

Quick Start

AC1900

WiFi Range Extender

Model EX6400



NETGEAR®

Getting Started

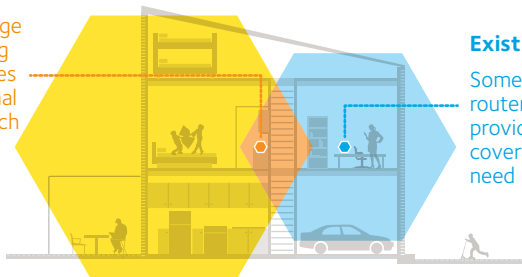
The NETGEAR WiFi Range Extender increases the distance of a WiFi network by boosting the existing WiFi signal and enhancing the overall signal quality over long distances. An extender repeats the signals from an existing WiFi router or access point.

WiFi range extender

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

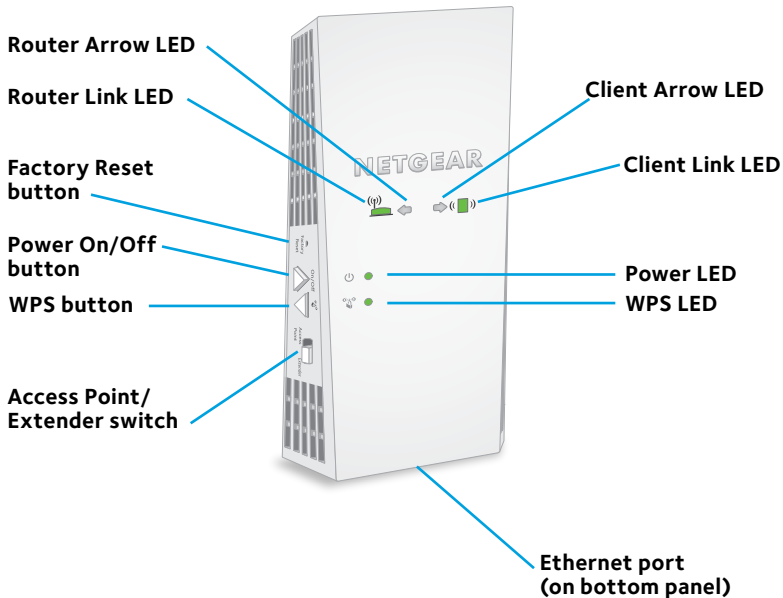
Existing WiFi

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

LED	Description
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.
Client Link LED 	This LED indicates the connection between the extender and your WiFi-enabled computer or mobile 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.

No arrow LEDs are lit. The extender is in a good location.

 **Client Arrow LED blinks.** Move the WiFi-enabled computer or mobile device closer to the extender.

 **Router Arrow LED blinks.** Move the extender closer to the router.

Use the Extender in Extender Mode

In extender mode, the extender repeats the signals from an existing WiFi router or access point.

Set the **Access Point/Extender** switch, place the extender, supply power, and connect it to your WiFi network.

Set the Access Point/Extender Switch

To use the extender in extender mode, set the **Access Point/Extender** switch to **Extender** .

Place the Extender and Supply 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.

Wait for the Power LED  to light green. This might take up to 100 seconds. 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 the following section.
- **Connect with the NETGEAR installation assistant.** For more information, see *Connect With the NETGEAR Installation Assistant* on page 9.

Connect With WPS

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

Note: WPS does not support WEP network security. If you are using WEP security, follow the instructions in *Connect With the NETGEAR Installation Assistant* on page 9.

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.

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 the NETGEAR Installation Assistant* 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.
6. Use the Router Link LED  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 WiFi-enabled computer or mobile device, open the WiFi connection manager and locate and connect to the 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.

9. Test the new extended WiFi range by moving your WiFi-enabled computer or mobile device to the area with a poor router WiFi signal:
 - a. Leave your WiFi-enabled computer or mobile device in the area with a poor router WiFi signal and return to the extender.
 - b. Check the Client Link LED () on the extender:
 - If the Client Link 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 Client Link LED is red, your new extender WiFi network does not reach the area with a poor router WiFi signal. You must move your WiFi-enabled computer or mobile device closer to the extender until the Client Link LED turns solid green or amber.

Connect With the NETGEAR Installation Assistant

1. Connect your WiFi-enabled computer or mobile device to the extender using a wired Ethernet or WiFi connection:
 - To connect with a wired Ethernet connection, use an Ethernet cable to connect the Ethernet port on the extender to an Ethernet port on your WiFi-enabled computer.
 - To connect with WiFi, on your WiFi-enabled computer or mobile device, open the WiFi connection manager and locate and connect to the extender network called NETGEAR_EXT.

After the connection with your WiFi-enabled computer or mobile device is established, the Client Link LED () lights.

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

The New Extender Setup page displays.

3. Click the **NEW EXTENDER SETUP** button.

The Create Account page displays.

