Quick Start

AC1200 Dual Band WiFi Range Extender

Model EX6120



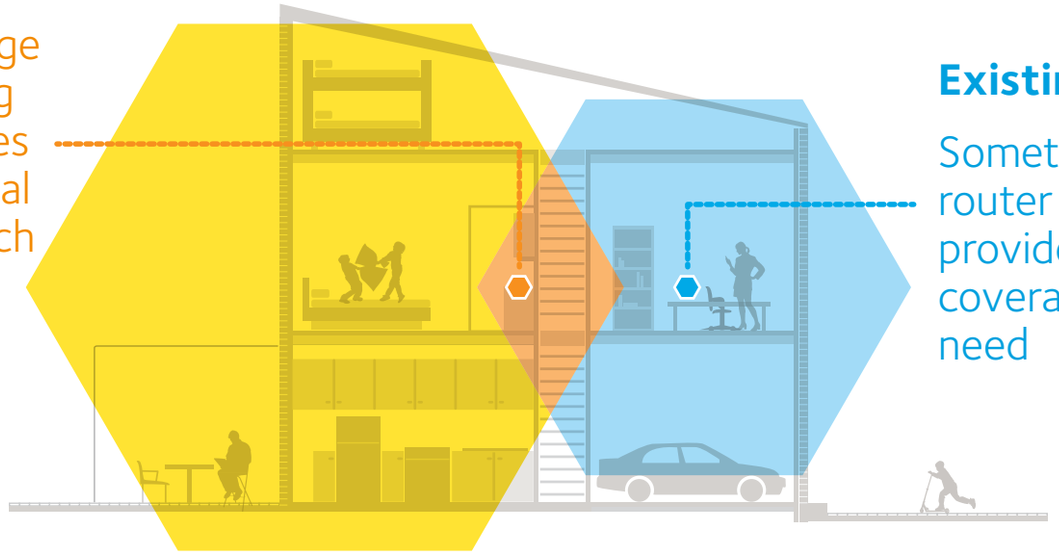
NETGEAR®

Getting Started

The NETGEAR WiFi Range Extender increases the distance of a WiFi network by boosting the existing WiFi signal and enhancing the overall signal quality over long distances. An extender repeats the signals from an existing WiFi router or access point.

