



User Guide

**AX1800  
MAX-STREAM®  
WiFi Range Extender**

Model RE7310

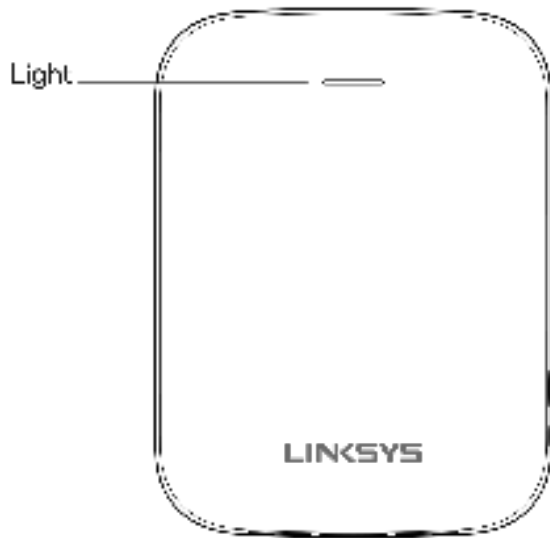


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# Product Overview

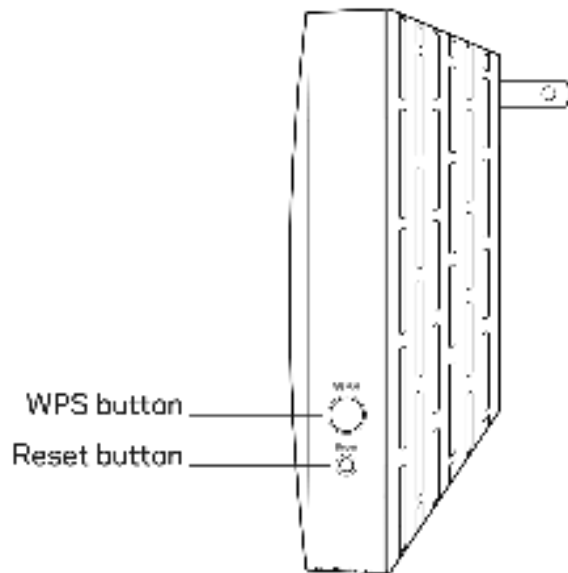
## Front view



The light on the front of the range extender gives you information about power, updating and signal strength.

Light color	Status/ description
Solid Blue	<ul style="list-style-type: none"><li>Power on, ready for device connection</li></ul>
Blinking Blue (normal state)	<ul style="list-style-type: none"><li>Starting up.</li><li>Upgrading firmware.</li></ul>
Blinking Orange (normal state)	<ul style="list-style-type: none"><li>Not connected to the router or other error.</li></ul>
Blinking Blue (WPS pairing)	<ul style="list-style-type: none"><li>WPS pairing in process</li></ul>
Blinking Orange (WPS pairing)	<ul style="list-style-type: none"><li>Overlapping WPS pairing sessions</li></ul>
Solid Orange for 2 minutes (WPS pairing)	<ul style="list-style-type: none"><li>WPS pairing unsuccessful</li></ul>

## Side view



**WPS™ Button**—Use Wi-Fi Protected Setup to automatically and securely add compatible wireless devices to your network with Push Button Connect. Refer to Using WPS on page [5](#).

**Reset Button**—Press and hold until the power light on the front of the range extender blinks to reset to factory defaults. You can also restore the defaults from the Administration > Factory Defaults screen in the extender's settings interface (page [13](#)).

# How to Install the Range Extender

There are two ways to use your Linksys range extender: as a wireless range extender or as a wired range extender (access point). Wireless range extenders repeat existing Wi-Fi signals. Wired range extenders (access points) create new Wi-Fi hotspots when connected to a router or access point with an ethernet cable. Both scenarios require a router with a working internet connection.

Before starting setup, decide whether you want to use your RE7310 as a wireless range extender or as a wired range extender (access point). Instructions for both setups are in this user guide.

