Installation

N600 WiFi Range Extender
Model WN3500RP
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.
Meet Your Extender

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

LEDs

- Power LED
- 2.4 GHz Link Rate LED
- 5 GHz Link Rate LED
- Device to Extender LED
- WPS LED

Buttons and Ports

- Power On/Off button
- WPS button
- Audio port
- USB port
- Factory Reset button
- Ethernet port
### LED Descriptions

<table>
<thead>
<tr>
<th>Description</th>
<th>Status</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Power LED</strong></td>
<td>Solid amber</td>
<td>The extender is booting.</td>
</tr>
<tr>
<td></td>
<td>Solid green</td>
<td>The extender is powered on.</td>
</tr>
<tr>
<td></td>
<td>Off</td>
<td>The extender is powered off.</td>
</tr>
<tr>
<td><strong>2.4 GHz Link Rate LED</strong></td>
<td>Solid green</td>
<td>Best connection.</td>
</tr>
<tr>
<td></td>
<td>Solid amber</td>
<td>Good connection.</td>
</tr>
<tr>
<td></td>
<td>Solid red</td>
<td>Poor connection.</td>
</tr>
<tr>
<td></td>
<td>Off</td>
<td>No connection.</td>
</tr>
<tr>
<td><strong>5 Ghz Link Rate LED</strong></td>
<td>Solid green</td>
<td>Best connection.</td>
</tr>
<tr>
<td></td>
<td>Solid amber</td>
<td>Good connection.</td>
</tr>
<tr>
<td></td>
<td>Solid red</td>
<td>Poor connection.</td>
</tr>
<tr>
<td></td>
<td>Off</td>
<td>No connection.</td>
</tr>
<tr>
<td><strong>Device to Extender LED</strong></td>
<td>Solid green</td>
<td>The extender is connected to a computer or WiFi device.</td>
</tr>
<tr>
<td></td>
<td>Off</td>
<td>The extender is not connected to a computer or WiFi device.</td>
</tr>
<tr>
<td><strong>WPS LED</strong></td>
<td>Solid green</td>
<td>WiFi security is enabled (WPA or WPA2).</td>
</tr>
<tr>
<td></td>
<td>Blinking green</td>
<td>A WPS connection is in progress.</td>
</tr>
<tr>
<td></td>
<td>Off</td>
<td>WiFi security is not enabled.</td>
</tr>
</tbody>
</table>
Install the WiFi Extender

Prepare the extender, place the extender, apply power, and connect it to your WiFi network.

Prepare the Extender

You can use the AC plug or the stand and power adapter cord that came with your extender to plug it into an electrical outlet.

Note: The AC plug varies by region.
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 the initial setup process.

2. Plug the extender into an electrical outlet. The Power LED \( \bullet \) lights green. If the Power LED does not light, press the Power On/Off 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 web browser setup.** For more information, see *Connect with Web Browser Setup* on page 9.
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 are using WEP security, follow the instructions in *Connect with Web Browser Setup* 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 2.4 GHz Link Rate LED 🔄 lights, and the extender connects to your existing WiFi network.
   
   If the 2.4 GHz Link Rate LED does not light, try again. If it still does not light, see *Connect with Web Browser Setup* 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. Find the new extended network name on your computer or WiFi device.
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 computer or WiFi devices to the new extended WiFi 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 that 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 green. If the Power LED does not light, press the **Power On/Off** button.

8. Use the Link Rate LEDs ✋ to help you choose a spot where the extender-to-router connection is optimal.
Connect with Web Browser Setup

1. Use a WiFi network manager on a computer or WiFi device to find and connect to the NETGEAR_EXT (SSID) WiFi network. After the connection with the computer or WiFi device is established, the Device to Extender LED lights.

2. Open a web browser window from the same computer or WiFi device. The browser takes you directly to the NETGEAR genie web browser setup. If you are not automatically directed to NETGEAR genie, launch a web browser and enter www.mywifient.net in the address field. Enter admin for the user name and password for the password.

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

Select the name of your 2.4GHz WiFi network.

