


What should I do if I fail to configure TP-Link Range Extender?

Troubleshooting

Updated 02-20-2023 07:40:04 AM  231571

This Article Applies to: 

If you have already tried to configure the range extender but it failed, please check the following troubleshooting.

Some tips before troubleshooting:

1. If there is no RE light on some range extenders. It may have a Signal light or 2.4G/5G light. Please refer to the installation guide to check whether the extender is connected to the main network.
2. End-device means a computer, laptop, front-device(s) means your modem or main router, etc. which the TP-Link router is connected.
3. DFS Function: For Dual-Band Range Extender if there's only a 2.4G LED light on, then 5G light off, please help fix the main router's 5G to band1 (channel 36-48), then the RE should be able to connect to the Router in 5G.
4. Router Advanced Features: Check those main router functions that may have a bad influence on RE to connect and work stably:

[Fix Unstable Connection on the Range Extender by Changing Router Advanced Features | TP-Link](#)

Case 1: The RE light is off after the configuration

1. Check if the user enters the correct Wi-Fi password on the extender.
 - a. By forgetting Wi-Fi and reconnecting to the home Wi-Fi, enter the password again.
 - b. on iPhone, go to WLAN-> highlight the connected network name, and enter iPhone's password to see the password.
2. Put the range extender 2-3 meters away from the router. Factory reset it by pushing the reset button for a few seconds. And configure the range extender from scratch.
3. If possible, suggest giving a different name for 2.4G and 5G Wi-Fi on the Main router. It will help us to locate which band has a connection issue with the router.
4. If the RE light is finally on but still has no internet access, please go through and refer to Case Two or Three. If the RE light is still off, turn off and on the range extender and wait two to 2 minutes then check if the RE light will be lit.
5. Upgrade the range extender to the latest firmware and reconfigure it. Click [here](#).
6. Make sure the main router doesn't enable any security settings, like MAC Filtering or Access control. And Authentication Type and Encryption type are Auto on the router.
7. Try resetting the extender completely. Use a pin to press the button for 1 second to reset the extender. Also, once you reset, you need to reconfigure the extender following the FAQ:

[How to configure Range Extender via Tether APP](#)

8. Log into the range extender by using **www.tplinkrepeater.net** or the IP address assigned by the router (find the IP address from the router's interface). Take picture of the Status page and save the system log (Save the log within 3-5 minutes after the range extender reboot).

Case 2: The RE light is on, and the end devices can not connect to the Wi-Fi of the range extender.

1. Check the wireless signal strength of the end devices. If only one end device cannot join the Wi-Fi of the range extender, remove the profile of the wireless network and connect it once again. And connect it to your router directly to see if it can connect.
2. If multiple devices cannot connect to the extender SSID, you may also follow the below link to see if it can configure it well:

[What's the solution if my TP-Link range extender can't connect to my router properly?](#)

Case 3: The RE light is on, and the end devices can connect to the Wi-Fi of the range extender but have no network access.

1. Do not set the same SSID for the range extender and router. Otherwise, please reset the range extender and create a separate SSID.
2. Upgrade the range extender to the latest firmware and reconfigure it. Click [How to upgrade the firmware of my range extender](#).
3. Try multiple end devices. If only one end device doesn't have internet access, check whether the end device is obtaining an IP Address automatically. What if it connects to the main router directly?
4. Connect the same end device to the main router directly to check its internet connectivity. Check its IP address and Default Gateway when connected to the router and range extender. (click [here](#))
5. Make sure the main router doesn't enable any security settings, like **MAC Filtering or Access control**.
6. Log into the range extender by using **www.tplinkrepeater.net** or the IP address assigned by the router (find the IP address from the router's interface). Take picture of the Status page and save the system log (Log taken within 3-5 minutes after the range extender reboot).
7. In this case, we may also follow the below link to see if we can configure it well:

[What's the solution if my TP-Link range extender can't connect to my router properly?](#)

Note:

If the error message "**No Host Network Connection**" pops up after "**the apply settings**", it's probably because the router's 5G is using the DFS channel, please try to disable Band Steering on the router and change the 5G channel to Band 1(36, 40, 44, 48).


