device displays onscreen.

Deny access to a computer or WiFi device

By default, access control is disabled so that it is easy for you to connect to the extender's WiFi networks.

You can deny network access to specific computers and WiFi devices based on their MAC addresses. Each network device is assigned a MAC address, which is a unique 12-character physical address, containing the hexadecimal characters 0-9, a-f, or A-F only, and separated by colons (for example, 00:09:AB:CD:EF:01). Typically, the MAC address is on the label of the WiFi device. If you cannot access the label, you can display the MAC address using the network configuration utilities of the computer. You might also find the MAC addresses on the Connected Devices page (see <u>View connected devices</u> on page 25).

To use WiFi access control to deny access:

- 1. Launch a web browser from a computer or mobile device that is connected to your extender network.
- 2. Log in to your extender:
 - If you did not enable the One WiFi Name feature, enter http://www.mywifiext.net/ in the address field of the browser.
 - If you enabled the One WiFi Name feature, enter one of the following URLs:
 - Windows-based computers. <u>http://mywifiext/</u> or <u>http://mywifiext.local/</u>
 - Mac computers, iOS devices, and Linux devices. <u>http://mywifiext.local/</u>
 - Android devices. http://<extender's IP address>/ (for example, http://192.168.1.3/)
 For more information about how to find your extender's IP address, see <u>Find</u> the Extender's IP address on page 59.

- 3. Enter your admin user name and password and click the **LOG IN** button. The Status page displays.
- 4. If your browser displays the **Menu** icon \equiv , click it. The extender menu displays.

5. Select Settings > Connected Devices.

The Connected Devices page displays.

- 6. In the WiFi Devices section, select the **Enable Access Control** check box. The WiFi devices table displays the names and MAC addresses of WiFi devices that are connected to the extender.
- 7. Select the **Deny** check box for the device.
- Click the SAVE button. Your settings are saved and that device cannot connect to the extender's WiFi network.

Set up an access schedule

You can control access by all users during specific periods of the day. You can set up an access schedule that prevents the extender's wireless or wired connection to the router based on the times that you set.

To set up an access schedule:

- 1. Launch a web browser from a computer or mobile device that is connected to your extender network.
- 2. Log in to your extender:
 - If you did not enable the One WiFi Name feature, enter http://www.mywifiext.net/ in the address field of the browser.
 - If you enabled the One WiFi Name feature, enter one of the following URLs:
 - Windows-based computers. <u>http://mywifiext/</u> or <u>http://mywifiext.local/</u>
 - Mac computers, iOS devices, and Linux devices. <u>http://mywifiext.local/</u>
 - Android devices. http://<extender's IP address>/ (for example, http://192.168.1.3/)
 For more information about how to find your extender's IP address, see <u>Find</u> the Extender's IP address on page 59.

- 3. Enter your admin user name and password and click the **LOG IN** button. The Status page displays.
- 4. If your browser displays the **Menu** icon \equiv , click it. The extender menu displays.

5. Select **Do More > Access Schedule**.

The Access Schedule page displays.

- 6. Select the **Access Schedule On** radio button. The page adjusts.
- 7. In the **Days** menu and the **Time** menu, select the day and time when you want to disable the extender's wireless or wired connection to the router.
- 8. Click the **Add Time** button to add the time that you specified to the Scheduled Times table.
- 9. Click the **SAVE** button. Your settings are saved.

Change the extender's device name

The default device name is the extender's model number.

To change the extender's device name:

- 1. Launch a web browser from a computer or mobile device that is connected to your extender network.
- 2. Log in to your extender:
 - If you did not enable the One WiFi Name feature, enter http://www.mywifiext.net/ in the address field of the browser.
 - If you enabled the One WiFi Name feature, enter one of the following URLs:
 - Windows-based computers. <u>http://mywifiext/</u> or <u>http://mywifiext.local/</u>
 - Mac computers, iOS devices, and Linux devices. <u>http://mywifiext.local/</u>
 - Android devices. http://<extender's IP address>/ (for example, http://192.168.1.3/)
 For more information about how to find your extender's IP address, see <u>Find</u> the Extender's IP address on page 59.

- 3. Enter your admin user name and password and click the **LOG IN** button. The Status page displays.
- 4. If your browser displays the **Menu** icon \equiv , click it. The extender menu displays.

- 5. Select **Settings > Wireless**. The WiFi Settings page displays.
- Scroll down and click the **IP Address** heading. The page expands.
- 7. In the **Device Name** field, type a name.
- 8. Click the **SAVE** button. Your settings are saved.

Set up the extender to use a static IP address

The extender comes set up to use a dynamic IP address, which is the correct setting for most home networks.

