# NETGEAR®

## EX6100 WiFi Range Extender
## Installation Guide

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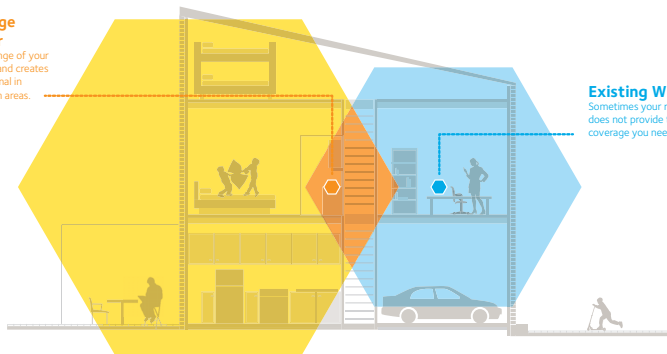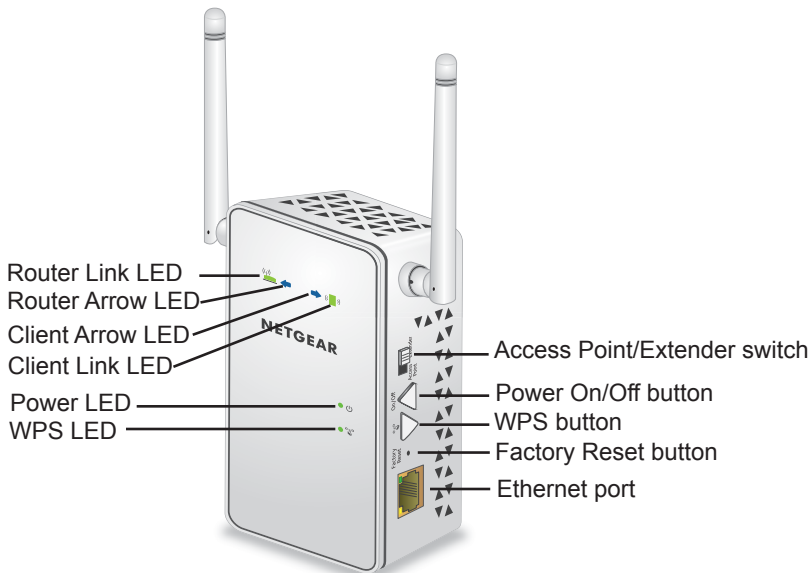
**Existing WiFi**
Sometimes your router does not provide the WiFi coverage you need.

You can also connect the extender to your router or gateway with an Ethernet cable and use the extender as an 11ac access point. See *Install the Extender as an Access Point* on page 15.

# Meet Your Extender

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

## Front Panel and Side Panel

Router Link LED

Router Arrow LED

Client Arrow LED

Client Link LED

Power LED

WPS LED

Access Point/Extender switch

Power On/Off button

WPS button

Factory Reset button

Ethernet 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.

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 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.

3. Make sure that the switch on the extender is set to **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 genie Smart Setup**. 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. The **WPS** button is a physical button on the router or access point.

WPS does not support WEP network security. If you are using WEP security, see *Connect with NETGEAR genie Smart Setup* on page 8.

➢ **To connect with WPS:**

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 is connected 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. 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 extended network name**. MyNetworkName_2GEXT

   or

   MyNetworkName_5GEXT

5. Connect your existing WiFi devices to the new extended 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 and wait one minute. 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.** Make sure that the switch on the extender is set to **Extender**.

**2.** Use a WiFi network manager on a computer or mobile device to find and connect to one of the extender WiFi networks.

The extender is dual band, so it has two WiFi networks:

- **2.4 GHz network**. EX6100_NETGEAR_2GEXT

- **5 GHz network**. EX6100_NETGEAR_5GEXT

After the connection with the computer or mobile device is established, the Client Link LED ((◼)) lights solid green.

**3.** 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 enter **www.mywifiext.net** in the address field. Enter **admin** for the user name and **password** for the password.

