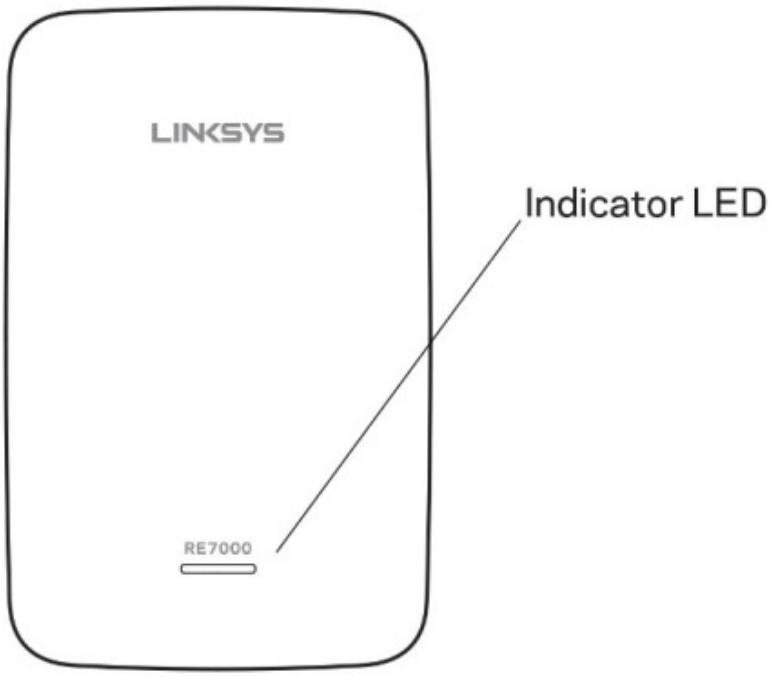
LINKSYS AC1900/AC1750 WiFi Range Extender User Guide

