NETGEAR®

AC1200 WiFi Range Extender
User Manual

Model EX6110

Support

Thank you for purchasing this NETGEAR product.

After installing your device, locate the serial number on the label of your product and use it to register your product at *https://my.netgear.com*. You must register your product before you can use NETGEAR telephone support. NETGEAR recommends registering your product through the NETGEAR website. For product updates and web support, visit *http://support.netgear.com*.

Phone (US & Canada only): 1-888-NETGEAR.

Phone (Other Countries): Check the list of phone numbers at *http://support.netgear.com/general/contact/default.aspx*.

Trademarks

Compliance

For regulatory compliance information, visit *http://www.netgear.com/about/regulatory*. See the regulatory compliance document before connecting the power supply.

Contents

Overview 1

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

This chapter covers the following topics:

- *Meet Your Extender*
- *When to Use Your Extender*
- *How the Extender Works*

Note For more information about the topics covered in this manual, visit the support website at *support.netgear.com*.

Meet Your Extender

Before you install your extender, familiarize yourself with its LEDs and buttons.

LEDs

The following table describes the LEDs.

Table 1. LED descriptions

LED	Description
Power	• **Solid green**. The extender is powered on. • **Solid amber**. The extender is booting. • **Off**. The extender is powered off.
Router	This LED indicates the network connection between the extender and the router or access point. • **Solid green**. Best connection. • **Solid amber**. Good connection. • **Solid red**. Poor connection. • **Off**. No connection.

Table 1. LED descriptions (Continued)

LED	Description
Device	This LED indicates the network connection between the extender and a computer or mobile device. • **Solid green**. Best connection. • **Solid amber**. Good connection. • **Solid red**. Poor connection. • **Off**. No connection.
WPS	• **Solid green**. WiFi security is enabled (WPA or WPA2). • **Blinking green**. A WPS connection is being established. • **Off**. WiFi security is not enabled.

Buttons

The side panel contains the following buttons:

- **Reset button**. Pressing the **Reset** button for about five seconds resets the extender.
- **WPS button**. Pressing the **WPS** button let's the extender connect to your existing WiFi network through WPS. You can also connect WPS-enabled devices to the extender using the **WPS** button.
- **Power button**. Pressing the **Power** button turn the extender on or off.

When to Use Your Extender

NETGEAR recommends that you connect through the extender network only when the WiFi device is in a "dead zone" where connection from the existing network is poor or nonexistent. Data traffic routed through the extender is inherently slower than traffic routed directly from the network.

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.

WiFi Range Extender
Boosts the range of
your existing WiFi and
creates a stronger
signal in hard-to-reach
areas.

Existing WiFi
Sometimes your
router does not
provide the WiFi
coverage that you
need

Figure 1. Range extender in a home

Get Started
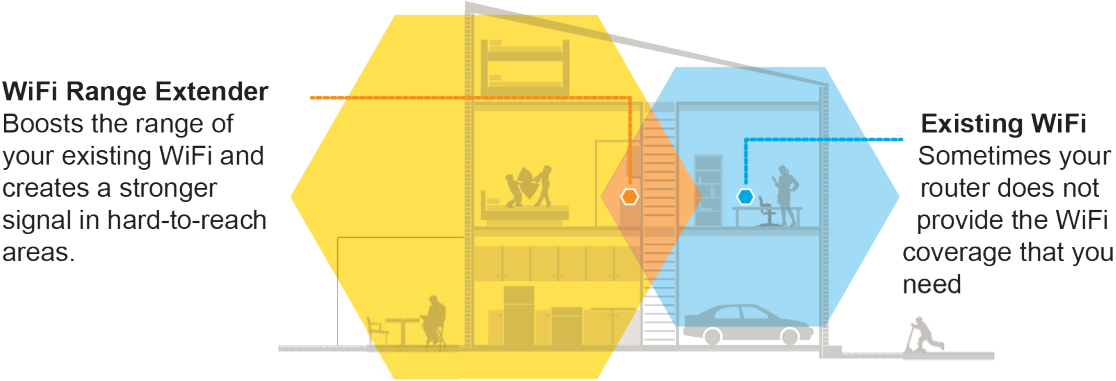
2

This chapter covers the following topics:

- *Install the WiFi Extender*
- *Log In to the Extender After Installation*
- *Run Smart Setup Installation*

Install the WiFi Extender

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

Place the Extender and Apply Power

► **To place the extender and apply power:**

1. 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 amber and then turn green.
   If the Power LED does not light, press the **Power On/Off** button on the side of the extender.

