Quick Start

N600 WiFi Range Extender
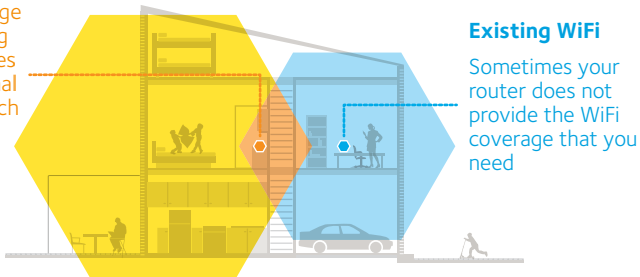Model WN2500RPv2

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.

WPS button (on the side)

WPS LED

LAN LEDs 1−4
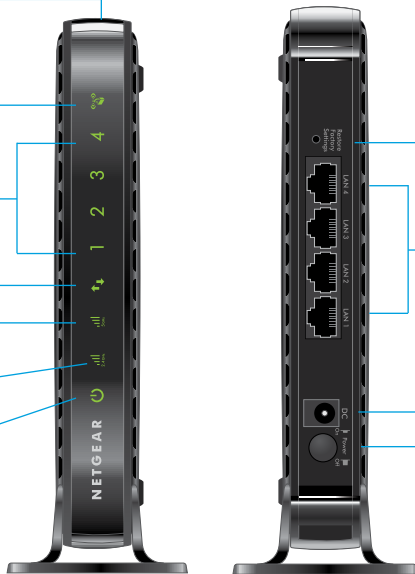
Device Link LED

2.4 GHz Link LED

5 GHz Link LED

Power LED

Restore Factory Settings button

LAN ports 1−4

Power input

Power On/Off button

LED Descriptions

Power LED

⏻

Solid amber. The extender is booting.
Solid green. The extender is powered on.
Blinking green. The firmware is corrupt. Visit *downloadcenter.netgear.com*.
Blinking amber. The firmware is upgrading or the **Restore Factory Settings** button was pressed.
Off. The extender is powered off.

2.4 GHz Link and 5 GHz LEDs

�.ıll   .ıll
2.4 GHz   5 GHz

Indicates a 2.4 GHz or 5 GHz extender connection to a router or access point.
Solid green. Best connection.
Solid amber. Good connection.
Solid red. Poor connection.
Off. No connection.

Client Link LED

↑↓

Solid green. The extender is connected to a computer or WiFi device.
Off. The extender is not connected to a computer or WiFi device.

LAN LEDs

1234

Solid green. The LAN port detects a local area network (LAN) connection.
Off. No device is detected on the LAN port.

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

The extender repeats the signals from an existing WiFi router or access point.

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 initial setup.

2. Connect the extender power adapter and plug it into an electrical outlet.

   Wait for the Power LED ⏻ to light green.

3. 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 the NETGEAR Installation Assistant* on page 8.

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 use WEP, follow the instructions in *Connect the NETGEAR Installation Assistant* on page 8.

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 and the 2.4 GHz Link LED 📶 lights.

   If the 2.4 GHz Link LED does not light, try again. If it still does not light, see *Connect the NETGEAR Installation Assistant* on page 8.

3. If your WiFi router supports the 5 GHz band, repeats 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. Connect the extender power adapter, plug it into an electrical outlet, and wait for the Power LED ⏻ to light green.

6. Use the 2.4 GHz Link LED and the 5 GHz Link LED to help you choose a spot where the extender-to-router connection is optimal.

7. If the 2.4 GHz Link LED does not 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 this LED lights amber or green.

8. On your computer or WiFi-enabled device, open the WiFi connection manager and locate and connect to the new extended 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 extended WiFi network names**. MyNetworkName_2GEXT and MyNetworkName_5GEXT.

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

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9. Test the new extended WiFi range by moving your WiFi-enabled device to the area with a poor router WiFi signal:

   a. Leave your WiFi-enabled 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 extended 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 extended WiFi network does not reach the area with a poor router WiFi signal.

     You must move your WiFi-enabled device closer to the extender until the Client Link LED turns solid green or amber.

Connect With the NETGEAR Installation Assistant

1. Connect your device to the extender using a wired Ethernet or WiFi connection:

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

   After the connection with your WiFi-enabled 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.

   The New Extender Setup page displays.

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

   The Create Account page displays.

