



Wi-Fi Power Levels

How to reduce your power levels

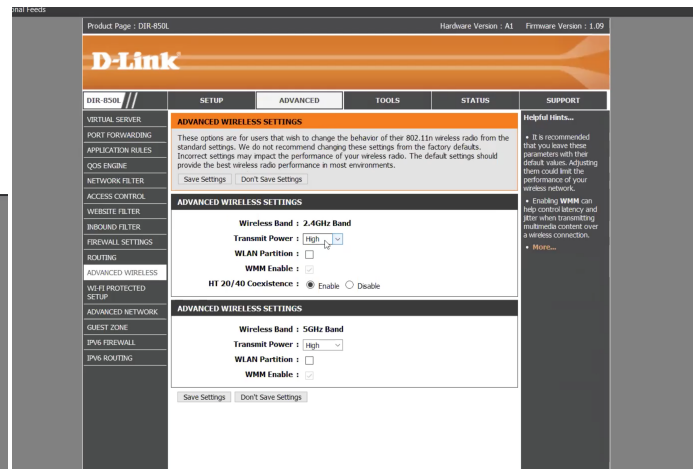
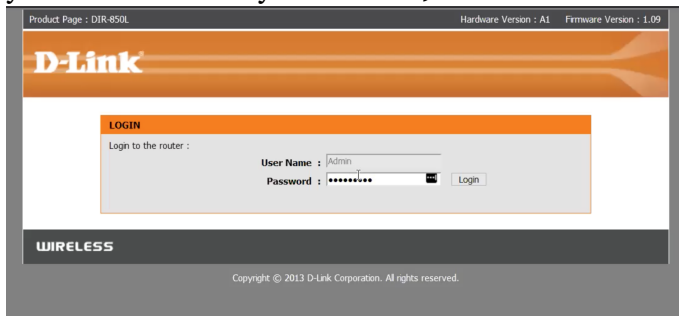
Kayla, Corey, David/Thursday 15th October, 2020/Ontario

Introduction

In this document we review how to reduce your Wi-Fi power levels on your router and extender devices. This is meant to be a secondary option instead of hardwiring with Ethernet cables, for areas where cables are not an option. **Please Note:** All routers and extenders are different and will have slightly different tabs. You will require your log in and set up information for your devices.

1 Wi-Fi Router

Go to your router site and login (you can also go directly to your locational login by inputting your IP address if you know it).

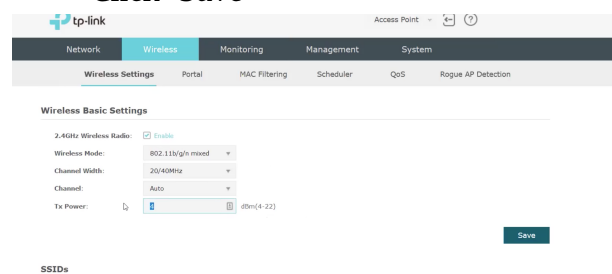


1.1 D-Link

- Go to the ADVANCED tab
- Click ANDVANCEDSD WIRELESS
- For one or both of your frequency bands (2.4 GHz and / or 5 GHz) Set the transmit power to "low"
- Click "Save Settings"

1.2 tp-Link

- Log In
- Go to the "Wireless" Tab
- On the "Wireless Settings" tab set the tx Power: to the minimum allowed dBm power level (in this case it is 4 dBm).
- Click "Save"



2 Wi-Fi Extender

For the Wi-Fi Extender Power level changes you must first login to your Extender. The attached document is for the NETGEAR N300 WiFi Range Extender Model EX2700. **Please Note:** You may also need to remain logged in to your router / know your IP address for reducing an extender power level.

Once logged in and after completing device set up please see pages 15 and 19 in particular. The pages before and in between are troubleshooting for installation issues.

2.1 YouTube Follow Up

A link to our YouTube tutorial and a follow up video can be found here:



