

# NETGEAR®

Installation Guide



## N600 WiFi Range Extender

Model WN2500RP



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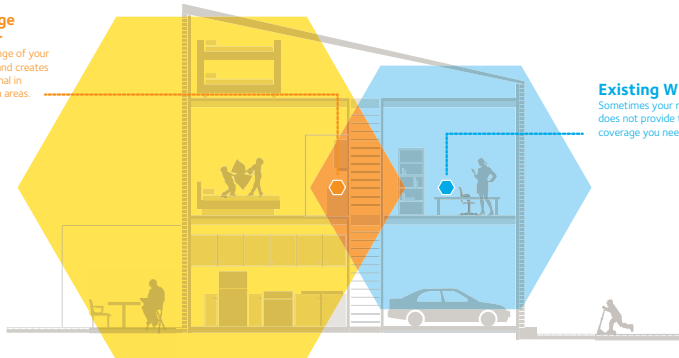
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# Getting Started

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.



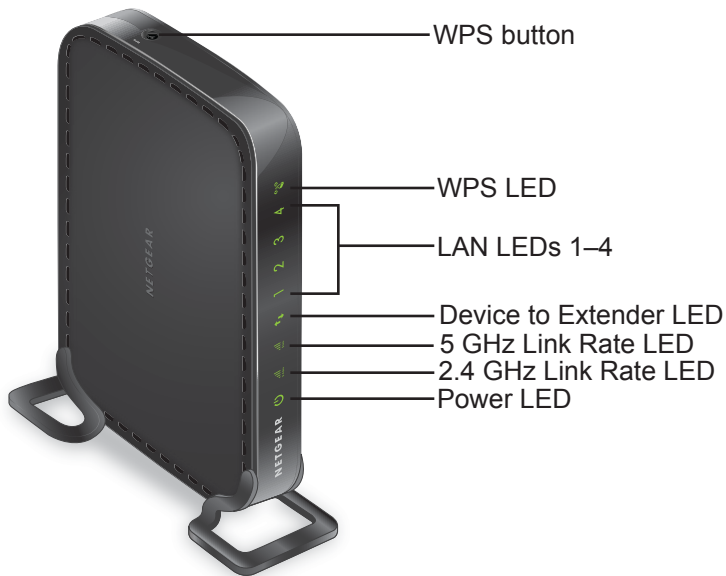
## Existing WiFi

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

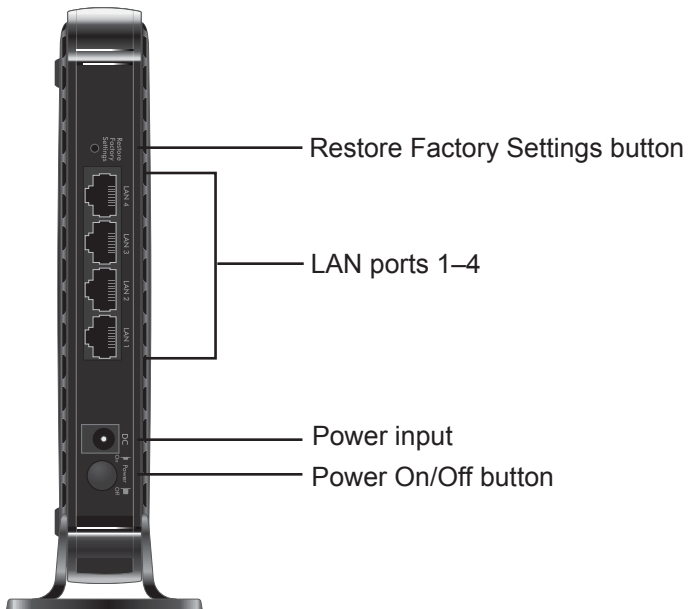
# Meet Your Extender

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

## Front Panel



## Rear Panel



## LED Descriptions

Use the LEDs during installation to find the best location for the extender or to monitor the extender performance.

Power LED



- **Solid Amber.** The extender is booting.
- **Solid Green.** The extender is powered on.
- **Blinking Green.** The firmware is corrupt. Visit <http://support.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  
Rate LED



This LED indicates a 2.4 GHz WiFi 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

### 5 GHz Link Rate LED



This LED indicates a 5 GHz WiFi 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 to Extender LED



- **Solid Green.** The extender is connected to a computer or mobile device.
- **Off.** The extender is not connected to a computer or mobile device.

### LAN LEDs



- **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 in progress.
- **Off.** WiFi security is not enabled.

# Install the WiFi Extender


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.

**Note:** Proximity to the WiFi router is required only during the initial setup process.

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

The Power LED  lights solid amber while it is booting and then solid green when it is powered on. If the Power LED does not light, press the **Power** button.

## 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 9.
- **Connect with the genie® Smart Setup.** For more information, see [Connect with NETGEAR genie Smart Setup](#) on page 11.



## Connect with WPS

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



WPS does not support WEP network security. If you are using WEP security, follow the instructions in *Connect with NETGEAR genie Smart Setup* on page 11.