If all the troubleshooting can not fix the issue, you try the suggestions on the forum:

[Recommended settings on the host router to work well with TP-Link Range Extenders](#)

Please contact [TP-Link support](#) if the steps above do not solve the problem. Let us know the model number of your Router and which band you expand, 2.4GHz or 5GHz.

TP-Link Range Extender Stops Working

Troubleshooting

Updated 02-16-2023 10:12:15 AM  3318

This Article Applies to:

If your TP-Link range extender was working fine before, but it failed to connect to the host router suddenly, the following troubleshooting may help you figure it out.

Case1. The extender stops working with nothing changed on the host router

1. Try rebooting your router and the extender.
2. Ensure that your extender is within range of the router.
3. Ensure that the range extender is not affected by interfering devices such as metal objects, fish tanks, microwaves, Bluetooth devices, and so on.
4. If the above steps didn't resolve the issue, try resetting the extender completely. Use a pin to press the button for 1 second to reset the extender. After resetting, you will need to reconfigure the extender following the FAQ:

[How to configure Range Extender via Tether APP](#)

Case 2. The extender stops working after changing the host router

If the host router was changed, you need to reset the extender and reconfigure it again.

Use a pin to press the button for 1 second to reset the extender. Also, once you reset, you need to reconfigure the extender following the FAQ:

[How to configure Range Extender via Tether APP](#)

Case 3. The extender stops working after changing some settings on the host router

If you recently changed the settings on your host router, such as Access Control settings, channel, etc. You may try to check and modify the settings on the host router by following the instruction:

[Recommended settings on the host router to work well with TP-Link Range Extenders](#)

If the troubleshooting steps are still not working, try upgrading the firmware to the latest version, you can refer to the FAQ for instructions on how to do this:


[How to upgrade the firmware of my range extender \(new logo\)](#)

If the firmware update still cannot fix the issue, please [contact support](#) and provide us with the following info for further troubleshooting:

1. The LED status of the extender, you can take a photo.
2. The IP address when the device (phone or laptop) is connected to the extender.
3. The IP address when the device (phone or laptop) is connected to the router.
4. The model number of your main router.
5. Firmware of the extender.

How to improve my wireless speed or range

User Application Requirement

Updated 06-29-2022 01:53:37 AM  1390858

This Article Applies to: 

Overview:

To improve the wireless speed or range, it is highly recommended to work on the following common solutions:

- [Choosing the best location](#)
- [Optimizing configuration of the device](#)
- [Upgrade the equipment](#)

Symptom:

Weak wireless signal showed, low wireless speed or range.

Cause:

The factors most frequently affecting the wireless signal:

1) Intrinsic factors:

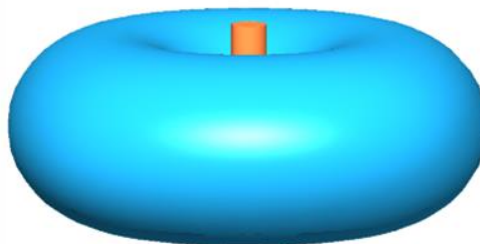
•Transmission Distance.

Regarding on the wireless device particularly working on 5GHz band, it will be more sensitive to the obstacle. Though there will be more clear channels than those of 2.4GHz bands, the wireless signal will be reduced significantly and transmit in shorter range due to higher frequency.

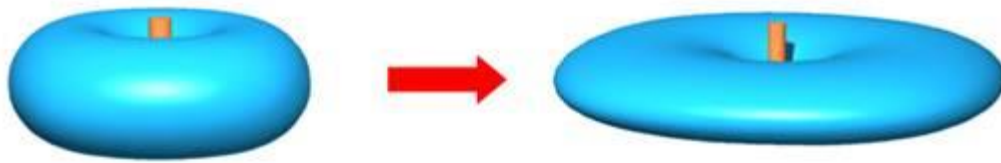
•Antenna.