## Setting up as a wireless range extender

### Wi-Fi Protected Setup (WPS)

#### Does your router have a WPS button?

WPS is a simple way to connect Wi-Fi devices with Push Button Connect. Routers that support WPS have a button that might look like one of these symbols:



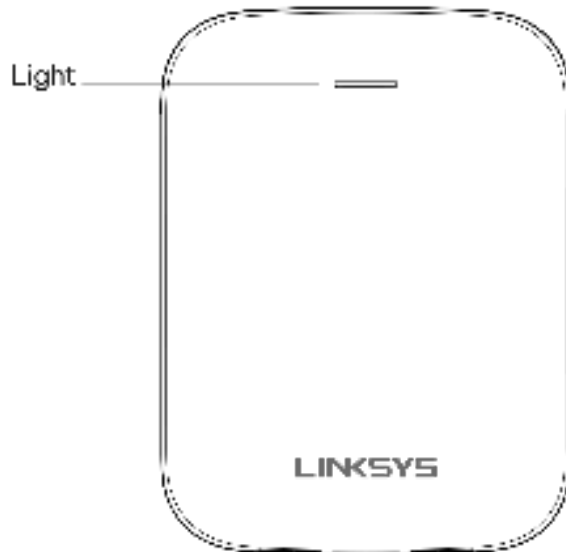
If your router has a WPS button, continue with WPS below.

If not, or if you are not sure, continue with browser-based setup on [page 9](#).

**Note**—*The WPS button will not work if you have disabled WPS on your router, or if you have chosen WEP as your network security type. In either case, continue with browser-based setup on [page 9](#).*

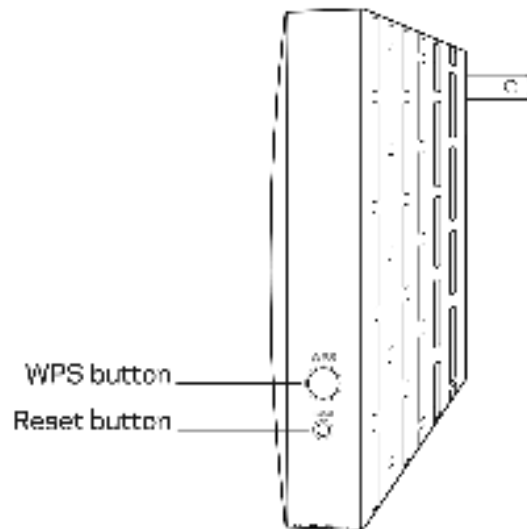
1. **Plug the range extender into an electrical outlet close to your router.** You can move the range extender to an ideal location later in step 5. After the range extender is plugged in, the light on the front will blink blue for up to a minute.

2. **Wait for the light on the front of your range extender to blink orange before going to step 3.** This can take up to a minute.




3. **Extend your network.**

- a. Press the WPS button on your router. Within the next two minutes complete step 3b.
- b. Press the WPS button on the side of your range extender.



The light on the front of your range extender will blink blue. Watch the light to verify whether the connection was successful.

If it turns solid blue , the connection was successful. Move to step 4.

If it blinks orange , the connection failed. You can try again by repeating step 3 or try browser-based setup on page [9](#).


#### 4. Extend a second network.

You may skip this step if you have a single-band router or if you don't want to extend a second network.

- a. Press the WPS button on your router again. Within the next two minutes complete step 4b.
- b. Press the WPS button on your range extender again.

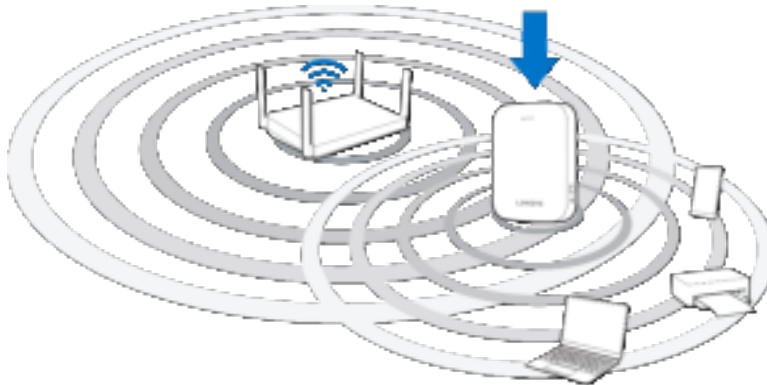
The light on the front of your range extender will start to blink blue. Watch the light to verify whether the connection was successful.

