TP-LINK®
The Reliable Choice

Easy Wi-Fi Extension
Flexible Placement

AC 1200

Wi-Fi Range Extender RE350

1910011680
REV 1.0.0

COPYRIGHT & TRADEMARKS

Specifications are subject to change without notice. TP-LINK® is a registered trademark of TP-LINK TECHNOLOGIES CO., LTD. Other brands and product names are trademarks or registered trademarks of their respective holders.

No part of the specifications may be reproduced in any form or by any means or used to make any derivative such as translation, transformation, or adaptation without permission from TP-LINK TECHNOLOGIES CO., LTD. Copyright ©2016 TP-LINK TECHNOLOGIES CO., LTD.

All rights reserved.

http://www.tp-link.com

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."

This device is restricted to indoor use only when operating in 5150-5250MHz.

CE Mark Warning

CE1588

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.

RF Exposure Information

This device meets the EU requirements (1999/5/EC Article 3.1a) on the limitation of exposure of the general public to electromagnetic fields by way of health protection.

The device complies with RF specifications when the device used at 20 cm from your body.

National restrictions

Restricted to indoor use.

Canadian Compliance Statement

This device complies with Industry Canada license-exempt RSSs. 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 nedoit pas produire de brouillage, et

2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Caution:

1） 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;

The high-power radars are allocated as primary users (i.e. priority users) of the bands 5250-5350 MHz and 5650-5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

Avertissement:

1） Le dispositif fonctionnant dans la bande 5150-5250 MHz est réservé uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux;

En outre, 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 5250-5350 MHz et 5650-5850 MHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL.

Industry Canada Statement

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

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 20cm de distance entre la source de rayonnement et votre corps.

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。

於 5.25GHz 至 5.35GHz 區域內操作之無線設備的警告聲明

工作頻率 5.250~5.350GHz 該頻段限於室內使用。

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.

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.

For EU/EFTA, this product can be used in the following countries:

AT	BE	BG	CH	CY	CZ	DE	DK
EE	ES	FI	FR	GB	GR	HR	HU
IE	IS	IT	LI	LT	LU	LV	MT
NL	NO	PL	PT	RO	SE	SI	SK

Explanation of the symbols on the product label

Symbol	Explanation
	Class II equipment
	AC voltage
	RECYCLING This product bears the selective sorting symbol for Waste electrical and electronic equipment (WEEE). This means that this product must be handled pursuant to European directive 2012/19/EU in order to be recycled or dismantled to minimize its impact on the environment. User has the choice to give his product to a competent recycling organization or to the retailer when he buys a new electrical or electronic equipment.

Contents

Introduction *1*
- Product Overview 1
  - What can your Extender do 1
  - Support for the 802.11ac wireless technology 1
  - Main Features 2
- Appearance 2
- Position the Extender 3

Connect the Extender to the Internet *4*
- Before You Begin 4
- Basic Requirements 5
- Quick Setup 5
  - Using WPS (Wi-Fi Protected Setup) 5
  - Using your Web Browser 7
- Use the Extender as a Network Adapter 11
- Use the Extender as an AP 11
  - Change the working mode to AP 12
  - Connect your devices to the AP by WPS 13

View the Information of the Extender *16*
- Current Status of the Extender 16
- Information about the Host Network, the Extender and the Clients 17

Manage the Extended Network and Security Settings *18*
- Extend Another Network 18
- Customize the Extender's SSID 20
- Manage the Extender's Wi-Fi Security Settings 21
  - Change your Admin Account 21
  - Block / Allow Network Access for Specific Clients 22
- Change the Extender's IP Address 24
- DHCP Server 24
  - Settings 25
  - View the DHCP Client List 26

Manage the Extender *27*
- LED Control 27
- Firmware Upgrade 28
- Backup & Restore 28
- Factory Defaults 29
- System Log 29
- Reboot 30
- Logout 30

Appendix *31*
- Factory Defaults 31
- Troubleshooting 32
- Specifications 33
- Glossary 34

1

Introduction

This chapter covers the following topics:

- **Product Overview**
- **Appearance**

Product Overview

What can your Extender do

The RE350 AC1200 Wi-Fi Range Extender is dedicated to Small Office/Home Office (SOHO) wireless network solutions. It will enlarge your existing wireless network and mobility within your wireless network 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.

The extender provides two options to finish the quick setup.

Option One: an easy wireless connection to the host network (equipped with WPS/QSS button) by Using WPS on the front panel.

Option Two: Using your Web Browser for installation and management.

Even though you may not be familiar with the extender, you can easily configure it with the help of this guide. Before installing the extender, please look through this guide to get the full information of the extender AC1200 Wi-Fi Range Extender.

Support for the 802.11ac wireless technology

With using IEEE 802.11ac wireless technology, this device can transmit wireless data at the rate of up to 300Mbps (2.4GHz) + 867Mbps (5GHz). With

multiple protection measures, including wireless LAN 64/128/152-bit WEP encryption, Wi-Fi protected Access (WPA2-PSK, WPA-PSK), the extender

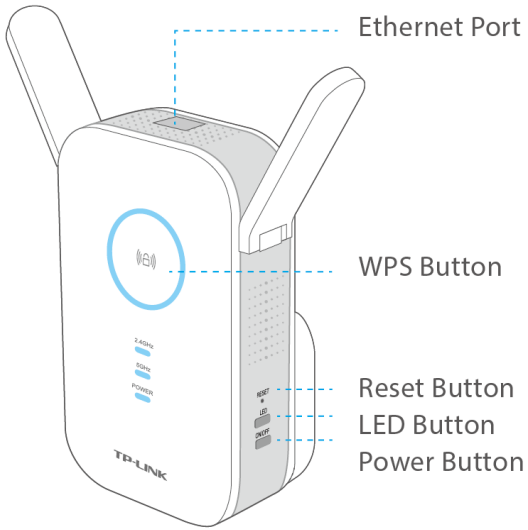
AC1200 Wi-Fi Range Extender delivers complete data privacy. It is also

compatible with all IEEE 802.11n, IEEE 802.11a, IEEE 802.11b and IEEE 802.11g products.

Main Features

- Complies with IEEE 802.11ac
- Provides multiple encryption security Types including: 64/128-bit WEP and WPA-PSK/WPA2-PSK
- Supports Built-in DHCP server
- Supports Firmware Upgrade
- Supports Web-based Management
- Supports two working modes: Range Extender and Access Point

Appearance



LED Explanation

Name	Status	Indication
WPS	Solid blue	The extender is connected to the router, and is in a good location.
	Solid red	The extender is connected to the router, but too far away from the router.

Name	Status	Indication
WPS	Blinking	WPS connection is in process.
	Off	No active connection.
5GHz/ 2.4GHz	On	The extender is connected to both 2.4GHz and 5GHz Wi-Fi bands of your host network.
	Off	No connection.
Power	On	The extender is on.
	Blinking	The extender is initializing.
	Off	The extender is off.

Button Explanation

- **WPS Button:** If your Wireless router supports WPS or QSS function, you can press the WPS or QSS button and then press the RE button to establish a secure connection between the Wireless router and the extender.
- **Reset Button:** This button is used to restore the extender's factory default settings.

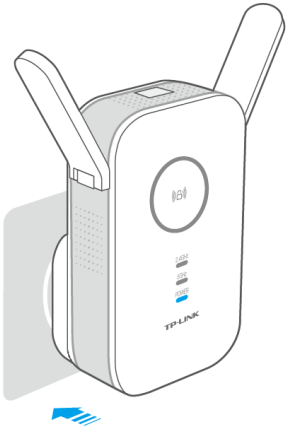
  There are two ways to reset the extender:

  Option One: With the extender powered on, use a pin to press the **RESET** button until all the LEDs turn on momentarily, then release the button and wait the extender to reboot to its factory default settings.

  Option Two: Restore the default settings from "**System Tools > Backup &Restore**" of the extender's Web-based Management page.
- **LED Button:** You can press the LED button to light up or turn off all the LEDs. After the LEDs are off, the extender can still work normally.
- **Power Button :** You can press the Power button to turn on or off the extender.
- **Ethernet Port:** One 10/100/1000Mbps RJ45 Ethernet port is used to add wireless connectivity to an Ethernet-enabled device such as Internet TV, DVR, Gaming console and so on. Please note that this port will not run when it is connected to a router.

Position the Extender

For safety, we suggest you plug the extender right way up as the picture shown below.



2

Connect the Extender to the Internet

This chapter covers the following topics:

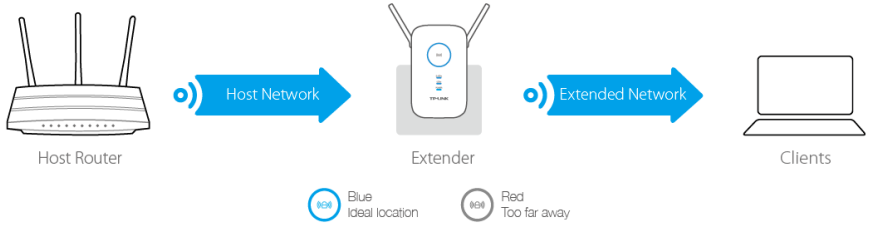
- **Before You Begin**
- **Basic Requirements**
- **Quick Setup**

Before You Begin

Please read this guide carefully before installing and using the device. The operating distance range of your wireless connection can vary significantly depending on the physical position of the wireless devices. Factors that can weaken signals by getting in the way of your network's radio waves are metal appliances or obstructions and walls. Typical ranges vary based on the types of materials and background RF (radio frequency) noise in your home or office.

In order to optimize the performance of extender, please follow the instructions below to achieve an **ideal location** (please make sure it is always within the wireless coverage of the wireless router).

- **Half-way Between** - Generally, the ideal location for extender is half-way between the Wireless router and Wireless Client. If the wireless signal is not satisfactory, you may place extender somewhat nearer to the Wireless router.



- **Less Obstacles** - Clear obstacles in the way between extender and Wireless router. It's better to locate it in a spacious place, such as near the corridors.

- **Less Interference** - Choose a location away from Bluetooth devices and other household electronics, such as cordless phone, microwave, and baby monitor, etc., to minimize signal interference.

Basic Requirements

- Place your extender in a well-ventilated place far from direct sunlight, any heater or heating vent.
- Leave at least 2 inches (5cm) space around the device for heat dissipation.
- Turn off your extender and unplug the power adapter in a lighting storm to avoid damage.
- Use appropriate Web browser, such as Microsoft Internet Explorer 5.0 or above, Netscape Navigator 6.0 or above.
- Operating temperature of the extender should be 0℃~40℃ (32℉ ~104℉).
- Operating humidity of the extender should be 10%~90%RH (Non-condensing).