5. 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 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 **2.4 GHz WiFi Networks** or **5 GHz WiFi Networks** check box.

8. In the **Password (Network Key)** field, type the existing WiFi network password (also called the 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.

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

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

10. Connect your WiFi-enabled device to the new extender WiFi network using the extender SSID and password that you created in Step 10.

11. Make sure that your computer or WiFi device is connected before you click the **Continue** button.

12. Click the **Continue** button.

    A message displays confirming that the extender is connected and ready.

13. Make sure that you can connect to the Internet and then click the **Next** button.

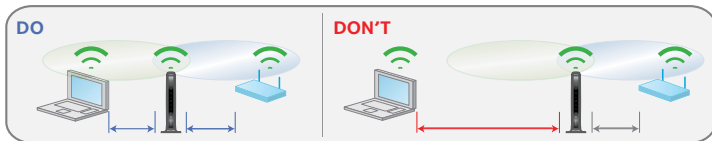   The registration page displays.

14. 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.

15. 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.
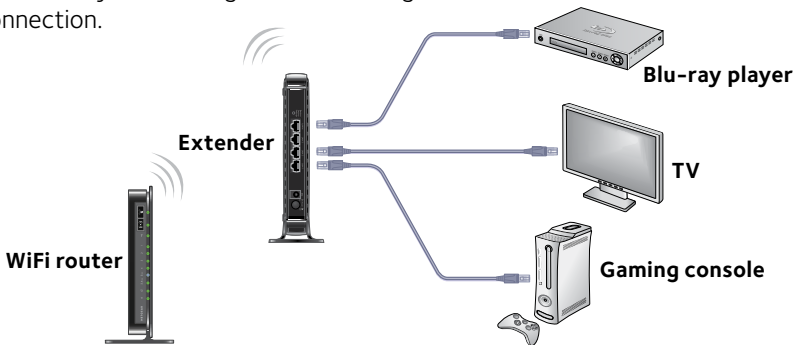

16. Plug the extender into an electrical outlet and wait for the Power LED to light green.

17. Use the 2.4 GHz Link LED to help you choose a spot where the extender-to-router connection is optimal.

18. If the 2.4 GHz 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 2.4 GHz Link LED lights amber or green.

19. Reconnect your WiFi-enabled device to the new extender WiFi network.

20. Test the extended WiFi range by moving your WiFi-enabled device to the area with a poor router WiFi signal:

    a. Leave your WiFi-enabled 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 extended 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 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 Client Link LED turns solid green or amber.

Connect Ethernet-Enabled Devices

After the extender is connected to your existing WiFi network, you can connect a device to the extender using an Ethernet cable. Then that device can access your existing network through the extender-to-router WiFi connection.

Blu-ray player

Extender

TV

WiFi router

Gaming console

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.

Extender

WiFi router

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

2. Connect the extender power adapter, plug it into an electrical outlet, and wait for the Power LED ⏻ to light green.

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

4. On your WiFi-enabled 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. Click the **ACCESS POINT** button.

    The extender checks for an Internet connection.

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

11. Click the **Continue** button.

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

12. Make sure that you can connect to the Internet using the extender network and then click the **Next** button.

The registration page displays.

13. 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 device, open the WiFi connection manager and locate and connect to the new extender WiFi network.

After the connection with the WiFi-enabled 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. If you used WPS to finish the setup, you must complete New Extender Setup to create an account.

4. Enter your user name and password.

The Status page displays.

Frequently Asked Questions

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

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 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 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 user name 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 **Restore Factory Settings** button on the extender for at least five seconds until the Power LED lights amber.
2. Release the **Restore Factory Settings** button and wait for the extender to reboot.

   The extender resets and returns to the factory default settings.

I enabled a WiFi MAC filter, WiFi 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, WiFi 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, WiFi access control, or ACL.

    For more information about how to disable your router's MAC filter, WiFi access control, or ACL, see your router's documentation.

2. Power on the extender and connect all of your WiFi devices to the extender 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 user name and password.

The Status page displays.

5. Select **Settings > Connected Devices**.

The Connected Devices section displays the MAC addresses and virtual MAC addresses for the computers 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, WiFi access control, or ACL.

I am connected to NETGEAR_EXT and launched a browser but do not see the NETGEAR installation assistant. What can I do?

Try these troubleshooting steps:

- Make sure that your 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. Enter your user name and password.