If it turns solid blue , the connection was successful.

If it blinks orange , the connection failed. You may try again by repeating step 4.




#### 5. Move your range extender to an ideal spot.

Unplug your range extender and plug it back in midway between your router and the area without Wi-Fi. Using your mobile device or laptop, be sure you have at least two bars (around 50%) of your router's Wi-Fi signal at that location. If you don't have two bars, move the range extender closer to the router.



#### 6. Check the range extender's light for connection quality.

It can take up to a minute for the range extender to start up after moving it. During this period, you will see the blinking blue light again.

- Solid blue  Ready to use.
- Solid orange  Weak connection to the router. Find an outlet closer to your router.
- Blinking orange  Not connected to the router. Find an outlet closer to your router.

#### 7. Connect your Wi-Fi devices to the extended network you just created.

If you have setup your range extender with a router that features seamless roaming, your

extended Wi-Fi network shares the same network name and password. Connected devices will select the main or extended network as you move around your house.

If you do not have a router with seamless roaming, select an extended network on your device's Wi-Fi manager. Extended networks are identified by "\_Ext" added to the end of your main network names. Passwords will be the same as those for your main networks.

**Your range extender is now set up. Enjoy your extended Wi-Fi coverage.**

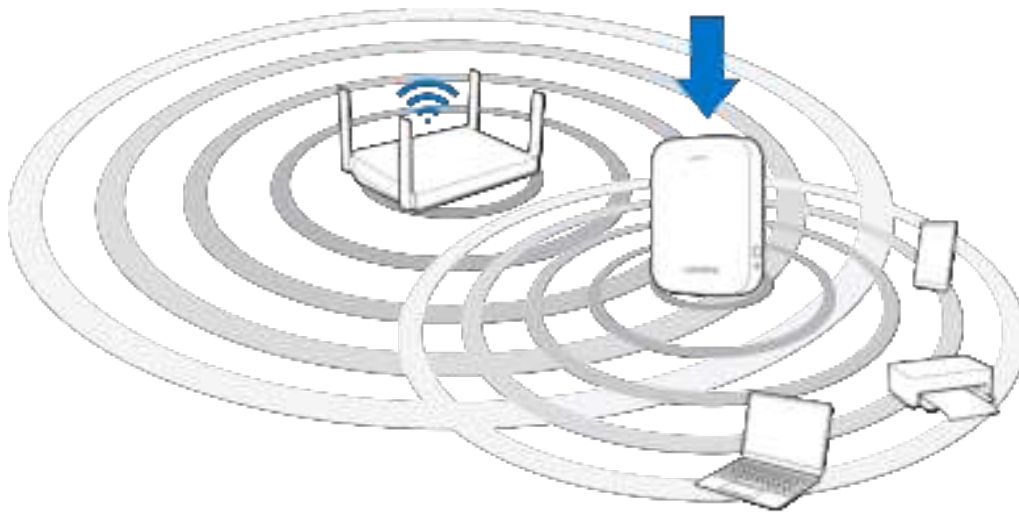


## Setting up in a web browser

Use this setup method if you don't have a WPS button on your router, or if you don't want to use WPS to set up your RE7310.

### 1. Plug in the range extender

Plug in the range extender midway between your router and the area without Wi-Fi. Using your mobile device or laptop, be sure you have at least two bars (around 50%) of your router's Wi-Fi signal at that location. If you don't have two bars, move the range extender closer to the router. You can move the range extender to an ideal location later using the setup software.