AC1900/AC1750 WiFi Range Extender
User Guide

Contents

Product Overview

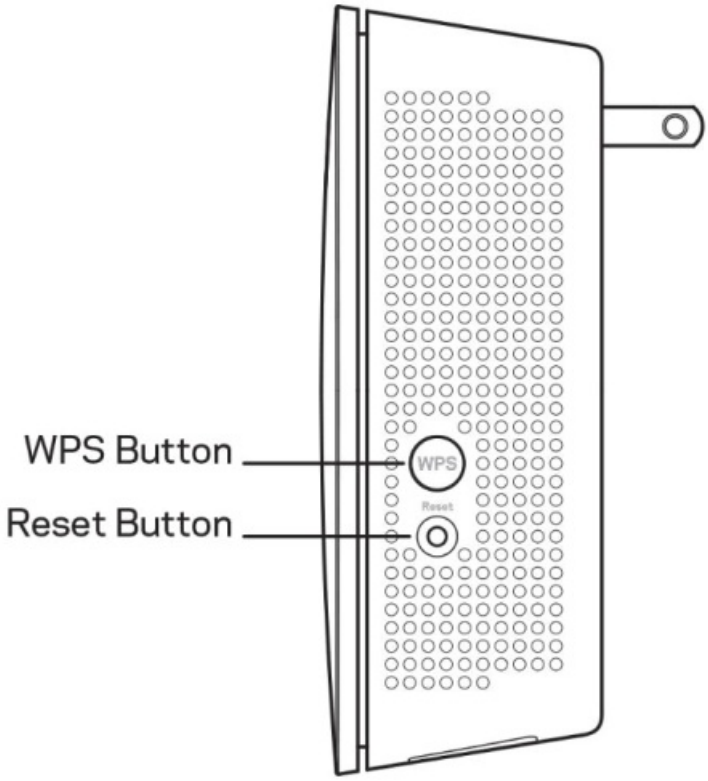
Front view



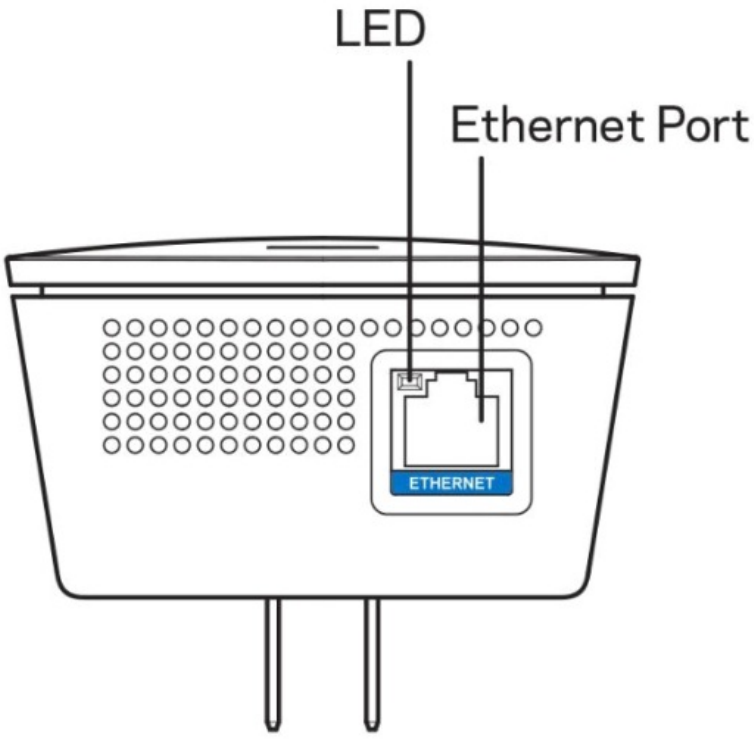
The indicator LED on the front of the range extender gives you information about power, updating, and signal strength.

Power Light	Status/ Description
Blinking Green	· Starting up. · Resetting to factory defaults. · Upgrading firmware.
Solid Green	· Ready to use.
Solid Amber	· Weak connection with the router. Fix: Unplug the extender, and move it closer to the rout er.
Blinking Amber	· Not connected to the router or other error. **Fix:** 1. Make sure your router has an Internet connection and Wi-Fi is turned on. 2. If the router is in order, unplug the extender, move it closer to the router, plug it back in, wait one minute, and reconnect to your network

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 6.
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 14).
Bottom view



LED—The LED confirms an Ethernet connection to the main router.

Ethernet Port (blue)— Connect wired devices to your wireless network with Ethernet (network) cables. The green light turns on when an Ethernet device is connected and active on this port. The light blinks when the extender is sending or receiving data over the Ethernet port.

How to Install the Range Extender

There are two ways to use your Linksys 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 RE7000 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?

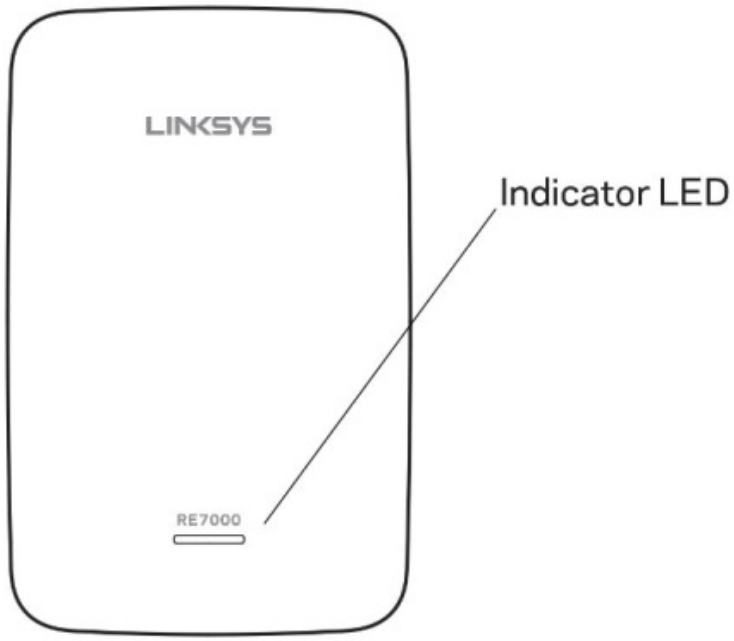
WPS is a simple way to connect Wi-Fi devices with Push Button Connect. Routers that support WPS have a button that might look like one of these symbols:

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

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

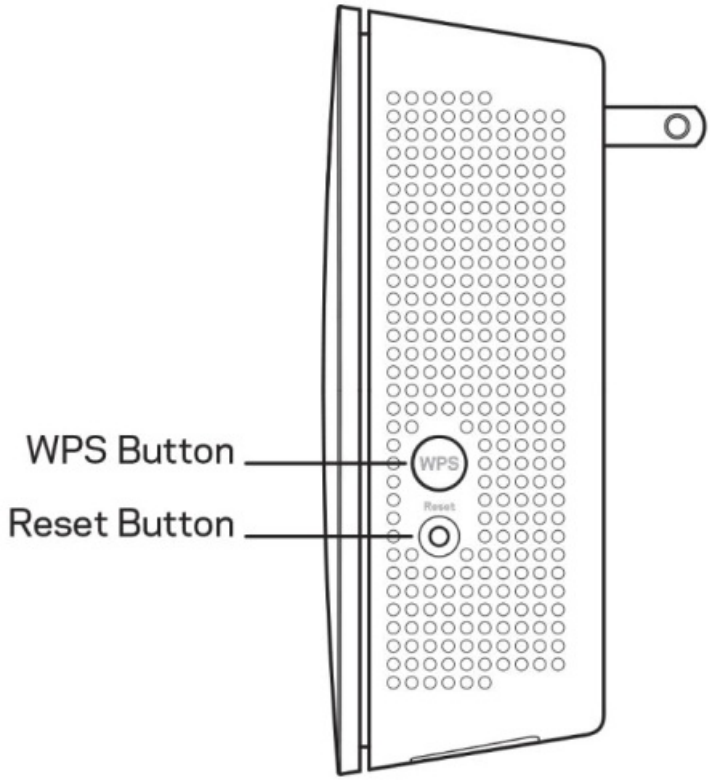
1. Plug the range extender into an electrical outlet close to your router. You can move the range extender to an ideal location later in step 5. After the range extender is plugged in, the indicator LED on the front will blink green for up to a minute.
2. Wait for the indicator LED on the front of your range extender to blink amber before going to step 3. This can take up to a minute.



3. **Extend your 2.4 GHz networks.**

   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 WPS button will light up and the indicator LED on the front of your range extender will blink green.



Watch the indicator LED on the front of your range extender to verify whether the connection was successful.

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

If it blinks amber , the connection failed. You may try again by repeating step 3 or try the browser-based setup on page 9.

4. **Extend your 5 GHz network.**

   You may skip this step if your router does not have a 5 GHz network or if you don't want to extend that network.

   a. Press the WPS button on the side of your router again. Within the next two minutes complete step 4b.

   b. Press the WPS button on your range extender again.

   The WPS button will light up and the indicator LED on the front of your range extender will start to blink green.

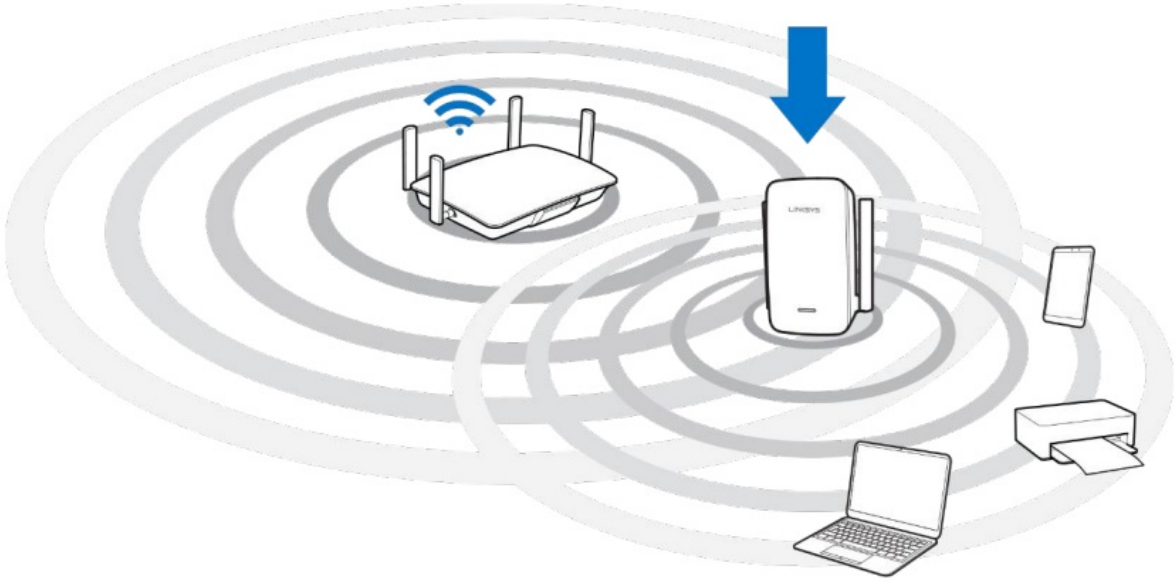
   Watch the indicator LED on the front of your range extender to verify whether the connection was successful.