To set up the extender to use a static IP address:

- 1. Launch a web browser from a computer or mobile device that is connected to your extender network.
- 2. Log in to your extender:
 - If you did not enable the One WiFi Name feature, enter http://www.mywifiext.net/ in the address field of the browser.
 - If you enabled the One WiFi Name feature, enter one of the following URLs:
 - Windows-based computers. <u>http://mywifiext/</u> or <u>http://mywifiext.local/</u>
 - Mac computers, iOS devices, and Linux devices. <u>http://mywifiext.local/</u>
 - Android devices. http://<extender's IP address>/ (for example, http://192.168.1.3/)
 For more information about how to find your extender's IP address, see <u>Find</u> the Extender's IP address on page 59.

A login page displays.

- 3. Enter your admin user name and password and click the **LOG IN** button. The Status page displays.
- If your browser displays the Menu icon ≡, click it. The extender menu displays.
- 5. Select **Settings > Wireless**. The WiFi Settings page displays.

 Scroll down and click the **IP Address** heading. The page expands.

By default, the **Dynamically get IP Address from Router** radio button is selected.

- 7. Select the Use Static IP Address radio button.
- 8. Complete the fields to specify the IP network IP addresses.
- 9. Click the **SAVE** button. Your settings are saved.

Adjust the WiFi coverage

You can adjust the extender output power percentage and range of your extended WiFi network. If you select a low output power percentage, the extender's WiFi range will be shorter, and the extender uses less power. If you select a high output power percentage, the extender's WiFi range will be longer, and the extender uses more power.

For a smaller coverage area, choose a lower output power percentage. For a larger coverage area, select a higher output power percentage.

To adjust the WiFi coverage:

- 1. Launch a web browser from a computer or mobile device that is connected to your extender network.
- 2. Log in to your extender:
 - If you did not enable the One WiFi Name feature, enter http://www.mywifiext.net/ in the address field of the browser.
 - If you enabled the One WiFi Name feature, enter one of the following URLs:
 - Windows-based computers. <u>http://mywifiext/</u> or <u>http://mywifiext.local/</u>
 - Mac computers, iOS devices, and Linux devices. <u>http://mywifiext.local/</u>
 - Android devices. http://<extender's IP address>/ (for example, http://192.168.1.3/)
 For more information about how to find your extender's IP address, see <u>Find</u> the Extender's IP address on page 59.

A login page displays.

3. Enter your admin user name and password and click the **LOG IN** button. The Status page displays.

- 4. If your browser displays the **Menu** icon \equiv , click it. The extender menu displays.
- 5. Select **Do More > WiFi Coverage**. The WiFi Coverage page displays.
- 6. Select a WiFi Output Power radio button
- 7. Click the **SAVE** button. Your settings are saved.

Enable FastLane technology

Get the most out of your HD entertainment with FastLane technology. With FastLane technology, the extender connects to your router using one band and connects to your devices using another band. Because a band is dedicated to each function, performance is enhanced.

If all your devices and your WiFi router support only the 2.4 GHz band, or all your devices and your WiFi router support only the 5 GHz band, do not enable FastLane Technology.

To activate FastLane mode:

- 1. Launch a web browser from a computer or mobile device that is connected to your extender network.
- 2. Log in to your extender:
 - If you did not enable the One WiFi Name feature, enter http://www.mywifiext.net/ in the address field of the browser.
 - If you enabled the One WiFi Name feature, enter one of the following URLs:
 - Windows-based computers. <u>http://mywifiext/</u> or <u>http://mywifiext.local/</u>
 - Mac computers, iOS devices, and Linux devices. <u>http://mywifiext.local/</u>
 - Android devices. http://<extender's IP address>/ (for example, http://192.168.1.3/)
 For more information about how to find your extender's IP address, see <u>Find</u> the Extender's IP address on page 59.

A login page displays.

3. Enter your admin user name and password and click the **LOG IN** button. The Status page displays.

- If your browser displays the Menu icon ≡, click it. The extender menu displays.
- Select **Do More > FastLane**. The FastLane Technology page displays.
- 6. Select the **FastLane Technology** radio button. The page adjusts and displays two more radio buttons.
- 7. Select a radio button:
 - Router-to-Extender in 2.4 GHz only and Extender-to-Device in 5 GHz only. The 5 GHz band is used to connect the extender to the WiFi devices, and the 2.4 GHz band is used to connect the extender to the WiFi router. Use this mode if the devices that you want to use for gaming and streaming support the 5 GHz band, but your WiFi router supports the 2.4 GHz band.
 - Router to Extender in 5 GHz only and Extender-to-Device in 2.4 GHz only. The 2.4 GHz band is used to connect the extender to the WiFi devices, and the 5 GHz band is used to connect the extender to the WiFi router. Use this mode if your WiFi router supports the 5 GHz band, but the devices that you want to use for gaming and streaming support the 2.4 GHz band.
- 8. Click the **SAVE** button. Your changes are saved.