### 2. Wait for the light on the front of your range extender to blink orange.

This can take up to a minute



### 3. Connect to range extender setup network.

On a computer, phone or tablet, connect to the Wi-Fi network: Linksys Extender Setup - XXX. (XXX are the last three digits of your range extender's MAC address.)



### 4. Launch setup.

Visit <http://extender.linksys.com> (or try <http://192.168.1.1>) in a browser and follow the on-screen instructions to complete setup.



**Note**—If you are not connected to your range extender's setup network you will get a page alerting you that you haven't connected to the extender. The page will ask whether you are trying to set up a new range extender or access settings on a range extender you already set up.

Sometimes you will get a "404 Not Found" error page. If that happens, clear your browser cache and try again.

### 5. Connect your Wi-Fi devices to the extended network you just created.

If you have setup your range extender with a router that features seamless roaming, your extended Wi-Fi network shares the same network name and password. Connected devices will select the main or extended network as you move around your house.

If you do not have a router with seamless roaming, select an extended network on your device's Wi-Fi manager. Extended networks are identified by "\_Ext" added to the end of your main network names. Passwords will be the same as those for your main networks.

# Accessing Your Range Extender Settings

To change or view range extender settings, first connect to an extended network, e.g., MyWiFi\_Ext. In a browser, go to <http://extender.linksys.com> and enter the range extender's admin password.

Your range extender's default admin password is "admin". It is highly recommended that you change this after setup.

To change your admin password, click the *Management* tab and enter a new password under *Extender Access*.



If you have not changed the range extender's default name, you can also access settings when connected to your main router.

Visit <http://RE7310-XXX> (Windows) or <http://RE7310-XXX.local> or (Mac OS X or iOS) in a browser.

**Note**—XXX are the last 3 digits of your range extender's MAC address. You can find the MAC address on the back of your RE7310. (You might have to unplug your range extender to see the MAC address label. Plug it back in and make sure the light is solid blue before visiting the URL.)

If you changed your range extender's name, you can access the settings interface by entering the new name in a browser. For example: if you named your extender MyExtender, enter <http://MyExtender> (Windows) or <http://MyExtender.local> (Mac OS X or iOS).

You can also enter your range extender's IP address in a browser. Find the IP address in your router's settings.

**Note**—*If you are not connected to your extended network you will get a page alerting you that you haven't connected to the extender. The page will ask whether you are trying to set up a new range extender or access settings on a range extender you already set up.*

*Sometimes you will get a "404 Not Found" error page. If that happens, clear your browser cache and try again.*

# Using Range Extender Settings

Click *Help* on the right side of the screen for additional information on the screen's options.

Changes to settings will not be effective until you click **Save** at the bottom of the screen. You also can click **Cancel** to clear any changes.

The screenshot shows the Linksys Basic Settings page for a Wireless Range Extender. The page is divided into a left sidebar with navigation links and a main content area. The main content area is titled "Basic Settings" and contains several sections for configuring the extender's operation and wireless settings.

**Basic Settings**

Operation Mode: Wireless Range Extender (Change)

Extender IP Address: 192.168.1.100 (Change)

**2.4 GHz Wireless Settings**

Status: On

Signal Strength: [Signal strength indicator]

Network Name (SSID): wireless\_ext

Password: [Password field]

**2.4 GHz Extended Wireless Settings**

Status: On

Need setup or router settings

Network Name (SSID): wireless\_ext

Password: [Password field]

**5 GHz Wireless Settings**

Status: On

Signal Strength: [Signal strength indicator]

Network Name (SSID): wireless\_ext

Password: [Password field]

**5 GHz Extended Wireless Settings**

Status: On

Need setup or router settings

Network Name (SSID): wireless\_ext

Password: [Password field]

**Network Setup**

Extender Name: EXTEND-001

Friendly Name: Linksys Range Extender

**Time Settings**

Time Zone: (GMT-08:00) Pacific Time (US & Canada)