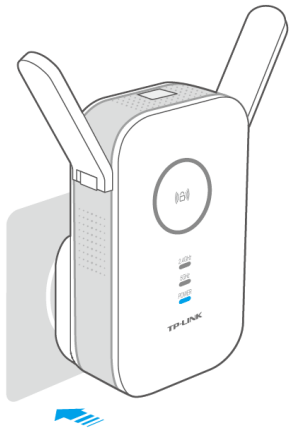
Quick Setup

Using WPS (Wi-Fi Protected Setup)

WPS is an easier way to extend your host network. We recommend you to use this way if your host router has a WPS button. The button might look like one of these: , WPS, . Otherwise, please use Using your web browser.

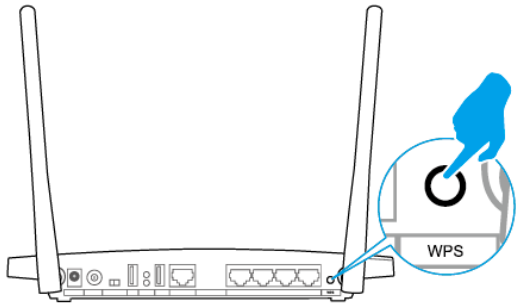
1 Power On

Plug the extender into an electrical outlet near your router, and wait until the Power LED is lit and solid blue.



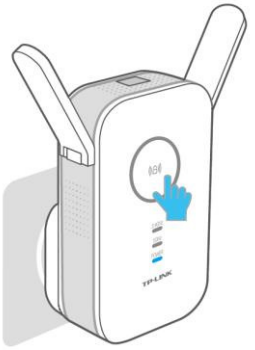
2 Connect

1) Press the **WPS button** on your router/AP.



For more information about using WPS on your router, please refer to the router manufacturer's user guide.

2) Immediately press the **WPS button** on your extender. The LED should change from flashing to solid, showing that WPS connection is successful.



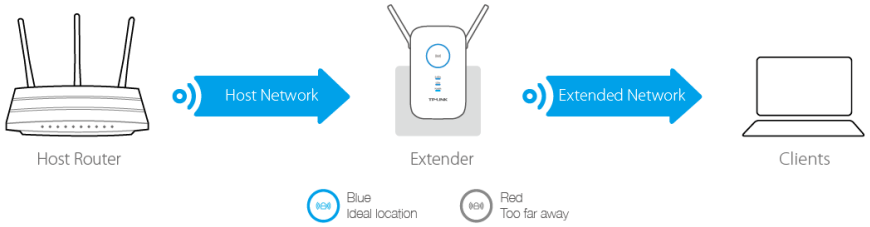
- If the RE LED does not change from flashing to solid, please refer to Using your Web Browser.
- Some ISP gateways disable the WPS function by default, if the WPS method fails, please refer to Using your Web Browser.

3) If you are connecting the extender to a dual-band router but only 2.4GHz or 5GHz LED is on, repeat step 1 and 2 again to connect the other band.

3 Relocate

Plug the extender into an electrical outlet about halfway between your router (Host Network) and the Wi-Fi dead zone.

Wait until the LED is lit with a solid blue. If not, relocate the extender closer to the router to achieve a good (or better) signal quality.



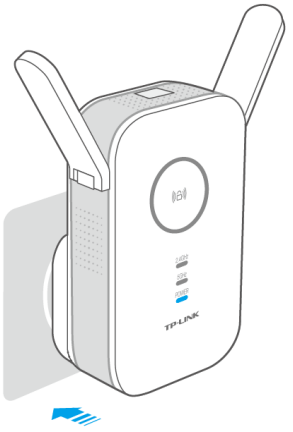
Enjoy!

The extender shares the same wireless network names (SSIDs) and wireless passwords as those of the host networks.

Using your Web Browser

1 Power On

Plug the extender into an electrical outlet near your router, and wait until the Power LED is lit and solid blue.



2 Connect to the Extender

- Connecting via Ethernet Cable

  1) Disable the Wi-Fi on your computer.

  2) Connect the extender to your computer via an Ethernet cable.

- Connecting via Wireless

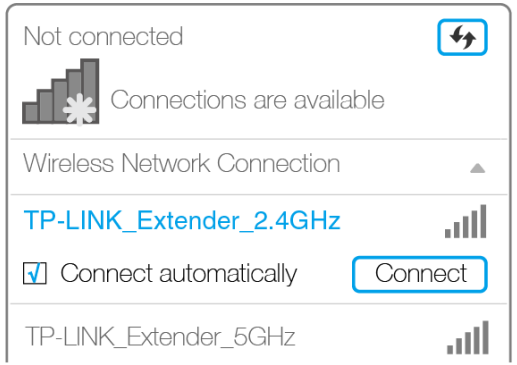
  For windows users:

  1) Unplug the Ethernet cable from your computer (if any).

  2) Click the Wireless Network Connection icon on your taskbar.

  3) Click the refresh icon and connect to the extender's network:

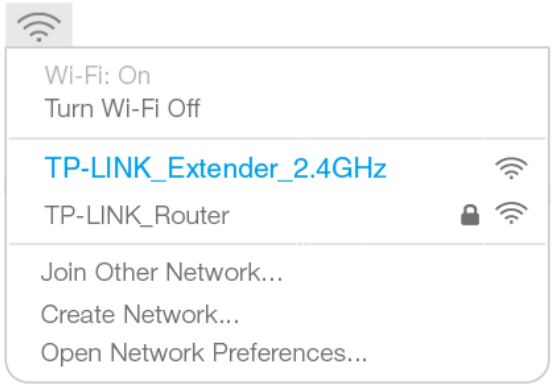
TP-LINK_Extender_2.4GHz or _5GHz.



For Mac OS X users:

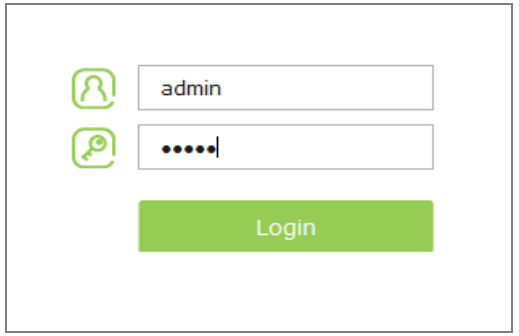
1) Unplug the Ethernet cable from your computer (if any).

2) Click the Wi-Fi icon on the top right corner of the screen, and connect to the extender's network: *TP-LINK_Extender_2.4GHz or _5GHz*.



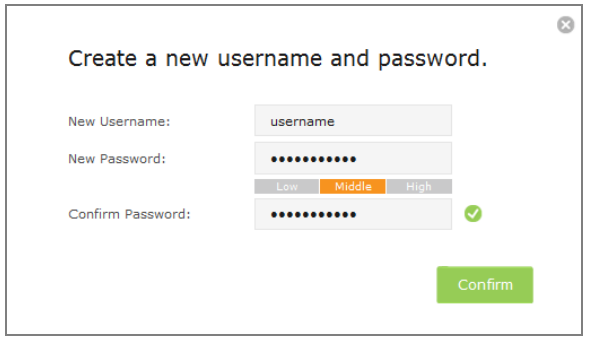
3 Login

Launch a web browser and type **http://tplinkrepeater.net** into the URL field and use admin (all lowercase) for both Username and Password to log in.



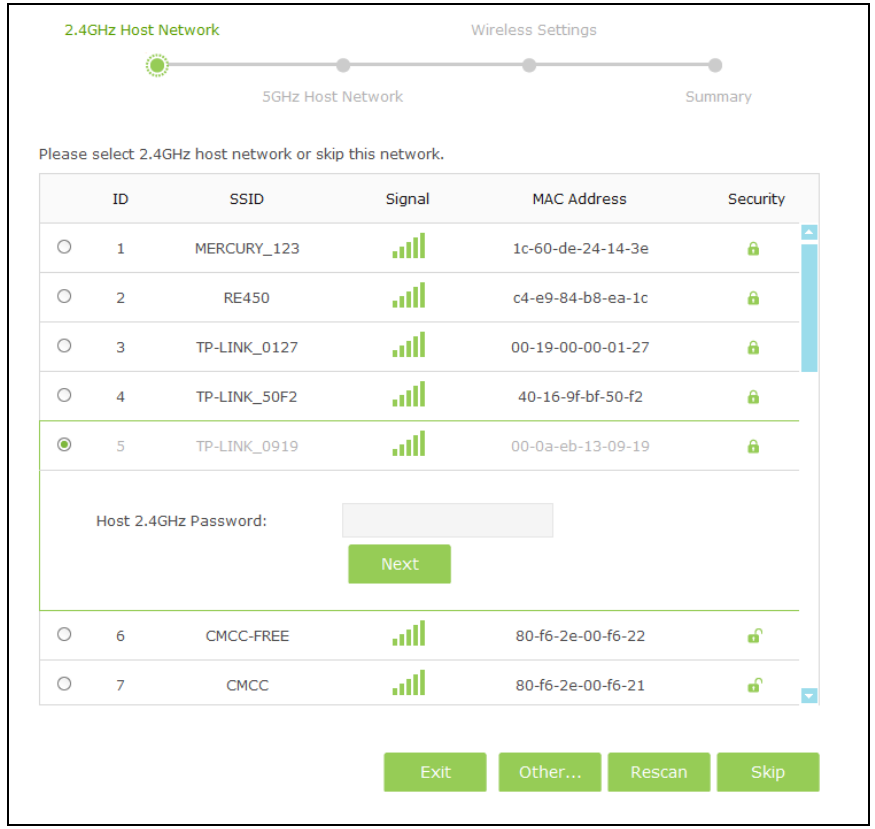
4 Configure

1) **Create a new username and password** to log in the web management page, and then click **Confirm**.