Configure a router with advanced MAC settings to work with your extender

If you enabled a WiFi MAC filter, WiFi access control, or access control list (ACL) on your router, when a WiFi device connects through the extender to your router, the MAC address of the WiFi device shown on the router is translated to another MAC address.

If your router's MAC filter, WiFi access control, or ACL is enabled, the WiFi device connects to the extender but cannot get an IP address from the extender and cannot access the Internet.

To allow the WiFi device to receive an IP address from the extender and access the Internet, you must provide translated MAC address to the router.

To add a translated MAC address to your router and reserve an IP address for your extender

- 1. Log in to your router and disable the MAC filter, WiFi access control, or ACL. For more information about how to disable your router's MAC filter, WiFi access control, or ACL, see your router's documentation.
- 2. Power on the extender and connect all of your WiFi devices to the extender.
- 3. Make sure that the Connection Link LED remains lit.
- 4. Log in to your extender:
 - a. Launch a web browser from a computer or mobile device that is connected to your extender network.
 - b. Log in to your extender:
 - If you did not enable the One WiFi Name feature, enter http://www.mywifiext.net/ in the address field of the browser.
 - If you enabled the One WiFi Name feature, enter one of the following URLs:
 - Windows-based computers. <u>http://mywifiext/</u> or <u>http://mywifiext.local/</u>
 - Mac computers, iOS devices, and Linux devices. <u>http://mywifiext.local/</u>
 - **Android devices**. http://<*extender's IP address*>/ (for example, http://192.168.1.3/)

A login page displays.

c. Enter your admin user name and password and click the **LOG IN** button. The Status page displays.

5. Select Settings > Connected Devices.

The Connected Devices page displays the MAC addresses and virtual MAC addresses for computers and WiFi devices that are connected to the extender network.

6. On the router, add the extender's virtual MAC address and all the virtual MAC addresses connected to the extender network to your router's MAC filter table.

Note: To reserve a specific IP address for the extender, you must specify the first virtual MAC address that displays for your extender's 2.4 GHz or 5 GHz network in your router's IP reservation table. (The first virtual MAC address that displays for your extender's 2.4 GHz and 5 GHz networks is the same.)

7. Enable the router's MAC filter, wireless access control, or ACL.

Extender Network Settings

4

Maintain and monitor the extender

This chapter covers the following topics:

- Change the extender login user name and password
- <u>Turn password protection off and on</u>
- <u>Recover a forgotten user name or password</u>
- Automatically adjust for daylight saving time
- Manually set the extender clock
- Back up and manage the extender configuration
- Back up the configuration settings
- <u>Restore the configuration settings</u>
- <u>Return the extender to its factory default settings</u>
- <u>Update the extender firmware</u>
- <u>Restart the extender from the extender web interface</u>
- <u>Turn the LEDs On or Off</u>

Change the extender login user name and password

You can change the admin user name and password that you use to log in to the extender.

To change the extender's login user name and password:

- 1. Launch a web browser from a computer or mobile device that is connected to your extender network.
- 2. Log in to your extender:
 - If you did not enable the One WiFi Name feature, enter http://www.mywifiext.net/ in the address field of the browser.
 - If you enabled the One WiFi Name feature, enter one of the following URLs:
 - Windows-based computers. <u>http://mywifiext/</u> or <u>http://mywifiext.local/</u>
 - Mac computers, iOS devices, and Linux devices. http://mywifiext.local/
 - Android devices. http://<extender's IP address>/ (for example, http://192.168.1.3/)
 For more information about how to find your extender's IP address, see <u>Find</u> the Extender's IP address on page 59.

A login page displays.

- 3. Enter your admin user name and password and click the **LOG IN** button. The Status page displays.
- If your browser displays the Menu icon ≡, click it. The extender menu displays.
- 5. Select **Settings > Password**.

The Password Settings page displays.

6. To change the admin user name, enter a new user name in the **New User Name** field.

Your admin user name can be a name or email address.

- 7. To change the admin password, enter a new password in the **New Password** field and the **Verify Password** field.
- 8. Select questions and enter the answers.

9. Click the **SAVE** button. Your settings are saved.

Turn password protection off and on

We recommend that you leave password protection on to help keep your network secure. You can turn password protection off and on.

To turn password protection off or on:

- 1. Launch a web browser from a computer or mobile device that is connected to your extender network.
- 2. Log in to your extender:
 - If you did not enable the One WiFi Name feature, enter http://www.mywifiext.net/ in the address field of the browser.
 - If you enabled the One WiFi Name feature, enter one of the following URLs:
 - Windows-based computers. <u>http://mywifiext/</u> or <u>http://mywifiext.local/</u>
 - Mac computers, iOS devices, and Linux devices. <u>http://mywifiext.local/</u>
 - Android devices. http://<extender's IP address>/ (for example, http://192.168.1.3/)
 For more information about how to find your extender's IP address, see <u>Find</u> the Extender's IP address on page 59.