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



Select the name of your 2.4GHz WiFi network.

| Step 1 : Select the WiFi Network |
| Step 2 : Set Up the Extender |
| Step 3 : Apply Settings |

The Extender supports dual bands: 2.4GHz and 5GHz.
Select the 2.4GHz WiFi network that you want to connect to, and then click the Continue, or click the Skip button to select 5GHz network.

| Skip | Refresh | Continue |

| | SSID | Channel | Signal | Security |
| --- | --- | --- | --- | --- |
| ○ | NETGEAR16 | 1 | 100% | WPA2-PSK |
| ○ | 3700v4-Lance_2GEXT | 1 | 100% | WPA2-PSK |
| ○ | NETGEAR85 | 1 | 100% | WPA2-PSK |
| ○ | NETGEAR62 | 6 | 100% | WPA2-PSK |
| ○ | ngguest | 9 | 100% | WPA2-PSK |
| ○ | jw2 | 11 | 100% | WPA2-PSK |
| ◉ | ntgrwlan | 9 | 100% | WPA2-PSK |
| ○ | KG3800-2.4G_2GEXT_DBG | 1 | 100% | WPA/WPA2-PSK |

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

**6.** Select a 5 GHz WiFi network to extend and click the **Continue** button.

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



Select the name of your 5GHz WiFi network.

| Step 1 : Select the WiFi Network |
| Step 2 : Set Up the Extender |
| Step 3 : Apply Settings |

| Skip | Refresh | Continue |

| | SSID | Channel | Signal | Security |
| --- | --- | --- | --- | --- |
| ○ | ngguest_5g | 149 | 100% | WPA2-PSK |
| ○ | ybrouter_5G_N_5GEXT | 153 | 100% | WPA/WPA2-PSK |
| ○ | NETGEAR34-5G | 153 | 100% | WPA2-PSK |
| ○ | NETGEAR85-5G | 153 | 100% | WPA2-PSK |
| ◉ | ntgrwlan_5g | 149 | 100% | WPA2-PSK |
| ○ | NETGEAR16-5G | 153 | 99% | WPA2-PSK |
| ○ | GodSpeed_5g | 153 | 99% | WPA2-PSK |
| ○ | NETGEAR62-5G | 153 | 96% | WPA2-PSK |
| ○ | ddpof44 | 157 | 91% | WPA2-PSK |

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

**8.** Select the **Private Network** or **Public Network** radio button, and click the **Continue** button.

**9.** Enter names (SSIDs) for your new extender WiFi network in the **Name (2.4G SSID)** and **Name (5G SSID)** fields and click the **Continue** button.



**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:

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

Use your password to connect.

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



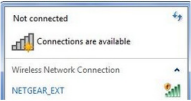| Step 1 : Select the WiFi Network |
| Step 2 : Set Up the Extender |
| Step 3 : Apply Settings |

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) : ntgrwlan_2GEXT
Security type: WPA2-PSK
Passphrase :

**Extender network (5GHz a/n/ac):**
Wireless network name (SSID) : ntgrwlan_5g_5GEXT
Security type: WPA2-PSK
Passphrase :

Now, you need to reconnect your wireless device(s) to the new Extender network. On your wireless device (laptop, tablet, smartphone, gaming console, etc.), use the wireless manager to find the new Extender network (mentioned above) and connect. For example, on a laptop, you might use Windows WiFi manager as shown below to connect your PC to the new Extender network.

Not connected
Connections are available
Wireless Network Connection
NETGEAR_EXT

☑ Last step, once you have reconnected your device running this Wizard, please mark the checkbox and click the **Continue** button to finalize your installation.

Continue

**12.** 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.

**13.** Plug the extender into an electrical outlet and wait one minute.

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.

# 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.

**Left arrow blinks**. Move the extender closer to the router.

**Right 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 use the extender to connect a device wirelessly to your WiFi router or access point.