Connect to an Existing WiFi Network

To extend the range of your WiFi network, you must connect the extender to your existing WiFi network. You can do this in one of two ways:

• **Connect with WPS**. For more information, see *Connect with WPS* on page 10.

• **Connect with web browser setup**. For more information, see *Connect with the NETGEAR Installation Assistant* on page 11.

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 *Connect with the NETGEAR Installation Assistant* on page 11.

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

1. Press the **WPS** button on the extender.
   The WPS LED blinks.

2. Within two minutes, press the **WPS** button on your router or access point.
   When the extender connects to your existing WiFi network, the WPS LED on the extender lights solid green and the Router LED lights.
   If the Router Link LED does not light, try again. If it still does not light, see *Connect with the NETGEAR Installation Assistant* on page 11.

3. If your WiFi router supports the 5 GHz band, repeat Steps 1 and 2 to connect the extender to the 5 GHz band.

4. Unplug the extender and move it to a new location that is about halfway between your router and the area with a poor router WiFi signal.
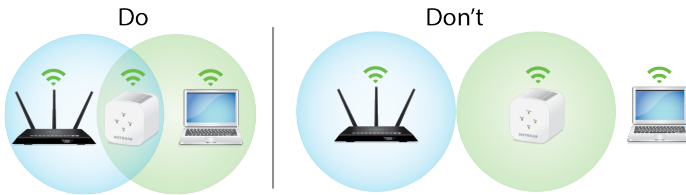
The location that you choose must be within the range of your existing WiFi router network.

5. Use the Router LED to help you choose a spot where the extender-to-router connection is optimal.

6. If the Router LED doesn't light amber or green, 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 Router LED lights amber or green.

7. On your computer or mobile device, find and connect to a new extender WiFi network.

   The extender creates two new extender WiFi networks. The extender's new WiFi network names are based on your existing WiFi network name, with _2GEXT and _5GEXT at the end of the name.

   For example:

   • **Existing WiFi network name**. MyNetworkName

   • **New extender WiFi network names**. MyNetworkName_2GEXT and MyNetworkName_5GEXT

   Use the same WiFi password that you use for your WiFi router.

8. Test the new extender WiFi range by moving your computer or mobile device to the area with a poor router WiFi signal:

   a. Leave your computer or mobile device in the area with a poor router WiFi signal and return to the extender.

   b. Check the Device LED on the extender:

      • If the Device LED is solid green or amber, your new extender WiFi network reaches the area with a poor router WiFi signal and your network setup is complete.

      • If the Device LED is red, your new extender WiFi network does not reach the area with a poor router WiFi signal.
        You must move your computer or mobile device closer to the extender until the Device LED turns solid green or amber.

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 a computer or mobile device, open the WiFi connection manager and find and connect to the extender network called NETGEAR_EXT.

   When you are connected to the extender, the Device LED lights.

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 WiFi network.

5. Unplug the extender and move it to a new location about halfway between your router and the area with a poor WiFi signal.
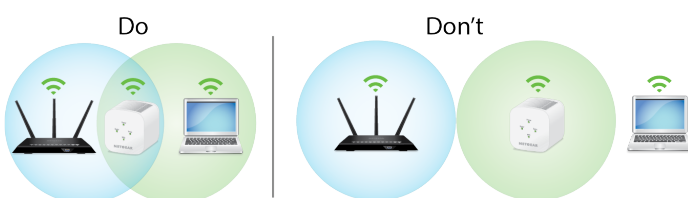
6. Plug the extender into an electrical outlet and wait for the Power LED to light green.

7. Use the Router LED to help you choose a spot where the extender-to-router connection is optimal.

8. If the Router LED doesn't light amber or green, 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 Router LED lights amber or green.

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

10. Test the new extended WiFi range by moving your computer or mobile device to the area with a poor router WiFi signal:

    a. Leave your computer or mobile device in the area with a poor router WiFi signal and return to the extender.

    b. Check the Device LED on the extender:

       • If the Device LED is solid green or amber, your new extender WiFi network reaches the area with a poor router WiFi signal and your network setup is complete.

       • If the Device LED is red, your new extender WiFi network does not reach the area with a poor router WiFi signal.
       You must move your computer or mobile device closer to the extender until the Device LED turns solid green or amber.

11. Plug the extender into an electrical outlet and wait for the Power LED to light green.

Find the Best Location

If the WiFi signal is weak, the first time you join the extender network, the Router LED or Device LED is amber or red. If this happens, adjust the position of the extender:

- If the Router LED is amber or red, move the extender closer to the router.
- If the Device LED is amber or red, move the computer or mobile device closer to the extender.