WiFi Range Extender

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

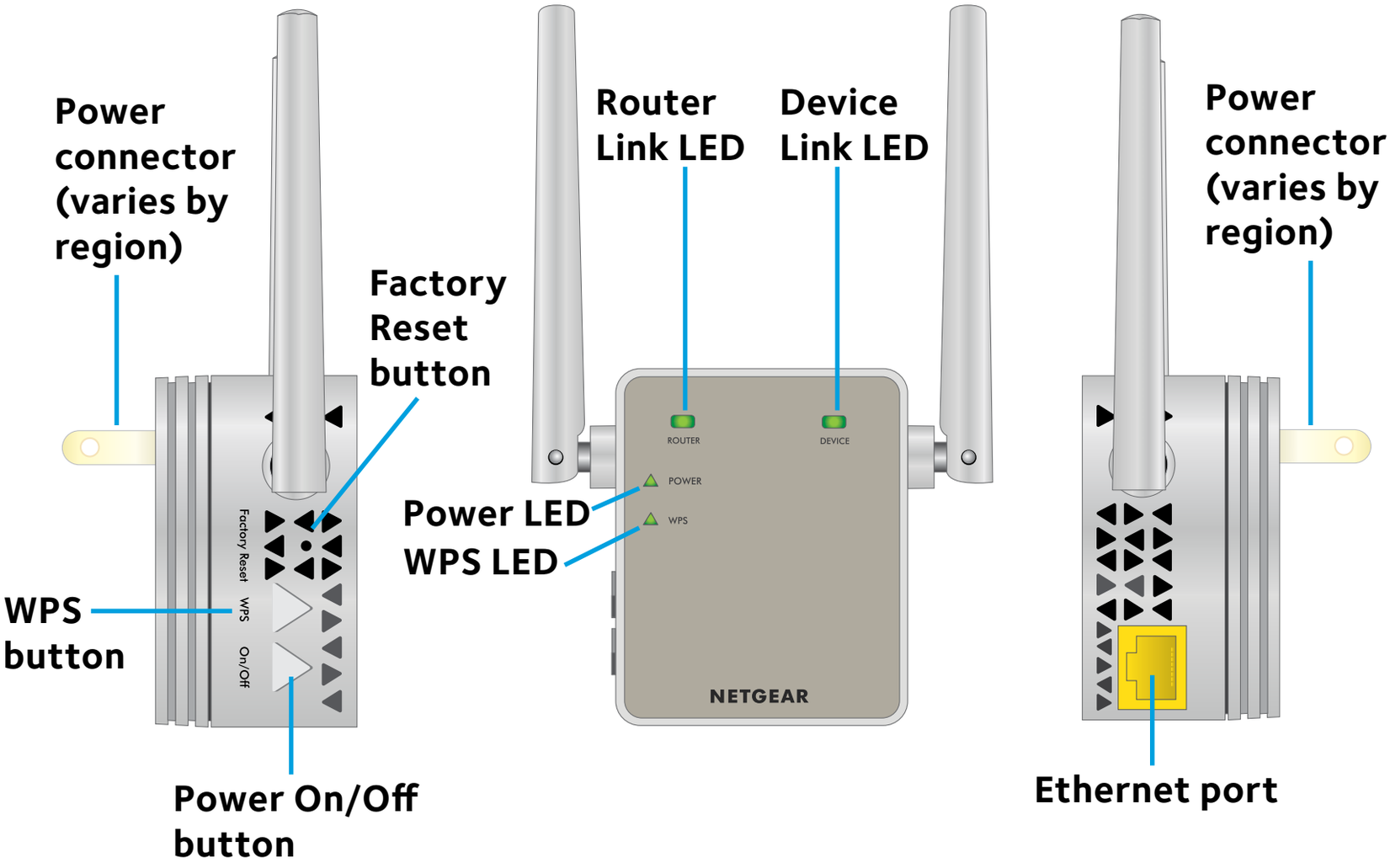


Existing WiFi

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

Meet Your Extender

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



LED Descriptions

Router Link LED



This LED indicates the 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.

Device Link LED



This LED indicates the connection between the extender and a computer or WiFi device.

Solid green. Best connection.

Solid amber. Good connection.

Solid red. Poor connection.

Off. No connection.

Power LED



Solid amber. The extender is booting.

Solid green. The extender is powered on.

Off. The extender is powered off.

WPS LED



Solid green. WiFi security is enabled (WPA or WPA2).

Blinking green. A WPS connection is being established.

Off. WiFi security is not enabled.

Use the Extender in Extender Mode

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

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 and wait for the Power LED to light green.

   If the Power LED does not light, press the **Power On/Off** button on 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 6.
- **Connect with web browser setup**. For more information, see *Connect with Web Browser Setup* on page 9.

Connect with WPS

Wi-Fi Protected Setup (WPS) lets you join a secure WiFi network without typing the network name and password.

Note: WPS does not support WEP network security. If you are using WEP security, follow the instructions in *Connect with Web Browser Setup* on page 9.

1. Press the **WPS** button on the side panel of the extender.

   The WPS LED blinks.

2. Within two minutes, press the **WPS** button on your router or access point.

   The WPS LED on the extender lights solid green, the Router Link LED lights, and the extender connects to your existing WiFi network.

   If the Router Link LED does not light, try again. If it still does not light, see *Connect with Web Browser Setup* on page 9.

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

   If the Power LED does not light, press the **Power On/Off** button on the extender.

6. Use the Router Link LED on the front panel to help you choose a spot where the extender-to-router connection is optimal.
7. If the Router Link 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 Link LED lights amber or green.

8. On your computer or WiFi device, find and connect to the new extended WiFi network.

   The extender creates two new extended 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 extended WiFi network names**. MyNetworkName_2GEXT and MyNetworkName_5GEXT

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



Router **Extender** **Computer**

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

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

   b. Check the Device Link LED on the extender:

      - If the Device Link LED is solid green or amber, your extended WiFi network reaches the area with a poor router WiFi signal and your network setup is complete.
      - If the Device Link LED is red, your extended WiFi network does not reach the area with a poor router WiFi signal.

        You must move the computer or WiFi device closer to the extender until the Device Link LED turns solid green or amber.

Connect with Web Browser Setup

1. Use a WiFi network manager on a computer or WiFi device to find and connect to the NETGEAR_EXT (SSID) WiFi network.

   After the connection with the computer or WiFi device is established, the Device Link LED lights.

2. Launch a web browser.
3. Enter **www.mywifiext.net** in the address field of the browser.

   The New Extender Setup page displays.

4. Click the **NEW EXTENDER SETUP** button.
5. When prompted, complete the fields on the page to set up your login credentials and click the **NEXT** button.
6. Click the **WIFI RANGE EXTENDER** button.

   The extender searches for WiFi networks in your area and displays a list.

7. Select a WiFi network to extend and click the **NEXT** button.

   If you do not want to extend both WiFi bands, clear the **2.4GHz WiFi Networks** or the **5GHz WiFi Networks** check box.

8. In the **Password (network key)** field, type the existing WiFi network password (also called passphrase or security key) and click the **NEXT** button.

