

NETGEAR®



Installation Guide

N300 WiFi Range Extender

Model WN3000RP



Getting Started

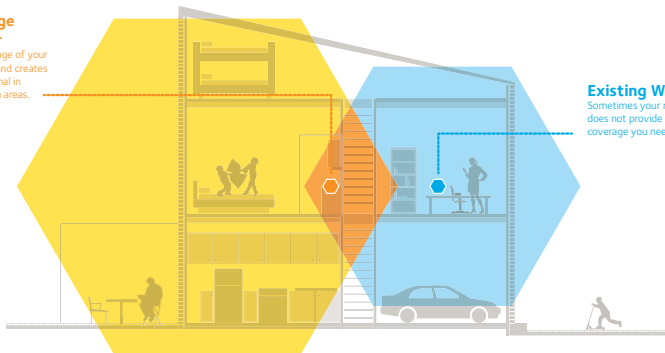
The NETGEAR WiFi Range Extender increases the distance of a WiFi network by boosting the existing WiFi signal and enhancing the overall signal quality over long distances. An extender repeats the signals from an existing WiFi router or access point.

WiFi Range Extender

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

Existing WiFi

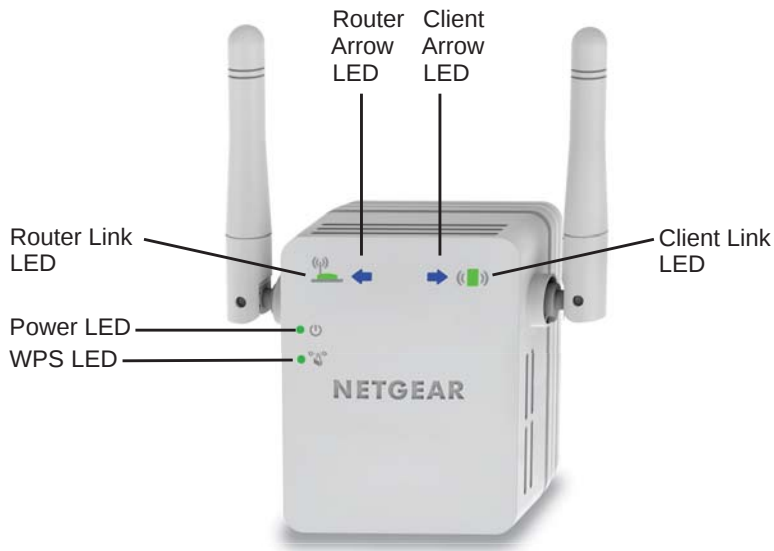
Sometimes your router does not provide the WiFi coverage you need.



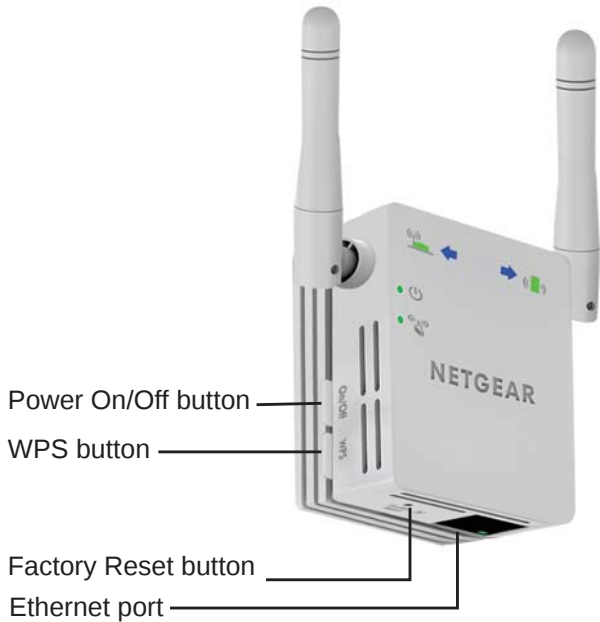
Meet Your Extender

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

Front Panel



Side and Bottom Panels



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.

Client Link LED This LED indicates the 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.

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

Note: If the Router Arrow LED  or Client Arrow LED  blinks, see [Find the Best Location](#) on page 12. If no arrow LEDs are lit, the extender is in a good location.

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. Plug the extender into an electrical outlet.

The Power LED ●  lights green. 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 7.
- **Connect with the genie® web browser.** For more information, see [Connect with NETGEAR genie Smart Setup](#) 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.

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 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, the Router Link LED  lights, and the extender connects to your existing WiFi network.

Note: If the Router Link LED does not light, try again. If it still does not light, see *Connect with NETGEAR genie Smart Setup* on page 8.

3. Find the new extender network name.
The extender's wireless network name (SSID) changes to your existing WiFi network name, with **_EXT** at the end of the name, for example:
 - **Existing WiFi network name.** MyNetworkName

- **New extended network name.** MyNetworkName_EXT
- 4. Connect your WiFi devices to the new extender network.
Use the same WiFi password that you use for your WiFi router.
- 5. Unplug the extender and move it to a new location closer to the area with a poor WiFi signal.
The location that you choose must be within the range of your existing WiFi router network.
- 6. Plug the extender into an electrical outlet.
The Power LED ●  lights green. If the Power LED does not light, press the **Power** button.
Use the Router Link LED 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 Client Link LED () lights.
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 WiFi network to extend and click the **Continue** button.