   If it turns solid green , the connection was successful.

   If it starts to blink amber before it turns solid green, 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 indicator LED for connection quality.**

   It can take up to a minute for the ranger extender to boot up after moving it. During this period you will see the blinking green LED once again.

   • Solid green Ready to use.

   • Solid amber Weak connection to the router. Find an outlet closer to your router.

   • Blinking amber 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.**

   Select the extended network on your device's Wi-Fi manager. Extended networks are identified by "_Ext" added to the end of your main network name(s). Passwords are the same as those for your main networks.

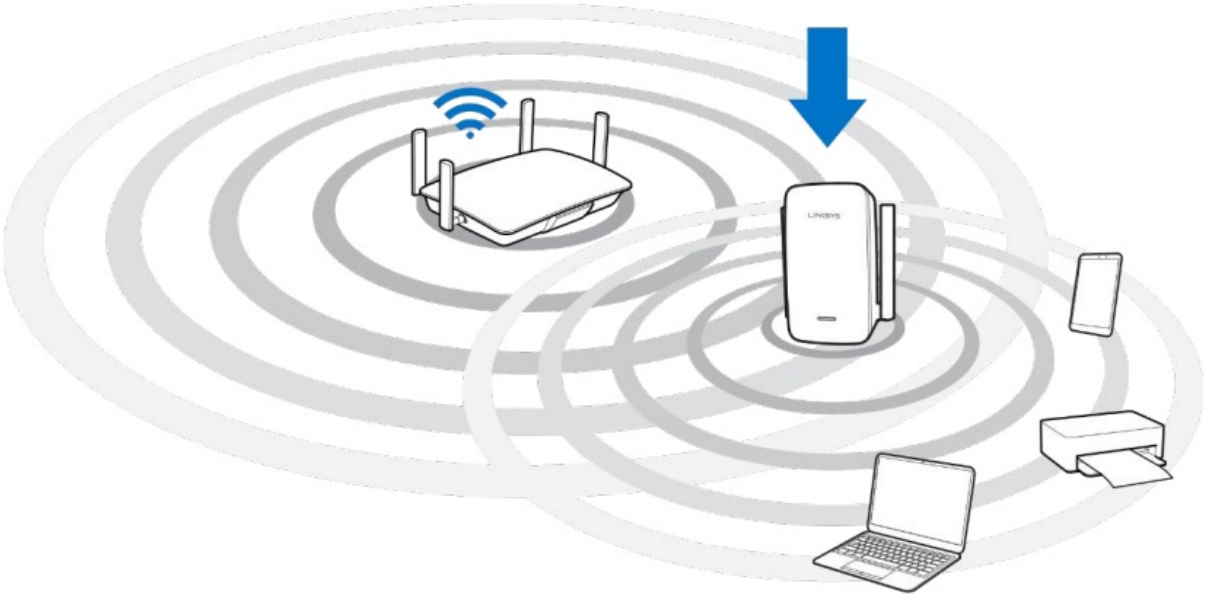
Your range extender is now set up. Enjoy your extended Wi-Fi coverage.

Browser-based setup

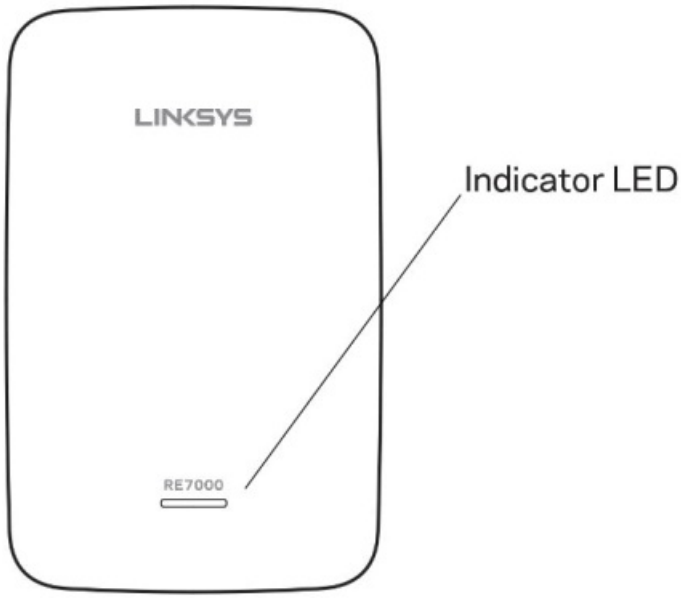
Use this setup method if you don't have a WPS button on your router, or if you don't want to use WPS to set up your RE7000.