9. Set the network name (SSID) and password for your extender and click the **NEXT** button.

   Wait for the page to show a list of available extended WiFi networks, which might take up to one minute.

10. Use a WiFi network manager on the computer or WiFi device to connect to the new extended WiFi network.

    You must connect your computer or WiFi device before you click the **Continue** button.

11. Click the **Continue** button.

    A message displays confirming that the extender is connected to the existing WiFi network.

12. Click the **Next** button.

    The registration page displays.

13. Complete the registration fields and click the **Finish** button to complete the setup.

    If you do not want to register your extender, click the **Skip Registration** link. Note that you must register your extender before you can use NETGEAR telephone support.

    The Status page displays.

14. 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.

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

    If the Power LED does not light, press the **Power On/Off** button on the extender.

16. Use the Router Link LED to help you choose a spot where the extender-to-router connection is optimal.
17. If the Router Link 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 Link LED lights amber or green.

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



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

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

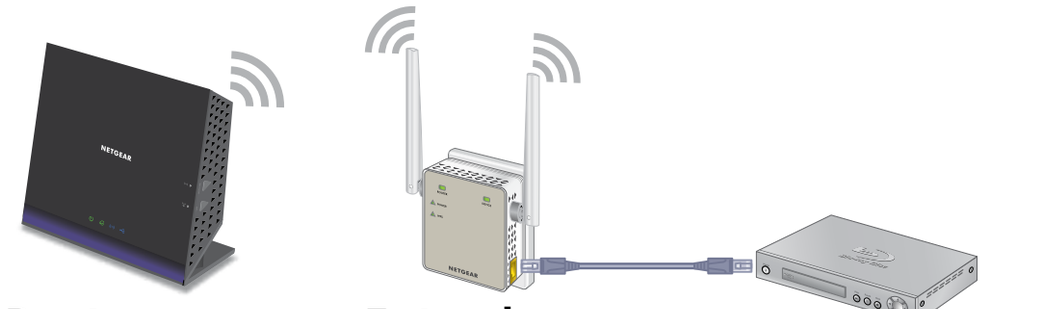
    b. Check the Device Link LED on the extender:

    - If the Device Link LED is solid green or amber, your extended WiFi network reaches the area with a poor router WiFi signal and your network setup is complete.
    - If the Device Link LED is red, your extended WiFi network does not reach the area with a poor router WiFi signal.

      You must move the computer or WiFi device closer to the extender until the Device Link LED turns solid green or amber.

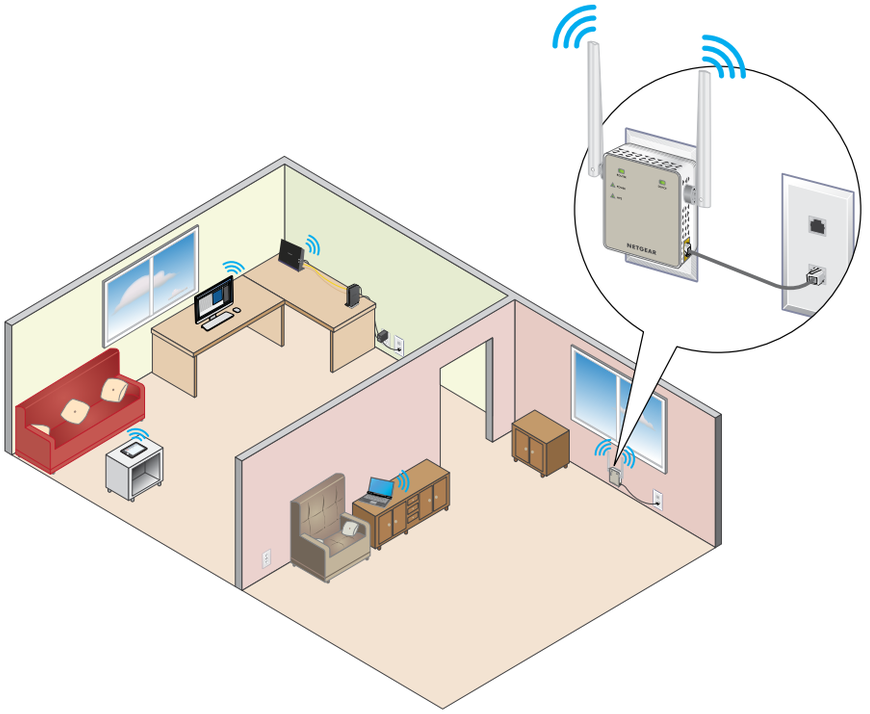
Connect an Ethernet-Enabled Device

After the extender is connected to your existing WiFi network, you can connect a wired device to the extender using an Ethernet cable. That device can then access your existing network through the WiFi connection.