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 and the 2.4 GHz Link Rate LED on your extender light solid green, and the extender connects to your existing WiFi network.  
**Note:** If the 2.4 GHz Link Rate LED does not light, or the LED is blinking amber, try again. If it still does not light, see *Connect with NETGEAR genie Smart Setup* 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. Find the new extender network name.



The extender's wireless network name (SSID) changes to your existing WiFi network name, with **\_2GEXT** or **\_5GEXT** at the end of the name, depending on whether the extender is connecting to your WiFi network in 2.4 GHz or 5 GHz.

For example:

- **Existing WiFi network name.** MyNetworkName
- **New extender network name.** MyNetworkName\_2GEXT  
or  
MyNetworkName\_5GEXT

5. Connect your WiFi devices to the new extender network.  
Use the same WiFi password that you use for your WiFi router.
6. Unplug the extender and move it to a new location closer to the area with a poor WiFi signal.  
The location you choose must be within the range of your existing WiFi router network.
7. Plug the extender into an electrical outlet.  
The Power LED  lights solid amber while it is booting and then solid green when it is powered on. If the Power LED does not light, press the **Power** button.  
Use the Link Rate LEDs  on the front panel to help you choose a spot where the extender-to-router connection is optimal.

## Connect with NETGEAR genie Smart Setup

1. Use a WiFi network manager on a computer or mobile device to find and connect to the **NETGEAR\_EXT** (SSID) WiFi network. After the connection with the computer or mobile device is established, the Device to Extender LED   lights solid green.
2. Open a web browser window from the same computer or mobile device.

The browser takes you directly to the NETGEAR genie smart setup.

**Note:** If you are not automatically directed to NETGEAR genie, launch a web browser and type **www.mywifiext.net** in the address field. Enter **admin** for the user name and **password** for the password.

3. Select a 2.4 GHz WiFi network to extend and click the **Continue** button.

**NETGEAR** genie

WN2500RPv2

Extender-to-Router

Device-to-Extender

Apply Settings

Select the 2.4GHz WiFi network you would like to extend.

Your extender supports dual band WiFi. If you want to connect to 5GHz only, click the Skip button.

[Skip](#) [Refresh](#) [Continue](#)

	SSID	Channel	Signal	Security
<input checked="" type="radio"/>	NETGEAR39	1	100%	WPA2-PSK
<input type="radio"/>	17500_2HealthTap_0	6	65%	WPA/WPA2-PSK
<input type="radio"/>	babo.iminda	1	61%	WPA2-PSK
<input type="radio"/>	-WiFi	1	58%	WPA2-PSK
<input type="radio"/>	NETGEAR70	1	56%	WPA2-PSK
<input type="radio"/>	GTV_TESTING_2	1	53%	WPA2-PSK
<input type="radio"/>	GlobeTelHealthCare-Guest	1	53%	OFF
<input type="radio"/>	99quest	1	52%	WPA/WPA2-PSK
<input type="radio"/>	Ng_11p-11	1	50%	OFF
<input type="radio"/>	Innovation2g	3	50%	WPA2-PSK

- Type the network password (also called passphrase or security key) in the **Password (network key)** field and click the **Continue** button.
- Select a 5 GHz WiFi network and click the **Continue** button.  
If your router does not support the 5 GHz band, click the **Skip** button.

**NETGEAR** genie

WN2500RPv2



Extender-to-Router

Device-to-Extender

Apply Settings

Select the 5GHz WiFi network you would like to extend.

Your extender supports dual band WiFi.

If your router does not support 5GHz band, click the Skip button.

	SSID	Channel	Signal	Security
<input type="radio"/>	noquest	153	80%	WPA/WPA2-Psk
<input type="radio"/>	mynlan	153	80%	WPA/WPA2-Psk
<input type="radio"/>	1111william280	162	72%	WPA2-Psk
<input type="radio"/>	GlobeTeaserCafe-5G-Quest	153	65%	OFF
<input type="radio"/>	NETGEAR485-5G	153	65%	WPA2-Psk
<input type="radio"/>	NETGEAR5G	153	64%	WPA2-Psk
<input type="radio"/>	GTV_TESTING-5G_2	153	56%	WPA2-Psk
<input type="radio"/>	NETGEAR70-5G	153	47%	WPA2-Psk
<input type="radio"/>	1111william280_a	163	45%	WPA2-Psk
<input type="radio"/>	MELat5g	153	41%	WPA2-Psk

- Type the network password (also called passphrase or security key) in the **Password (network key)** field and click the **Continue** button.

7. Type the name (SSID) for your new extender WiFi network in the **2.4GHz Network Name (SSID)** field and the **5GHz Network Name (SSID)** field and click the **Continue** button.

**NETGEAR** genie

WN2500RPv2

Extender-to-Router

Device-to-Extender

Apply Settings

Enter name and security settings for your extended WiFi network.

2.4GHz Network Name (SSID): NETGEAR36\_2GEXT

5GHz Network Name (SSID): NETGEAR36\_5G\_5GEXT

Use the same security mode and password as those for the existing network.