<table>
<thead>
<tr>
<th>SSID</th>
<th>Channel</th>
<th>Signal</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>ngwlan</td>
<td>11</td>
<td>69%</td>
<td>WPAWPA2-PSK</td>
</tr>
<tr>
<td>NETGEAR</td>
<td>6</td>
<td>68%</td>
<td>OFF</td>
</tr>
<tr>
<td>NETGEAR71</td>
<td>6</td>
<td>67%</td>
<td>WPA2-PSK</td>
</tr>
<tr>
<td>NETGEAR-3G</td>
<td>11</td>
<td>63%</td>
<td>OFF</td>
</tr>
<tr>
<td>NG_11g-2</td>
<td>1</td>
<td>63%</td>
<td>OFF</td>
</tr>
<tr>
<td>24023Validation_g</td>
<td>2</td>
<td>63%</td>
<td>WPAWPA2-PSK</td>
</tr>
<tr>
<td>24023Validation_g1</td>
<td>2</td>
<td>63%</td>
<td>WPA2-PSK</td>
</tr>
<tr>
<td>qHub</td>
<td>6</td>
<td>61%</td>
<td>WPA2-PSK</td>
</tr>
<tr>
<td>ngwlan</td>
<td>1</td>
<td>61%</td>
<td>WPAWPA2-PSK</td>
</tr>
</tbody>
</table>
3. Select a 2.4 GHz WiFi network to extend and click the **Continue** button.

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

5. 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.

6. Type the network password (also called passphrase or security key) in the **Password** field, and click the **Continue** button.
   The following screen displays:

   ![Screen showing settings for the Extender network]

7. In the **Name (2.4G SSID)** and **Name (5G SSID)** field, type the names (SSIDs) for your new extender WiFi networks and click the **Continue** button.

   You can use the same security settings as the settings for your existing network by selecting the check box.
The settings are applied and the following screen displays.

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): nguest_2GEXT
- Security type: WPA/WPA2-PSK
- Passphrase: [Redacted]

**Extender network (5GHz a/n):**
- Wireless network name (SSID): nguest_5GEXT
- Security type: WPA/WPA2-PSK
- 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.

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

8. Use a WiFi network manager on the computer or WiFi device to connect to the extender’s newly created WiFi network. Repeat this step for all of your computers and WiFi devices.

9. If the screen is still displayed on your computer or WiFi device, select the check box at the bottom of the screen and click the **Continue** button.
A message displays confirming that the extender is connected to the WiFi network.

10. Click the **Finish** button.

11. 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.

12. Plug the extender into an electrical outlet.

   The Power LED lights green. If the Power LED does not light, press the **Power On/Off** button.

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

Stream Music Using DLNA or AirPlay

You can use DLNA or AirPlay to stream music to speakers or audio systems connected to the extender’s audio jack. The USB port on the extender can be used to power the speakers.
Log In to Access Extender Settings

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

1. Use a WiFi network manager on a computer or WiFi device to find and connect to the new extended WiFi network. After the connection with the computer or WiFi device is established, the Device to Extender LED lights.

2. Launch a web browser.

3. Enter www.mywifiext.net in the address field of the browser. A login screen displays.

4. Enter admin for the user name and password for the password. NETGEAR genie displays.

5. Make any needed changes.
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 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 6.

If you are using WEP security, make sure that you are typing the network password 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.
My router security is WEP, and I entered the wrong passphrase or security key on the extender. I cannot access the extender anymore. What can I do?

The extender cannot check to see if the WEP passphrase is correct. If you entered the wrong passphrase, your wireless device is not able to get the IP address from the extender. You must reset the extender to its factory default settings to get the IP address back.

**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.
I completed the Installation Wizard, but my WiFi device is unable to get an IP address from the extender. What should I do?

Make sure that the password that you entered on your WiFi device is correct, and power cycle the extender and your router. If your WiFi device is still not able to get an IP address, try the following:

- Move the extender closer to your router, and move your WiFi device closer to the extender.
- Disable the WiFi on your WiFi device and enable it again to see if your WiFi device can get the IP address.
- If your router has a MAC filter, wireless access control, or access list (ACL), disable it and add the device’s MAC address to your router.

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.mywifiate.net in the address field. Enter admin for the user name and password for the password.
I enabled a wireless MAC filter, wireless access control, or access list (ACL) on my router. What should I do when installing the extender?

When the WiFi device connects through the extender to your router, the MAC address of the WiFi 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 WiFi device connects to the extender but cannot get an IP address from the extender and cannot access the Internet.

To allow the WiFi 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 WiFi devices to the extender network.

3. Make sure that the Link Rate LEDs remain lit.

4. Log in to your extender.
   a. Launch a web browser.
   b. Enter **www.mywifieext.net** in the address field of the browser.
A login screen displays.

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

5. Select **Maintenance > Attached Devices**.
   
The Attached Devices screen displays the MAC addresses and virtual MAC addresses for computers and WiFi devices that are connected to the extender network.

6. On the router, add all of the virtual MAC addresses from your extender to your router’s MAC filter table.

7. Enable the router’s MAC filter, wireless access control, or ACL.
Support

Thank you for purchasing this NETGEAR product. 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.