Omni-directional antennas and directional antennas

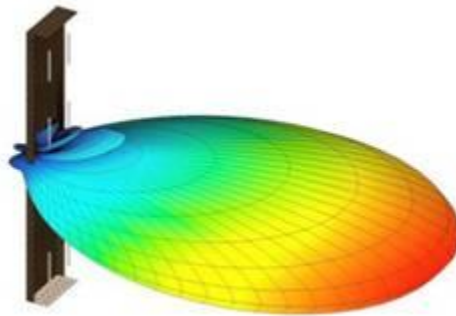
Omni-directional antennas are resembled in our home products like wireless router or wireless ADSL2+ Modem Routers, they radiate horizontally all around, but are weaker upward or downward as the picture shows.



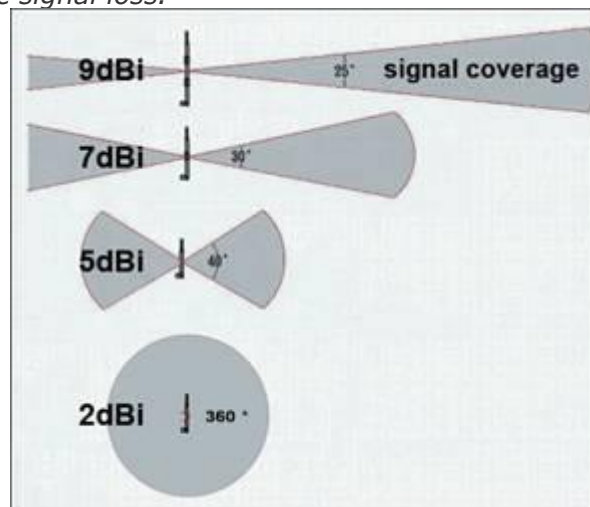
While a directional antennas radiate strongly in a particular direction which are usually used for high power outdoor products. The gain of a directional antenna increases, also with the coverage distance, but the effective coverage angle decreases. Generally, the higher gain value of an antenna, the better directional ability will be.



For directional antennas, the lobes are pushed in a certain direction and little energy is there on the back side of the antenna. Please refer the picture below.



This phenomenon will be more significant once you deploy the High-Gain antenna, so we recommend that to confirm precise on horizon direction otherwise there be unexpected dramatic signal loss.



•Wireless Communication Performance.

Higher transmission rates, better performance

2) Extrinsic factors:

- Physical Barriers, such as wall or clapboard and so on;
- Other similar devices and other sources such as microwave ovens, cordless phones or other technologies that use the same band as Bluetooth
 - There are more than one AP or wireless routers working in the same Channel.
- The location where an AP or wireless router is placed. You'd better to place the device at a higher location to reduce the barrier's countercheck.

Solution:

I Choosing the best location

- 1) Antennas should be positioned for best location and direction

- Deploy the antenna in good location and correct angle, and also make sure your wireless client devices are in the coverage;
- For multi-story buildings wireless coverage, we recommend to placing antennas at 45 degrees (diagonally) or 0 degrees (straight out parallel to the floor) which will be more effective. Since antennas always transmit weakly at the base, do not place your wireless client device at the bottom of TP-Link wireless router or access point.

2) Try best to avoid the extrinsic interference

- Avoiding the physical interference in the wireless coverage, each wall or ceiling will have a negative effect on wireless radio particularly the ones built by solid metal material ;
- Keep your device away from various electromagnetic noise sources that generate RF noise, like microwaves, Monitors, electric motors, copying and fax machines, etc.

I Optimize configuration of the device

- For TP-Link wireless products, we recommend to do corresponding settings to avoid the interference from other networking and radio frequency equipment.

First, please log into the product and you can refer to this [link](#) as guidance. Here we take TL-WR1043ND user interface as an example and then please go to **Wireless->Wireless settings** and change the channel settings, the default value is Auto and here we recommend select 1, 6 or 11 if you suffer high wireless interference.

For 802.11b&g, there are 14 channels designated in the 2.4 GHz range and three non-overlapping channels recommended: 1, 6 and 11 (1, 7 and 13 in part European region, please obey your local regulations or laws).

Sometimes the "well-known" channels will be also crowded and we recommend to select the appropriate one adjusted to your local environment.