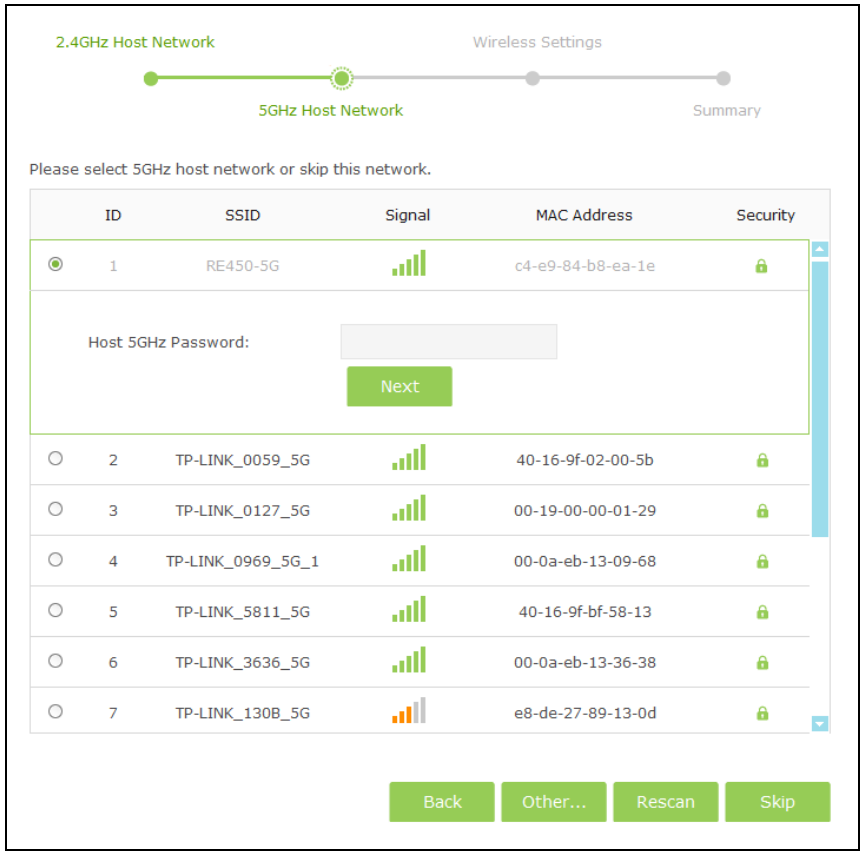


2) Select your router's 2.4GHz host network and enter the password,

then click **Next**.

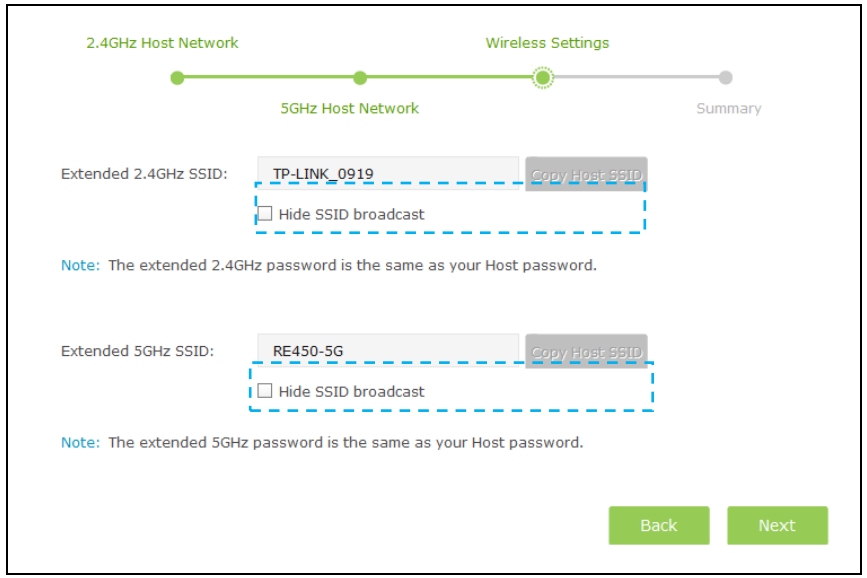


3) Select your router's 5GHz host network and enter the password, then click **Next**.

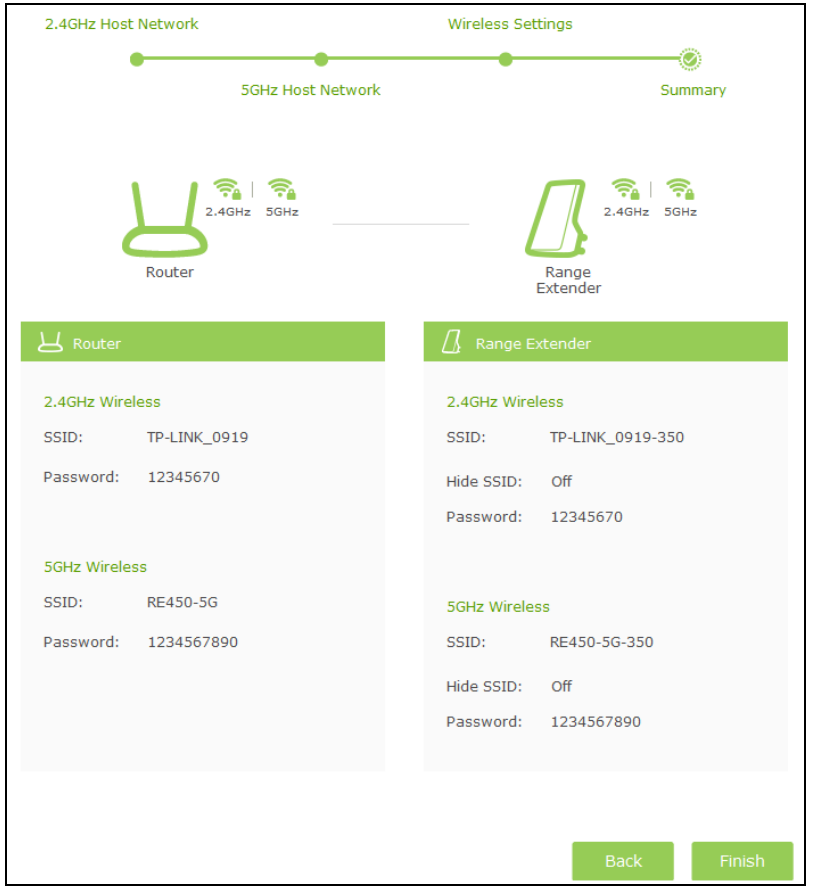


If your router does not support 5GHz wireless network, please click Skip to continue.

4) Either keep the same SSIDs as your host networks or create new names for the extended networks, then click **Next**.



5) Verify your wireless settings and click **Finish**. The corresponding LEDs (2.4GHz and 5GHz) should turn on and stay solid.

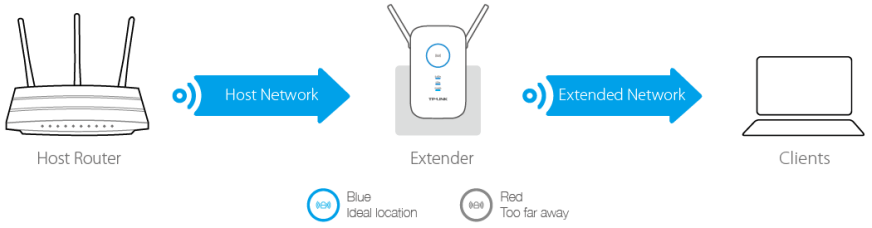


5 Relocate

Plug the extender into an electrical outlet about halfway between your router (Host Network) and the Wi-Fi dead zone.

Wait until the LED is lit with a solid blue. If not, relocate the extender

closer to the router to achieve a good (or better) signal quality.



Enjoy!

Both extended networks share the same Wi-Fi passwords as those of the host networks, but may have different wireless network names if you customize the SSIDs during the configuration.

Use the Extender as a Network Adapter

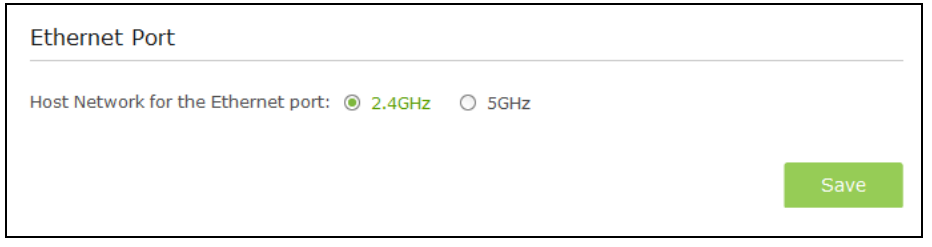
The extender can be used as a wireless adapter to connect any Ethernet-enabled device, such as a Blu-ray player, game console, DVR, or smart TV, to your wireless network.

After the extender connected to the Internet, you can connect an Ethernet-enabled device to the extender using an Ethernet cable.

By default, the Ethernet port connects to the 5GHz wireless network. If you want the extender to connect to the 2.4GHz wireless network only, please follow the steps below to finish the settings:

1) Launch a web browser and type in **http://tplinkrepeater.net**, and then go to **Settings->Network** webpage.

2) Select the radio button **2.4GHz** in the following figure.



3) Click **Save** to save the settings.

Use the Extender as an AP

The extender can work as an access point, which can transform the existing wired network to a wireless network.

Change the working mode to AP

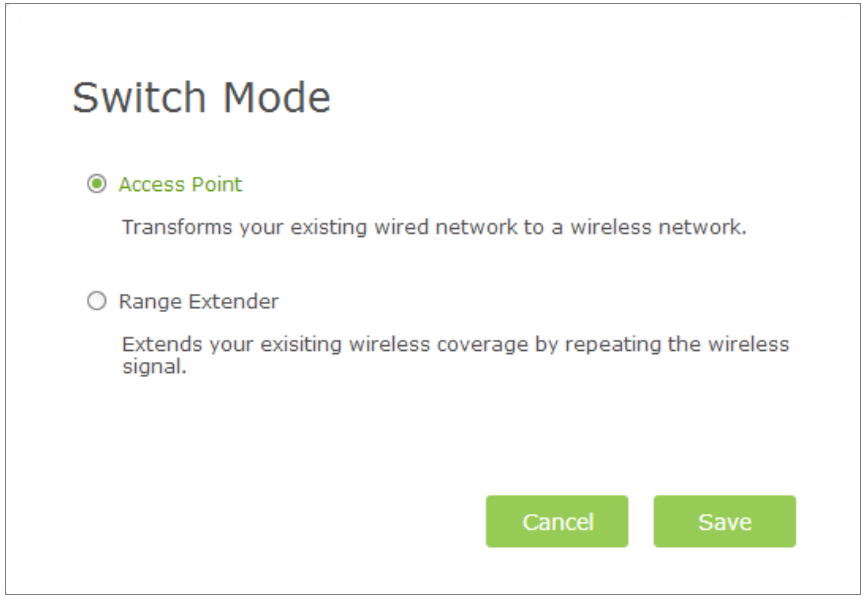
1 Connect the extender to your router

Power on the extender, and connect it to your router's Ethernet port via an Ethernet cable.