Extender-to-Router

Device-to-Extender

Apply Settings

Select the name of your existing network.

Refresh Continue

	SSID	Channel	Signal	Security
☐	ngquest	1	100%	WPA2-PSK
☐	KC3800-2.4G	2	100%	WPA/WPA2-PSK
☐	NETGEAR90-5G_2GEXT	5	100%	WPA2-PSK
☐	NETGEAR06	8	100%	WPA2-PSK
☐	ngquest	9	100%	WPA2-PSK
☐	ntgrvian	9	100%	WPA2-PSK
☐	NETGEAR34	11	100%	WPA2-PSK
☐	JW's EX8100 NETGEAR34_2GEXT	11	100%	WPA2-PSK
☐	NETGEAR75	5	96%	WPA2-PSK

4. Type the network password (also called passphrase or security key) in the **Password** field, and click the **Continue** button.
5. Select the **Private Network** or **Public Network** radio button and click the **Continue** button.

6. Type the name (SSID) for your new extender WiFi network in the **Name** field, and click the **Continue** button.

Extender-to-Router
Device-to-Extender
Apply Settings

Enter the settings for the Extender network.

Continue

2.4GHz Network Name (SSID): nigrwan_EXT

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

Note: You can use the same security settings as your existing network by selecting the check box.

The settings are applied and the following screen displays:

Extender-to-Router
Device-to-Extender
Apply Settings

You are now one step away from completing the installation.

Your Extender network has been created:

Extender network (2.4GHz b/g/n):
Wireless network name (SSID): nigrwan_EXT
Security Type: WPA2-PSK(AES)
Passphrase [REDACTED]

Next, you will need to connect your wireless devices to the Extender network. On your wireless device (e.g. laptop, tablet, smartphone, gaming console, etc.) use the wireless manager to find the Extender network names and connect. For example, you might use Windows software as shown below to connect your PC to the Extender network.

☐ My wireless devices are connected to the Extender network. (Selecting this checkbox activates the Continue button.)

Continue

On iPads, iPhones, and MacBook computers, this screen automatically closes.

7. 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.
8. If the screen is still displayed on your computer or device, select the following check box and click the **Continue** button.

☒ My wireless devices are connected to the Extender network. (Selecting this checkbox activates the Continue button.)

Continue

9. Unplug the extender and move it to a new location closer to the area with a poor WiFi signal.
The location that you choose must be within the range of your existing WiFi router network.
10. Plug the extender into an electrical outlet.
The Power LED ●  lights green. If the Power LED does not light, press the **Power** button.
Use the Router Link LED  to help you choose a spot where the extender-to-router connection is optimal.

Find the Best Location

If the WiFi signal is weak, the first time you join the extender network, an arrow LED blinks for two minutes. If this happens, adjust the position of the extender.

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



Router arrow blinks. Move the extender closer to the router.



Client arrow blinks. Move the computer or mobile device closer to the extender.

Extender Performance

These extender LEDs indicate a WiFi connection:



WiFi signal between the router and the extender



WiFi signal between the extender and the computer or mobile device

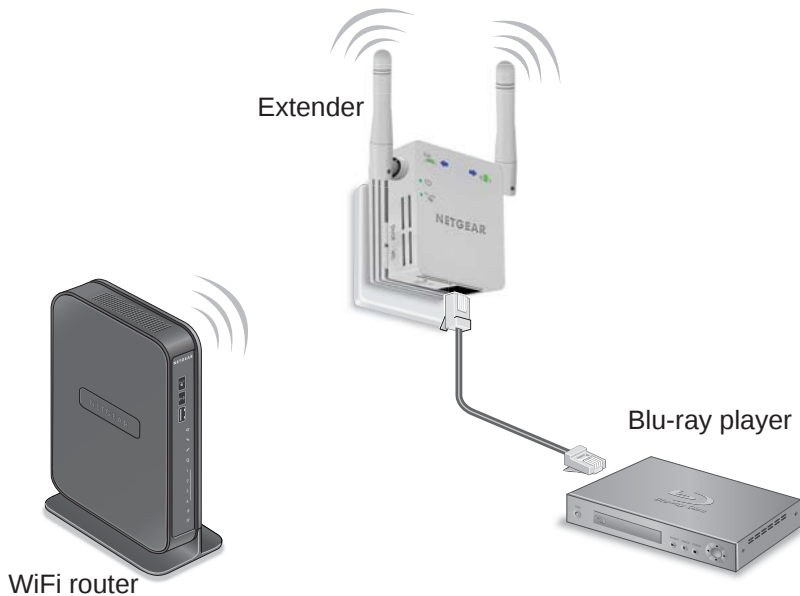
The LEDs are color coded:

- Green indicates the best connection.
- Amber indicates a good connection.
- Red indicates a poor connection.

An LED that is off indicates no WiFi connection.

Connect an Ethernet-Enabled Device

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.
For more information, see *Place the Extender and Apply Power* on page 6.
2. Connect the extender to an existing WiFi network.
For more information, see *Connect to an Existing WiFi Network* on page 6.
3. Plug the Ethernet cable from an Ethernet-enabled device in to the port on the 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. 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 (passphrase), and I am sure I have entered the correct passphrase. 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 6.

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

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.

**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 Client Link 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.

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

1. Use a sharp object such as a pen or paper clip to press and hold the **Factory Reset** button on the bottom of 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.

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/.

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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