Quick Summary Info



Longer Power Level Reduction Explanation

Quick Start

N300 WiFi Range Extender

Model EX2700



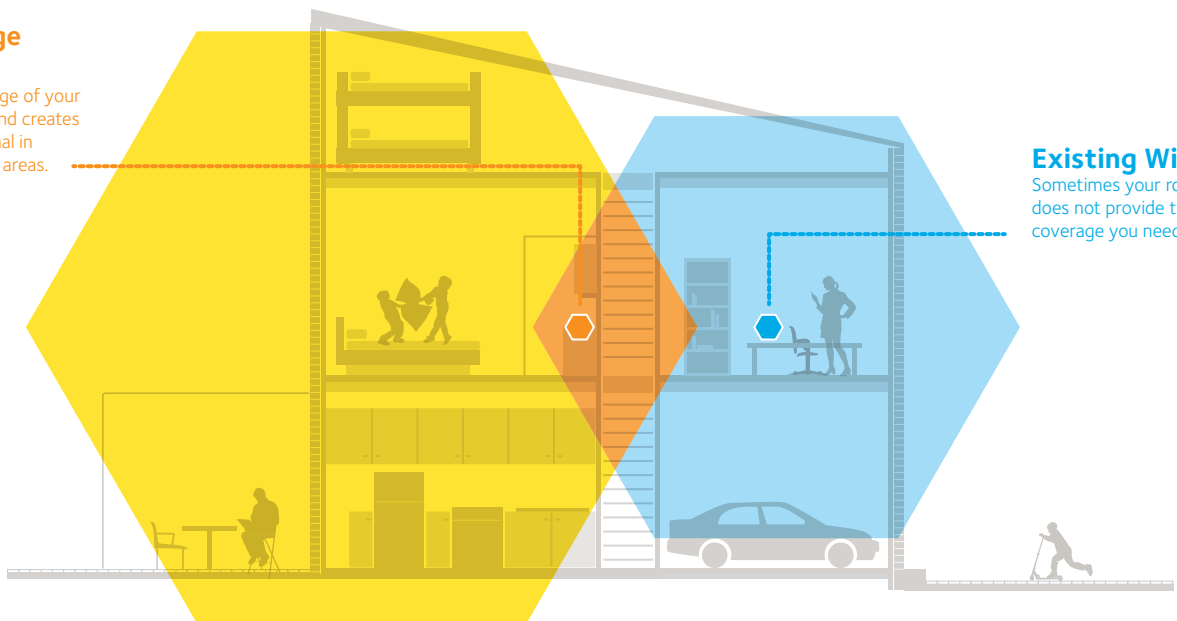
NETGEAR®

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.