Automatically adjust clock for daylight saving changes

**Reboot**

Reboot

**Buttons:** Save, Cancel

## WPS

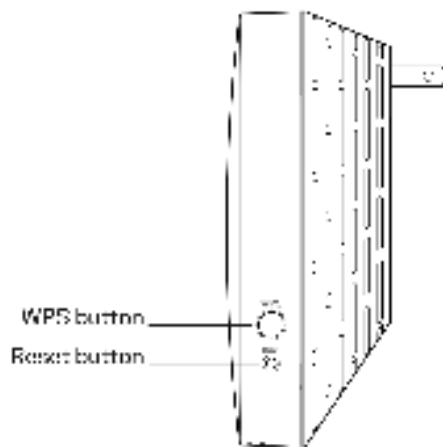
WPS makes it easy to connect your range extender to your network and connect other devices to your network through the range extender.

### Connecting the range extender to an existing access point or wireless router (see p. 5)

### Connecting devices to your network through the range extender

Repeat the instructions for each client device that supports WPS.

#### 1. Connecting with the WPS Button



- a. Press the WPS button on the client device.
- b. Press and hold the WPS button on the side of the range extender for one second OR click the WPS button on the WPS screen in the range extender's browser-based settings. The light on the front of the range extender will blink blue until pairing is complete. If the light blinks orange, the connection failed. Go back to previous step and try again.
- c. If using the range extender's WPS screen, be sure to click **OK** within two minutes or you will have to start over.

#### 2. Connecting with the client device's PIN

2. If your client device has a Wi-Fi Protected Setup™ PIN number, enter that number here  and then click

- a) Enter the PIN from the client device in the field on the range extender's WPS screen.
- b) Click Register on the range extender's WPS screen. The light on the front of the range extender blink until pairing is complete.
- c) Click **OK** on the range extender's WPS screen within two minutes or you will have to start over.

### **3. Connecting with the extender's PIN**

- a) On the client device, enter the PIN listed on the range extender's WPS screen. (It is also listed on the product label on the back of the range extender.)
- b) Click **OK** on the client device's WPS screen within two minutes.

# Site Survey

Site Survey gives a snapshot of all access points and wireless routers within range of the extender.



Log in to the range extender's browser-based settings (see "Accessing Your Range Extender Settings" on page 11). Click the *Wireless* tab. Click the *Site Survey* page.

- **Select**—Click the button next to the wireless network name (SSID) in the *Select* column and click *Connect*. For dual-band networks, be sure to connect to both bands, 2.4 GHz and 5 GHz.
- **SSID**—The names of neighboring wireless networks.
- **GHz**—The radio band (in GHz) of the neighboring wireless networks
- **Signal Strength**—The power of the wireless signal received: dot only = 25%, dot + one wave = 50%, dot + two waves = 75%, dot + three waves = 100%. If no waves are displayed, your range extender is too far from the upstream access point or the signal is blocked. Try to keep the signal strength between 50% and 100% for best performance.
- **Security**—The mode of security in use by the neighboring wireless networks. If a network supports Wi-Fi Protected Setup, the Wi-Fi Protected Setup icon is also displayed.



## QoS (Quality of Service)

RE7310 supports WMM (Wi-Fi Multimedia), which enhances the quality of service (QoS) on a network. QoS prioritizes data packets according to four traffic classes: voice, video, best effort, and background. We recommend keeping the default QoS settings.

## Cross-Band

Cross-Band is the simultaneous use of both bands for high-speed data transfer and uninterrupted streaming and gaming. When in Auto Cross-Band (default), the range extender selects the appropriate band (2.4 GHz or 5 GHz) when sending data from wireless clients to the Wi-Fi router.

## Access Control

All devices connected to your range extender can access your Wi-Fi network if the range extender can access the router. Use the Access Control feature to restrict certain devices. On the *Wireless* > *Access Control* screen you can specify the MAC addresses of devices to allow or deny.



# Troubleshooting

Your range extender works on 2.4GHz and 5 GHz networks.

## You cannot get your range extender connected

Check the position of your router and range extender.

- For first-time setup, you may need to place the range extender closer to the router. After you set up your range extender, you can unplug it and move it to the final location.
- To reduce signal obstructions, try alternate locations for the router and range extender.
- Avoid placing the router and range extender near metal objects, masonry walls, and reflective surfaces such as glass or mirrors.
- Avoid placing the router and range extender near other electronics that may cause signal interference.