Back

Continue

**Note:** To use the same security settings as your existing network, select the check box.

The settings are applied and the following screen displays:

**NETGEAR** genie

WN2500RPv2

Extender-to-Router

Device-to-Extender

Apply Settings

Follow the instructions below to connect your devices to the extended network.

**2.4GHz Extender Network**

Name (SSID): NETGEAR36\_2GEXT

Security: WPA2-PSK

Password (network key):

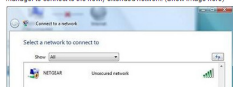
**5GHz Extender Network**

Name (SSID): NETGEAR36\_5G\_5GEXT

Security: WPA2-PSK

Password (network key):

Connect our devices like a laptop, tablet, smart TV, etc. to your extended network. For example, on your laptop you may use the Windows WiFi manager to connect to the newly extended network. (Show image here)



Once you have connected your devices, mark the checkbox and click the Continue button.

Continue

8. Use a WiFi network manager on the computer or mobile device to connect to the extender's newly created WiFi network.

Repeat this step for all of your computers and mobile devices.

9. Select the check box and click the **Continue** button.

**NETGEAR** genie®

WN2500RPv2

Extender-to-Router

Device-to-Extender

Apply Settings

Follow the instructions below to connect your devices to the extended network.

2.4GHz Extender Network

Name (SSID): NETGEAR3G\_2GEXT

Security: WPA2-PSK

Password (network key):

5GHz Extender Network

Name (SSID): NETGEAR3G\_5G\_5GEXT

Security: WPA2-PSK

Password (network key):

Connect your devices like a laptop, tablet, smart TV, etc. to your extended network. For example, on your laptop you may use the Windows WiFi manager to connect to the newly extended network. (Show image here)




Once you have connected your devices, mark the checkbox and click the Continue button.

Continue

10. Unplug the extender and move it to a new location closer to the area with a poor WiFi signal.

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

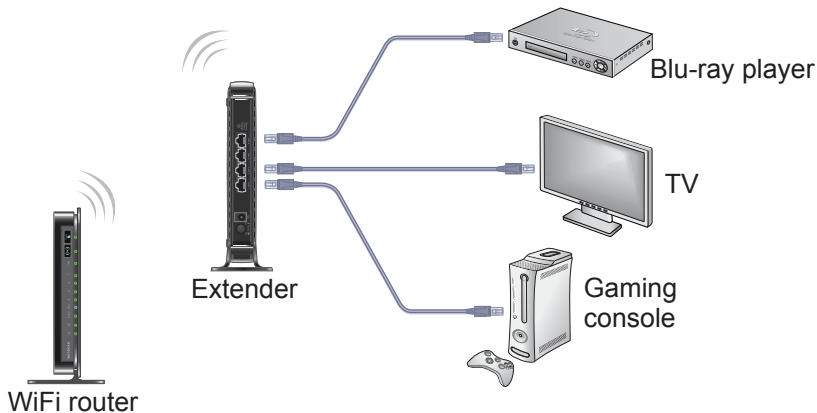
11. Plug the extender into an electrical outlet.

The Power LED  lights solid amber while it is booting and then solid green when it is powered on. If the Power LED does not light, press the **Power** button.

Use the Link Rate LEDs  on the front panel to help you choose a spot where the extender-to-router connection is optimal.

## 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.



1. Set up the extender and connect it to an existing WiFi network. For more information, see *Install the WiFi Extender* on page 8.
2. Plug the Ethernet cable from an Ethernet-enabled device in to a LAN port on the extender.

# Access Extender Settings

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

1. Connect a computer or mobile device to the extender's network.
2. Launch a web browser and enter **www.mywifiext.net** or **www.mywifiext.com** in the address field.  
A login screen displays.
3. Enter **admin** for the user name and **password** for the password.



## Frequently Asked Questions

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

**The web browser setup guide keeps asking me for my network security key (password), and I am sure I have 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 8.

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

**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 to Extender LED is green and that you have a valid IP address.
- Relaunch the web browser and type **www.mywifiext.net** or **www.mywifiext.com** in the address field. Enter **admin** for the user name and **password** for the password.

## **Will the extender work 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.

## **What are the user name and password to log in to the extender?**

The user name is **admin** and the default password is **password**. Both are case-sensitive.

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

1. Use a sharp object such as a paper clip to press and hold the **Restore Factory Settings** button on the extender for at least five seconds until the Power LED blinks 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.

You can now access the extender from your web browser using the factory default settings.

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

When the wireless device connects through the extender to your router, the MAC address of the wireless device shown on the router is translated to another MAC address. If your router's MAC filter is enabled, the wireless 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.

1. Disable the MAC filter on your router.
2. Power on the extender and connect all of your wireless devices to the extender.
3. Make sure that the Link Rate LED remains lit.
4. Log in to your router and check the attached devices on the Attached Devices screen.
5. Add any MAC addresses that begin with 02:0F:B5 to your router's MAC filter table.

## Support

Thank you for selecting NETGEAR products. 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/](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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201-17793-02

**January 2014**