A login page displays.

- 3. Enter your admin user name and password and click the **LOG IN** button. The Status page displays.
- 4. If your browser displays the **Menu** icon \equiv , click it. The extender menu displays.
- Select Settings > Password.
 The Password Settings page displays.
- 6. Select the **Password Off** or **Password On** radio button.
- 7. Click the **SAVE** button. Your settings are saved.

Recover a forgotten user name or password

If you changed the password that you use to access the extender and you set up password recovery, you can recover your password if you lose it.

To recover your password that you use to access the extender:

- 1. Launch a web browser from a computer or mobile device that is connected to your extender network.
- 2. Log in to your extender:
 - If you did not enable the One WiFi Name feature, enter http://www.mywifiext.net/ in the address field of the browser.
 - If you enabled the One WiFi Name feature, enter one of the following URLs:
 - Windows-based computers. <u>http://mywifiext/</u> or <u>http://mywifiext.local/</u>
 - Mac computers, iOS devices, and Linux devices. <u>http://mywifiext.local/</u>
 - Android devices. http://<extender's IP address>/ (for example, http://192.168.1.3/)
 For more information about how to find your extender's IP address, see <u>Find</u> the Extender's IP address on page 59.

A login page displays.

3. Click the Username & Password Help link.

A page displays requesting the answers to your security questions.

If you forgot the answers to your security questions, restore the extender's factory settings and set up your login credentials again. See <u>Return the extender to its factory</u> <u>default settings</u> on page 50.

- 4. Enter the saved answers to your security questions.
- 5. Click the **NEXT** button.

Your admin user name address and password are displayed.

- 6. Click the **BACK** button. A login page displays.
- 7. Log in to the extender.

Automatically adjust for daylight saving time

To set up the extender to automatically adjust for daylight saving time:

- 1. Launch a web browser from a computer or mobile device that is connected to your extender network.
- 2. Log in to your extender:
 - If you did not enable the One WiFi Name feature, enter http://www.mywifiext.net/ in the address field of the browser.
 - If you enabled the One WiFi Name feature, enter one of the following URLs:
 - Windows-based computers. <u>http://mywifiext/</u> or <u>http://mywifiext.local/</u>
 - Mac computers, iOS devices, and Linux devices. <u>http://mywifiext.local/</u>
 - Android devices. http://<extender's IP address>/ (for example, http://192.168.1.3/)
 For more information about how to find your extender's IP address, see <u>Find</u> the Extender's IP address on page 59.

A login page displays.

- 3. Enter your admin user name and password and click the **LOG IN** button. The Status page displays.
- If your browser displays the Menu icon ≡, click it. The extender menu displays.
- 5. Select **Do More > Access Schedule**. The Access Schedule page displays.
- 6. Select the Automatically adjust for daylight savings time check box.
- 7. Click the **SAVE** button. Your settings are saved.

Manually set the extender clock

If you turned on the access schedule, you can set the extender clock. The extender clock makes sure that the WiFi access schedules are accurate.

To manually set the extender clock:

- 1. Launch a web browser from a computer or mobile device that is connected to your extender network.
- 2. Log in to your extender:
 - If you did not enable the One WiFi Name feature, enter http://www.mywifiext.net/ in the address field of the browser.
 - If you enabled the One WiFi Name feature, enter one of the following URLs:
 - Windows-based computers. <u>http://mywifiext/</u> or <u>http://mywifiext.local/</u>
 - Mac computers, iOS devices, and Linux devices. <u>http://mywifiext.local/</u>
 - Android devices. http://<extender's IP address>/ (for example, http://192.168.1.3/)
 For more information about how to find your extender's IP address, see <u>Find</u> the Extender's IP address on page 59.

A login page displays.

- 3. Enter your admin user name and password and click the **LOG IN** button. The Status page displays.
- If your browser displays the Menu icon ≡, click it. The extender menu displays.
- 5. Select **Do More > Access Schedule**. The Access Schedule page displays.
- 6. In the Extender Clock section, select the **Manual** radio button.
- 7. To specify the time, complete the fields or click the **Sync Clock** button to synchronize the extender time to the time on the computer or mobile device that you are using.
- 8. Click the **SAVE** button. Your settings are saved.

Back up and manage the extender configuration

When the extender works correctly after initial setup, we recommend that you back up the extender configuration settings. After you back up the settings, if you change the

extender configuration settings but are not content with the new settings, you can restore the extender configuration to the backed-up settings.

Back up the configuration settings

You can back up the configuration file of the extender.