2 Change the working mode to AP

1) Connect your computer to the extender's wireless network.

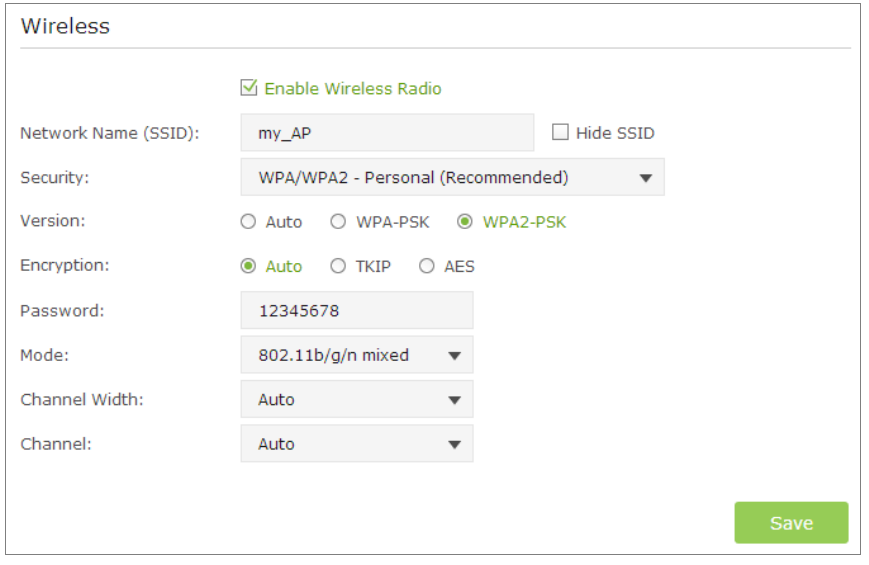
2) Launch a web browser and log into **http://tplinkrepeater.net**, click **Mode** on the top right corner, select **Access Point** and click **Save**. The extender will switch to AP mode and reboot automatically.



3) After rebooting, you may need to reconnect to the extender's network and log in again.

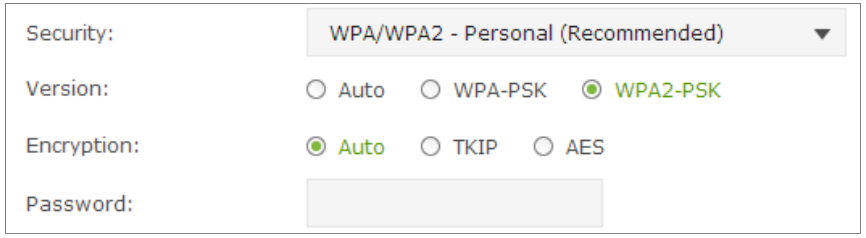
3 Customize the SSID and Password (Optional)

Go to **Settings** > **Wireless** > **Wireless Settings** page, customize the SSID and password of the extender, and click **Save**.



- **Network Name (SSID):** Customize an easy-to remember SSID for your AP's wireless network.
- **Security:** Select the security type. **WPA/WPA2 - Personal** is recommended.

Select **WPA/WPA2 – Personal**:

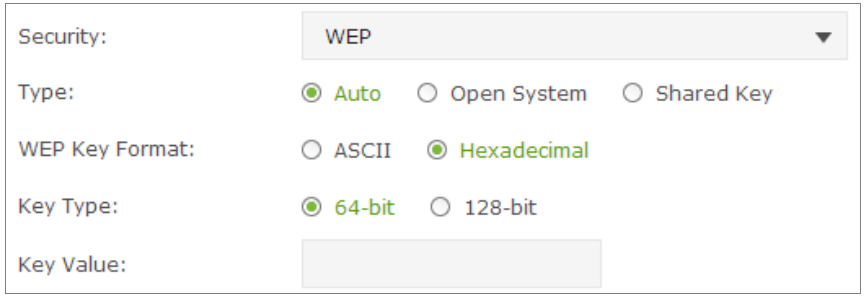


1) Select the security version. WPA2-PSK is recommended.

2) Select the encryption type. TKIP is NOT recommended if the extender operates in 802.11n mode, because TKIP is not supported by 802.11n specification and the WPS function.

3) Enter a new password in the **Password** field.

Select **WEP**:



1) Select the security type. The defult is auto, which automatically chooses Open System or Shared Key based on the capability and access request of the wireless client.

2) Select the WEP key format. ASCII format is a combination of alphabetic and numeric characters. Hexadecimal format is a combination of the numbers (0-9) and letters (A-F, a-f).

3) Select the key type. 64-bit allows you to enter 10 hexadecimal digits or 5 ASCII characters into the **Key Value** field. 128-bit allows you to enter 26 hexadecimal digits or 13 ASCII characters into the **Key Value** field.

4) Enter the WEP key into the **Key Value** field.

- **Mode:** Select a transmission mixed mode.
- **Channel Width:** Select a channel bandwidth for the wireless network.
- **Channel:** Select the operating channel for the wireless network. It is recommended to leave the channel to Auto, if you are not experiencing the intermittent wireless connection issue.

4 Enjoy the Internet

Now you can connect to the AP's wireless network to enjoy the Internet.

You can connect your wireless devices to the AP's wireless network by WPS. For detailed instructions, please refer to Connect your devices to the AP by WPS.

Connect your devices to the AP by WPS

There are three ways to connect your devices to the AP by WPS.

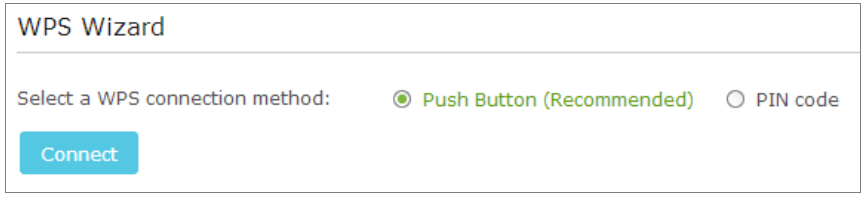
Method One: Use your device's WPS button

1) Launch a web browser, log into **http://tplinkrepeater.net**, and then

go to **Settings** > **Wireless** > **WPS** page.

2) Enable the WPS function of the AP.

3) Select **Push Button** at WPS Wizard section, and click **Connect**.



4) Enable the WPS function on your client device within 2 minutes.

5) "Connect successfully" will appear on the WPS page, which means that your client device has connected to the AP by WPS.

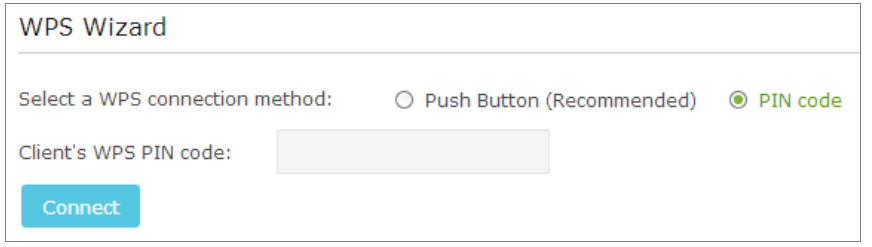
Method Two: Enter the client's PIN code on the AP

Use this method if your client device has a WPS PIN code.

1) Launch a web browser, log into **http://tplinkrepeater.net**, and then go to **Settings** > **Wireless** > **WPS** page.

2) Enable the WPS function of the AP.

3) Select **PIN code** at WPS Wizard section, enter the client's WPS PIN code and click **Connect**.



4) "Connect successfully" will appear on this page, which means that your client device has connected to the AP by WPS.

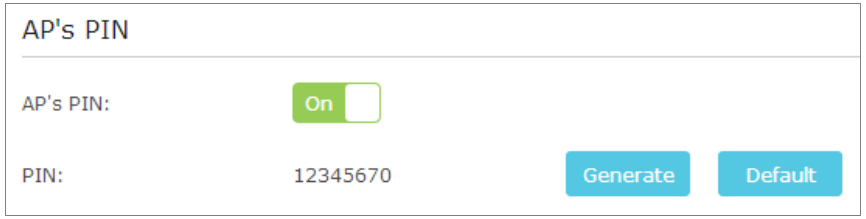
Method Three: Enter the AP's PIN code on your client device

Use this method if your client device requires the AP's PIN code.

1) Launch a web browser, log into **http://tplinkrepeater.net**, and then go to **Settings** > **Wireless** > **WPS** page.

2) Enable the WPS function of the AP.

3) Enable the AP's PIN. The current PIN code of the AP will be displayed on this page, you can also click **Generate** to get a new one.



4) On your client device, enter the AP's PIN code. When the AP's **WPS LED** is solid on, the client device has successfully connected to the AP.

3

View the Information of the Extender

This chapter covers the following topics:

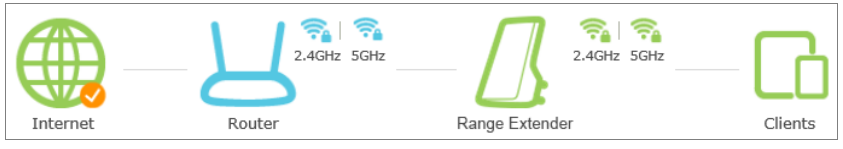
- **Current Status of the Extender**
- **Information about the Host Network, the Extender and the Clients**

Current Status of the Extender

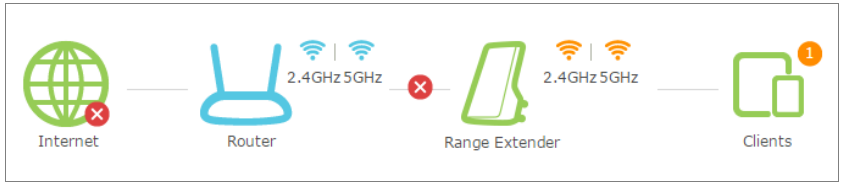
1) Launch a web browser and type in **http://tplinkrepeater.net**, then go to **Settings** > **Status** webpage.

2) You can view the network connection in the Status webpage.

- The normal status.



- The extender is failed to connect to the wireless network of your router.



- The extender is connected to the wireless network of your router, but no transmitting data. Please check your host network.