1. **Plug in the range extender**

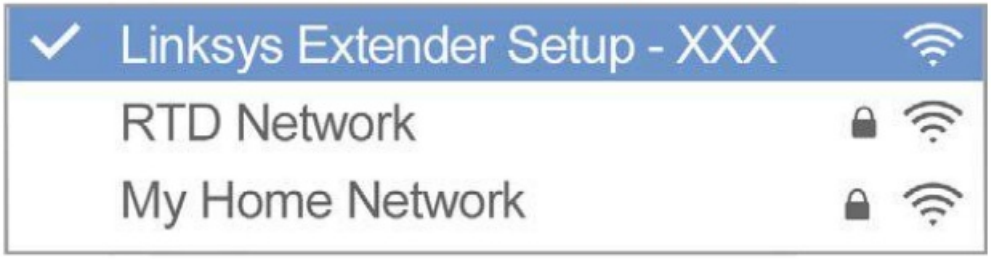
   Plug in the range extender midway between your router and the area without Wi-Fi. Using your mobile device or laptop, be sure you have at least two bars (around 50%) of your router's Wi-Fi signal at that location. If you don't have two bars, move the range extender closer to the router. You can move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



2. **Wait for the indicator LED on the front of your range extender to blink amber.**
   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.)



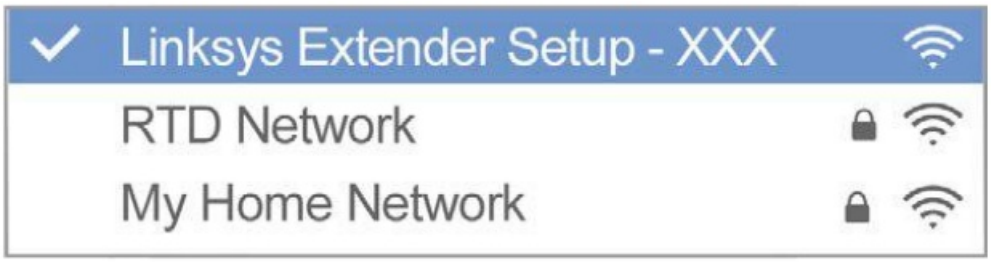
4. **Launch setup.**
   Enter **http://extender.linksys.com** (or try **http://192.168.1.1**) in a browser to complete the setup. Follow the on-screen instructions to select your network to extend, customize your extended network name and password and find the best spot using Spot Finder Technology.

http://extender.linksys.com

5. **Connect your Wi-Fi devices to the extended network you just created.**
   Select the extended network on your device's Wi-Fi manager. Extended networks are identified by "_Ext" added to the end of your main network name(s).

Setting up as wired range extender (access point)
Browser-based setup

1. **Prepare for setup**
   Be sure your router has a working Internet connection and you have an Ethernet cable long enough to connect the router to the range extender.
2. **Plug the Linksys extender into a wall outlet.**
3. **Wait for the blinking indicator LED to change from green to amber.**
4. **Use an Ethernet cable to connect the range extender to the LAN port of your router.**
5. **Connect to the Linksys Extender Setup network.**
   On a computer, phone, or tablet, connect to the Wi-Fi network Linksys Extender Setup – XXX, where XXX is the last 3 digits of your range extender's MAC address.



6. **Launch setup.**
   Enter http://extender.linksys.com (or try http://192.168.1.1) in a browser to complete the setup. Be sure to choose "As a wired range extender (access point)" when asked how you want to use your range extender. Follow the on-screen instructions to create a network name and password for your access point.
7. **Connect your Wi-Fi devices to the extended network you just created.**
   Select the extended network on your device's Wi-Fi manager. Extended networks are identified by "_Ext" added to the end of your main network name(s).