To back up the extender configuration settings:

- 1. Launch a web browser from a computer or mobile device that is connected to your extender network.
- 2. Log in to your extender:
 - If you did not enable the One WiFi Name feature, enter http://www.mywifiext.net/ in the address field of the browser.
 - If you enabled the One WiFi Name feature, enter one of the following URLs:
 - Windows-based computers. <u>http://mywifiext/</u> or <u>http://mywifiext.local/</u>
 - Mac computers, iOS devices, and Linux devices. <u>http://mywifiext.local/</u>
 - Android devices. http://<extender's IP address>/ (for example, http://192.168.1.3/)
 For more information about how to find your extender's IP address, see <u>Find</u> the Extender's IP address on page 59.

A login page displays.

- 3. Enter your admin user name and password and click the **LOG IN** button. The Status page displays.
- If your browser displays the Menu icon ≡, click it. The extender menu displays.
- Select Settings > Other. The Other Settings page displays.
- 6. Click the **BACKUP** button.

Your browser extracts the configuration file from the extender. The backup file uses a .cfg extension.

- 7. If your browser is not set up to save downloaded files automatically, locate where you want to save the file.
- Click the **OK** button. The extender configuration settings are backed up.

Restore the configuration settings

You can restore the configuration settings of the extender to a previously saved configuration file.

To restore the extender configuration settings:

- 1. Launch a web browser from a computer or mobile device that is connected to your extender network.
- 2. Log in to your extender:
 - If you did not enable the One WiFi Name feature, enter http://www.mywifiext.net/ in the address field of the browser.
 - If you enabled the One WiFi Name feature, enter one of the following URLs:
 - Windows-based computers. <u>http://mywifiext/</u> or <u>http://mywifiext.local/</u>
 - Mac computers, iOS devices, and Linux devices. <u>http://mywifiext.local/</u>
 - Android devices. http://<extender's IP address>/ (for example, http://192.168.1.3/)
 For more information about how to find your extender's IP address, see <u>Find</u> the Extender's IP address on page 59.

A login page displays.

- 3. Enter your admin user name and password and click the **LOG IN** button. The Status page displays.
- ^{4.} If your browser displays the **Menu** icon \equiv , click it. The extender menu displays.
- 5. Select **Settings > Other**. The Other Settings page displays.
- 6. Click the **BROWSE** button.
- Locate and select the previously saved backup file.
 The backup file uses a .cfg extension.

CAUTION: After you click the **RESTORE** button, do not try to go online, turn off the extender, shut down the computer, or do anything else to the extender until it finishes restarting.

- 8. Click the **RESTORE** button. A confirmation pop-up window opens.
- Confirm your decision. The extender configuration is restored and the extender restarts. This process takes about one minute.

Return the extender to its factory default settings

Under some circumstances (for example, if you lose track of the changes that you made to the extender settings), you might want to erase the configuration and reset the extender to factory default settings.

To reset the extender to factory default settings, you can either use the **Reset** button on the back panel or log in to the extender and reset it.

Use the Reset button

CAUTION: This process erases any settings that you configured in the extender.

To use the Reset button to return the extender to its factory default settings:

- 1. Insert a straightened paper clip into the hole of the **Reset** button and hold it for about seven seconds.
- 2. Release the button.

CAUTION: Do not try to go online, turn off the extender, shut down the computer, or do anything else to the extender until it finishes restarting!

The extender resets and restarts. This process takes about one minute.

Log in and reset the extender to factory settings

CAUTION: This process erases any settings that you configured in the extender.

To log in to the extender and reset the extender's factory settings:

- 1. Launch a web browser from a computer or mobile device that is connected to your extender network.
- 2. Log in to your extender:
 - If you did not enable the One WiFi Name feature, enter http://www.mywifiext.net in the address field of the browser.
 - If you enabled the One WiFi Name feature, enter one of the following URLs:
 - Windows-based computers. <u>http://mywifiext/</u> or <u>http://mywifiext.local/</u>
 - Mac computers, iOS devices, and Linux devices. <u>http://mywifiext.local/</u>
 - Android devices. http://<extender's IP address>/ (for example, http://192.168.1.3/)
 For more information about how to find your extender's IP address, see <u>Find</u> the Extender's IP address on page 59.

A login page displays.

- 3. Enter your admin user name and password and click the **LOG IN** button. The Status page displays.
- If your browser displays the Menu icon ≡, click it. The extender menu displays.
- 5. Select **Settings > Other**.

The Other Settings page displays.

CAUTION: After you click the **RESET** button, do not try to go online, turn off the extender, shut down the computer, or do anything else to the extender until it finishes restarting.

- Click the **RESET** button. A confirmation pop-up window opens.
- 7. Confirm your decision.

The extender returns to its factory settings and restarts. This process takes about one minute.

Update the extender firmware

You can log in to the extender and check to see if new firmware is available, or you can manually load a specific firmware version to your extender.

Check for new firmware and update the extender

Unless you changed the settings in the Firmware Update page previously, the extender is set up to check for new firmware automatically at login.