- The extender is connected to the router unnormally. Maybe the gateway is set incorrectly in the Static IP. You can select “Obtain an IP address automatically” on the “LAN Settings” page.

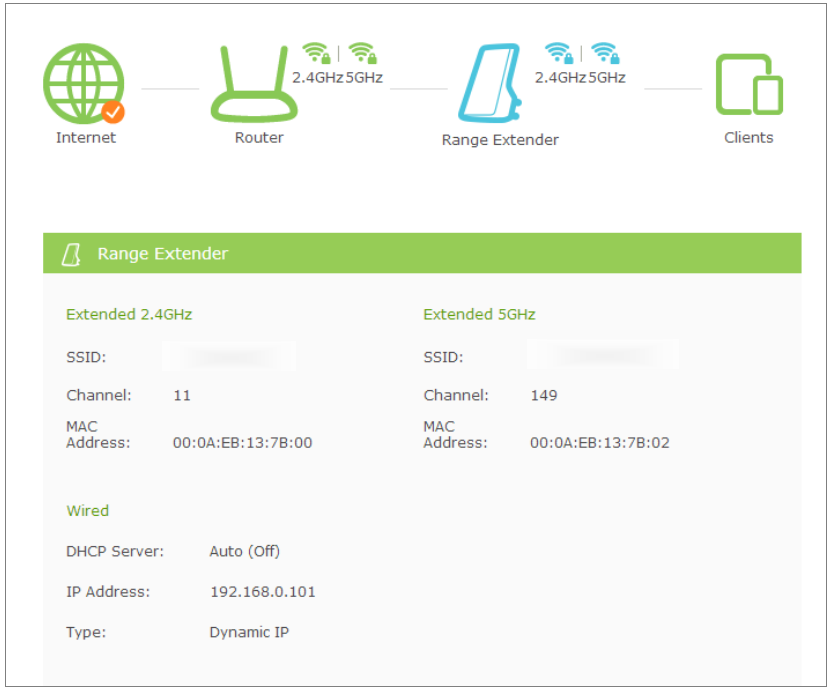
Instructions for the icons of 2.4GHz/5GHz wireless status:

Name	Instructions
	The wireless is on and encrypted.
	The wireless is on and unencrypted.
/	Router：The wireless is off, or the connection is failed. Extender：The wireless is off.
/	The icons are selected.

Information about the Host Network, the Extender and the Clients

1) Launch a web browser and type in **http://tplinkrepeater.net**, and then go to **Settings** > **Status** webpage.

2) Click the icon of your router, the extender or clients. The detailed instructions for the corresponding icon are displayed below.



4

Manage the Extended Network and Security Settings

This chapter covers the following topics:

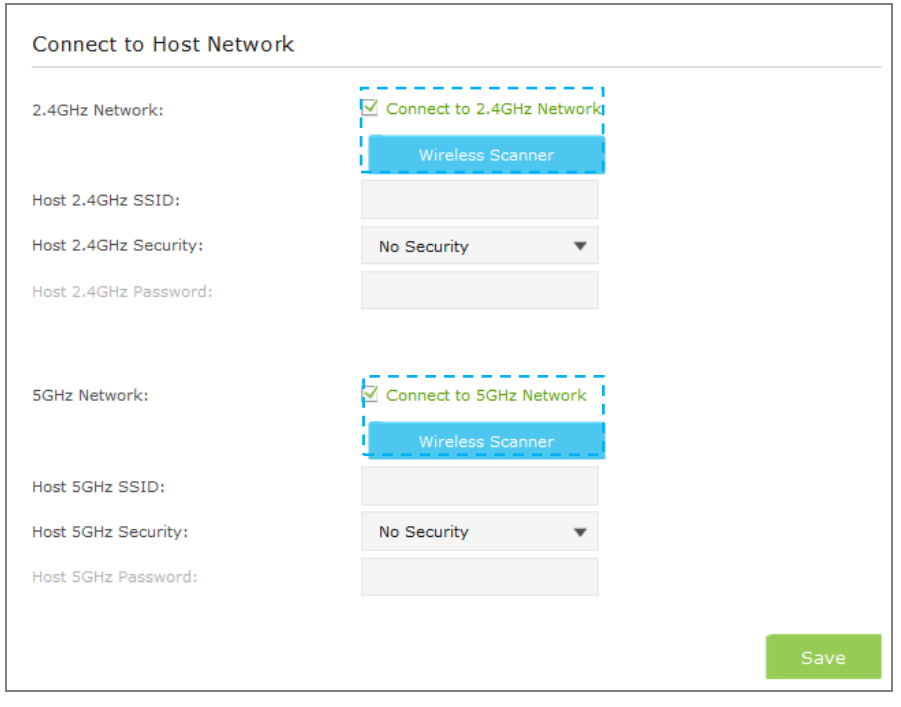
- **Extend Another Network**
- **Customize the Extender's SSID**
- **Manage the Extender's Wi-Fi Security Settings**
- **Change the Extender's IP Address**
- **DHCP Server**

Extend Another Network

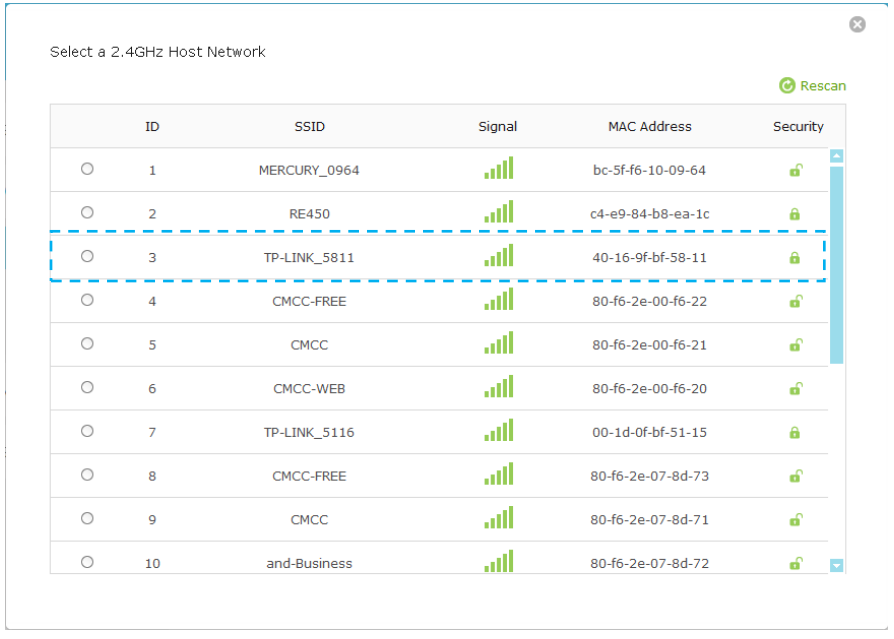
If you want to extend another network, you can refer to the following steps to finish it quickly.

1) Launch a web browser and type in **http://tplinkrepeater.net**, and then go to **Settings->Wireless->Connect to Network** webpage.

2) Enable **Connect to 2.4GHz/5GHz Network**. Then click **Wireless Scanner** to scan the network you want to extend.



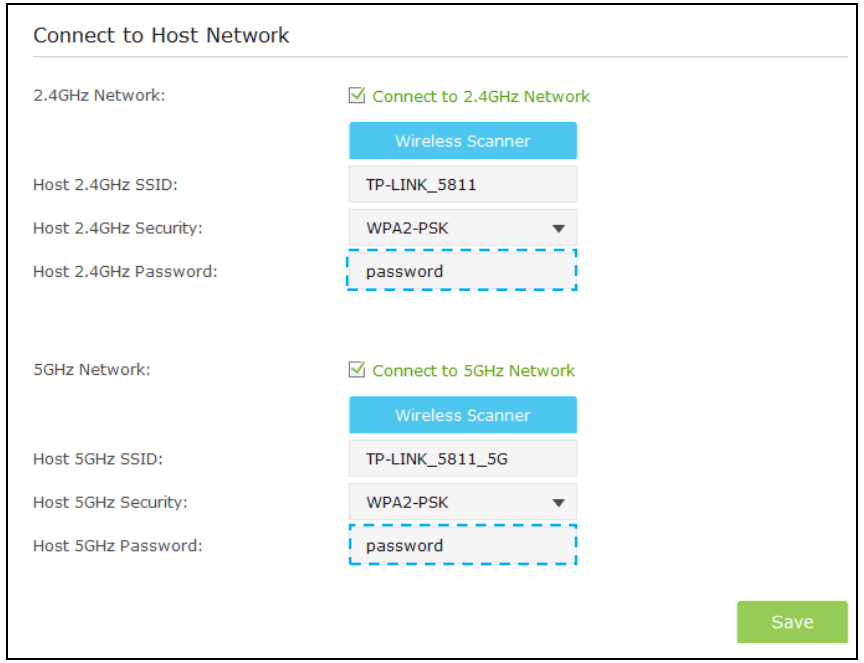
3) Select the network you want to extend from the list.



If the network you want to extend is on but not shown in the list, please try by following the steps below.

- Move the extender closer to your router/ AP. Then click **Refresh** on the top-right corner of the list to scan the network again.
- You can also enter the information of the network manually you want to extend on the **Connect to Network** page. Then click **Save** to connect to the host network.

4) Once a network is selected, the SSID and security settings of that network will automatically fill in. If the host network is encrypted, enter the password in the box of the host wireless security.



When **Host 2.4GHz/5GHz Security** is WEP, please select the index same with the host network.

5) Click **Save** to save the settings.

6) **Relocate**.

Plug in the extender halfway between your wireless router/AP (Host Network) and the Wi-Fi dead zone.

Wait for the extender to reconnect and the LED turns solid blue. If not, relocate it closer to the router to achieve a good (or better) signal quality.

Enjoy!

