

User Guide

AX1800 MAX-STREAM® WiFi Range Extender

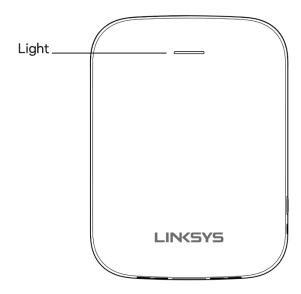
Model RE7310

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# **Product Overview**

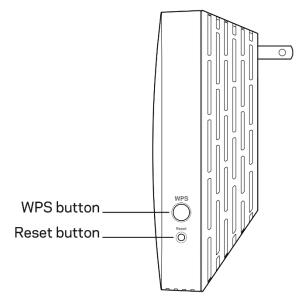
## Front view



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

Light color	Status/ description
Solid Blue	Power on, ready for device connection
Blinking Blue	Starting up.
(normal state)	Upgrading firmware.
Blinking Orange	Not connected to the router or other error.
(normal state)	
Blinking Blue	WPS pairing in process
(WPS pairing)	
Blinking Orange	Overlapping WPS pairing sessions
(WPS pairing)	
Solid Orange for	WPS pairing unsuccessful
2 minutes	
(WPS pairing)	

## 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 <u>5</u>.

**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 <u>13</u>).

# 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:



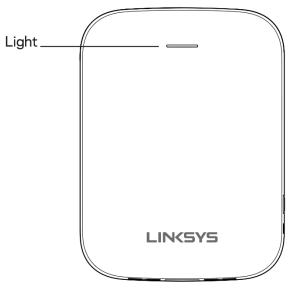
If your router has a WPS button, continue with WPS below.

If not, or if you are not sure, continue with browser-based setup on page 9.

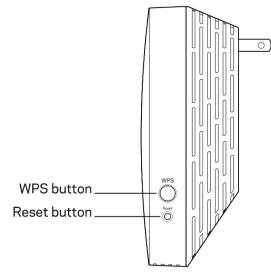
**Note**—The WPS button will not work if you have disabled WPS on your router, or if you have chosen WEP as your network security type. In either case, continue with browser-based setup on page <u>9</u>.

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.
  - 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 <u>9</u>.

### 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.

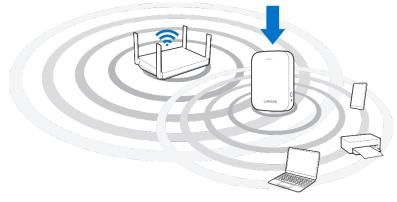
The light on the front of your range extender will start to blink blue. Watch the light to verify whether the connection was successful.

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 ranger 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.

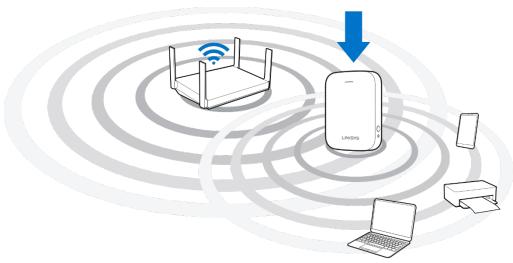
Your range extender is now set up. Enjoy your extended Wi-Fi coverage.

### 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.

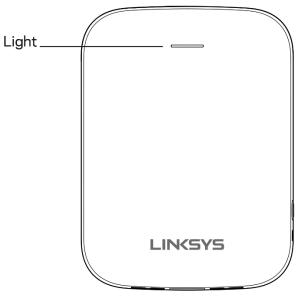
### 1. Plug in the range extender

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



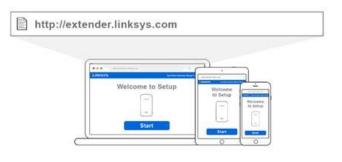
#### 3. Connect to range extender setup network.

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.)