To check manually for new firmware and, if available, update the firmware:

- 1. Launch a web browser from a computer or mobile device that is connected to your extender network.
- 2. Log in to your extender:
 - If you did not enable the One WiFi Name feature, enter http://www.mywifiext.net/ in the address field of the browser.
 - If you enabled the One WiFi Name feature, enter one of the following URLs:
 - Windows-based computers. <u>http://mywifiext/</u> or <u>http://mywifiext.local/</u>
 - Mac computers, iOS devices, and Linux devices. <u>http://mywifiext.local/</u>
 - Android devices. http://<extender's IP address>/ (for example, http://192.168.1.3/)
 For more information about how to find your extender's IP address, see <u>Find</u> the Extender's IP address on page 59.

A login page displays.

- 3. Enter your admin user name and password and click the **LOG IN** button. The Status page displays.
- If your browser displays the Menu icon ≡, click it. The extender menu displays.
- 5. Select Firmware Update.

The Firmware Update page displays.

- 6. Click the **CHECK ONLINE** button.
- 7. If new firmware is available, follow the onscreen prompts to update the firmware.

Note: You might need to unzip the firmware file. The firmware update process takes about two minutes.

Manually upload firmware to the extender

If you want to upload a specific firmware version, follow these instructions.

To manually upload a firmware file to your extender:

1. Download the firmware file for your extender from the <u>NETGEAR Download Center</u>, save it to your desktop, and unzip the file if needed.

Note: The correct firmware file uses an .img or .chk extension.

- 2. Launch a web browser from a computer or mobile device that is connected to your extender network.
- 3. Log in to your extender:
 - If you did not enable the One WiFi Name feature, enter http://www.mywifiext.net/ in the address field of the browser.
 - If you enabled the One WiFi Name feature, enter one of the following URLs:
 - Windows-based computers. <u>http://mywifiext/</u> or <u>http://mywifiext.local/</u>
 - Mac computers, iOS devices, and Linux devices. <u>http://mywifiext.local/</u>
 - Android devices. http://<extender's IP address>/ (for example, http://192.168.1.3/)
 For more information about how to find your extender's IP address, see <u>Find</u> the Extender's IP address on page 59.

A login page displays.

- 4. Enter your admin user name and password and click the **LOG IN** button. The Status page displays.
- If your browser displays the Menu icon ≡, click it. The extender menu displays.
- 6. Select Firmware Update.

The Firmware Update page displays.

- 7. Click the **BROWSE** button.
- 8. Locate and select the new firmware file.

The firmware file name ends with a .img or .chk extension.

9. Click the **UPLOAD** button.

CAUTION: After you click the **UPLOAD** button, do not try to go online, turn off the extender, shut down the computer, or do anything else to the extender until it finishes restarting.

The firmware update starts and the extender restarts. The firmware update process takes about two minutes.

Restart the extender from the extender web interface

You can log in to the extender and restart it. When the extender restarts, all computers and WiFi devices that are connected to its WiFi network are automatically disconnected.

To restart the extender from the extender web interface:

- 1. Launch a web browser from a computer or mobile device that is connected to your extender network.
- 2. Log in to your extender:
 - If you did not enable the One WiFi Name feature, enter http://www.mywifiext.net/ in the address field of the browser.
 - If you enabled the One WiFi Name feature, enter one of the following URLs:
 - Windows-based computers. <u>http://mywifiext/</u> or <u>http://mywifiext.local/</u>
 - Mac computers, iOS devices, and Linux devices. http://mywifiext.local/
 - Android devices. http://<extender's IP address>/ (for example, http://192.168.1.3/)
 For more information about how to find your extender's IP address, see <u>Find</u> the Extender's IP address on page 59.

A login page displays.

- 3. Enter your admin user name and password and click the **LOG IN** button. The Status page displays.
- ^{4.} If your browser displays the **Menu** icon \equiv , click it. The extender menu displays.

5. Select **Settings > Other**.

The Other Settings page displays.

6. Click the **RESTART** button and click the **Yes** button to confirm. The extender restarts, which takes about two minutes.

Turn the LEDs On or Off

If you turn the LEDs off, the Power LED remains on.

To turn the LEDs on or off:

- 1. Launch a web browser from a computer or mobile device that is connected to your extender network.
- 2. Log in to your extender:
 - If you did not enable the One WiFi Name feature, enter http://www.mywifiext.net/ in the address field of the browser.
 - If you enabled the One WiFi Name feature, enter one of the following URLs:
 - Windows-based computers. <u>http://mywifiext/</u> or <u>http://mywifiext.local/</u>
 - Mac computers, iOS devices, and Linux devices. <u>http://mywifiext.local/</u>
 - Android devices. http://<extender's IP address>/ (for example, http://192.168.1.3/)
 For more information about how to find your extender's IP address, see <u>Find</u> the Extender's IP address on page 59.