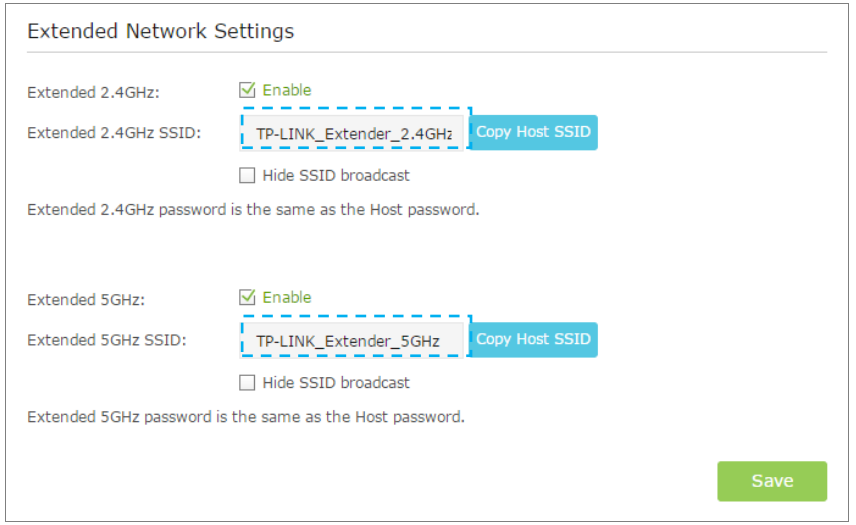
The extender shares the same wireless network name (SSID) and wireless password as your host network. If you want to change the wireless network name (SSID), please refer to Customize the Extender's SSID.

Customize the Extender's SSID

On the Extended Network page, you can change or hide the wireless network name (SSID) of the extender, as well as enable or disable the wireless network of the extender.

1) Launch a web browser and type in **http://tplinkrepeater.net**, then go to **Settings->Wireless-> Extended Network** page.

2) Either keep the host SSIDs (default) or customize 2.4GHz and 5GHz SSIDs using up to 32 characters.



- **Extended 2.4GHz/5GHz**: Enable or disable the 2.4GHz/5GHz host network.
- **Extended 2.4GHz/5GHz SSID**: Either copy the host SSID or create a new name using up to 32 characters. This field is case-sensitive.
- **Hide SSID broadcast**: Select this checkbox if you want to hide the extender's SSID (of the 2.4GHz/5GHz wireless network) from the Wi-Fi network list. If you want to connect to the hiden SSID, please enter the SSID and the password manaully.

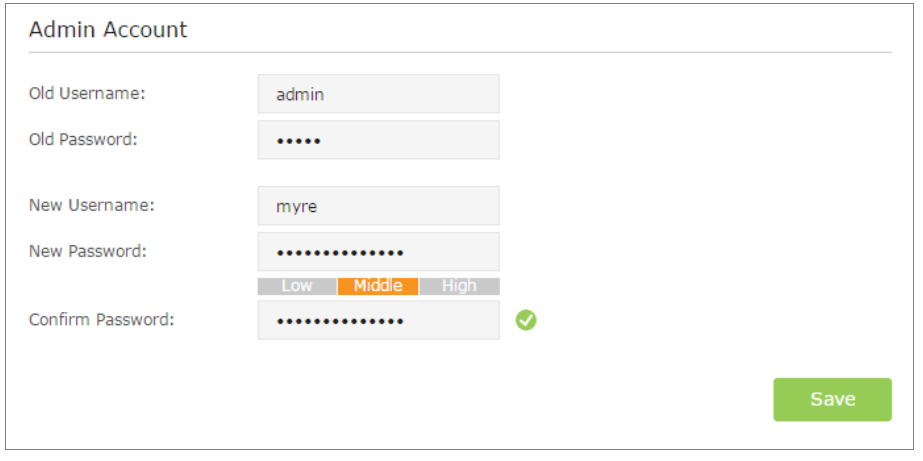
3) Click **Save** to save the settings.

Manage the Extender's Wi-Fi Security Settings

Change your Admin Account

1) Launch a web browser and type in **http://tplinkrepeater.net**, then go to **Settings->System Tools->Admin Account** webpage.

2) Create a new username and password as shown in the figure below.



- **Old Username:** Enter your current username.
- **Old Password:** Enter your current password.
- **New Username:** Enter your new username.
- **New Password:** Enter your new password.
- **Confirm Password:** Re-enter your new password.

3) Click **Save** to save the settings.

Block / Allow Network Access for Specific Clients

For increased security, you can restrict access to the extended network by allowing only specific wireless devices in the pre-set white list, or preventing the devices in the pre-set black list from connecting to the extended network.

Blacklist Mode

The devices in the Blacklist are not allowed to connect to the extender.

1) Launch a web browser and type in **http://tplinkrepeater.net**, and then go to **Settings->Wireless-> Access Control** page.

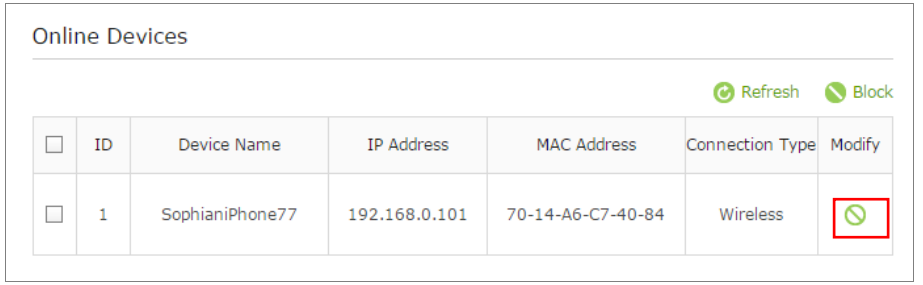
2) Click the button to enable the Access Control function.

3) Select **Blacklist**, and then click **Save** to save the settings.

4) Add the device to the blacklist by following the ways.

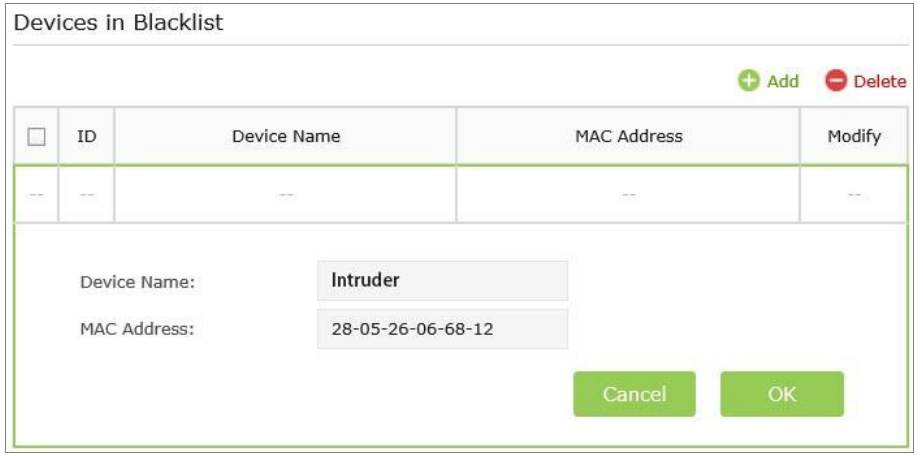
- Add the Online Devices to the blacklist.

  In the Online Devices list, you can view the information about the devices connected to the extender. For one device, you can click the icon to add the device to the blacklist. For several devices, select them and click **Block** to add them at the same time.



- Add the device to the blacklist manually, if the device is not in the Online Devices list.

  Click **Add**. Then enter the device name and MAC address in the figure below.



- **Device Name:** Enter the device name.
- **MAC Address**: Enter the MAC address of the client device in XX-XX-XX-XX-XX-XX format (e.g. 00-11-22-33-44-AA).

5) Click **OK** to save your settings.

Whitelist Mode

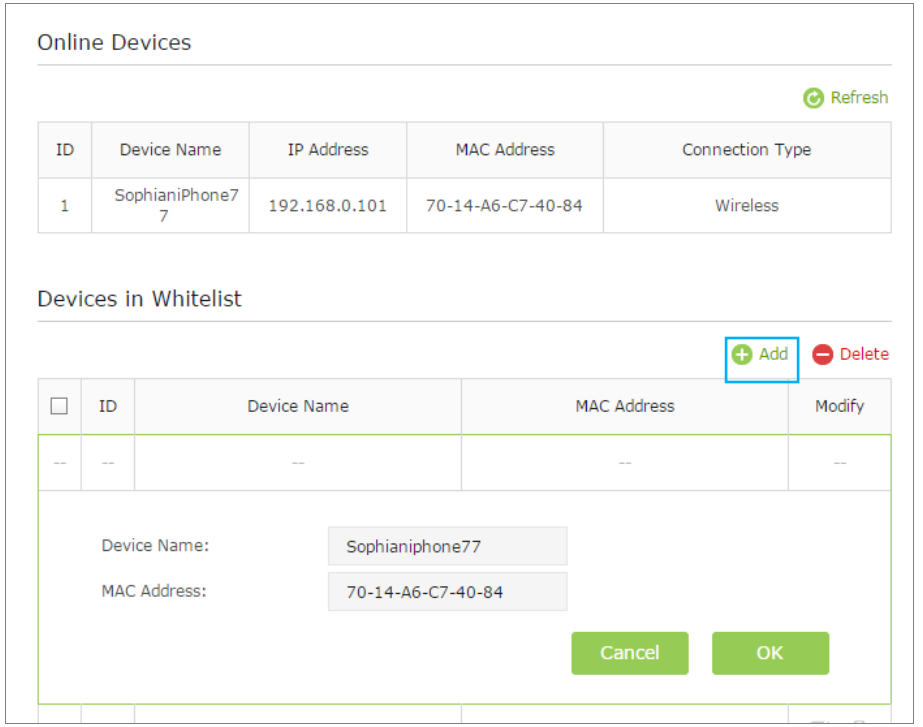
Only the devices in the Whitelist are allowed to connect to the extender.

1) Launch a web browser and type in **http://tplinkrepeater.net**, then go to **Settings->Wireless-> Access Control** page.

2) Click the button to enable the Access Control function.

3) Select **Whitelist**, then click **Save** to save the settings.

4) Click the **Add** button to add a device manually into the whitelist.



- **Device Name:** Enter the device name.
- **MAC Address:** Enter the MAC address of the client device in XX-XX-XX-XX-XX-XX format (e.g. 00-11-22-33-44-AA).

5) Click **OK** to save your settings.

Modify or Remove a Device in the Blacklist/Whitelist

Launch a web browser, log into **http://tplinkrepeater.net**, and then go to **Settings > Advanced Settings > Access Control** page.

In the **Devices in Blacklist** / **Whitelist** part:

	ID	Device Name	MAC Address	Modify
☐	1	my phone	2A-47-56-85-67-10	
☐	2	host	48-89-11-25-57-95	

- Click the icon , and then you can modify the device name and mac address.
- Click the icon to remove one device from the list. For several devices, select them and click **Delete** to remove them at the same time.

Change the Extender's IP Address

By default, the extender is set to obtain an IP address automatically from the front router. If you want to use a specific IP address appropriate to your network demand, please refer to the steps below.