I Upgrade the equipment

- If you want to have a big improvement immediately and boost the wireless throughput, you can also choose to upgrade a combination of [antennas](#) or other [wireless equipment](#) to enhance the wireless transmission;
- If you are in a congestion wireless environment, the wired connection can be taken into consideration and the [TP-Link Powerline equipments](#) is a good alternative.

How to Connect Your Wireless Devices to the Range Extender via WPS as AP mode (Blue UI)

Configuration Guide

Updated 06-28-2022 02:42:42 AM  62979

This Article Applies to: 

Wi-Fi Protected Setup (WPS) provides an easier approach to set up a security-protected Wi-Fi connection.

Wireless devices that support WPS, including Android phones, tablets, most USB network cards, can be connected to your extender through this method (not supported by iOS devices).

1. Visit <http://tplinkrepeater.net>, and log in with the username and password you set for the extender.

2. Go to **Settings > Wireless > WPS**.

3. Enable **WPS**.

WPS

Enable WPS:

On ☒

4. Connect via WPS:

- AP's PIN: Enable **AP's PIN** and enter the PIN on your device. You can click **Generate** to get a new PIN or click **Default** to restore the PIN to its factory one.

AP's PIN

AP's PIN:

On ☒

PIN:

59409205

[Generate](#)

[Default](#)

- Push Button (Recommended): Click **Connect** and push the WPS button on the client device.
- PIN code: Enter the client's PIN, and click **Connect**.

WPS Wizard

Select a WPS connection method:

☐ Push Button (Recommended)

☒ PIN code


Client's WPS PIN code:

[Connect](#)

Get to know more details of each function and configuration please go to [Download Center](#) to download the manual of your product.

How to adjust Wi-Fi coverage of TP-Link Range Extender (new logo)

Q&A of functional explanation or specification parameters

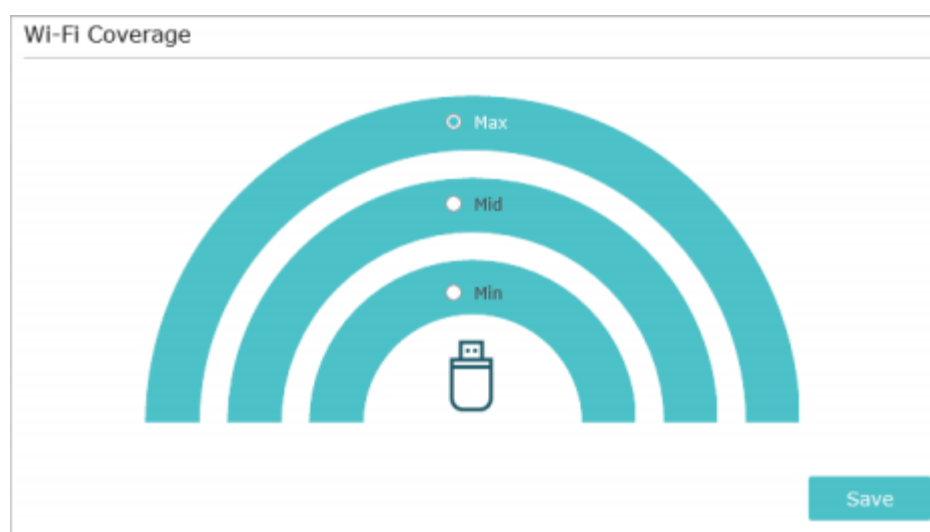
Updated 06-28-2022 02:25:22 AM  85511

This Article Applies to: 

You can set the extender's Wi-Fi coverage depending on how large you want your Wi-Fi area to be.

Here takes TL-WA820RE as demonstration:

1. Log into the Web GUI of the range extender. If you don't know how to do that, please refer to [How to log into the Web GUI of my 11N Range Extender \(new logo\)?](#)
2. Go to **Settings > Advanced Settings > Wi-Fi Coverage**.
3. Select **Min**, **Mid** or **Max** to adjust your Wi-Fi coverage of the extender.



4. Click **Save**.

Get to know more details of each function and configuration please go to [Download Center](#) to download the manual of your product.