4. Complete the fields on the Create Account page and click the **NEXT** button.

5. Verify that the **Access Point/Extender** switch  is set to **Extender** and click the **CONTINUE** button.

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

6. 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** checkbox.
7. In the **Password (network key)** field, type the existing WiFi network password (also called passphrase or security key) and click the **NEXT** button.
8. Set the network name (SSID) and password for your extender and click the **NEXT** button.

Note: We recommend that you use a different network name (SSID) for your extender than the network name (SSID) that your router uses.

Wait for the page to display a list of new extender WiFi networks, which might take up to one minute.

9. Connect your WiFi-enabled computer or mobile device to the new extender WiFi network using the extender SSID and password that you created in Step 9.
10. Make sure that your WiFi-enabled computer or mobile device is successfully connected before you click the **CONTINUE** button.
11. Click the **CONTINUE** button.

A message displays confirming that the extender is connected to the new extender 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 about halfway between your router and the area with a poor WiFi signal.

The location that you choose must be within the range of your existing WiFi router network.



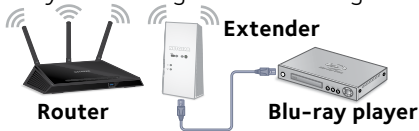
15. Plug the extender into an electrical outlet and wait for the Power LED   to light green.
16. Use the Router Link LED  to help you choose a spot where the extender-to-router connection is optimal.
17. If the Router Link LED doesn't light amber or green, plug the extender into an outlet closer to the 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 WiFi-enabled computer or mobile device to the new extender WiFi network.
19. Test the new extended WiFi range by moving your WiFi-enabled computer or mobile device to the area with a poor router WiFi signal:
 - a. Leave your WiFi-enabled computer or mobile device in the area with a poor router WiFi signal and return to the extender.
 - b. Check the Client Link LED () on the extender:
 - If the Client Link 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 Client Link LED is red, your new extender WiFi network does not reach the area with a poor router WiFi signal. You must move your WiFi-enabled computer or mobile device closer to the extender until the Client Link LED turns solid green or amber.

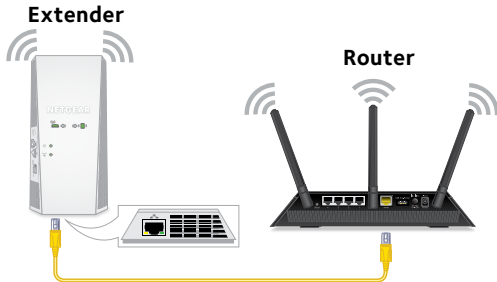
Connect an Ethernet-Enabled Device

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. Set the **Access Point/Extender** switch to **Access Point** .
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.
3. 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.

4. On your WiFi-enabled computer or mobile device, open the WiFi connection manager and locate and connect to one of the following WiFi extender networks:

- **2.4 GHz network.** NETGEAR_EXT
- **5 GHz network.** NETGEAR_5GEXT

When you join the network, the extender Client Link LED (■) lights to show that you are connected.

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

The New Extender Setup page displays.

6. Click the **NEW EXTENDER SETUP** button.

The Create Account page displays.

7. Complete the fields on the Create Account page and click the **NEXT** button.

8. 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.

9. Connect your WiFi-enabled computer or mobile device to the new access point WiFi network using the SSID and password that you created in Step 8.

10. Click the **CONTINUE** button.

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

11. Click the **NEXT** button.

The registration page displays.

12. Follow the onscreen instructions to register your extender.

Access Extender Settings

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

1. On your WiFi-enabled computer or mobile device, open the WiFi connection manager and locate and connect to a new extender WiFi network.

After the connection with the WiFi-enabled computer or mobile device is established, the Client 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 and password and click the **LOG IN** button.
The Status page displays.

Frequently Asked Questions

You can find more information about your product in the user manual, which is available at www.netgear.com/support.

The NETGEAR installation assistant 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 Supply 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 and password. What can I do?

On the login page, click the **Username & Password Help** link to answer the security questions 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 and in the address field, enter **www.mywifiext.net**.

The New Extender Setup page displays.

3. Click the **NEW EXTENDER SETUP** button.
4. 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 blinks 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 WiFi 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 and in the address field, enter **www.mywifiext.net**.
A login page displays.

- b. Enter 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 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. I can't see the NETGEAR installation assistant. What can I do?

Try these troubleshooting steps:

- Make sure that your WiFi-enabled computer is set up to use DHCP (most are).
- Make sure that the Client 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 and password and click the **LOG IN** button.

Support

Thank you for purchasing this NETGEAR product. You can visit www.netgear.com/support to register your product, get help, access the latest downloads and user manuals, and join our community. We recommend that you use only official NETGEAR support resources.

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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 www.netgear.com/about/regulatory/.

See the regulatory compliance document before connecting the power supply.

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