Blu-ray player

Extender
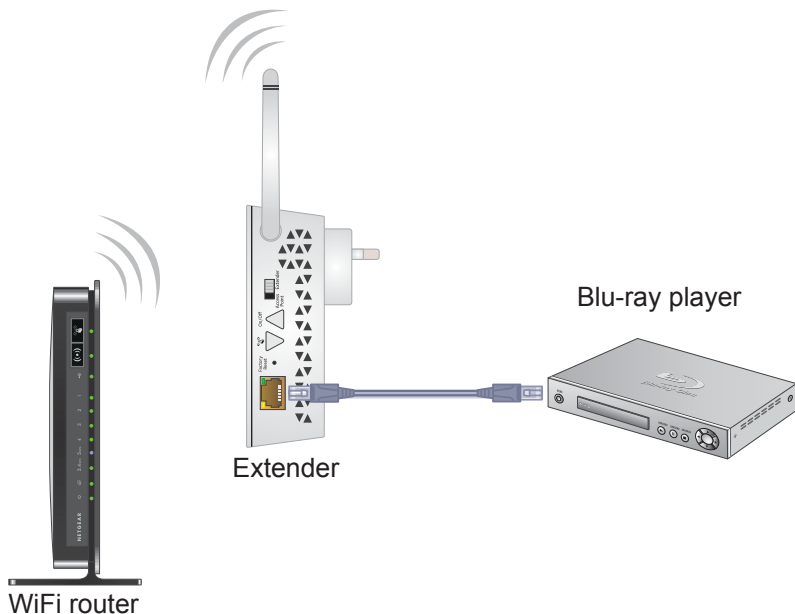
WiFi router

➤ **To connect an Ethernet-enabled device to your WiFi router or access point:**

1. Set up the extender.
   For more information, see *Place the Extender and Apply Power* on page 5.

2. Connect the extender to an existing WiFi network.
   For more information, see *Connect to an Existing WiFi Network* on page 5.

3. Plug the Ethernet cable from an Ethernet-enabled device to the Ethernet port on the extender.

# Install the Extender as an Access Point

You can also use the extender as a WiFi access point, which creates a new AC750 WiFi hotspot within your local network.
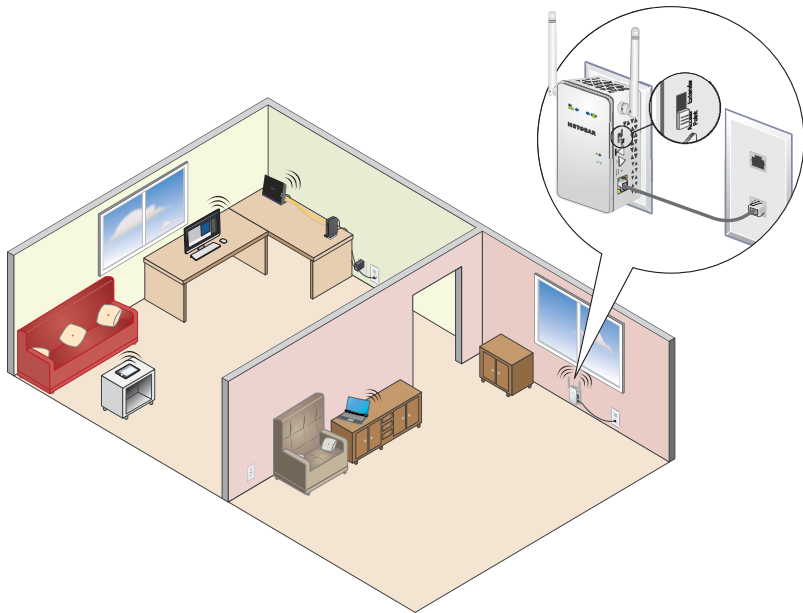
➢ **To install the extender as an access point:**

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

2. Plug the extender into an electrical outlet near a router Ethernet LAN port or a remote Ethernet jack that has access to your local area network (LAN).

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

   The extender joins the LAN and creates a WiFi hotspot.

4. On your computer or mobile device, find and join a WiFi extender network.

   The extender is dual band, so it has two WiFi networks:

   • **2.4 GHz network**. EX6100_NETGEAR_2GEXT

   • **5 GHz network**. EX6100_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.

6. Enter **admin** for the user name and **password** for the password.

   NETGEAR genie displays and detects the Internet connection.

7. Follow the genie steps to set up WiFi security for both WiFi networks.

# Access Extender Settings

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

➢ **To log in to the extender after the initial setup:**

1. Connect a computer or mobile device to the extender's network.
2. Launch a web browser and enter **www.mywifiext.net** 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 5.

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

**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.

**Will the extender work if I connect it to the router with an Ethernet cable?**

It depends. If the switch is set to **Extender**, the extender connects to the router over WiFi. If the switch is set to **Access Point**, the extender connects to the router with an Ethernet cable.

**I am connected to EX6100_NETGEAR_2GEXT or EX6100_NETGEAR_5GEXT and launched a browser. Why can't I see the web browser setup genie**?

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 of the web browser. 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 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.

## 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/.*

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