TP-LINK®

RE590T
User Guide

AC1900 Touch Screen Wi-Fi Range Extender

REV1.0.0 1910011426

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About This Guide

This guide provides details of each function and shows how to configure the extender appropriate to your needs. In addition to this guide, a Quick Installation Guide is also released with each TP-LINK extender, you are suggested to configure your extender for quick Internet setup by following the published Quick Installation Guide before you get started with a further configuration.

Conventions

In this guide the following conventions are used:

Convention	Description
range extender/ extender	Stands for AC1900 Touch Screen Wi-Fi Range Extender without any explanation.
parameters	Parameters provided in the screenshots are just references for setting up the device, which may differ from the actual situation. You can set the parameters according to your demand.
screenshots	The demonstrated screenshots may look a little different from the actual screen display or web page of your device due to the various firmware versions. Please just configure your product based on the actual screen display or web page.
Blue Italic	Hyperlinks are in blue italic. You can click to redirect to a website or a specific section.
Blue	Contents to be emphasized and texts on the screen and web page are in blue, including the menus, items, buttons, etc.
>	The menu structures to show the path to load the corresponding page. For example, Advanced > Wireless > MAC Filtering means the MAC Filtering function page is under the Wireless menu that is located in the Advanced tab.
Note:	Ignoring this type of note might result in a malfunction or damage to the device.
Tips:	Indicates important information that helps you make better use of your device.

Chapter *1*

Get to Know About Your Extender

This chapter introduces what the extender can do and shows its main features and appearance.

This chapter contains the following sections:

- *Product Overview*
- *Main Features*
- *Panel Layout*

1. 1. Product Overview

What This Product Does

The RE590T AC1900 Touch Screen Wi-Fi Range Extender is dedicated to Small Office/ Home Office (SOHO) wireless network solutions. It will enlarge your existing wireless network and mobility while also allowing you to connect a wired device to a wireless environment. Increased mobility and the absence of cabling will be beneficial for your network.

Expanded coverage by up to 10,000 sq. ft.

Three external antennas help to extend wireless coverage by up to 10,000 sq.ft. and eliminate Wi-Fi dead zones. The dual core processor ensures excellent performance for your Wi-Fi range extender.

Beamforming Technology

Beamforming technology allows the range extender to locate wireless devices and concentrate its wireless signal strength towards them to form stronger, more reliable connections.

Effortless Touch Experience

With just a few taps on the 4.3 inch capacitive touchscreen, the intuitive menu allows you to set up your range extender and manage your network in a matter of seconds.

Lag-free Online Gaming and 4K Streaming

Wireless 802.11ac technology provides combined speeds of up to 1900Mbps on the simultaneous 2.4GHz (600Mbps) and 5GHz (1300Mbps) bands. With speeds like that, you can enjoy lag-free online gaming and stream Ultra-HD video at the same time, on multiple devices, and still have plenty of network capacity left over.

Gigabit-Class Wired Performance

Four Gigabit Ethernet ports support blazing-fast wired connections that reach speeds 10x greater than Fast Ethernet. This allows the RE590T to provide optimal performance for connected game consoles, PCs, smart TVs, etc.

Technology Made Beautiful

The elegantly designed body exudes a natural aura of continuity in any environment. With the RE590T, you can proudly integrate a gracefully designed range extender into your personal decor.

1. 2. Main Features

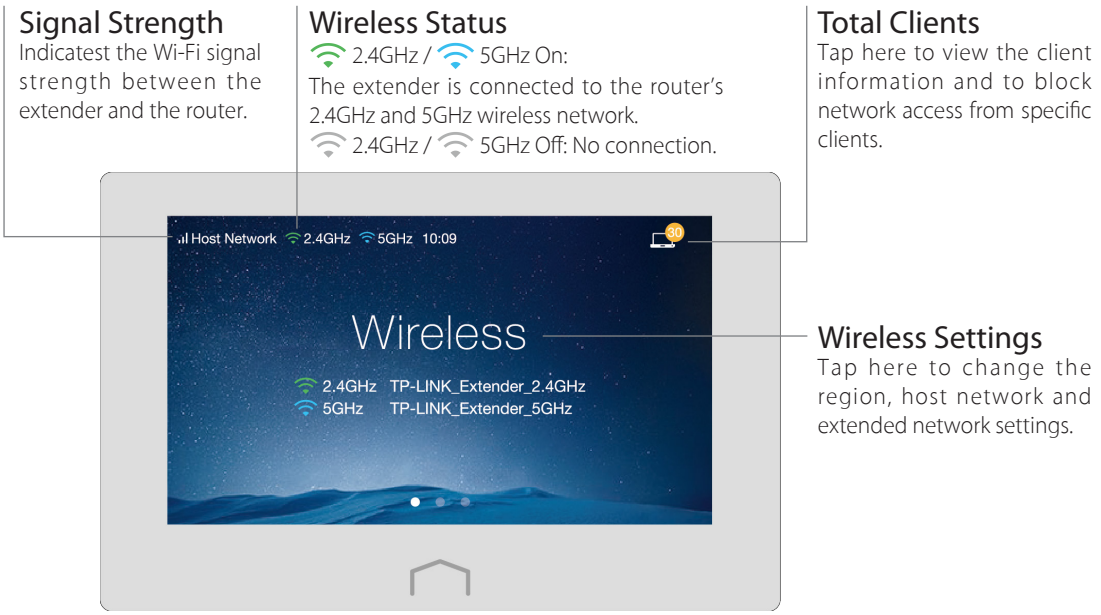
- Extend the Range of Any Wi-Fi Network and manage the extended network using the 4.3 inch capacity touchscreen.
- Three external antennas utilize Beamforming technology to provide reliable connections and extended coverage by up to 10,000 sq ft.
- Wireless 802.11ac technology provides up to 1900Mbps expanded dual band wireless speeds, ideal for lag-free online gaming and 4K video streaming.
- Gigabit Ethernet ports act as a wireless adapter to connect a wired device to your network at gigabit speeds.
- Dual core 1GHz processor ensures no interruption when simultaneously processing multiple wireless or wired tasks.
- TP-LINK Tether App allows easy access and management using any mobile device.
- Works with any Wi-Fi router or wireless access point.

1. 3. Panel Layout

1. 3. 1. Top View

The extender features a 4.3 inch colorful touchscreen display, you can configure and manage your extender with just a few taps.

Home Screen



Menu Screen

Tap the icons on the menu screen to perform various function, such as wireless Settings, WPS, Devices Control, ect

1. 3. 2. The Back Panel

The extender's back panel shows the connection ports, buttons and antennas. Refer to the following for detailed instructions.

Item	Description
Power	For connecting the extender to power socket via the provided power adapter.
Power On/Off	The switch for the power. Press it to power on or off your extender.
Ethernet (1, 2, 3, 4)	Used for connecting to Ethernet-enabled device, such as smart TV, game console, desktop, DVR, etc.
Reset	With the extender powered on, use a pin to press and hold the Reset button until the RE590T logo displays.
Antennas	Used for wireless operation and data transmit. Upright them for the best Wi-Fi performance.

Chapter 2

Quick Setup for Internet Connection

This chapter introduces how to connect and configure your extender to extend the existing wireless coverage by repeating the wireless signal. Furthermore, the extender can also be used as a wireless adapter that connects Ethernet-only devices to your Wi-Fi network.

This chapter contains the following sections:

- *Connec the Hardware*
- *Configure the extender*
- *Relocate the extender*
- *Enjoy the Internet*
- *Entertainment Adapter*

2. 1. Connec the Hardware

1. Install the antennas and position them vertically.
2. Plug the extender's adapter into an elextrical outlet near your router. Then turn on the extender and wait until the system boot on the screen completes.

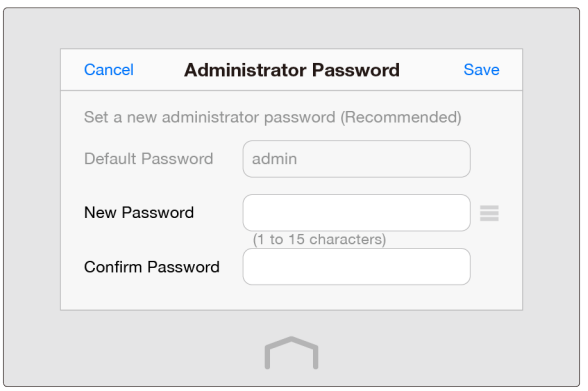
2. 2. Configure the extender

Here we will introduce your three methods to configure the extender. Method ONE is recommended.