A login page displays.

- 3. Enter your admin user name and password and click the **LOG IN** button. The Status page displays.
- ^{4.} If your browser displays the **Menu** icon \equiv , click it. The extender menu displays.
- 5. Select **Do More > LED On/Off**. The LED On/Off page displays.
- 6. Select the **ON** or **OFF** radio button.
 - To turn the LEDs on, select the **ON** radio button.
 - To turn the LED off, select the **OFF** radio button.

7. Click the **SAVE** button. Your settings are saved.

5 FAQs and troubleshooting

This chapter contains the following topics:

- <u>FAQs</u>
- Find the Extender's IP address
- Cannot Connect to the Extender
- Cannot Join a WiFi Network and Receive an Error Message
- <u>Cannot access mywifiext.net</u>
- Cannot connect to extender using the Nighthawk app

FAQs

This section provides answers for difficulties you might experience with the extender.

The web browser setup keeps asking me for my network password (passphrase) or security key, and I am sure that I entered the correct password. What can I do?

The extender is probably placed at the borderline of the range covered by the router or access point. To improve your signal strength, move your extender closer to your router and make sure that the Connection Link LED lights solid white or amber. The LED lights as follows:

- **Solid white**. Best connection
- Solid amber. Good connection
- Solid red. Poor connection
- **Off**. No connection

Can I set up the extender in extender mode if I connect it to the router or access point with an Ethernet cable?

No. The extender is designed to connect wirelessly to the router or access point if it is in extender mode. If the extender is in access point mode, you can connect it to the router or access point with an Ethernet connection. For more information about access point mode, see <u>Use the extender in access point mode</u> on page 18.

I am connected to NETGEAR_EXT and launched a browser but I don't see the NETGEAR installation assistant. What should I do?

Try these troubleshooting steps:

- Relaunch the web browser and enter **http://www.mywifiext.net/** in the address field.
- Clear your web browser cache and history, and then try vising <u>http://www.mywifiext.net</u> again.
- If you are installing the extender as an access point, make sure that you are connecting your computer or WiFi device to the extender through a WiFi connection instead of an Ethernet connection.
- Make sure that your computer is set up to use DHCP (most are).

I forgot my admin user name address and password. What can I do?

On the login window, click the **Username & Password Help** link to answer the security questions that you set up during the initial setup. For more information, see <u>Recover a</u> <u>forgotten user name or password</u> on page 45.

To restore factory settings:

- 1. Use a sharp object such as a pen or paper clip to press and hold the **Reset** button on the extender for seven seconds until the Power LED blinks amber.
- 2. Release the **Reset** button and wait for the extender to reboot. The extender resets and returns to the factory default settings.

Find the Extender's IP address

If your extender and router use the same WiFi network name (SSID) and you want to log in to your extender using an Android device, you must use the extender's IP address. You can log in to your router to find your extender's IP address. If you own a NETGEAR router, use the following procedure to find the extender's IP address. If you do not own a NETGEAR router, see your router's documentation.

Note: The following instructions might not apply to your NETGEAR router. For more information, see your NETGEAR router's user manual.

To log in to your extender and find your extender's IP address:

- 1. Launch a web browser from a computer or mobile device that is connected to the router network.
- Enter http://www.routerlogin.net/.
 A login window opens.
- 3. Enter the router admin user name and password.

The user name is **admin**. The password is the one that you specified the first time that you logged in. The user name and password are case-sensitive.

The BASIC Home page displays.

4. Select Attached Devices.

A list of devices connected to your router displays.

5. Find your extender in the list and note your extender's IP address.

Cannot Connect to the Extender

If you cannot connect to the extender, determine what prevents you from connecting:

- If you cannot access the extender settings using the Nighthawk app, you can access the extender using the extender web interface at <u>http://www.mywifiext.net/</u>, see <u>Cannot access mywifiext.net</u> on page 61 for more information.
- If you forgot your user name or password, click the **Username & Password Help** link. For more information, see <u>FAOs</u> on page 58.
- If your browser displays an error page, include **http://** in the address field of your browser by typing **http://www.mywifiext.net/**.
- If you cannot get a WiFi connection working, you can use an Ethernet cable to connect your computer to the extender. Then log in to the extender web interface (<u>http://www.mywifiext.net</u>) and see if your extender has any connection issues.