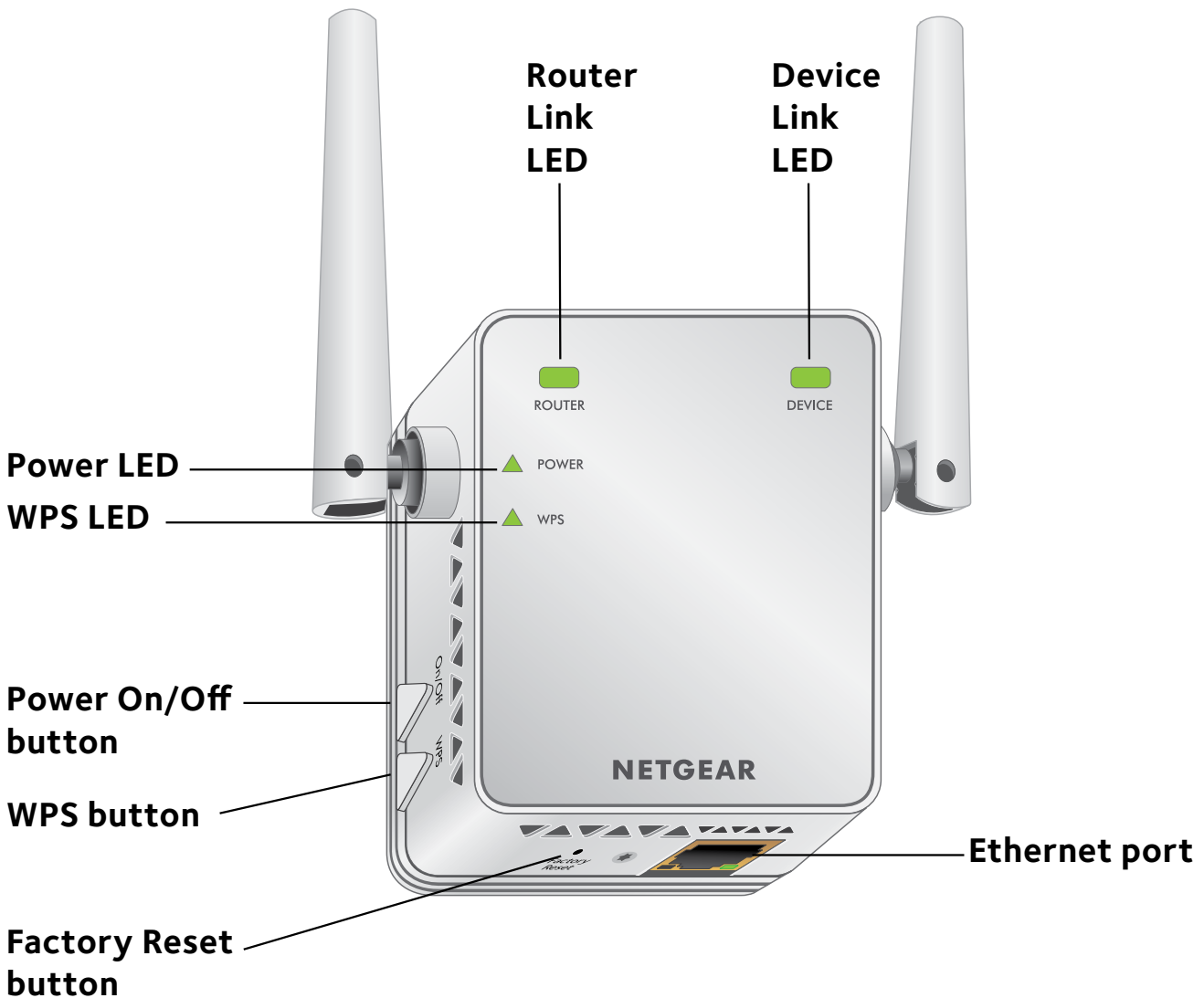


Existing WiFi

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

Meet Your Extender

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



LED Descriptions

Router Link LED



ROUTER

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.

Device Link LED



DEVICE

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 being established.

Off. WiFi security is not enabled.

Use the Extender

The extender repeats the signals from an existing WiFi router or access point. Place the extender, supply power, and connect it to your WiFi network.

Place the Extender and Supply 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.
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 the NETGEAR installation assistant.** For more information, see *Connect with the NETGEAR Installation Assistant* on page 10.

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 the NETGEAR Installation Assistant* on page 10.

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.

When the extender connects to your existing WiFi network, the WPS LED on the extender lights solid green and the Router Link LED lights. If the Router Link LED does not light, try again. If it still does not light, see *Connect with the NETGEAR Installation Assistant* on page 10.

3. 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.

4. Plug the extender into an electrical outlet and wait for the Power LED to light green.
5. Use the Router Link LED on the front panel to help you choose a spot where the extender-to-router connection is optimal.
6. If the Router 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 Router Link LED lights amber or green.

7. On your computer or WiFi device, find and connect to the new extended WiFi network.

The extender creates a new extended WiFi network. The extender's new WiFi network name is based on your existing WiFi network name, with _EXT at the end of the name.

For example:

- **Existing WiFi network name.** MyNetworkName
- **New extended WiFi network name.** MyNetworkName_EXT.

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



8. Test the extended WiFi range by moving your computer or WiFi device to the area with a poor router WiFi signal:
 - a. Leave your computer or WiFi device in the area with a poor router WiFi signal and return to the extender.
 - b. Check the Device Link LED on the extender:
 - If the Device 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 Device 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 Device Link LED turns solid green or amber.

Connect with the NETGEAR Installation Assistant

1. Use a WiFi network manager on a computer or mobile device to find and connect to the extender WiFi network NETGEAR_EXT.
After the connection with the computer or WiFi device is established, the Device 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. Select a WiFi network to extend and click the **NEXT** button.
7. In the **Password (Network Key)** field, type the existing WiFi network password (also called the passphrase or security key) and click the **NEXT** button.

8. Set the network name (SSID) and password for your extender and click the **NEXT** button.

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

Wait for the page to display the new extended WiFi network settings, which might take up to one minute.

9. Connect your computer or WiFi device to the new extended WiFi network using the SSID and password that you created in Steps 7 and 8.
10. Make sure that your computer or WiFi device is successfully connected before you click the **CONTINUE** button.
11. Click the **CONTINUE** button.
A message displays confirming that the extender is connected and ready.
12. Click the **NEXT** button.
The registration page displays.

13. 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.

14. 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.