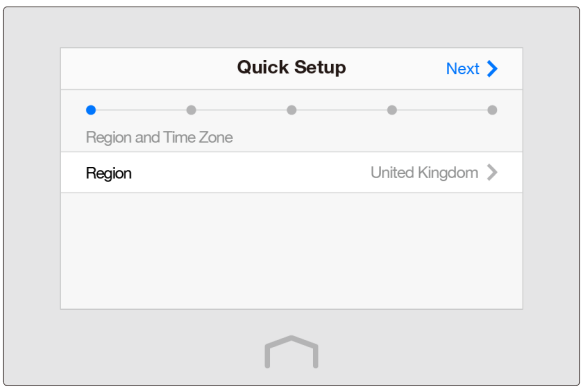
2. 2. 1. Method ONE: Using Touchscreen App

The touchscreen quick setup makes configuring the extender a breeze.

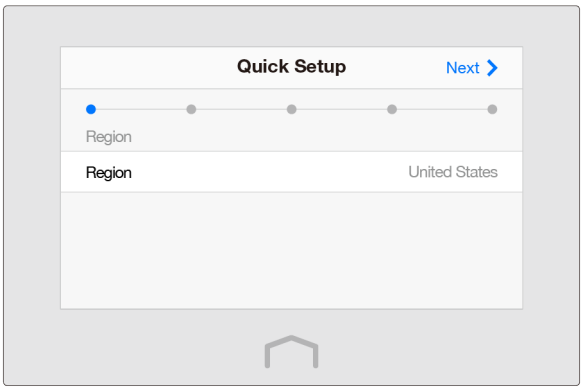
1. At first login, create a new administrator password (recommended) and tap Save.



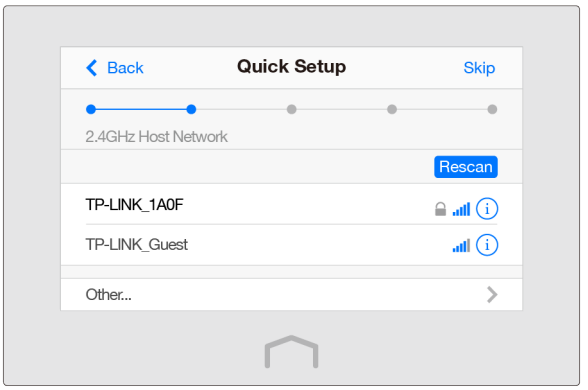
2. Select your region, then tap Next.

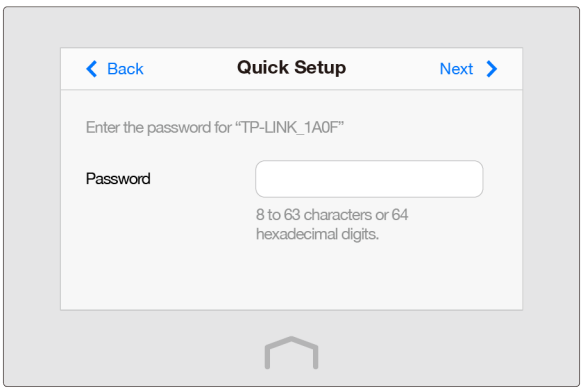


Note: Per FCC regulations, all Wi-Fi products marketed in the U.S. are fixed to the U.S. region.



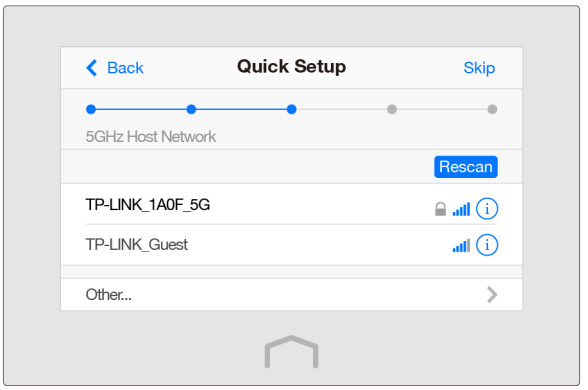
3. Select your host router's 2.4GHz wireless network and enter its password, then tap Next.

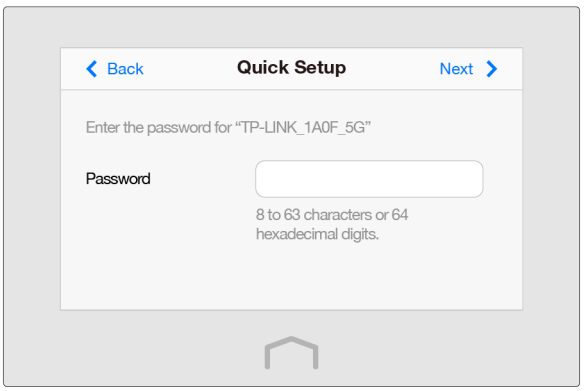




4. Select your host router's 5GHz wireless network and enter its password, then tap Next.

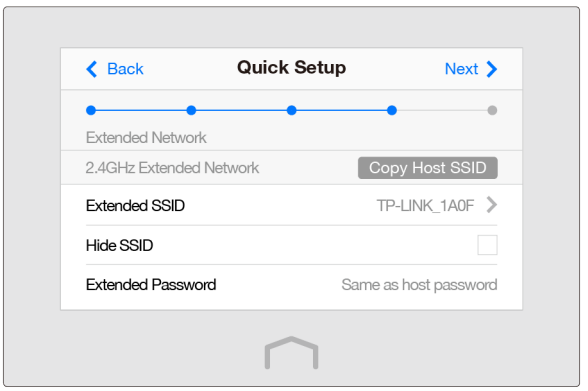
Note: If your host router does not support the 5GHz band, tap Skip.



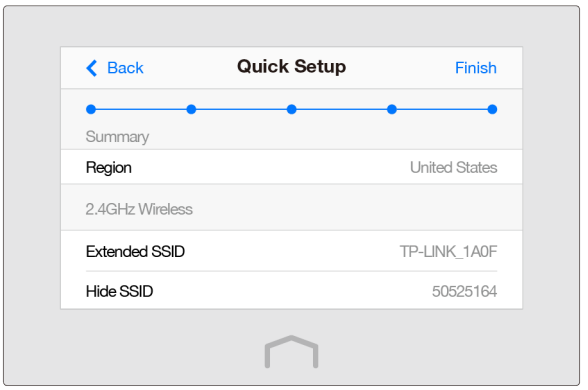


5. Either keep the default SSIDs or customize them for both 2.4GHz and 5GHz extended networks, then tap Next.

Note: Please swip up for the 5GHz settings.



6. Verify your wireless settings and tap Finish. Corresponding Wi-Fi signal icon(s)(2.4GHz / 5GHz) at the top left of the touchscreen should be lit.



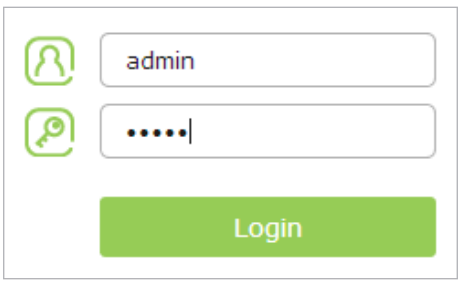
2. 2. 2. Method TWO: Using WPS (Wi-Fi Protected Setup)

1. Press the WPS button on your host router.
2. Tap WPS on the menu screen of the extender, and tap Start WPS. Once the WPS connection is successful, a success message dispalys.

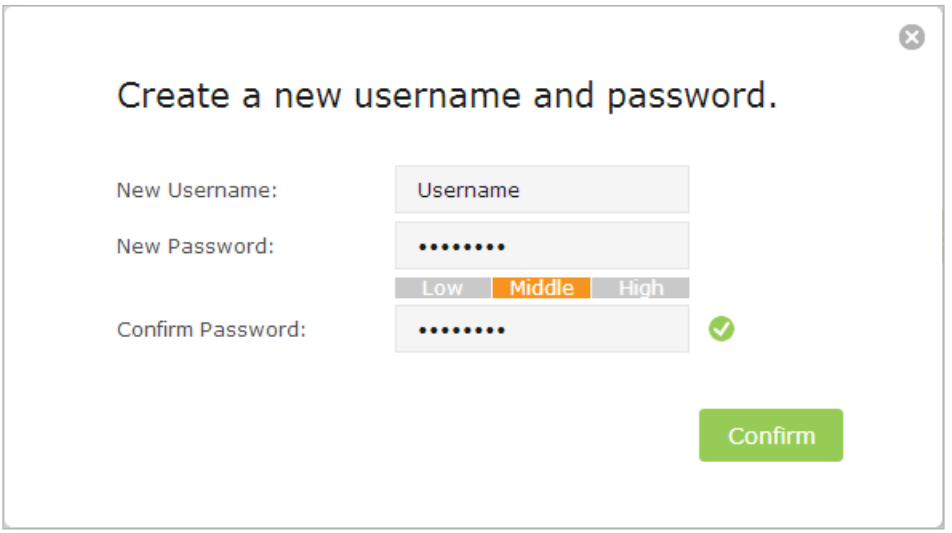
2. 2. 3. Method THREE: Using Web-based Utility

The web-based utility can be used on any Windows, Macintosh or UNIX OS with a web browser, such as Microsoft Internet Explorer, Mozilla Firefox or Apple Safari.