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. When you are connected to the extender, the Device Link LED lights.

2. Log in to your extender:

   - If you did not enable the One WiFi Name feature, enter 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 computer. http://mywifiext
     - Mac computers and iOS 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 *Find Extender's IP Address* on page 40.

Run Smart Setup Installation

You can use 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 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 your extender and router use different WiFi network names (SSIDs), enter **www.mywifiext.net**.
   - 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 *Find Extender's IP Address* on page 40.

   A login page displays.

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

4. Click the **SMART SETUP** button.

5. Follow the prompts.

Extender Network Settings

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This chapter covers the following topics:

- *View Connected Devices*
- *Boost Your Video Streaming with FastLane Technology*
- *View WiFi Settings*
- *Change the WiFi Network Name*
- *Turn Off the SSID Broadcast to Create a Hidden Network*
- *Disable or Enable the WiFi Radios*
- *Change the WiFi Speed*
- *Use WPS to Add a Computer to the Extender's WiFi Network*
- *Deny Access to a Computer or WiFi Device*
- *Set Up an Access Schedule*
- *Change the Extender's Device Name*
- *Set Up the Extender to Use a Static IP Address*
- *Use the Extender with MAC Filtering or Access Control*

View Connected Devices

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

▶**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 your extender and router use different WiFi network names (SSIDs), enter **www.mywifiext.net**.

   • 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 *Find Extender's IP Address* on page 40.

   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 ☰, click it.
   The extender menu displays.

5. Select **Settings > Connected Devices**.
   The Connected Devices page displays. The devices connected to the extender dsipalys on the page.

Boost Your Video Streaming with 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.

When you enable FastLane Technology, two options are available:

• Use the 2.4 GHz band to connect the extender to the WiFi devices and use the 5 GHz band 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.

• Use the 5 GHz band to connect the extender to the WiFi devices and use the 2.4 GHz band 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.

▶**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 your extender and router use different WiFi network names (SSIDs), enter **www.mywifiext.net**.

- 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 *Find Extender's IP Address* on page 40.

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 ☰ , click it.
The extender menu displays.

5. 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**
- **Router to Extender in 5 GHz only and Extender-to-Device in 2.4 GHz only**

8. Click the **SAVE** button.
Your changes are saved.

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 your extender and router use different WiFi network names (SSIDs), enter **www.mywifiext.net**.

- 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 *Find Extender's IP Address* on page 40.

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 ☰ , click it.

The extender menu displays.

5. Select **Settings > Wireless**.

    The WiFi Settings page displays.

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 your extender and router use different WiFi network names (SSIDs), enter **www.mywifiext.net**.

    - 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 *Find Extender's IP Address* on page 40.

    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 ☰, click it.
    The extender menu displays.

5. Select **Settings > Wireless**.

    The WiFi Settings page displays.

6. In each **Network Name (SSID)** field, type a 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 wireless 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 your extender and router use different WiFi network names (SSIDs), enter **www.mywifiext.net**.

- 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 *Find Extender's IP Address* on page 40.

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 ☰, click it.
The extender menu displays.

5. Select **Settings > Wireless**.

The WiFi Settings page displays.

6. 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 your extender and router use different WiFi network names (SSIDs), enter **www.mywifiext.net**.

- 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 *Find Extender's IP Address* on page 40.

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 ☰, 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

The 2.4 GHz network WiFi speed to set to a specific WiFi speed. You can only change the 5 GHz WiFi speed.

▶**To change the 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 your extender and router use different WiFi network names (SSIDs), enter **www.mywifiext.net**.

   • 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 *Find Extender's IP Address* on page 40.

   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 ≡, click it.
   The extender menu displays.

5. Select **Settings > Wireless**.
   The WiFi Settings page displays.

6. In the 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 *View WiFi Settings* on page 17).

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 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 your extender and router use different WiFi network names (SSIDs), enter **www.mywifiext.net**.

    • 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 *Find Extender's IP Address* on page 40.

    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 ☰, 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.

7. Click the **WIFI PROTECTED SETUP (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 your extender and router use different WiFi network names (SSIDs), enter **www.mywifiext.net**.

    • 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 *Find Extender's IP Address* on page 40.

    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 ☰ , click it.
    The extender menu displays.

5. 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.

8. 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.

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 *View Connected Devices* on page 16).