Cannot Join a WiFi Network and Receive an Error Message

To join a WiFi network, you must know its WiFi network name (also called the SSID) so that you can select it. If the network is secure, you must know the WiFi password (also called the passphrase or key). If the extender does not connect to the network that you select, the cause might be one of the following:

- It is possible that you typed the WiFi network name or WiFi passowrd incorrectly. Use Smart Setup (see <u>Run the Smart Setup installation</u> on page 20) to select a WiFi network and retype the WiFi password. The WiFi password is case-sensitive. For example, PASSWORD25 is not the same as Password25 or password25.
- If the extender cannot detect your WiFi network, check to see if your WiFi network is still working. Make sure that the WiFi router is turned on. If possible, move the extender closer to the WiFi router.
- If the extender Connection Link LED is red, the WiFi connection between the WiFi router and the extender is poor. You can establish the best connection with a clear line of sight between the extender and the WiFi router. Make sure that no physical obstacles exist between the extender and the WiFi router, and try to move the extender closer to the WiFi router.

If you use Smart Setup, and the extender does not connect to the WiFi router, does not connect to the Internet, or cannot get an IP address from the WiFi router, Smart Setup displays a message to notify you that the extender is not configured.

To run Smart Setup again, click the **YES** button. To manually configure the extender, click the **NO, CONFIGURE MANUALLY** button.

Cannot access mywifiext.net

When you try to access <u>http://www.mywifiext.net/</u> to set up your extender, you might receive an error message that says you are not connected to the extender's WiFi network. This website is not a regular Internet website. It is a local web address used to log in to the extender web interface and view the extender settings.

Your computer or mobile device must be connected to your extender network to access <u>http://www.mywifiext.net/</u>.

Try these troubleshooting tips to connect to <u>http://www.mywifiext.net/</u>:

- If you're trying to access <u>http://www.mywifiext.net/</u> for the first time to set up your extender, see <u>Connect with the NETGEAR installation assistant</u> on page 17 and follow the instructions.
- Launch a web browser and enter the extender's default IP address, which is **192.168.1.250**.

If this IP address does not work, it is possible that your extender's IP address might have changed. You can log in to your router to view your extender's IP address. For more information, see <u>Find the Extender's IP address</u> on page 59.

- If your extender and router use the same WiFi network name (SSID), enter http://<extender's IP address> (for example, http://192.168.1.3). For more information about how to find your extender's IP address, see <u>Find the</u> <u>Extender's IP address</u> on page 59.
- Clear your web browser's cache and browsing history and try again. For more information, see the help content for your web browser.
- Try using another web browser.
- Assign a static IP address to your computer. Before you change any network settings, note your current Default gateway (Windows) or Router (Mac) address. Use the IP address **192.168.1.249** and the subnet mask **255.255.255.0**.

For more information, see your computer's documentation.

Cannot connect to extender using the Nighthawk app

You can use the Nighthawk app to set up your extender and access your extender settings.

If the Nighthawk app is unable to connect to your extender, try these troubleshooting tips:

- If you're setting up your extender for the first time, make sure your mobile device is connected to the extender WiFi network called NETGEAR_EXT.
- If you already set up your extender, make sure your mobile device is connected to the new extender WiFi network that was set. Your extender's WiFi network and password is the same as your router's WiFi network and password.
- If you already set up your extender and your extender is connected to a Nighthawk router, you can access your extender settings through your router's Network Map in the Nighthawk app.

Launch the Nighthawk app, tap the **Network Map** on the router dashboard, and then tap the extender icon.

6 Supplemental Information

This appendix covers the following topics:

- Factory Default Settings
- <u>Technical and Environmental Specifications</u>

Factory Default Settings

To reset the extender to factory default settings, you can use the **Reset** button on the side panel or you can log in and click the onscreen **RESET** button. For more information, see <u>Return the extender to its factory default settings</u> on page 50.

The following table shows the factory default settings.

Feature	Default Settings
Smart Setup	Enabled
WiFi communication	Enabled
WiFi network name (SSID)	NETGEAR_EXT
Security	Disabled
Transmission speed	Auto ¹
Country/region	Varies by region
Operating mode	802.11a/b/g/n/ac
Data rate in the 2.4 GHz band	Max 600 Mbps
Data rate in the 5 GHz band	Disabled by default (When enabled the max data rate is 1200 Mbps)
DHCP	Server and client are enabled

Table 9. Factory default settings

¹ Maximum WiFi signal rate (IEEE Standard 802.11). Actual throughput can vary. Network conditions and environmental factors, including volume of network traffic, building materials and construction, and network overhead lower actual data throughput rate.

Technical and Environmental Specifications

The following table shows the technical and environmental specifications.

Table 10. Technical specifications

Technical Specifications	
Network protocol and standards compatibility	Data and routing protocols: TCP/IP, DHCP server and client, DNS relay
Physical specifications	• Dimensions: 9.5 x 6.7 x 2.5 in (241.7 x 169.5 x 63.4 mm)
	• Weight: 1.1 lb (504.4 g)
Environmental	• Operating temperature: 32° to 104°F (0° to 40°C)
	Operating humidity: 90% maximum relative humidity, noncondensing
Interface	Local: Two 10/100/1000 Mbps Ethernet ports
	• 802.11ac/n/a/g/b and 802.11k

Supplemental Information