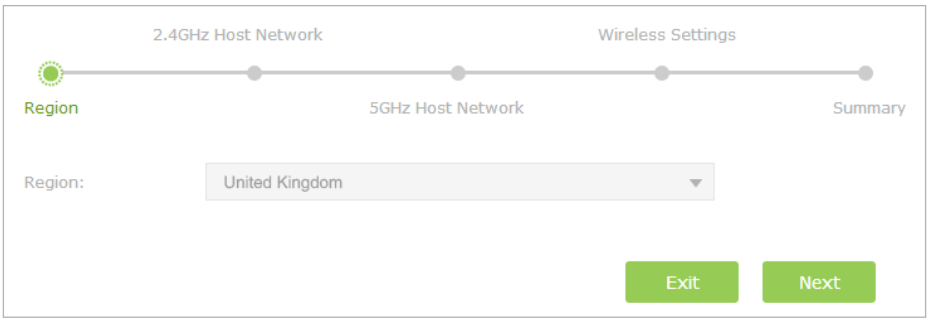
1. Connect your computer to your extender wirelessly or via an Ethernet cable. The default SSID (Wireless Network Name) and Wireless Password are printed on the product label at the bottom of your extender.
2. Launch a web-browser on your computer, and type http://tplinkrepeater.net into the address bar, and use admin (all lowercase) for both username and password.



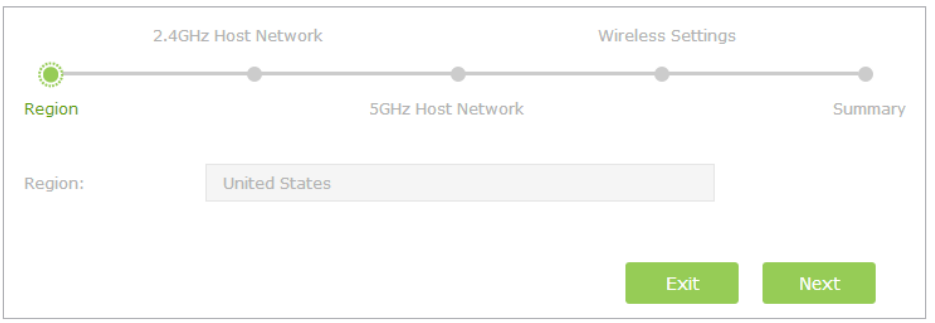
The first time you log in, created a new username and password, then click Confirm.



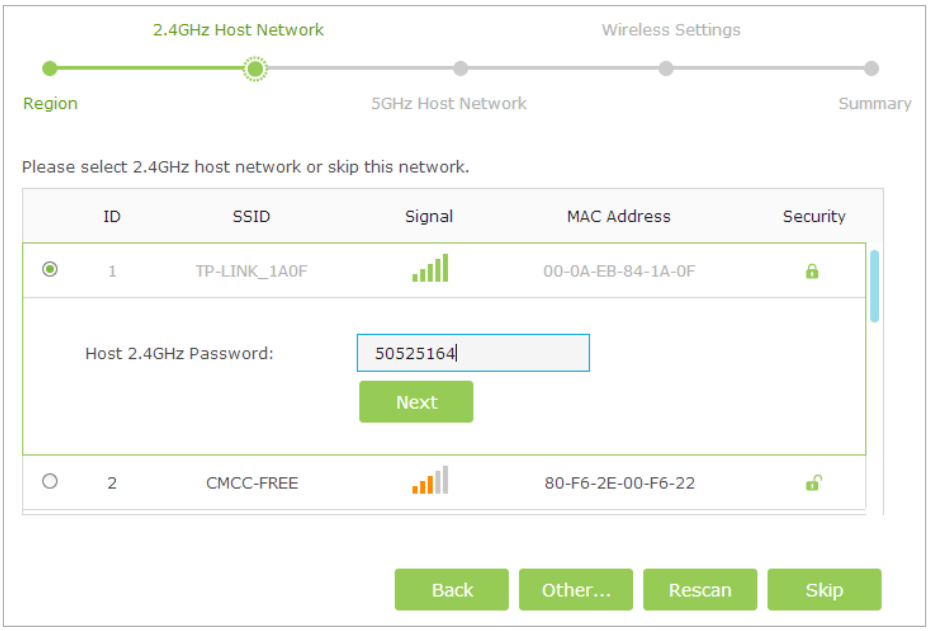
3. Select your region, then click Next.



Note: Per FCC regulations, all Wi-Fi products marketed in the U.S. are fixed to the U.S. region only.