✓ Linksys Extender Setup - XXX	(î:
RTD Network	ê 🤶
My Home Network	

#### 4. Launch setup.

Visit <u>http://extender.linksys.com</u> (or try <u>http://192.168.1.1</u>) 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 <u>http://extender.linksys.com</u> 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*.

Wireless     Basic Settings     Help       Basic Settings     WFS       WFS     Extender Access       Cross Band     Extender Access       Spot Finder     Access Control       Access Control     Re-enter to confirm:       Administration     Management       Log     Diagnostics       Factory Defaults     Firmware Upgrade       Status     Desice Info       Extender     Save       Status     Configurations       Mackup Configurations     Restore Configurations       Status     Save       Device Info     Ethernet Statistics       WLAN Statistics     Save	Basic Settings WPS	Managem	ent	
Site Survey     Extender Access       QoS     Extender Access       Cross Band     Extender Password:       Spot Finder     Re-enter to confirm:       Access Control     Password hint (optional):       Administration     Management       Log     Backup and Restore       Diagnostics     Backup Configurations Restore Configurations       Firmware Upgrade     Saive Cancel				łp
OoS     Extender Password:       Cross Band     Re-enter to confirm:       Spot Finder     Password hint (optional):       Administration     Password hint (optional):       Management     Log       Diagnostics     Backup and Restore       Firmware Upgrade     Backup Configurations       Status     Restore Configurations       Device Info     Ssive       Ethernet Statistics     Ssive		Extender Access		
Spot Finder     Re-enter to confirm:        Access Control     Password hint (optional):     re7350       Administration     Management     Log       Diagnostics     Backup and Restore       Backup Configurations     Restore Configurations       Status     Save       Ethernet Statistics     Save	-	Extender Password:		1
Access Control     Password hint (optional): re7350       Administration     Management       Log     Diagnostics       Factory Defaults     Backup Configurations       Firmware Upgrade     Backup Configurations       Status     Save       Ethernet Statistics     Save	0.000 2000	Re-enter to confirm:		]
Management Log Backup and Restore Diagnostics Backup Configurations Restore Configurations Factory Defaults Firmware Upgrade Status Device Info Ethernet Statistics	•	Password hint (optional):	re7350	1
Log Backup and Restore Diagnostics Factory Defaults Firmware Upgrade Status Device Info Ethernet Statistics	Administration	L		_
Diagnostics Factory Defaults Firmware Upgrade Status Device Info Ethernet Statistics	Management			
Factory Defaults     Firmware Upgrade       Status     Save       Device Info     Save       Ethernet Statistics     Cancel	Log	Backup and Restor	e	
Firmware Upgrade Status Device Info Ethernet Statistics	Diagnostics	Backup Configuration	s Restore Configurations	
Status Device Info Ethernet Statistics Cancel	Factory Defaults			
Device Info Silve Cancel	Firmware Upgrade			
Ethernet Statistics	Status			
	Device Info	Save	Cancel	
WLAN Statistics	Ethernet Statistics			
	WLAN Statistics	1		
			English	~
English		0.0000	Belkin International, Inc. and/or its affiliates. All rights reserve	

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

Visit <u>http://RE7310-XXX</u> (Windows) or <u>http://RE7310-XXX.local</u> 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 <a href="http://myExtender">http://myExtender</a> (Windows) or <a href="http://myExtender.local">http://myExtender</a> (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.