> 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) Launch a web browser and type in **http://tplinkrepeater.net**, and then go to **Settings->Network** webpage.

2) Select **Use the following IP address**, and then enter the IP address and gateway manually.

- **IP Address:** Enter the IP address in dotted-decimal notation (192.168.0.254 by default).
- **Subnet:** Enter the subnet mask in dotted-decimal notation that determines the size of the network (255.255.255.0 by default).
- **Default Gateway:** 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.

3) Click **Save** to save the settings.

DHCP Server

DHCP stands for Dynamic Host Configuration Protocol. The DHCP Server will automatically assign dynamic IP addresses to the devices on the network. This protocol simplifies network management and allows new wireless devices to be set to IP addresses automatically.

To use the DHCP server function of the device, you should configure all computers in the LAN as "Obtain an IP Address automatically" mode.

Settings

- **Set the DHCP Server status to Auto (by default)**

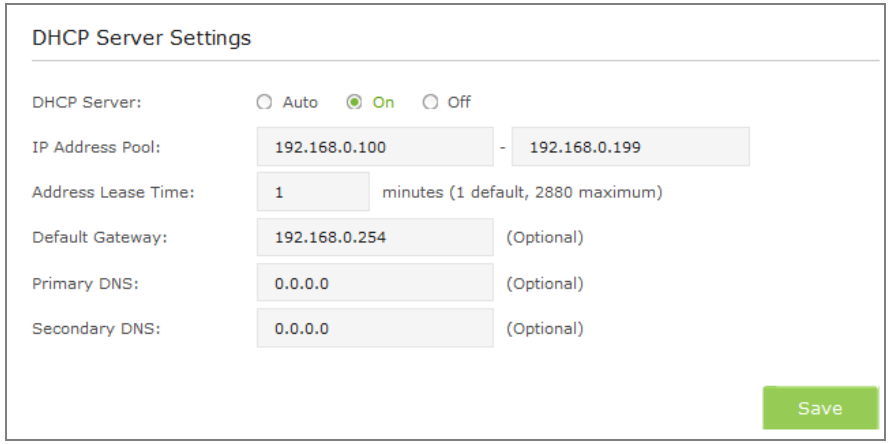
  When the DHCP Server is Auto, the extender automatically detects to find the devices enabling the DHCP Server. If the DHCP Server of the device is enabled, the extender's DHCP Server is disabled. Otherwises, the extender's DHCP Server is enabled. The default is Auto.

- **Enable DHCP Server**

  When the DHCP Server is **On**, please make sure that IP Address Pool, Default Gateway for the DHCP server and LAN IP address are in the same segmengt as the router. Otherwises, the extender cannot access the Internet.

1) Launch a web browser and type in **http://tplinkrepeater.net**, then go to **Settings->Network** webpage.

2) If the DHCP Server is **On**, please configure it as shown in the figure bleow.



- **IP Address Pool:** Enter a range of IP address that can be leased to the clients. By default, the starting IP address is 192.168.0.100 and the ending IP address is 192.168.0.199.
- **Address Lease Time:** Enter the time duration that an IP address is leased to the client, between 1 and 2880 minutes. The default is 1 minute.
- **Default Gateway (Optional):** Enter the LAN IP address of your host network.
- **Primary DNS (Optional):** Enter the DNS IP address provided by your ISP.
- **Secondary DNS (Optional):** Enter the second DNS IP address provided by your ISP.

3) Click **Save** to save your changes.

- **Disable DHCP Server**

  If the DHCP server of the extender is **Off**, please make sure the DHCP server of your host router is on. Otherwise, you have to configure the IP address for each client manually.

1) Launch a web browser and type in **http://tplinkrepeater.net,** and then go to **Settings->Network** webpage.

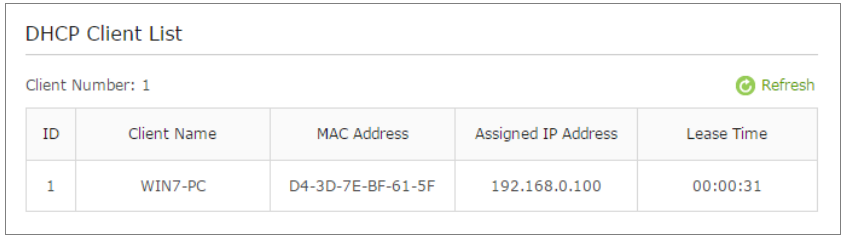
2) Select **Off**, then click **Save** to save the settings.

View the DHCP Client List

The DHCP Client List displays the Client Name**,** MAC Address, Assigned IP and Lease Time for each DHCP Client attached to the device.

1) Launch a web browser and type in **http://tplinkrepeater.net**, and then log in to **Settings->Network** webpage.

2) You can view the information of the DHCP clients connected to the extender in the DHCP Client List.



ID	Client Name	MAC Address	Assigned IP Address	Lease Time
1	WIN7-PC	D4-3D-7E-BF-61-5F	192.168.0.100	00:00:31

- **Client Name:** The name of the DHCP client.
- **MAC Address:** The MAC address of the DHCP client.
- **Assigned IP Address:** The IP address that is allocated to the client by the DHCP server.
- **Lease Time:** The time duration that the IP address is leased to the DHCP client.

Click **Refresh** to refresh the DHCP Client List.

5

Manage the Extender

This chapter covers the following topics:

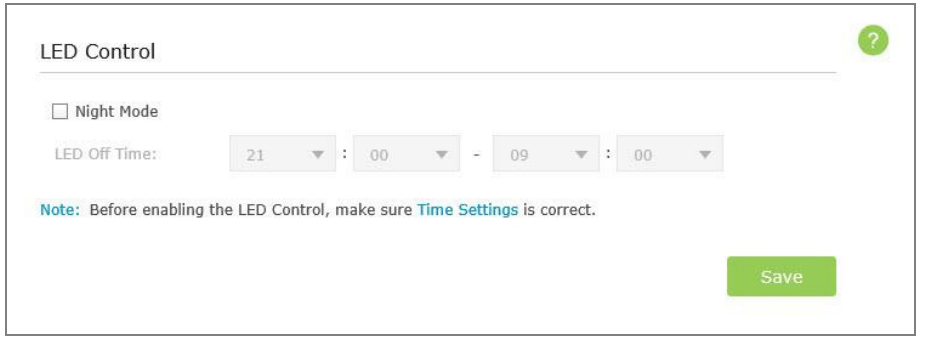
- **LED Control**
- **Firmware Upgrade**
- **Backup & Restore**
- **Factory Defaults**
- **System Log**
- **Reboot**
- **Logout**

LED Control

LED Control can turn off the LEDs at the specific time. The extender can still work normally after the LEDs are off.

1) Launch a web browser and type in **http://tplinkrepeater.net**, and then go to **Settings-> System Tools -> Time Settings** webpage. Select the Time Zone of your location. Click **Save** to save your settings.

2) Go to **Settings-> System Tools -> LED Control** webpage, and then set the time to turn off the LEDs.

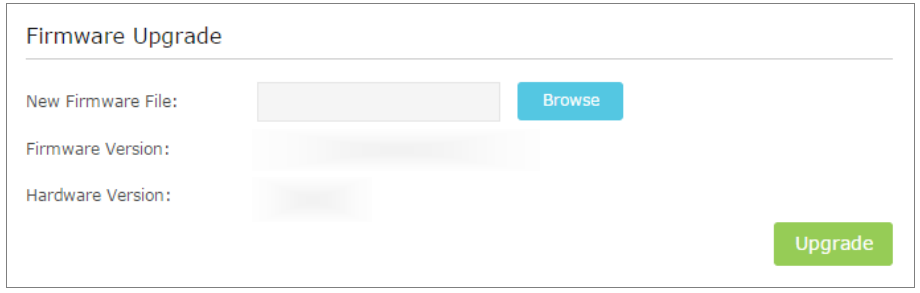


- **Night Mode:** If the Night Mode box is checked, all the LEDs are off in the setting time.
- **LED Off Time:** Set the time to turn off the LEDs.

Click **Save** to save your settings.

Firmware Upgrade

1) Launch a web browser and type in **http://tplinkrepeater.net**, and then go to **Settings->System Tools->Firmware Upgrade** webpage.
2) You can view the firmware version and the software version. Search the latest firmware of your extender from the Support page at **www.tp-link.com**. Then download the latest firmware upgrade file to your computer.
3) Click **Browse** to locate and select the downloaded file.



4) Click **Upgrade**. The upgrade process takes a few minutes to complete and the extender will automatically reboot itself when finished.

Please DO NOT power off the extender during the upgrade process.

Backup & Restore

It is highly recommended to backup your current configurations, in case a recovery is needed to restore the system to a previous state.

1) Launch a web browser and type in **http://tplinkrepeater.net,** then go to **Settings->System Tools->Backup & Restore** webpage.
2) Backup and restore the configuration on the **Backup & Restore** page.

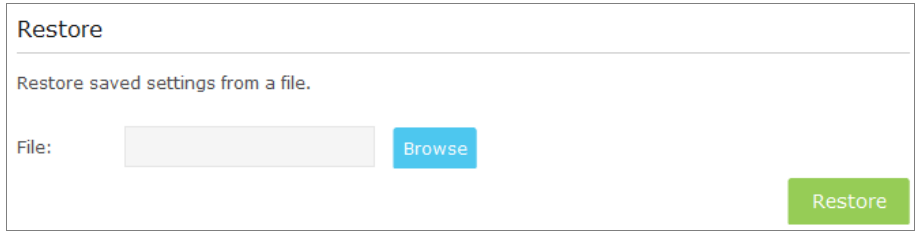
- Backup Configurations

  Click **Backup** to save your current configurations as a config.bin file on your computer. Make sure to save it in a safe location where you can retrieve it when needed.

Please DO NOT power off the extender during the backup process.

- Restore Configurations

  Click **Browse** to locate and select your backup file. Click **Restore** and then **YES** to restore the extender. The restore process may take a few minutes to complete and the extender will automatically reboot itself when finished.



Please DO NOT power off the extender during the restore process.

Factory Defaults

1) Launch a web browser and type in **http://tplinkrepeater.net**, then go to **Settings->System Tools-> Backup & Restore** webpage.