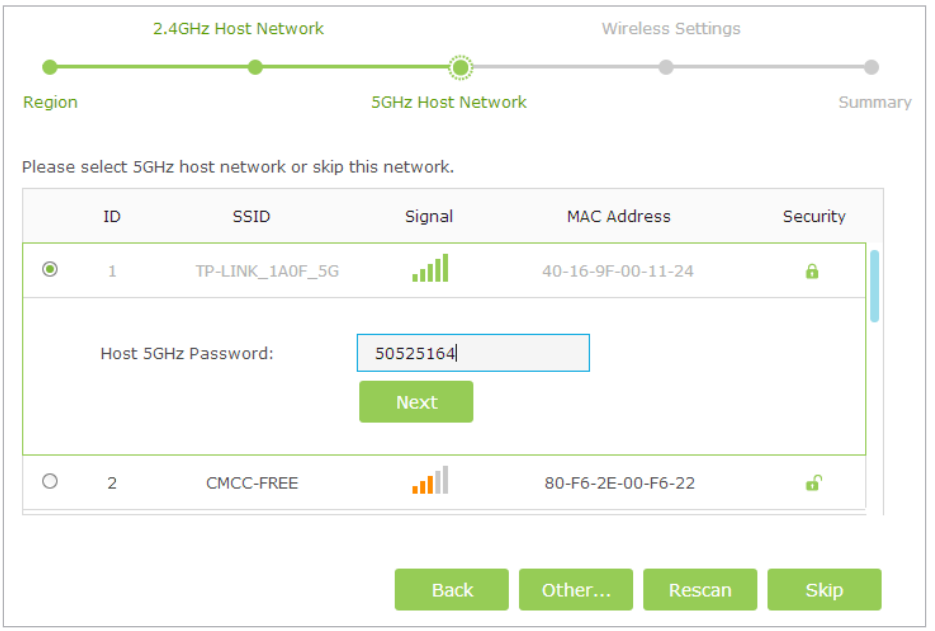


4. Select your host router's 2.4GHz network and enter the password, then click Next.

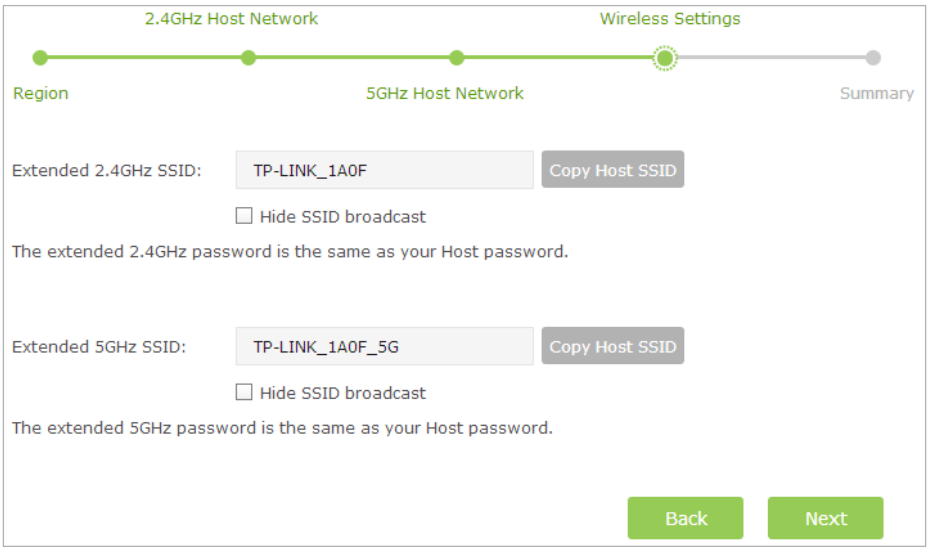


5. Select your host router's 5GHz network and enter the password, then click Next.

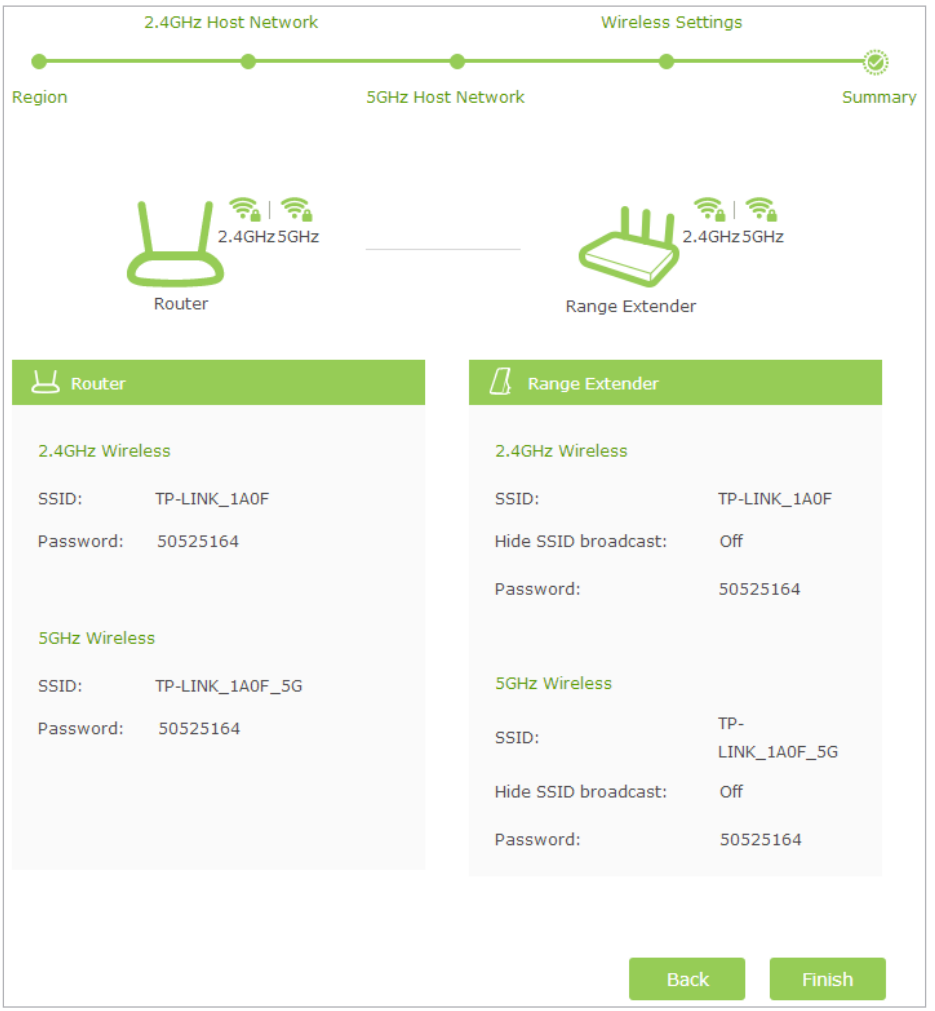
Note: If your router does not support the 5GHz band, click Skip.



6. Either copy the host's SSIDs or customize them for both 2.4GHz and 5GHz extended networks, then click Next.



7. Verify your wireless settings and click Finish.

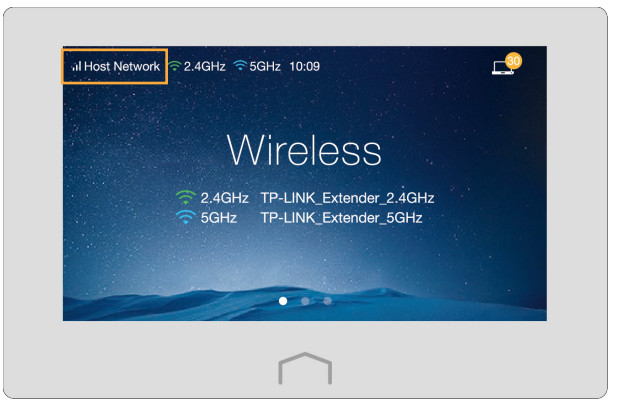


2. 3. Relocate the extender

1. Place the extender halfway between your host router (Host Network) and the Wi-Fi dead zone.

Ideal Extender Placement

2. Make sure the extender receives a strong signal (recommended signal strength or) from your host router. If not, relocate it closer to your router.



Note: Make sure to place the extender away from all Bluetooth devices and other household electronics.

2. 4. Enjoy the Internet

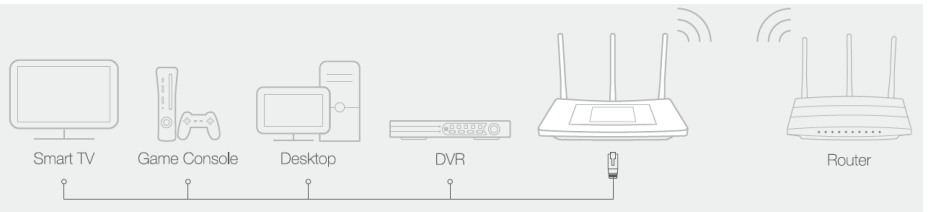
Now, connect your devices to the extender wirelessly or via an Enthernet cable to enjoy the Internet.

Note: Both entended networks share the same Wi-Fi password as your host network, but may have different wireless network names if you customize the names during the configuration.

2. 5. Entertainment Adapter

The extender can also be used as a wireless adapter that connects up to 4 Ethernet-only devices to your Wi-Fi network, such as a Blu-ray player, game console, DVR, smart TV, etc.

1. Connect to your extender to your Wi-Fi network by using either way introduced before.
2. Connect your Ethernet-only device(s) to the extender's Ethernet port(s) via Ethernet cable(s).



Chapter *3*

Further Configuration

This chapter introduces configurations of the extender's various features, such as Devices Control, DHCP, Clock, etc. Follow this chapter, you can configure most features on touchscreen. Some other features, such as Firmware Upgrade, Backup & Restore, System Log, etc, can only be configured through web-based utility.

This chapter contains the following sections:

- *Quick Setup*
- *Wireless Settings*
- *Devices Control*
- *WPS*
- *LAN*
- *DHCP Server*
- *Clock*
- *Screen Settings*
- *Reboot & Reset*
- *Administrator Password*
- *About*
- *Firmware Upgrade*
- *Backup & Restore*
- *System Log*

3. 1. Quick Setup

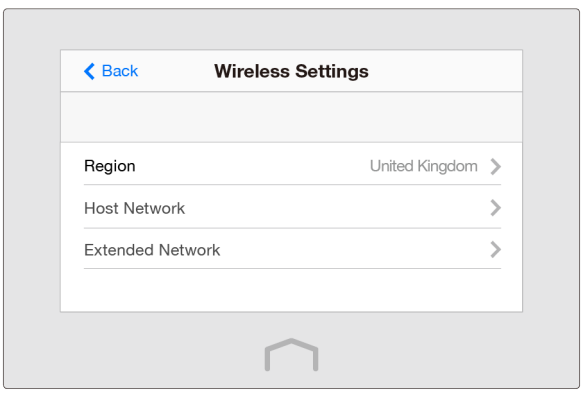
Please refer to the *Method ONE: Using Touchscreen App* under Chapter 2 *Quick Setup for Internet Connection* to connect the extender to your existing wireless network.

3. 2. Wireless Settings

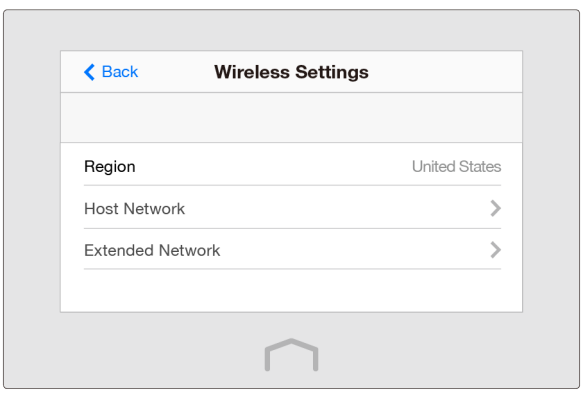
The Wireless Settings app helps you customize the wireless settings including the region, host network and extended network according to your needs.

Choose your region

Tap Wireless Settings on the menu screen, then choose your region.

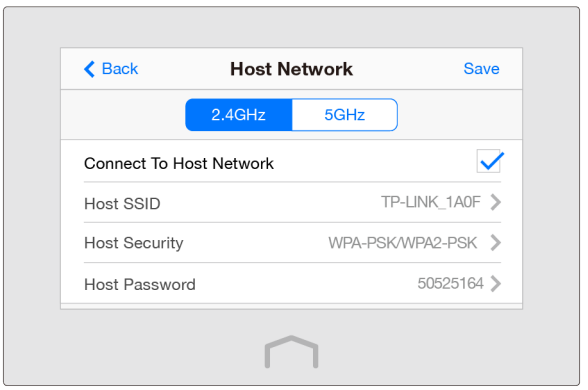


Note: Per FCC regulations, all Wi-Fi products marketed in the U.S. are fixed to the U.S. region only.