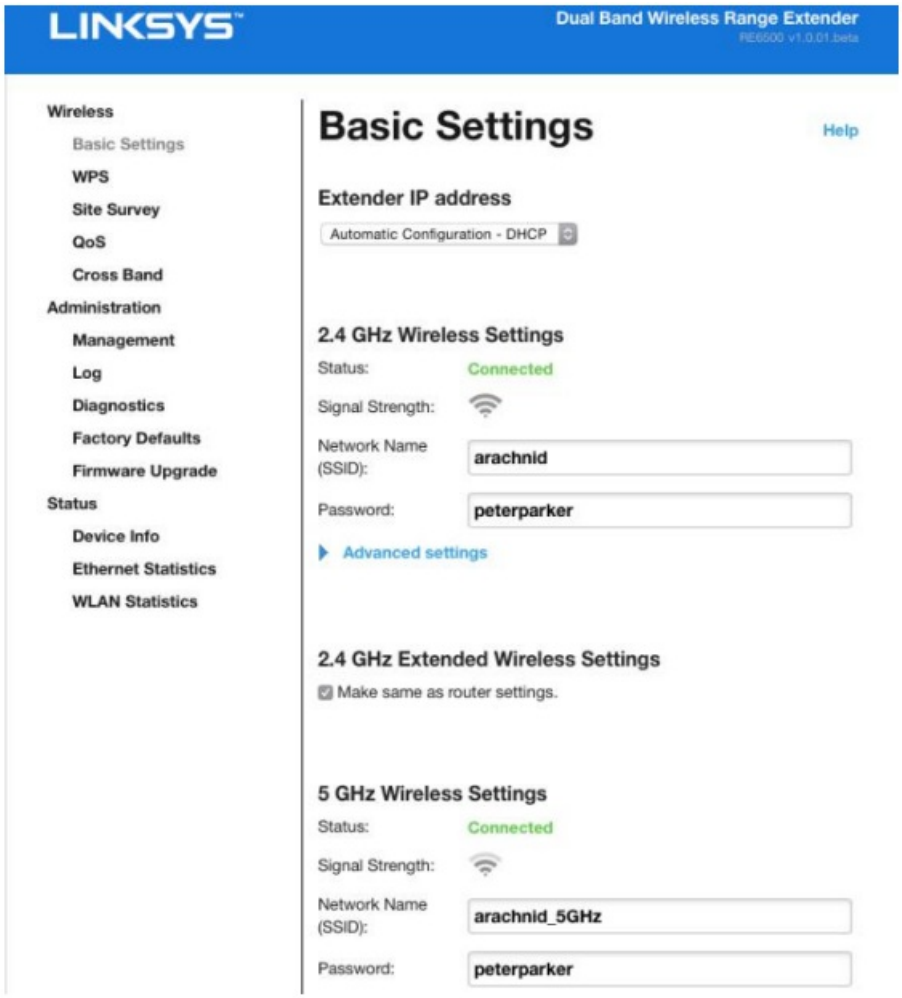
How to Access the Settings Interface

To change or view range extender settings, first connect to an extended network, e.g., MY WI-FI_Ext. In a browser, go to http://extender.linksys.com and enter the admin password.
Note— Your range extender's default admin password is "admin". It is highly recommended that you change this

after the WPS setup.
If you have not changed the range extender's default name, you can also access the settings interface when connected to your main router.
Enter into a browser **https://RE70000-XXX** (Windows) or **http://RE7000-XXX.local** or (Mac OS X or iOS).
Note— XXX is the last 3 digits of your range extender's MAC address. You can find the MAC address on the back of your RE7000. (You might have to unplug your range extender to see the MAC address label. Plug it back in and make sure the LED light is solid green before accessing 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 on your router's administrative interface.