► **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 your extender and router use different WiFi network names (SSIDs), enter **www.mywifiext.net**.

- 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 *Find Extender's IP Address* on page 40.

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 ≡, 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.

8. 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 to all users during specific periods of the day. You can set up an access schedule that prevents Internet access through the extender network 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 your extender and router use different WiFi network names (SSIDs), enter **www.mywifiext.net**.

   - 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 *Find Extender's IP Address* on page 40.

   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 ≡, click it.
   The extender menu displays.

5. Select **Do More > Access Schedule**.
   The Access Schedule pahe 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 Internet access.

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 name is EX3800.

▶**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 your extender and router use different WiFi network names (SSIDs), enter **www.mywifiext.net**.

   • 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 *Find Extender's IP Address* on page 40.

   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 ☰, click it.
   The extender menu displays.

5. Select **Settings > Wireless Settings**.
   The WiFi Settings page displays.

6. 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 your extender and router use different WiFi network names (SSIDs), enter **www.mywifiext.net**.

    • 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 *Find Extender's IP Address* on page 40.

    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 ☰ , click it.
   The extender menu displays.

5. Select **Settings > Wireless Settings**.
   The WiFi Settings page displays.

6. 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.

Use the Extender with MAC Filtering or Access Control

When the WiFi device connects through the extender to your router, the MAC address of the wireless device that is shown on the router is translated to another MAC address. If your router's MAC filter, wireless 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 wireless device to receive an IP address from the extender and access the Internet, you must provide the translated MAC address to the router.

►**To add a translated MAC address to your router:**

1. Log in to your router and disable the MAC filter, wireless access control, or ACL.
   For more information about how to disable your router's MAC filter, wireless 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. Launch a web browser from a computer or mobile device that is connected to your extender network.

4. Log in to your extender:

   • If your extender and router use different WiFi network names (SSIDs), enter **www.mywifiext.net**.

   • 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 *Find Extender's IP Address* on page 40.

   A login page displays.

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

6. If your browser displays the **Menu** icon ≡, click it.
   The extender menu displays.

7. Select **Settings > Connected Devices**.
   The Connected Devices section displays the MAC addresses and virtual MAC addresses for computers and WiFi devices that are connected to the extender network.

8. 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.

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

Maintain and Monitor the Extender 4

This chapter covers the following topics:

- *Change the Extender admin User Name and Password*
- *Turn Password Protection Off and On*
- *Recover a Forgotten User Name or Password*
- *Automatically Adjust for Daylight Saving Time*
- *Manually Set the Extender Clock*
- *Back Up and Manage the Extender Configuration*
- *Return the Extender To Its Factory Default Settings*
- *Update the Extender Firmware*

Change the Extender admin User Name and Password

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

▶**To add an extender user:**

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 your extender and router use different WiFi network names (SSIDs), enter **www.mywifiext.net**.

   • 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 *Find Extender's IP Address* on page 40.

   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 ≡ , 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 email address in the **New User Name** field.

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

NETGEAR recommends 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 your extender and router use different WiFi network names (SSIDs), enter **www.mywifiext.net**.

   • 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 *Find Extender's IP Address* on page 40.

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 ☰, click it.
   The extender menu displays.

5. 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 to access the extender and set up password recovery, you can recover your password if you lose it.

► **To recover your password 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 your extender and router use different WiFi network names (SSIDs), enter **www.mywifiext.net**.

   - 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 *Find Extender's IP Address* on page 40.

   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 *Return the Extender To Its Factory Default Settings* on page 33.

4. Enter the saved answers to your security questions.

5. Click the **NEXT** button.
   Your admin user name and password displays.

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 your extender and router use different WiFi network names (SSIDs), enter **www.mywifiext.net**.

   - 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 *Find Extender's IP Address* on page 40.

   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 ≡ , 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 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 your extender and router use different WiFi network names (SSIDs), enter **www.mywifiext.net**.

   - 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 *Find Extender's IP Address* on page 40.

   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 ☰ , 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, NETGEAR recommends that you back up the extender configuration settings. After you have 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 your extender and router use different WiFi network names (SSIDs), enter **www.mywifiext.net**.

   • 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 *Find Extender's IP Address* on page 40.

   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 ☰ , click it.
   The extender menu displays.

5. 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 an `.cfg` extenstion.

7. If your browser is not set up to save downloaded files automatically, locate where you want to save the file.

8. Click the **OK** button.
    The extender configuration settings are backed up.

Restore the Configuration Settings

You can restore the configuration file 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 your extender and router use different WiFi network names (SSIDs), enter **www.mywifiext.net**.