Set your host network

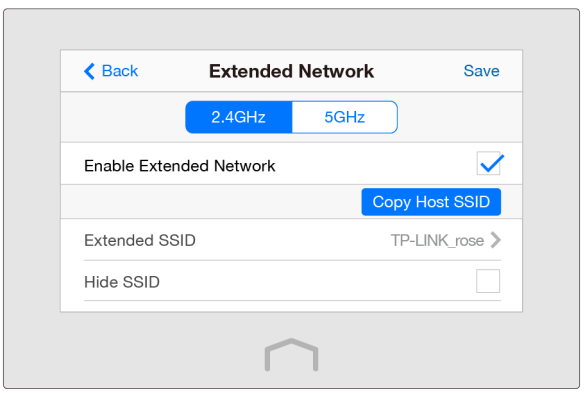
1. Tap Wireless Settings on the menu screen, then tap Host Network.



2. Tap 2.4GHz or 5GHz menu to choose to set 2.4GHz or 5GHz host network.
3. Select the Connect To Host Network checkbox. If not, you are choosing not to extend the host network's 2.4GHz or 5GHz band.
4. Tap Host SSID to scan the wireless networks around, and select the SSID of your host network.
   Note: If the host network you want to extend is on but not shown in the list, please try to move your extender closer to your host router, then tap Rescan. Or, select Other…to enter the SSID manually.
5. Once a network is selected, the SSID and security settings of that network will automatically be filled in. Tap Host Password to enter the password of the host network in corresponding encryption.
   Note: If the host network security is WEP, tap Index to select index same as host network.
6. Tap Save.

Set your extended network

1. Tap Wireless Settings on the menu screen, then tap Extended Network.



2. Tap 2.4GHz or 5GHz menu to choose to set 2.4GHz or 5GHz Extended network.
3. Select the Enable Extended Network checkbox.

4. Either tap Copy Host SSID to copy the host router's SSID, or tap Extended SSID to create a new name for the extended network.
5. Select the Hide SSID checkbox if you want to hide your extender's SSID from the Wi-Fi network list, and your wireless device will need to manually join the network.
6. Tap **Save**.

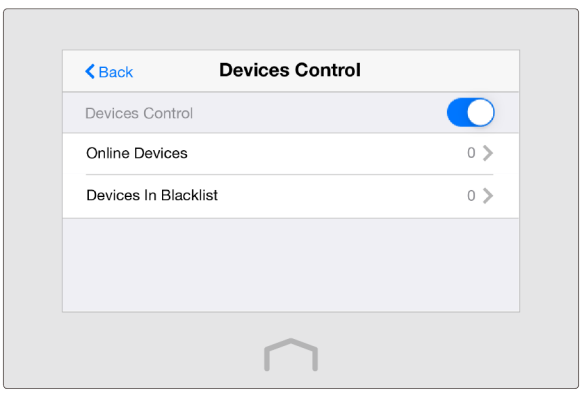
3. 3. Devices Control

The Devices Control app helps to view the client information and block unauthorized users (wired or wireless) from connecting to your extender.

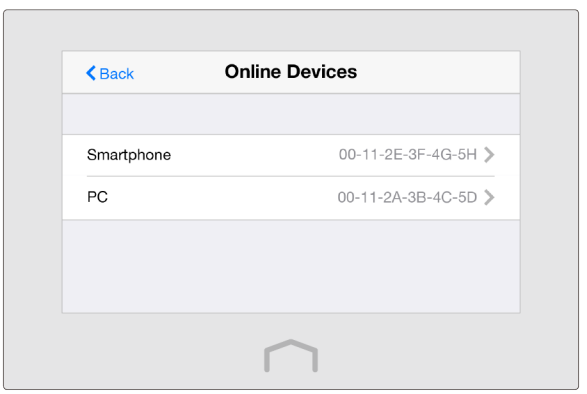
I want to Block some specific devices from connecting to my extender.

How can I do that?

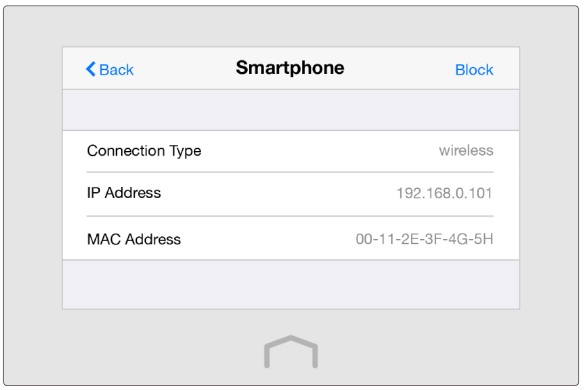
1. Tap Wireless Settings on the menu screen, then toggle the button to enable Devices Control function.



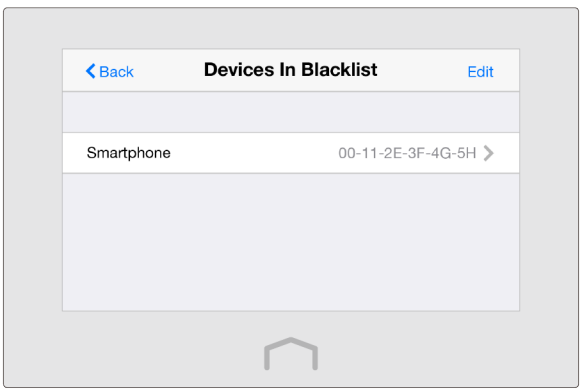
2. Tap Online Devices to view the connected clients.



3. Select the device(s) to be blocked and tap Block.



4. The blocked device(s) will be added to Devices in Blacklist automatically.



Note: If you want to add a device manually or delete a blocked device, tap Edit on the Devices In Blacklist page.

Done! Now devices in the blacklist cannot connect to your extender.

3. 4. WPS

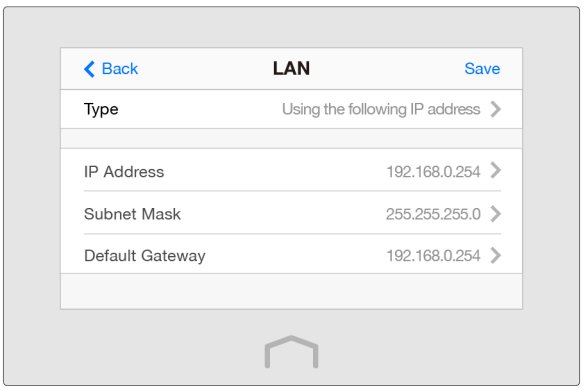
Please refer to the *Method TWO: Using WPS (Wi-Fi Protected Setup)* under Chapter 2 *Quick Setup for Internet Connection* to connect the extender to your existing wireless network.

3. 5. LAN

By default, your extender is set to obtain an IP address automatically from the host router. The LAN app allows you to use a specific IP address appropriate to your network demand.

Note: We do NOT recommend you change the IP address unless you are quite sure about the IP setting for special network demand. Random changes may lead to Internet disconnection.

1. Tap LAN on the menu screen, then tap Type to select Use the following IP address and tap Done.



2. Tap IP Address to enter an IP address in dotted decimal notation. It should be in the same subnet as the host network.
3. Tap Subnet Mask to enter the subnet mask in dotted decimal notation. It determines the network portion and host portion of the IP address.
4. Tap Default Gateway to enter the gateway that is in the same subnet as the IP address in dotted decimal notation . It is usually the LAN IP address of your router.
5. Tap Save.

3. 6. DHCP Server

The extender can be configured as a DHCP (Dynamic Host Configuration Protocol) server to assign IP addresses automatically to the devices on the LAN. To use the DHCP server function of your extender, you must set all computers on the LAN to"Obtain an IP Address automatically".

You can also manually reserve an IP address for a client that is connected to your extender. Once reserved, the IP address will only be assigned to the same client by the DHCP server.

Set the DHCP server

1. Tap DHCP Server on the menu screen, then select DHCP Server.
2. The Enable DHCP Server is set to be Auto by default, and the function will automatically be turn on or off according to the DHCP settings of the host network.

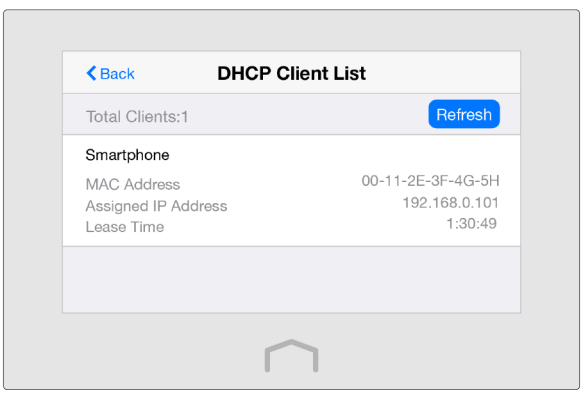
   If you select On, please configure it manually.