Using Range Extender Settings

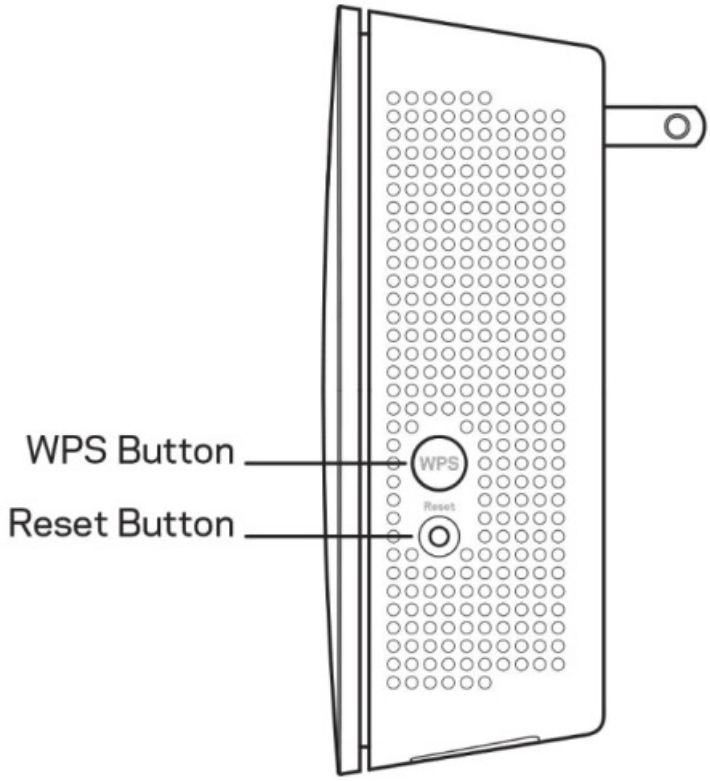
Click Help on the right side of the screen for additional information on the screen's options.
Changes to settings will not be effective until you click Save at the bottom of the screen. You also can click Cancel to clear any changes.



Using WPS

WPS makes it easy to connect your extender to your network and connect other devices to your network through the extender.
Connecting the range extender to an existing access point or wireless router (see p. 6)
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. Click the WPS button on the extender's WPS screen, OR press and hold the WPS button on the side of the extender for one second. When the connection is complete, the indicator LED on the front of the range extender will be solid green for 10 seconds. If the indicator LED blinks amber for 10 seconds, the connection failed. Go back to the previous step and try again.

c. If using the 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 extender's WPS screen.

b) Click Register on the extender's WPS screen. When the connection is complete, the indicator LED on the front of the range extender will be solid green for 10 seconds.

c) Click OK on the extender's WPS screen within two minutes or you will have to start over.

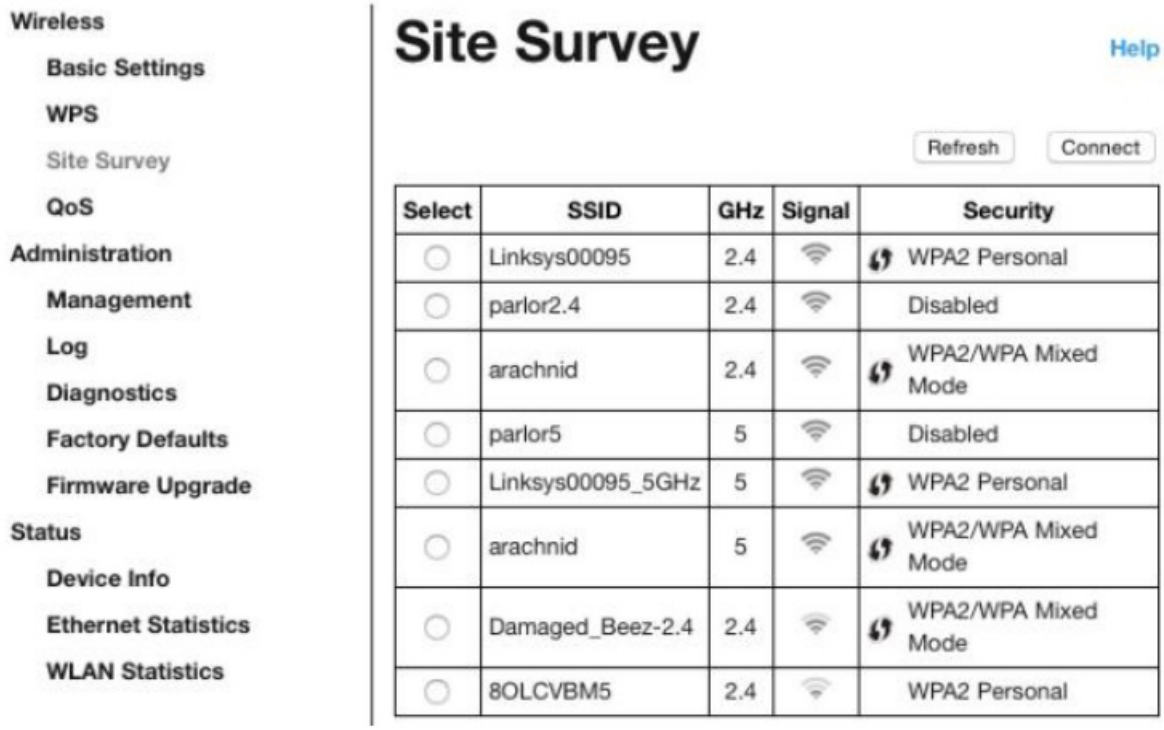
3. **Connecting with the extender's PIN**