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.



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

   If the Power LED does not light, press the **Power On/Off** button.

2. Use an Ethernet cable to connect the Ethernet port on the extender to a router Ethernet LAN port or a remote Ethernet LAN jack with LAN access.

   The extender joins the LAN and creates a WiFi hotspot.

3. Use a WiFi network manager on a computer or WiFi device to find and connect to the NETGEAR_EXT (SSID) WiFi network.

   After the connection with the computer or WiFi device is established, the Device Link LED lights.

4. Launch a web browser and enter **www.mywifiext.net** in the address field.

   The New Extender Setup page displays.

5. Click the **NEW EXTENDER SETUP** button.
6. When prompted, complete the fields on the page to set up your login credentials and click the **NEXT** button.
7. Click the **ACCESS POINT** button.

   The extender checks for an Internet connection.

8. Click the **HOME NETWORK** or **PUBLIC NETWORK** button.
9. When prompted, set the network name (SSID), security option, and password for each access point network, and click the **NEXT** button.

   Your settings are applied and the extender is ready to be used as an access point.

10. Use a WiFi network manager on your computer or WiFi device to connect to the new access point WiFi network.
11. Click the **Continue** button.

    A screen displays that says you successfully created an access point.

12. Click the **Next** button.

    The registration page displays.

13. Follow the onscreen instructions to register your extender.

Log In to Access Extender Settings

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

1. Use a WiFi network manager on a computer or WiFi device to find and connect to the new extended WiFi network.

   After the connection with the computer or WiFi device is established, the Device Link LED lights.

2. Launch a web browser.
3. Enter **www.mywifiext.net** in the address field of the browser.

   A login page displays.

4. Type your email address and password and click the **LOG IN** button.

   The Status page displays.

5. Make any needed changes.

Frequently Asked Questions

You can find more information about your extender in the user manual, which is available at *http://downloadcenter.netgear.com*.

The web browser setup guide 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, see *Place the Extender and Apply Power* on page 5.

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

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 *Use the Extender in Access Point Mode* on page 13.

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

On the login page, click the **Username & Password Help** link to answer the security questions that you set up during the initial setup.

If you forgot the answers to your security questions, do the following to set up your login credentials again:

1. Restore the extender to its factory default settings.
2. Launch a web browser.
3. Enter **www.mywifiext.net** in the address field of the browser.

   The New Extender Setup page displays.
4. Click the **NEW EXTENDER SETUP** button.
5. When prompted, complete the fields on the page to set up your login credentials again.

How do I restore the extender to its factory default settings?

1. Use a sharp object such as a pen or straightened paper clip to press and hold the **Factory Reset** button on the extender for at least five seconds until the Power LED lights amber.
2. Release the **Factory Reset** button and wait for the extender to reboot.

   The extender resets and returns to the factory default settings.

I enabled a wireless MAC filter, wireless access control, or access control list (ACL) on my router. What should I do when installing the extender?

When a device connects through the extender to your router, the MAC address of the device shown on the router is translated to another MAC address. If your router's MAC filter, wireless access control, or ACL is enabled, the device connects to the extender but cannot get an IP address from the extender and cannot access the Internet.

To allow your device to receive an IP address from the extender and access the Internet, you must provide the translated MAC address to the 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 devices to the extender network.
3. Make sure that the Router Link LED remains lit.
4. Log in to your extender:
   a. Launch a web browser.
   b. Enter **www.mywifiext.net** in the address field of the browser.

      A login page displays.

c. Type your email address 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 the extender, wired devices, and WiFi devices that are connected to the extender.

6. On the router, add the extender's virtual MAC addresses and all of the virtual MAC addresses of the devices connected to the extender to your router's MAC filter table.
7. Enable the router's MAC filter, wireless access control, or ACL.

I am connected to NETGEAR_EXT and launched a browser. Why can't I see the web browser setup guide?

Try these troubleshooting steps:

- Make sure that your computer is set up to use DHCP (most are).
- Make sure that the Device Link LED is green and that you are using a valid IP address.
- Relaunch the web browser and type **www.mywifiext.net** in the address field. Type your email address and password and click the **LOG IN** button.

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*.

NETGEAR recommends that you use only the official NETGEAR support resources. You can get the user manual online at *http://downloadcenter.netgear.com* or through a link in the product's user interface.

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Compliance

For the current EU Declaration of Conformity, visit *http://support.netgear.com/app/answers/detail/a_id/11621/*.

For regulatory compliance information, visit *http://www.netgear.com/about/regulatory/*.

See the regulatory compliance document before connecting the power supply.

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