How to Boost Your Wi-Fi Signal

Before You Buy

Updated 11-23-2021 06:28:35 AM  383234

This Article Applies to: 

What if the Wi-Fi signal coverage is not good because of the Wi-Fi dead zone? Below is the comparison of Range Extenders, Powerline Adapters, and Mesh devices, etc, you may choose an appropriate solution based on your own requirements.

Range Extender (RE)

Wi-Fi Range Extenders boost the existing Wi-Fi in your home by receiving the wireless signals from your router and repeating them with powerful amplifiers and antennas, extending your coverage by up to twice the range. Just place the range extender about halfway between your router and the Wi-Fi dead zone. The extender will capture and repeat the Wi-Fi signal from your router to the surrounding areas to expand your wireless network coverage. Your devices can connect to the network either through your router or extender as you move around your house. So sudden signal drops or Wi-Fi dead zones become a thing of the past.

Note: Like wireless routers, range extenders also suffer from interference from obstacles such as concrete walls, metal objects, and microwaves. To avoid such obstacles for the best wireless performance. All TP-Link range extenders have a Signal LED to indicate the signal strength a range extender gets from the main router, which can help you find the best location for your extender.



Power line Adapter (PLC)

Powerline networking solutions transmit data and extend your home network using existing electrical wiring. Eliminating the need for expensive and complicated Ethernet cables. Thick walls and similar obstacles aren't an issue the way they might be with a range extender.

Note: Both powerline adapters will need to be on the same electrical circuit. If your home is wired on multiple circuits, you'll need to check that the section of your home with the router and the section you want to add coverage to are on the same circuit.



Mesh

If you still encounter Wi-Fi dead-zones when walking around your home, you can take TP-Link's whole-home mesh Wi-Fi solutions into consideration. Mesh Wi-Fi network, multiple network nodes work together to form a single, unified network that shares the same Wi-Fi settings. To know more about it, refer to <https://community.tp-link.com/en/home/stories/detail/407>

TP-Link currently provides two mesh Wi-Fi solutions:

- **Deco: Whole new mesh ecosystem**

Setting up a whole new Wi-Fi system is a good choice if you want to have a new and high-quality system. For more details, please refer to <https://www.tp-link.com/support/faq/1427/>

When Deco works with the existing router, here are two typical connection structures.

Topology 1:



Topology 2---Ethernet backhaul, please refer to <https://www.tp-link.com/support/faq/1794/>



- **One Mesh™:** Cost-effective mesh network with existing TP-Link devices

One Mesh network can provide stability, good performance network for you. If you already have a One Mesh router like Archer A7, you can just add a repeater to build a Whole-Home WiFi System.

To know more about an OneMesh™ network, refer [here](#).



Referring to the following summary and your house situation to choose the best Wi-Fi dead zone killer.

Scheme Comparison	Range Extender	Power Line Adapter	Mesh	Deco P7&Deco P9
One- Story Home	◇◇◇◇◇	◇◇◇◇◇	◇◇◇◇◇	◇◇◇◇◇
Multi-Story Home	◇◇◇	◇◇◇◇◇	◇◇◇◇◇	◇◇◇◇◇
How to extend	Wireless	Power Line	Wired or Wireless	Wired, Wireless, or Powerline
Implementation Conditions	No	Under the same power circuit	No	Under the same power circuit for

				Powerline transmission
Configuration Convenience	App Easy deployment	Plug and Play	App Easy deployment	App Easy deployment
Reliability	Fair	Good	Great	Excellent
Product Highlights	AC Passthrough	AC Passthrough (the model with letter"P")	Ethernet Backhaul	Ethernet and Powerline Backhaul
Scheme Details	Click here >>	Click here >>	Click here >>	Click here >>

◇: Recommendation Index

Disclaimer: Maximum wireless transmission rates are the physical rates derived from IEEE Standard 802.11 specifications. Range and coverage specifications along with the number of connected devices were defined according to test results under normal usage conditions. Actual wireless transmission rate, wireless coverage, and a number of connected devices are not guaranteed and will vary as a result of 1) environmental factors, including building materials, physical objects, and obstacles, 2) network conditions, including local interference, volume, and density of traffic, product location, network complexity, and network overhead and 3) client limitations, including rated performance, location, connection quality, and client condition.