a) On the client device, enter the PIN listed on the extender's WPS screen. (It is also listed on the product label on the back of the extender.)

b) Click OK on the client device's WPS screen within two minutes.

How to Use Site Survey

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



Log in to the settings interface (see “How to Access the Settings Interface” on page 13). 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 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 optimum performance.
- Security—The mode of security in use by the neighboring wireless networks If a network supports a Wi-Fi Protected Setup, the Wi-Fi Protected Setup icon is also displayed.

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.

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 extender.

- For first-time setup, you may need to place the extender closer to the router. After you’ve set up your extender, you can unplug it and move it to the final location.
- To reduce signal obstructions, try alternate locations for the router and extender.

- Avoid placing the router and extender near metal objects, masonry walls, and reflective surfaces such as glass or mirrors.
- Avoid placing the router and extender near other electronics that may cause signal interference.

If you're using Wi-Fi Protected Setup to connect, wait until the WPS button LED turns from solid amber to off before trying to make the connection again.

You cannot access your range extender

To access your range extender, 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 interface.

***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.

Specifications

RE7000 RE6800	
Description	Dual-band Wireless-AC Range Extender
Standards	IEEE 802.11ac, 802.11a, 802.11n, 802.11g, 802.11b
Ports	Gigabit Ethernet
Buttons	Reset, Wi-Fi Protected Setup”
LEDs	Power, Wi-Fi Protected Setup, Ethernet (link activity)
Wireless Security	Wi-Fl Protected Access” 2 (WPA2), Wifi Protected Access” (WPA), WEP
Environmental	
Dimensions	121x 87 x 60 mm
Weight	180 g
Power	Internal AC/DC power supply: 100-240V, ~ 0.5k 50/60 Hz
Certification	FCC, ICES-003, RSS-247, CE, VVi-Fi (IEEE 802.11a/b/g/n), WPAZ”, WMMS, 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/RE7000** for award-winning 24/7 technical support.

Licenses and notices for third-party software used in this product may be viewed here: **http://support.linksys.com/en-us/license**.
Please contact **http://support.linksys.com/enus/gplcodecenter** for questions or GPL source code requests.

LNKPG-00286 A00

FCC Statement
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular
installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Radiation Exposure Statement
This device complies with FCC radiation exposure limits set forth for an uncontrolled environment and it also complies with Part 15 of the FCC RF Rules. This equipment must be installed and operated in accordance with provided instructions and the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. End-users and installers must be provided with antenna installation instructions and consider removing the no-collocation statement.
This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

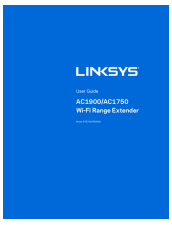
Caution!
Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
Canada Statement
This device complies with Industry Canada's license-exempt RSS. Operation is subject to the following two conditions:

1. This device may not cause interference; and
2. This device must accept any interference, including interference that may cause undesired operation of the device.

The device meets the exemption from the routine evaluation limits in section 2.5 of RSS 102 and compliance with RSS-102 RF exposure, users can obtain Canadian information on RF exposure and compliance.
This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.
The device for operation in the band 5150-5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems

LINKSYS™
Model # RE7000/RE6800

Documents / Resources

	LINKSYS AC1900/AC1750 WiFi Range Extender [pdf] User Guide AC1900 AC1750 WiFi Range Extender, AC1900 WiFi Range Extender, AC1750 WiFi Range Extender, WiFi Range Extender, Range Extender, Extender, RE7000, RE6800

References

- Wireless Range Extender
- Linksys Official Support - User Guides, Downloads, FAQs