   - IP Address Pool: The start address and end address must be on the same subnet with LAN IP. Your extender will assign addresses within this specified range to its clients.
   - Address Lease Time: The amount of time in which a DHCP client can lease its current dynamic IP address assigned by your extender. After the dynamic IP address expires, the client will be automatically assigned a new dynamic IP address.
   - Default Gateway (Optional): Enter the LAN IP address of your extender.
   - Primary/Secondary DNS (Optional): Enter this parameters as provided by your ISP.

   If you select Off, please make sure the DHCP server of your host network is on. Otherwise, you have to set the IP address for each client manually.
3. Tap Save.

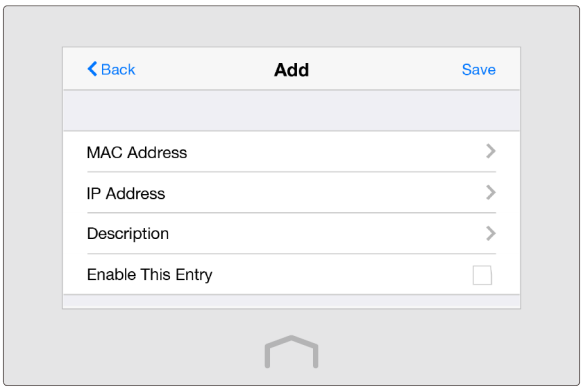
View the client information

Tap DHCP Server on the menu screen, then select DHCP Client List. On this page, the details of the clients connected to the extender are displayed as shown below.

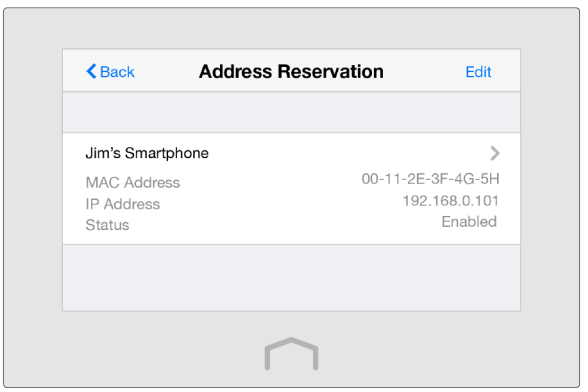


Reserve an IP address

1. Tap DHCP Server on the menu screen, then select Address Reservation and tap Add.



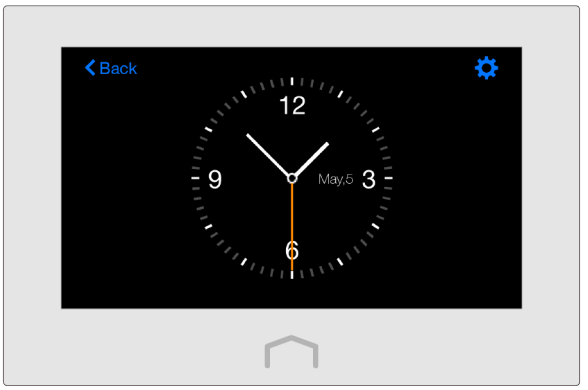
2. Enter the MAC Address of the device for which you want to reserve an IP address.
3. Specify the IP Address which will be reserved for the device.
4. Enter the Description for the device.
5. Check the Enable This Entry box and tap Save to make the settings effective (shown as figure below).



Note: If you want to modify a reserved address, tap the reserved address to modify it. If you want to add or delete a reserved address, tap Edit to set up according to your needs.

3. 7. Clock

Tap Clock on the menu screen, you can see the current time and date got automatically by the extender from the Internet.



Set time zone

1. Tap Clock on the menu screen to open the clock, and tap .
2. Tap Time Zone to select your time zone and tap Done.
3. Tap **Save**.

Set clock type

1. Tap Clock on the menu screen to open the clock, and tap .
2. Tap Clock Display to select the clock type you prefer, then tap Done.
3. Tap Save.

3. 8. Screen Settings

The Screen Settings app helps to set the brightness and screen saver of your extender.

1. Tap Screen Settings on the menu screen.
2. Drag the scroll bar to set the brightness of the screen.
3. Tap Start screen saver after to select the wait time and tap Done. By default, the screen saver will start if the screen is idle for 3 minutes.
4. Tap Save.

3. 9. Reboot & Reset

With Reboot & Reset app, you can restart your extender or reset it to its factory default settings.

Tap Reboot & Reset on the menu screen.

- Tap Reboot, the extender will shut down and boot again.
- Tap Reset, all the settings you have configured will be erased and the extender will be set to its factory default settings.

Note: Please do NOT power off your extender during the rebooting or resetting process.

3. 10. Administrator Password

Administrator password is used to log in to the touchscreen page and web-management page of your extender. You are required to set a new administrator password at your first login. You can also change it with the Administrator Password app.

1. Tap Administrator Password on the menu screen.
2. Enter the old password. Enter the new password and enter again to confirm.
3. Tap Save.

Note:

1. If you disable this function, your touchscreen will be under no protection and anyone can change the settings of your extender through the touchscreen, but logging in through web-based management page still requires the password.
2. If you change the administrator password on the screen, logging into web-based management page also requires the new password.

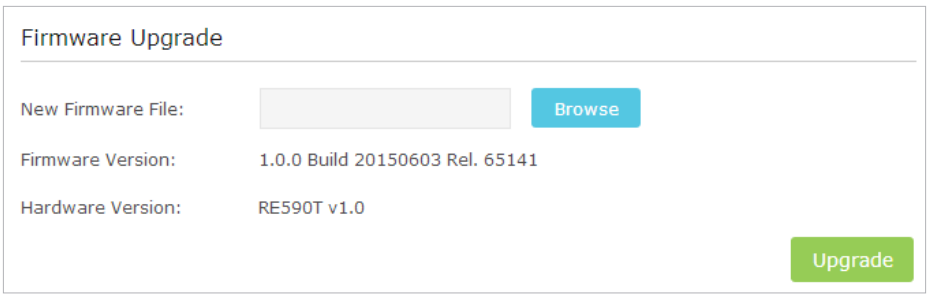
3. 11. About

Tap About on the menu screen, you can see the product model, hardware version, firmware version of your extender.

3. 12. Firmware Upgrade

TP-LINK is dedicated to improving and richening the product features, giving you a better network experience. We will release the latest firmware at TP-LINK official website, you can download the latest firmware file from our website and upgrade the firmware to the latest version.

1. On your computer, download the latest firmware file from our website http://tp-link.com/en/support
2. Launch a web-browser on your computer, and type http://tplinkrepeater.net into the address bar, and enter the username and password you have set before, then click Login.
3. Go to Settings > System Tools > Firmware Upgrade page.



4. Click **Browse** to locate the downloaded new firmware file, and click Upgrade.
5. Wait a few moments for the upgrading and rebooting. During the process, do NOT turn off or reset your extender.

Note:

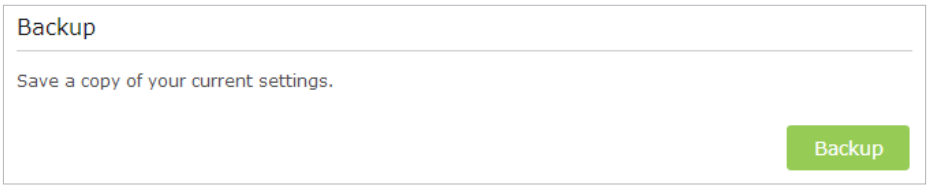
1. The upgraded firmware version must correspond to the hardware version.
2. Before upgrading the firmware, it's better to back up your current settings. Please refer to the *Backup & Restore* for details.

3. 13. Backup & Restore

The configurations of the extender are stored as a file in the extender. You can back up the configuration file to your computer for future use and restore the extender to a previous settings from the backup file when needed.

Backup

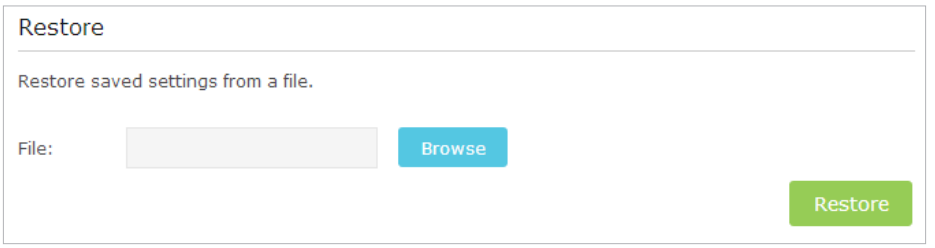
1. Launch a web-browser on your computer, and type http://tplinkrepeater.net into the address bar, and enter the username and password you have set before, then click Login.
2. Go to Settings > System Tools > Backup & Restore page.