If you're using Wi-Fi Protected Setup to connect, make sure the light on the front of the range extender is not blinking orange before trying to make the connection again.

## You cannot access your range extender

To access your range extender settings in a browser, you must be connected to your extended network. If you currently have wireless internet access, the problem may be that you have accidentally connected to a different wireless network.

To fix the problem on Windows computers\*:

1. On your Windows desktop, click on the wireless icon in the system tray. A list of available networks will appear.
2. Click your extended network name. Click Connect. In the example below, the computer was connected to another wireless network named wraith\_5GHz. Your extended network name, Damaged\_Beez2.4\_Ext in this example, is shown selected.



3. If you are prompted to enter a network security key, type your password (security key) into the network security key field. Click **OK**.
4. Your computer will connect to the extended network, and you should be able to access the range extender's settings in a browser.

*\*Depending on your version of Windows, there could be some differences in wording or icons in these steps.*

To fix the problem on Mac computers, do the following:

1. In the menu bar across the top of the screen, click the Wi-Fi icon. A list of wireless networks will appear.
2. In the example below, the computer was connected to another wireless network named wraith\_5GHz. Your extended network name, Damaged\_Beez2.4\_Ext in this example, is shown selected.



3. Click the extended network name of your range extender (Damaged\_Beez2.4\_Ext in the example).
4. Type your wireless network password (Security Key) into the *Password* field. Click **OK**

## You have intermittent connection problems

Plug in the range extender midway between your router and the area without Wi-Fi. Be sure you have at least 50% of your router's Wi-Fi signal at that point on the device you used for setup. If you have two bars or lower, move closer to your router.

To check the signal strength for individual devices connected to the extended network, go to the *Status > WLAN Statistics* page in your extender settings and click **Wireless Clients Table** at the bottom of the page.



The screenshot shows the 'Wireless Clients Table' interface on a Linksys website. It features two tables: one for the 2.4 GHz Extended Network and another for the 5 GHz Extended Network. Each table has columns for Client Name, Global MAC, IP Address, Signal Strength, and Uptime. The 2.4 GHz table is currently empty, while the 5 GHz table shows one client with a signal strength of -72 dBm and an uptime of 2:45. Navigation buttons (Back, Forward, Close) are at the bottom, along with a login field and copyright information.

2.4 GHz Extended Network				
Client Name	Global MAC	IP Address	Signal Strength	Uptime
None	None	None		None

5 GHz Extended Network				
Client Name	Global MAC	IP Address	Signal Strength	Uptime
Microsoft	18:8B:AB:7A:AB:10	10.142.1.101	-72 dBm	2:45

Back Forward Close

Login:

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# Specifications

## RE7310

Description	AX1800 WiFi Range Extender
Standards	IEEE 802.11ax/ac/a/n/g/b, 802.3ab/u
Buttons	Reset, WPS
Light	Front: 1 multicolor light for power, system status
Wireless Security	WPA2, WPA3/WPA2-mixed, WPA3-Personal

## Environmental

Dimensions	135 mm x 101 mm x 50.5 mm 5.31 in x 3.98 in x 1.99 in
Weight	.472 kg (1.04 lb)
Power	Internal AC/DC power supply: 100-240V, 12V/1.5A, 50/60 Hz
Certification	FCC, ICES-003, RSS-247, Wi-Fi (IEEE 802.11ax/ac/a/b/g/n), WPA2™, WPA3/WPA2- mixed, WPA3-Personal, Wi-Fi Protected Setup™
Operating Temp.	32 to 104°F (0 to 40°C)
Storage Temp.	-4 to 140°F (-20 to 60°C)
Operating Humidity	10% to 80% non-condensing
Storage Humidity	5% to 90% non-condensing

Specifications are subject to change without notice.

Visit [Linksys.com/support/RE7310](https://Linksys.com/support/RE7310) for award-winning 24/7 technical support.

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