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

16. Use the Router Link LED to help you choose a spot where the extender-to-router connection is optimal.

17. If the Router 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 Router Link LED lights amber or green.

18. Reconnect your computer or WiFi device to the new extended WiFi network.

19. Test the extended WiFi range by moving your computer or WiFi device to the area with a poor router WiFi signal:

a. Leave your computer or WiFi device in the area with a poor router WiFi signal and return to the extender.

b. Check the Device Link LED on the extender:

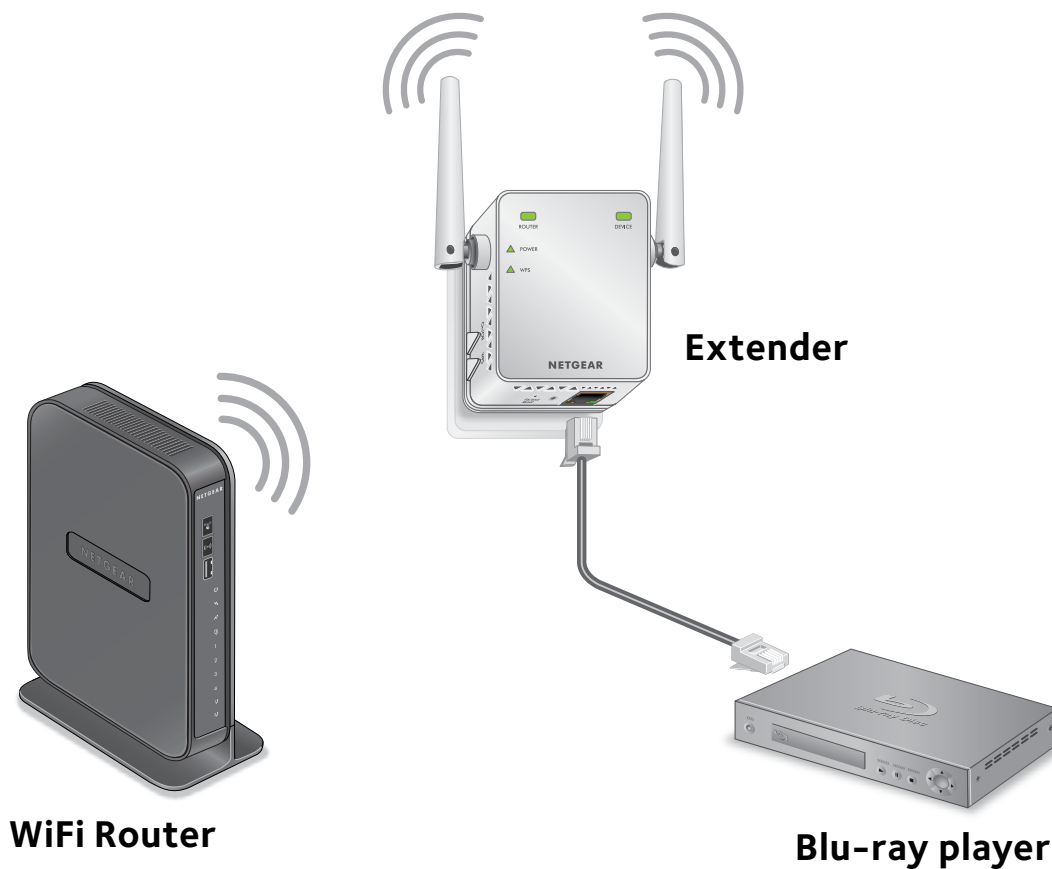
- If the Device Link LED is solid green or amber, your extended WiFi network reaches the area with a poor router WiFi signal and your network setup is complete.

- If the Device 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 Device Link LED turns solid green or amber.

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.



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 Link LED lights.

2. Launch a web browser.

3. Enter **www.mywifiext.net** in the address field of the browser.

A login window opens.

4. Type your email address and password and click the **LOG IN** button.

The Status page displays.

Frequently Asked Questions

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

I forgot my login email address and password. What can I do?

In the login window, 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.

Can I connect the extender to the router with an Ethernet cable?

No. The extender is designed to connect wirelessly to the router or access point.

The web browser setup guide keeps asking me for my network password (passphrase) or security key, 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 Supply Power* on page 5.

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

I am connected to NETGEAR_EXT and launched a browser, but I can't 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 Device 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. Type your email address and password and click the **LOG IN** button.

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

The extender resets and returns to the factory default settings.

I enabled a wireless MAC filter, wireless 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, wireless 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, 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 Router Link LED remains lit.
4. Log in to your extender:
 - a. Launch a web browser.
 - b. Enter **www.mywifext.net** in the address field of the browser.
A login window opens.
 - c. Enter your email address and password and click the **LOG IN** button.
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, wireless access control, or ACL.

Support

Thank you for purchasing this NETGEAR product. You can visit www.netgear.com/support to register your product, get help, access the latest downloads and user manuals, and join our community. We recommend that you use only official NETGEAR support resources.

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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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