3. Click Backup to save a copy of the current settings. A conf. bin file will be stored to your computer.

Restore

1. Launch a web-browser on your computer, and type http://tplinkrepeater.net into the address bar, and enter the username and password you have set before, then click Login.
2. Go to Settings > System Tools > Backup & Restore page.



3. Click Browse to locate the previous backup configuration file, and click Restore.
4. Wait for the restoring and then the extender will automatically reboot.

3. 14. System Log

System Log can help you know what happened to your extender, facilitating you to locate the malfunctions. For example when your extender does not work properly, you may need to save the system log and send it to the technical support for troubleshooting.

1. Launch a web-browser on your computer, and type http://tplinkrepeater.net into the address bar, and enter the username and password you have set before, then click Login.
2. Go to Settings > System Tools > System Log page.

System Log

Log Filter: Type = ALL Level = ALL

Refresh Delete All

ID	Time	Type	Level	Content
1	0 days 01:54:05	DHCPS	INFO	Sent an ACK packet to 192.168.0.100
2	0 days 01:54:05	DHCPS	INFO	Received a request packet from C4:E9:84:1D:70:DD
3	0 days 01:53:35	DHCPS	INFO	Sent an ACK packet to 192.168.0.100
4	0 days 01:53:35	DHCPS	INFO	Received a request packet from C4:E9:84:1D:70:DD
5	0 days 01:53:05	DHCPS	INFO	Sent an ACK packet to 192.168.0.100
6	0 days 01:53:05	DHCPS	INFO	Received a request packet from C4:E9:84:1D:70:DD
7	0 days 01:52:35	DHCPS	INFO	Sent an ACK packet to 192.168.0.100
8	0 days 01:52:35	DHCPS	INFO	Received a request packet from C4:E9:84:1D:70:DD
9	0 days 01:52:05	DHCPS	INFO	Sent an ACK packet to 192.168.0.100
10	0 days 01:52:05	DHCPS	INFO	Received a request packet from C4:E9:84:1D:70:DD

1 2 3 4

Save Log

3. You can filter out and view the specific logs by choosing log type and level.

4. Click Save Log to save all the logs in txt file to your computer.

Appendix A: Troubleshooting

T1. What can I do if I forgot my administrator password?

You must restore the extender to its factory default settings, and create a new one.

T2. How do I restore my extender to its factory default settings?

- Tap Reboot & Reset on the menu screen, and then tap Reset.
- While the extender is powered on, use a pin to press and hold the Reset button on the rear panel until the RE590T logo displays.

T3. What can I do if I forgot my wireless network password?

The password of the extended network is the same as your host network.

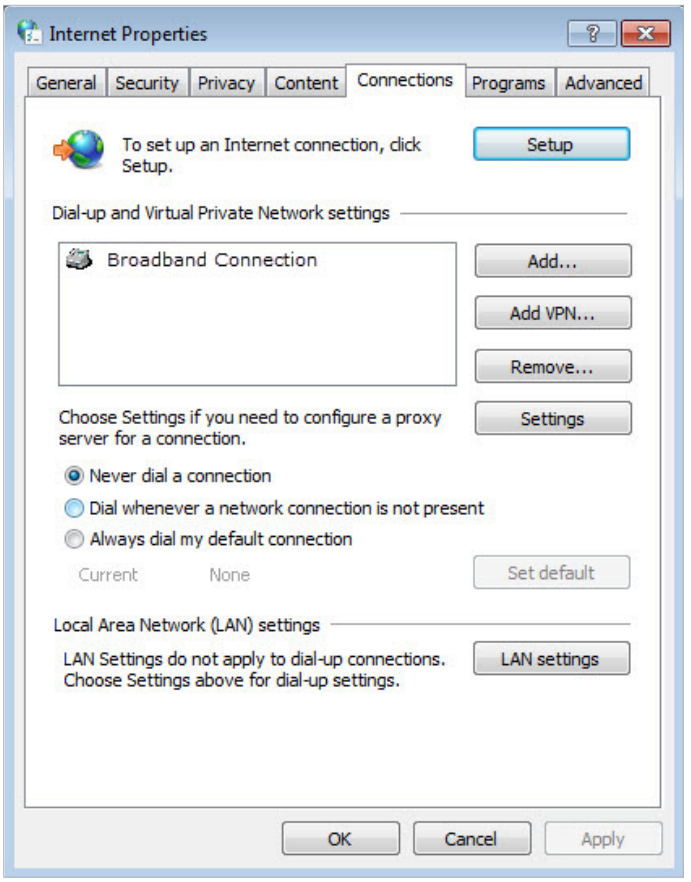
T4. What can I do if I cannot log into the extender's web management page?

- Tap Devices Control on the menu screen to check if your computer is connected to the extender correctly.
- Make sure the IP address of your computer is configured to obtain an IP address automatically and obtain DNS server address automatically.
- Make sure the default access (http://tplinkrepeater.net) you input is correct.
- Check your computer's settings:

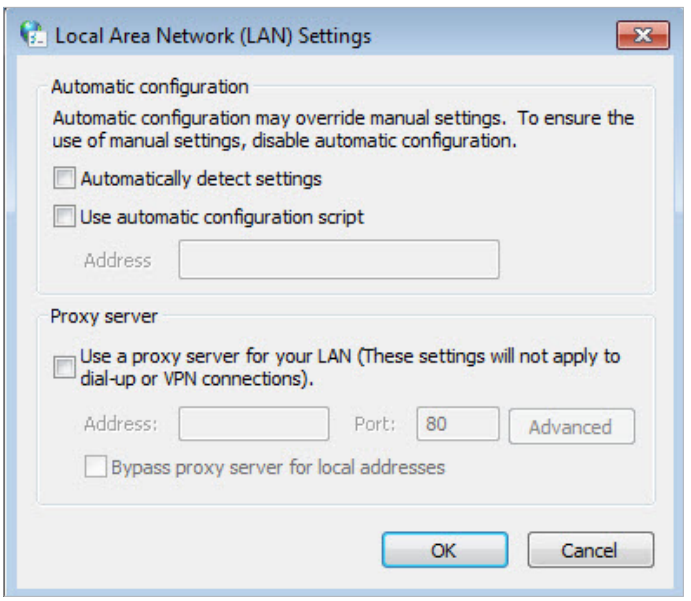
  1) Go to Start > Control Panel > Network and Internet, and click View network status and tasks;

  2) Click Internet Options on the bottom left;

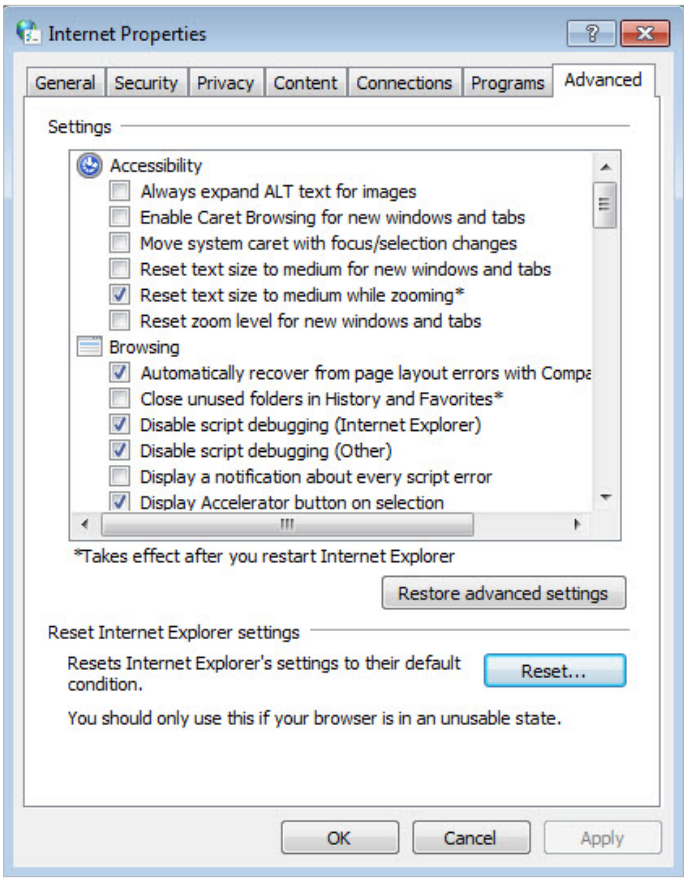
  3) Click Connections, select Never dial a connection;



4) Click LAN settings, deselect the following three options and click OK;



5) Go to Advanced > Restore advanced settings, click OK to save the settings.



- Change a web browser or computer and try to log in again.
- Reset the extender to factory default settings, then connect your computer to the extender and try to log in again. If login fails, please contact the technical support.