    •   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 *Find Extender's IP Address* on page 40.

    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 ≡, click it.
    The extender menu displays.

5. Select **Settings > Other**.
    The Other Settings page displays.

6. Click the **BROWSE** button.

7. 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.

9. 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 **Factory Reset** button on the side 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 your extender and router use different WiFi network names (SSIDs), enter **www.mywifiext.net**.

   • 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 *Find Extender's IP Address* on page 40.

   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 ☰ , 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!

6. 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 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 your extender and router use different WiFi network names (SSIDs), enter **www.mywifiext.net**.

   - 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 *Find Extender's IP Address*
     on page 40.

   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 ☰, 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. Launch a web browser from a computer that is connected to your extender network.

2. Download the firmware for your extender from the *NETGEAR Download Center*, save it to your desktop, and unzip the file if needed.
   You might need to unzip the firmware file.

3. Log in to your extender:

   • If your extender and router use different WiFi network names (SSIDs), enter **www.mywifiext.net**.

   • 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 *Find Extender's IP Address* on page 40.

   A login page displays.

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

5. 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 `.chk` extension.

 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!

9. Click the **UPLOAD** button.
   The firmware update starts and the extender restarts. The firmware update process takes about two minutes.

FAQs and Troubleshooting 5

This chapter covers the following topics:

- *FAQs*
- *Cannot Connect to the Extender*
- *Cannot Join a WiFi Network and Receive an Error Message*
- *Cannot Access mywifiext.net*
- *Find Extender's IP Address*

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. For more information about where to place the extender, see *Find the Best Location* on page 13.

If you are using WEP security, make sure that you are typing the network password in the correct field.

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

In 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 *Recover a Forgotten User Name or Password* on page 29.

▶**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 lights amber.

2. Release the **Reset** button and wait for the extender to reboot.
    The extender resets and returns to the factory default settings.

Cannot Connect to the Extender

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

- If you cannot access *www.mywifiext.net*, see *Cannot Access mywifiext.net* on page 39 for more information.

- If you forgot your user name or password, click the **Username & Password Help** link. For more information, see *FAQs* on page 38.

- If your browser displays an error page, include **http://** in the address field of your browser by typing *http://www.mywifiext.net*.

- If you already set up the extender but can no longer connect to it over WiFi, check to see if the Device LED is off or red.

Cannot Join a WiFi Network and Receive an Error Message

To join a WiFi network, you must know its network name (also called the SSID) so that you can select it. If the network is secure, you must know 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 network name, passphrase, or key incorrectly. Use Smart Setup (see *Run Smart Setup Installation* on page 13) to select a WiFi network and retype the passphrase or key.

The passphrase or key 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 Device 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 *www.mywifiext.net* 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's settings.

Your computer or mobile device must be connected to your extender network to access *www.mywifiext.net*.

Try these troubleshooting tips to connect to *www.mywifiext.net*:

- If you're trying to access *www.mywifiext.net* for the first time to set up your extender, see *Connect with the NETGEAR Installation Assistant* on page 11 and follow the instructions.

- After you connect your computer or mobile device to the extender network, make sure that the extender's Device LED is solid green or amber.
  If the Device LED is not lit, open your computer's or mobile device's WiFi connection manager and make sure that your device is still connected to the extender network.

- 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, 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 *Find Extender's IP Address* on page 40.

- 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 *Find Extender's IP Address* on page 40.

- 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.

Find 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 example 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.

2. 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.

Factory Settings and Technical Specifications

6

This appendix covers the following topics:

- *Factory Default Settings*
- *Technical and Environmental Specifications*

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 *Return the Extender To Its Factory Default Settings* on page 33.

The following table shows the factory default settings.

Table 2. 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	54/145/300 Mbps
Data rate in the 5 GHz band	54/145/300/433/867 Mbps
DHCP	Client enabled

[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 3. Technical specifications

Technical Specifications	
Network protocol and standards compatibility	Data and routing protocols: TCP/IP, DHCP server and client, DNS relay,
Physical specifications	• Dimensions: 72.5 x 72.5 x 64.8 mm (2.85 x 2.85 x 2.55 in.) • Weight: 152 g (0.34 lb)

Table 3. Technical specifications (Continued)

Technical Specifications	
Environmental	• Operating temperature: 32° to 104°F (0° to 40°C) • Operating humidity: 90% maximum relative humidity, noncondensing
Interface	802.11ac, 802.11a, 802.11g, 802.11b