LINKSYS		Dual Band Wireless Range Extender RE7850 v1 0.04.025
Wireless Basic Settings	Basic Set	ttings Help
WPS		
Site Survey	Operation Mode	
QoS	Wireless Range Extende	ar Change
Cross Band		
Spot Finder	Extender IP addre	ee
Access Control Administration	Automatic Configuration	
Management		
Log		
Diagnostics	2.4 GHz Wireless	Settings
Factory Defaults	Status:	Connected
Firmware Upgrade	Signal Strength:	<u></u>
Status Device Info	Network Name (SSID):	arachnid
Ethernet Statistics	Password:	peterparker
WLAN Statistics		peterparter
	<ul> <li>Advanced settings</li> </ul>	
	2.4 GHz Extended	
	Network Name (SSID):	arachnid_Ext
	Password:	peterparker
	<ul> <li>Advanced settings</li> </ul>	
	Status: Signal Strength: Network Name (SSID): Password: Advanced settings	Connected arachnid peterparker
	5 GHz Extended W	/ireless Settings
	Make same as router	settings.
	Network Name (SSID):	arachnid_Ext
	Password:	peterparker
	<ul> <li>Advanced settings</li> </ul>	
	Network Setup	
	Extender Name:	RE7350-EBD
	Friendly Name:	Linksys Range Extender
	Time Settings Time Zone: Automatically adjust	(GMT-05:00) Indiana East, Colombia, 🗘
	Reboot Reboot	
	Save	Cancel
	© 203	English 💿

## WPS

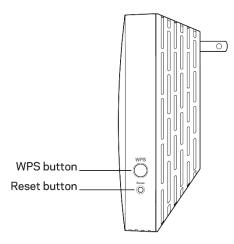
WPS makes it easy to connect your range extender to your network and connect other devices to your network through the range extender.

# 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



- 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.

fireless Basic Settings WPS Site Survey	Site	Survey	/			He Refresh Connec
QoS	Select	SSID	GHz	Signal		Security
Cross Band	0	arachnid	2.4	(î)	0	WPA2 Personal
Spot Finder	0	arachnid	5	<del>ç</del>	0	WPA2 Personal
Access Control	0	Asus	2.4	<del>,</del>	0	WPA2 Personal
Management	0	Asus	5	~		WPA2 Personal
Log	0	Batman	2.4	-	0	WPA2 Personal
Diagnostics Factory Defaults	0	Fios-KzL9T	2.4	~	0	WPA2 Personal
Firmware Upgrade	0	NETGEAR42	2.4	<b>?</b>	ø	WPA2 Personal
atus	0	NETGEAR57	2.4	<u></u>	0	WPA2 Personal
Device Info Ethernet Statistics	0	P Shitty	2.4	<b></b>	0	WPA2 Personal
WLAN Statistics	0	raomlho	5	((;	_	WPA2 Personal
	0	Scooternet	2.4	<b>?</b>	ø	WPA2 Personal
	0	trumpisachild	2.4	ŝ	ø	WPA2 Personal

Log in to the range extender's browser-based settings (see "Accessing Your Range Extender Settings" on page <u>11</u>). 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.

LINKSYS	Dual Band Wire	eless Range Extender RE7350 v1.0.04.025
Wireless Basic Settings WPS Site Survey QoS	Crabled Clisabled	Help
Cross Band Spot Finder Access Control Administration Management Log	Add a Device Wireless Device: Host name MAC Address:	\$ Save
Diagnostics Factory Defaults Firmware Upgrade Status Device Info Ethernet Statistics	Access Control List MAC Address: None	
WLAN Statistics	Save	
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# 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.

[		
ľ	Wireless Network Connection 2	
	wraith_5GHz Connected	
	wraith	
	wraith_5GHz-guest	
	wraith-guest	
	wraith2.4_6700	
	wraith5_6700	_
	Damaged_Beez2.4_Ext	-
	Connect automatically	
	8OLCVBM5	
	Other Network	-
	Open Network and Sharing Center	

- 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.

Wireless	Clients Tab	le		
2.4 GHz Extended Net	twork			
Clients Name	Global MAC	IP Address	Signal Strength	Uplink
None	None	None	- Mi	None
5 GHz Extended Netw	vork	1		
Clients Name	Global MAC	IP Address	Signal Strength	Uplink
ChristophersMBP	18:65:90:DA:89:59	10.142.1.130	Ş	2.4G
Save	Refresh	ose	Englist	1

# **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 <sup>™</sup> , WPA3/WPA2- mixed, WPA3-Personal, Wi-Fi Protected Setup <sup>™</sup>
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 for award-winning 24/7 technical support.

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