Appendix B: Specifications

HARDWARE FEATURES	
Interfaces	4*10/100/1000Mbps Ethernet Ports(RJ45)
Button	Reset Button, Power On/Off Button
Dimensions (W x D x H)	11.2 x 6.2 x 2.1 in. (284 x 157 x 52 mm)
Antenna	2.4GHz: Omni directional antenna with 2dBi gain 5.0GHz: Omni directional antenna with 2dBi gain
External Power Supply	12V/2.5A
Touch Screen	Screen Type: Capacitive Screen Size: 4.3 inch Screen Resolution: 128 ppi
WIRELESS FEATURES	
Wireless Standards	IEEE 802.11a/ac, IEEE 802.11b/g/n
Frequency	2.4GHz, 5GHz
Signal Rate	Up to 1300Mbps @5GHz, Up to 600Mbps @2.4GHzs
Reception Sensitivity	5GHz: 11a 6Mbps:-94dBm@10% PER 11a 54Mbps: -75dBm@10% PER 11ac HT20 MCS8: -66dBm@10% PER 11ac HT40 MCS9: -62dBm@10% PER 11ac HT80 MCS9: -59dBm@10% PER 2.4GHz: 11g 54M: -76dBm@10% PER 11n HT20 MCS7: -73dBm@10% PER 11n HT40 MCS7: -71dBm@10% PER
Wireless Functions	Concurrent Mode boost both 2.4G/5G Wi-Fi band, Devices Control, Domain Login Function
Wireless Security	64/128-bit WEP, WPA-PSK / WPA2-PSK
Transmission Power	CE: <20dBm(2.4GHz), <23dBm(5GHz), FCC: <30dBm
OTHERS	
System Requirements	Microsoft® Windows® 98SE, NT, 2000, XP, Vista or Windows 7, 8, 8.1, Mac® OS, NetWare®, UNIX® or Linux.
Environment	Working Temperature: 0℃ ~ 40℃(32℉ to 104℉) Working Humidity: 10% ~ 90% RH (non-condensing) Storage Temperature: -40℃ ~ 70℃(-40℉ to 158℉) Storage Humidity: 5% ~ 90% RH (non-condensing)
Certifications	CE, FCC, RoHS

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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 receiver.
- Connect the equipment into 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.

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.

2) This device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

FCC RF Radiation Exposure Statement

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This device and its antenna must not be co-located or operating in conjunction with any other antenna or transmitter.

"To comply with FCC RF exposure compliance requirements, this grant is applicable to only Mobile Configurations. The antennas 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."

The device operates in 5.15 ~ 5.25GHz / 5.745 ~ 5.85GHz frequency range. It is restricted in indoor environment only. This device meets all the other requirements specified in Part 15E, Section 15.407 of the FCC Rules.

CE Mark Warning

CE 1588 ⓘ

This is a class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

National Restrictions

This device is intended for home and office use in all EU countries (and other countries following the EU directive 1999/5/EC) without any limitation except for the countries mentioned below:

Country	Restriction	Reason/remark
Bulgaria	None	General authorization required for outdoor use and public service
France	Outdoor use limited to 10 mW e.i.r.p. within the band 2454-2483.5 MHz	Military Radiolocation use. Refarming of the 2.4 GHz band has been ongoing in recent years to allow current relaxed regulation. Full implementation planned 2012
Italy	None	If used outside of own premises, general authorization is required
Luxembourg	None	General authorization required for network and service supply(not for spectrum)
Norway	Implemented	This subsection does not apply for the geographical area within a radius of 20 km from the centre of Ny-Ålesund
Russian Federation	None	Only for indoor applications

Note: Please don't use the product outdoors in France.

5150-5250 MHz

Country	Restriction	Reason/remark
Bulgaria	Not implemented	Planned
Croatia	License required	None
Italy	None	General authorization required if used outside own premises
Luxembourg	None	General authorization required for network and service supply (not for spectrum)
Russian Federation	No info	None

Canadian Compliance Statement

This device complies with Industry Canada license-exempt RSS standard(s). 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.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :
1. l'appareil ne doit pas produire de brouillage;
2. l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, meme si le brouillage est susceptible d'en compromettre le fonctionnement.

This radio transmitter (Model: RE590T) has been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible gain indicated. Antenna types not included in this list (Appendix B), having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device. Le présent émetteur radio (Model: RE590T) a été approuvé par Industrie Canada pour fonctionner avec les types d'antenne énumérés ci-dessous et ayant un gain admissible maximal. Les types d'antenne non inclus dans cette liste (Annexe B), et dont le gain est supérieur au gain maximal indiqué, sont strictement interdits pour l'exploitation de l'émetteur.

This device has been designed to operate with the antennas listed above (Appendix B) , and having a maximum gain of 2 dBi. Antennas not included in this list or having a gain greater than 2 dBi are strictly prohibited for use with this device. The required antenna impedance is 50 ohms.

To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that permitted for successful communication.

Caution:

(i) 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;

(ii) the maximum antenna gain permitted for devices in the band 5725-5850 MHz shall be such that the equipment still complies with the e.i.r.p. limits specified for point-to-point and non-point-to-point operation as appropriate; and

(iii) Users should also be advised that high-power radars are allocated as primary users (i.e. priority users) of the bands 5650-5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

Avertissement:

(i) les dispositifs fonctionnant dans la bande 5150-5250 MHz sont réservés uniquement pour une utilisation à l’intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux;

(ii) le gain maximal d'antenne permis (pour les dispositifs utilisant la bande de 5725 à 5 850 MHz) doit être conforme à la limite de la p.i.r.e. spécifiée pour l'exploitation point à point et l’exploitation non point à point, selon le cas;

(iii) De plus, les utilisateurs devraient aussi être avisés que les utilisateurs de radars de haute puissance sont désignés utilisateurs principaux (c.-à-d., qu’ils ont la priorité) pour les bandes 5650-5850 MHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL.

Radiation Exposure Statement:

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

Déclaration d'exposition aux radiations:

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.

Industry Canada Statement

CAN ICES-3 (B)/NMB-3(B)

Korea Warning Statements:

당해 무선설비는 운용중 전파혼신 가능성이 있음.

NCC Notice & BSMI Notice:

注意！

依據 低功率電波輻射性電機管理辦法

第十二條 經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性或功能。

第十四條 低功率射頻電機之使用不得影響飛航安全及干擾合法通行；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。前項合法通信，指依電信規定作業之無線電信。低功率射頻電機需忍受合法通信或工業、科學以及醫療用電波輻射性電機設備之干擾。

減少電磁波影響，請妥適使用。

安全諮詢及注意事項

- 請使用原裝電源供應器或只能按照本產品注明的電源類型使用本產品。
- 清潔本產品之前請先拔掉電源線。請勿使用液體、噴霧清潔劑或濕布進行清潔。
- 注意防潮，請勿將水或其他液體潑灑到本產品上。
- 插槽與開口供通風使用，以確保本產品的操作可靠並防止過熱，請勿堵塞或覆蓋開口。
- 請勿將本產品置放於靠近熱源的地方。除非有正常的通風，否則不可放在密閉位置中。
- 請不要私自打開機殼，不要嘗試自行維修本產品，請由授權的專業人士進行此項工作。

Продукт сертифіковано згідно с правилами системи УкрСЕПРО на відповідність вимогам нормативних документів та вимогам, що передбачені чинними законодавчими актами України.

EAC

Safety Information

- When product has power button, the power button is one of the way to shut off the product; when there is no power button, the only way to completely shut off power is to disconnect the product or the power adapter from the power source.
- Don’t disassemble the product, or make repairs yourself. You run the risk of electric shock and voiding the limited warranty. If you need service, please contact us.
- Avoid water and wet locations.

This product can be used in the following countries:

AT	BG	BY	CA	CZ	DE	DK	EE
ES	FI	FR	GB	GR	HU	IE	IT
LT	LV	MT	NL	NO	PL	PT	RO
RU	SE	SK	TR	UA	US		

DECLARATION OF CONFORMITY

For the following equipment:

Product Description: AC1900 Touch Screen Wi-Fi Range Extender

Model No.: **RE590T**

Trademark: **TP-LINK**

We declare under our own responsibility that the above products satisfy all the technical regulations applicable to the product within the scope of Council Directives:

Directives 1999/5/EC, Directives 2004/108/EC, Directives 2006/95/EC, Directives 1999/519/EC, Directives 2011/65/EU

The above product is in conformity with the following standards or other normative documents

EN 300 328 V1.8.1

EN 301 489-1 V1.9.2 & EN 301 489-17 V2.2.1

EN 55022: 2010 + AC: 2011

EN 55024: 2010

EN 60950-1: 2006 + A11: 2009 + A1: 2010 + A12: 2011 +A2: 2013

EN 50385: 2002

EN 301 893 V1.7.1

The product carries the CE Mark:

CE 1588 ⓘ

Person responsible for making this declaration:

Yang Hongliang
Product Manager of International Business

Date of issue: 2015/08/24

TP-LINK TECHNOLOGIES CO., LTD
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