Improving your WiFi coverage signal using a TP-Link TL-WA850RE(US) Universal WiFi Range Extender

A WiFi Range extender, or repeater, effectively contains two wireless routers, similar to the wireless router you already have in your home. One of these wireless routers picks up the existing WiFi network. It then transfers the signal to the other wireless router, which transmits the boosted signal.

This Quick Installation Guide instructs you on the basics of setting up the Wifi range extender device. Please refer to the manufacturers guide that came with the device for specific information on each function and show you the way to configure these functions appropriate to your needs.

NOTE: A hard wired ethernet connection between your network router and the energy monitor will always be preferred for the most stable and trouble free connection, but may be logistically difficult and require additional labor charges.
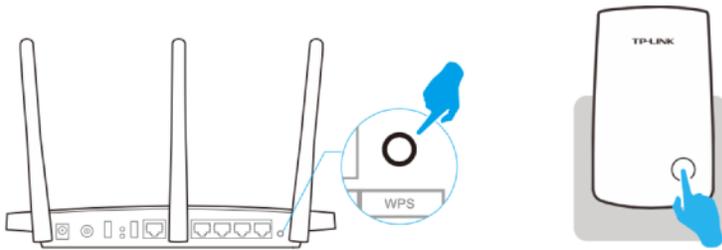

Name	Status	Indication
RE	On/Off	The extender is connected or not connected to the router.
	Blinking	WPS connection is in process.
Wireless	On	The extender's wireless function is on.
	Off	The extender's wireless function is off.
Power	On	The extender is on.
	Off	The extender is off.
▁▃▅▇ (Signal Strength)	On	Indicates the Wi-Fi connection between the extender and the router. More lit LEDs indicate a better signal strength.
Ethernet	On	A device is connected to the Ethernet port.
	Off	No device is connected to the Ethernet port.

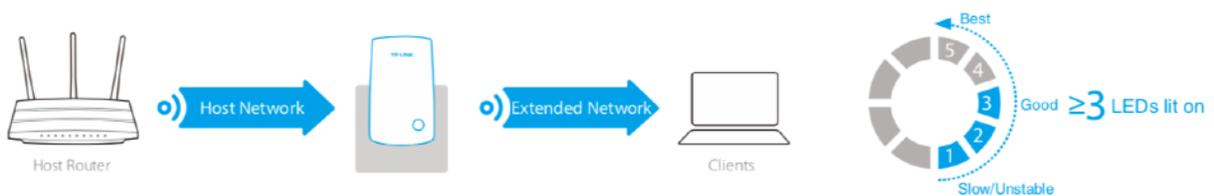| Ports or Buttons	Description
(RANGE EXTENDER)	Press the WPS button on your host router, and immediately press the button on the extender. The RE LED of the extender should change from blinking to solid on, indicating successful WPS connection.
RESET Button	With the extender powered on, use a pin to press the RESET button until all the LEDs turn on momentarily. Then release the button.
ETHERNET Port	Connect your Ethernet-only device to the Ethernet port of the extender to join the Wi-Fi network.

Configuration Method 1: via the WPS button

Using the WPS button is an easier way to extend your host network. We recommend you to use this way if your router has a WPS button. The button might look like one of these: ⟦𝟏⟧ | ⟦WPS⟧ | ⟦⟧

1. Plug the extender into a wall outlet located near your home router. Press the WPS button on your home router, and then press the button on the extender within 2 minutes. Make sure the extender is within close range of your router for this step.

2. Wait until the RE LED changes from blinking to solid on, which indicates that the WPS connection is successful. If not, please refer to Method Two: Via a web browser.

3. Now relocate the extender approximately **half way** between your router and the energy monitor.

Wait until the ▮▮▮▮ LEDs are lit. Make sure the extender is in a location with 3 or more LEDs lit. If not, relocate it closer to the router to achieve better signal quality.

NOTE: It is important to restart the energy monitor so that it can be associated with the new extended WiFi network.

NOTE: The Wi-Fi extender must be configured with the same network name (SSID) that your energy monitor was connected to. If your Wi-Fi extender has a different network name (*Network Name*_EXT for example), then the energy

monitor will not see the new network and need to be programmed to connect to this new network name (SSID).

Configuration Method 2: via a web browser or smart phone app

Unfortunately, due to the various model numbers and software updates, please refer to the manufacturers documentation supplied with the device for details on this method.

Below is a link will full details and instructions:

https://www.tp-link.com/us/download/TL-WA850RE.html

NOTE: It is important to restart the energy monitor so that it can be associated with the new extended WiFi network.

Disclosures:

THE EXTENDER WILL NOT AUTOMATICALLY BE UPDATED IF YOU CHANGE YOUR HOME NETWORK NAME OR PASSWORD IN THE FUTURE. THE EXTENDER WILL NEED TO BE RESET IF YOUR NETWORK OR PASSWORD CHANGES.

Customer premise equipment necessary for a strong and secure connection to the provided energy monitoring equipment is the responsibility of the homeowner.

Hawaii Energy Connection, LLC can only offer limited support on 3rd party products and does not cover warranty replacements. Support is also limited on these solutions. Our intention in providing these recommended solutions is to assist you in overcoming customer premises equipment challenges that my affect the energy monitoring equipment performance.