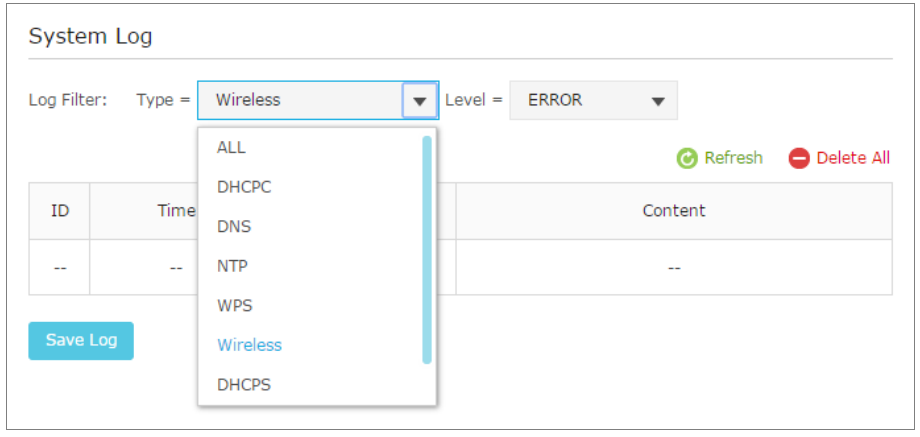
2) Click **Factory Restore** to reset your extender to its factory default settings in the figure below.

Factory Restore will erase all settings that you have configured for the extender. To re-login to the extender's management page, use the default admin for both username and password.

System Log

1) Launch a web browser and type in **http://tplinkrepeater.net**, then go to **Settings->System Tools-> System Log** webpage.

2) You can select the Log Type and Log Level in the Log Filter drop-down list. Here you can quickly trace the logs which you want to view.



You can also click the following buttons to apply the settings.

- Click **Refresh** to update the system log.
- Click **Delete All** to permanently remove all logs.
- Click **Save Log** to save the system log as a **.txt** file on your computer.

Reboot

1) Launch a web browser and type in **http://tplinkrepeater.net**.
2) Click **Reboot** on the top right corner to reboot the extender.

Logout

1) Launch a web browser and type in **http://tplinkrepeater.net**.
2) Click **Logout** on the top right corner to log out the management webpage safely.

6

Appendix

This chapter covers the following topics:

- **Factory Defaults**
- **Troubleshooting**
- **Specifications**
- **Glossary**

Factory Defaults

Name	Status
Common Default Settings	
Username	admin
Password	admin
IP Address	192.168.0.254
Subnet Mask	255.255.255.0
Domain	http://tplinkrepeater.net
Wireless	
SSID	2.4GHz: TP-LINK_Extender_2.4GHz 5GHz: TP-LINK_Extender_5GHz
Wireless Security	Disabled
Access Control	Disabled

Troubleshooting

T1. How do I restore my extender's configuration to its factory default settings?

There are two ways to reset the extender:

- Option One: With the extender powered on, use a pin to press and hold the RESET button until all LEDs turn on momentarily, then release the button.
- Option Two: Restore the default settings from "**System Tools > Restore & Backup**" of the extender's Web Management page.

Once the extender is reset, the current configuration settings will be lost and you will need to reconfigure it.

T2. What can I do if I forget my password?

- Restore the extender's configuration to its factory default settings. If you don't know how to do that, please refer to previous **T1**;
- Use the default username and password: admin, admin;
- Try to reconfigure your extender by following the instructions of this guide.

T3. What can I do if I cannot access the web management page?

- Check to verify all the connections (either wireless or wired ones) are proper. If yes, please proceed to the next step; otherwise, check the connections again.
- Try to obtain an IP address and gateway; if succeed, open your web-browser, enter the default domain http://tplinkrepeater.net in the address field and get logged in. If you are unable to log in, please RESET the device, and then use the default IP address to get into the web-based configuration page, reconfigure the device.
- Feel free to contact our technical support if the problem still persists.

T4. I enabled a wireless MAC filter, wireless access control, or access control list (ACL) on my router. What should I do before configuring and using the extender?

When a device connects through the extender to your router, the MAC address of the device shown on the router is translated to another MAC address. If your router's MAC filter, wireless access control, or ACL is enabled, the devices connected to the extender cannot get an IP address from the extender and cannot access the Internet.

To solve this problem, please follow the steps below:

1. Log into your router and disable the MAC filter, wireless access control or ACL

   For more information about how to disable your router's MAC filter, wireless access control or ACL, please refer to your router's user guide.

2. Power on your extender, and using Option ONE: Using WPS or Option TWO: Using Web Browser to configure your extender.
3. Connect all of your devices to the extended network, and make sure the router's Link LED remains lit.
4. On your router, add all the Online Devices' MAC addresses to your router's MAC filter table.

5. Enable the router's MAC filter, wireless access control, or ACL.

Now, you have successfully configured your extender.

T5. How can I know that my wireless signal has been boosted by extender?

An easy way is to compare the signal strength of your target wireless network (symbolized by its SSID), with extender in operation vs. out of operation. Before comparison, you'd better make sure your computer can obtain an IP address from your target wireless network and thus access the Internet, either via extender or without.

T6. Will the extender work if I connect its ETHERNET port to the router via Ethernet cable?

Sorry, it won't work. The extender is designed to connect wirelessly to the router, while the ETHERNET port is designed to connect with a wired device, like Internet TV, Gaming console, DVR and so on.

T7. Why does the wireless transmission rate speed down, while the wireless signal is stronger after repeated by extender?

In compliance with the wireless transmission protocol, all the extender devices are set to work in half-duplex instead of full-duplex mode. In other words, the extender has to process one-way communication between your root Wireless router (or AP) and the terminal clients; so the transmission time will be double-increased, while the speed will be decreased. TP-LINK recommends that you connect to the extender when your home network connection is poor, or when you want a larger wireless coverage to eliminate "dead zone".

Specifications

General	
Standards and Protocols	IEEE 802.3, IEEE 802.3u, IEEE 802.11a, IEEE 802.11n, IEEE 802.11b, IEEE 802.11g, IEEE 802.1x, IEEE 802.11e, IEEE 802.11i, IEEE 802.11ac, TCP/IP, DHCP
Safety & Emission	CE
Ports	One 10/100/1000Mbps Auto-Negotiation LAN RJ45 port
Wireless	
Frequency Band	2.4GHz：2.4~2.4835GHz 5GHz： 5.15~5.35GHz 5.47~5.85GHz
Radio Data Rate	2.4GHz： 11n：up to 300Mbps 11g：54/48/36/24/18/12/9/6Mbps 11b：11/5.5/2/1Mbps 5GHz： 11ac: up to 867Mbps 11n: up to 300Mbps 11a: 54/48/36/24/18/12/9/6Mbps
Security	WEP, WPA-PSK, WPA2-PSK

Physical and Environment	
Working Temperature	0℃~40℃ (32℉~104℉)
Working Humidity	10% ~ 90% RH, Non-condensing
Storage Temperature	-40℃~70℃(-40℉~158℉)
Storage Humidity	5% ~ 95% RH, Non-condensing

Glossary

- **802.11b -** The 802.11b standard specifies a wireless networking at 11 Mbps using direct-sequence spread-spectrum (DSSS) technology and operating in the unlicensed radio spectrum at 2.4GHz, and WEP encryption for security. 802.11b networks are also referred to as Wi-Fi networks.
- **802.11g -** specification for wireless networking at 54 Mbps using direct-sequence spread-spectrum (DSSS) technology, using OFDM modulation and operating in the unlicensed radio spectrum at 2.4GHz, and backward compatibility with IEEE 802.11b devices, and WEP encryption for security.
- **802.11n -** 802.11n builds upon previous 802.11 standards by adding MIMO (multiple-input multiple-output). MIMO uses multiple transmitter and receiver antennas to allow for increased data throughput via spatial multiplexing and increased range by exploiting the spatial diversity, perhaps through coding schemes like Alamouti coding. The Enhanced Wireless Consortium (EWC) was formed to help accelerate the IEEE 802.11n development process and promote a technology specification for interoperability of next-generation wireless local area networking (WLAN) products.
- **Access Point (Range Extender) -** A wireless LAN transceiver or "base station" that can connect a wired LAN to one or many wireless devices. Access points can also bridge to each other.
- **DNS** (Domain Name System) – An Internet Service that translates the names of websites into IP addresses.
- **Domain Name -** A descriptive name for an address or group of addresses on the Internet.
- **DoS** (Denial of Service) **-** A hacker attack designed to prevent your computer or network from operating or communicating.
- **DSL** (Digital Subscriber Line) - A technology that allows data to be sent or received over existing traditional phone lines.
- **ISP** (Internet Service Provider) - A company that provides access to the Internet.
- **MTU** (**Maximum Transmission Unit**) **-** The size in bytes of the largest packet that can be transmitted.
- **SSID -** A Service Set Identification is a thirty-two character (maximum) alphanumeric key identifying a wireless local area network. For the wireless devices in a network to communicate with each other, all devices must be configured with the same SSID. This is typically the configuration parameter for a wireless PC card. It corresponds to the ESSID in the wireless Access Point and to the wireless network name.
- **WEP** (Wired Equivalent Privacy) - A data privacy mechanism based on a 64-bit or 128-bit or 152-bit shared key algorithm, as described in the IEEE 802.11 standard.
- **Wi-Fi –**A trademark of the Wi-Fi Alliance and the brand name for products

using the IEEE 802.11 family of standards.

- **WLAN** (Wireless Local Area Network) - A group of computers and associated devices communicate with each other wirelessly, which network serving users are limited in a local area.
- **WPA (Wi-Fi Protected Access)** - WPA is a security technology for wireless networks that improves on the authentication and encryption features of WEP (Wired Equivalent Privacy). In fact, WPA was developed by the networking industry in response to the shortcomings of WEP. One of the key technologies behind WPA is the Temporal Key Integrity Protocol (TKIP). TKIP addresses the encryption weaknesses of WEP. Another key component of WPA is built-in authentication that WEP does not offer. With this feature, WPA provides roughly comparable security to VPN tunneling with WEP, with the benefit of easier administration and use. This is similar to 802.1x support and requires a RADIUS server in order to implement. The Wi-Fi Alliance will call this, WPA-Enterprise. One variation of WPA is called WPA Pre Shared Key or WPA-Personal for short - this provides an authentication alternative to an expensive RADIUS server. WPA-Personal is a simplified but still powerful form of WPA most suitable for home Wi-Fi networking. To use WPA-Personal, a person sets a static key or "passphrase" as with WEP. But, using TKIP, WPA-Personal automatically changes the keys at a preset time interval, making it much more difficult for hackers to find and exploit them. The Wi-Fi Alliance will call this, WPA-Personal.